NOTE: THIS IS A COURTESY COPY OF TIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 20, 2016 NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

ENVIRONMENTAL PROTECTION

LAND USE MANAGEMENT

WATER RESOURCE MANAGEMENT

Flood Hazard Area Control Act Rules; Coastal Zone Management Rules; Freshwater Wetlands Protection Act Rules; and Stormwater Management Rules

Adopted Recodification: N.J.A.C. 7:13-17.2 as 20.2

Adopted Recodifications with Amendments: N.J.A.C. 7:13-7.63 as 7.23; 9.8 as 15.1; 10.1 as 11.1; 10.3 through 10.6 as 11.3 through 11.6; 11.1 through 11.6 as 12.1 through 12.6; 11.9 as 12.8; 11.10 as 12.9; 11.12 as 12.12; 11.14 through 11.16 as 12.14 through 12.16; 11.17 as 12.18; 11.18 as 12.20; 11.19 as 12.21; 13.4 as 3.7; 13.5 as 3.8; 17 as 20; and 19.2 as 24.11

Adopted Amendments: N.J.A.C. 7:7-6.23, 17.12, and 25.1; 7:7A-11.1; 7:8-3.3, 4.2, and 5.5; and 7:13-1.1, 1.2, 1.4, 1.6, 2, 3, 4.1, and Appendices 1 and 2

Adopted Repeals and New Rules: N.J.A.C. 7:7-9.26; and 7:13-1.3, 1.7, 5, 6, 7, 8, 14, 16, and 18

Adopted Repeals: N.J.A.C. 7:13-9.1 through 9.7, 10.2, 10.7, 11.7, 11.8, 11.11, 11.13, 12, 13.1 through 13.3, 15, and 19.1

Adopted New Rules: N.J.A.C. 7:13-2.5, 4.2, 9, 10, 11.2, 12.7, 12.10, 12.11, 12.13, 12.17, 12.19, 13, 17, 19, 21, 22, 23, and 24.1 through 24.10

Proposed: June 1, 2015, at 47 N.J.R. 1041(a).

Adopted: April 28, 2016, by Bob Martin, Commissioner, Department of Environmental Protection.

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Filed: May 2, 2016, as R.2016 d.055, **with non-substantial changes** not requiring additional public notice (see N.J.A.C. 1:30-6.3).

Authority: N.J.S.A. 13:1D-1 et seq.; 13:1D-29 et seq., specifically 13:1D-33; 13:20-1 et seq.; 58:10A-1 et seq.; 58:11A-1 et seq.; and 58:16A-50 et seq.

DEP Docket Number: 05-15-04.

Effective Date: June 20, 2016.

Expiration Dates: November 14, 2021, N.J.A.C. 7:7;

August 5, 2022, N.J.A.C. 7:7A;

June 26, 2021, N.J.A.C. 7:8;

October 6, 2021, N.J.A.C. 7:13.

The rule adoption can also be viewed or downloaded from the Department's website at www.nj.gov/dep/rules.

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Summary

The Department is adopting comprehensive changes to the Flood Hazard Area Control Act (FHACA) rules, N.J.A.C. 7:13, that reduce unnecessary regulatory burden, add appropriate flexibility, provide better consistency with Federal, local, and other State requirements, create additional permits-by-rule and general permits, and address implementation issues identified since the repeal and repromulgation of the rules in November 2007. Specifically, the adopted amendments, repeals, and new rules consolidate similar provisions, simplify language, incorporate additional detail and description regarding the substantive standards that must be met to undertake regulated activities, and harmonize certain procedural provisions with the Department's other land use regulations. The Department is also adopting related amendments to the Coastal Zone Management (CZM) rules, N.J.A.C. 7:7, and the Stormwater Management (SWM) rules, N.J.A.C. 7:8, for consistency with the FHACA rules regarding development in flood hazard areas and the preservation of vegetation and habitat within and adjacent to surface waters.

In response to public comment on the June 1, 2015 notice of proposal, the Department has made a number of changes on adoption. These changes are described below in responses to comments and in the Summary of Agency-Initiated Changes.

The Department is also publishing elsewhere in this issue of the New Jersey Register, a proposal of amendments to the rules adopted herein. Under the concurrent proposal, amendments are proposed to the FHACA rules and the CZM rules to make adjustments addressing certain concerns raised on the June 1, 2015 notice of proposal that require further public notice and comment. The proposed amendments and new rules fall into six categories:

improvements to riparian zone protections; consistency of the FHACA rules with the Uniform Construction Code and National Flood Insurance Program; consistency between the FHACA rules and CZM rules; facilitation of environmentally beneficial activities; clarification that permits-by-rule, general permits-by-certification, and general permits may not be used for activities qualifying as "major development;" and institution of a cap on stormwater calculation review fees.

Summary of Hearing Officer's Recommendation and Agency Response:

The Department held two public hearings on the notice of proposal on: Monday, June 22, 2015, at 10:00 A.M., at the New Jersey Department of Environmental Protection Public Hearing Room, Trenton; and Thursday, June 25, 2015, at 5:00 P.M., at the Township of Long Branch Municipal Building, Long Branch. Ms. Virginia Kop'kash, Assistant Commissioner, Land Use Management, was the hearing officer for the public hearings. Fifteen persons provided written comments and/or oral comments at the public hearings. The hearing officer recommended that the amendments, repeals, and new rules be adopted with the changes described in the responses to comments and summary of agency-initiated changes below. The Department accepts the recommendation. The hearing record is available for inspection in accordance with applicable law by contacting:

Office of Legal Affairs

Attention: DEP Docket No. 05-15-04

Department of Environmental Protection

401 East State Street, 7th floor

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Mail Code 401-04L

P.O. Box 402

Trenton, NJ 08625-0402

Summary of Public Comments and Agency Responses:

The following persons timely submitted comments on the notice of proposal:

1. Michele Adams, Meliora Design
2. Diane Ali
3. Donna Arcaro
4. Beverly Arnold
5. Beth Styler Barry, Musconetcong Watershed Association
6. Louise Ann Barton
7. Joseph Basralian
8. Enis Bengul
9. Richard Bizub, Pinelands Preservation Alliance
10. Roma Blanchet
11. Sara Bluhm, New Jersey Business and Industry Association
12. Ruth Boroshok
13. Hal Bozarth, Chemistry Council of New Jersey
14. Hal Bozarth, Site Remediation Industry Network
15. Stephen Buente, New Jersey Turnpike Authority
16. Jenifer Burghardt
17. Charlene Burke

18. Diane Burke

19. Richard Burrow, Langan Engineering & Environmental Services, Inc.

20. Rebecca Canright

21. Kathleen Cherry, Princeton Battlefield Society

22. Wanna Chin

23. Soumen Chowdhury

24. Jennifer Coffey, Association of New Jersey Environmental Commissions

25. Edward Cohen

26. James Conroy

27. Julia Crislip

28. Thomas Decker, Jacobs Engineering

28A. Noemi de' la Puente, New Jersey Environmental Lobby

29. Emile DeVito, New Jersey Conservation Foundation

30. Tim Dillingham, The American Littoral Society

31. Peter Dolan, New York-New Jersey Trail Conference

32. Elaine Dolsky

33. Ken Dolsky, Coalition Against Pilgrim Pipeline

34. Don Donnelly, New Jersey Division of the Allegheny Society of American Foresters

35. Teresa Duckworth, Morris County Division of Mosquito Control

36. Margaret Eberbach

37. Michael A. Egenton, New Jersey State Chamber of Commerce

38. Styra Eisinger

39. Julie Evans

40. Robert Farrell

41. Marvin Feil

42. Heather Fenyk, Lower Raritan Watershed Partnership

43. Temma Fishman

44. Patsy Fox

45. Elizabeth Ciuzio Freiday, United States Fish and Wildlife Service

46. Wilma Frey, New Jersey Conservation Foundation

47. Russell J. Furnari, Public Service Electric and Gas

48. Peter Gapp

49. Richard Garlipp

50. Denise Garner, Jackson Township Environmental Commissioner

51. Michael J. Garrity, Atlantic City Electric

52. Cheryl Garside

53. Elizabeth Hays Gatti

54. Maryjane Genestra

55. Michael Giuliano, Seaside Park Planning Board

56. Marian Glenn, Rahway River Watershed Association

57. Alan Godber

58. Toni Granato, Sierra Club

59. Amy Greene, Amy S. Greene Environmental Consultants

60. Linda Greenwood

61. Jerry Haimowitz

62. Jennifer Harford

63. Louis C. Harris, Jr.

64. Michael Harris

65. Cathy Hayes

66. Cathleen Hothersall

67. Laurie Howard, Passaic River Coalition

68. Valerie A. Hrabel, Greenman-Pedersen, Inc.

69. Fairfax Hutter

70. Phyllis Ianniello

71. Susan Jefferies

72. Erica Johanson

73. Winifred Johanson

74. Diane Jones

75. Brigitta Kahn

76. Robert Karl, Brick Township Municipal Utilities Authority

77. Caroline Katmann, Sourland Conservancy

78. Lisa Kazmier

79. Ann Kelly

80. James Kelly

81. William Kibler, Raritan Headwaters Association

82. Robert Kingsley

83. Stephen Knowlton

84. Boris Kofman

85. Eddie Konczal

86. Keith Kulper

87. Patricia Labriola

88. Laura Lander

89. Doug Lashley, GreenVest, LLC

90. Sara Lazarus

91. Zachary Lees, Clean Ocean Action

92. Jeanne P. Lennon, Jersey Central Power and Light

93. David Lowenstern

94. John Luard

95. C. Sharyn Magee, Washington Crossing Audubon Society

96. Deborah Mans, New York/New Jersey Baykeeper

97. Roberta Martin

98. Gary Massaro

99. Joan Matthews, United States Environmental Protection Agency, Region 2

100. Michael McClure

101. Kelly McCormick, Langan Engineering & Environmental Services, Inc.

102. Michael G. McGuinness, NAIOP New Jersey

103. Linda McKillip

104. Wilbur McNeill, Weequahic Park Association

105. Gina Megay

106. John Miller, New Jersey Association for Floodplain Management

107. Meryl Miller

108. Laura Mirsky

109. Brian Montag, K&L Gates LLP (on behalf of New Jersey Asphalt Pavement Association)

110. Mike Moriarty, FEMA Region 2, Mitigation

111. Carrie Mosley, United States Department of Agricultural, Natural Resources Conservation Service

112. Virginia Murchison

113. Kathleen Murphy, Chatham Environmental Commissioner

114. Stephanie Murphy, Rutgers New Jersey Agricultural Experiment Station

115. William Murphy

116. S. Murray

117. Margaret Najjar

118. Jack Nator

119. Bernard V. Navatto, Jr., Somerset County Planning Board

120. Judi Nichols

121. Laura Oltman

122. Doug O'Malley, Environment New Jersey

123. Barbara Parker

124. Colleen Parker

125. Rita Petruccelli

126. Amy P. Pinelli, Bristol-Meyers Squibb

127. Michael L. Pisauro, Jr., Stony Brook-Millstone Watershed Association

128. David Pringle, Clean Water Action

129. Jean Public

130. Edward W. Purcell, Esq., New Jersey State League of Municipalities

131. Monique Purcell, New Jersey Department of Agriculture, Division of Agricultural & Natural Resources

132. Rita Raftery

133. Joann Ramos

134. Michaela Redden

135. Mark Renna, Evergreen Environmental, LLC

136. Lisa Riggiola

137. Robert Ritter

138. Kim Robinson

139. Elizabeth Roedell

140. John M. Rogalo

141. George Rogozin

142. Jean Rogozin

143. Robert Rosenthal

144. Judith Ross

145. Linda Rossin

146. Stacey Roth, New Jersey Pinelands Commission

147. Elliott Ruga, New Jersey Highlands Coalition

148. Anthony Russo, Commerce and Industry Association of New Jersey

149. Mary Ellen Sandahl

150. Leslie Sauer

151. Paul Schorr

152. Eric Schrading, United States Fish and Wildlife Service

153. John Sgambati

154. Katherine Sgambati

155. Michael Shakarjian, Borough of Milltown Environmental Commission

156. Bruce S. Shapiro, New Jersey Realtors

157. Carol Ann Short, New Jersey Builders Association

158. Bill Simmons, League of Women Voters of Monmouth County

159. William Simmons

160. Thomas Simonet

161. Frank Sinden

162. Grace Sinden

163. Ann Sisko

164. Matthew Smith, Food and Water Watch

165. Warren Sobelsohn

166. Kathy Strack

167. Carolyn Sullivan

168. Lisa Supretto

169. Hannah Suthers

170. Hannah Suthers, Stony-Brook Millstone Watershed Association

171. Ryck Suydam, New Jersey Farm Bureau

172. Virginia Tamuts

173. Faith Teitelbaum, Whale Pond Brook Watershed Association

174. Joseph Testa

175. Megan Tinsley, New Jersey Audubon

176. Linda Tissot

177. Jeffrey H. Tittel, Sierra Club, New Jersey Chapter

178. Mary Tulloss

179. Janice Urbsaitis

180. Louise Usechak, League of Women Voters of Monmouth County

181. Michele Van Allen

182. Mark Van Rossen

183. Maya K. Van Rossum, The Delaware Riverkeeper Network

184. Sandra Van Sant

185. Daniel Velez

186. Patricia Verrochi

187. Kimi Wei

188. Donald Weigl

189. Thomas Wells, The Nature Conservancy

190. Britta Wenzel, Save Barnegat Bay

191. Nancy Wilson

192. Douglas Wisniewski

193. Bill Wolfe

194. Stacy Zamudio

195. Cindy Zipf, Clean Ocean Action

196. The Sierra Club submitted an identical comment letter on behalf of 639 individuals. The Department has designated this standard letter as commenter 196. Where individuals added comments in addition to those appearing on the form letter, their name is listed separately in the commenter list.

The comments received and the Department's responses are summarized below. The number(s) in parentheses after each comment identify the respective commenter(s) listed above.

General Comments

General support of rulemaking

1. COMMENT: The Department is applauded for proposing regulatory measures that would significantly benefit rebuilding efforts, which remain critically important to the State's economic recovery, following the devastation imparted by Superstorm Sandy. Further, the Department is recognized for its tremendous work in utilizing the practical experiences learned by both the Department and the regulated community from the implementation of the 2007 FHACA Rules to identify the regulatory areas necessary for amendment. The Department has conducted

numerous stakeholders meetings and sought engineering solutions that safeguard the environment, public health, and safety while also addressing implementation issues raised by the regulated community prior to proposing the rules. The Department is encouraged to continue such an approach with other regulatory programs. (57)

2. COMMENT: The Department is commended for its efforts to streamline and make consistent the permitting process and providing the opportunity for stakeholder input. (59)

3. COMMENT: The proposed rulemaking is generally supported. (146 and 171)

4. COMMENT: This rulemaking will support efforts to redevelop areas and bring much-needed jobs and investment to New Jersey. (102)

5. COMMENT: The Department's efforts to reduce redundancies in its regulations and to streamline functions are applauded. (76)

6. COMMENT: The Department is thanked for putting forward these proposed amendments, which will both simplify and provide consistency to the process for private property owners whose homes and land are subject to the rules being amended by the Department. The Department's efforts to streamline the FHACA, CZM, and SWM Rules are also supported as this will assist property owners applying for permits under these rules, especially due to the fact that many of the properties affected can be subject to more than one of these rules. (156)

7. COMMENT: The Department is applauded for attempting to streamline the review process while adding predictability to the permitting process. The proposed combination of aspects from the FHACA Rules, SWM rules, FWPA Rules, and CZM Rules will reduce the time spent on duplicative review and will allow permit requests to be viewed in tandem rather than

piecemeal. The streamlining of the review and permitting process and the elimination of duplicative processes between these rules is supported. (119)

8. COMMENT: The changes in the rule that address permit efficiency, reduction in the costs of permit applications, streamlining of the permit process, and elimination of duplication from overlapping permit and administrative requirements are supported. These enhancements will ease the burden of compliance on the regulated public without compromising the protection of lives and property that higher standards provide. (106)

9. COMMENT: The Department is commended for its efforts with this rulemaking, which simplifies the regulatory regime for activities in riparian zones and flood hazard areas while maintaining all relevant protections. For farm businesses in particular, providing this clarification will maximize natural resource conservation efforts and the implementation of best management practices. Such changes must be made by all agencies of State government as stipulated by the Legislature in the Right to Farm Act.

In addition, the proposed rulemaking is supported as a means of providing clarity for farm operators conducting normal farming practices in flood hazard areas. This rulemaking streamlines the permitting process for such agricultural activities in a manner consistent with recommended practices from the U.S. Department of Agriculture, Natural Resource Conservation Service and harmonizes the project review process for agricultural practices with those set forth by the State and local Soil Conservation Districts. (171)

10. COMMENT: The notice of proposal mirrors the recently amended CZM Rules to effectuate the Department's transformation goals for the Division of Land Use Regulation: electronic submittals, efficient processing of applications, and elimination of unnecessary

paperwork. The proposed amendments align with the FWPA Rules regarding standards for riparian zone mitigation banks and availability of riparian zone creation and preservation as compensation options. The expanded use of general permits-by-certification, additional new general permits, and proposed new 19 permits-by-rule for activities that have *de minimis* impacts on flooding and the environment are supported. (102 and 157)

11. COMMENT: The "Table of Citations and Recodifications, N.J.A.C. 7:13," which lists the proposed relocation and recodification of the existing FHACA Rules, is useful. (102)

12. COMMENT: The Department's stakeholder process is supported. The Department incorporated the ideas and concepts from those meetings into the proposed rule; this cooperation resulted in a rule that is positive and workable for both the regulated community and the Department. (47 and 102)

13. COMMENT: The Department is applauded for acknowledging the beneficial net gain provided to the environment by proactive habitat restoration and enhancement activities, specifically invasive species control, and the need to establish a regulatory framework that reduces the regulatory burden on community stakeholders and facilitates project implementation. The proposed tiered permitting hierarchy for proactive habitat restoration and enhancement based on conditions related to specific activities is supported. The Department's regulatory approach supports restoration efforts, such as Bristol-Myers Squibb's Wetland and Riparian Enhancement Program for managing water quantity and quality in the Hopewell Campus watershed. (126)

14. COMMENT: The Department is commended for its efforts to streamline and make consistent the permitting process. The commenter also expressed appreciation for having had the opportunity to participate in the stakeholder meetings. (59)

15. COMMENT: The Department's efforts to streamline the permitting process, reduce the need for Department staff to process individual permits, which will routinely end up being approved, and thereby reduce staff workload, as well as the effort to reduce delays and expenses related to individual permit applications, are appreciated. (68)

RESPONSE TO COMMENTS 1 THROUGH 15: The Department acknowledges these comments in support of the rules.

General opposition to rulemaking

16. COMMENT: The FHACA Rules need to be strengthened, but this rulemaking instead weakens them. Two commenters believe that in addition to weakening the FHACA Rules, the rulemaking also weakens the CZM Rules and SWM rules. One commenter believes that the weakening of the rules will negatively affect the progress that the Hackensack and Passaic Rivers are making towards recovery from years of misuse and pollution. (17, 21, 52, 69, 79, 86, 107, 160, 166, and 177)

17. COMMENT: New Jersey needs strengthened protections, not giveaways to special interests that put communities at risk of more flooding while destroying the State's water quality. The quality of New Jersey's waters must be protected and preserved for future generations. The Department is urged not to adopt the proposed rules as they weaken water quality and flood protections and are contrary to good planning. (10, 25, 26, 39, 52, 60, 63, 73, 83, 80, 84, 85, 86,

87, 88, 94, 98, 105, 113, 125, 136, 143, 149, 155, 166, 174, 179, 182, 185, 187, 189, 194, and 196)

18. COMMENT: The proposed rules are opposed. (12, 72, 87, 88, 121, and 181)

19. COMMENT: Please do not approve this rulemaking. Our streams and waterways need more protection, not less. The health of our precious water supply is at stake. This is an urgent matter. (108)

20. COMMENT: Elements of the FHACA rules reduce protections by streamlining the permitting process, creating greater waiver opportunities, reducing naturally-effective buffers, removing well-experienced and dedicated Department staff as an active part of the in-the-field process, and allowing other measures that will ultimately and negatively impact the State's natural resources and place residents at risk. These elements are opposed. (183)

21. COMMENT: The proposed rules will increase flooding and erosion, degrade water quality and drinking water supplies, and harm the natural environment, resulting in negative impacts to public health and safety as well as property. (7, 10, 24, 36, 42, 57, 63, 73, 74, 80, 85, 86, 88, 91, 98, 97, 120, 149, 158, 174, 177, 179, 180, 187, 195, and 196)

22. COMMENT: The FHACA Rules are intended to protect the safety and health of the public, as well as the wildlife and vegetation that exist adjacent to the State's waters, and also preserve surface water quality. The proposed regulations are opposed as they threaten these protections. Preserving vegetation and habitat within and adjacent to surface waters is important for preserving water quality, particularly drinking water quality. (21 and 175)

23. COMMENT: With the increased storm and flooding problems New Jersey has experienced recently, it is prudent to add protections, not remove them. The Department must

protect riparian buffers and vegetation. Continued flooding will put additional financial burdens on the State and its citizens. It is dangerous to look only at short-term gains without looking at the moderate and long-term dangers that these proposed changes represent. (23, 62, 75, 91, 112, 121, 149, 158, 166, 169, 172, 180, and 195)

24. COMMENT: The proposed amendments and new rules will only benefit developers who will develop more of the State and impact things that should be protected. The Department should not be proposing rules that increase development. Commenters indicated that impacted resources will include wildlife habitat, the public trust, and the environment in general. The proposed amendments will ultimately create additional costs for individuals and taxpayers. (2, 22, 38, 39, 44, 48, 57, 63, 66, 81, 82, 85, 87, 91, 103, 115, 116, 138, 141, 144, 145, 149, 150, 166, 179, 184, 186, 187, 193, 194, 195, and 196)

25. COMMENT: This rulemaking allows more disturbances in riparian buffers and flood hazard areas, as well as an unproven and administratively complex mitigation program. The proposed changes will cause the loss of the resources the Department is supposed to protect, will result in more flooding and flood damage, and increase the risk to the public's health and safety. (24 and 147)

26. COMMENT: Significant amounts of impervious coverage in urban watersheds exacerbate problems in flood hazard areas (for example, pollution, flooding, and erosion). The flood fringe and riparian zone have unique and irreplaceable benefits, such as the capture, filtering, absorption, and reuse of stormwater related to flood hazards. These benefits are most directly associated with high-functioning, sensitive streams with a watershed impervious surface cover from 0 to 10 percent. Many urban watershed streams are actually considered impacted,

meaning they have a watershed impervious cover ranging from 11 to 25 percent, and show clear signs of degradation from urbanization. Many streams in the most urbanized communities have a watershed impervious cover of more than 25 percent and are considered non-supporting, serving simply as conduits for stormwater flow. In other words, the riparian areas of these streams do not adequately provide the capture, filtering, absorption, and reuse benefits needed in our most urbanized areas. Accordingly, the Department should not adopt the rulemaking. (42)

27. COMMENT: The Department should revise the proposed changes to the FHACA, CZM, and SWM rules, including the proposed changes permitting property owners to build in vulnerable areas while using mitigation measures elsewhere. These rules will make it easier for individuals to obtain permits to build in flood prone areas. These rule revisions could also increase flooding, and they target our environment in order to increase profits for builders. While development is not opposed, it should not be allowed to occur indiscriminately without regulation. (49)

28. COMMENT: While the effort made to clarify definitions and reduce duplication is appreciated and has been successful in some cases, taking the lower standard wherever a conflict arises between rules is not appropriate. (150)

29. COMMENT: New Jersey was once a leader in the movement for clean air, energy, and water. Commissioners who have children must see the need for protecting our State's waterways from pollution and the ravages of overdevelopment. Please vote to keep protecting our waterways, and the health of New Jersey's land and citizens. (187)

RESPONSE TO COMMENTS 16 THROUGH 29: The amendments to the FHACA rules were proposed in order to reduce unnecessary and unintentional regulatory burdens, to add appropriate flexibility, to provide better consistency with Federal, State, and local standards, and to address implementation issues that have arisen since the adoption of the 2007 rules.

The Department recognizes the substantial hazards posed by persistent flooding, increasingly severe weather events, and impaired water quality in New Jersey, which threaten public health and safety, property and property values, economic sustainability, and the environment. As such, the adopted FHACA Rules remain the most stringent statewide flood mitigation and stream corridor protection standards in the nation and meet all State and Federal requirements for water quality. The adopted amendments will not encourage increased development within flood hazard areas, exacerbate flooding, or impair wildlife, water quality, and the environment, but will instead promote smarter development, habitat and riparian zone restoration, and environmental enhancement activities, such as daylighting streams and the construction of terrestrial passages within bridges and culverts to address habitat fragmentation. Additionally, the adopted rules seek to balance the protection of natural resources with the health, safety, and welfare of New Jersey and its residents, recognizing that economic growth is an essential component of the State's overall wellbeing and that development within a riparian zone or flood hazard area is sometimes unavoidable. The adopted rules, therefore, ensure that public health, safety, and welfare are safeguarded and improve the regulatory process to allow the Department to concentrate its efforts and resources on projects and activities that represent significant risks to flood hazard areas and riparian zones.

As a result of both the Department's experience and stakeholder input, the adopted rules were designed to allow prudent development while ensuring that impacts to riparian zones are avoided, where possible, and, where they cannot be avoided, minimized. The amendments to the riparian zone rules retain water quality protections that meet the Federal Water Pollution Control Act (commonly known as the Clean Water Act) and the New Jersey Water Pollution Control Act. Many minor activities in riparian zones are regulated under permits-by-rule, general permits-by-certification, or general permits, which strictly limit both the amount and the location of impacts associated with these activities. Further, as many permits-by-rule and general permits-by-certification limit activities to actively disturbed areas, such as lawn and farm fields, the Department is providing an incentive for individuals planning to undertake activities within a riparian zone to locate the activities exclusively in such areas and thereby avoid the need to apply to the Department for an authorization under a general permit or an individual permit. These types of authorizations allow residential, commercial, and public projects that result in *de minimis* impacts to flooding and the environment to proceed.

The adopted amendments are additionally designed to increase mitigation options by expanding both the locations where mitigation may occur, as well as the means that may be utilized to perform mitigation with two new mitigation methods: riparian zone creation and riparian zone preservation. The riparian zone creation and preservation standards adopted herein are similar to the standards for these compensation options for disturbance to freshwater wetlands in the FWPA Rules. Further, the standards for riparian zone mitigation banks adopted herein will encourage the development of banks similar to the freshwater wetlands mitigation banks. Mitigation is important in assuring that the functions and values of the riparian zone are

appropriately protected when impact to one part of the riparian area in excess of that allowed by the rules is unavoidable and is minimized. The amendments at N.J.A.C. 7:13-13 expand the locations available for mitigation in order to provide applicants with more opportunities to perform restoration and enhancement activities and to promote these activities in degraded areas that may not be in close proximity to the site of disturbance.

Stakeholder Process

30. COMMENT: Executive Order No. 2 provides that there should be adequate stakeholder involvement prior to the proposal to avoid ill-conceived rules. The Department did not hold the transparent and open stakeholder process that it alludes to in the rulemaking. It appears that the Department's stakeholder process is by invitation only, which is a sham restriction on public involvement. Further, the rulemaking alludes to stakeholder discussions in which environmental groups participated. It is requested that the Department identify these environmental groups, what was discussed, what positions were taken during the discussions, and how things were resolved. This rulemaking has been portrayed as a consensus package that was developed overtime through a stakeholder process, but there is no evidence that this was actually the case. Please identify any environmental groups that supported this rulemaking on adoption. (193)

31. COMMENT: As the representative for a land trust, the commenter participated in many stakeholder meetings in Trenton related to flood hazard rules, riparian corridors, and stormwater management. Weeks were spent reviewing what works and what does not work. Another goal was to address complaints where the rules were unclear or duplicative. Weakening the regulations was never discussed. Apparently there was a whole other set of meetings the external

stakeholders were not privy to as the proposed changes represent much of what was recommended against. (150)

32. COMMENT: In the press release the Department issued with the publication of the rulemaking, there were stakeholders listed in the development of the rule who were never actually consulted and did not participate in any stakeholder meetings. (24 and 147)

RESPONSE TO COMMENTS 30 THROUGH 32: Stakeholder involvement is an integral component of rule and policy development. The purpose of the stakeholder process is to convene representatives of all affected interests to seek their experiences and perspectives on a given topic, so that well-informed and balanced decisions are made when drafting rules. The purpose of the stakeholder process is not to reach a consensus or to draft a rule that is supported by one interest over another, but to generate an informed rulemaking that reflects the Department's determination as to how to best satisfy its statutory mandates to protect public health, safety, and welfare and the environment.

As explained at 47 N.J.R. 1041(a), the Department conducted extensive stakeholder outreach. The Department sought input from local governments, the development community, the environmental community, and State and Federal agencies through 11 stakeholder meetings held on February 1, 4, and 7, 2011; April 13, 15, 18, and 20, 2011; and May 15, 16, 18, and 24, 2012. These stakeholder meetings addressed changes to the application process rules, as well as standards governing development within flood hazard areas and riparian zones. Five subcommittees were formed to specifically address the following subject areas: riparian zones; building standards; acid producing soil deposits; stormwater management; and bridges, culverts, and transportation projects. The subcommittees addressed issues including the relationship

between the riparian zone under the FHACA Rules and the Special Water Resource Protection Area (SWRPA) under the SWM rules, the appropriate width of riparian zones along various surface waters, standards relevant to development within riparian zones, adaptability of development to future flood events, appropriate floor elevations for habitable buildings in flood hazard areas, mitigation of impacts related to exposure of acid producing soil deposits caused by development, standards relevant to the construction and replacement of bridges and culverts, and means by which the Department can continue to facilitate the repair, replacement, and adaptability of public infrastructure. The Department posted on its stakeholder webpage the sign-in sheet of all stakeholder meeting attendees, as well as audio recordings of all meetings. This information is available from the Department's website at http://www.nj.gov/dep/transformation/landuse/landuse_rules.html. Many of the amendments adopted herein reflect the suggestions and recommendations of the subcommittees and stakeholders.

The following organizations representing environmental perspectives were invited to participate in the stakeholder process to assist in the development of the June 1, 2015 notice of proposal: American Littoral Society, Urban Coast Institute, Monmouth University, Stevens Institute of Technology, Association of New Jersey Environmental Commissions, Environment New Jersey, New York/New Jersey Baykeeper, New Jersey Conservation Foundation, Delaware Riverkeeper Network, Hudson Riverkeeper, New Jersey Audubon Society, New Jersey Environmental Federation, Rutgers University, Passaic River Coalition, Stony Brook-Millstone Watershed Association, and Stockton University. Additionally, representatives from the following organizations attended one or more stakeholder meetings associated with this

rulemaking: Delaware Riverkeeper Network, American Littoral Society, Association of New Jersey Environmental Commissions, New Jersey Conservation Foundation, New York/New Jersey Baykeeper, New Jersey Environmental Federation, Stony Brook-Millstone Watershed Association, Stevens Institute of Technology, and Rutgers University.

Public Hearings

33. COMMENT: The notice for the two public hearings that were held on the proposed rule changes was insufficient. It is not practical for the average person or small organization to completely review over 930 pages; the current file on the Department website says this is not the final version. These rule revisions must be put on hold immediately, and all interested parties must be invited to discuss how the rules should be changed, if change is needed. Clearly written and efficient rules are important. The consensus among people who care about New Jersey's environment seems to be that these rule changes are totally unacceptable. (57)

34. COMMENT: Attending the public hearings in person is difficult for people who work. (129)

35. COMMENT: Legislators, administrators, and Department staff are public servants; the public should have a say. (125)

36. COMMENT: The voluminous rulemaking, at 936 pages, contains a great deal of information and very substantial proposed changes to the FHACA, CZM, and SWM rules for which there was a fairly limited time frame and opportunity to review. (175)

37. COMMENT: This rulemaking has been under development for at least four years. The public has been allowed only 60 days to review and comment on a 936-page document. (24 and 147)

38. COMMENT: These rules are complicated and long. Neither 20 days post-publication nor 60 days over the summer are enough time to provide detailed comments because groups need to coordinate with one another, with mayors, and with environmental commissions to determine the impacts of this rulemaking on the local level. (24)

39. COMMENT: Normally it takes a good length of time to really evaluate and comment on the CAFRA regulations, the FHACA Rules, and the SWM rules. Now, they have all been proposed at the same time, but the public was not given three times as long to evaluate them. Please extend the public comment period. (158 and 180)

40. COMMENT: The incredibly short time frame for public comment is contested given the length and complexity of the rulemaking and the time of year (summer vacation) that the public comment period spans. The Department is clearly not interested in truly informed and thoughtful public comment. (183)

41. COMMENT: The Department should have a hearing of this magnitude closer to the City of Newark. Holding this hearing so far from urban areas is unfair to low income residents. (104)

42. COMMENT: The government should never “streamline” regulations hastily without clarity, rigorous review, and ample public comment and input on unintended consequences. In particular, specific changes and rules that increase disturbance and often eliminate oversight by the already under-staffed Department are most strongly opposed. (69)

RESPONSE TO COMMENTS 33 THROUGH 42: A 60-day public comment period was provided, consistent with the requirements of the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq. (APA). While the APA did not require a public hearing for this rulemaking, the Department held two public hearings, including one during evening hours, in different parts of the State, with hearings conducted in Trenton and Long Branch to increase accessibility to those affected by the rules. In addition to publication of the notice of proposal in the New Jersey Register, the Department provided additional notice of the rulemaking on its website, to media outlets maintaining a press office to cover the State House Complex, to 180 other media outlets throughout the State, and by e-mail to the Department's rulemaking listserv and also publicized the rulemaking by press release. Further, the Department conducted extensive stakeholder outreach in developing this rulemaking, as explained in the notice of proposal Summary at 47 N.J.R. 1041(a) and in the Response to Comments 30 through 32. Many of the amendments that were proposed on June 1, 2015, reflect the suggestions and recommendations of the subcommittees and stakeholders. In addition, as indicated above, a total of 835 individuals and agencies submitted comments, which are summarized and addressed in this notice of adoption. Therefore, the Department believes that there was ample opportunity to provide comments and discuss the rulemaking.

Streamlining of Application Process

43. COMMENT: The Department's efforts to streamline and enhance efficiency of regulations is respected and supported; however, doing so at the expense of water and

environmental quality, as well as public health, safety, and welfare is not supported. The proposed regulations will result in such degradations. (24)

44. COMMENT: Some of the proposed rule changes simplify the administration of regulations. While a nice objective, it should not be achieved by lowering water quality standards. (32 and 33)

45. COMMENT: The Department's stated objective of consolidating standards and harmonizing procedural requirements among specified land use regulations is supported if this can be done without compromising natural resource protection standards, aggravating future flood resilience, or narrowing rule applicability. However, the rulemaking is insufficient and would result in unacceptable harm to critical natural resources, frustrate efforts to protect high-quality waters, remove impaired waters from lists, and reduce flood resiliency in the State. (5, 29, 30, 46, 96, and 189)

46. COMMENT: Under the guise of streamlining and reducing the regulatory burden on applicants who want to build close to streams, the Department is proposing to roll back protections that prevent water quality degradation and prevent housing development where it would impair or destroy natural resources. (5, 72, 122, 132, and 163)

47. COMMENT: Streamlining sounds like an excuse to stop caring about water quality. Both wildlife and humans will pay for this lack of stewardship, given how precious clean and fresh water is becoming today. (78)

48. COMMENT: The rulemaking is not reducing unnecessary regulations; it is reducing necessary clean water protections. The Department is not making the rules transparent and clear, but it is increasing risk. (177)

49. COMMENT: While the stated purpose of these changes is to reduce regulatory burden and balance the needs of riparian zone protection against the needs of development, the end result is the undermining of natural resource and flood hazard protection standards. While the benefits in streamlining and simplifying the permitting process for developers are recognized, the result is a thorough and methodical evisceration of the FHACA Rules. (91 and 195)

50. COMMENT: The proposed changes do not advance the goal of protecting New Jersey's environment. This rulemaking focuses on easing the burden on the Department to manage the regulations. (81)

51. COMMENT: In the introductory statement from the June 22, 2015, public hearing at the Department's headquarters in Trenton, the reduction of regulatory burden was mentioned as a factor in these rule changes. The origin of that is Governor Christie's Executive Order No. 2, which has no legislative basis. It is not supposed to change legislative standards, and the standards under the SWM rules are legislatively imposed. These standards are not subject to the Governor's Executive Order. Accordingly, the notion of reducing regulatory burden has no standing in law. A substantive standard cannot be changed through an administrative mechanism. (193)

52. COMMENT: Standardizing the process for obtaining a permit across the FHACA, SWM, and CZM rules is a positive change, so long as the regulations and expected project performance remain at least as rigorous as the current permitting process and provide a process for both protecting existing riparian areas and expanding the area of vegetated and forested riparian areas to improve water quality. It is not clear that the proposed regulations will achieve this. (1)

53. COMMENT: The Department has stated that its goal is to align the rules governing the permitting processes of coastal, flood hazard, and freshwater permitting to the extent the respective enabling statutes allow. Streamlining and standardizing are laudable goals. However, the Department is encouraged to reflect on the emergence of the current multi-layered environmental institutional landscape. The fact that multiple programs within the Department administer policies that recognize the values and benefits of the flood fringe and riparian areas testifies to collectively held and enduring core values and ideologies around environmental protection and enhancement. (42)

RESPONSE TO COMMENTS 43 THROUGH 53: The amendments designed to facilitate the administration of the flood hazard area permitting program do not affect the substantive standards for water and environmental quality or public health and safety for activities regulated under the FHACA rules. The streamlining of the permitting process is intended to align the operations of the Division of Land Use Regulation to create an efficient and predictable system of regulation of the State's lands and waters for the benefit of applicants, Department staff, and ultimately the environment as the Department will be better able to focus its resources on those activities having the greatest potential for environmental impact. The streamlining is also intended to facilitate electronic submission and storage of permit applications, which will allow interested parties easier and more efficient access to all the information submitted to the Department. While the areas governed by the coastal, freshwater wetlands, and flood hazard area rules remain distinct and the standards that an applicant must meet to obtain a permit differ widely under these programs, many of the permitting procedures are very similar. The adopted changes make the flood hazard area permitting process provisions consistent in presentation,

organization, and content with the equivalent provisions in the CZM rules, aligning these rules with respect to emergency authorizations, pre-application processes, application requirements, public notice requirements, application review, permit conditions, and requests for adjudicatory hearings, where the enabling statutes allow.

Further, the consolidation of SWRPA and the 300-foot riparian zone into the adopted 300-foot riparian zone is not anticipated to have negative impacts because, under the prior rules, development within the inner 150 feet of an SWRPA could be permitted with a hardship exception obtained under the FHACA rules. To obtain a hardship exception, applicants were required to demonstrate that the proposed disturbance would not pose a threat to the environment or to public health, safety, and welfare and would not adversely impact the use of contiguous or nearby property. Further, it needed to be demonstrated that there was no feasible or prudent alternative, including not pursuing the project, and that the hardship was a result of an extraordinary situation not created by the applicant. Most of these hardship exemption requests were for activities listed in Table 11.2 and have been approved by the Department after significant expenditures of time and resources both on the part of applicants and the Department. The deletion of SWRPA rules is meant to simplify the permitting process, not to significantly alter the type and size of activities currently permitted in riparian zones. The adopted amendments to the riparian zone, including the incorporation of relevant aspects of the SWRPA under prior N.J.A.C. 7:8-5.5(h) into the requirements for development within a 300-foot riparian zone under N.J.A.C. 7:13-11.2, provide water quality benefits and protections that meet the Federal Clean Water Act and the New Jersey Water Pollution Control Act and are suitably protective of riparian zones. (For further information on riparian zone protections in the FHACA

rules formerly provided by the SWRPA in the SWM rules, see Response to Comments 136 through 148.)

54. COMMENT: In the notice of proposal, the Department indicates that some of the changes are based upon limited resources due to cuts in staffing and available budget. If the Department's staffing is inadequate, it should seek funding from the Legislature, rather than cutting environmental protections. (81)

55. COMMENT: The demands placed on the Department's resources merit sympathy. Staffing levels and the Department's budget are at all-time lows. Regulated areas can come under the jurisdiction of more than one program unit, each with differing standards and rules. Reasonable requests with *de minimus* impacts and well-intentioned conservation projects can be overwhelmed by regulatory complexity. The need for a more streamlined, more efficient approach is well justified. While this is precisely the reasoning given for the rule changes proposed on this docket, the Department goes much further than is appropriate and sacrifices necessary review in the name of streamlining and efficiency. (24 and 147)

56. COMMENT: The rulemaking is plain wrong. It will create administrative burdens, and the program will likely be underfunded, so that staff cannot do their jobs. Do not make our communities more vulnerable to flooding and future damages. (194)

RESPONSE TO COMMENTS 54 THROUGH 56: The Legislature approves a budget for the Department each fiscal year, and the Department is required to perform its operations within the confines of that budget. Streamlining administrative functions to align the operations of the Division of Land Use Regulation is beneficial to the Department in light of staffing and budgetary shortages, but streamlining is also designed to create a more efficient and predictable

regulatory system that will increase staff productivity and efficiency, as well as provide clarity for applicants. Increasing efficiency in the handling of minor projects with *de minimis* impacts will allow the Department to better concentrate available resources on those activities that have the potential to have a greater impact on public health, safety, and the environment. While consideration of what resources are available and how to best utilize those resources is always a concern, with the Department seeking ways to focus resources where they will have the greatest impact, the adopted amendments to more efficiently administer the flood hazard area permitting program do not affect the standards for flood protection and environmental quality.

57. COMMENT: The Department's first responsibility and primary charge is to protect public property, health, safety, and resources. If the Department truly wishes to make the application process less burdensome and more predictable for the regulated community, it can create less confusing regulations and can deny applications promptly and clearly. (24 and 147)

58. COMMENT: After having read the Summary of the proposed rule changes, it appears that some of the Department's stakeholders (for example, developers) have had more than their fair share of influence on the proposed rule changes. The stated argument for streamlining and reducing the regulatory burden on applicants is not accepted. The applicants who wish to build close to the protected waters are developers and not individuals. The hardship that these groups would incur by conducting studies is nonsense; this kind of research and analysis should happen under any circumstance. (64)

59. COMMENT: The Department seems concerned that existing regulations are too complex, unpredictable, and burdensome on the regulated community. The regulations can be

simplified by eliminating or limiting the available exemptions. The regulations will be more predictable if they are enforced as written. When proposed development is contrary to the regulations, the Department should not negotiate with permit applicants and then eventually issue the permit. The regulated community will soon learn that proposed developments that do not conform to the regulations will not be permitted. (81)

RESPONSE TO COMMENTS 57 THROUGH 59: This rulemaking is intended to increase clarity through the consolidation of redundant provisions, the simplification of language or, conversely, the incorporation of additional detail and description where necessary, and the alignment of procedural requirements across the land use permitting programs. These changes will simplify the permit process and facilitate greater compliance by prospective applicants. Further, the amendments are not intended to make development easier but to incorporate procedures that appropriately regulate unavoidable and/or beneficial activities within flood hazard areas and riparian zones.

For example, an undeveloped lot that was created prior to the adoption of riparian zones may be accessible only if the construction of a roadway is permitted across a regulated water. In cases where the regulated water being crossed is designated as Category One, the SWRPA would have prevented the construction of such a roadway. However, if the Department prevented the road crossing from being constructed, the lot would be rendered inaccessible, a result that would be deleterious to the property owner and potentially constitute a regulatory taking. In such a case, the owner could seek relief from strict compliance with the SWRPA standards under a request for a hardship exception under prior N.J.A.C. 7:13-9.8, adopted N.J.A.C. 7:13-15.1. Under a hardship exception request, the applicant would be required to demonstrate that the proposed

development could not avoid being located in an SWRPA, would not pose a threat to the environment or to public health, safety, and welfare, and would not adversely impact the use of contiguous or nearby property. Where such a situation occurred, after much time and expense, the applicant was generally granted a hardship exception for activities that met these standards and that unavoidably impacted the SWRPA or where temporary impacts would result in a long-term environmental benefit. Other examples of projects in which the Department typically issued hardship exceptions to undertake activities within an SWRPA include landfill closures, public infrastructure, and repairing failing subsurface sewage disposal systems. Rather than require applicants to seek a hardship exception in such cases, the adopted amendments and new rules instead uniformly apply requirements necessary to ensure that disturbance to riparian vegetation is avoided when feasible, minimized to the extent practicable, and, where disturbance to riparian zone vegetation would adversely impact the environment, appropriate compensation is provided (see N.J.A.C. 7:13-11.2(b)).

Further, specific standards related to the particular activity being proposed have been incorporated under N.J.A.C. 7:13-11.2. These activity specific standards obviate the need for a hardship exception request while ensuring that the permitted activities meet the same stringent standards as set forth in the prior rules. As previously stated, the activities that have been added to Table 11.2 are limited in scope, such as landfill closure and site remediation activities. By incorporating appropriate standards for such unavoidable and/or beneficial projects into the FHACA Rules, the Department anticipates that hardship exceptions will be requested less frequently, with requests coming only in unusual and uncommon circumstances. The adopted amendments and new rules provide the same level of protection as the rules prior to this adoption

while creating a more efficient and predictable process for projects that would have been ultimately approved under the prior rules after significant time, money, and resources were spent by the applicant and the Department. For further information see the Response to Comments 150 through 160.

General Flooding Concerns

60. COMMENT: New Jersey continues to be a leader in flood damage claims. According to FEMA's statistics, from January 1, 1978 to April 30, 2015, New Jersey has received $5,652,736,211.37 in payments to compensate for flood damages. This places New Jersey second in the country for such claims. The Department acknowledges the problem with flooding by noting that New Jersey has a "dense population and extensive level of existing development within flood hazard areas" and that "periodic flooding causes severe, repetitive, and deleterious social, economic, and environmental impact. Flooding has and continues to be the most frequent, destructive, and costly natural hazard in New Jersey and is responsible for the large majority of disaster-related damage reported in the State." (See 47 N.J.R. 1047.) As such, this rulemaking should incorporate standards and procedures that reduce the impacts of this problem. (28A, 42, 56, 67, and 127)

61. COMMENT: Events like Superstorm Sandy and Hurricane Floyd will occur again. The Governor has tried to construct sand dunes along the oceanfront, which has been a fight. Why would the Department lower the standards of these rules? The rules need to be strengthened before the next big storm hits New Jersey. The State is now buying up so many houses that were subject to regular flooding in places like Manville and Bound Brook. (74)

62. COMMENT: Further flooding in our State is a cause for great concern. The flood fringe and riparian zone are critical in protecting against flooding and environmental impacts. However, this rulemaking increases the amount of allowable disturbance in the riparian zone and reduces the amount of mitigation required for the disturbances. Such changes would certainly negatively affect the people of New Jersey. (138)

63. COMMENT: The flood hazard area program has been working; it has protected property, the environment, and water quality, but it is being eliminated. The State is not learning a lesson from flooding and storm surges. Instead of fixing the problems in New Jersey and making the State more resilient to flooding, this rulemaking is burying the State in more flood water. (177)

RESPONSE TO COMMENTS 60 THROUGH 63: The adoption of the amendments, repeals, and new rules proposed under this rulemaking will not exacerbate flooding or increase flood damage. The purpose of the adopted rules is not to increase development but rather to ensure that clear and consistent standards that are appropriately protective of public health, safety, and welfare and the environment are in place for development within flood hazard areas and riparian zones. The stringent flood protections set forth in the prior FHACA Rules have not been weakened, and the amendments to the riparian zone standards under this chapter will not cause a measurable change in flood flows or flood damage. Where development is undertaken in flood hazard areas, the FHACA Rules ensure that permitted activities are constructed in a manner that protects inhabitants and their property from flood damage, as well as protecting down-stream inhabitants and their property from worsened flooding resulting from upstream development in flood prone areas. For example, through the FHACA emergency rulemaking of 2013 (see 45 N.J.R. 360(a) and 1104(a)), the Department adopted standards to ensure that construction

conforms to FEMA's most current mapped flood elevations and to make it easier for citizens and local governments to rebuild in a resilient manner. The effect of these standards is to ensure, in part, that rebuilding is undertaken in a manner consistent with the latest scientific standards as applied by FEMA. Further, because the Department's flood elevation standards require that the lowest floor of buildings be constructed at least one foot above the Department's design flood elevation, the Department has appropriately accounted for the possibility of impacts from future flood events that may be greater than the currently predicted levels depicted by FEMA's flood mapping. These standards were also incorporated into the CZM Rules for areas subject to tidal flooding.

The FHACA rules are not the State's sole means of protecting residents and their properties from flooding and severe weather events. Many efforts are ongoing throughout the State and in the various other Departments to assist in the recovery from Superstorm Sandy and Hurricane Irene. For example, the Department's Blue Acres Program was established for the purpose of acquiring flood-damaged or flood-prone properties from willing sellers for conservation and recreation purposes. See www.nj.gov/dep/greenacres/blue_flood_ac.html for additional information concerning this program. Following Superstorm Sandy, the State allocated approximately $300 million in recovery funding toward purchasing homes from willing sellers in repetitive flood loss and flood-prone areas and converting the land to open space. The program removes families from harm's way, while also creating natural buffers against future severe weather events. The State of New Jersey also implements other techniques, such as the use of dredged material of the appropriate grain size and composition to nourish beaches and the

establishment of living shorelines, to make communities more resistant to future severe weather events.

In addition, New Jersey's Coastal Management Program has focused on the need for resiliency to coastal hazards since 2011, when it developed two assessment tools to ensure that coastal communities have consistent and comprehensive guidance to assess their vulnerability and capacity for resilience. The Coastal Community Vulnerability Assessment and Mapping Protocol was developed to guide communities through the development of an assessment to characterize the vulnerability of buildings, infrastructure, facilities, and other important community resources, such as public access locations and facilities, while the Getting to Resilience questionnaire was assembled to assist local decision-makers in reviewing and characterizing their existing planning, response, and recovery efforts to identify opportunities to support greater community resilience. Staff has piloted these assessment tools in multiple coastal municipalities (see http://www.nj.gov/dep/cmp/czm_hazards.html). Post-Sandy, the Department, working with its partners and with funding from the National Oceanic and Atmospheric Administration, has developed the Resilient Coastal Communities Initiative to further develop these tools into a community-based planning program that will identify and expand the use of existing management tools and develop and apply new approaches to coastal hazards, including flooding. These efforts are intended to inform more effective Department policies, regulations, and planning.

64. COMMENT: This rulemaking should not be adopted as it is contrary to the Department's mission and lacks common sense. New Jersey already has serious flooding problems. ,Therefore, the rules protecting water quality and residents from flooding must be more stringent,

not less. Many members of the public cannot afford flood insurance and lose everything when flooding occurs. This issue will be exacerbated as flooding is expected to increase with more impervious ground material and climate change. (71, 161, and 162)

65. COMMENT: This rulemaking is vehemently opposed as it will undermine the Department's mission statement and result in the deterioration of New Jersey's highest quality waterways, the reduction of water quality throughout the State, the inability to restore high quality waterways that are already impaired, unacceptable harm to critical natural resources, and backsliding with regard to efforts to increase the flood resiliency in the State. (91 and 195)

RESPONSE TO COMMENTS 64 AND 65: The FHACA Rules adopted herein are not contrary to the Department's mission statement. As part of its 2010 mission statement, the Department proclaimed the following:

> "NJDEP's core mission is and will continue to be the protection of the air, waters, land, and natural and historic resources of the State to ensure continued public benefit. The Department's mission is advanced through effective and balanced implementation and enforcement of environmental laws to protect these resources and the health and safety of our residents. At the same time, it is crucial to understand how actions of this agency can impact the State's economic growth, to recognize the interconnection of the health of New Jersey's environment and its economy, and to appreciate that environmental stewardship and positive economic growth are not mutually exclusive goals: we will continue to protect the environment while playing a key role in positively impacting the economic growth of the State."

The adopted rules provide exceptional flood mitigation and water quality protections that exceed any other statewide program in the nation. Further, the rules balance the social and economic needs of the State with the protection of important natural resources while ensuring that public health, safety, and welfare are suitably safeguarded.

66. COMMENT: The general preference for redevelopment over new development is acknowledged. However, redevelopment should not sacrifice the need to protect and improve water quality and to address flooding concerns, especially in our urban areas and older suburbs. As the Department explained in the beginning of the Summary document, New Jersey has a dense population and extensive development in the flood plain. Redevelopment should not ignore this issue and should occur in a manner that is not inconsistent with New Jersey's obligation to protect human life and property and improve water quality. The need to redevelop should not be a rationale to increase the number of people and property subject to periodic flooding, which is what this rulemaking does. (28A, 42, 56, 67, and 127)

67. COMMENT: Coastal areas, as well as urban waterways and communities, are extremely vulnerable to flooding impacts, and protections should not be weakened. Rather, areas vulnerable to flooding should be strengthened to withstand heavy rain events and storm surge. (96)

RESPONSE TO COMMENTS 66 AND 67: The FHACA rules contain the same stringent flooding standards for redevelopment as are required for new development. The FHACA rules further do not make a distinction between urban areas and other areas in the State. All New Jersey residents are afforded appropriate flood protection under this chapter.

For example, N.J.A.C. 7:13-12.5, Requirements for a building, which continues prior N.J.A.C. 7:13-11.5, sets forth the same lowest floor elevation standards for buildings that are reconstructed, elevated, modified, or converted from one use to another as new buildings (see N.J.A.C. 7:13-12.5(i) through (n)), with limited exceptions. Particularly, under both the prior and adopted FHACA Rules, some flexibility is allowed for buildings that have been substantially damaged by fire, flooding, or other natural disaster as it may not be possible in all cases to meet the standards for a new building (see N.J.A.C. 7:13-12.5(j)). Additionally, under both the prior and adopted FHACA Rules, the flood storage displacement standards at N.J.A.C. 7:13-11.4 do not differentiate between redevelopment and new development although the removal of lawfully existing fill and structures does generally create additional flood storage volume that can in some cases be credited toward redevelopment on the same site. Further, N.J.A.C. 7:13-12.6, which continues prior N.J.A.C. 7:13-11.6, places standards for roadways to ensure that roadways are elevated at least one foot above the design flood elevation wherever practicable.

Unlike fluvial areas, where fill and structures can displace flood storage volume and exacerbate flooding, the Department recognizes that the placement of fill in tidal flood hazard areas does not cause additional flooding. The Department also recognizes that it may not be possible to fully elevate roadways to one foot above the design flood elevation. However, coastal communities are afforded appropriate flood protection under this chapter.

68. COMMENT: The Department must realize that the FHACA Rules are not just an environmental regulation; they contain a very important set of standards that make New Jersey safer and, ultimately, more resilient to the devastating damage of flooding. The rules provide protections to the real stakeholders – the citizens and businesses that occupy the floodplain and

adjacent lands and the taxpayers who will be asked to pay disaster costs for flood damages. These rules are vitally important to building occupants, first responders, including police and fire services, community vitality, and the long-term economy of the State of New Jersey. Commissions, task forces, and a multitude of other groups have recommended restrictions to building in the floodplain for over a hundred years. With our existing exposure, which is increasing into the future, the administration of higher standards is intelligent and based on irrefutable statistics. Current economic conditions and politics do not justify lowering standards that will increase flood vulnerability, risk, and costs to the New Jersey taxpayer over the long term. The higher standards in the existing rules point to broad economic benefits and ultimately reduce burdens on taxpayers and government at all levels, helping the State and communities better manage their budgets and create resilient, sustainable communities. There is no doubt that higher standards are in the best long-term financial interests of taxpayers. As seen after Superstorm Sandy, many businesses did not reopen after a significant flood event, resulting in the loss of inventory, sales, productivity, profits, jobs, income, and tax revenue. Personal impacts of flooding include both physical and social impacts, such as the loss of jobs and wages, increases in bankruptcies, dislocation of communities, and impacts to mental health. Communities often take years to recover from major flood events; many are still in the recovery process three years after Superstorm Sandy. Good planning and regulatory programs can eliminate risk before a flood. (106)

RESPONSE: The Department acknowledges that the FHACA rules play an important role in ensuring New Jersey's resilience after flood events. For this reason, the FHACA Rules incorporate standards that exceed Federal minimum recommendations under the National Flood

Insurance Program, such as requiring additional freeboard for the lowest floor of buildings, requiring that roadways be suitably elevated where practicable, and limiting the loss of flood storage resulting from development in fluvial areas. Additionally, elsewhere in this issue of the New Jersey Register, the Department is proposing to amend the FHACA Rules to include additional flood protection standards that better align this chapter with NFIP and UCC requirements in V zones and coastal A zones.

69. COMMENT: These rules are contrary to the statutory requirements of the Flood Hazard Area Control Act (FHACA). This rulemaking does not protect the "safety, health and general welfare" of the citizens of New Jersey stated at N.J.S.A. 58:16A-50(b). (27, 56, 77, and 122)

70. COMMENT: These rules are contrary to the statutory requirements of the FHACA. This rulemaking does not protect the safety, health, and general welfare of the citizens of New Jersey as required by N.J.S.A. 58:16A-50(b). As this rulemaking does not meet its goals of protecting people and property from flooding, the Department should not adopt this rulemaking. (5, 138, 170, 173, and 190)

71. COMMENT: These rules violate the FHACA. They are supposed to promote the general welfare of the citizens of New Jersey by ensuring flood protection. Adding these loopholes places more people at risk. (177)

RESPONSE TO COMMENTS 69 THROUGH 71: The Flood Hazard Area Control Act at N.J.S.A. 58:16A-50(b) states:

> "It is in the interest of the safety, health, and general welfare of the people of the State that legislative action be taken to empower the Department of

> Environmental Protection to delineate and mark flood hazard areas, to authorize the Department of Environmental Protection to adopt land use regulations for the flood hazard area, to control stream encroachments, to coordinate effectively the development, dissemination, and use of information on floods and flood damages that may be available, to authorize the delegation of certain administrative and enforcement functions to county governing bodies and to integrate the flood control activities of the municipal, county, State and Federal Governments."

The Flood Hazard Area Control Act, therefore, authorizes the Department to exercise its discretion to determine appropriate standards for development within flood hazard areas. The Department has adopted these rules pursuant to this discretion.

New Jersey is a leader in statewide flood protection and mitigation. New Jersey's zero-percent net-fill requirement, reliance on fluvial flood elevations that anticipate future increases in flooding, stringent standards for accessing buildings during a flood event, and the requirement to provide an additional one foot of freeboard for buildings represent a model that other states emulate. The adopted rules, therefore, fulfill the statutory mandate set forth by the Legislature and are not anticipated to encourage increased development, reduce water quality, or increase flooding risk.

72. COMMENT: Regulations help protect the people of New Jersey. Approving these rule changes may have a short-term benefit, but the Legislature should investigate the long-term costs. (62)

RESPONSE: The FHACA and the Water Pollution Control Act were adopted by the Legislature with the intent to protect the public against flooding and water quality impairments. The Department's authority for regulating activities within floodplains is derived from these mandates, and the adopted rules remain the most stringent statewide flood mitigation rules in the nation. Through this rulemaking, the Department has sought to balance the environmental and socioeconomic needs of the State and its residents and does not anticipate adverse environmental or economic impacts from efforts to streamline the regulatory process for applicants.

73. COMMENT: The rules should clarify if municipalities may only pass ordinances and rules that are more restrictive than State standards in the floodway of a natural stream and not in tidal areas in accordance with the enabling statute. N.J.S.A. 58:16A-62 only permits municipalities to adopt more restrictive ordinances for channels in the flood hazard areas of natural streams. Similarly, the Department's model flood ordinances speak to fluvial floodways. (55)

RESPONSE: Pursuant to N.J.S.A. 58:16A-62, "Any municipal or other entity vested with authority to adopt rules and regulations concerning the development and use of land may adopt requirements more restrictive than those contained in the rules and regulations adopted by the department for the floodway and then those contained in the minimum standards promulgated by the department." As such, a municipality can pass an ordinance that is more restrictive than that which is set forth in the FHACA Rules for any floodway, irrespective of whether the area is tidal or fluvial.

Climate Change, Resiliency, and Adaptation

74. COMMENT: As New Jersey suffers more and more from the impacts of climate change, increasingly volatile weather, and increased flooding, these rules roll back protections that would limit future adverse impacts from development. (80)

75. COMMENT: The increasing problems caused by stronger storms and rising sea level are obvious to all. This rulemaking should address this. (144)

76. COMMENT: These changes show strong signs of being favors to corporate and development interests. This is very dumb, short-term thinking with the indisputable threat climate change poses to a vulnerable coastal state. (149)

77. COMMENT: This rule does not consider the frequency of storms, storm surges, or climate impacts. These changes essentially reduce water and habitat protections and will be detrimental to New Jersey. New Jersey has seen a significant number of major floods in recent years and is second in the nation for damage from flooding. In light of this, these rules should be strengthened, not weakened. (177)

78. COMMENT: In the face of a warming climate, the attendant increase in flooding events, and the large amount of impervious surfaces that already cover New Jersey, these rules have no justification and can only be viewed as a severe regression of water quality, wildlife habitat, and flood and climate resiliency protections. (91 and 195)

79. COMMENT: In a post-Superstorm Sandy, increasingly climate crisis environment, it is beyond the pale to propose these changes. Allowing development in areas prone to flooding and near drinking water supplies will place more people in harm's way. Obviously, there need to be

some exceptions to the rule for the sake of efficiency; these proposed changes, however, go way too far. The State needs to reduce development in these areas. (128)

80. COMMENT: These new rules are opposed because they neglect to consider climate change or sea level rise, factors that will become more and more important in New Jersey, as seen with the devastating impact of Superstorm Sandy. But even more important, these rules will cause more flooding and put more people and property in harm's way. (58)

81. COMMENT: Sea level rise and climate change are critical, not only because of flooding from storms, but also because of the impacts on the flooding when we already have elevated bays and estuaries that are backing up our storm drains and our stream systems. This has a big, new impact on the flood hazard rules. Right now, the bays and rivers are rising every time there is a full moon or minor event. Water is backing up and creating a bigger hazard; it is leading to the formation of a single stream system in New Jersey. This is one of the reasons buffers were put in place. The Department says these rules are needed to streamline the permit process, but if these rules go forward, there will not be any actual streams left. (177)

82. COMMENT: New Jersey flood plains are larger now than ever before, and this is an effect of both climate change, which is bringing increasingly intense and frequent flood storms, and the large amount of impervious cover resulting from more than 300 years of development. Structures should be removed from the flood plains and riparian areas. (24)

83. COMMENT: The proposed amendments and new rules ignore the lessons learned from Hurricane Irene and Superstorm Sandy. (193)

84. COMMENT: This rulemaking enables more development in marginal areas. The Department does not appear to have read the latest Rutgers studies on sea level rise. Rutgers has

established a new way of calculating sea level rise based on the data from Superstorm Sandy. Some of the areas that seem targeted for more development are the very areas that will be impacted the most during the next major storm or superstorm. It is important to understand which areas will be impacted the most before allowing further development simply because more construction or more development is desired by some.

As climate change brings additional warming and the evaporation of surface water supplies along with increasingly heavy storm events, more rigorous protections for our stream corridors need to be enacted to allow for more natural floodplain areas to decrease the downstream destruction and protect water supplies. Forested buffers must be protected to help lower water temperatures and hold the soils as the volumes of water in streams increase during future events and lead to further erosion and degradation. (158 and 180)

85. COMMENT: As the climate warms, the frequency and intensity of hurricanes and heavy rain events increases. In 2011, Hurricane Irene became the first hurricane to hit the US since 2008, making three landfalls along the Atlantic Coast and causing widespread flood devastation that resulted in more than $7.3 billion in damages. In New Jersey and New York alone, 22 river flooding records were broken, mass transit was suspended, and more than 1.3 million people were under mandatory evacuation orders. In October 2012, Superstorm Sandy made landfall, becoming the deadliest and most costly storm in New Jersey history with 38 deaths and more than $37 billion in damages. In light of such facts, this rulemaking should incorporate standards and procedures that take climate change and related high intensity storms into account in order to reduce the risks of flooding to people, property, and habitat, and it should seek to preserve and expand the buffer zones that act as sponges and walls against the rising waters associated with

flooding events. Because the proposed rules do not accomplish these goals, the Department must not adopt them. Instead, it should first analyze the impacts of climate change on riparian habitat, water quality, and flood resiliency, as well as the impacts of any proposed reductions to riparian zone protection with regard to increasingly strong climactic events and then propose rules that suitably account for these impacts in order to adequately reduce the risks of flooding. (91 and 195)

RESPONSE TO COMMENTS 74 THROUGH 85: The adopted rules, in conjunction with the building standards under New Jersey's Uniform Construction Code, provide flood protections for the residents of the State and their property, as well as water quality protections that meet all State and Federal requirements. The Department recognizes that New Jersey has substantial and persistent flooding problems and that unchecked development can exacerbate both local and regional flooding. However, the Department also recognizes that development within a riparian zone or flood hazard area is sometimes unavoidable. The adopted rules do not encourage additional development within flood hazard areas, and when development must occur within a riparian zone, the rules encourage smarter development. This rulemaking has not reduced the stringent flood protections set forth in the 2007 FHACA Rules. Rather, the rule recognizes that in some instances development is unavoidable, and in these situations the standards ensure that such development will not increase flooding or environmental impacts.

The Department additionally recognizes that the extent of flooding within the State can increase over time due to a variety of factors and that New Jersey's communities need to adapt to changing conditions. In response, the FHACA Rules were amended in 2007 to require that the lowest floor of buildings and the elevation of many roadways and parking areas be situated at

least one foot above the flood hazard area design flood elevation. The Department regulates a 100-year design flood of all non-delineated streams in accordance with N.J.S.A. 58:16A-55.2 and includes a 25 percent factor-of-safety to account for potential future increases in flood discharges. The Department also regulates flood hazard areas of certain streams under delineations adopted in accordance with N.J.S.A. 58:16A-52 and may, as appropriate, revise or otherwise update those delineations in the future. In addition, N.J.A.C. 7:13-12.5 and 12.6 require that buildings and roadways be situated at least one foot above the flood area design flood elevation with limited exceptions, which will help protect lives and property from potential increases in flooding.

The Department recognizes that development and redevelopment within New Jersey's communities needs to adapt to changing conditions. To assist in this process, the Department adopted regulatory amendments to the standards concerning the height of the lowest floor of a building to facilitate the rebuilding after Superstorm Sandy in a more resilient manner. The 2013 emergency amendments to the FHACA Rules ensure that the best available flood elevation data is used to determine the flood hazard area design flood elevation for a given site, including the Federal Emergency Management Agency's (FEMA) advisory flood maps and subsequently released preliminary maps for New Jersey's coast, which include revised A- and V-zone limits. Because the Department's flood elevation standards require that the lowest floor of buildings be constructed at least one foot above flood elevations in areas subject to both tidal and fluvial flooding, the Department has appropriately accounted for the possibility of impacts from future flood events that may be greater than the currently predicted levels depicted by FEMA's flood mapping. Because the CZM Rules' flood hazard area rule at N.J.A.C. 7:7-9.25(f) requires that

development in flood hazard areas comply with the FHACA and the implementing rules, the changes made in the 2013 FHACA emergency rulemaking apply to development subject to the CZM Rules.

Further, as indicated in the Response to Comments 60 through 63, the Department's Blue Acres Program was established for the purposes of acquiring flood-damaged or flood-prone properties from willing sellers for conservation and recreation purposes, thus removing families from harm's way while creating natural buffers against future severe weather events and returning flood carrying capacity to vital areas. As additionally discussed in the noted response, with respect to tidal areas, since 2011, the NJCMP has developed two assessment tools to ensure that coastal communities have consistent and comprehensive guidance to assess their vulnerability to coastal hazards and capacity for resilience: the Coastal Community Vulnerability Assessment and Mapping Protocol and the Getting to Resilience questionnaire. Through the NJCMP, the Department has developed the Resilient Coastal Communities Initiative to further develop these tools into a community-based planning program. The NJCMP has also initiated a Sustainable and Resilient Communities Grant Program to fund a comprehensive planning approach at the municipal level.

86. COMMENT: Due to global warming and carbon emissions, flooding in the State continues to increase in frequency and intensity. Instead of relaxing the State's flood regulations and giving developers free reign to develop flood prone areas, the Department should be prohibiting development and tightening the regulations. New Jersey is one of the worst states with respect to flooding because the State itself is sinking. The State should be doing everything

in its power to prevent or delay flooding. For example, Maryland is building natural barriers along its waterways to address flooding. As another example, New York and New York City have proposed a $20 million plan to protect the state and city from flooding. Instead of following these states, New Jersey is allowing more development adjacent to its waterways. As a result, the State must buy houses that are repeatedly being adversely impacted by flooding. The State needs to declare a moratorium on more building adjacent to its waterways. The State also needs to develop a serious plan on how to address flooding and climate change. (8)

RESPONSE: It has been estimated that 35 percent of New Jersey's land area lies within a flood hazard area, and since riparian zones may extend outside the flood hazard area, the area of land subject to the FHACA Rules is well over 35 percent of New Jersey. A significant amount of the State's existing homes and businesses, roadways, and other infrastructure lie within flood hazard areas or riparian zones. Preventing all development within the State's flood hazard areas and riparian zones would, therefore, have significant adverse impacts on numerous communities. Under the FHACA, the Department is authorized to "adopt land use regulations for the flood hazard area" and to "control stream encroachments." (See N.J.S.A. 58-16A-50(b).) Therefore, the FHACA presupposes that development can occur within flood hazard areas, provided protections are put in place to ensure that such development does not threaten public health, safety, and welfare.

Further, through the 2013 coastal rulemaking in response to the significant adverse social, economic, and environmental impacts associated with Superstorm Sandy (see 45 N.J.R. 1141(a); 45 N.J.R. 1696(a)), the Department is implementing some actions similar to those being implemented by New Jersey's neighboring states, including New York, to address adaptation and

the promotion of resilient coastal communities. For example, the amendments allow for soft buffers through the establishment of living shorelines. Tidal wetlands are a major component of the coastal ecosystem that provide multiple ecosystem services, as well as a first defense against storm surge. Living shorelines are a means to assist in restoring special areas, such as wetlands, that have been lost and can be designed to adapt to changing environmental conditions.

87. COMMENT: The Department has missed opportunities to strengthen its resource protection mandate through the FHACA Rules. These potential opportunities include the creation of riparian zone expansion projects to ensure that flooding events and sea level rise do not destroy the essential and increasingly rare habitat in riparian zones, the prioritization of living shoreline and erosion control measures throughout the FHACA Rules, and the upgrading of culvert requirements to increase their size, friendliness to fish, and ecological sensitivity. (91 and 195)

RESPONSE: The Department is facilitating the enhancement of riparian zones through adoption of general permit-by-certification 4 at N.J.A.C. 7:13-8.4 for enhancement of a riparian zone through the planting of native, non-invasive plant species and general permit 4 at N.J.A.C. 7:13-9.4 for creation, restoration, and enhancement of habitat and water quality values and functions. Authorization under both of these permits does not require an application fee. Further, the FHACA Rules provide for the creation of riparian zones under N.J.A.C. 7:13-13.9 and for the restoration and enhancement of riparian zones under N.J.A.C. 7:13-13.10. Living shoreline projects are subject to the CZM Rules and are encouraged and facilitated under general permit 24 at N.J.A.C. 7:7-6.24. Finally, as part of this rulemaking, the bridge and culvert requirements

under the FHACA Rules at N.J.A.C. 7:13-12.7 have been amended to increase protection of aquatic biota (see N.J.A.C. 7:13-12.7(f)3 and 4), as well as to prevent and/or reduce fragmentation of wildlife habitat that is caused by existing or proposed roadways (see N.J.A.C. 7:13-12.7(d)3 and (e)3).

Flood Standards, NFIP, and FEMA

88. COMMENT: The Department recognizes climate change as a factor contributing to increased flooding, but the proposed rule fails to factor in the projected influences climate change will have on precipitation and flood events in New Jersey (see 47 N.J.R. 1082). In determining flood mapping, flood elevations, and other features of floodway design standards, the Department proposes the 100-year flood as the standard. However, FEMA and many states have adopted the 500-year flood in response to the conservatively projected influences of climate change on the Mid-Atlantic region. This is a gross omission that the Department must rectify. Providing flexibility for the regulated community should not be the priority of the Department, especially where public health, safety, and property are at risk. (24 and 147)

RESPONSE: As explained in the Response to Comments 74 through 85, the Department recognizes the potential impacts of rising sea levels and has adopted margins of safety within the FHACA Rules that would address potential changes in flood elevations. Under N.J.S.A. 58:16A-50 et seq., the Department is authorized to “adopt, amend or repeal rules and regulations and to issue orders concerning the making rebuilding or renewing of any structure or alteration and the development or use of land in the area which would be inundated by the 100-year design flood of any nondelineated steam.” The Department, therefore, regulates the 100-year design flood of all

nondelineated streams in accordance with N.J.S.A. 58:16A-55.2 and includes the 25 percent factor-of-safety to account for potential future increases in flood discharges. The Department also regulates flood hazard areas of certain streams under delineations adopted in accordance with N.J.S.A. 58:16A-52 and may, as appropriate, revise or otherwise update those delineations in the future. The rules provide a robust level of protection for public health and safety, as well as the environment, into the foreseeable future. However, the Department does not view any of its rules as static items that cannot be changed to reflect evolving science. Should it become apparent that changing conditions warrant further amendment, the Department will take any action determined to be necessary to continue to protect the public and the environment.

Further, in response to the commenter's assertion that FEMA and many states have adopted the 500-year flood, while the Department acknowledges that some jurisdictions may recommend or in some cases require that the lowest floor of certain buildings be set at or above the 500-year flood elevation, there are several issues that should be noted. First, under the FHACA Rules, the lowest floor of buildings in areas subject to tidal flooding must be elevated at least one foot above FEMA's 100-year flood elevation. Further, in areas subject to fluvial flooding, the lowest floor of a building must be elevated at least one foot above the flood hazard area design flood elevation, which itself is at least one foot above FEMA's 100-year flood elevation. As a result, in fluvial areas, the lowest floor of buildings must be set at least two feet above FEMA's 100-year flood elevation. In many of the New Jersey's flood plains, the 500-year flood elevation is no more than one or two feet above the 100-year flood elevation. Therefore, the existing requirement of the FHACA Rules results in the lowest floor of a building that in some cases exceeds the 500-year flood elevation.

Second, the majority if not all of the jurisdictions noted by the commenter focus these lowest floor requirements on buildings that lie within the 100-year flood plain rather than the 500-year flood plain. However, the FHACA Rules regulate the flood hazard area design flood, which, as noted above, is larger than the 100-year flood. Therefore, the FHACA Rules apply to a larger number of buildings than FEMA or other jurisdictions. Third, the FHACA Rules apply many additional standards to development within flood hazard areas that are not addressed by FEMA and other jurisdictions, such as limitations on flood storage displacement (net-fill) in fluvial areas and stringent stormwater management controls under N.J.A.C. 7:8 that reduce the volume and rate of runoff reaching surface waters, thereby reducing their flood potential.

Finally, elsewhere in this issue of the New Jersey Register, the Department is proposing to amend the FHACA Rules to ensure that the lowest flood elevation of buildings is no lower than that which is required under the Uniform Construction Code, which incorporates by reference portions of the International Building Code and International Residential Code. As these national model codes are compliant with the National Flood Insurance Program and in some cases require buildings to be constructed higher than already required under the FHACA Rules, the Department is ensuring that no building in New Jersey is constructed at an elevation lower than that which would be required by these codes and FEMA. Therefore, where FEMA and the UCC require the lowest floor of a building to be constructed at or above the 500-year flood elevation, this requirement would be automatically incorporated into the FHACA Rules.

89. COMMENT: The flood hazard mapping is based on maps that are almost 40 years old. With so much increase in development since then, it is absurd and irresponsible to operate under such embarrassingly out-of-date information. (75)

90. COMMENT: The rulemaking fails to fully update the flood hazard mapping. The Department continues to use 1980 maps that are 35 years out-of-date and does not require updates despite the increased flooding and pavement since then. (103 and 144)

RESPONSE TO COMMENTS 89 AND 90: In order to ensure that the Department and the regulated public are utilizing the best available flood data for new construction, elevating buildings, and redevelopment, the 2013 emergency rulemaking amended the FHACA Rules to specify that the flood hazard area design flood elevation in tidal areas is the highest of the design flood elevation depicted on a Department delineation, the FEMA effective 100-year flood elevation, or any newer advisory or preliminary 100-year flood elevation. Additionally, in fluvial areas, one foot is added to the FEMA effective and preliminary mapping. An exception is made where a Department delineation is adopted subsequent to January 24, 2013, as well as in cases where an applicant chooses to recalculate the design flood elevation using newer hydrologic and topographic data. The Department is also working with FEMA to include the flood hazard area design flood elevation on FEMA's new flood mapping as it becomes available throughout the State. The use of FEMA's advisory and preliminary mapping, where more protective than FEMA's effective mapping, and the automatic incorporation of effective FEMA maps that depict the Department's flood hazard area design flood elevation ensure that the State will not rely on outdated or inaccurate flood mapping. Further, should FEMA incorporate additional risk factors into its depiction of the 100-year flood elevation on its Flood Insurance Rate Maps, these

changes will be automatically incorporated into the Department's delineations. For an added factor of safety, the Department's flood elevation standards require that the lowest floor of buildings be constructed at least one foot above the flood hazard area design elevation. Therefore, the Department has appropriately accounted for the possibility of impacts from future flood events that may be greater than the levels depicted on the Department delineations. As discussed in more detail in the Response to Comments 91 through 97, the Department is additionally proposing amendments elsewhere in this issue of the New Jersey Register to make clear that construction in V zones must additionally comply with the elevation requirements of the NFIP and UCC in the limited circumstances where those standards result in a higher first floor elevation.

91. COMMENT: In the 1970s, the Department published a series of paper "Flood Hazard Reports" that contained highly detailed maps of the flood hazard areas. These maps included two-foot elevations, roads, railroads, and other civil works, buildings, and even fence lines and individual trees. The Department should commit to the production of an electronic replacement for this series using current GIS technology. The resulting products should be freely available, posted on the GeoWeb system, and completed based on a schedule reflecting flood losses. This would potentially address the confusion professed by applicants, provide readily accessible administrative information to the Department's staff, and assist local governments in planning and floodplain management. These maps should reflect the 500-year flood hazard area rather than the 100-year area to address anticipated climate change impacts on flooding. (24)

RESPONSE: The Department's flood hazard area delineations have been digitized and are available electronically by contacting the Department's Flood Control Section at http://www.nj.gov/dep/floodcontrol/index.htm. However, Department delineations have not been converted into a GIS layer due to issues with properly georeferencing the mapping. Rather than expending the considerable time and resources that would be required to georeference these older maps that may not fully reflect the extent of today's flooding and that, as noted in the Response to Comments 89 and 90, are superseded in some cases by FEMA mapping, the Department is instead partnering with FEMA to incorporate all of its flood hazard areas on digitized FEMA maps, which are GIS compatible. Current FEMA mapping additionally depicts the 500-year flood elevation and limits referenced by the commenter.

92. COMMENT: Minimum State regulatory requirements must be consistent with the NFIP for actions in the floodplain. The Department provides technical assistance and training to local government officials and conducts Community Assistance Visits and ordinance reviews to ensure community compliance with the NFIP. The Department is also a Cooperating Technical Partner, and as such, the Department receives payments to collaborate with FEMA Region II in updating flood hazard mapping and producing non-regulatory products that are valuable in emergency management planning and risk reduction actions. FEMA is a partner to the State of New Jersey in identifying natural hazard risk and overseeing implementation at the community level. The importance of the consistency of the FHACA Rules with the NFIP cannot be understated. New Jersey homeowners and business owners depend on the NFIP standards and New Jersey's even higher standards to minimize flood losses. In fact, FEMA, through Federal

regulations, specifically encourages states to adopt standards that exceed Federal minimums (these Federal minimum standards are designed for an insurance program, not specifically for public safety) as a means to mitigate current and future storm and flood damages and associated costs. This will become increasingly important with the increases in sea level that have been observed for decades along the New Jersey coast. Accordingly, the FHACA Rule must be amended to be consistent with the NFIP. (106)

93. COMMENT: In the interest of achieving the Department's stated objective of uniform standards, this rule needs to address requirements for building in high hazard areas, such as V zones. The rule is silent with respect to FEMA, NFIP, and UCC requirements directed at establishing the appropriate elevation of the "lowest horizontal structural member" and, as such, makes future development in coastal zones more vulnerable to flood damage. In addition, the rule allows for development in high-risk zones using insufficient building elevation standards that do not adequately factor in future conditions related to more frequent high-intensity storms, population growth proximate to waterways, and sea level rise. Not only do increased density and outdated building standards in high-risk zones increase the potential for safety issues and the likelihood of property damage, but the more development there is in a floodplain, the less able it is to provide the benefits of a floodplain in natural conditions, such as flood attenuation through the absorption, slowing, and storage of floodwaters. Naturally functioning floodplains also provide important water quality and habitat benefits. The Department is encouraged to revise elevation requirements for building in high hazard areas, such as V zones, to match those mandated by FEMA, NFIP, and the UCC. (30 and 189)

94. COMMENT: Even with the staggering damage caused by Hurricane Irene and Superstorm Sandy, as well as concrete evidence that the number and intensity of such destructive events will increase, the Department has proposed rules that will encourage development and an increased population density in flood prone areas. The rules directly conflict with FEMA's NFIP and State UCC requirements directed at establishing the appropriate elevation of the "lowest horizontal structural member," and as such, the rules will increase the amount of future development in coastal zones and vulnerable flood prone areas. The proposed rulemaking allows for increased density in high risk zones and does not consider the impacts of climate change and related high intensity storms, population growth near waterways and coastal areas, and sea level rise. (91 and 195)

95. COMMENT: One of the stated objectives of the rulemaking is to provide better consistency with Federal, State, and other local requirements. In the interest of achieving the Department's stated objective of uniform standards, the FHACA Rules need to address requirements for building in high hazard areas, such as V zones. The rulemaking seems to conflict with FEMA, NFIP, and UCC requirements directed at establishing the appropriate elevation of the "lowest horizontal structural member" and, as such, makes future development in coastal zones more vulnerable to flood damage. The FHACA Rules should exceed the NFIP standards for development within V zones. The rulemaking allows for increased density in high risk zones using outdated building standards. The rulemaking does not adequately factor in future conditions related to more frequent high intensity storms, population growth proximate to waterways, and sea level rise. (177)

96. COMMENT: NFIP provides subsidized flood insurance to protect property owners. As a condition of eligibility however, participating municipalities must adopt local flood plain management measures to reduce or avoid flood damage. Properties located in a participating municipality, which do not have flood insurance, are denied both direct Federal financial assistance, and Federally related financing by private lending institutions. At present 550 New Jersey municipalities participate in this program. Participating municipalities must enforce their local flood plains management measures. Indeed, if "communities do not adequately enforce their floodplain management regulations, they can be placed on probation and potentially suspended from the [NFIP]" pursuant to 44 CFR 59.24(b).

The proposed regulations define the measurement of minimum elevation of the lowest floor in a V zone as the lowest walking surface. The NFIP, however, defines the measurement of the minimum elevation of the lowest floor in a V zone as the lowest horizontal structural member of the lowest floor. Here, the State standard is below the Federal standard. Put another way, the State is proposing a standard that is less than the standard that municipalities must enforce. This may be an issue for some municipalities in reviewing applications to develop properties within V zones. These proposed regulations create "prior approvals," which are necessary preconditions to final local approval. By creating a lower State standard, these regulations put great pressure on local building officials to correctly evaluate these proposed projects. This would create unnecessary friction between the regime of the State and the regime municipalities that must enforce.

Consequently, these regulations should be amended, so that they are better aligned with the NFIP. Alternatively, these regulations should specifically state that regardless of any State

approval granted, these projects must still comply with Federal flood reduction standards. An example of such language can be found in New Jersey's CAFRA regulations at N.J.A.C. 7:7E-3.25(f). (130)

97. COMMENT: There is the potential for confusion and error in not defining the V zone in the FHACA Rules. Under the NFIP, the V zone has restrictions on building foundation (covered through the UCC) and building elevation, as specified for A zone construction in the rule. This deficiency will be magnified when the imminent change is made to the State building code to require construction in the coastal A zone (between the Limit of Moderate Wave Action and the V zone) to match standards of the V zone. (106)

RESPONSE TO COMMENTS 92 THROUGH 97: The construction of buildings in tidal flood hazard areas is subject to the requirements of the FHACA Rules, the UCC, and in certain cases, the Department's CZM Rules. Together, these three sets of rules, which focus on different aspects of development, meet or exceed minimum NFIP standards in both A zones and V zones. It should be noted that, while the NFIP allows development landward of the mean high water in V zones, the Department's CZM Rules limit development in V zones and are, therefore, more stringent than the minimum standards set by NFIP. FEMA encourages communities that participate in the NFIP to adopt higher standards. A municipality may choose to adopt regulations that are more stringent than those of the Department's rules.

However, the Department recognizes that the requirements of the FHACA Rules in some regards differ from the standards of the NFIP. For example, the Department requires that the lowest floor of buildings in flood hazard areas be constructed at least one foot above the flood hazard area design flood elevation, which results in buildings that are at least one foot higher

than NFIP in tidal areas and at least two feet higher than NFIP in fluvial areas. In other cases, the FHACA Rules do not address requirements covered by the NFIP, such as specific construction standards. This is appropriate because the construction requirements for all buildings in New Jersey, including buildings located in flood hazard areas and V zones, are set forth in the Uniform Construction Code (UCC), N.J.A.C. 5:23, which is promulgated by the New Jersey Department of Community Affairs and administered locally though building code officials. However, as the Department recognizes these differing standards can lead to confusion, the Department is proposing elsewhere in this issue of the New Jersey Register to incorporate into the FHACA Rules appropriate V zone and coastal A zone standards to ensure consistency with the standards of the UCC, which is consistent with minimum NFIP requirements.

98. COMMENT: Mapping produced through the NFIP and administered by FEMA is for static conditions at the time the Flood Insurance Study and Flood Insurance Rate Map are developed. While the maps are completed with the best available data, by the time these insurance products are adopted by the municipality, they are already out-of-date, under-representing future conditions and associated risk. According to the Association of State Floodplain Managers' National Flood Programs and Policies Review from 2007, this mapping is, "… based on a relatively short history of flooding and rainfall, hydrologic calculations that have a significant inherent error, and other variables such as future development that are not accounted for in calculations to determine flood heights or velocities …" Therefore, higher standards are needed to offset this uncertainty in future flood risk with additional freeboard. The freeboard in New Jersey riverine and tidally-effected waters should be increased to two feet for

non-critical buildings and structures and three feet for critical facilities. This increase is supported by the FHACA, which provides New Jersey's statutory basis for higher standards. Specifically, the FHACA was created: "… in the interest of the safety, health, and general welfare of the people of the State that legislative action be taken to empower the Department of Environmental Protection to delineate and mark flood hazard areas, to authorize the Department of Environmental Protection to adopt land use regulations for the flood hazard area, to control stream encroachments, to coordinate effectively the development, dissemination, and use of information on floods and flood damages that may be available …" Further, the New Jersey Legislature empowered the Department to "… adopt rules and regulations which delineate as flood hazard areas such areas as, in the judgment of the department, the improper development and use of which would constitute a threat to the safety, health, and general welfare from flooding." The FHACA is necessary because the companion Federal statute is insufficient to provide adequate protection for people and property in our densely developed State. Prior governors and legislatures have determined and supported the need to adopt New Jersey-specific laws and regulations that include higher standards appropriate to New Jersey's growing risk. It is important to recognize that these standards represent uncertainty in engineering, climatic data, future conditions, and the significance of underreporting flood risks to safety and property damage. The costs to development interests, building materials and labor, and inhibited land use are very small when compared to the benefits of keeping citizens safer and communities more resilient to future flood events. In addition, owners realize great savings in flood insurance premiums and make up the additional cost of construction in short order. (106)

RESPONSE: The Department recognizes that the extent of flooding within the State can increase over time due to a variety of factors. In response, the FHACA Rules were amended in 2007 to require that the lowest floor of buildings and the elevation of many roadways and parking areas be situated at least one foot above the flood hazard area design flood elevation. The Department also regulates a flood larger than the 100-year flood in fluvial areas to account for possible future changes in flood elevations. Through the 2013 FHACA emergency rulemaking, the Department amended the FHACA Rules to ensure construction activities in New Jersey will utilize the most recent and accurate flood mapping available, as discussed in the Response to Comments 89 and 90. The use of FEMA's preliminary mapping and automatic incorporation of effective FEMA maps that depict the Department's flood hazard area design flood elevation ensure that the State will not rely on outdated or inaccurate flood mapping. Further, should FEMA incorporate additional risk factors into its depiction of the 100-year flood elevation on its Flood Insurance Rate Maps, these changes will be automatically incorporated into the Department's delineations.

Regarding freeboard above the design flood elevation, the FHACA Rulesrequire the lowest floor of buildings to be constructed at least one foot above the design flood elevation, or for non-residential buildings that cannot be elevated, the building must be flood-proofed to at least one foot above the design flood elevation. Additionally, the Department recognizes that the UCC incorporates by reference the International Building Code and International Residential Code, which in some cases require additional freeboard for certain types of buildings. As such, the Department is proposing elsewhere in this issue of the New Jersey Register to amend the FHACA Rules to incorporate the floor elevation standards of the UCC where those standards

result in a higher elevation than that called for in the FHACA Rules so that adequate freeboard is provided for all buildings.

99. COMMENT: The State is still allowing breakaway walls in areas that are flood prone. (177)

RESPONSE: All construction standards and techniques for buildings in New Jersey are incorporated under the UCC, N.J.A.C. 5:23. Only the UCC can set construction standards. Therefore, the FHACA Rules do not address specific construction techniques, such as breakaway walls.

General Riparian Zone Concerns

100. COMMENT: It is concerning that this rulemaking presumes that development within riparian zones is “sometimes unavoidable” and sets requirements by type of development. This presumes that development really is unavoidable and allows the applicant to make the determination. (1)

101. COMMENT: There is no scientific justification for disturbing riparian vegetation. The basis and background document and cumulative impact assessment contain no rationale for allowing these proposed revisions. These proposed rules would have serious implications both in the riparian habitats themselves, as well as downstream and would undoubtedly cost the State of New Jersey millions of dollars in flood damage claims and other economic impacts, as well as the ecological functions provided by waterways and riparian habitats. (91 and 195)

102. COMMENT: There does not appear to be any scientific rationale, a basis and background document, or cumulative impact assessment to justify these sweeping authorizations to clear, cut, and otherwise disturb riparian vegetation. In the contrary, extensive research has demonstrated the importance of maintaining unfragmented buffers. Maintaining buffers of native vegetation within riparian areas provides multiple benefits for water quality by absorbing and filtering out nutrients and other pollutants, for water quantity by replenishing groundwater, maintaining baseflow, and storing and slowing floodwaters, and for stream health by stabilizing banks and shading rivers to keep waters cool, supporting fish and other aquatic wildlife. Maintaining vegetated riparian buffers has been shown to reduce small drainage problems and complaints, to increase property values, to maintain a foundation for open space greenways, to provide conservation corridors for wildlife movement, and to provide spaces for stormwater best management practices, especially in urban areas. In the country's most urbanized state, which has numerous water quality and flooding problems, riparian buffer disturbances should be strictly limited. (29, 30, 46, and 189)

RESPONSE TO COMMENTS 100 THROUGH 102: It has been estimated that 35 percent of New Jersey's land area lies within a flood hazard area, and since riparian zones may extend outside the flood hazard area, the area of land subject to the FHACA Rules is well over 35 percent of New Jersey. A significant amount of the State's existing homes and businesses, roadways, and other infrastructure lie within riparian zones. Preventing all development within riparian zones would, therefore, have significant adverse impacts on numerous communities. Under the FHACA, the Department is authorized to "adopt land use regulations for the flood hazard area" and to "control stream encroachments." (See N.J.S.A. 58-16A-50(b).) Therefore,

the FHACA provides the Department with discretion to determine how development can occur within flood hazard areas and to create appropriate protections to ensure that such development does not threaten public health, safety, and welfare. Further, the FHACA Rules recognize that some projects within riparian zones are unavoidable, beneficial, and/or *de minimis*. Therefore, the rules allow the construction of infrastructure projects (roads, utilities, stormwater discharges, trails, footbridges), projects that are beneficial to flooding and/or the environment (bank stabilization, public access, repairing septic systems, site remediation, solid waste facility closures, flood control projects, stream cleaning, removing fill/structures), and *de minimis* disturbances associated with a single-family home or duplex. Further, the FHACA Rules establish limits for the amount of riparian zone disturbance that can occur for each type of activity to ensure continued riparian zone functionality. As discussed in the Response to Comments 60 through 63, the adoption of the amendments, repeals, and new rules proposed under this rulemaking will not exacerbate flooding or increase flood damage. The purpose of the adopted rules is not to increase development, but rather to ensure that clear and consistent standards that are appropriately protective of public health, safety, and welfare and the environment are in place for development within flood hazard areas and riparian zones. The stringent flood protections set forth in the prior FHACA Rules have not been weakened, and the amendments to the riparian zone standards under this chapter will not cause a measurable change in flood flows or flood damage.

Opposition to Amended Riparian Zone Standards

103. COMMENT: Several commenters believe that the rules should not allow an increase in allowable riparian zone disturbance. Some commenters believe that an increase will weaken the water quality protection afforded by riparian zones, putting the State's water resources at risk, and/or result in additional flooding. (1, 24, 28A, 42, 56, 63, 67, 73, 80, 83, 127, 166, 170, 174, 179, 187, 193, 194, and 196)

104. COMMENT: The Department correctly notes that New Jersey has a "dense population and extensive level of existing development within flood hazard areas," and that "periodic flooding causes severe, repetitive, and deleterious social, economic, and environmental impact. Flooding has and continues to be the most frequent, destructive, and costly natural hazard in New Jersey and is responsible for the large majority of disaster-related damage reported in the State." The Department also acknowledges the importance of the flood fringe and riparian zone in protecting against flooding and environmental impacts. Given the Department's recognition of these issues, the increase in the amount of allowable disturbance in the riparian zone and reduction in the amount of mitigation required for these disturbances in this rulemaking is contrary to the requirements and intent of the FHACA, which requires the Department to protect the "safety, health and general welfare of the people" of New Jersey at N.J.S.A. 58:16A-50(b). Loosening standards does not achieve this goal and, in fact, may promote the opposite by making it easier to place people and property in harm's way. The Department should not adopt these regulations. (5, 27, 56, 77, 122, 155, 173, and 177)

105. COMMENT: The rulemaking increases allowable stream buffer disturbance. Various projects will now be allowed to have bigger impacts on waterways in riparian areas including single-family homes or duplexes; utilities; additions to private residences; garages, barns, or

sheds; roadways and private driveways; and railroad projects. This amendment is opposed. (103 and 142)

106. COMMENT: The rulemaking eliminates protections to riparian zones, which will have significant adverse consequences, such as increased flooding, reduced water quality, impacted wildlife, and reduced recreational opportunities. This rulemaking puts people and property at risk, as well as destroys water quality that the Department is mandated to be protecting. (177)

107. COMMENT: The proposed rule changes are extremely concerning because they weaken protections for riparian buffers. The proposed increases in development along riparian areas and disturbance to riparian vegetation are also concerning. Riparian buffers absorb flood waters, filter pollution before it reaches our shared waterways, provide shade to maintain temperature and dissolved oxygen levels, and prevent erosion by stabilizing soils. Protecting vegetated riparian buffers in flood hazard areas is the most environmentally sound and economically efficient means of protecting public health, safety, property, and environment from the impacts of flooding. (24)

108. COMMENT: The proposed increases to the amount of disturbance allowed in the riparian zone and the reduction in the amount of mitigation required for these disturbances is troubling. The proposed changes to the rules will allow impacts that are directly at odds with ongoing restoration work and riparian area enhancements. (42)

109. COMMENT: The rulemaking provides for increased impacts to the riparian zone, reductions in the amount of mitigation required, and an increase in the threshold impacts before mitigation is required. The summary document does not contain any analysis regarding the impacts to surface water quality in general. (28A, 42, 56, 67, 127, and 170)

110. COMMENT: The increase in disturbance in riparian zones and the reduction in the amount of mitigation required for these disturbances is contrary to the requirements and intent of the FHACA, which requires the Department to protect the "safety, health and general welfare of the people" of New Jersey (N.J.S.A. 58:16A-50(b)). Relaxing standards does not achieve this goal and, in fact, may promote the opposite, actually placing people and property in harm's way; therefore, the Department should not adopt these regulations. (5, 24, 27, 29, 46, 56, 77, 122, 138, 139, 147, 170, 173, 177, and 190)

111. COMMENT: The changes to the riparian zone protection standards that would significantly diminish riparian zone protection by creating exception areas, increasing areas of riparian zone disturbance, allowing for more permits, and removing requirements for demonstration of "hardship" are concerning. (177)

112. COMMENT: Buffers are the best way to protect water quality. In the Department's notice of proposal for the FHACA Rules of 2006, it determined that expanding the riparian buffer was necessary because existing buffers were "not adequate to preserve the functions of the riparian system" (38 N.J.R. 3950(a)). The Department also noted that the width of the riparian zone was important and that breaks or gaps reduced its effectiveness. Scientific literature reinforces the importance of buffers in removing "excess nutrients and contaminants such as pesticides, heavy metals and organic matter, all of which are detrimental to water quality." Unfortunately, by reducing buffers, the Department's rulemaking reduces New Jersey's ability to achieve its dual goals of maintaining and improving water quality and reducing the risks of flooding for people and property. (28A, 42, 56, 67, 127, and 170)

113. COMMENT: Buffers for native vegetation should be maintained within riparian areas because they provide multiple benefits for water quality by absorbing and filtering out nutrients and other pollutants, for water quantity by replenishing groundwater, maintaining baseflow, and storing and slowing floodwaters, and for stream health by stabilizing banks and shading rivers to keep waters cool to support fish and other aquatic wildlife. (177)

114. COMMENT: The proposed new rules will hurt water quality and be detrimental to New Jersey's environment, cutting back on stream buffers and destroying riparian corridors. These changes are unacceptable. (139)

115. COMMENT: Reducing buffer widths will degrade surface waters used for drinking and swimming, adding to the Federal 303(d) list of impaired waters in New Jersey. For example, clay and silt fine-sized sediments, which would be removed by healthy riparian zones, can blanket and impair macroinvertebrate habitat and also provide substrate for the survival and growth of fecal indicator bacteria, such as E. coli, in streams, stormwater structures, and freshwater and coastal lakes. (158, 159, and 180)

116. COMMENT: The rulemaking would eliminate important protections for our waterways by weakening stream buffer requirements, which hurts water quality, water supply intakes, and fisheries, allowing for thermal pollution and siltation of streams. Stream buffers are important habitat corridors and are natural vegetative areas that protect streams from pollution and protect people from flooding. (49 and 177)

117. COMMENT: Extensive research has demonstrated the importance of maintaining significantly sized stream buffers. Maintaining buffers of native vegetation within riparian areas provides multiple benefits for water quality by absorbing and filtering out nutrients and other

pollutants, for water quantity by replenishing groundwater, maintaining baseflow, and storing and slowing floodwaters, and for stream health by stabilizing banks and shading rivers to keep waters cool, supporting fish and other aquatic wildlife. Maintaining vegetated riparian buffers has been shown to reduce small drainage problems and complaints, to increase property values, to maintain a foundation for open space greenways, to provide conservation corridors for wildlife movement, and to provide spaces for stormwater best management practices, especially in urban areas. In the country's most urbanized state, which has numerous water quality and flooding problems, existing riparian buffers should be maintained or expanded. (29 and 46)

RESPONSE TO COMMENTS 103 THROUGH 117: The Department acknowledges the many important functions provided by vegetated riparian zones and agrees that appropriately limiting disturbance to vegetated riparian zones is an essential component in maintaining adequate water quality standards, protecting people and property from flooding, and promoting healthy ecosystems. For this reason, the FHACA Rules establish strict limits for the amount of riparian zone disturbance that can occur for each type of activity. Further, with the exception of the riparian zone along waters flowing through areas containing acid producing soil deposits, as discussed in the Response to Comments 223 through 226, the widths of the riparian zone along both sides of waters regulated under this chapter (50-foot, 150-foot, and 300-foot, as set forth at both prior and adopted N.J.A.C. 7:13-4.1) have not been amended by this rulemaking.

Under the adopted permits-by-rule, general permits-by-certification, and general permits, regulated activities are tightly limited and can generally occur only within actively disturbed areas and/or within close proximity to structures and buildings in order to ensure that riparian zone impacts are *de minimis*. Under individual permits, N.J.A.C. 7:13-11.2(b) requires that the

basic purpose of the regulated activity or project cannot be accomplished onsite without the clearing, cutting, and/or removal of vegetation in the riparian zone and, further, that all clearing, cutting, and/or removal of riparian zone vegetation is minimized through methods, including situating the regulated activity or project as far from any regulated water as feasible and limiting construction to areas devoid of vegetation, actively disturbed areas, or other areas wherein the benefits and functions of a riparian zone are considerably deteriorated and impaired as a result of previous development. N.J.A.C. 7:13-11.2(c) establishes strict setbacks from the top of bank of regulated waters, and N.J.A.C. 7:13-11.2(d) requires removal of existing development and subsequent restoration of near-stream areas in the majority of cases. N.J.A.C. 7:13-11.2(g) through (y) recognize that some activities within riparian zones are unavoidable, beneficial, and/or result in a *de minimis* impact to riparian zone functionality. It is, therefore, appropriate, in specific cases, to permit limited riparian zone disturbance for the construction of infrastructure projects (roads, utilities, stormwater discharges, trails, footbridges), projects that reduce flooding and/or are beneficial to the environment (bank stabilization, public access, repairing septic systems, site remediation, solid waste facility closures, flood control projects, stream cleaning, removing fill/structures), and *de minimis* disturbances associated with a single-family home or duplex. Further, all temporarily disturbed areas must be replanted, and where impacts to riparian zone vegetation exceed acceptable limits, as well as in a number of cases where development occurs within a 300-foot riparian zone, mitigation in accordance with N.J.A.C. 7:13-13 must be provided. Together, these standards provide exceptional protection of vegetated riparian zones.

On November 5, 2007, limits on the area of riparian zone vegetation that could be disturbed for a variety of regulated activities, reflecting the best available science at that time,

were incorporated in the FHACA Rules (see 39 N.J.R. 4573(a)). In implementing the FHACA Rules since 2007, the Department has determined that in many cases the adopted limits did not fully consider the actual area of disturbance that is needed to undertake regulated activities that have been demonstrated to necessarily impact riparian zone vegetation and have satisfied the other requirements applicable pursuant to N.J.A.C. 7:13-11.2(b) due to variations in topography, vegetative coverage, and the location of existing development. In addition, during the stakeholder process associated with this rulemaking, numerous private developers, public entities, and design professionals articulated that the limits on riparian zone disturbance incorporated in the 2007 FHACA Rules could not often be achieved, forcing many projects to request a hardship exception. In response to these findings, as well as the Department's experience in reviewing these requests and determining that in many cases exceptions were needed not because of unique or unusual circumstances, but because the area allowed in Table C for the particular activity was inadequate for a standard project, the Department determined that adjustments to the values in Table C were warranted in order to better represent the typical area of riparian zone disturbance associated with a variety of activities. Furthermore, the Department has added several new subcategories of regulated activities to cover common regulated activities that were omitted from Table C, which has been replaced by Table 11.2 at N.J.A.C. 7:13-11.2, which includes closure of a solid waste facility and remediation of a contaminated site. As noted above, applicants proposing development in a riparian zone must demonstrate that the riparian disturbance is unavoidable, that the unavoidable disturbance is minimized, and that all other applicable requirements of N.J.A.C. 7:13-11.2, as well as the rest of the chapter have been satisfied. Additionally, many activities, such as the construction of private roadways or

hazardous site remediation within a 300-foot riparian zone, require mitigation for the total riparian disturbance, not simply the amount of disturbance that exceeds the limit in Table 11.2. The expansion of riparian mitigation options will facilitate successful mitigation projects to compensate for permitted riparian disturbance. Table 11.2, therefore, permits only those projects that are unavoidably located within a riparian zone, would provide an environmental benefit, and/or which would result in *de minimis* impacts to riparian zone functionality. The Department believes that the adopted amendments are suitably protective of water quality and will encourage prospective applicants to situate projects in actively disturbed areas rather than forested areas.

Existing Need for a Hardship

118. COMMENT: Under existing N.J.A.C. 7:13-9.8, a hardship exception for activities that exceed the allowable riparian zone disturbances is appropriate for both water quality and water quantity protection as required by State and Federal laws. Further, it is appropriate that the process to obtain a hardship exception requires additional work, analysis, and cost to an applicant. Vegetated riparian buffers are critically important for protecting and maintaining water quality and preventing/reducing flooding and flood damages. Accordingly, avoiding this regulatory requirement through a hardship exception should not be cheap and easy. (183)

119. COMMENT: In cases where the existing riparian zone standards are not met, applicants must demonstrate a hardship, which the Department has indicated is time and resource consuming. The Department has also indicated that while in most cases the hardship exception is granted, applicants have difficulty meeting the compensation requirements. For these reasons, proposed N.J.A.C. 7:13-11.2 removes requirements that are “burdensome, unmanageable,

unhelpful to the goal of riparian zone protection." However, no data or specifics regarding how the program is succeeding in maintaining and increasing the overall area of protected and vegetated riparian zone are provided that would demonstrate that these requirements are "unhelpful." "Burdensome" is not a justification for reducing standards. Furthermore, the Department has not provided any data or statistics on the number and types of projects that encounter hardships or the final permit requirements that are negotiated under the current program to justify the claim that the requirements are actually "burdensome." (1)

120. COMMENT: Many disturbances that currently require a demonstration that strict compliance with riparian zone limitations would create an undue hardship would be allowed with mitigation under this rulemaking. This rulemaking is opposed. (24 and 147)

RESPONSE TO COMMENTS 118 THROUGH 120: The FHACA Rules seek to balance suitable protection of public health, safety, and welfare and the environment while permitting, in limited cases, development that is unavoidable or beneficial and/or that results in a *de minimis* impact to riparian zone functionality, as noted in the Response to Comments 103 through 117 above. Part of this balance includes providing for a reasonable area of riparian zone disturbance to conduct activities that meet this test, as well as requiring mitigation for activities that do not have a *de minimis* impact on riparian zone functionality.

Under prior N.J.A.C. 7:13-10.2, a person proposing to exceed the limits set forth on riparian zone disturbance under Table C was required to demonstrate that strict compliance with these limits constituted a unique and exceptional hardship pursuant to N.J.A.C. 7:13-9.8. Specifically, prior N.J.A.C. 7:13-9.8(b)1, which is continued with amendments at N.J.A.C. 7:13-15.1(c)1, required the applicant to demonstrate that, "due to an extraordinary situation of the

applicant or site condition, compliance with this chapter would result in an exceptional and/or undue hardship for the applicant." Given the frequency with which applicants found that meeting the limitations of Table C was not possible, it became difficult to claim that "an extraordinary situation of the applicant or site condition" existed in many cases. For example, it was not uncommon that the construction of a roadway or utility line could not meet the requirements of Table C. This use of hardship exception requests has unnecessarily increased application costs, led to uncertainty for prospective projects, including potentially beneficial activities, and increased the Department's administrative and technical review of applications, thereby diverting the Department's attention from concentrating resources on activities that have a greater potential to impact public health and safety and the environment. This also contradicts the purpose of the hardship exception provisions, which is to provide a means of relief from strict compliance with one or more requirements of this chapter in unique and unusual situations.

Given the number of hardship exception requests received related to compliance with Table C and the Department's experience in reviewing these requests and determining that in many cases exceptions were needed not because of unique or unusual circumstances but because the area allowed in Table C for the particular activity was inadequate for a standard project, the Department determined that adjustments to the values in Table C was warranted in order to better represent the typical area of riparian zone disturbance associated with a variety of activities. Several new subcategories of regulated activities were additionally added to cover common regulated activities that were omitted from Table C, which has been replaced by Table 11.2 at N.J.A.C. 7:13-11.2. In cases where an applicant cannot meet the riparian zone limitations under Table 11.2, a strict standard is incorporated into the appropriate subsection in N.J.A.C.

7:13-11.2 with which an applicant must demonstrate compliance. For example, N.J.A.C. 7:13-11.2(g) sets forth individual permit standards for the construction of a new railroad or public roadway or the expansion, reconstruction, or improvement of a lawfully existing railroad or public roadway that results in clearing, cutting, and/or removal of riparian zone vegetation. Under N.J.A.C. 7:13-11.2(g)1, the total area of riparian zone vegetation to be cleared, cut, and/or removed cannot exceed the limits set forth in Table 11.2, unless the applicant demonstrates that compliance with all Federal, State, and local requirements governing railroads and public roadways cannot be achieved, and that public safety cannot be adequately ensured, without exceeding these limits. This is a stringent test that is more appropriate for applicants proposing to construct railroads and public roadways that exceed the limitations of Table 11.2 than the hardship exception standards at prior N.J.A.C. 7:13-9.8, adopted as N.J.A.C. 7:13-15.1. Similar standards for exceeding Table 11.2 are found at N.J.A.C. 7:13-11.2(h) for private roadways, subsection (i) for bank stabilization and channel restoration projects, subsection (j) for stormwater discharges, subsection (k) for utility lines, subsection (q) for individual subsurface sewage disposal systems, subsection (t) for trails and boardwalks, subsection (u) for footbridges, subsection (v) for flood control projects, and subsection (w) for sediment and/or debris removal from a regulated water. The remaining activities in Table 11.2 either have no limit on riparian zone disturbance due to the nature of the activity, such as site remediation activities and solid waste facility closures, or else the limits in Table 11.2 cannot be exceeded without a hardship exception, such as the construction of a single-family home or duplex. The Department believes that the adopted requirements under N.J.A.C. 7:13-11.2 are suitably protective of water quality,

will have a *de minimis* impact on riparian zone functionality, and will not impair the quality of surface waters or result in other deleterious to the environment.

Impervious Surface

121. COMMENT: Research has shown that the water quality and environmental condition of a watershed is demonstrably related to the amount of impervious surface within a watershed. These proposed rules would further degrade the last buffer zones between developed areas and impervious surfaces and result in water quality degradation throughout the State. (91 and 195)

RESPONSE: The Department's Stormwater Management rules establish strict water quality treatment standards at N.J.A.C. 7:8-5.5 that apply to impervious surfaces both within and outside of flood hazard areas and riparian zones. These water quality standards, in conjunction with the limitations on riparian zone disturbance under the FHACA Rules, ensure that development will not impair the quality of New Jersey's surface waters or result in other deleterious impacts to the environment.

Restoration of Buffers

122. COMMENT: Buffers in urbanized areas should be restored. Maintaining vegetated riparian buffers has been shown to reduce small drainage problems and complaints, increase property values, maintain a foundation for open space greenways, provide conservation corridors for wildlife movement, and provide spaces for stormwater best management practices. (177)

123. COMMENT: The rules should encourage expansion and restoration of forested buffers, as well as the restoration of previously disturbed riparian zones and not allow increased

disturbance in other areas. In the northeast, most riparian zones were once forested, and these forests should be restored. This restoration is not just an environmental issue but a public health and safety issue as well. When homes are damaged or destroyed, New Jersey becomes less affordable and protective. Please do not adopt these rules. Instead, draft rules that protect people and water quality. (28A, 42, 56, 67, 127, and 170)

RESPONSE TO COMMENTS 122 AND 123: Under N.J.A.C. 7:13-11.2(d), permittees are required to restore developed portions of the riparian zone within 25 feet of the top of bank of regulated waters in many cases. Further, the Department has adopted new standards at N.J.A.C. 7:13-12.14 that encourage and facilitate the removal of pipes and culverts that enclose regulated waters and the restoration of such areas with native, non-invasive riparian zone vegetation. Finally, a number of adopted provisions encourage prospective applicants to situate proposed development within actively disturbed areas (see, for example, N.J.A.C. 7:13-11.2(b)2 and (f)6). In this way, the Department anticipates that the adopted rules will facilitate redevelopment and restoration of riparian zones.

25-Foot Setback

124. COMMENT: The setback requirements along impounded fluvial waters and tidal waters where the bank has a bulkhead or revetment should not be removed. (29, 30, 46, 91, 177, 189, and 195)

RESPONSE: Clearing, cutting, and/or removing riparian zone vegetation within 25 feet of any top of bank is generally prohibited under the adopted FHACA Rules because vegetation in this area is essential for maintaining bank stability and discouraging channel migration. Riparian

zone disturbance within 25 feet of the top of bank can easily destabilize a channel, resulting in increased erosion and flooding, as well as harmful impacts to water quality. However, such impacts to erosion, flooding, and water quality will not occur when riparian zone disturbance takes place adjacent to a bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water. As such, the adopted rules do not require such a setback in these cases.

Buffer Averaging

125. COMMENT: The FHACA rules permit the width of the riparian zone to be averaged while the SWRPA does not. Therefore, the SWRPA provides additional protections against disturbance compared to those found in the riparian zone standards under the FHACA Rules. (28A, 42, 56, 67, and 127)

RESPONSE: The width of a riparian zone cannot be altered or averaged under the FHACA Rules.

126. COMMENT: The draft amendments to the FHACA Rules that the Department published for comment in May 2012, included an innovative proposal for “averaging” riparian buffer zones that does not appear in the proposed rules that the Department published on June 1, 2015. The riparian zone averaging provision, which advanced environmental preservation, as well as flexibility for the regulated community, was appreciated. The USEPA is among the many authorities that recognize the potential benefits of riparian buffer averaging programs, especially to “relieve some of the significant financial hardships for developers

(http://water.epa.gov/polwaste/npdes/swbmp/Riparian-Forested-Buffer.cfm)." The averaging proposal is good policy and the Department should reconsider it. (51 and 92)

127. COMMENT: N.J.A.C. 7:13-13 should include a buffer averaging program similar to the one found in the FWPA rules at N.J.A.C. 7:7A. (101)

RESPONSE TO COMMENTS 126 and 127: As part of the Department's stakeholder process, draft rules were vetted among a number of interested parties for frank discussion. During this period, the Department had considered proposing a subchapter that would provide for riparian zone averaging. However, based on input from stakeholders and Department staff, the Department was unable to confirm that allowing a reduction in the width of the riparian zone in one area in exchange for expanding the riparian zone in another area would in all cases result in the averaging fully compensating for all ecological loss from the area where the riparian zone is reduced. Therefore, this rulemaking did not include a change to allow riparian zone averaging.

General Water Quality Concerns

128. COMMENT: The proposed rules do not meet the goals set out in New Jersey's Water Pollution Control Act and Water Quality Planning Act, under which these rules receive their authority. These acts require the Department to improve the quality of New Jersey's waterways where possible or, at the very least, protect them from further degradation. This is especially important given that, according to the Department's 2012 Integrated Report, an overwhelming majority of New Jersey's waters do not meet their designated uses. One commenter asserted that for public water supply, only 37 percent of designated waters met the standards for this use while only 16 percent met them for recreation, only 23 percent for aquatic life, only 58 percent for

shellfish harvest for consumption, and a meager 0.3 percent for fish consumption. In fact, only one assessment unit fully meets all of the designated uses. As this rulemaking does not meet the goal of improving or maintaining water quality, the Department should not adopt this rulemaking. (5, 27, 28A, 42, 56, 67, 77, 122, 127, 138, 170, 173, and 177)

RESPONSE: The commenters appear to base their conclusion that "the rule proposal does not meet the goal of improving or maintaining water quality" on an assumption that most of the waters of the State are impaired ("an overwhelming majority of New Jersey's waters do not meet their designated uses") and that the rulemaking will allow additional degradation in these already impaired waters ("These acts require the Department to … protect [New Jersey's waters] from further degradation.") The Department does not agree with this conclusion or these assumptions. While the 2012 Integrated Water Quality Monitoring and Assessment Report (Integrated Report) found that only a small percentage of New Jersey's 952 assessments units (AUs) fully support all applicable designated uses, the report does not find that the vast majority of waters of the State are impaired. In fact, the 2012 Integrated Report shows that many AUs have insufficient information to assess designated use support, especially fish consumption and recreation uses. In 2012, 62 percent of all 952 AUs had insufficient information to assess the fish consumption use and 36 percent had insufficient information to assess the recreation use. This is significant because, even if all other applicable designated uses were fully supported, if insufficient information existed to assess one applicable designated use, the AU was not counted as fully supporting all applicable designated uses. Accordingly, focus on such a statistic is misleading and does not provide an accurate assessment of the condition of the State's waters or compliance with any applicable regulatory or statutory mandate.

The use assessment portion of the Integrated Reports are prepared in accordance with Federal Clean Water Act Section 305(b), which requires states to assess overall water quality and support of designated uses of all principal waters of the State. These reports are also intended to establish program priorities and funding for restoring, maintaining, enhancing, and protecting waters of the State and the uses and benefits (public health, environmental, and economic) they provide. The designated use assessments do not provide a mechanism for evaluating site-specific impacts from land use activities on receiving water quality. However, as indicated in the Response to Comments 136 through 148, this rulemaking will not result in degradation of water quality.

129. COMMENT: The Memorandum of Agreements that New Jersey has with the USEPA under the Clean Water Act says that New Jersey must work to improve its water quality and to reduce and eliminate impairments. The USEPA has accepted riparian buffers as part of the State's delegated authority under the Clean Water Act to improve New Jersey's water quality. Any reduction in buffers or new loopholes to allow development in these buffers violates those agreements. The USEPA needs to sign-off on this rule change since it does not comply with all the Federal regulations currently in place. (177)

130. COMMENT: The proposed rules, in particular the increased amount of disturbance allowed in riparian zones and the reduction in the amount of mitigation/restoration, may have a significant potential to reduce water quality. The Department cannot adopt such policies under its own regulations and authorizing statutes, as well as Federal law. (28A, 42, 56, 67, and 127)

131. COMMENT: These changes contradict and undermine the intent of both State and Federal Clean Water Acts and, maybe even more importantly, place entire communities of New Jersey residents at increased risk from flooding. (75)

RESPONSE TO COMMENTS 129 THROUGH 131: The Water Pollution Control Act at N.J.S.A. 58:10A-2 states the following:

> "The Legislature finds and declares that pollution of the ground and surface waters of this State continues to endanger public health; to threaten fish and aquatic life, scenic and ecological values; and to limit the domestic, municipal, recreational, industrial, agricultural and other uses of water, even though a significant pollution abatement effort has been made in recent years. It is the policy of this State to restore, enhance and maintain the chemical, physical, and biological integrity of its waters, to protect public health, to safeguard fish and aquatic life and scenic and ecological values, and to enhance the domestic, municipal, recreational, industrial and other uses of water."

The Department recognizes that vegetation adjacent to surface waters is essential for maintaining bank stability and water quality. The indiscriminate disturbance of such vegetation destabilizes the channels and banks of surface waters, which leads to increased erosion and sedimentation that exacerbates the intensity and frequency of flooding. The loss of vegetation adjacent to surface waters also reduces filtration of stormwater runoff and subjects surface waters to increased sun exposure, which causes water temperatures to rise and dissolved oxygen content to fall. Such impacts adversely affect the health and habitat of fish and wildlife that

depend upon clean surface waters and therefore disrupt the ecological balance that is necessary for life. In order to better address these adverse impacts and implement the purpose and mandate set forth in N.J.S.A. 58:10A-2, the 2007 FHACA Rules incorporated 50-, 150-, and 300-foot riparian zones along New Jersey's surface waters. The adopted amendments to the Department's riparian zone standards, including the incorporation of relevant aspects of the SWRPA under prior N.J.A.C. 7:8-5.5(h) into the requirements for development within a 300-foot riparian zone under N.J.A.C. 7:13-11.2, provide water quality benefits and protections that meet the Federal Clean Water Act, the New Jersey Water Pollution Control Act, and the New Jersey Water Quality Planning Act. The adopted rules, therefore, fulfill the Department's statutory mandate set forth by the Legislature.

Special Water Resource Protection Area (SWRPA)

132. COMMENT: The Department's amendments to consolidate the SWM rules into the FHACA Rules as a way to address implementation issues and conflicts deriving from the overlap in jurisdiction are supported. (102)

133. COMMENT: The Department's proposed consolidation of the current SWM rules at N.J.A.C. 7:8-5.5(h), which establish a 300-foot SWRPA along designated Category One waters and certain tributaries, into the FHACA Rules at proposed N.J.A.C. 7:13-11.2 is strongly supported. (157)

134. COMMENT: Currently, the SWM rules require a 300-foot riparian area along Category One streams and certain tributaries based on USGS quadrangle mapping. Removing this

requirement is a positive improvement, as USGS quadrangles are not a reliable determination of streams. (1)

135. COMMENT: The Department's assessment of the implementation issues and unintended negative consequences resulting from the overlap in jurisdiction between the SWM rules and the FHACA Rules (for example, where the SWRPAs and the 300-foot riparian zone both apply to the same activity or project) as explained in the notice of proposal Summary at 47 N.J.R. 1042 and 1053 is accurate. (157)

RESPONSE TO COMMENTS 132 THROUGH 135: The Department acknowledges these comments in support of the rule.

136. COMMENT: This rulemaking seeks to eliminate the current Category One waters' 300-foot vegetated buffer protections under the SWM rules, N.J.A.C. 7:8, which will weaken the protection of the State's waters. (91, 191, and 195)

137. COMMENT: SWRPAs were developed to address impaired or degraded waters in the State and should not be repealed. (122 and 163)

138. COMMENT: The Department must ensure that these amendments maintain an equivalent level of riparian buffer protection as the current SWM rules. (76)

139. COMMENT: Do not repeal the existing protections for Category One waters. (6, 9, 26, 72, 122, 124, 132, 133, 163, 164, and 191)

140. COMMENT: If the rules protecting Category One waters are retracted, many waterways will suffer from increased stormwater runoff. It is important to continue to protect all the areas that have been upgraded to Category One. (50 and 165)

141. COMMENT: The Department has explained the importance of the SWRPA in protecting water quality numerous times. The Department's proposed abandonment of the SWRPA is completely indefensible in light of its past defense of it. (28A, 42, 56, 67, and 127)

142. COMMENT: In light of the devastation caused by flooding in the State, these rules are unconscionable, putting people and property in harm's way by increasing flooding and water pollution. Studies show that a forested buffer will soak up at least three inches of water every time it rains. Without the buffer, runoff will increase, adding to flooding. So why make these changes? These rules, if they go forward, will cause problems that will take at least 40 years to fix. (177)

143. COMMENT: SWRPAs under the SWM rules are designated as a special area because of the special characteristics and vital functions they play in the preservation of Category One waters. The proposed revisions to the FHACA Rules eliminate this vital natural resource conservation principle and completely undermine protection of the most essential of public trust resources. It is the Department's responsibility to ensure that proposed projects in flood prone areas are of the proper size and scope to maintain riparian zone habitat and prevent flood damage and property loss. (91 and 195)

144. COMMENT: In addition to the potential harm to wildlife, human health may be affected by this rule change since many Category One waters are designated drinking water sources. (155)

145. COMMENT: The Pinelands are a unique resource that benefit from the Department's protection of their high-quality waters. This rulemaking would repeal important protections for Category One waters, thereby impairing the Pinelands. (6, 65, 72, 132, and 133)

146. COMMENT: Pulling the SWRPA out of the SWM rules will put additional people and businesses in harm's way; that is unacceptable in this State, which has increasingly intense floods and a large majority of waterways failing clean water standards for at least one parameter under the State's SWQS. (24)

147. COMMENT: Maintaining the 300-foot SWRPA along Category One waters, which the rulemaking intends to delete, is strongly supported. If Category One waters become subject to the FHACA Rules rather than the current SWM rules, the State's most pristine waters and their associated wildlife will suffer from decreased protection. (175)

148. COMMENT: Since this rule eliminates and reduces SWRPAs, it opens these areas for development, effectively eliminating any riparian buffers. (177)

RESPONSE TO COMMENTS 136 THROUGH 148: Category One waters are waters to which the State affords greater protection due to their exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, or exceptional fisheries resource(s). Under the Department's Surface Water Quality Standards (SWQS), N.J.A.C. 7:9B, Category One waters are to be protected from any measurable changes to water quality. (See N.J.A.C. 7:9B-1.4). As explained in the Response to Comments 180 through 186, the antidegradation policies of the SWQS are implemented through the New Jersey Pollutant Discharge Elimination System (NJPDES) permitting process.

The changes being adopted at this time, including repeal of the SWRPA provisions formerly codified at N.J.A.C. 7:8-5.5(h) and the incorporation of additional standards at N.J.A.C. 7:13, do not reduce protections afforded to Category One waters, nor do they increase flooding or otherwise negatively impact the State's water resources. Instead, the adopted amendments,

repeals, and new rules incorporate new standards into the FHACA Rules applicable to a wider suite of waters than the SWRPA to create a 300-foot riparian zone with standards that will apply to a uniform set of surface waters designated as Category One and the tributaries to these waters. These amendments ensure that the protections previously provided to the 300-foot SWRPA under the SWM rules continue to be provided to these waters by the 300-foot riparian zone under the FHACA Rules, making continued separate protection of this same area under the SWM rules unnecessary.

While the intent of both the FHACA Rules riparian zone and the former SWM rules SWRPA was to provide protections to land near surface waters, the range of activities and waters covered differed, with the FHACA Rule riparian zones covering a broader range of activities and more waters than the SWRPA. The SWM rules SWRPA was established before the current FHACA Rules riparian zone protections were incorporated into the FHACA Rules. Established in 2004, the SWRPA was intended to provide protections solely to waters with special characteristics classified as Category One under the SWQS. The SWRPA was established as the best available and most reliable method to prevent degradation of Category One waters from nonpoint source pollution. In 2007, the Flood Hazard Area Control rules were repealed and replaced by new Flood Hazard Area Control Act Rules (see 38 N.J.R. 3950(a)). While the predecessor to the FHACA Rules did include some protection for a regulated area adjacent to watercourses, this area was limited to either 25 feet or 50 feet from the top of the bank of a stream channel, depending on the type of stream and the resources present, and was determined to provide inadequate protection. Accordingly, the 2007 rules expanded the regulated area into the three riparian zone widths found in the current rules, including the 300-foot riparian zone

adjacent to Category One waters and all upstream tributaries within the same HUC-14 watershed. As noted at the time of proposal of the expanded riparian zone protections, while the 300-foot riparian zone was similar to the existing SWRPA under the SWM rules, the SWRPA was only applicable when a major development, as defined at N.J.A.C. 7:8-1.2, is proposed, while the 300-foot riparian zone applies to any activity that requires approval under the FHACA Rules, which includes a larger set of activities than that which is regulated under the SWM rules (see 38 N.J.R. 3951).

With reference to the protections provided by these two areas, riparian zones are treated as special areas under the FHACA Rules, regardless of whether the water is designated Category One or not; the types of activities permitted within these areas are restricted and the amount of disturbance associated with those activities is strictly limited. Activities that may be authorized through permits-by-rule, general permits-by-certification, and general permits are carefully circumscribed to ensure that activities conducted pursuant to these authorizations impacting any riparian zone are appropriate, with the extent of activity allowed based upon the level of review applicable to the authorization. In no case is an activity that would pose more than a *de minimis* impact on flooding and the environment allowed within any width riparian zone under any of these forms of approval (see N.J.A.C. 7:13-6.2(a)).

For projects that may have more than a minimal impact on riparian zones, the Department requires an individual permit, under which the proposed activities and their associated potential riparian zone impacts are subjected to significant Department review, with any impact found to be unavoidable, or otherwise beneficial to public health, safety, and welfare, and/or the environment, subject to minimization and mitigation requirements that ensure all ecological

functions associated with the riparian zone are maintained. As an example of the protections provided to all riparian zones, including not only the 300-foot riparian zone associated with a Category One water and its tributaries, but also 50-foot and 150-foot riparian zones, the rules applicable to the issuance of individual permits provide at N.J.A.C. 7:13-11.2(b) that any impact to riparian zone vegetation, whether it be clearing, cutting, or removal of the vegetation, is prohibited unless it can be demonstrated that the basic purpose of the regulated activity or project cannot be accomplished without impacting riparian zone vegetation. Only where complete avoidance of impact to riparian zone vegetation is not possible will any impact be allowed, and then only for limited types of activities that are listed in Table 11.2, provided any potential impact is minimized and other requirements applicable to the specific regulated activity are satisfied. (See N.J.A.C. 7:13-11.2(g) through (y).) These additional requirements, such as limits on the area of riparian zone vegetation that can be disturbed for a given activity, requirements related to the proximity of the activity to the regulated water and top of bank, and limitations on the conduct of the activity during certain times of year when activities that would potentially impact fish populations when they are breeding or would be particularly sensitive to disturbance, further that any activities in all riparian zones are only conducted in a manner and at times that avoid and minimize potential impacts (see N.J.A.C. 7:13-11.3 through 11.6).

While the FHACA Rules include limitations and requirements designed to protect riparian zones and the benefits they provide adjacent to all regulated waters, riparian zones adjacent to Category One waters also receive an extra level of protection in certain situations. For permits-by-rule, general permits-by-certification, and general permits, in addition to limits on the amount of disturbance in the riparian zone and other restrictions applicable to all width riparian zones,

additional requirements are imposed in the rules to ensure authorized activities will not result in impacts to Category One waters. For example, general permit-by-certification 4 for the enhancement of a riparian zone through the planting of native, non-invasive plant species requires, at N.J.A.C. 7:13-8.4(a)5, that "no trees are cleared, cut, and/or removed within the riparian zone of a … Category One water ..." Additionally, general permit 1 for channel cleaning under the Stream Cleaning Act provides, at N.J.A.C. 7:13-9.1(a)7iv, that the general permit is not applicable to "sediment removal from a channel with a natural bed" along a "channel … classified as a … Category One water …"

Where individual permits are required, additional mitigation requirements are applicable where certain activities unavoidably impact a 300-foot riparian zone associated with a Category One water. In particular, the adopted FHACA Rules require that mitigation must be provided to offset all impacts to vegetation within a 300-foot riparian zone associated with the construction of railroads, roadways, and stormwater discharges, pursuant to N.J.A.C. 7:13-11.2(g)3, (h)3, and (j)4. All other activities impacting riparian zone vegetation in excess of the limits contained in Table 11.2 are required to provide mitigation in accordance with N.J.A.C. 7:13-13, for any excess area impacted to offset impacts to the vegetated buffer in the riparian zone, except for site remediation projects, solid waste facility closures, and activities not listed in Table 11.2, which, as noted above, require mitigation for all riparian zone disturbance. This is particularly significant since all riparian zone mitigation performed under the FHACA Rules is required, in accordance with N.J.A.C. 7:13-13.2(a), to fully compensate for any ecological loss resulting from the unavoidable riparian zone impact, regardless of the form of mitigation proposed. In the case of 300-foot riparian zones associated with Category One waters and their tributaries, full

compensation for ecological loss means, in addition to other factors considered by the Department such as the size and quality of the proposed mitigation, as well as the proximity of the mitigation site to the project, that mitigation for any impact to the riparian zone of a Category One water or associated tributary possessing a 300-foot riparian zone must be provided along the same Category One waterbody or tributary possessing a 300-foot riparian zone or, where an applicant can demonstrate full compensation, another stream that flows into the Category One water or tributary, to ensure that the mitigation fully compensates for the ecological impact from the disturbance.

In contrast, the SWM SWRPA prohibited most impacts within the inner 150-foot portion of the SWRPA, and further limited encroachment to previously developed or disturbed areas within the outer portion of the SWRPA (the area between 150 and 300 feet of the waterbody). While the restrictions contained in the SWM rules were strict, as more fully discussed in the Response to Comments 150 through 160, the SWM rules are implemented through other permitting programs and, in practice, the SWRPA was subject to hardship exception and similar provisions applicable to those permitting program rules. As explained below, the protections provided by the FHACA Rule riparian zones equal or exceed those that were provided by the SWRPA.

As indicated in the notice of proposal Summary, the purpose of proposed amendments adopted at this time related to the 300-foot riparian zone and the SWRPA was to provide a single uniform set of design and construction standards for work along Category One waters and their tributaries while maintaining protection of riparian areas adjacent to these waters. Combining these standards and situating them in one chapter eliminates regulatory conflicts, reduces confusion among the regulated community, and clarifies the Department's goals for protecting

these high quality waters. The resulting 300-foot riparian zone under the FHACA Rules, as amended, not only accomplishes these goals but actually expands protections and/or provides water quality benefits not previously achieved by the SWM SWRPA in several ways.

For example, the 300-foot riparian zone applicable to Category One waters under the FHACA Rules applies to a greater number of projects than were subject to SWRPAs, and, therefore, provides additional water quality benefits not afforded under the SWRPA. The SWM rules are only triggered where a "major development" is proposed. A "major development" is defined at N.J.A.C. 7:8-1.2 to mean any development that "provides for ultimately disturbing one or more acres of land or increasing impervious surface by one-quarter acre or more." Thus, if a person proposed to clear vegetation from 0.99 acres of land, and did not increase impervious cover by more than 0.25 acres, that activity is not subject to any of the requirements of the SWM rules, including the standards associated with the SWRPA. In contrast, the protections afforded to a riparian zone under FHACA Rules are triggered regardless of the size or scope of a proposed development. Furthermore, an individual permit is often needed for small projects that would not have triggered the SWRPA requirements under the SWM rules. These smaller activities are thus subject to the highest level of Department review and the additional standards applicable to individual permits under the FHACA Rules. For example, permit-by-rule 12 provides for an addition to a building of no more than 400 square feet, and general permit-by-certification 8 provides for a building addition of no more than 750 square feet (see N.J.A.C. 7:13-7.12 and 8.8). A larger addition would need an individual permit, but would still be far below the threshold for a major development, and, therefore, not subject to the prior SWRPA, since an addition to a building under an individual permit is limited to 2,000 square feet of riparian zone

disturbance, measured cumulatively since the November 5, 2007, adoption date of the prior FHACA Rules.

Further, 300-foot riparian zones apply to Category One waters and tributaries that were not protected under the SWRPA. Whereas surface waters draining more than 50 acres and naturally-occurring streams that possess a discernible channel, regardless of drainage area, possess a riparian zone, irrespective of whether these waters are depicted on any map, Category One waters and perennial and intermittent streams that drain into or upstream of Category One waters were afforded SWRPA protections only where such waters were depicted on USGS Quadrangle maps or on County Soil Survey maps (see prior N.J.A.C. 7:8-5.5(h)). However, as explained in the notice of proposal Summary at 47 N.J.R. 1053-1054, there are a number of drawbacks to reliance on these maps. In some cases, a USGS Quadrangle map will indicate that a stream exists at a given location, as evidenced by a solid blue line. However, not all streams are reflected as a blue line on a USGS map, with areas adjacent to a Category One water, or to a tributary to a Category One water, that does not appear as a blue line accordingly receiving no protection under the prior SWRPA. Further, with reference to the County Soil Survey maps, many of these were developed several decades ago and were never intended to depict all waters or be used as a regulatory tool. As a result, these maps do not necessarily reflect current feature locations accurately, due either to natural migration or human intervention. Moreover, the United States Department of Agriculture (USDA) Natural Resource Conservation Service has replaced these printed maps with online soil mapping that does not indicate the location of most surface waters. (See USDA Web Soil Survey at http://websoilsurvey.sc.egov.usda.gov.) For these reasons, continued reliance on the SWRPA, as that area was defined in the SWM rules, would become

unsustainable in light of USDA's move away from referencing the location of most surface waters on available soil mapping. Reliance on printed maps would tie protection of Category One waters and their tributaries to increasingly out-of-date information.

Because the 300-foot riparian zone associated with Category One waters in the FHACA Rules is a Statewide standard that applies to a broader range of waters, regardless of whether the water is depicted by USGS Quadrangle maps or County Soil Survey maps, and to a wider range of activities without limit to the size of a particular development (that is, whether it results in one acre of disturbance or 0.25 acres of impervious surface), the Department did not cross-reference the FHACA Rules' Category One riparian zone in the SWM rules at N.J.A.C. 7:8-5.5(h) where the SWRPA was previously codified. However, in light of the comments received, the Department is adding on adoption a cross-reference in the SWM rules at N.J.A.C. 7:8-5.5(h) to the riparian zone requirements at N.J.A.C. 7:13 in order to allay any concerns that the Department is abandoning special protections for Category One waters,. The modification clarifies that the Department has not repealed special protections along Category One waters, and provides that the Department must authorize, through a Flood Hazard Area permit, any major development located within, or which discharges stormwater within, the 300-foot riparian zone associated with Category One waters in accordance with the FHACA Rules. This change clarifies that any major development subject to the SWM rules is also subject to the riparian zone requirements of the FHACA Rules to eliminate any misconception that repeal of the SWRPA is also a repeal of protections applicable to major development for this area.

In light of the special values present in Category One waters, elsewhere in this issue of the New Jersey Register the Department is proposing amendments specific to the 300-foot riparian

zone adjacent to Category One waters in order to enhance their protection. As noted above, the FHACA Rules require avoidance of the riparian zone, and minimization of disturbance within the riparian zone when disturbance is unavoidable. The Department recognizes that it is more beneficial to protect near stream areas from impacts, and, thus, N.J.A.C. 7:13-11.2(b)2 requires that disturbance to a riparian zone be minimized by situating the regulated activity or project as far from any regulated water as feasible. While this requirement is equally applicable in 300-foot riparian zones, with any unavoidable impact required to be situated as closed to the outer edge of the riparian zone as possible, the FHACA Rules currently do not specifically indicate that the inner 150-foot portion of the 300-foot riparian zone associated with Category One waters should be given greater protections. The Department reexamined all permits-by-rule, general permits-by-certification, and general permits adopted by this rulemaking and determined that additional protections could be incorporated into a number of these permits to ensure that disturbance within 150 feet of a Category One water does not occur. For example, for the construction of one single-family home or duplex in a tidal flood hazard area under general permit-by-certification 6 at N.J.A.C. 7:13-8.6, the Department is proposing to require that no disturbance is located within 150 feet of any top of bank in a 300-foot riparian zone. Regarding development under individual permits, the Department is proposing to provide additional protections at N.J.A.C. 7:13-11.2(d) for activities proposed within 150 feet of the top of bank of regulated waters possessing a 300-foot riparian zone by specifically limiting disturbance within that area.

In addition, the Department is proposing to require mitigation in accordance with N.J.A.C. 7:13-13 for all activities proposed within a 300-foot riparian zone, unless the activity would have been exempt from the prior SWRPA requirements under N.J.A.C. 7:8-5.2(d), as well as minor

construction associated with a single-family home or duplex that meets the requirements of N.J.A.C. 7:13-11.2(m) or (n), provided the limits set forth in Table 11.2 are not exceeded. This new standard applies regardless of whether the activity is a major development under the SWM rules. Under the amendments adopted at this time, the FHACA Rules require that mitigation must be provided to offset all impacts to vegetation within a 300-foot riparian zone associated with certain activities noted previously in this response. Mitigation for other projects located within a 300-foot riparian zone is required only for the area in excess of the amount permitted under Table 11.2 for that activity. Expanding the mitigation requirement within 300-foot riparian zones to include many more projects strengthens the protections applicable to Category One water riparian zones prior to adoption of these amendments and new rules, and, as indicated in the notice of proposal at 47 N.J.R. 1060-1061, establishes requirements that mirror those that were previously required under the SWM rules as the result of a functional value analysis performed in response to a hardship exception application.

In addition, in order to fully ensure that no activity authorized under a permit-by-rule, general permit-by-certification, or general permit could have greater than minimal impacts on flooding and the environment, the Department is proposing to add at N.J.A.C. 7:13-6.7, which sets forth the conditions applicable to these permits, a new requirement that would prevent a major development from qualifying for any permit-by-rule, general permit-by-certification, or general permit. Therefore, with the exception of certain forest management activities covered allowed under permit-by-rule 26 at N.J.A.C. 7:13-7.26, all projects that constitute a major development (and would thus have been subject to the SWRPA) that are located within a riparian zone or flood hazard area will require an individual permit from the Department. Given that the

activities authorized under permits-by-rule, general permits-by-certification, and general permits are tightly limited in scope and area of disturbance, the Department does not anticipate that activities under these permits are likely to constitute a major development, and, therefore, would not have triggered the prior SWRPA. However, the proposed amendment at N.J.A.C. 7:13-6.7 will ensure that projects that may have triggered SWRPA requirements under the SWM rules trigger similar requirements under the individual permit standards of the FHACA Rules. For a complete description of the additional protections proposed, please see the notice of proposal published elsewhere in this issue of the New Jersey Register.

Finally, with regard to potential impacts to Category One waters in the Pinelands, as noted in the Response to Comments 170 and 171, the deletion of the SWRPA from the SWM rules and the addition of standards to the FHACA Rules to create a uniform set of standards that will apply to a uniform set of surfaces waters will not lessen the existing protections afforded to Category One waters or in any way affect the protection of these waters in the Pinelands.

149. COMMENT: The rulemaking rolls back buffer protections for the State's highest quality waterways. Category One waterways are currently protected by 300-foot buffers. The new SWM rules roll back this standard, with only certain streams being protected under the FHACA Rules. (87, 90, 103, 142, and 177)

RESPONSE: Under prior N.J.A.C. 7:8-5.5(h), a SWRPA applied “along all waters designated Category One at N.J.A.C. 7:9B and perennial or intermittent streams that drain into or upstream of the Category One waters as shown on the USGS Quadrangle Maps or in the County Soil Surveys, within the associated HUC 14 drainage.” As discussed in the Response to Comments

136 through 148, many surface waters regulated under the FHACA Rules do not appear on these maps and, accordingly, a riparian zone would apply where there was no SWRPA in many cases. Conversely, in rare instances, some features depicted on a USGS Quadrangle Map or County Soil Survey maps are not defined as regulated waters under the FHACA Rules and would not possess a riparian zone. However, as discussed further below, the Department does not anticipate that those features would have possessed an SWRPA. Therefore, because those waters were unlikely to have possessed an SWRPA, elimination of the SWRPA requirements does not in any way result in reduction of protections to any waters that existed prior to this rulemaking.

Pursuant to N.J.A.C. 7:13-2.2(a)3, riparian zones do not apply to the following features that drain less than 50 acres: (1) waters that do not possess a discernible channel; (2) waters confined within a manmade conveyance structure or drainage feature, such as a pipe, culvert, ditch, channel, or basin (not including any water that historically possessed a naturally-occurring, discernible channel, which has been piped, culverted, ditched, or similarly modified); and (3) waters that are not connected to a regulated water by a channel or pipe, such as an isolated pond or depression that has no outlet.

Regarding the first category above, a feature having a drainage area of less than 50 acres that does not possess a discernible channel is a “swale,” as defined by the FWPA Rules at N.J.A.C. 7:13-1.4. Any feature defined as a swale cannot also constitute an “intermittent or perennial stream” as these categories are intended to be mutually exclusive. Swales are rarely, if ever, depicted on USGS Quadrangle or County Soil Survey maps. However, since a swale cannot also be an “intermittent or perennial stream,” even if it were to appear on these maps, the feature should not possess an SWRPA pursuant to prior N.J.A.C. 7:8-5.5(h).

Regarding the second category above, these features may in some cases be depicted on a USGS Quadrangle map or County Soil Survey map. However, as these features would not constitute an "intermittent or perennial stream," they would not have received an SWRPA pursuant to prior N.J.A.C. 7:8-5.5(h). Further, manmade drainage features, such as ditches, channels, and basins, are, like swales, generally subject to the FWPA rules, the permitting standards of which are not amended by this rulemaking.

Finally, features that are not connected to a regulated water by a channel or pipe, such as an isolated pond or depression that has no outlet, may in rare instances be depicted on County Soil Survey maps as an "intermittent or perennial stream." These are features that typically form and dissipate over time due to natural dynamics, such as through erosion, or due to the presence of Karst topography or other underlying geology, and can form for a short distance and disappear or reappear due to groundwater infiltration. However, since the SWM rules would have applied an SWRPA only to "perennial or intermittent streams that drain into or [are] upstream of Category One waters" as depicted on USGS Quadrangle maps and County Soil Survey maps, these isolated features would not have possessed an SWRPA under N.J.A.C. 7:8-5.5(h). Furthermore, due to their isolated nature, an SWRPA would not have provided the ecological and habitat benefits and aesthetic values that SWRPAs were intended to provide, and any water quality benefits would likely have been minimal.

While there may have been some inconsistency in the Department's initial implementation of the SWRPA prior to the adoption of the current FHACA Rules riparian zone, in part due to language at former N.J.A.C. 7:8-5.5(a)1i regarding measurement of the 300-foot buffer where there is no discernible bank and whether that language was intended to imply that intermittent

streams under the SWM rules' SWRPA provisions could lack a discernible bank, the Department has for the past decade implemented the SWM SWRPA in accordance with the plain language of that rule. Particularly, as indicated consistently in multiple Department rules (see, for example, the FWPA Rules at N.J.A.C. 7:7A-1.4, which state that intermittent stream "means surface water drainage channels with definite bed and banks in which there is not a permanent flow of water …" and similar definition in the WQMP Rules at N.J.A.C. 7:15-1.5), an intermittent stream must have a discernible bed and bank. Conversely, also by definition (see, for example, the FWPA Rules at N.J.A.C. 7:7A-1.4), a swale "has no definite bed and banks" and "is not an intermittent stream." Rather than intending to dramatically change the long accepted definitions of both "intermittent stream" and "swale," N.J.A.C. 7:8-5.5(a)1i simply recognized that portions of the Category One water itself may lack a defined bank, making it necessary to account for how the SWRPA would be measured when that circumstance presented itself.

150. COMMENT: The SWM rules do not allow development within the SWRPA, while the FHACA Rules allow it within the riparian zone with the extent of development dependent upon the development type. This is a reduction in protection and regulatory standards that should not be approved. (1)

151. COMMENT: Do not repeal the SWRPA; development should not be allowed within 150 feet of surface waters. (29, 30, 46, 177, and 189)

152. COMMENT: By protecting individual waterways with the much larger footprint of the SWM rules, New Jersey protected waterways before they became polluted. This rule is an

outright repudiation of this progress. The Department is urged to outright reject this rulemaking. (122)

153. COMMENT: The elimination of SWRPAs is tremendously concerning. Rather than strengthening the Department's policy to prohibit disturbance within the inner 150 feet, increased redevelopment and disturbance will be allowed closer to streams and within flood hazard areas. Increasing disturbance of riparian vegetation and development within riparian buffers along New Jersey's highest quality streams is a pathway towards water quality impairment. (24)

154. COMMENT: These proposed changes will reduce important 300-foot buffers along high-quality Category One streams, which prevent flooding and promote better water quality for our drinking water. The Department's rulemaking to delete the SWRPA from the SWM rules and the proposed allowance of development within 150 feet of Category One streams and their tributaries should be withdrawn. (177)

155. COMMENT: If the SWRPA is deleted from the SWM rules, the sole protection of the 300-foot buffer of Category One waters will be the FHACA Rules. This will result in weaker protection because under SWRPA, the inner 150 feet of the 300-foot buffer must remain undisturbed by development. The FHACA Rules allow for disturbance within this inner region and also offer weaker protection to the outer half of the buffer. (155)

156. COMMENT: Retaining the full integrity of the current Category One buffers is essential to protect water supply and water quality. (158 and 180)

157. COMMENT: Please do not eliminate the SWRPA under the SWM rules in favor of uniform standards for a uniform list of waters under the FHACA Rules. (29, 46, 96, 122, and 177)

158. COMMENT: The current SWRPA and strict Category One stream 300-foot riparian buffer regulations with inviolable 150-foot inner buffers are based on sound, proven science necessary to fully protect streams and associated biota from degradation. These SWRPA protections should not be tampered with, nor weakened, under any circumstance, including special exemptions for utility construction, maintenance, or developments. (69)

159. COMMENT: In this rulemaking, the SWRPA is technically eliminated. The regulations under SWM rules are different due to scope, technical requirements, demonstrations, disturbance restrictions, and buffer width. The requirements are more stringent under the SWRPA than under the FHACA Rules. Eliminating the Category One buffers and relying on the FHACA Rules' flood hazard area program will significantly reduce the level of protection for both water quality and flood prevention. (193)

160. COMMENT: The rulemaking eliminates the current hardship waiver requirements for disturbances within 150 feet of Category One streams, effectively stripping riparian buffer requirements and allowing development in this critical riparian habitat. (91 and 195)

RESPONSE TO COMMENTS 150 THROUGH 160: The riparian zone requirements under the FHACA Rules are protective of the special features of Category One waters, including water quality, water supply, threatened and endangered species, and fisheries resources. The fact that limited disturbances within the 300-foot riparian zone are authorized under the FHACA Rules

does not mean that the riparian zone protections under FHACA Rules are less protective of water quality than the SWRPA.

Prior to this rulemaking, projects designed near Category One waters were required to have a 300-foot SWRPA on each side of the waterway "consisting of existing vegetation or vegetation allowed to follow natural succession …" under the SWM rules, pursuant to N.J.A.C. 7:8-5.5(h)1i. Additionally, prior N.J.A.C. 7:8-5.5(h)1ii provided, in part, that encroachment within the designated SWRPA "shall only be allowed where previous development or disturbance has occurred" and only where the "applicant demonstrates that the functional value and overall condition of the SWRPA will be maintained to the maximum extent practicable. In no case shall the remaining SWRPA be reduced to less than 150 feet …" The Department anticipated that unavoidable encroachments would need to be allowed when the SWM rules were adopted on February 2, 2004, and indicated that the hardship provisions, found in other permitting rules, created a process for allowing such encroachments (see the Response to Comments 440-441, 36 N.J.R. 716). Thus, while N.J.A.C. 7:13-5.5(h)1ii provides no allowance for any disturbance within the inner 150 feet of the 300-foot SWRPA, and permits limited disturbance in the outer 150 feet, the Department has authorized encroachments into these portions of the SWRPA under the hardship exception provisions of the FHACA Rules and other relevant permitting programs cited in the response to comments above under which the SWM rules have been implemented. Since the Department amended the FHACA Rules and expanded the riparian zone along Category One waters to 300 feet in 2007, all encroachments within the SWRPA, which required a flood hazard area individual permit and were not otherwise provided for under prior N.J.A.C.

7:8-5.5(h), have been processed under the hardship exception provisions of the FHACA Rules at prior N.J.A.C. 7:13-9.8.

The SWRPA was never a "no-build" regulation. Instead, disturbance, while discouraged, was allowed in limited circumstances. Prior N.J.A.C. 7:8-5.5(h)1ii permitted disturbance to the outer 150-foot portion of the SWRPA where the applicant demonstrated that the “functional value and overall condition of the special water resource protection area will be maintained to the maximum extent practicable.” The Department issued guidance on how to meet this regulatory requirement on January 2, 2007, which was accompanied by Administrative Order 2007-01 issued by Commissioner Lisa P. Jackson. After implementing the guidance for a year, the Department found it necessary to revise it, and on January 24, 2008, the Department issued revised guidance for the SWRPA functional value analysis, which was accompanied by Administrative Order No. 2008-02 issued by Commissioner Lisa P. Jackson. On April 11, 2008, the Department published this guidance as the Technical Manual for Special Water Resource Protection Area Functional Value Analysis January 2, 2007, Revised January 24, 2008 (FVA Technical Manual). As explained in the guidance and FVA Technical Manual, the Department assessed the impact of the proposed encroachment on four categories of riparian functional values: wildlife habitat, nonpoint source pollution load, temperature moderation, and channel integrity. If there were no alternatives to a proposed project, the Department required minimization and mitigation of the impact to the functional value.

In some cases, the SWM rules provided flexibility for encroachments within the inner 150 feet of the SWRPA and within undeveloped portions of the outer 150 feet of the SWRPA through certain exemptions. Under N.J.A.C. 7:8-5.2(d), certain utility crossings and trails are

exempt from stormwater management requirements, including the prior SWRPA requirements, and N.J.A.C. 7:8-5.2(e) provides a waiver from strict compliance from stormwater management standards (including the prior SWRPA) for the enlargement of an existing public roadway or railroad, or the construction or enlargement of a public pedestrian access under certain circumstances.

In situations where the SWRPA rules provided no specific exception, the Department, under its hardship exception process and in accordance with the Guidance and FVA Technical Manual, required the applicant to demonstrate that the proposed development could not avoid being located within the inner 150 feet of an SWRPA, would not pose a threat to the environment or to public health, safety, and welfare, and would not adversely impact the use of contiguous or nearby property under the hardship exception provisions in Department permitting rules. Where there was an anticipated loss to the functional value of wildlife habitat, nonpoint source pollution load, temperature moderation, or channel integrity as a result of the anticipated disturbance, the Department required minimization, and, typically, mitigation of the impacts (see FVA Technical Manual, pages 11-12). The Department generally granted the applicant a hardship exception for activities that met these standards and which: (1) unavoidably impacted the SWRPA, such as public infrastructure and private road crossings to parcels that could not otherwise be accessed; (2) provided an environmental benefit, such as remediation activities, landfill closures, and repairing failing subsurface sewage disposal systems; and/or (3) would have a demonstratively *de minimis* impact on SWRPA functionality, such as a redevelopment activity on existing pavement within the inner 150-feet of the SWRPA where little or no vegetation was proposed to be impacted.

The FHACA Rules, which allow limited disturbance of the riparian zone consistent with identified standards, maintain the same protectiveness as the SWRPA, as implemented. In fact, these protections extend beyond those afforded by the SWRPA, since the SWM rule only applies to major developments and the FHACA Rules apply to any clearing, cutting, and/or removal of vegetation within the riparian zone. The same type of projects that regularly qualified for hardship exceptions under the FHACA Rules are now authorized under N.J.A.C. 7:13-11.2 and contain the same protections, only now the process is more predictable and efficient. Rather than require a site-specific analysis of the impacts of proposed development within the SWRPA as set forth in the Guidance and FVA Technical Manual, the FHACA Rules instead require the robust avoidance and minimization demonstrations noted above and further require mitigation in accordance with the methods set forth in N.J.A.C. 7:13-13 in cases where the proposed development could diminish riparian zone functionality. Thus, the adopted amendments uniformly apply requirements necessary to ensure that disturbance to riparian vegetation is avoided when feasible, and minimized to the extent practicable and, where disturbance to riparian zone vegetation would adversely impact the environment, appropriate compensation is provided. The adopted amendments create a process for projects that would have been ultimately approved under the prior rules after significant time, money, and resources were spent both by the applicant and the Department.

For example, under the prior SWM rules, a person could not undertake a site remediation project within a previously-undisturbed SWRPA or within 150 feet of a Category One stream or tributary. A person proposing such an activity would have, therefore, been required to demonstrate that not remediating the site would constitute a hardship on the applicant, that

disturbance to vegetation was necessary and unavoidable to properly remediate the site, and that the project would not pose a threat to the environment or to public health, safety, and welfare, all pursuant to the hardship exception process set forth at prior N.J.A.C. 7:13-9.8. Given the clear environmental benefit of undertaking site remediation activities, the Department generally approved hardship exception requests for such projects, requiring the applicant to perform a functional value analysis of any impacts to riparian zone vegetation, pursuant to the guidance set forth in Administrative Order No. 2008-02. If the site disturbance were temporary in nature, and all disturbed vegetation were replaced with vegetation of equal or superior functionality, no additional mitigation would have been required. However, should the site remediation activities necessarily result in a change in character of the riparian zone vegetation, such as a forested site that is cleared of vegetation and capped with an impermeable layer to prevent infiltration of precipitation and subsequent migration of groundwater contamination, the Department would require, consistent with the FVA, mitigation to offset the loss of functionality, generally by planting vegetation at another location.

Rather than require applicants to undergo this complex administrative process, N.J.A.C. 7:13-11.2(r) instead incorporates standards specific to undertaking site remediation activities within a riparian zone, which are no less stringent than the previous SWRPA requirements in conjunction with the FHACA Rules' hardship exception process. Specifically, N.J.A.C. 7:13-11.2(r)1 requires that the applicant "demonstrates, or provides a certification from a licensed site remediation professional … that the area of riparian zone vegetation to be cleared, cut, and/or removed is the minimum necessary for compliance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and the Administrative Requirements for the Remediation of

Contaminated Sites rules, N.J.A.C. 7:26C." This demonstration or certification must furthermore include "an exploration of all feasible alternative remediation methods acceptable under N.J.A.C. 7:26E and 7:26C; and the identification of any remediation methods that would result in less area of riparian zone vegetation to be cleared, cut, and/or removed, with an explanation for why these remediation methods were not chosen." Finally, under N.J.A.C. 7:13-11.2(r)2, the applicant must provide "mitigation, in accordance with N.J.A.C. 7:13-13, for the total area of vegetation that is cleared, cut, and/or removed" in order to fully offset any impacts to riparian zone functionality. These standards are in addition to the general avoidance and minimization standards that apply to all projects located within a riparian zone pursuant to N.J.A.C. 7:13-11.2(b). Further, all riparian zone mitigation must, as set forth at N.J.A.C. 7:13-13.2(a), "fully compensate for any ecological loss." As such, the Department will review all mitigation plans to ensure that riparian zone functionality is fully maintained.

The approach taken for site remediation projects in the FHACA Rules also applies to other projects that could have triggered the SWRPA requirements, such as repairing failing subsurface sewage disposal systems (see N.J.A.C. 7:13-11.2(q)), solid waste landfill closures (N.J.A.C. 7:13-11.2(s)), and footbridges (see N.J.A.C. 7:13-11.2(u)). In each of these instances, the Department has identified the factors that it would have required for a hardship exception for these projects, and has incorporated the relevant standards into these subsections as appropriate.

While the adopted FHACA Rules continue to provide the same level of protection afforded to the 300-foot area adjacent to a Category One water and its upstream tributaries previously applicable under the combination of the SWRPA and the FHACA Rules riparian zone, upon further consideration and in response to the comments received on the June 1, 2015 notice of

proposal to merge riparian zone and SWRPA requirements, the Department has determined it is appropriate to further improve protection of Category One waters and their tributaries. Specifically, as discussed in the Response to Comments 136 through 148, the Department is proposing elsewhere in this issue of the New Jersey Register to amend the mitigation standards at N.J.A.C. 7:13-13 to apply to all activities within a 300-foot riparian zone that require an individual permit, whether or not the activities constitute a major development under the SWM rules, unless the activity would have been exempt from the prior SWRPA requirements under N.J.A.C. 7:8-5.2(d) or the activity constitutes minor construction associated with a single-family home or duplex that meets the requirements of N.J.A.C. 7:13-11.2(m) or (n), and provided the limits set forth in Table 11.2 are not exceeded. The Department additionally reexamined all permits-by-rule, general permits-by-certification, and general permits adopted by this rulemaking and determined that additional protections could be incorporated into a number of these permits to ensure that disturbance within 150 feet of a Category One water does not occur. The Department is further proposing to incorporate additional protections at N.J.A.C. 7:13-11.2(b) and elsewhere in the FHACA Rules for activities proposed within 150 feet of the top of bank of regulated waters possessing a 300-foot riparian zone. See the Summary of the notice of proposal published elsewhere in this issue of the New Jersey Register for a complete description of the additional protections proposed.

161. COMMENT: Replacing Category One hardship waivers with “compensation” money or new “Riparian Zone Mitigation Banks” will not be successful. (69)

RESPONSE: Monetary contributions and mitigation banks are a nationally recognized strategy for offsetting lost ecological functions and are supported by Federal guidelines released by the USEPA and US Army Corps. of Engineers (USACE). The 19 approved wetlands mitigation banks serving 19 of the 20 watershed management areas throughout New Jersey are an example of the successful implementation of this strategy. Based on the Department's observation of the success of these wetland mitigation banks, the adopted FHACA Rules implement a similar system for riparian zone banking to increase options for riparian zone restoration and enhancement. Like any other mitigation, mitigation provided through the purchase of mitigation credits must satisfy the requirement at N.J.A.C. 7:13-13.2(a) that the mitigation fully compensate for any ecological loss. This requirement ensures that the mitigation provided by the mitigation bank that is represented by the mitigation credits purchased is of the appropriate type and in the appropriate location to fully compensate for all impacts from the unavoidable encroachment into the riparian zone area.

162. COMMENT: With regard to mapping in the rulemaking, at several locations the Department cites administrative difficulties arising from linkages between both the SWM rules and the FHACA Rules with the USGS topographic maps and the County Soil Survey Maps. Many of these difficulties could be remedied by specifying other map sources already in the Department's possession. The Department's Geographic Information System (GIS) data on streams, specifically the New Jersey National Hydrography Dataset (NHD), is recommended as a substitute for the now obsolete USGS (7.5') Topographic Maps. This dataset was compiled as part of the USGS's on-going efforts and has been in use and recognized since 2011. Many of the

streams included on the NHD are not shown on the older USGS 7.5' quadrangles. In addition, the Department has agreed to periodically update this dataset in cooperation with the USGS. With regard to the County Soil Survey maps, inclusion of this mapping source in the existing regulations is traceable to the regulatory requirements to map intermittent streams. At the time, this was the only available source of information, despite the technical deficiencies that made these maps difficult to incorporate in a GIS system. It is commonly understood that the locations of intermittent streams on these maps are best viewed as "possibilities" rather than exact locations. Paper copies of the soil surveys have been phased out by the Natural Resources Conservation Service and replaced with a readily accessible on-line "Digital Soil Survey" that addressed many of the paper product's problems. (24)

RESPONSE: The Department recognizes the comprehensiveness of the NHD maps and is aware of the improvements to County Soil Survey maps achieved through the Digital Soil Survey. Despite these improvements, the Department has determined not to tie the riparian zone requirements to different or upgraded maps because the Department considers ground conditions to be the most reliable and protective metric on which to base its determination of its jurisdiction under these rules. As noted in the Response to Comments 136 through 148, County Soil Survey maps were developed several decades ago and were never intended to depict all waters or be used as a regulatory tool. Further, the available Digital Soil Survey mapping does not indicate the location of most surface waters, as the hydrography layer of the printed maps has not been continued in the current digital format. Continued reliance on increasingly out-of-date printed mapping to indicate the location of riparian zones is highly problematic. As mapping techniques continue to improve, the Department will revisit the issue of whether to incorporate specific

maps into the FHACA Rules. Currently, regulating features based on actual, observed ground conditions is the most protective method.

163. COMMENT: The FHACA Rules' mapping requirements for applicant submissions may not contain proper specifications to inform Department reviewers, local planning boards, and environmental commissions that routinely review applications as part of the local site plan review process. The Department should examine its mapping requirements. (24)

RESPONSE: It is unclear what aspects of the rules' mapping requirements will lead to a lack of information for Department reviewers, local planning boards, and environmental commissions, as the commenter suggests. Applicants are required to submit site plans, which show all regulated features on the site and Department staff regularly performs site investigations to verify the accuracy of the regulated feature delineations. If Department staff determines that a site plan does not accurately reflect ground conditions on the site, the applicant must revise and resubmit its site plan in order for the review process to continue. Additionally, local officials will review applications for local construction approvals for projects in accordance with local laws and ordinances. Given the extensive public notice requirements for authorization under general permits-by-certification and general permits, and for applications for verifications and individual permit under N.J.A.C. 7:13-19, as well as the information provided in combination with local and county oversight, the Department believes that the adopted rules adequately ensure that local and county officials remain accurately informed of projects being reviewed on the State level within their respective jurisdictions, and that the above process for Department confirmation of accuracy of information depicted ensures that agencies at all levels have accurate information

upon which to base their respective decisions. Accordingly, the Department does not believe that revising mapping requirements will have a positive impact on the permitting process.

164. COMMENT: Rather than reducing protections for Category One streams, the Department should continue to identify and classify additional streams as Category One because of their tremendous value to wildlife and water quality. (175)

RESPONSE: The consolidation of the SWRPA and the 300-foot riparian zone will not reduce protections for Category One waters, as discussed in the Response to Comments 136 through 148. The Department continues to evaluate waters to determine if they should be designated as Category One. The FHACA Rules and SWM rules do not impact that ongoing effort under the Surface Water Quality Standards, N.J.A.C. 7:9B.

165. COMMENT: The FHACA Rules propose to eliminate a lot of protections for Category One streams and their buffers, especially their headwaters, which is opposed because headwaters are critical for flood protection and water quality. Once headwaters are destroyed, there will be reduced water quality and increased flooding downstream. Headwater protections will also be removed for trout-associated waters. The removal of the 150-foot buffer for trout-associated waters is opposed. Trout are a threatened species in New Jersey, and the buffers are critical for water quality and temperature. These critical Category One and trout-associated streams are the most highly-sensitive and highest quality stream areas in New Jersey, yet the new rules allow building right up to the stream bank and allow outfalls to empty into the stream. (177)

166. COMMENT: The rulemaking attacks headwater protections. The 2007 rules were intended to protect the entire length of a Category One stream. For years, under the stream encroachment regulations, Category One or trout production streams with drainage areas of less than 50 acres were not regulated. The impact on water quality was devastating because developers were bulldozing those drainage areas and building houses on septic systems. Because of this, fecal coliform is now measurable in high-quality streams. The 2007 rule was put in place to protect those drainage areas because they contain mostly hydric soils. In places such as Ringwood and West Milford with a high seasonal high water table, development was causing siltation in the streams and also septic pollution because the septic system would end up failing within a few years. The rules are in place to protect those headwater areas from these types of problems. (177)

167. COMMENT: The proposed amendments remove protections for many headwater streams and trout-associated waters. The rulemaking will allow the development of these critical Category One and trout-associated streams that are the most highly-sensitive, best quality stream areas in New Jersey. (90, 103, 142, and 177)

168. COMMENT: Removing protections for Category One and sensitive headwaters will have disastrous impacts on water quality and flooding. (73, 80, 85, 149, 166, 174, 179, 194, and 196)

RESPONSE TO COMMENTS 165 THROUGH 168: This rulemaking does not reduce protection of headwaters. Headwaters are naturally-occurring sources of a surface water, such as a spring or where surface waters coalesce into a discernible linear feature. Under prior N.J.A.C. 7:8-5.5(h), an SWRPA applied to “along all waters designated Category One at N.J.A.C. 7:9B and perennial or intermittent streams that drain into or upstream of the Category One waters as

shown on the USGS Quadrangle Maps or in the County Soil Surveys, within the associated HUC 14 drainage." As discussed in the Response to Comments 136 through 148, many surface waters regulated under the FHACA Rules do not appear on these maps and, accordingly, a riparian zone would apply where there was no SWRPA in many cases. Conversely, in rare instances, some features depicted on a USGS Quadrangle Map or County Soil Survey maps are not defined as regulated waters under the FHACA Rules and would not possess a riparian zone. However, as discussed in the Response to Comment 149, these features did not possess a SWRPA pursuant to N.J.A.C. 7:8-5.5(h). Therefore, 300-foot riparian zones fully cover all surface waters that should have possessed an SWRPA.

With regard to the waters regulated under the FHACA Rules, the Department has neither proposed nor adopted any amendments that would affect the application of a riparian zone to headwaters. As enumerated in the Response to Comment 322 through 332 below, the Department's June 1, 2015, proposal amended for clarity N.J.A.C. 7:13-2.2(a)3, which sets forth the waters draining less than 50 acres that are not subject to the requirements of the FHACA Rules. These amendments did not, nor were they intended to, amend the number of headwaters regulated under the FHACA Rules. Nevertheless, since the proposed clarifications created confusion and led some commenters to conclude that headwater protections were being reduced, the Department has not adopted any of the proposed amendments to N.J.A.C. 7:13-2.2(a)3 in order to allay any concerns that headwater protections were being amended. Thus, headwater protections under the adopted FHACA Rules are the same as under the prior rules and have not been modified or reduced.

With regard to trout production waters, the adopted FHACA Rules continue to protect these waters and their tributaries without amendment. Trout production waters and all upstream tributaries are afforded a 150-foot riparian zone pursuant to N.J.A.C. 7:13-4.1(c)2, and are protected from degradation pursuant to the standards set forth for regulated activities in or along a regulated water with fishery resources at N.J.A.C. 7:13-11.5.

169. COMMENT: Under the rules, for the first time a septic system can now be placed 50 feet away from a Category One stream. This will hurt water quality (90, 103, 142, and 177)

RESPONSE: N.J.A.C. 7:13-11.2(q) authorizes the construction of an individual subsurface sewage disposal system that serves one new single-family home or duplex, or the repair or alteration of a lawfully existing, malfunctioning individual subsurface sewage disposal system that serves any kind of building. The prior FHACA Rules did not have specific category limits for riparian zone vegetation impacts applicable to construction or repair of an individual subsurface sewage disposal system. Accordingly, these activities were subject to the riparian zone vegetation impact limits applicable to “all other regulated activities” under prior Table C and conditions applicable to issuance of an individual permit under prior N.J.A.C. 7:13-10.2(r), which permitted development to be located no closer than 25 feet from any top of bank or edge of water. The prior FHACA Rules, furthermore, did not differentiate between Category One waters and other waters in the location of septic systems. New N.J.A.C. 7:13-11.2(q) subjects both new and reconstructed/repaired systems to additional requirements designed to assure that riparian zone vegetation and the benefits it provides are protected. In both cases, the new subsection seeks to protect the area within 50 feet of the top of bank. Individual subsurface

sewage disposal systems are designed to infiltrate effluent into the ground. Systems located in close proximity to surface waters can leach effluent into these waters and adversely impact aquatic biota. Furthermore, as surface waters are dynamic systems that periodically flood and often meander over time, locating individual subsurface sewage disposal systems in close proximity to surface waters can result in other adverse environmental impacts, as well as increasing the likelihood of expensive and possibly environmentally damaging repair and reconstruction activities. Therefore, where a new system is proposed, the system must not result in disturbance of riparian zone vegetation within 50 feet of the top of bank. In the case of an existing system being reconstructed or repaired, disturbance within this area may only occur if the existing system is already located there and, even then, only if the repaired or modified system cannot be relocated outside the 50-foot area and as far from the regulated water as possible (see N.J.A.C. 7:13-11.2(q)3ii and 4iii).

It should also be noted that the installation of an individual subsurface sewage disposal system is subject to the Standards for Individual Subsurface Sewage Disposal Systems, N.J.A.C. 7:9A, which contain additional standards related to the construction of septic systems in proximity to surface waters. For example, pursuant to N.J.A.C. 7:9A-4.3(a), “No part of a subsurface sewage disposal system shall be constructed in ground subject to surface flooding …” Also, as noted above, the SWRPA was not triggered unless the project constituted a “major development” as defined under the SWM rules. Major development required the disturbance of more than one acre of land or the imposition of more than 0.25 acres of impervious cover. Only if there were a “major development” would a septic system be restricted within the 300-foot SWRPA. Most single family homes never triggered this restriction, and prior N.J.A.C. 7:8-

5.5(h)5 further exempted the construction of one single-family home within an SWRPA in certain cases. Additionally, single family homes that did trigger the SWRPA would likely have qualified for a hardship exception under the FHACA Rules to avoid a potential takings claim. Therefore, this rulemaking does not represent the first time that septic systems can be placed within the 300-foot riparian zone or SWRPA along a Category One water. Degradation of water quality is not expected if septic systems are constructed and operated in accordance with N.J.A.C. 7:9A.

170. COMMENT: The New Jersey Pinelands Commission has spent considerable resources to protect the environmentally important Toms River watershed. In 2003, it embarked on a project aimed at better protecting critical natural resources and water quality called the Toms River Corridor Plan. This plan recommends using a combination of planning, zoning, and resource protection tools to protect water quality and critical natural resources. In response to the plan, Manchester and Jackson Townships adopted changes to their master plans and ordinances to implement the recommended management area and zoning changes, which resulted in a significant decrease in development intensities within these areas. The municipalities also implemented other tools, such as mandatory clustering requirements and increased wildlife habitat buffers along the main stem of the Toms River. In addition to these municipal efforts, the New Jersey Pinelands Commission contributed $2.8 million in Pinelands Conservation Fund monies to assist Ocean County and the Trust for Public Land in permanently preserving 875 acres within the Toms River Corridor. Weakening Category One protections in the non-Pinelands headwater areas of the watershed will have detrimental consequences on the

Pinelands. The proposed changes to SWRPAs will result in an overall weakening of natural resource protection. Do not repeal or eliminate SWRPAs under the SWM rules. (9)

171. COMMENT: The elimination of the 300-foot SWRPA under the SWM rules will result in a decrease in the protections afforded to Category One waters. This is a concern because the headwaters of the Toms River watershed are located outside of, but flow into the Pinelands Area and, thus, are a Pinelands (PL) water (that is, an Outstanding National Resource Water). Given this, the Department is asked to clarify whether this rule change will decrease the regulatory protections afforded the headwaters of the Toms River watershed located outside of the Pinelands Area. Should that be the case, it is requested that the Department address other regulatory avenues to ameliorate any potential negative impacts to the Toms River watershed as a result of this rulemaking. (146)

RESPONSE TO COMMENTS 170 AND 171: The Department recognizes the New Jersey Pinelands Commission's work to protect and improve the headwaters of the Toms River through the Toms River Corridor Plan. As explained in the Response to Comments 136 through 148, the deletion of the SWRPA from the SWM rules and the addition of standards to the FHACA Rules to create a uniform set of standards that will apply to a uniform set of surfaces waters will not lessen the existing protections afforded to Category One waters, including portions of the Toms River, as implemented under the SWM rules. As discussed in the Response to Comment 149, all waters previously associated with an SWRPA will have a 300-foot riparian zone. Suitable water quality protection along Category One waters and their tributaries and upstream headwaters is, therefore, extended under this rulemaking to all regulated waters that possess a riparian zone and which are described at N.J.A.C. 7:13-4.1(c)1. Finally, as explained in the Response to Comments

165 through 168, the adopted rules do not reduce headwater protections. For the reasons explained above, the Department does not believe that the adopted amendments will negatively impact the Pinelands or undermine work to protect the Toms River Corridor.

172. COMMENT: With the proposed deletion of the SWRPA, significant source water protections will be eliminated along with wetlands buffer standards designed to protect ecological values that promote groundwater recharge. The Highlands are the gathering grounds of headwaters that grow into the defined streams and rivers that comprise some of the State's most important drinking water resources. The uppermost origins of these riverine systems are the swales and intermittent streams that would no longer be regulated under the proposed rules. In the western Highlands where limestone is the predominant bedrock, important tributaries to Category One waterbodies are easily misidentified because only a small segment of a waterbody may actually rise to the surface. When misidentified as isolated wetland features, they lose the protection that the SWRPA currently affords. (24 and 147)

RESPONSE: The adopted amendments do not affect or alter the protections afforded to vegetated buffers or zones under the FWPA rules, N.J.A.C. 7:7A or the Highlands Water Protection and Planning Act Rules, N.J.A.C. 7:38. The adopted FHACA Rules at N.J.A.C. 7:13-4.1(i) specifically provide that the riparian zones established under the FHACA Rules are separate from, and in addition to, the 300-foot buffer established along certain waters under the Highlands Water Protection and Planning Act Rules, and the 50-foot and 150-foot transition areas along freshwater wetlands and other features that are regulated under the FWPA rules. Further, as noted in the Response to Comment 149 and in the Response to Comments 165

through 168, the adopted amendments do not reduce the number of headwaters that possess a riparian zone under the FHACA Rules. Given the protections afforded by the FHACA Rules for development within riparian zones and the added protections for surface water features under the FWPA rules and the Highlands Water Protection and Planning Act Rules, the consolidation of the SWRPA and 300-foot riparian zone in the FHACA Rules will not impair the quality of the State's surface waters or lead to deleterious impacts to aquatic biota.

173. COMMENT: Since the SWM rules were promulgated to meet the Federal requirements of the Clean Water Act and the State SWQS approved by USEPA, a repeal of SWRPAs would be inconsistent with both anti-backsliding and anti-degradation provisions of the Clean Water Act and State SWQS rule. (6, 29, 46, 96, 122, 164, and 177)

174. COMMENT: While the USEPA is trying to strengthen water protections under the Clean Water Act, the Christie Administration is attempting to weaken them through this rulemaking. These rules violate the State and Federal Clean Water Acts and the USEPA's Municipal Stormwater Rules. They also undermine the State's requirement from the USEPA to clean up streams. (122)

175. COMMENT: These rules are obviously important to the implementation of the Federal Clean Water Act and, therefore, the proposed changes are vehemently opposed. (128)

176. COMMENT: By eliminating the SWRPA designation under the SWM rules in favor of a uniform standard under the FHACA Rules, the Department is drafting regulations that will be inconsistent with the anti-backsliding and anti-degradation provisions of the Clean Water Act and the State SWQS. (91 and 195)

177. COMMENT: The proposed rules conflict with the Municipal Stormwater Permit requirements, which specifically require compliance with the water quality provisions of the SWM rules. The Category One buffers are part of the water quality provisions of the SWM rules, so they technically are a requirement of the municipal permit rules. The municipal permit rules are part of the Federally-delegated requirements of the Clean Water Act and USEPA. (193)

178. COMMENT: There is concern that additional development and discharges to surface waters in riparian zones could negatively impact surface water quality in spite of efforts to reduce impacts on vegetation and riparian zone functionality. The USEPA's National Pollutant Discharge Elimination System (NPDES) permitting regulations at 40 CFR 122.44(l), which are applicable to state NPDES programs, require permits, when renewed or reissued, to include interim effluent limitations, standards, or conditions at least as stringent as the final effluent limitations, standards, or conditions in the previous permit. New Jersey's Municipal Separate Storm Sewer System (MS4) permits cross-reference the State's SWM rules and require compliance with those rules. If changes to the SWM rules result in a less stringent permit condition, this would constitute backsliding in violation of the USEPA's permit regulations. Fact sheets that clearly detail how these rule revisions maintain the same level of stringency and do not result in backsliding are recommended for the New Jersey's MS4 permits affected by these changes. The potential impacts of these proposed changes should be discussed, especially given that the Department is in the process of drafting new MS4 general permits that will reference these rules. (99)

RESPONSE TO COMMENTS 173 THROUGH 178: Sections 402(o) and 303(d)(4) of the Clean Water Act, 33 U.S.C. §§ 1342(o) and 1313(d)4, and 40 CFR 122.44(l) of the NPDES rules

prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations or standards in a reissued permit to be as stringent as those in the previous permit, with some exceptions. See also, N.J.A.C. 7:14A-13.19.

New Jersey's Municipal Stormwater program is a Federally delegated program under the Clean Water Act. Under this program, the Department regulates discharges to surface water and groundwater of stormwater from small municipal separate storm sewer systems. New Jersey's municipal separate storm sewer system (MS4) program consists of general permits that address stormwater quality issues related to new development, redevelopment, and existing development by requiring municipalities and other regulated entities to implement Statewide Basic Requirements (SBR). The details of the program, including the SBRs, are set forth in the NJPDES rules, at N.J.A.C. 7:14A-25. N.J.A.C. 7:14A-25.6(b)3i establishes that one of the SBRs for post construction stormwater management is the requirement that the permittees develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb one acre or more that discharge into the permittee's small MS4. This program requires compliance with the applicable design and performance standards established under the SWM rules at N.J.A.C. 7:8. Thus, the MS4 program incorporates BMPs established under the SWM rules to prevent and reduce pollution from stormwater. One of these best management practices (BMPs) has been the SWRPA, which municipalities have implemented through the adoption of municipal ordinances that establish 300-foot buffers along Category One waters. As indicated above, the FHACA Rules require that runoff discharged to the 300-foot riparian zone be treated to reduce the total suspended solids (TSS) load by 95 percent. Maintenance of the 300-foot riparian zone, in accordance with these rules, represents a

BMP or strategy to treat runoff in support of a 95 percent reduction of TSS.

Although the Federal Clean Water Act's anti-backsliding provisions at sections 402(o) and 303(d)(4) only refer to effluent limitations, and thus suggest that Congress only intended that the anti-backsliding analysis apply to permit conditions that pertain to effluent limitations, EPA rules at 40 CFR 122.44(l) are not specific in this regard, and require that when a permit is renewed or reissued, "interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit …" Some commenters read the EPA rules as requiring an anti-backsliding analysis anytime a permitting agency modifies any condition in a permit, even if the condition is unrelated to effluent limitations. However, this reading would result in the inability of a permitting agency to make any changes to any conditions in any permit, if an argument could somehow be raised that such modified condition is less "stringent." Arguably, any change in an administrative condition, such as a reduction in reporting frequency, could trigger the anti-backsliding prohibition and violate the Federal Clean Water Act under this interpretation. Such a result is unwarranted and unreasonable.

Nevertheless, repeal of the SWRPA and the adopted regulations governing disturbance within the riparian zone under FHACA Rules do not revise any effluent limitations, standards, or conditions in an NJPDES permit. Moreso, the adopted rules remain as protective of water quality. Therefore, even if the anti-backsliding provisions were to apply in this case, they would not have been triggered through this rulemaking.

The Department has not modified any effluent limitations, standards, or conditions in an NJPDES permit. New Jersey only regulates small MS4 systems in its NJPDES program, and the

Federal rules do not require effluent limitations for small MS4s. 40 CFR 122.26. In addition, the standards for stormwater control under the SWM rules remain in place, including nonstructural stormwater management strategies, erosion control, groundwater recharge, and runoff quantity standards, and are incorporated into the MS4 program as applicable. (See N.J.A.C. 7:8-5.5 and 7:14A-25.6(b)3.) For example, pursuant to the FHACA Rules at N.J.A.C. 7:13-11.2(j)4, runoff from the water quality design storm that is discharged within a 300-foot riparian zone shall be treated to reduce the post-construction load of total suspended solids (TSS) by 95 percent of the anticipated load from the developed site, expressed as an annual average. This standard remains unchanged in this rulemaking; the requirement was simply moved from N.J.A.C. 7:8-5.5(h)3ii to 7:13-11.2(j)4.

Moreover, the conditions in the MS4 permit that cross-reference the SWM rules are not changing as a result of this rulemaking, and while the SWRPA in the SWM rules has been repealed, its protections have been incorporated into the riparian zone requirements under FHACA Rules. The riparian zone standard is a Statewide standard that applies regardless of whether it is referenced in the MS4 permit. In response to comments, the Department has determined that it is appropriate to cross-reference the 300-foot riparian zone requirements in the SWM rules at N.J.A.C. 7:8-5.5(h). Upon adoption the Department is adding a new N.J.A.C. 7:8-5.5(h) that cross-references the need for Department approval of major developments along the 300-foot riparian zone. Department approval will be governed under the standards and criteria of the FHACA Rules. This requirement is consistent with the jurisdiction and scope of the prior SWRPA requirements.

The standards that apply to disturbances within the 300-foot riparian zone established under the FHACA Rules for Category One waters are just as protective as those implemented under the SWRPA. As described in the Response to Comments 150 through 160, the Department previously allowed disturbances within any portion of the 300-foot SWRPA through hardship exceptions. Therefore, the values associated with the SWRPA have been subject to encroachments previously, and allowing encroachments under the FHACA riparian zone does not diminish the protections previously provided under the SWRPA. The FHACA Rules are incorporating and codifying the criteria under which those encroachments were previously allowed.

The Department will ensure that the fact sheet to accompany the MS4 general permit suitably describes the applicability of the riparian zone to Category One waters. For additional discussion on the relationship between the regulatory changes to the SWRPA and the FHACA Rules and the applicability of the CWA antidegradation policies, see the Response to Comments 180 through 186.

179. COMMENT: This rule violates the USEPA Municipal Stormwater Regulations. Many towns have calculated the absorption of pollutants from buffers into their stormwater plans. By eliminating buffers, pollution will increase and those plans will be violated. (177)

RESPONSE: This rule does not violate EPA's Municipal Stormwater Regulations. As discussed in the Response to Comments 150 through 160 and in the Response to Comments 173 through 178, the rules as adopted merge the SWRPA requirements with the riparian zones requirements under FHACA Rules. Therefore, the adopted rules do not eliminate buffers along Category One

waters and their tributaries. The Department does not expect that the modifications to the rules will adversely impact the absorption of pollutants and/or cause violations of a municipality's stormwater management plan.

180. COMMENT: Measurable changes to Category One waters as a result of proposed changes to these rules would not comply with New Jersey's water quality standards. The Clean Water Act requires that water quality standards be established and implemented by states and that they include anti-degradation policies to maintain and protect high quality State waters from increased loadings of pollutants resulting from regulated activities. New Jersey's anti-degradation policies for Category One waters at N.J.A.C. 7:9B-1.5(d)2iii, require that they be protected from any measurable changes, including calculable or predicted changes, to the existing water quality. If measurable changes to the existing water quality of Category One waters results from the proposed changes to these rules, this would not comply with New Jersey's water quality standards. (99)

181. COMMENT: The proposed rules clearly violate the anti-degradation standards of the State and Federal Clean Water Acts and, therefore, clearly violate the USEPA's delegation authority under the Federal Clean Water Act. The proposed rules violate anti-backsliding provisions of the Federal Clean Water Act since currently the water quality of many of these areas is protected by buffers under the existing rules and under the proposed new rules would be subject to more development and associated pollution. (177)

182. COMMENT: Please do not repeal SWRPAs, as this would be inconsistent with both the Clean Water Act and State SWQS and would be detrimental to the environment. (3, 20, 32, 41,

43, 53, 54, 65, 72, 79, 93, 97, 100, 105, 123, 132, 134, 137, 153, 154, 163, 167, 176, 188, and 192)

183. COMMENT: Since the SWM rules were, in part, promulgated to meet the Federal requirements of the Clean Water Act and the State SWQS approved by USEPA, a repeal of SWRPAs would be inconsistent with the anti-degradation provisions of the Federal Clean Water Act and the State SWQS. Of particular concern is the impact the repeal of SWRPAs will have on Category One waters that enter the Pinelands. (9 and 24)

184. COMMENT: The Category One buffers eliminated under this rulemaking are part of the State's SWQS that are Federally required by both the Clean Water Act and the USEPA's anti-degradation rules. The USEPA's anti-degradation rules do not specify what the State must include in its anti-degradation policies, but do require that such policies exist and that there is an implementation procedure for them. The 2004 SWM rules were created in part as implementation procedures under the Federal anti-degradation policies. The USEPA and the Attorney General's office should conduct Federal oversight of these rules. (193)

185. COMMENT: Category One waters are currently protected through Department rules from any measurable change in water quality because of their exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, or exceptional fisheries resources. (9, 26, 72, 99, 122, 124, 132, 133, and 163)

186. COMMENT: Category One waters are to be protected from "any measurable changes (including calculable or predicted …) to the existing water quality" and "aesthetic value (color, clarity, scenic setting) and ecological integrity (habitat, water quality and biological functions)." Modifying the Category One 300-foot riparian buffer requirement would degrade the ecological

significance and water quality of Category One streams by removing the protecting vegetation that keeps these streams cool and clear. This would change habitat parameters of the streams, resulting in a loss of biodiversity and an increased amount of sediment. The negative long-term environmental effects on the Category One streams outweigh the short-term gains of facilitating pipeline construction. Please do not weaken the protection on Category One streams by modifying the FHACA Rules. (95)

RESPONSE TO COMMENTS 180 THROUGH 186: The Federal Clean Water Act requires delegated states to establish and implement surface water quality standards. These standards must include antidegradation policies to maintain and protect high quality state waters from increased loadings of pollutants resulting from regulated activities. New Jersey's anti-degradation policies for Category One waters are set forth at N.J.A.C. 7:9B-1.5(d)2iii and require that they "shall be protected from any measurable changes (including calculable or predicted changes) to the existing water quality."

The antidegradation policies at N.J.A.C. 7:9B-1.5(d) are implemented through the NJPDES permitting process. For point source discharges that are nonpoint source in origin, the Department, consistent with the Federal rules at 40 CFR 131.12(a)(2), utilizes a "best management practices" or "BMP" approach to protect water quality.

Under the NJPDES rules at N.J.A.C. 7:14A-1.2, a BMP is defined in part as "methods, measures, or practices selected by an agency to meet its nonpoint source control needs." A BMP is expected to evolve and change over time. There are several BMPs recognized by the Department to mitigate the effects of pollution from point sources that are nonpoint in origin that are subject to the NJPDES rules. (See New Jersey Stormwater Best Management Practices

Manual). The Department established the 300-foot SWRPA as a specific BMP based on the Department's determination that restricting disturbances within a vegetated area along Category One waters and upstream tributaries as defined at N.J.A.C. 7:8-5.5(h) is the best and most reliable means to prevent the degradation of water quality from nonpoint source pollution that would be regulated under NJPDES, and protect the chemical, physical, and biological integrity of the State's surface waters. See 36 N.J.R. 742. The 300-foot FHACA riparian zone provides equivalent water quality protection, pollutant uptake, temperature moderation, habitat, streambank stability, and other beneficial functions afforded by the prior SWRPA requirements.

As with all BMPs, neither the SWRPA, nor the FHACA riparian zone, require measurement of water quality before and after the imposition of the vegetated buffer or zone to determine its effectiveness. Both sets of rules presume that if a vegetated area is maintained in accordance with Department standards, which require avoiding disturbance, minimizing disturbance, and mitigating when disturbance is unavoidable, water quality will be protected. This is because the functional values of the vegetated buffer are maintained (through avoidance or minimization) or replaced (through mitigation).

The incorporation of the SWRPA into the FHACA Rules does not expand the Clean Water Act policies to every regulated activity under the FHACA Rules. Only those regulated activities that would also be considered a "major development" subject to the SWRPA under the Stormwater Management rules, and thus regulated under NJPDES, trigger the applicability of the antidegradation policies articulated in the SWQS. Since the riparian zone under the FHACA Rules is no less stringent than the SWRPA as it was implemented, the Department does not predict any measurable changes to Category One waters from "major developments" as a result

of the regulatory changes to the FHACA Rules and the SWM rules. As explained in the Response to Comments 150 through 160, the SWRPA was never implemented as a "no-build" regulation. Disturbance, while discouraged, was always allowed within both the inner 150-foot and outer 150-foot portions of the SWRPA in limited circumstances pursuant to prior N.J.A.C. 7:8-5.5(h) or through the Department's hardship exception under various permitting programs. Disturbances to the SWRPA were allowed if the applicant could demonstrate that it was unavoidable, would not pose a threat to the environment or to public health, safety, and welfare, and would not adversely impact the use of contiguous or nearby property under the hardship exception provisions in Department permitting rules. Where there was an anticipated loss to the functional value of wildlife habitat, nonpoint source pollution load, temperature moderation or channel integrity, the Department required minimization, and typically, mitigation of the impacts (see FVA Technical Manual, pages 11-12). Therefore, the fact that the FHACA Rules allow disturbances within the 300-foot riparian zone in limited circumstances does not reflect a change in implementation of the BMP, nor is it predicted to cause water quality degradation.

The FHACA Rules establish permits-by-rule, general permits-by-certification, and general permits that specifically allow disturbances within the riparian zone. However, it is unlikely that the activities authorized by these permits would have been large enough to constitute a "major development" and trigger the SWRPA protections. These permits are limited in scope pursuant to N.J.A.C. 7:13-6.2(b)1 to ensure that any impact on flooding and the environment is minimal, regardless of the classification of the water associated with the riparian zone. For projects that will have more than a minimal impact, the Department requires an individual permit, which requires detailed Department review to ensure that impacts to the riparian zone are avoided,

minimized, and mitigated, as appropriate. In addition, elsewhere in this issue of the New Jersey Register, the Department is proposing to limit permits-by-rule, general permits-by-certification, and general permits to activities that do not meet the definition of major development as defined in the SWM rules at N.J.A.C. 7:8-1.2.

Under N.J.A.C. 7:13-11.2(b),which establishes conditions for individual permits, any impact to riparian zone vegetation, whether it be clearing, cutting, or removal of the vegetation, is prohibited unless it can be demonstrated that the basic purpose of the regulated activity or project cannot be accomplished without impacting riparian zone vegetation. Only where complete avoidance of impact to riparian zone vegetation is not possible will any impact be allowed, and then only if any impact is minimized and other requirements applicable to the specific regulated activity satisfied. Further, mitigation in accordance with N.J.A.C. 7:13-13 must be provided to offset all impacts to riparian zone vegetation within 300 feet of a Category One water associated with the construction of certain railroads and roadways, stormwater discharges, site remediation projects, and solid waste facility closures, and any impacts that exceed allowable limits set forth in Table 11.2. Additionally, all riparian zone mitigation must, as set forth at N.J.A.C. 7:13-13.2(a), “fully compensate for any ecological loss.” The Department will review all mitigation plans to ensure that riparian zone functionality is fully maintained and that, in the case of Category One waters, mitigation is provided along the same Category One waterbody or, where appropriate, a tributary to the Category One water. As discussed in the Response to Comments 150 through 160, by codifying avoidance, minimization, and mitigation standards presently incorporated in the FVA Guidance into the FHACA Rules, the Department is ensuring that these standards will be imposed in a predictable manner.

As an example, under the prior rules, a person proposing the construction of a footbridge over a stream would have been subject to the FHACA Rules (see prior N.J.A.C. 7:13-11.8) but would be subject to the SWRPA only if the footbridge constituted a major development which, due to the relatively high thresholds of a major development defined under the SWM rules, would be very unlikely. The standards associated with footbridges under the prior FHACA Rules have been continued and strengthened to ensure that footbridges are limited in size and scope so as to disturb a minimal area of riparian zone vegetation, avoid disturbance to any channel, not adversely impact fishery resources or any threatened and endangered species of plant or animal, and prevent any increase in flooding. (See permit-by-rule 23 at N.J.A.C. 7:13-7.23, general permit 12 at N.J.A.C. 7:13-9.12, and individual permit standards at N.J.A.C. 7:13-11.2(u) and 12.7(a).) In rare instances where an SWRPA would have been triggered by a footbridge, applicants would have sought a hardship exception through the FHACA Rules and, if the above standards had been met, along with the hardship exception requirements, would have obtained a flood hazard area permit for the project. The adopted FHACA Rules continue these protections in a more transparent and predictable manner, without compromising water quality or flood protections.

Upon review of the comments, the Department has added a cross-reference to the riparian zone standards for Category One waters in the SWM rules at N.J.A.C. 7:8-5.5(h) to ensure that persons seeking to comply with the SWM rules know they must also comply with the 300-foot riparian zone associated with Category One waters and their tributaries in the FHACA Rules. In addition, the Department identified areas of the FHACA Rules that can provide improved riparian zone protections, especially those associated with Category One waters. Thus, the

Department is not adopting the exemption from Table C for actively disturbed areas under proposed N.J.A.C. 7:13-11.2(f)1 or the expanded allowances for riparian zone disturbance under proposed N.J.A.C. 7:13-11.2(y), as discussed in more detail in the response to comments associated with these provisions. The Department is additionally not adopting clarifications that were proposed to the waters regulated under this chapter at N.J.A.C. 7:13-2.3(a)3 and to the location of riparian zones at N.J.A.C. 7:13-4.1, which were perceived by some commenters as reducing headwater protections. Further, published elsewhere in this issue of the New Jersey Register, the Department is proposing amendments that will specifically protect the inner 150-foot portion of the 300-foot riparian zone associated with Category One waters, limit permits-by-rule, general permits-by-certification, and general permits to activities that do not meet the definition of major development as defined in the SWM rules at N.J.A.C. 7:8-1.2, and expand the projects for which mitigation is required within a 300-foot riparian zone. For further discussion, see the notice of proposal and the Response to Comments 136 through 148.

Given the above, current protections of water quality are maintained in this rulemaking.

187. COMMENT: Given the FHACA Rules' objective of protecting and enhancing water quality, the inner 150 feet of the 300-foot riparian zone should receive similar protections to those afforded under the SWRPA. Serious threats to New Jersey loom in the form of fast-tracked construction projects including utility infrastructure, particularly natural gas pipelines. These projects, exempt from all State and local regulations, and subject only to the Federal Clean Water Act, threaten to degrade treasured open spaces and clean waters. Any weakening of these regulations will undermine the Department's enforcement of the Federal Clean Water Act and

proud heritage of environmental protection. If regulations are further weakened, New Jersey will ultimately be a less desirable place to live. (69)

188. COMMENT: The changes to the FHACA Rules that would give special exemptions to utilities, including gas pipelines, allowing them to cross many Category One waters more easily by modifying the Category One 300-foot riparian buffer requirement is opposed. The negative long-term environmental effects on the Category One streams outweigh the short-term gains of facilitating pipeline construction. (95)

RESPONSE TO COMMENTS 187 AND 188: The Department acknowledges that pipelines, if improperly constructed, can have deleterious impacts on riparian environments and regulated waters. For this reason, the Department has not weakened the standards for pipelines and other utility lines set forth in the prior FHACA Rules. Rather, the Department has adopted robust standards for utility line construction in riparian zones in order to ensure that riparian zone disturbance is avoided wherever practicable and, where disturbance cannot be avoided, riparian zone functionality is not impaired. In fact, the new requirements in the FHACA Rules governing utility line construction are more protective than requirements in the SWM rules, both before and after the SWRPA requirements were consolidated with the riparian protections of the FHACA Rules. Particularly, N.J.A.C. 7:8-5.2(d)1 provides an exemption from “the groundwater recharge, stormwater runoff quantity, and stormwater runoff quality requirements at N.J.A.C. 7:8-5.4 and 5.5” for the “construction of an underground utility line provided that the disturbed areas are revegetated upon completion.” N.J.A.C. 7:8-5.2(d)2 provides a similar exemption for the “construction of an aboveground utility line provided that the existing conditions are maintained

to the maximum extent practicable." Therefore, neither the SWRPA standards nor the other stormwater runoff quality standards at N.J.A.C. 7:8-5.5 applied to such utility projects.

With regard to the standards under the FHACA Rules, several prior permits-by-rule that facilitate utility line construction in a manner that does not exacerbate flooding or adversely impact the environment have been continued. For example, permit-by-rule 36 authorizes the placement of an underground utility line beneath a regulated water through directional drilling or jacking, provided a number of requirements are met to ensure that the regulated water and its riparian zone vegetation are not disturbed. Under this authorization, the regulated water cannot be disturbed in any way except for temporary disturbance associated with soil borings necessary to ensure that the project is viable, no trees can be cleared, cut, and/or removed in a riparian zone, all disturbed areas in the flood hazard area must be restored to their original topography upon completion of the regulated activity, and all riparian zone vegetation that is cleared, cut, and/or removed to conduct a regulated activity, access an area where regulated activities will be conducted, or otherwise accommodate a regulated activity shall be replanted immediately after completion of the regulated activity. A number of other conditions must additionally be met. Any utility line that cannot meet the strict limitations of the adopted permits-by-rule is required to obtain an individual permit, since the FHACA Rules do not contain any general permit-by-certification or general permit to facilitate utility line construction. The individual permit requirements at N.J.A.C. 7:13-11.2(b) further require applicants seeking an individual permit for any activity, including pipeline construction, to demonstrate that: the basic purpose of the activity cannot be accomplished onsite without the clearing, cutting, and/or removal (disturbance) of vegetation in the riparian zone; disturbance is minimized; and for a disturbance

that exceeds acceptable limits, mitigation is provided. Further, all temporarily disturbed areas must be replanted in accordance with N.J.A.C. 7:13-11.2(z).

Adopted N.J.A.C. 7:13-11.2(k) sets forth additional requirements for utility line construction. Under N.J.A.C. 7:13-11.2(k), an applicant must demonstrate that clearing, cutting, and/or removal of riparian zone vegetation is unavoidable through an alternatives analysis prepared in accordance with N.J.A.C. 7:13-12.9(b)1. Trees cannot be cleared, cut, or removed within 25 feet of any top of bank unless the applicant demonstrates that such disturbance is unavoidable, and disturbance to forested areas must be avoided to the maximum extent practicable.

While the Department recognizes that the construction of utility lines is sometimes necessary to fulfill a compelling public need, the adopted requirements ensure that riparian ecosystems and the integrity of regulated waters are protected. Further, it should be noted that these protections afforded to riparian zones, and the robust requirements described above that must be met to construct utility lines through riparian zones, apply not only to the 300-foot riparian zone along Category One waters and their tributaries, but also to activities impacting any 50- or 150-foot riparian zone.

189. COMMENT: The Department’s deletion of the SWRPAs under the SWM rules is opposed. While the SWRPA does not apply to all of the same waters as the 300-foot riparian zone, this does not mean that it is inconsistent or duplicative. (5, 56, 67, 77, 122, 138, 170, 173, and 190)

190. COMMENT: The Department justifies the proposed deletion of SWRPA buffers by claiming confusion between the list of regulated waters under the FHACA Rules and the regulated waters under the State SWM rules as shown on the USGS Quadrangle Maps or in the County Soil Survey maps. These are buffer regulations promulgated to protect different kinds of resources for different reasons. FHACA Rules riparian buffer standards were developed primarily to protect life and property during flood events whereas buffers under SWRPA were developed primarily to protect water quality. Parallel sets of regulations for functionally different riparian buffers are not complicated to understand. Any confusion is either self-inflicted or overstated and is certainly not justification for the deletion of SWRPA buffers. More streamlined regulatory language and better cross-referencing would dispel any lingering confusion. (24 and 147)

191. COMMENT: The removal of the SWRPA is contrary to protecting water quality. The SWM rules have different requirements and different statutory policies; just because the two zones may not currently be the same in all circumstances, defaulting to the lowest common denominator is not the solution. Better protections and water quality are needed. (28A, 42, 56, 67, and 127)

192. COMMENT: The SWRPA mandate in the SWM rules, N.J.A.C. 7:8-5.5(h), is intended to address water quality issues associated with stormwater runoff from development projects. The focus of the FHACA Rules is fundamentally different, that is to protect communities from the health, safety, environmental, and community harms caused by development within fluvial and tidal flood hazard areas and to preserve the benefits of these areas when they are protected. The SWRPAs found in the SWM rules are a fundamental underpinning of those rules for anti-

degradation protection in the State and for other required Clean Water Act mandates; removing this concept puts the legal and scientific defensibility of the SWM rules in question. (183)

193. COMMENT: The purposes for which SWRPAs were established go well beyond those that relate to the life and property purposes of the FHACA Rules to embrace the anti-degradation policies for Category One waters. (24)

194. COMMENT: Both the FHACA Rules and SWM rules are necessary to effectuate the goals of the Department and the enabling legislation. While there is a relationship between these sets of rules, the requirements of the SWM rules are designed to address issues not contemplated in the FHACA Rules. The designation of SWRPAs is one of the major strategies for protection of high resource value Category One waters to achieve designated beneficial uses in the State SWQS. This strategy was crafted to recognize and address the extent of impaired waters in the State and to control diffuse sources of pollution not regulated under the NJPDES Program. (24)

RESPONSE TO COMMENTS 189 THROUGH 194: The Department acknowledges that the SWPRA was adopted under the SWM rules as a best management practice to reduce pollutant loading within Category One waters and their tributaries. While riparian zones apply to a wider set of waters than the SWRPA, the rationale for adopting standards for disturbance to riparian zone vegetation under the FHACA Rules is equivalent to the purpose of the SWRPA, as elucidated by the scope and purpose of the FHACA Rules at N.J.A.C. 7:13-1.1(c)2:

> Vegetation adjacent to surface waters is essential for maintaining bank stability and water quality. The indiscriminate disturbance of such vegetation destabilizes the channels and banks of surface waters, which leads to increased erosion and sedimentation that exacerbates the intensity and

> frequency of flooding. The loss of vegetation adjacent to surface waters also reduces filtration of stormwater runoff and subjects surface waters to increased sun exposure, which causes water temperatures to rise and dissolved oxygen content to fall. Such impacts adversely affect the health and habitat of fish and wildlife that depend upon clean surface waters and therefore disrupt the ecological balance that is necessary for life. Humans are ultimately affected by this imbalance, since clean water is essential for all life.

The importance of the riparian zone under the FHACA Rules as a tool for protection of water quality through those rules was additionally repeatedly stressed when the Department named the area the riparian zone and expanded its area of protection as part of the 2007 rulemaking to repeal the Flood Hazard Area Control rules and replace them with the FHACA Rules. As indicated by the Department in the extensive discussion of changes to Subchapter 4 of the new rule adopted at that time, “The expansion of the riparian zone is being proposed because the Department has determined that the level of protection afforded under the existing rules is not adequate to preserve the functions of the riparian systems. Healthy riparian zones are essential to the natural environment. Loss of soil and plant life that occurs adjacent to regulated waters not only threatens public and private property, but directly impacts water quality and the health of fish and wildlife. The extreme importance of preserving and restoring adequate stream corridors has been heavily documented in recent decades.” After discussing the results of some of the available studies, the Department concluded, “that expanding the regulated area adjacent to waters as proposed herein is both appropriate and necessary to adequately protect the State's

surface and groundwater resources." (38 N.J.R. 3971; see also 38 N.J.R. 3951). In fact, after discussing early in the notice of proposal the water quality benefits provided by the riparian zone, the relationship between the riparian zone and the SWRPA was specifically addressed in the 2007 notice of proposal, which noted, "the existing Stormwater Management rules at N.J.A.C. 7:8-5.5(h) establish a 300-foot Special Water Resource Protection Area along Category One waters and certain tributaries only when a major development, as defined at N.J.A.C. 7:8-1.2, is proposed. The 300-foot riparian zone proposed under this chapter, however, will apply to any activity that requires approval under this chapter, which includes a larger set of activities than that which is regulated under the Stormwater Management rules." The Department's intent regarding the purposes served by these areas is now and has always been clear; both the SWRPA and the riparian zone were intended to protect regulated waters from negative impacts of inappropriate development, despite being part of different regulatory programs, and both were intended to protect water quality. Additionally, both were promulgated under the authority of the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. and the Water Quality Management Act, N.J.S.A. 58:11A-1 et seq.

In order to avoid any potential confusion as to the purpose of the riparian zone as a means to protect water quality both of Category One waters and, in fact, all regulated waters, the Department is adding a cross reference in the SWM rules at N.J.A.C. 7:8-5.5(h) to the riparian zone requirements at N.J.A.C. 7:13. This further clarifies that the 300-foot riparian zone associated with Category One waters is incorporated in the MS4 program, as appropriate. See also the Response to Comments 150 through 160 and the Response to Comments 180 through 186.

195. COMMENT: SWRPAs receive additional protections against disturbance than the riparian zones receive in the FHACA Rules. If the Department is interested in standardizing language, a solution is the expansion of the scope of the SWRPAs, so that they apply to the same waters under the same circumstances as the riparian zone under the FHACA Rules. That is, the SWRPA is applied to all projects, not just projects that meet the definition of major development, and the SWRPA should also apply to all regulated waters, not just blue line water. (5, 27, 28A, 42, 56, 67, 77, 69, 122, 127, 138, 170, 173, and 190)

196. COMMENT: Given the FHACA Rules' objective of protecting and enhancing water quality, the inner 150 feet of the 300-foot riparian zone should receive similar protections to those afforded under the SWRPA. One of the commenters believes that the solution to inconsistent application is to harmonize the rule, so that the best protections of each rule are incorporated into the other. The SWRPA should continue to apply to waters that are not regulated waters under the FHACA Rules, as meeting criteria under N.J.A.C. 7:13-2.2(a)3. (5, 27, 28A, 42, 56, 67, 77, 122, 127, 138, and 170)

197. COMMENT: If the Department wants to bring the riparian buffer mandates of the SWM rules and the FHACA Rules into conformance with one another, they should take the most stringent, rather than the least restrictive, language from each rule to craft a new provision that is recited in both sets of rules. In addition, the rule should clearly state that the established buffer must address the issues of stormwater, water quality, and water quantity, as well as ecological, community, and flood damage issues contained in both rules. This new provision should be articulated both in the FHACA Rules and SWM rules to ensure a firm understanding that

compliance with the riparian buffer mandates is necessary to comply with both overarching pieces of legislation. (183)

RESPONSE TO COMMENTS 195 THROUGH 197: As noted in the Response to Comments 189 through 194 above, both the SWRPA and the riparian zone were intended to protect regulated waters from negative impacts of inappropriate development, despite being part of different regulatory programs, and both were intended to protect water quality, with both promulgated under the same statutory authority. However, as discussed in the Response to Comments 136 through 148, SWRPA protections applied only to waters depicted on USGS Quadrangle maps or County Soil Survey maps in cases where a proposed project constituted a "major development." As a result, the SWRPA applied in a more limited set of circumstances than the 300-foot riparian zone under the FHACA Rules, which created unnecessary complications for prospective applicants and Department staff. Further, as discussed in the Response to Comments 150 through 160, the fact that limited disturbances within the 300-foot riparian zone are authorized under the FHACA Rules does not make the riparian zone under FHACA Rules less protective of water quality than the SWRPA. Even though N.J.A.C. 7:13-5.5(h)1ii provides for no allowance for any disturbance within the inner 150 feet of the 300-foot SWRPA, and limited disturbance in the outer 150 feet, encroachments into the entire SWRPA have been authorized by the Department consistent with other provisions of the SWM rules, or through hardship waivers issued pursuant to the FHACA Rules and other Department permitting rules, which implement the SWM rules.

The changes being adopted at this time, including repeal of the SWRPA, do not reduce protections afforded to Category One waters, nor do they increase flooding or otherwise

negatively impact the State's water resources. Instead, the adopted amendments, repeals, and new rules incorporate SWRPA protections into the FHACA Rules to create a 300-foot riparian zone with standards that will apply to a uniform set of surface waters designated as Category One and tributaries, ensuring that the protections previously provided to the 300-foot SWRPA area under the SWM rules continue to be provided to these waters by the 300-foot riparian zone protected under the FHACA Rules, making continued separate protection of this same area under the SWM rules unnecessary. As indicated in the Response to Comments 136 through 148, to further ensure that there is no uncertainty as to the applicability of the FHACA Rules riparian zone protections to major development that would otherwise have been subject to the SWRPA, the Department is adding a cross-reference to the FHACA Rule requirements in the SWM rules at N.J.A.C. 7:8-5.5(h) where the SWRPA requirements were formerly codified.

198. COMMENT: The rule change seems to originate in the Department's transition report to the Administration, in which there was an explicit recommendation to eliminate the Equivalence Demonstration (as it was known then) under Commissioner Jackson's Administrative Order; that impetus of either revising or eliminating a guidance document that people find problematic has now morphed into a much more radical regulatory curtailment. (193)

RESPONSE: The adopted amendments concerning the SWRPA and 300-foot riparian zone originated in the experience of Department staff and the regulated public. As discussed in the Response to Comments 150 through 160, because the Department determined that guidance to the regulated community was necessary, the Department issued Administrative Order No. 2008-02, which provided guidance on how the Department could evaluate whether "the functional

value and overall condition of the SWRPA will be maintained to the maximum extent practicable" where work is proposed within an SWRPA. As explained in the administrative order and Functional Value Analysis Technical Manual, the Department assessed the impact of the proposed encroachment on four categories of riparian functional values: wildlife habitat, nonpoint source pollution load, temperature moderation, and channel integrity, and if there were no alternatives, required minimization and mitigation of the impact to the functional value. Rather than require applicants to perform this analysis, the Department has, through this rulemaking, instead increased the mitigation requirements for activities within the 300-foot riparian zone in order to mirror the mitigation required when performing the functional value analysis. Specifically, mitigation is required for all riparian zone disturbance for railroads, roadways, stormwater discharges, site remediation projects, solid waste facility closures pursuant to N.J.A.C. 7:13-11.2(g)3, (h)3, (j)4, (r)2, and (s)3, as well as any project that is covered under N.J.A.C. 7:13-11.2(y)3. The adopted amendments are, therefore, not a "radical regulatory curtailment," but a commonsense revision of well-intentioned, but ultimately cumbersome regulations.

199. COMMENT: The Department's policy rationale for amending, repealing, and clarifying riparian zone protection standards is inconsistent and at odds with the purpose of the FHACA Rules. The Department's statement at 47 N.J.R. 1053-1054 of the notice of proposal Summary concerning the deletion of the SWRPA and changes to riparian zone provisions is in direct conflict with the description of amendments to scope and purpose statement at N.J.A.C. 7:13-1.1 as summarized at 47 N.J.R. 1047 and does not properly factor in the significant functions and

values of vegetated riparian zones articulated in the statement concerning vegetated areas immediately adjacent to surface waters at 47 N.J.R. 1049-1050. Therefore, the Department is urged not to adopt this regulation. (29, 46, and 177)

RESPONSE: The Department acknowledges the many important functions provided by vegetation near surface waters, as stated in the scope and purpose of the FHACA Rules at N.J.A.C. 7:13-1.1(c)2 and articulated in the notice of proposal Summary at 47 N.J.R. 1047, 1049, and 1050, and for this reason establishes stringent standards for clearing, cutting, and/or removal of vegetation within the riparian zones that have been established under this chapter. In the notice of proposal Summary at 47 N.J.R. 1053-1054, the Department set forth its rationale for the deletion of the SWRPA from the SWM rules and the related incorporation of certain standards into the 300-foot riparian zone under the FHACA Rules. This rationale is not in conflict with N.J.A.C. 7:13-1.1(c)2. Rather, the rationale explains that, while the SWRPA is similar in some respects to the 300-foot riparian zone, three major differences between the riparian zone protections and the SWRPA protections to Category One waters and their tributaries have resulted in unintended and problematic consequences. First, SWRPAs apply only in cases where a “major development” is proposed, while riparian zones under the FHACA Rules apply irrespective of the size or intensity of a proposed development. Since many prospective construction projects do not meet the definition of a “major development” and SWRPAs are limited to Category One waters, riparian zones therefore impact a greater number of projects than do SWRPAs.

Second, as discussed in the Response to Comments 150 through 160, the prohibitive nature of the SWRPA standards prevented many projects that were unavoidable, beneficial in nature, or

which would have *de minimis* impacts, therefore, forcing many applicants to seek hardship exceptions under the FHACA Rules. Third, SWRPA's reliance on USGS Quadrangle and County Soil Survey maps has led to significant implementation difficulties and resulted in many surface waters not having SWRPA protections, in contrast to the riparian zone, which, in accordance with N.J.A.C. 7:13-2.2(a) and 2.3(c), applies to surface waters with a drainage area of at least 50 acres and headwaters with a discernible channel regardless of drainage area. The adopted amendments consolidating the SWRPA and the 300-foot riparian zone into the uniformly applied 300-foot riparian zone, as well as other amendments to riparian zone regulations, are protective of vegetated areas adjacent to surface waters and the functions and values these areas provide. All riparian zone disturbance must be justified, avoided where practicable, minimized, and located as far from any regulated water as possible, pursuant to N.J.A.C. 7:13-11.2(b). Further, where impacts to riparian zone vegetation exceed acceptable limits, mitigation in accordance with N.J.A.C. 7:13-13 must be provided to fully compensate for adverse impacts to riparian zone functionality.

With regard to disturbance to vegetation in close proximity to regulated waters, the FHACA Rules incorporate a number of protections designed to ensure that disturbance is located "as far from any regulated water as feasible" pursuant to N.J.A.C. 7:13-11.2(b)2 and not located within 25 feet of any top of bank, except in the unavoidable or beneficial cases set forth in N.J.A.C. 7:13-11.2(c). Further, N.J.A.C. 7:13-11.2(d) requires that where riparian zone disturbance is proposed, all existing development within 25 feet of any top of bank must be removed and the area replanted with native, non-invasive vegetation except in select cases. Additionally, as noted in the Response to Comments 136 through 148, the Department has reexamined all permits-by-

rule, general permits-by-certification, and general permits adopted by this rulemaking and determined that additional protections could be incorporated into a number of these permits to ensure that disturbance within 150-feet of a Category One water does not occur except in limited cases where authorized activities would clearly have no more than a *de minimis* impact on riparian zone functionality as proposed elsewhere in this issue of the New Jersey Register. The Department is further proposing to incorporate additional protections at N.J.A.C. 7:13-11.2(b) and elsewhere in the FHACA Rules for activities proposed within 150 feet of the top of bank of regulated waters possessing a 300-foot riparian zone.

200. COMMENT: The rulemaking repeatedly refers to the Department's experience as justification for these changes, but it does not refer to any data or science that justifies it. That contrasts with the ecological methodology used to justify the Category One buffers 12 years ago, a methodology that was held to a high standard. The Department staff did an analysis of the Category One program in terms of the scientific basis for the designation. This analysis not only found the scientific basis to be adequate, but the staff recommended the designation of 121 additional miles of Category One waters. Those recommendations have not been promulgated through rulemaking. The Department has not designated these additional Category One waters, so it is not following the recommendations of its own staff. Instead, this rulemaking will dismantle that program. The Category One program is intended to protect exceptional water quality, exceptional ecological waters, exceptional recreational waters, and exceptional fishery resources. It is a very important program that is treated very poorly in this rulemaking. (193)

201. COMMENT: These rules are troubling due to the progress that has been made in protecting water quality. The rulemaking appears to have been written by the Builders Association attorneys, contradicting the studies and science that this Department has sponsored at least as far back as the 1989 report on riparian corridors and reservoir buffers. There is a long litany of reports and science to justify the 300-foot buffers. These rules ignore science, ecology, and aquatic biology. Ringwood has implemented stream buffers, which were upheld in court, that are actually larger than the buffers in the rules now. (177)

RESPONSE TO COMMENTS 200 AND 201: The Department develops rules based on the experience of its staff, as well as the latest research of the scientific community. Due to the many studies that support preserving vegetation adjacent to surface waters, the Department continues to establish robust protections within riparian zones along New Jersey's regulated waters. The Department is committed to the protection of all of the State's regulated waters, including Category One waters, which provide exceptional ecological, recreational, water supply, and fishery resources to the State of New Jersey. Accordingly, in the adopted rules, a surface water designated as Category One by the Surface Water Quality Standards, N.J.A.C. 7:9B, receives the widest riparian zone, that is 300 feet, with other regulated waters receiving either a 150-foot or 50-foot riparian zone depending upon the resources associated with the water.

Further, the adopted rules do not alter or amend the Category One designations promulgated in N.J.A.C. 7:9B, nor do they impact the Department's continuing efforts to evaluate whether additional waters should be designated as Category One, based upon the criteria established in the Surface Water Quality Standards.

202. COMMENT: A nondegradation analysis is not required for a permit-by-rule, an application for an authorization under a general permit and general permit-by-certification, and an individual permit application. This is problematic. According to the USEPA's Water Quality Standards Handbook, "water quality standards apply broadly and it is inappropriate to exempt whole classes of activities from standards and thereby invalidate that broader, intended purpose of adopted State water quality standards." New Jersey's existing standards apply to preventing degradation due to non-point source pollution, which should not be diminished through adoption of permits-by-rule and general permits-by-certification. (28A, 42, 56, 67, and 127)

RESPONSE: Under a permit-by-rule, a person may undertake specific regulated activities without having to obtain prior written approval from the Department, provided all conditions of the permit-by-rule are satisfied. See N.J.A.C. 7:13-6.3(a). Under a general permit-by-certification, a person may undertake certain activities that are authorized by the Department based on an electronic permit application and certification by the applicant that the activity complies with the permit (see N.J.A.C. 7:13-6.3(b)). These types of permits cover a variety of minor activities, including minor stream cleaning projects, forestry activities, lawn maintenance, construction associated with existing buildings, roadways, ecological enhancement activities, construction of a single family home, and construction of trails and boardwalks. As noted in the Response to Comments 180 through 186, the antidegradation policies for point source discharges in the Surface Water Quality Standards (SWQS) do not apply to nonpoint source discharges. For nonpoint source discharges, and point source discharges that are nonpoint source in origin, the Department uses a BMP approach to protect water quality. The State addresses antidegradation requirements as discussed in the Response to Comments 180 through 186. The allowance of

permits-by-rule, and general permits-by-certification in the FHACA rules is consistent with the approach described there.

A person conducting regulated activities pursuant to a permit-by-rule, or general permit-by-certification must comply with specific conditions in the permit, and general conditions applicable to all such permits, such as prohibiting adverse impacts on threatened and endangered species habitat. N.J.A.C. 7:13-6.7(a) and (b). In addition, all permittees must comply with all other applicable Federal, State, and local requirements, as required by N.J.A.C. 7:13-22.1(c)3. For activities within the riparian zone of a Category One water, the FHACA Rules impose additional restrictions to provide heightened protections for these waters. For example, general permit-by-certification 4 for the enhancement of a riparian zone through the planting of native, non-invasive plant species requires, at N.J.A.C. 7:13-8.4(a)5, that "no trees are cleared, cut, and/or removed within the riparian zone of a … Category One water …" As indicated in the Response to Comments 136 through 148 and the Reponse to Comments 180 through 186, based upon the types of activities regulated under the permits-by-rule and general permits-by-certification, the Department does not predict any measurable change to Category One waters as a result of their issuance. However, to further ensure these permits only apply to projects that are *de minimis*, the Department is proposing, elsewhere in this issue of the New Jersey Register, to further limit these permits to activities that do not disturb more than one acre or impose more than one-quarter acre of impervious cover. The only exceptions to this requirement would be normal property maintenance under permit-by-rule 1 and forest management activities conducted in accordance with permit-by-rule 26. See the concurrent notice of proposal Summary for a complete description of the additional protections proposed.

If the water is a Pinelands Water, the applicant for a permit-by-rule or general permit-by-certification will also be required to comply with other State law, including the Pinelands Protection Act. As required under the SWQS, a new or expanded discharge could be allowed if authorized by the Pinelands Commission in accordance with the Pinelands Comprehensive Management Plan, N.J.A.C. 7:50-4.61 through 4.70. The Department coordinates permit actions with the Pinelands Commission, and requires that applicants for authorization under a general permit or individual permit demonstrate that any necessary Pinelands approval has been requested or received (see N.J.A.C. 7:13-18.4(b)) and further requires applicants for any verification, authorization under a general permit, individual permit, or major technical modification within the Pinelands Preservation Area or the Pinelands Protection Area to provide the Pinelands Commission a copy of the application form submitted to the Department.

203. COMMENT: The majority of New Jersey's waters do not meet one or more water quality standards. For example, approximately 77 percent of New Jersey waters do not meet the aquatic life criteria under the Federal Clean Water Act. The FHACA Rules and SWM rules should aim to meet these water quality requirements; these rules do not. (28A, 42, 56, 67, and 127)

RESPONSE: The commenter's statement regarding waters that do not meet water quality standards is not correct. According to New Jersey's 2014 Integrated Water Quality Assessment Report (see http://www.state.nj.us/dep/wms/bears/2014_integrated_report.htm), 64 percent of New Jersey waters do not support the general aquatic life use due to exceedances of one or more parameters. Parameters used to assess support of the general aquatic life use include both chemical pollutants and macroinvertebrate health. Biological impairment is the sole cause of

impairment for all waters not supporting the general aquatic life use. The FHACA Rules and the SWM rules impose a variety of requirements aimed at improving water quality, preventing pollution and meeting the State's Surface Water Quality Standards.

Total Maximum Daily Loads (TMDLs)

204. COMMENT: The proposed rules clearly impact almost every TMDL in the State, especially with regard to phosphorous and stormwater loads. Those TMDLs looked at the Category One buffers and streams as part of the process to protect water quality. While the Federal government is improving with regards to clean water, New Jersey is regressing. (177)

205. COMMENT: The Department has relied on SWRPAs along Category One waters as State required BMPs for regulatory purposes of nonpoint pollution controls and for calculating Waste Load Allocations (WLAs) and Load Allocations (LAs) in Federally mandated TMDLs pursuant to 40 CFR Part 130. SWRPAs, as State water quality BMPs, become subject to Federal review upon incorporation in a TMDL. Because the rulemaking would eliminate SWRPAs, it would create significant flaws in all adopted TMDLs that involve Category One waters. Elimination of protections for SWRPAs will result in loss of riparian vegetation and the ability to filter pollutants, resulting in additional pollutant loadings to impaired waters that exceed the TMDLs, WLAs, and LAs approved by the USEPA. (193)

206. COMMENT: Loss of SWRPA buffers and water quality benefits would contradict the factual basis and assumptions of TMDLs involving Category One Waters. Accordingly, the rulemaking would violate Federal regulations and requirements of the Clean Water Act. At a minimum, the Department's proposed elimination of SWRPAs, as State BMPs for TMDLs,

requires USEPA review and approval. The proposed elimination of SWRPAs, if adopted, would require amendments to all adopted TMDLs involving Category One waters. (193)

RESPONSE TO COMMENTS 204 THROUGH 206: New Jersey's SWQS, N.J.A.C. 7:9B, constitute the Department's rules governing matters of policy with respect to the protection and enhancement of surface water resources. The rules include various mechanisms designed to achieve these goals including establishment of water quality criteria, classification of the surface waters of the State and the uses that must be protected for particular water segments, and designation of antidegradation classifications applicable to the surface waters, which determine the level of protection to be provided to the different waters of the State. Designated uses specified by the SWQS include drinking water supply, fish consumption, shellfish resources, recreation, and aquatic life. The SWQS include antidegradation policies at N.J.A.C. 7:9B-1.5(d). Contained in the antidegradation policies are policies applicable to all surface waters of the State, as well as antidegradation policies applicable to particular waterbodies depending upon their antidegradation designation. The antidegradation policies applicable to all surface waters of the State include requirements that all existing and designated uses of all surface waters of the State must be maintained and protected; that existing water quality must be maintained and that waters that are not in compliance with one or more of the water quality criteria (impaired waters) must be restored to meet SWQS. For the purpose of the antidegradation policies that are waterbody specific, the State's waters are divided into three groups with the level of protection provided for each group of water (the antidegradation policy applicable to the waterbody) dependent upon the characteristics of the water. The three tiers of antidegradation designations are: Outstanding National Resource Waters, Category One, and Category Two waters. Category

One waters, the only waters to which the SWRPA applied, are designated for protection from measurable changes in water quality because of their exceptional ecological significance, exceptional water supply, exceptional recreation, and exceptional fisheries.

TMDLs are required, under Section 303(d) of the Federal Clean Water Act, 33 U.S.C. § 1313(d), to be developed for waterbodies that cannot meet water quality standards after the implementation of technology-based effluent limitations. TMDLs may also be established to help maintain or improve water quality in waters that are not impaired. A TMDL represents the assimilative or carrying capacity of a waterbody, taking into consideration point and nonpoint sources of pollutants of concern, natural background, and surface water withdrawals. A TMDL quantifies the amount of a pollutant a waterbody can assimilate without violating the State's water quality standards, allocates that load capacity to known point and nonpoint sources, and is expressed as the sum of waste load allocations for point sources, load allocations for nonpoint sources, a required margin of safety, and an optional reserve capacity. The goal of the TMDL is to attain the specific SWQS and protection of applicable designated uses.

A TMDL is developed as a mechanism for identifying all the contributors to surface water quality impacts for the water in question and setting the load reductions for pollutants of concern as necessary to meet SWQS. A TMDL implementation plan identifies the regulatory and non-regulatory tools intended to be used to achieve the calculated necessary pollutant reductions. Regulatory measures typically include effluent limitations or additional measures that are incorporated into wastewater or stormwater permits issued pursuant to the NJPDES rules, N.J.A.C. 7:14A. Where management measures rely upon non-regulatory actions, such as further reduction from nonpoint sources and point source discharges that are nonpoint source in origin,

by implementing best management practices, an implementation plan provides a basis for aligning available funding and stewardship building resources to assist with implementation activities.

Where an existing TMDL implementation plan identifies the SWM SWRPA as one of the BMPs intended to achieve the desired goals of the TMDL, repeal of the SWRPAs from the SWM rules and protection of the same area under the FHACA when the 300-foot area is impacted by major development will not eliminate protection of the near water area. Instead, the 300-foot FHACA riparian zone would be the BMP implemented to provide the same level of protection. As indicated in the Response to Comments 173 through 178, to clarify this link, the Department has added a cross-reference in the SWM rules at N.J.A.C. 7:8-5.5(h) to eliminate any potential doubt as to the need for major development impacting a 300-foot area adjacent to a Category One water to continue to protect this area through the FHACA Rules' riparian zone provisions. No amendments to adopted TMDLs involving Category One waters are necessary. With reference to point sources regulated through a NJPDES permit, the NJPDES rules at N.J.A.C. 7:14A will continue to require that new or expanded wastewater discharges must maintain the existing water quality of the receiving Category One streams. If the discharge is located above a Category One segment, the applicant must meet the standard of "no measurable change" in water quality at the Category One boundary.

207. COMMENT: The USEPA must review and approve all modifications to State SWQS. Did the USEPA review the rulemaking or will it review the adoption? (193)

RESPONSE: The commenter is correct that USEPA must approve all modifications to the SWQS. Every three years the Department performs a triennial review of its SWQS subject to EPA approval. The Department is currently considering updates and changes to the SWQS, however, no amendments were made to the SWQS through this rulemaking. The Department does not anticipate proposing any changes to antidegradation policies or Category One waters as a result of this rule adoption.

Acid Producing Soils/SCD

208. COMMENT: The deference of the Department to the Soil Conservation Districts in instances relating to acid producing soils is understood. Soil Conservation District staff are more than qualified to review the potential impacts of projects affecting acid producing soils. They also have the ability to decide where projects would not have a significant impact or may be preferred in an effort to contain acid producing soils. (119)

209. COMMENT: The Department is commended for harmonizing these rules with the "approval and supervision" responsibilities already maintained by the local Soil Conservation Districts. The existing rules are unnecessarily duplicative, requiring applicants to seek review and approval from both the Department and the local Soil Conservation Districts. Clarifying the role of the districts in approving and supervising certain permit-eligible activities will streamline this process, maximizing predictability and efficiency for landowner-applicants. (171)

210. COMMENT: The FHACA Rules 150-foot riparian zone on acid producing soils has significantly impeded or terminated development and redevelopment projects. Practical difficulty has been encountered in locating the "precise location or depth of acid producing soil

deposits on a given site or along a given regulated water" to then determine the appropriate location for the 150-foot riparian zone. Further, the Department's observations that the local Soil Conservation Districts "are well staffed and effectively trained to help prospective developments avoid and mitigate impacts from exposure of acid producing soil deposits" and that there are long established, proven engineering mechanisms available to prevent impacts from such soils, as required under the Standards for Soil Erosion and Sediment Control, are accurate. Therefore, the Department's rulemaking to reduce the riparian zone along regulated waters containing acid producing soil deposits from a 150-foot to a 50-foot riparian zone is supported. (157)

211. COMMENT: The removal of all standards and requirements related to acid producing soils, including the establishment of the 150-foot riparian zones where acid producing soils are present, is supported. The mitigation of potential impacts resulting from exposure to such deposits should continue to be regulated by the local Soil Conservation Districts as in the past. (19 and 101)

212. COMMENT: The rulemaking achieves the important objective of reducing riparian zones relative to acid producing soil deposits, while ensuring the least impact on local streams. The current 150-foot riparian zone in areas with acid producing soils has been an obstacle to redevelopment. The reduction of the riparian zone in these instances from 150 feet to 50 feet is supported. Also, the decision to defer to local Soil Conservation Districts to work with developers to avoid or mitigate the impact of acid producing soils is applauded. (102)

RESPONSE TO COMMENTS 208 THROUGH 212: The Department acknowledges these comments in support of the rule.

213. COMMENT: The broad and unfettered delegation of powers to the Soil Conservation Districts (SCDs) is opposed. The SCDs are semi-autonomous bodies that are locally governed and, as such, could make opposing permitting decisions on similar activities and impacts. Furthermore, because of the local nature of these boards, there is the potential for political and economic pressure to influence permitting decisions. These SCDs are already underfunded with limited budgets and staff resources to meet their duties. Delegating more responsibility to these SCDs is unacceptable and is a dereliction of the Department's duties. Under N.J.S.A. 58:16A-55.6, Delegation of power to approve or disapprove application to county governing body, the delegation of power by the Department to SCDs is inconsistent with the delegation provisions of the FHACA. (91 and 195)

214. COMMENT: Under this rulemaking, the Department will delegate certain powers, functions, and technical regulatory decisions to local Soil Conservation Districts as authorized by the Soil Erosion and Sediment Control Act. With regard to proposed N.J.A.C. 7:13-11.2(j)1, the notice of proposal states: "[t]he Department is proposing to delete all standards and requirements related to acid producing soil deposits in the FHACA Rules, as well as to delete reference to acid producing soil deposits from the riparian zone special area in the CZM rules, and to instead rely on local Soil Conservation Districts to mitigate potential impacts resulting from exposure of such deposits, as required under the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90." However, at N.J.S.A. 58:16A-55.6, the FHACA limits the Department's delegation authority to certain qualified county governing bodies and establishes delegation standards and a review process. "The Department of Environmental Protection may delegate its power to approve or disapprove any application made to it pursuant

to this act and its power to enforce any aspect of this act to a county governing body which agrees to accept such designation and in the department's judgment is capable of utilizing the rules, regulations and standards adopted by the department for the administration of this program. The department shall review this delegation at least biannually and may revoke such delegation for failure to properly administer such delegated powers. The county governing body may charge the same fees promulgated by the commissioner pursuant to P.L. 1975, c. 232 (C. 13:1D-33), when such powers are delegated to it." The proposed delegation to local Soil Conservation Districts is not authorized by the FHACA and is inconsistent with the delegation provisions of the Act. (193)

215. COMMENT: The Department's proposed rules defer to Natural Resource Conservation Service standards for stormwater discharge, which are weaker standards, ceding authority to another agency in violation of the New Jersey Clean Water Act. (177)

216. COMMENT: The Department's interest in allowing Soil Conservation Districts to provide the on-site evaluation of presence/absence of acid producing soils is understood, but the assertion that those county agencies have sufficient staffing to take on this added regulatory responsibility is questioned. (183)

217. COMMENT: In response to this rulemaking, assistance should be offered to the Soil Conservation Districts. The districts are already overloaded with their current activities and, therefore, may need some assistance from the Department in terms of technical guidance, additional staff, or additional resources for completing this task. (119)

218. COMMENT: Please have the Soil Conservation Districts weigh-in on their ability to manage these new responsibilities and whether the applicants will be covering those new costs in permitting fees. (183)

219. COMMENT: Under BMPs, at optimal conditions, Soil Conservation Districts are only 50 percent effective. They are not effective for steep slopes, as found in most Category One streams. They are not in the business of water quality, but of minor mitigation around the impacts of storm construction; a program that is supposed to protect drinking water will be delegated to an agency that does not protect drinking water. The Department is not performing its core mission. (177)

220. COMMENT: The Attorney General's office should investigate the Department's authority to delegate to local Soil Conservation Districts under the FHACA and the Water Pollution Control Act and issue a written opinion if this rulemaking is adopted. (193)

RESPONSE TO COMMENTS 213 THROUGH 220: The Department is not delegating regulatory authority under N.J.S.A. 58:16A-55.6. Instead, the Department has determined to no longer regulate acid producing soils under the FHACA Rules.

While the increased riparian zones in areas containing acid producing soils and related restrictions adopted in 2007 were believed to be important measures to protect water quality, as explained in the notice of proposal, the Department's experience since that time has demonstrated that the requirements were actually resulting in negative impacts to water quality and the environment. Accordingly, the Department is repealing those requirements in accordance with its authority and the goals of these acts. The Department is, therefore, not delegating authority to the Soil Conservation Districts; it is instead leaving the regulations of

areas containing acid producing soils to the agency with the most appropriate expertise and existing protective standards, the Soil Conservation Districts.

The local Soil Conservation Districts and New Jersey Department of Agriculture were consulted in developing these amendments and are supportive of the removal of standards related to acid producing soil deposits from the FHACA Rules. The adopted amendments do not delegate additional responsibilities to local Soil Conservation Districts and will not require additional resources. Under the Standards for Soil Erosion and Sediment Control in New Jersey, N.J.A.C. 2:90, local Soil Conservation Districts are required to properly mitigate potential impacts associated with acid producing soil deposits.

221. COMMENT: The Department states that the proposed rules eliminate duplicative requirements that are enforced by the local Soil Conservation Districts. The removal of requirements that seem to be duplicative should be performed with caution. Soil Conservation Districts operate from a specialized local knowledge and provide a level and extent of review and regulation that is not provided by the Department. (21)

RESPONSE: The Department acknowledges the specialized knowledge of soil management practices that the local Soil Conservation Districts possess. The local Soil Conservation District will draw upon that knowledge in managing and mitigating for potential impacts from the exposure of acid producing soils using the established management practices established under the Standards for Soil Erosion and Sediment Control in New Jersey, N.J.A.C. 2:90.

222. COMMENT: In the event that the 150-foot riparian zone is reduced to 50 feet along streams with acid producing soils, it would be prudent to require site inspections for projects occurring within this riparian zone. This will allow the local Soil Conservation Districts to make accurate assessments when approving or denying projects in these areas. This will also add an additional layer of safeguarding for the riparian zone. (119)

RESPONSE: Under N.J.A.C. 2:90-1.4(b), local Soil Conservation Districts require that applicants prepare an application containing information about present and proposed culverts and drains, flood mapping, streams and wetlands present on site, soil and natural resources, land cover and use, and hydraulic and hydrologic data. This information allows districts to assess projects and determine if the appropriate standards are being implemented for a particular site. The standards used by districts to manage acid producing soils state that monitoring of a site with acid producing soils must continue for six months after disturbance ceases to ensure that no problems from the acid producing soils have emerged. Local Soil Conservation District staff generally inspect soil disturbance several times during the conduct of the regulated activity in order to ensure that the site has been properly stabilized. Additionally, the Department recognizes the value of protecting riparian zones from unwarranted disturbance and the importance of oversight in activities that require significant land disturbances and will conduct inspections and investigate actual or suspected sources of pollution of the environment consistent with its authority under N.J.S.A. 13:1D-9.

223. COMMENT: The change to reduce the riparian zone from 150 feet to 50 feet along regulated waters that flow through areas containing acid producing soil deposits will

inappropriately allow development up to within 50 feet of a regulated water. This undermines the protection of riparian zones and their attendant ecological, economic, and flood protection value. (91 and 195)

224. COMMENT: The Department's claim that a 150-foot buffer can be replaced with a 50-foot buffer supported by "engineering mechanisms" is disputed. The 150-foot buffer relies on the natural abilities of the land and distance to ameliorate any negative impacts of the acid soils on the waterways. Engineering mechanisms require regular monitoring and maintenance. They are susceptible to failure due to neglect, tight agency budgets, ignorance, and human error. The Department is urged not to eliminate the 150-foot buffer because a 50-foot, engineering-supported rule will lead to degraded waterways. (183)

225. COMMENT: The change to delete the regulation protecting acid producing soils is concerning. As indicated in the proposed rule, reducing the riparian buffer from 150 feet to 50 feet along approximately 1,270 miles of regulated waters would significantly reduce the total area of riparian zones throughout the State and allow development to occur much closer to these waters. The Department's argument that deleting the regulation will decrease the disturbance to acid producing soils is rejected. The use of best management practices will allow for proper infiltration of stormwater into these soils, which should allow the 150-foot buffer to perform effectively. (155)

226. COMMENT: The Department should maintain the current 150-foot buffer width in areas with acid producing soils. Many acid soils, such as the clays and silts of the Coastal Plain, are especially vulnerable to erosion, and when they erode, they downcut rather than erode laterally, losing the ability to overflow into their original riparian wetlands during bankfull storms. In spite of the arguments offered in the notice of proposal Summary in support of reducing the buffers, streams in these soils need additional protections from stormwater runoff. (158, 159, and 180)

RESPONSE TO COMMENTS 223 THROUGH 226: The Department recognizes the important ecological functions afforded by riparian zones and the need to protect water resources and vegetation from leachate produced by exposure of acid producing soil deposits. However, the Department has observed that the previous requirements placing stormwater discharges outside of the 150-foot riparian zone increased erosion through areas containing acid producing soil deposits and was, therefore, not protecting aquatic resources and vegetation as originally intended. Further, under the Standards for Soil Erosion and Sediment Control in New Jersey, N.J.A.C. 2:90, local Soil Conservation Districts are required to properly mitigate potential impacts associated with acid producing soil deposits. Given the protections already in place to mitigate exposure of acid producing soil deposits as well as the unintended adverse impacts resulting from the Department's adoption of a 150-foot riparian zone along regulated waters that flow through areas containing these deposits, the Department has determined that requiring a 150-foot riparian zone in these areas is unnecessary, duplicative, and in some cases, harmful to water quality.

227. COMMENT: The removal of protections from acidic streams with the reductions to their 150-foot buffers will open very important, environmentally sensitive areas to development, especially in and around the Pinelands. (177)

RESPONSE: The previous FHACA Rules provided 150-foot riparian zones along regulated waters flowing through areas containing acid producing soil deposits without regard to the pH of the regulated water. The Department recognizes the environmental importance and sensitivity of particular areas, and as such, Category One waters, certain trout waters, and waters supporting threatened or endangered species that are critically dependent on the regulated water for survival, and tributaries to these waters, all require a 300-foot or 150-foot riparian zone under both the previous rules and the rules as adopted. In addition to these protections, the Pinelands Comprehensive Management Plan establishes robust protections to freshwater wetlands and surface waters within the Pinelands. The deletion of standards related to acid producing soil deposits from the FHACA Rules does not alter or reduce these protections.

228. COMMENT: Areas with acid producing soils are very sensitive, and the rules will eliminate protections for them. A hardship waiver is only supposed to be granted for development when there is no other alternative. In the case of acid producing soils, the hardship waiver is too easy to obtain. (177)

RESPONSE**:** The Department agrees that hardship exceptions should be granted only in rare cases where strict compliance with one or more requirements of the FHACA Rules is not

possible or feasible. For this reason, N.J.A.C. 7:13-15.1 sets forth a stringent process whereby the Department will review and investigate such requests. Further, areas containing acid producing soil deposits will continue to be subject to the State's Soil Erosion and Sediment Control Standards at N.J.A.C. 2:90, which provide suitable protection for regulated waters flowing through areas containing these deposits. The 150-foot riparian zone established by the FHACA Rules prior to the amendments and new rules adopted at this time along regulated waters flowing through areas containing these deposits created numerous situations where granting a hardship exception was warranted. For this reason, and for reasons discussed in the Response to Comments 223 through 226 addressing the unanticipated adverse water quality impacts related to the Department's adoption of a 150-foot riparian zone in areas containing acid producing soil deposits, the Department has determined that it is unnecessary, and in some cases deleterious, to provide an expanded riparian zone in areas containing such deposits.

229. COMMENT: The Department should continue to protect acid producing soils by maintaining the 150-foot riparian zone along those waters. If, as the Department indicates, erosion is a problem, the optimal solution is to require additional infiltration of stormwater onsite and further dispersion of the remaining runoff outside of the riparian zone. The solution is not, as the Department proposes, to allow the piping of excess stormwater through the riparian zone and directly into streams. This piped water has the potential to increase erosion in the stream from the increased velocity at which water will enter the stream as opposed to the velocity when water moves as sheet flow overland through the riparian zone. Given the Department's obligation to protect water quality and to reduce or eliminate erosion, this provision is contrary to

the Department's statutory obligations. The Soil Erosion and Sediment Control Standards, N.J.A.C. 2:90, should be applied as the minimum solution to the problem of erosion; those rules do not allow discharges that create erosive conditions. The optimal solution is to add requirements for additional infiltration of stormwater onsite and further dispersion of the remaining runoff outside of the riparian zone through means such as green infrastructure that will infiltrate, treat, or otherwise retain stormwater onsite to the maximum extent possible. Therefore, the proposed deletion of acid producing soils under the 150-foot riparian zone at N.J.A.C. 7:13-4 as well as the similar deletion under the CZM Rules at N.J.A.C. 7:7-9.26(e)2 are opposed. (1, 27, 28A, 42, 56, 67, 77, 122, 127, 138, 170, 173, 175, and 190)

230. COMMENT: The Department is proposing new requirements for stormwater outfall structures. These include a new policy described by the Department as "Added deference to local Soil Conservation Districts for stability issues." This policy lacks any asserted legal and scientific basis and is unsound public policy; therefore, it is *ultra vires* as well as an arbitrary, capricious abuse of discretion. (193)

RESPONSE TO COMMENTS 229 AND 230: In accordance with the Soil Erosion and Sediment Control Act Standards, N.J.A.C. 2:90, local Soil Conservation Districts review certain activities that disturb over 5,000 square feet of land regardless of proximity to a regulated water. In order for a project to be approved, an applicant must demonstrate compliance with N.J.A.C. 2:90. The standard within the Soil Erosion and Sediment Control standards for conduit outlet protection sets allowable velocities dependent on the soil type at a site to protect areas downstream of a

stormwater discharge from scour and erosion. Additionally, under the Stormwater Management Rules at N.J.A.C. 7:8-5.4 and 5.5, the volume, rate, and quality of stormwater discharge water is regulated to protect waterways from adverse impacts from development. These rules in concert with the adopted FHACA Rules will ensure that erosion within a regulated water and its riparian zone will not occur as a result of development.

231. COMMENT: The Department's Summary explanation encourages filling in the riparian zone and flood fringe in order to cap acid producing soils. This is a direct violation of statutory mandates. (28A, 42, 56, 67, and 127)

RESPONSE: This rulemaking is not intended to encourage the placement of fill within riparian zones or flood fringes or the capping of areas containing acid producing soil deposits. As noted in the Response to Comments 223 through 226, the 150-foot riparian zone established by the prior FHACA Rules along regulated waters flowing through areas containing these deposits created unanticipated adverse water quality impacts. The Department has therefore determined that it is unnecessary, and in some cases deleterious, to provide an expanded riparian zone in areas containing such deposits.

232. COMMENT: The "Advanced Measures" in the SWM rules at N.J.A.C. 7:14A-26.6(e) could reduce erosion from stormwater volume by requiring more green infrastructure in these watersheds, for example. (158, 159, and 180)

RESPONSE: The commenter appears to be referencing the "additional measures" in the Department's NJPDES Rules at N.J.A.C. 7:14A-25.6(e), which are non-numeric or numeric effluent limitations that are expressly required to be included in the stormwater program by an areawide or Statewide water quality management plan adopted in accordance with the Department's Water Quality Management Planning Rules at N.J.A.C. 7:15. The Department agrees that promoting green infrastructure can help reduce erosion in a given watershed. However, it is not clear how the requirements of the Department's NJPDES rules relate to the requirements of the FHACA Rules.

233. COMMENT: While there is some redundancy between the Soil Erosion and Sediment Control Standards, N.J.A.C. 2:90, and Section 7 of the Department's Draft Technical Manual for Flood Hazard Area Control Act Rules (technical manual), the technical manual provides extensive guidance on acid producing materials, and parts of Section 7 of the technical manual that are not included in N.J.A.C. 2:90 would be lost through the deletion of the acid producing soil provisions from the FHACA Rules. For example, the technical manual suggests that borings and depth (horizon) sampling be performed in a specific pattern that is designed to ascertain if and where acid producing deposits are in the soil profile/regolith, which in theory would be considered in the overall development plan before excavation and/or grading since buffer width from the stream depended on the location of any acid producing material found. The Soil Erosion and Sediment Control Standards do not currently include such guidance; rather, they rely on a geology map of potential acid producing deposits at undetermined depths and experience/visual recognition of local Soil Conservation District staff. The specified sampling and testing scheme

in Section 7 of the technical manual provides the most reliable information regarding determining the location of acid producing soils. This information should be captured in some form for the Soil Conservation Districts' eventual use in the event that Section 7 is deleted. The information could provide a basis for future revisions to N.J.A.C. 2:90 to assist Soil Conservation District staff in protecting soil and water quality.

While the technical manual is intended as guidance, developers are using the methodology outlined in the technical manual when taking soil samples for a determination of the acid producing character of the soils as evidenced in the samples received by the Rutgers Soil Testing Laboratory. Further, according to reports issued by Rutgers Soil Testing Laboratory, neither appearance nor initial pH of a sample will conclusively determine if a sample is classified as "acid producing." Accordingly, a strict sampling protocol is necessary for accurate evaluation of the soils; discrete samples of distinct layers (without transitions or mixing that would dilute acid producing character) are necessary, as described in the technical manual. In addition to the problems of acidic surface soil, the impossibility of vegetative growth at extremely low pH, acid-water runoff, erosion, and impacts to surface waters, there are problems of potential damage to the structure itself from dissolving cement or metal corrosion that may threaten the safety of the built infrastructure that may also lead to unexpected costs. In summary, the potential hazards of exposed/oxidized acid producing soil justify the precautions outlined in the technical manual. (114)

RESPONSE: The Department acknowledges the value of the information on acid producing soils contained in Section 7 of the Draft Technical Manual for FHACA Rules. However, the

Department has determined that the Flood Hazard Area Technical Manual is not the appropriate location for this information. As such, the Department is working with the State Soil Conservation Committee to discuss ways in which this important information can be memorialized.

Threatened and Endangered Species

234. COMMENT: Preserving a wide variety of threatened and endangered species within surface waters and within habitats abutting surface waters is important. (21)

RESPONSE: The Department agrees that protecting threatened and endangered species and their habitats is essential and, as such, incorporates stringent standards at N.J.A.C. 7:13-6.7(b)4 for permits-by-rule, general permits-by-certification, and general permits and at N.J.A.C. 7:13-11.6 for individual permits that ensure that a regulated activity does not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species and does not jeopardize the continued existence of any local population of a threatened or endangered species. Further, N.J.A.C. 7:13-4.1(c)2 establishes a 150-foot riparian zone along any segment of a regulated water flowing through an area that contains a threatened or endangered species, and/or present or documented habitat for those species, that is critically dependent on the regulated water for survival, and all upstream regulated waters located within one mile of such habitat (measured along the length of the regulated water).

Groundwater/Water Supply

235. COMMENT: The existing rules need to be strengthened, not weakened. The current rules have allowed construction to occur where there is not adequate wastewater treatment, resulting in fecal bacteria contaminating the Metedeconk Watershed, including pollution of Lake Carasaljo and the bay in Toms River. Adequate septic tanks must be mandated in areas without city sewers and the rules amended to keep the water safe for families, the environment, and the economy. (179)

RESPONSE: The FHACA Rules set forth requirements governing disturbance to land and vegetation in the flood hazard areas and the riparian zones of regulated waters in order to minimize damage to life and property from flooding, preserve the quality of surface waters, and protect wildlife and vegetation that exist within and depend upon these areas for sustenance and habitat. The FHACA Rules do not include wastewater treatment provisions, which are instead covered by the Department's Standards for Individual Subsurface Sewage Disposal Systems at N.J.A.C. 7:9A, which provides the standards for the proper location, design, construction, installation, alteration, repair, and operation of individual subsurface sewage disposal systems in New Jersey. While septic systems constructed within areas regulated under the FHACA Rules are subject to riparian zone disturbance limits at N.J.A.C. 7:13-11.2, it is beyond the authority of these rules to set wastewater treatment standards. However, N.J.A.C. 7:9A-4.6 sets forth stringent standards for the construction of septic systems in flood hazard areas.

236. COMMENT: The regulations are not protective of drinking water supplies. Since there are about 1,500 square miles of urban and suburban watersheds upstream of the water supply intakes on the Raritan River, the Passaic River, and the Hackensack River, the benefits or absence of benefits to water supply intakes should have been considered. These waters supply about five million people with drinking water. The general permits in these regulations appear to allow continued intrusion into the riparian zone, thereby decreasing the vegetation available to trap, reduce, and alter contaminants that are in stormwater runoff. Stormwater runoff is an increasingly toxic mix of chemicals that conventional water treatment plants are not designed to treat. Rather, these plants are designed to remove particulates and pathogens and not the complex mix of organic and inorganic chemicals in road and agricultural or lawn runoff. The Federal Consumer Confidence Report (CCR) provided per Federal regulations to each consumer by each purveyor, supports this statement. These proposed regulations should clarify how the proposed regulations would improve or worsen the stormwater runoff water quality that reaches water supply intakes. The CCR reports for the Passaic Valley Water Commission Little Falls and the New Jersey American Water Company Raritan Millstone quantify and note the chemicals found in the finished water in both of those supplies. The Unregulated Contaminant Monitoring Rule (UCMR) data in those reports indicates the chemicals that may be regulated in drinking water that are found in those supplies. The regulations should establish the costs of treatment for stormwater runoff. The New Jersey Surface Water Quality Regulations would have to be amended to require the purveyor to provide more than conventional treatment if these changes are adopted. The New York City water supply CCR indicates that the protected watersheds of NYC do not have the chemicals found in New Jersey. That is probably because of both the

wastewater and stormwater that enters New Jersey water supply sources but not New York's source waters. Management of the water resource management program should explain how these regulations will save money for those individuals that own and want to develop land in the existing buffer areas and cost money for the water purveyors. (151)

237. COMMENT: Please protect New Jersey and protect our water sources. With climate change and the challenges we are facing (only to get worse) with draughts and floods, you must do everything you can do to have the foresight to protect our water. Water is life and a human right; please do not take these protections away. (18)

238. COMMENT: The revisions proposed are without common sense and would result in further compromise to the health of our stream corridors and the protection of our existing water supplies. These proposed revisions undercut the clear intent of previous regulations that afford maximum protection for our critical drinking water supplies. The Department has a responsibility to protect the public health. The public interest is not served by the changes in this consolidation and revision of the regulations. (158 and180)

239. COMMENT: Groundwater is under constant attack from development, from the clearing of areas in watersheds, and from pollution from dirty air and waste discharges. Water protection regulations need to be maintained and strengthened, not weakened. New Jersey has some of the least expensive, cleanest water in the country, a significant benefit to the people of this State. Risks should not be taken with water quality. In one case, the Department is allowing more

development where it was previously prohibited. This is a somewhat underhanded approach to aid development, and it is opposed. (32 and 33)

240. COMMENT: Many residents are heavily dependent on surface water to provide their water needs. Yet, development and an increase in impervious surfaces in water supply watersheds has led to a decreased recharge of the groundwater necessary to supply clean base flow for streams. Streams have to carry increasing quantities of stormwater runoff, further eroding embankments, degrading the integrity of the stream corridors, and supplying dirty water and non-point source pollution to reservoirs. (158 and 180)

RESPONSE TO COMMENTS 236 THROUGH 240: The purpose of the adopted rules is not to increase development but rather to ensure that clear and consistent standards that are appropriately protective of public health, safety, and welfare and the environment are in place for development within flood hazard areas and riparian zones. The Department does not anticipate that the adopted rules will adversely impact the quantity or quality of groundwater. Further, the Department's comprehensive Stormwater Management rules at N.J.A.C. 7:8 govern all impacts associated with runoff resulting from development, including the volume, rate, and quality of runoff as well as the volume of groundwater recharge that must be maintained. These rules help to ensure that development does not increase flooding in streams and rivers, does not deplete underground water supplies, and does not adversely impact the quality of surface waters. N.J.A.C. 7:8, in conjunction with standards for development within regulated waters and riparian

zones under the FHACA Rules, provide significant protections of New Jersey's surface waters and aquifers.

241. COMMENT: Asking the public to evaluate and comment on the proposed SWM, FHACA, and CZM Rules without a current Water Supply Master Plan to help determine the quantity of the present and future water supply is particularly disingenuous. The Water Supply Master Plan of 1996 is still in use even though these plans need to be revised and updated every 5 to 10 years. (61, 158, and 180)

242. COMMENT: This rulemaking is unsound and will diminish the quantity and quality of drinking water available in the State. The 1996 Water Supply Master Plan states that New Jersey's waters belong to its residents, held in trust and managed for them by the state. The Legislature declared that the Department shall prepare and adopt the New Jersey State Water Supply Plan, which shall be revised and updated at least once every five years, no later than December 31, 2006. However, we still don't have a water supply master plan. (61)

RESPONSE TO COMMENTS 242 AND 243: The Division of Water Supply and Geoscience (DWSG) within the Department regulates both the quality and quantity of New Jersey's water supply under various authorities. The New Jersey Water Supply Master Plan is a document intended to address the management of water supply in New Jersey by focusing on issues related to the quantity of water supply (for example, water availability). While the FHACA Rules address development and other activities within flood hazard areas and riparian zones, it is the DWSG implemented Water Supply Allocation Permit rules, N.J.A.C. 7:19, that regulate the

quantity of water diverted by users. DWSG continues to regulate the quantity of water diverted throughout the State using the best available current data regarding water availability, which has been updated since the last update of the Water Supply Master Plan. This information is available on the Division's website at www.njgeology.org. The FHACA Rules and the New Jersey Water Supply Master Plan are unrelated and not dependent on each other. Accordingly, amendments to the FHACA, SWM, and CZM Rules are not dependent on the release of an updated New Jersey Water Supply Master Plan.

243. COMMENT: The proposed changes that facilitate speedy development are opposed. Development increases flooding, which yields more runoff directly entering the ocean. This increases the risk for sea water intrusion into aquifers. Cape May and Keansburg have already spent millions of dollars to build desalinization plants. Freshwater is necessary for survival. More flooding into the ocean jeopardizes our fresh water supply. (22)

RESPONSE: Stormwater runoff from development regulated under the FHACA Rules does not increase flooding in the ocean. Because it is so vast, it would take a monumental quantity of runoff from regulated development to raise the level of the ocean. The adopted rules are not designed to promote rapid development. Certain regulated activities qualify for permits-by-rule, which do not require an application to the Department, or general permits-by-certification, which may be issued electronically without Departmental review. However, both of these types of permits apply only to those activities that result in *de minimis* impacts to flooding and the environment, and these permits include strict limits for the amount and location of disturbance.

Additionally, the groundwater recharge standards of the Department's Stormwater Management rules at N.J.A.C. 7:8-5.4(a)2 help to ensure that development does not deplete underground water supplies.

244. COMMENT: While the water quality of all rivers is a concern, the Rahway River is of particular concern as the residents of the Rahway River watershed get their drinking water from this river. The proposed amendments will give developers privileges to work with little oversight and/or regulation. This is an attempt by the Department to weaken the amendments to the Clean Water Act Rule announced by President Obama on May 27, 2015, which is intended to protect waterways. (117)

RESPONSE: As discussed in the Response to Comments 236 through 240, the adopted FHACA Rules do not allow indiscriminate development to occur without oversight or regulation. The amendments are not related to the USEPA's Clean Water Rule announced by President Obama on May 27, 2015, which is intended to more clearly define the waters that are protected under the Federal Clean Water Act. Regardless, the adopted FHACA Rules are consistent with all of the Federal Clean Water Act's standards for water quality.

Sedimentation

245. COMMENT: The proposed rules would increase development along the fringes of wetland areas, both in coastal and inland areas. This will contribute to sedimentation of

navigable waters, resulting in degraded water quality and increased costs for maintaining and dredging channels. (91 and 195)

246. COMMENT: Ongoing degradation of stream corridors in Monmouth County has led to siltation and erosion of the stream banks. The proposed rules are only going to exacerbate the problems. More silt and debris will be carried into reservoirs, leading to less reservoir capacity and more thermal pollution. (158 and 180)

RESPONSE TO COMMENTS 245 AND 246: The Department does not anticipate that these adopted rules will lead to increased erosion and sedimentation in waterways. Rather, the adopted rules recognize that the accumulation of silt is a common problem in navigable waters and reservoirs and therefore contain a variety of permits that facilitate the removal of accumulated sediment from regulated waters. In addition, the Department's Stormwater Management rules at N.J.A.C. 7:8-5.5(h) and the FHACA Rules at N.J.A.C. 7:13-11.2(j)4iii(1) require that runoff from development must be treated to remove 95 percent of total suspended solids discharged into Category One waters and certain tributaries, which accounts for many reservoirs, and to remove 80 percent of total suspended solids discharged into all other regulated waters. These standards greatly reduce the volume of material that is likely to accumulate within regulated waters and therefore help ameliorate the concerns raised by the commenters.

Manmade Waters

247. COMMENT: The proposed rules afford less protection to manmade watercourses. Some proposed general permits will allow for the relocation of these watercourses for various reasons, including roadway "safety" projects. A manmade watercourse could easily have more ecological significance than a natural watercourse, providing habitat that would not easily be replaced. The rules do not acknowledge this possibility and fall short of their required mission to protect streams and their corridors and should be revised. (118)

RESPONSE: Manmade features, such as ditches, with a drainage area of less than 50 acres were not regulated under the prior FHACA Rules, and the Department is continuing this without amendment at N.J.A.C. 7:13-2.2(a)3ii. However, with the exception of ditches that are fully lined with manmade impervious material, manmade watercourses with a drainage area of 50 acres or more contain both a flood hazard area and a riparian zone, and these watercourses are afforded the same protections as naturally-occurring watercourses. It has been the Department's experience that ditches that are fully lined with manmade impervious material and the lands that border them do not provide the beneficial functions of a natural channel and riparian zone. Therefore, protecting such features is not appropriate.

The relocation or modification of a regulated manmade watercourse is accepted in limited circumstances. Specifically, the relocation of a regulated manmade watercourse for certain roadway activities may be authorized under the new general permit 7 at N.J.A.C. 7:13-9.7, and new permit-by-rule 58 allows for the filling or modification of these watercourses for the purpose of restoring freshwater wetlands.

Manmade ditches with a drainage area of 50 acres or more are commonly created adjacent to existing public roadways to provide roadway drainage. Public entities sometimes find it necessary to straighten, widen, relocate, or otherwise modify existing roadways in order to ensure the safety of the travelling public. Such activities may require the relocation of an existing roadside ditch, which can occur without adverse impacts to flooding or the environment. Therefore, general permit 7 was established to assist public entities with these types of projects by reducing permit application requirements, fees, and review time. This general permit is also intended to provide an economic benefit to residents who use roads, bridges, and utilities, as the Department anticipates that such infrastructure will be more quickly and efficiently restored after a flood event, providing more immediate access to schools, businesses, and government services. To be eligible for this general permit, the public entity responsible for maintaining the roadway must meet strict parameters to ensure the maximum protection of the watercourse and riparian zone. The Department has additionally determined that the filling or modification of a manmade regulated water for the purpose of restoring freshwater wetlands is often a minor, beneficial activity that does not represent significant threats to flood protection or the environment. Therefore, N.J.A.C. 7:13-7.58 establishes a new permit-by-rule for such activities provided the restoration does not increase off-site flooding and any clearing, cutting, and/or removal of riparian zone vegetation is limited to actively disturbed areas.

Stream Cleaning

248. COMMENT: Too often, short-sighted, uninformed homeowners, developers, and municipalities try unsuccessfully to solve serious flooding problems by blindly clearing stream channels, removing channel vegetation, and straightening channels. These activities have resulted in increased flooding in the area where the activity is performed as well as downstream, leading to repairs and later flood plain buyouts that have cost taxpayers millions of dollars. (69)

RESPONSE: The FHACA Rules make a distinction between stream cleaning, which is limited to sediment and debris removal activities that do not alter the natural bed and banks of a regulated water (see N.J.A.C. 7:13-7.5, 8.1, 9.1, and 12.15), and a channel modification which, as defined at N.J.A.C. 7:13-1.2, can include "straightening, relocating, lining, or excavating a channel, or by enclosing the channel within a structure such as a pipe or culvert." The Department agrees that a channel modification, when improperly undertaken, can result in increased flooding both within the modified section of the channel and downstream. For this reason, channel modifications are subject to the stringent requirements set forth at N.J.A.C. 7:13-11.1(c), which permits channel modifications only in limited and unavoidable circumstances where the applicant demonstrates that offsite flooding will not increase. However, stream cleaning activities that meet the stringent requirements of the FHACA Rules will not exacerbate flooding or adversely impact the environment.

Barnegat Bay

249. COMMENT: The proposed rule change will negatively impact New Jersey waterways, in particular, the Barnegat Bay, by adding to the degradation of waters used for a variety of purposes including swimming, fishing, aquaculture, drinking, and sustaining aquatic life. As such, these proposed major changes will have significant negative implications on the bay and its ability to remain a viable ecosystem and a force for our State's economy. Post-Superstorm Sandy reconstruction has already increased the stresses on this resource tremendously. Although the Department's efforts to streamline the permit process and to clarify ambiguities are appreciated, the overall impact to the Barnegat Bay estuary and its ability to survive additional development is a concern. (190)

RESPONSE: The Department does not anticipate that this rulemaking will adversely impact the quality of stormwater being discharged into Barnegat Bay or increase development along the bay and its tributaries. The Department recognizes the importance of Barnegat Bay and the need to understand the relative importance of various stressors affecting the Bay, including, but not limited to, water quality, in order to formulate effective management strategies to restore the Bay. Toward this end, the Department has funded several scientific studies to fill data gaps and to develop a water quality model that will define the relationship between pollutant loads and water quality. The goal is to identify water quality thresholds key to supporting the health of the various plant and animal communities that are the basis of a healthy ecology in the bay, revise water quality criteria to reflect these healthy levels, and use the water quality model to determine load reductions by source that would be needed to achieve these healthy levels. Further, in 2011, Governor Christie announced his Comprehensive Action Plan to Address the Ecological Decline

of the Barnegat Bay to address the health of the Bay. This plan sets forth 10 action items that are intended to lead to improved health of the Bay. The plan includes progress in scientific research, water quality monitoring and analysis, and the implementation of stewardship projects, stormwater management, and the purchase of important lands for open space protection. The status of the 10 action items can be tracked from the Department's Barnegat Bay web page at http://www.nj.gov/dep/barnegatbay/#. The status of each action plan item can be accessed by clicking on the Action Details tab on the left-hand side of the page.

250. COMMENT: Ecological studies demonstrate that riparian buffers are critical to stream health. Under the proposed rule changes, the size of riparian buffers along several miles of tributaries within the Barnegat Bay watershed would be reduced from 150 feet to 50 feet. This change will not only result in negative impacts to the water quality of the Barnegat Bay but will undermine the Department's Barnegat Bay restoration efforts. (76)

RESPONSE: Restoring and protecting Barnegat Bay are priorities for the Department, as described in the Response to Comment 249. Further, as mentioned in Response to Comments 223 through 226, the width of the riparian zone has been reduced from 150 feet to 50 feet only around waters that flow through areas containing acid producing soils in order to guard against the negative impacts resulting from the increased erosion of these soils. Specifically, given the protections already in place to mitigate exposure of acid producing soil deposits as well as the unintended adverse impacts resulting from the Department's adoption of a 150-foot riparian zone along regulated waters that flow through areas containing these deposits, the Department has

determined that requiring a 150-foot riparian zone in these areas is unnecessary, duplicative, and in some cases, harmful to water quality. The Department is continuing to regulate a 300-foot riparian zone to C-1 waters and their tributaries. Therefore, all environmentally significant and sensitive waters within the Barnegat Bay watershed, along with their tributaries, will maintain either a 300-foot or 150-foot riparian zone regardless of the presence of acid producing soil deposits. The Department therefore does not anticipate that this rulemaking will adversely affect Barnegat Bay.

Wetlands Protection

251. COMMENT: As far as the Federal Clean Water Act is concerned, more protection is needed, not less. New Jersey was the only state delegated the right to pass regulations that would actually implement the Federal Clean Water Act by the USEPA. This rulemaking raises the question of whether New Jersey deserves the right to have that authority if it is weakening protections rather than strengthening them. (158 and 180)

RESPONSE: The commenter is referring to the Department's assumption of authority to regulate activities within freshwater wetlands under the Freshwater Wetlands Protection Act. Under the Federal Clean Water Act (33 U.S.C. §§ 1251 et seq.), passed in 1972 and amended in 1977 to address the discharge of dredge or fill material into Waters of the United States (commonly known as Section 404 of the Clean Water Act), the USEPA gave the State of New Jersey approval to operate the State Freshwater Wetlands Protection Act (FWPA) program in place of

the Federal 404 program. That is, applicants who obtain a freshwater wetlands permit from the State of New Jersey satisfy the Federal wetland permit requirements in most cases. This rulemaking does not alter or affect the FWPA Rules or the Department's assumption of the Federal permitting program.

252. COMMENT: Protecting the State's wetlands is essential to weathering the major storms that New Jersey will see with increasing frequency. Any measure that reduces wetlands protection is shortsighted and terribly wrong. (178)

RESPONSE: The Department agrees that wetlands are an environmentally important area providing habitat area for numerous aquatic plant and wildlife species; storm surge protection; flood water and sediment storage; pollution filtration; and a buffer from human activities. Wetlands located within riparian zones are subject to the FWPA Rules, N.J.A.C. 7:7A, and in tidal areas, to the CZM Rules, N.J.A.C. 7:7, in addition to the protections set forth in the adopted FHACA Rules, N.J.A.C. 7:13. The adopted amendments do not affect the Department's stringent protection of wetlands.

253. COMMENT: The proposed rule revisions would increase development along the fringes of wetland areas, both in coastal and inland areas. This will cause an increase in wetlands destruction and prevent these essential habitat and flood control areas from migrating with the rising sea level. While development patterns of New Jersey should be altered to adapt to sea level rise and increased climactic driven storm events, the Department has instead proposed

FHACA Rules that fly in the face of these facts and allow continued encroachment and development in the most flood prone and environmentally and ecologically important areas in the State. (91 and 195)

RESPONSE: Wetlands are a major component of the both the coastal and freshwater ecosystems that provide multiple ecosystem services as well as a first defense against storm surge. Wetlands in New Jersey are protected under the Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq., and the Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq. (coastal wetlands and freshwater wetlands, respectively). Under the CZM and FWPA Rules, a buffer is placed adjacent to these wetlands based on a number of factors, such as whether the wetlands are manmade or the presence of threatened or endangered wildlife or plant species. Under the CZM Rules, the buffers may extend up to 300 feet and under the FWPA Rules, 150 feet. The amendments to the FHACA Rules do not affect the Department's jurisdiction under these statutes, nor do they change the standards for protecting these areas under the CZM or FWPA Rules. Further, the adopted FHACA Rules do not allow development to occur indiscriminately within flood hazard areas or riparian zones. The rules do not encourage increased development within flood hazard areas, and the flood protection standards have not been reduced under these adopted rules. Rather, the adopted rules seek to balance the protection of natural and historic resources with the health, safety, and welfare of New Jersey and its residents, recognizing that development within a riparian zone or flood hazard area is sometimes unavoidable.

In addition, through this rulemaking, the Department has added a new general permit at N.J.A.C. 7:13-9.4 for the creation, restoration, and enhancement of habitat and water quality

values and functions as a companion to the existing general permit 16 in the FWPA Rules. These activities include, for example, the alteration of hydrology to create, restore, or enhance wetlands, breaching a structure, such as a dike, berm, or low dam, in order to allow water into an area, placing habitat improvement structures, regrading to provide proper elevation or topography for wetlands restoration, creation, or enhancement, and removing, planting, cutting, burning, or otherwise managing vegetation in order to increase habitat diversity or eliminate nuisance flora. This general permit will facilitate these environmentally beneficial projects in a manner that will not exacerbate flooding or adversely impact the environment.

254. COMMENT: Regulations created for the purpose of adding greater regulatory flexibility, which seems to be code for reducing rather than improving regulation, are opposed. The protection of natural resources needs to be maximized. It is questionable whether the new regulations, by reducing the size of buffer areas, for instance, mirror the Freshwater Wetlands Protection Act or are an attempt to create a precedent for later efforts to try to reduce the size and effectiveness of wetlands buffers. (21)

255. COMMENT: The proposed rule changes will result in more flooding and lower water quality because the rule reduces buffer widths. (193)

RESPONSE TO COMMENTS 254 AND 255: Riparian zone widths are not dependent upon or affected by the Department's FWPA Rules, and the FWPA Rules are not altered by this rulemaking. The width of wetlands transition areas (buffers), while similar to riparian zone

widths in certain cases, such as the 150-foot riparian zone along trout production waters and the 150-foot transition area around freshwater wetlands associated with trout production waters, are statutorily mandated and are not proposed for amendment. Additionally, as discussed in the Response to Comments 103 through 117, the adopted amendments will not adversely impact water quality or exacerbate flooding. Further, with the exception of the riparian zone along waters flowing through areas containing acid producing soil deposits, as discussed in the Response to Comments 223 through 226, the widths of the riparian zone along both sides of waters regulated under this chapter (50-foot, 150-foot, and 300-foot, as set forth at both prior and adopted N.J.A.C. 7:13-4.1) have not been changed by this rulemaking.

Historic and Archaeological Resources

256. COMMENT: Many of the bridges and dams subject to regulation under this rulemaking may have historical resource values. Historical resources are significant assets of the public trust and should be recognized. A provision should be added to the rules requiring that the New Jersey Historic Preservation Office be notified if a regulated activity is to occur at a bridge or dam with potential historical value so that the resource may be documented and recorded. Such a provision would not be intended to prevent an approved regulated activity from taking place. (24 and 147)

RESPONSE: The Department recognizes the value of New Jersey's historical resources. Bridges and dams that traverse a State open water are subject to the requirements of the FWPA Rules, N.J.A.C. 7:7A. These rules include specific protections for historic properties and

archaeological resources. The New Jersey Historic Preservation Office is consulted as part of the review of all freshwater wetlands permit applications that may affect historic resources. Consideration of historic and archaeological resources is additionally required as part of the Highlands Preservation Area Approval process and CAFRA, Waterfront Development, and Upland Waterfront Development permitting processes. Additionally, the New Jersey Register of Historic Places Act, N.J.S.A. 13:1B-15.128 et seq., requires that actions by State, county, or local governments that may impact a property listed in the New Jersey Register of Historic Places be reviewed and authorized through the New Jersey Historic Preservation Office. Finally, the National Historic Preservation Act of 1966, as amended, 16 U.S.C. § 470f, requires Federal agencies to take into account the effects of their undertakings on historic properties. The New Jersey Historic Preservation Office consults with Federal agencies in identifying historic properties and avoiding or minimizing any potential adverse effects from Federally funded, licensed, or permitted projects in New Jersey. Given the consideration of historic resources afforded by the FWPA Rules and the additional legal protections at the State and Federal level for projects undertaken by Federal, State, county, and local entities, the Department believes that there are suitable protections in place to protect historic bridges and dams.

Highlands and Pinelands

257. COMMENT: Please clarify whether or not the rules affect the Highlands Water Protection and Planning Act Rules or the Pinelands Comprehensive Management Plan and address those issues on adoption. The Pinelands Comprehensive Management Plan includes a

Memorandum of Agreement with the Department that is troubling because it delegates authority to the New Jersey Pinelands Commission to approve or disapprove certain minor stream encroachment permits. (193)

258. COMMENT: The proposed rule changes are a serious threat to the water quality in the Pinelands. (64)

RESPONSE TO COMMENTS 257 AND 258: The adopted rules do not amend or affect any provision of the Highlands Water Protection and Planning Act Rules or the Pinelands Comprehensive Management Plan. The 1998 Memorandum of Agreement noted by the commenter, in which the Department delegated authority to approve certain minor stream encroachment permits to the New Jersey Pinelands Commission, was rendered moot by the 2007 FHACA Rules as minor stream encroachment permits were repealed. There is currently no agreement that authorizes the New Jersey Pinelands Commission to approve applications under the FHACA Rules.

259. COMMENT: Please do not allow the construction of a pipeline through the Pinelands. (40)

260. COMMENT: New Jersey has had a record in environmental stewardship that residents should be proud of until recently. Oil pipelines slashing through high end residential communities in Princeton and the attempts to desecrate the Pine Barrens with pipelines that place

the largest fresh water aquifer on the East Coast at risk are truly dismaying. There is no reasonable basis for rolling back these sensible rules that have served New Jersey citizens for so long. (143)

RESPONSE TO COMMENTS 259 AND 260: While there is the potential for adverse impacts from improperly constructed or inappropriately located pipelines, through this adoption, the Department is adopting robust standards for utility line construction and reconstruction at N.J.A.C. 7:13-12.8 that do not weaken standards from the previous rules. Further, in addition to riparian zone standards that apply to all activities authorized under an individual permit, the adopted amendments set forth stringent riparian zone disturbance standards for utility lines at N.J.A.C. 7:13-11.2(k). Specifically, under N.J.A.C. 7:13-11.2(k), an applicant must demonstrate that clearing, cutting, and/or removal of riparian zone vegetation is unavoidable through an alternatives analysis prepared in accordance with N.J.A.C. 7:13-12.9(b)1. Trees cannot be cleared, cut, and/or removed within 25 feet of any top of bank unless it is demonstrated that such disturbance is unavoidable, and disturbance to forested areas must be avoided to the maximum extent practicable. In addition, adopted N.J.A.C. 7:13-11.2(l) sets forth riparian zone disturbance limits for the reconstruction, replacement, repair, or maintenance of existing utility lines. These standards are intended to balance situations where there is a compelling public need with protecting riparian ecosystems and the integrity of regulated waters. With respect to development in the Pinelands Preservation Area, Pinelands Protection Area, and the Pinelands National Reserve, the installation of a utility line is subject to review by both the Department and New

Jersey Pinelands Commission. This rulemaking does not alter or impact the jurisdiction or standards of the Pinelands Commission.

Public Trust Doctrine

261. COMMENT: The proposed rule does not uphold the State's responsibility to manage New Jersey's public trust resources under the conditions of the Public Trust Doctrine. The Department is the custodian of the public trust in our State's natural resources, in its waters, wildlife, and biodiversity, meaning it has a solemn responsibility to protect these natural resources for the overall good of society, for present and future generations. New Jersey statutes affirm the superiority of public rights over private rights for critical resources. The Department's public trust responsibility embodies key principles of environmental protection: stewardship, communal responsibility, and sustainability. This is not reflected or incorporated in the current rulemaking. To the contrary, the proposed rule changes would instead shift more control to development applicants who stand to reap short-term benefits by destroying the State's natural resources with a cost of long-term environmental degradation, hazard, and detriment to the public and to local governments, which are less likely and less able than the State to ensure protection of New Jersey's public trust resources. It is not their specific statutory responsibility to do so. (29, 46, and 96)

262. COMMENT: New Jersey is a coastal state experiencing increasingly intense and frequent storms and flooding. As the custodian of the public trust of our State's natural resources, it is the

NJDEP's role and responsibility to protect vegetated riparian buffers from any further disturbance and clearing to the maximum extent possible. The proposed rules abdicate NJDEP's responsibility to protect riparian buffers, which protect public health, safety, welfare, and environmental quality from the impacts of flooding and keep flooding impacts from getting worse. Therefore, it is respectfully requested that the NJDEP repeal, revise, and re-notice updates to the New Jersey Flood Hazard Area, CZM, and Stormwater rules. (24)

263. COMMENT: The Department's rulemaking, if adopted, will cause unacceptable losses to the public trust resources that the Department has a fundamental and solemn responsibility to protect and a retreat from a program of developing flood resiliency when we look to the State for leadership. (24 and 147)

RESPONSE TO COMMENTS 261 THROUGH 263: The Public Trust Doctrine stipulates that the State has the responsibility to manage all navigable waters, the lands beneath those waters, and the living resources within those waters for the use and benefit of the public. The adopted FHACA Rules provide stringent protections for these waters that do not compromise the Department's requirement under this Doctrine. As discussed in the Response to Comments 16 through 28, amendments to the FHACA Rules were proposed in order to reduce unnecessary and unintentional regulatory burdens, to add appropriate flexibility, to provide better consistency with Federal, State, and local standards, and to address implementation issues that have arisen since the adoption of the 2007 rules. The FHACA Rules remain the most stringent statewide flood mitigation and stream corridor protection standards in the nation and meet all State and

Federal requirements for water quality. The adopted amendments will not encourage increased development within flood hazard areas, exacerbate flooding, or impair wildlife, water quality, and the environment but will instead promote smarter development, provide incentives for development to be located in actively disturbed areas, increase habitat and riparian zone restoration and protection of threatened and endangered species and their habitat, and promote environmental enhancement activities, such as daylighting streams and the construction of terrestrial passages within bridges and culverts to address habitat fragmentation.

Other Comments

264. COMMENT: General Permit 3 for scour protection activities at bridges and culverts, general permit 9 for construction or reconstruction of a bridge or culvert across a regulated water with a drainage area of less than 50 acres, general permit 10 for reconstruction of a bridge or culvert across a regulated water with a drainage area of 50 acres or more, and the individual permit standards for bridges and culverts call for two feet of native substrate to be applied over a channel armor “where feasible.” By definition, channel armor is only proposed when the steam velocities are unstable and exceed those allowable under New Jersey SESC Standards Table 11-1 and are therefore subject to unacceptable soil erosion. Furthermore, the local Soil Conservation Districts will not permit soil loss due to such erosion or scour. This requirement for two feet of backfill over armor should be deleted. It is, by definition, not feasible. (68)

265. COMMENT: With regard to the general permit requirements at N.J.A.C. 7:13-9.3(a)4, 9.9(a)4, and 9.10(a)5 and the individual permit requirements at N.J.A.C. 7:13-12.7(f)4, these rules require that if and when channel armoring is provided, said armoring (that is, rip rap stone) must be buried beneath 2.0 feet of natural substrate (stream bed) material. The purpose of the armoring, when determined through hydraulic analysis, is to prevent the erosion and scour of stream channel and bed materials due to adverse turbulence and/or excessive velocities that would otherwise strip out channel lining soil material and transport it downstream. Placing loose, unconsolidated material over the anti-scour measures will only serve to wash out the "natural substrate" during the first design storm. The displaced material will be transported downstream and deposited in locations unanticipated by the designer. This may result in flooding downstream and destruction of aquatic organisms when they become buried. Therefore, the practice of placing loose soil directly into a stream channel is in conflict with the purpose and intent of N.J.S.A. 4:24-39 et seq. (131)

RESPONSE TO COMMENTS 264 AND 265: The Department recognizes that high channel velocity can in some cases dictate the need for armoring a streambed proximate to a bridge or culvert as a scour countermeasure technique. However, depending on the composition of the substrate material, the particular channel configuration of the site, and the anticipated channel velocity during bank-full flow, the requirement to bury armoring beneath at least two feet of native substrate can be an appropriate means of ensuring continued low-flow aquatic passage through the affected area. In cases where these factors preclude the placement of native substrate, the permitting standards referenced by the commenters include sufficient flexibility for the

Department to approve projects that do not include placing native substrate above streambed armoring (see, for example, N.J.A.C. 7:13-9.4(a)4, which requires the stabilizing material to be either native substrate or to be buried beneath at least two feet of native substrate "where placement of the native substrate is feasible and effective in stabilizing the channel and protecting aquatic habitat under expected flood conditions").

266. COMMENT: The rule provisions regarding road crossing structures need to be strengthened. General permit-by-certification 10 at N.J.A.C. 7:13-8.10 and general permit 10 at N.J.A.C. 7:13-9.10 should include the same standards as the individual permits for bridges and culverts at existing N.J.A.C. 7:13-11.7 and proposed N.J.A.C. 7:13-12.7. Replacing and maintaining undersized culverts and bridges that are not providing ideal hydraulic capacity or ecologic function in-kind is likely to cost more than increasing the structure size. (30 and 189)

267. COMMENT: Many small bridges and culverts that cross New Jersey's streams are undersized or designed according to out-of-date standards, thereby constricting stream flows as well as potentially undermining streambanks and threatening infrastructure integrity. This situation poses safety issues to communities during rain storms and high-tide events while compromising the structural integrity of bridges and culverts as well as the roads they support. (177)

RESPONSE TO COMMENTS 266 AND 267: The purpose of general permit-by-certification 10 and general permit 10 is to facilitate the replacement of existing culverts and bridges in certain

circumstances in which the Department does not need to review engineering calculations in order to determine that the replacement structure will not cause any adverse impact to flooding or the environment. Accordingly, activities under these permits are strictly limited to ensure that the hydraulic capacity of the existing bridge or culvert is not altered, as discussed below.

Where an existing bridge or culvert is proposed to be replaced with a structure that has a different shape or size, the new structure could possess a different hydraulic capacity than the existing structure. In such cases, the replacement bridge or culvert could restrict floodwaters and exacerbate upstream flood conditions or else convey floodwaters more efficiently and thereby exacerbate downstream flood conditions. For this reason, prior N.J.A.C. 7:13-11.7, adopted N.J.A.C. 7:13-12.7, which applies where an applicant seeks an individual permit, sets forth certain engineering requirements in cases where the size or shape of a culvert is modified from existing conditions in order to require the applicant to demonstrate that the project will not result in adverse offsite impacts.

During the Department's stakeholder process in developing this rulemaking, as discussed in the Response to Comments 30 through 32, various State, county, and municipal entities having the responsibility of maintaining bridges and culverts expressed that performing calculations to meet the requirements of N.J.A.C. 7:13-11.7 was in some cases not necessary for bridge and culvert replacement projects where the size and shape of the replacement structure exactly matches the existing structure or where minor deviations in the size and shape of the structure are proposed, which would not alter the hydraulic capacity of the bridge or culvert. In response to this observation, the Department proposed general permit-by-certification 10 for the in-kind replacement of a culvert under which the replacement culvert must match the physical

characteristics of the existing culvert. Similarly, the Department proposed general permit 10, which allows minor deviations in the dimensions of a replacement structure that are strictly limited under the general permit to ensure that the hydraulic capacity of the structure is not altered. Furthermore, a certification from a licensed professional engineer must be obtained under both permits, confirming that the replacement structure will not exacerbate flooding. Since projects completed under a general permit-by-certification 10 or general permit 10 will not alter the hydraulic capacity of the bridge or culvert, the more detailed review required by N.J.A.C. 7:13-12.7 is not necessary. The Department anticipates that the adoption of these permits will reduce costs for government entities as well as reduce the time it takes to replace failing bridges and culverts, which provides a benefit to public health, safety, and welfare, without compromising aquatic biota or riparian zone functionality.

268. COMMENT: The Department should consider establishing an oversight committee comprised of academic experts and water advocacy groups as well as Department staff and appointees with open public meetings. This committee should provide binding recommendations to the Department for review and approval of all permits-by-rule, general-permits-by-certification, general permits, individual permits, and hardship exceptions. Instead of relying on self-certification, this will provide science-based guidance for interpreting open-ended concepts and loosely-defined language in the rules. Specifically, the concept of an oversight committee that would have this authority should be incorporated at N.J.A.C. 7:13-6.1, regarding the Department's adoption of permits-by-rule general permits-by-certification, and general permits, 6.7(c) and 6.7(d), regarding conditions and engineering review under these permits, 13.8(b)1 and

(c), 13.9(c)2, 13.12(c)3, and 13.19, regarding the approval of riparian zone mitigation, 15.1(b)1, 2, and 3, regarding the approval of hardship exception requests under an individual permit, and 21.2(a), (b), (f), and (g) and 21.3(a) and (c), regarding the review of applications for verifications, authorizations of a general permit, and individual permits. (158, 159, and 180)

RESPONSE: Under the Flood Hazard Area Control Act, the Legislature has mandated that the Department shall assume certain responsibilities and functions related to protecting the residents of New Jersey from the deleterious impacts of flooding. Specifically, N.J.S.A. 58:16A-50(b) states that:

> "It is in the interest of the safety, health, and general welfare of the people of the State that legislative action be taken to empower the Department of Environmental Protection to delineate and mark flood hazard areas, to authorize the Department of Environmental Protection to adopt land use regulations for the flood hazard area, to control stream encroachments, to coordinate effectively the development, dissemination, and use of information on floods and flood damages that may be available, to authorize the delegation of certain administrative and enforcement functions to county governing bodies and to integrate the flood control activities of the municipal, county, State and Federal Governments."

Given this clear legislative mandate, decisions on permits and other actions cannot be submitted to the authority of an oversight committee comprised of academic experts and water advocacy groups as suggested by the commenter.

269. COMMENT: Please remove exemptions for construction of trails. For example, the Lawrence Hopewell Trail and Mercer Meadows Trails in Mercer County were permitted through wetlands. They now have serious and compounding drainage and trail washout problems with gravel entering streams and clouding waters. As they worsen, they cause deep erosion into bedrock, require riprap, swales, and trenching, further altering hydrology and probably lowering the water table, possibly contributing to departure of State-threatened grassland bird species. The Mercer County Park Commission is now proposing to construct more trails through environmentally sensitive areas. (69)

RESPONSE: The FHACA Rules do not contain exemptions for trails. In some cases, trail construction through flood hazard areas or riparian zones is authorized under permits-by-rule 8, 9, or 10. Alternately, a trail constructed within these regulated areas requires authorization under general permit 13 or an individual permit. The standards set forth in this chapter ensure that trail construction will not exacerbate flooding or adversely impact the environment. The construction of trails through freshwater wetlands is subject to the FWPA Rules and is generally authorized under freshwater wetlands general permit 17 or 17A at N.J.A.C. 7:7A-5.17 or 17A, respectively. Trails that are designed and maintained properly do not cause the problems identified by the commenter. With respect to the Lawrence Hopewell Trail and Mercer Meadows Trails in Mercer County, the issues identified by the commenter have been referred to the Department's Bureau of Coastal and Land Use Enforcement.

Coastal Zone Management Rules, N.J.A.C. 7:7-9.26

270. COMMENT: State regulations to protect Special Areas are systems driven and complement, and at times even supersede, local zoning laws. It is the Department's responsibility to ensure that proposed projects in flood prone areas are of the proper size and scope to maintain riparian zone habitat and prevent flood damage and property loss. (91 and 195)

RESPONSE: The flood hazard area and riparian zone special areas under the CZM Rules incorporate the flood hazard area and riparian zone standards of the FHACA Rules, which represent the most stringent Statewide flood mitigation and stream corridor protection rules in the nation. The Department believes the adopted rules are suitably protective of public health, safety, and welfare, and the environment.

271. COMMENT: Both N.J.A.C. 7:7E-3.26(d)1 and 2 and the definition of "top of bank" at N.J.A.C. 7:13-1.2 should reference "bankfull" conditions as the measuring point for purposes of the riparian zone when the top of bank is not discernible. Using bankfull is more scientifically defensible and should be easily determined by an expert with the appropriate training necessary to help an applicant apply the various mandates of the FHACA Rules. According to Natural Channel Design, Review Checklist, US Fish & Wildlife Service, Stream Mechanics, and the U.S. EPA (Nov. 2011), the "bankfull stage is the elevation of the water surface during a bankfull flow (Figure 2). This stage is often identified in the field by a geomorphic indicator, such as the top of the bank, slope break, highest part of a point bar or a scour line. The bankfull discharge is the flow that fills the active channel and represents the breakpoint between channel-forming

processes and floodplain processes. It is assumed for most projects that the bankfull discharge equals the effective discharge, which is the flow that transports the most sediment over a long period of time." (183)

RESPONSE: As explained in the notice of proposal Summary at 47 N.J.R. 1051, the amendments to the CZM Rules ensure that standards for activities and development within riparian zones remain consistent between the flood hazard area permitting program and the coastal permitting program. Accordingly, the standards at N.J.A.C. 7:7-9.26(c) and (d) are the same as the standards of the FHACA Rules at N.J.A.C. 7:13-4.1(c) and 1.2 (definition of "top of bank"), respectively. Consistent with the definition of "top of bank" at N.J.A.C. 7:13-1.2; N.J.A.C. 7:7-9.26(c) explains that the "top of bank means the upper limit of the bank of a regulated water, which is typically characterized by an observable change or break in the slope of the land." This is similar to the geologic and topographic characteristics described in the definition of "bankfull" provided by the commenter. N.J.A.C. 7:7-9.26(d) further explains, consistent with N.J.A.C. 7:13-1.2, how to determine where the top of bank is located when the geomorphic indicators identified in the definition of "top of bank" are not present or discernible. Where the top of bank can be determined, N.J.A.C. 7:7-9.26(d)1 through 5 are not applicable.

272. COMMENT: It is recommended that the provision at N.J.A.C. 7:7E-3.26(e)2 regarding the mandatory buffer width for trout production waters, trout maintenance waters, and waters flowing through endangered or threatened wildlife or plant species habitat should articulate 150 feet as the minimum mandatory riparian zone width and further allow for a demonstration by

interested parties regarding the appropriateness for mandating a wider riparian zone where needed to properly support the particular species associated with the waterway at issue. For example, there are a number of species of birds for which 300 feet or more are necessary to properly support the species. If it can be shown that regulated waters flow through habitat for a threatened or endangered species that require this larger buffer width, then the Department should have the authority to mandate it in any coastal zone, stormwater, or flood hazard area authorization given. (183)

RESPONSE: The Department has determined that a riparian zone width of 150 feet along both sides of a regulated water flowing through an area that contains threatened or endangered species, and/or present or documented habitat for those species, that are critically dependent on the regulated water for survival, is suitably protective for these species. Furthermore, since N.J.A.C. 7:7-9.26 specifies that projects reviewed for coastal permits are subject to the requirements of the FHACA Rules, projects reviewed under the CZM Rules would also be subject to N.J.A.C. 7:13-11.6, which sets forth additional standards that ensure that threatened or endangered species and their habitat are protected from adverse impacts in any regulated area under that chapter, irrespective of the riparian zone width.

273. COMMENT: N.J.A.C. 7:7E-3.26(e)3 should increase the mandatory buffer width for all waters not identified elsewhere in N.J.A.C. 7:7E-3.26(e)1 or 2 to a minimum 100-foot buffer. This mandatory buffer minimum should be provided for in every regulatory provision that

otherwise mandates a buffer that is smaller, and it should apply to all new development and redevelopment projects. (183)

RESPONSE: The Department acknowledges the essential functions provided by riparian zones and, for this reason, incorporates the most stringent Statewide stream corridor protection rules in the nation. For the reasons set forth in the Response to Comments 355 and 356, the Department has determined that the riparian zone widths set forth at prior N.J.A.C. 7:7E-3.26 and N.J.A.C. 7:13-4.1, adopted N.J.A.C. 7:7-9.26 and 7:13-4.1, afford appropriate water quality protection, bank stabilization, temperature moderation, flood attenuation, and habitat protection along regulated waters.

274. COMMENT: The rationale for riparian zones should be expanded. The importance of riparian buffers cannot be overstated. A great number of concepts need to be added and/or better emphasized in this section as well as in sections associated with the benefits of buffers in both the FHACA and Stormwater Management rules, such as that healthy vegetated riparian buffers are irreplaceably important to people as well as animals and the environment, they reduce erosion and sediment transfer, provide important aesthetic value, increase property values, reduce heating and cooling costs for buildings, enhance livability, increase public safety, reduce water and air pollutants and attendant healthcare costs, enhance recreational opportunities, reduce the cost of potable water, promote groundwater recharge, reduce flooding, support aquatic life, and generate both revenue and jobs associated with outdoor recreational activities. (183)

RESPONSE: The Department agrees that riparian zones provide a great number of essential functions as captured by the existing rationale. Since riparian zones were unchanged as part of this rulemaking and the important functions that vegetated riparian zones provide to surface waters is well known, such as increased channel stability, superior pollutant uptake, reduced erosion and associated sedimentation, temperature moderation, aesthetic and recreational value, and habitat, there is no need to amend the rationale.

275. COMMENT: The proposed rules contradict the fundamental driver of the rules, and this needs to change. For example, under proposed N.J.A.C. 7:7E-3.26(g)4, it seeks to not enforce a riparian zone around a stormwater management basin. What if this basin is an on-stream basin? Many exist, and would the rules now deprive that portion of the stream corridor of environmental protection? (118)

RESPONSE: Stormwater management basins are manmade structures that capture runoff from developed areas and are intended to provide water quality treatment, promote infiltration, and/or attenuate flood flows. There is no ecological benefit in placing a riparian zone around such structures. As such, the prior and adopted FHACA Rules and CZM Rules do not place a riparian zone around stormwater management basins. However, as depicted in Figure 4.1D at N.J.A.C. 7:13-4.1(g), where a stormwater management basin or wastewater treatment pond has been constructed along a regulated water such that the regulated water flows into and out from the basin or pond, the original location of the riparian zone along the regulated water is not affected

by the presence of the basin or pond. This is appropriate since the presence of the basin or pond would not obviate the need for a riparian zone along the regulated water itself. Similarly, in cases where a stormwater management basin has been constructed outside a regulated water but within the riparian zone, such as a basin located 50 feet from a regulated water that has a 150-foot riparian zone, the presence of the basin does not alter the location of the riparian zone or the protections placed on riparian zones under the FHACA Rules.

276. COMMENT: Proposed N.J.A.C. 7:7E-3.26(b)6 and 7:13-2.3(c)vi seek to remove riparian zone protections around lined watercourses. Since N.J.A.C. 7:13-1.1 states that vegetation adjacent to streams is essential for bank stability and water quality, this implies that protection of that vegetation is important. But these standards specifically remove the riparian zone protection. This contradicts the language of N.J.A.C. 7:13-1.1 and the purpose of riparian zones. If riparian zones provide an environmental service, then there is no reason not to protect them. By not enforcing riparian zone requirements at all regulated waters, it would seem to invalidate the rationale. The rules already assign relative importance to riparian zones by varying their width. To state that some waters don't get the benefit of riparian zone protection implies that those waters have no value, and this is contrary to the purpose of the rules. (118)

RESPONSE: All regulated waters provide an environmental benefit to the State. However, vegetation adjacent to manmade channels that have been created solely to convey stormwater, and which are fully lined with manmade impervious material, does not provide significant riparian zone functionality. In many cases, these manmade features were created in upland areas

not otherwise regulated under this chapter and tend to flow through highly developed or previously disturbed areas, such as within stormwater management structures and through urban areas, where redevelopment is encouraged. Examples of such waters include a concrete low-flow channel within a stormwater basin and a ditch completely lined with concrete or asphalt. While the Department has only come across a few circumstances where a regulated water is located within a basin or a concrete lined ditch, it was never the Department's intent to impose a riparian zone along these types of features. However, it should be noted that, where such features possess a contributory drainage area of at least 50 acres, a flood hazard area is present, pursuant to N.J.A.C. 7:13-2.3(b). This is appropriate since the Department has determined that any regulated water that has a drainage area of this size has the potential to cause flood damage and therefore should be regulated under the FHACA Rules. Placing a flood hazard area in such cases ensures that development does not exacerbate flooding or alter the flood-carrying capacity of the flood hazard area or otherwise subject the area to increased erosion and associated sedimentation within and downstream of the regulated water. Thus, while a riparian zone is not present under N.J.A.C. 7:7E-3.26(b)6 and 7:13-2.3(c)vi , the Department's application of a flood hazard area where these regulated waters drain at least 50 acres still provides attendant water quality benefits to the watershed.

Subchapter 1. General Provisions

277. COMMENT: The Department should include a provision in Subchapter 1, General Provisions, to clarify that any regulated activities or projects to be conducted in the Pinelands

Area pursuant to the FHACA Rules shall comply with the standards of the Pinelands Comprehensive Management Plan. This will ensure that entities seeking to engage in regulated activities or projects in the Pinelands Area under the FHACA Rules are aware of the additional regulatory requirements to which such activities or projects are subject. In 1998, prior to the repeal and repromulgation of the FHACA Rules in 2007, the Department and the New Jersey Pinelands Commission entered into a Memorandum of Agreement (MOA) that was intended to delegate the Department's power to approve or disapprove three minor stream encroachment permit applications (construction of foot bridges, construction of utility line crossings, and minor grading work) to the New Jersey Pinelands Commission. Given the significant changes to the FHACA rules in 2007 and the proposed changes in the current rulemaking, the terms of this MOA appear to be moot and the document void. Consequently, the New Jersey Pinelands Commission is no longer authorized to issue these minor stream encroachment permits and will review any regulated activities or projects to be conducted in the Pinelands Area under the FHACA Rules only in accordance with the standards of the Pinelands Comprehensive Management Plan. (146)

RESPONSE: N.J.A.C. 7:13-2.4(b) alerts prospective applicants that activities regulated under this chapter may also be subject to other Federal, State, or local requirements and that it is the applicant's responsibility to obtain all necessary approvals for a proposed project. N.J.A.C. 7:13-22.2(c) additionally sets forth a standard condition requiring each permittee to obtain all applicable Federal, State, and local approvals prior to commencement of regulated activities authorized under any permit. Since the types of approvals required for a given project vary

greatly throughout the State and it is important that all required approvals, whether Federal, State or local, be obtained, it is not appropriate to list any particular agency apart from the general requirements of N.J.A.C. 7:13-2.4(b) and 22.2(c).

N.J.A.C. 7:13-1.1 Purpose and Scope

278. COMMENT: The term "healthy vegetation" should not be replaced with simply "vegetation." Invasive vegetation and lawnscapes, for example, do not provide the same habitat benefits, erosion prevention, stormwater infiltration, peak flow reductions, and/or water quality benefits as healthy native vegetation. It is inaccurate and diminishing to the effectiveness of the regulation to make this change. (183)

RESPONSE: The Department agrees that healthy, native, non-invasive riparian zone vegetation provides functions and benefits that are superior to invasive vegetation and other vegetation within actively disturbed areas. However, the intent of N.J.A.C. 7:13-1.1(c)2 is to explain that all riparian zone vegetation serves important environmental functions and that the FHACA Rules are intended to preserve these functions by preventing the indiscriminate disturbance of vegetation along surface waters. "Healthy" is deleted from N.J.A.C. 7:13-1.1(c)2 because the term is subjective and has led some to conclude that vegetation that they consider to be "unhealthy" is not protected and can be removed.

279. COMMENT: The rulemaking states that "[t]he Department believes that these proposed amendments, described below, will more reasonably balance the social, economic, and environmental benefits of riparian zone protection with the development and infrastructure needs of communities throughout the State." This is in direct contradiction with the scope and purpose of the rules at N.J.A.C. 7:13-1.1(c). (91 and 195)

RESPONSE: The Department recognizes the great importance of preserving vegetation within riparian zones wherever practicable. However, the Department also recognizes that riparian zone disturbance is sometimes unavoidable. For example, an undeveloped lot that was created prior to the adoption of riparian zones under this chapter may be accessible only by constructing a roadway across a regulated water. If riparian zone disturbance were not permitted under any situation, the lot would not be able to be accessed, and the owner would be prevented from having any reasonable use for the lot. Similarly, existing roadways, utility lines, and other structures located within riparian zones must sometimes be replaced or improved to protect public safety. For this reason, only those activities that the Department has deemed to have a *de minimis* impact on riparian zone functionality are authorized within riparian zones under flood hazard area permits-by-rule, permits-by-certification, and general permits, pursuant to N.J.A.C. 7:13-6.2(b), and only those activities that the Department has determined are unavoidably located within riparian zones, are located as far from any regulated water as possible, and have minimal riparian zone disturbance are permitted under an individual permit, pursuant to N.J.A.C. 7:13-11.2(b). Further, where impacts to riparian zone vegetation exceed acceptable limits,

mitigation in accordance with N.J.A.C. 7:13-13 must be provided to ameliorate adverse impacts to riparian zone functionality with limited exceptions.

N.J.A.C. 7:13-1.2 Definitions

280. COMMENT: The Department is commended for the proposed definition of "actively disturbed area." (51 and 92)

RESPONSE: The Department acknowledges this comment in support of the rule.

281. COMMENT: The proposed definition of "actively disturbed area" does not address situations in which vegetation is temporarily planted after the removal of impervious surface as part of a redevelopment project. Please clarify the time frame during which the Department would consider an area to be an impervious surface after its removal and explain any flexibility that can be afforded to this time frame for extenuating circumstances. (157)

RESPONSE: The term "actively disturbed area" describes the vegetative condition of the riparian zone that, notwithstanding the discussion below, exists at the time a regulated activity is undertaken pursuant to a permit-by-rule or an application is made to the Department for an authorization under a general permit-by-certification or general permit or for an individual permit. However, the Department acknowledges that a lawfully existing impervious surface is sometimes removed from a site in order to facilitate a redevelopment project and that, during the

interim between the removal of the impervious surface and the undertaking of the redevelopment project, the area from which the impervious surface is removed is temporarily replanted with grass in order to improve overall site safety, conduct site remediation activities, minimize soil transport during the design and construction phase, and/or to meet the requirements of the local soil conservation district. The Department also recognizes that it can take several years for a redevelopment project to obtain all necessary approvals and that the removal of existing development may precede the commencement of redevelopment activities by several years. For example, a government entity may require an applicant to raze an unsafe building slated for redevelopment during the early phases of the conception and design of the redevelopment plan.

A similar situation is set forth at N.J.A.C. 7:13-11.2(f)4, which addresses the relocation of a "lawfully existing structure, which is situated within a riparian zone, to an actively disturbed area on the same site." In such a case, the Department does not subject this activity to the limitations of Table 11.2, provided "the area formerly occupied by the structure is stabilized and replanted with vegetation...." The removal of temporarily-planted vegetation and the subsequent redevelopment of the area would similarly not alter the functionality of the riparian zone from its original condition prior to the removal of the impervious surface. Therefore, N.J.A.C. 7:13-11.2(f)4, while not directly addressing the commenter's concern, indicates the Department's recognition that temporary disturbance to actively disturbed areas that do not result in a net decrease in riparian zone vegetation would not adversely impact riparian zone functionality.

Given the above, in cases where impervious surface within a riparian zone is removed as part of a planned redevelopment project, the area is temporarily seeded with grass, and the area is periodically mowed and not abandoned to the point that woody vegetation begins to establish,

the removal of the grass upon redevelopment of the site does not count toward the riparian zone disturbance limitations under a general permit authorization or individual permit. However, the Department recognizes that development is sometimes removed from a site for purposes other than redevelopment and/or that development can be abandoned for long periods of time such that woody vegetation begins to grow up through and around pavement, buildings, and other structures. In cases where a site is abandoned absent the intention for redevelopment and/or where woody vegetation begins to establish itself within and around the development, the vegetated portions of such a site would be subject to the limitations for clearing, cutting, and/or removal of riparian zone vegetation under this chapter.

282. COMMENT: The rulemaking is not limited to areas where human usage or intervention was legally permitted. A strict reading of this rulemaking would reward those that have actively disturbed the riparian zone without legal right to do so. (28A, 42, 56, 67, and 127)

RESPONSE: “Actively disturbed area” means “any expanse of land within a riparian zone in which vegetation has been permanently or periodically cleared, cut, removed, or otherwise altered by humans to accommodate an ongoing, *lawfully existing* land use….” (Emphasis added). The term “lawfully existing” is defined at N.J.A.C. 7:13-1.2 to mean “an existing fill, structure and/or use, which meets all Federal, State and local laws, and which is not in violation of this chapter because it was established: 1. Prior to January 31, 1980; or 2. On or after January 31, 1980, in accordance with the requirements of this chapter as it existed at the time the fill,

structure and/or use was established." Therefore, an area from which vegetation is removed in violation of the FHACA Rules does not constitute an actively disturbed area.

283. COMMENT: The rulemaking allows increased disturbance in "actively disturbed areas." While an undisturbed riparian zone may be better for water quality than a disturbed riparian zone, the rules should nevertheless be encouraging people to move away from the disturbed areas, away from the flood fringe, and restoring those areas to better protect the general health and safety. (28A, 42, 56, 67, and 127)

284. COMMENT: Areas already developed, paved, or farmed will be considered "actively disturbed." Encouraging development in previously disturbed riparian zones is a good proposal, but simply conceding that development can occur in previously disturbed areas accepts the "status quo" and concedes any efforts to improve current conditions. Water quality and stream health will not improve if the current conditions are accepted as baseline. Under this rulemaking, it appears that restoration of existing disturbed areas will only happen as part of mitigation for disturbance elsewhere. The Department must provide a method or process for the net area of undisturbed or restored riparian zones to increase with time, not decrease. The Department should provide statistics and data to justify its decision to not establish such a method or process. (1)

RESPONSE TO COMMENTS 283 AND 284: The Department believes that the FHACA Rules place appropriate protections on flood hazard areas and riparian zones, such that development

that occurs in these areas does so without exacerbating flooding or adversely impacting the environment. As noted in the Response to Comments 100 through 102, it has been estimated that 35 percent of New Jersey's land area lies within a flood hazard area, and since riparian zones may extend outside the flood hazard area, the area of land subject to the FHACA Rules is well over 35 percent of New Jersey. A significant amount of the State's existing homes and businesses, roadways, and other infrastructure lie within riparian zones. Preventing all development or redevelopment within riparian zones would therefore have significant adverse impacts on numerous communities. Under the FHACA, the Department is authorized to "adopt land use regulations for the flood hazard area" and to "control stream encroachments." (See N.J.S.A. 58:16A-50(b).) Therefore, the FHACA presupposes that development can occur within flood hazard areas, provided protections are put in place to ensure that such development does not threaten public health, safety, and welfare. Further, the FHACA Rules only permit activities within riparian zones that are unavoidable in nature, beneficial to the public and/or environment, or that have *de minimis* impacts to riparian zone functionality. Given that redevelopment of previously disturbed portions of a riparian zone have less impact on riparian zone functionality than disturbance to trees and other woody vegetation, it is appropriate that the Department provide incentives for projects located within riparian zones to be situated in actively disturbed areas. Specifically, recognizing the Department's inability to completely ban all development in the riparian zone, the FHACA Rules are designed to encourage redevelopment of actively disturbed areas, through such means as permits-by-rule and general permits-by-certification, as an incentive for people to focus activities in such areas and therefore protect undisturbed riparian zones from development. N.J.A.C. 7:13-11.2(d) additionally requires that where redevelopment

occurs within the riparian zone, all existing development within 25 feet of the top of bank must be removed and the area replanted with native, noninvasive vegetation, except in select cases where such restoration would not be effective, safe, or reasonable for the applicant. Additionally, through general permit-by-certification 4 for enhancement of a riparian zone through the planting of native, non-invasive plant species and general permit 4 for creation, restoration, and enhancement of habitat and water quality values and functions, both of which require no application fee to the Department, the FHACA Rules provide incentives for people to restore native, non-invasive vegetation to disturbed areas. Finally, the new mitigation options set forth in Subchapter 13, which encourage creation of restored riparian zones, provide for riparian zone enhancement at a mitigation to disturbance ratio of 2:1 and riparian zone restoration at a mitigation to disturbance ratio of 3:1, and encourage riparian zone preservation and banking, are anticipated to result in a greater area of restored and protected riparian zones than occurred under the prior FHACA Rules.

285. COMMENT: Forests and other non-ornamental woody vegetation are not considered "actively disturbed," including individual trees. In theory this is good, but since the rule allows clearing under the tree canopy, this "protection" is essentially meaningless. Disturbing below the canopy of a tree is likely to result in the decline and loss of the tree unless undertaken in a manner to assure tree health. So this is meaningless unless requirements for tree and forest protection are defined and implemented. Since disturbance will happen under a permit-by-rule, general permit by certification, or general permit, the practice will be "self-monitoring" and meaningless for riparian function protection. (1)

RESPONSE: As discussed in the Response to Comments 283 and 284, the definition of "actively disturbed area" was adopted in part to limit activities under permits-by-rule to such areas, and therefore minimize adverse impacts to riparian zone functionality, as well as to create an incentive for people who are proposing activities within riparian zones to locate the activity in areas occupied by lawn and other disturbed areas, rather than clearing, cutting, and/or removing trees to accommodate the proposed activity. Specifically, 22 of the adopted permits-by-rule limit activities to actively disturbed areas. Examples include normal property maintenance under permit-by-rule 1, reconstruction, relocation, and/or elevation of a lawfully existing building under permit-by-rule 11, construction of a trail or boardwalk under permit-by-rule 22, and placement of solar panels and associated equipment under permit-by-rule 30. The permits-by-rule that limit activities to actively disturbed areas are either *de minimis* in nature and could not compromise the integrity of a tree if the regulated activity were undertaken beneath its canopy, such as normal property maintenance or the construction of a trail or boardwalk, or else could not practically be undertaken beneath a tree's canopy, such as the reconstruction, relocation, and/or elevation of a lawfully existing building or the placement of solar panels and associated equipment. Therefore, where activities authorized under the adopted permits-by-rule could practicably be undertaken beneath a tree's canopy, such activities would not adversely impact the tree.

286. COMMENT: The definition of "channel" does not discuss what a man-altered channel is. This leaves the rule incomplete. (118)

RESPONSE: The term “man-altered” is not used in the FHACA Rules. The Department is assuming the commenter is referring to N.J.A.C. 7:13-2.2(a)3ii, which exempts from regulation under this chapter a water that has a drainage area of less than 50 acres and that is “confined within a lawfully existing, manmade conveyance structure or drainage feature, such as a pipe, culvert, ditch, channel or basin (not including any water that historically possessed a naturally-occurring, discernible channel, which has been piped, culverted, ditched or similarly modified).” Similarly, general permit-by-certification 8 at N.J.A.C. 7:13-8.11(a) authorizes “maintenance of one or more lawfully existing manmade stormwater management structures and conveyances, such as a pipe, culvert, ditch, channel, or basin, not including natural channels that were previously modified” and the individual permit for bridges and culverts at N.J.A.C. 7:13-12.7(g)3 provides that the “construction or reconstruction of a circular, elliptical, or box culvert is conditionally acceptable” provided the “channel is manmade (not including any water that historically possessed a naturally-occurring, discernible channel, which has been modified by humans).” In each of these three references, the Department believes the adopted language, which provides examples and context for the term “manmade,” is sufficiently clear as adopted and that the definition of channel does not need to be changed to address man-altered channels.

287. COMMENT: The definition of “conservation restriction” forbids or limits the placement of signs within the restricted area. However, signage is typically required to inform the public of a mitigation site and should be specified as an exception. (135)

RESPONSE: The Department recognizes the value of signage informing the public of a mitigation site. However, such signage does not need to be situated within the mitigation site itself but can rather be placed immediately outside the mitigation site, such as on fencing that surrounds the mitigation site.

288. COMMENT: It is recommended that the definition of "conservation restriction" be drawn in its entirety from the enabling statute for conservation restrictions, the New Jersey Conservation Restriction and Historic Preservation Restriction Act. (24)

RESPONSE: The adopted definition of "conservation restriction" is consistent with the New Jersey Conservation Restriction and Historic Preservation Restriction Act, N.J.S.A. 13:8B-1 et seq., and identical to the definition of the same term in the CZM Rules at N.J.A.C. 7:7-1.5.

289. COMMENT: The proposed regulations indicate that a professional engineer employed by the State might be able to reject a submission by a professional engineer. The proposed regulations are inconsistent with N.J.S.A. 45:8-28(b), which requires a professional engineer to be in responsible charge of planning the use of land and water irrespective of whether or not a plan is rejected. The proposed regulations should indicate if the Civil Service Commission and Department job specifications for the management titles of the subject programs require a duly qualified engineer or if this level of professional management is left to chance and the discretion of appointed managers. (151)

RESPONSE: The Department is assuming that the commenter is referring to the definition of "engineering certification," which provides that upon "clear and compelling evidence of a threat to public health, safety, welfare, and the environment, a New Jersey licensed professional engineer employed by the Department can reject an engineering certification submitted under this chapter." First, the Department must reserve the right to determine whether any information provided by an applicant demonstrates compliance with the relevant rules, including the review and, if necessary, rejection of an engineering certification. Moreover, this provision is necessary and appropriate in order to enable the Department to prevent an applicant from undertaking activities that could exacerbate flooding or adversely impact the environment should the submitted certification prove to be inaccurate.

For example, under proposed general permit 6, which authorizes the construction of one single-family home or duplex and one associated driveway that does not cross a regulated water in a fluvial flood hazard area, the applicant must provide an engineering certification confirming that the flood storage displacement (net-fill) requirements of the chapter are met. Based on the best available data, an engineer employed by the applicant may determine that these requirements are met and provide an engineering certification to this effect. However, the Department may be aware of site conditions pre-dating the general permit application or other factors that instead demonstrate that these requirements are in fact not met. Since general permit 6 simply requires the submission of an engineering certification, the requirements under this general permit would be met even if the certification proved to be in error. Therefore, the Department reserves the right to reject an engineering certification in unusual situations where a Department engineer determines that clear and compelling evidence of a threat to public health,

safety, welfare and the environment is present. This provision does not conflict with the statutes governing a professional engineer's responsible charge of works and systems but rather fulfills the Department's mandate under the Flood Hazard Area Control Act at N.J.S.A. 58:16A-50b, which states:

> "It is in the interest of the safety, health, and general welfare of the people of the State that legislative action be taken to empower the Department of Environmental Protection to delineate and mark flood hazard areas, to authorize the Department of Environmental Protection to adopt land use regulations for the flood hazard area, to control stream encroachments, to coordinate effectively the development, dissemination, and use of information on floods and flood damages that may be available, to authorize the delegation of certain administrative and enforcement functions to county governing bodies and to integrate the flood control activities of the municipal, county, State and Federal Governments."

Regarding Civil Service Commission and Department job specifications, management titles within the Division of Land Use Regulation do not require individuals to possess an engineering license. However, the Department employs a number of New Jersey licensed professional engineers within and outside of the Division.

290. COMMENT: The definition of "habitable building" does not include construction trailers, which are habitable. Many construction trailers contain office space and break rooms. As such, they are habitable and need to be protected as any habitable structure would be. (118)

RESPONSE: Like campers and recreational vehicles, construction trailers are not set on a foundation and, while temporarily connected to electrical service, are not intended to remain in place for any significant duration of time. Therefore, the Department believes that it is not appropriate to require construction trailers to be subject to the requirements for habitable buildings under the chapter, including elevation of the lowest floor and anchoring to resist lateral displacement and buoyancy during a flood event.

291. COMMENT: The definition of "habitable building" does not include kennels, which are habitable. People may not spend significant time in kennels, but animals do. To not protect them dooms them to possible drowning during flood events, which is easily avoidable. (118)

RESPONSE: The Department agrees that, wherever practicable, livestock and domestic animals should be protected from harm during flood events. For this reason, the Department amended the definition of "habitable building" through this rulemaking to include animal shelters that include regular human access and occupation. The term "outdoor kennel" was meant to encompass only the fenced-in area and not the building. The term "building" is defined to mean "a structure enclosed with exterior walls or fire walls, erected and framed of component structural parts, designed for the housing, shelter, enclosure, and support of individuals, animals, or property of any kind...." The term "habitable building" means "a building that is intended for regular human occupation and/or residence…." Any kennel or animal shelter that meets these definitions is therefore a habitable building and is subject to the associated requirements of this chapter, such as the individual permit requirements for buildings at N.J.A.C. 7:13-12.5.

292. COMMENT: The definition of "impervious surface" as proposed is ambiguous. Therefore, the current definition of impervious surface should be maintained. Examples that were previously included for impervious surfaces, but will be removed under the current proposal, include asphalt, brick, buildings, concrete, metal, and most structures. These examples should be retained. Also proposed for deletion is the recognition in the definition of "impervious surface" that densely packed gravel or stone should be considered to be impervious for the purposes of this chapter. It is suggested that an explanation of when densely packed gravel or stone is considered "impervious" and examples of pervious surfaces (porous pavement, porous paving blocks, gravel surfaces not traveled by heavy vehicles, etc.) be added to the definition of "impervious surface." (101)

RESPONSE: The examples noted by the commenter are deleted from the definition of "impervious surface" for three reasons. First, deleting the examples renders the definition identical to the definition of "impervious surface" in the Department's SWM rules at N.J.A.C. 7:8-1.2, which will promote consistency between the Department's rules. Second, it has been the Department's experience that the examples listed in the definition are sometimes misunderstood as exhaustive, therefore unintentionally leading some readers to mistakenly assume that a structure that is impervious should not be considered to fall within the definition. Finally, the reference to densely packed gavel or stone roadways and parking areas as sometimes being considered impervious has led to confusion among the regulated community.

As defined, an impervious surface means "a surface that is covered with a layer of material so that it is highly resistant to infiltration by water." Given the wide variety of materials that are placed on the ground and the differing permeability of these materials depending on their age, compaction, thickness, substrate, and construction technique, it is not possible for the Department to address every permutation of a particular material and determine whether it meets the definition of "impervious surface." Instead, the Department will determine whether the properties of the material in question meet the standard for permeability and has removed the examples set forth in the prior rule to avoid confusion and assumption that the examples were intended to be restrictive. For example, where gravel, stone, or other materials are packed so densely in a particular circumstance as to meet the standard of being highly resistant to infiltration by water, they continue to be considered impervious surface regardless of the presence or absence of the examples.

In cases where a prospective applicant seeks guidance on whether a material is impervious in a given circumstance, the applicant can perform permeability tests and submit the results to the Department for evaluation.

293. COMMENT: The proposed amendments add a new definition for "in-kind" and "in-kind replacement," which, among other things, means "the reconstruction or replacement of all or a portion of a lawfully existing structure without altering the location . . . of the structure." Utility poles are, of course, "structures" under the FHACA Rules, for which proposed permit-by-rule 3 authorizes in-kind replacement. It would be unusual for a utility pole to be replaced in precisely the same location given that standard maintenance procedure calls for replacing poles (i) before

they fail and (ii) while the current pole remains in use providing electric service. Thus, while the current pole is in service supporting energized electrical conductors, Atlantic City Electric and Jersey Central Power & Light's standard procedure (which is uniform throughout the U.S.) is to install a new pole within a very short distance of the current pole, transfer the energized conductors to the new pole, and then remove the old pole that has just been replaced. Although pole height and diameter may increase slightly, it is generally necessary to maintain approximately the same weight load on the new pole and the adjacent poles that support the same conductors. For that reason, the new pole will be placed as close as possible to the location of the pole that is being replaced. The Department's objective with regard to in-kind replacement is to avoid changing the flow of flood water or an "adverse impact to flooding or the environment," 47 N.J.R. 1090. The miniscule changes just described in a power pole's location, height, and diameter will not have any of those adverse impacts. As the Department notes in connection with general permit 10, reconstruction of one existing bridge or culvert, those objectives – and the definition of "in-kind" – can be satisfied "where the replacement structure varies only slightly in shape or dimension as compared with the structure being replaced," and for that reason general permit 10 allows minor variations in size and dimensions for a replacement bridge or culvert under the general permit (47 N.J.R. 1092). For example, under N.J.A.C. 7:13-9.10(a)2, the length and width of replacement bridges and culverts can increase by up to 10 percent and remain covered by the general permit. Given the above, please provide flexibility to allow the height, diameter, and location of replacement power poles to vary slightly and remain covered under permit-by-rule 3. This could be done by adding to the definition of "in-kind replacement," or to the terms of permit-by-rule 3, clarification that "in-kind replacement of

utility poles allows slight variation in the height, diameter, and location of the replacement pole." (51 and 92)

RESPONSE: Permit-by-rule 3 authorizes the in-kind replacement of any lawfully existing structure provided specific conditions that are intended to ensure that the structure being replaced within a flood hazard area or riparian zone does not exacerbate flooding or cause environmental harm are met. The Department acknowledges that it may not be possible or feasible to replace utility poles in accordance with the limits of permit-by-rule 3. Therefore, in recognition of the unique issues facing utility companies, the Department has adopted permit-by-rule 33, which continues the permit-by-rule at prior N.J.A.C. 7:13-7.2(c)1, and which is specific to the placement of one or more utility poles. This permit-by-rule does not require that the replacement of the utility pole be in-kind and allows for the placement of new poles, thereby affording the utility greater flexibility in the placement of utility poles than permit-by-rule 3, which is intended for a wide array of structures.

294. COMMENT: The Department should add language to the definition of "in-kind" to allow flexibility on how the definition is applied. Specifically, minor deviations in materials and locations should be allowed since minor deviations will not have any significant effects on flooding either upstream or downstream. Determining hydraulic equivalency should be given maximum flexibility. Additionally, the Department should allow for the use of better, more improved materials when replacement is needed. (11, 37, 59, and 148)

RESPONSE: The definition of “in-kind” provides for the use of different materials provided the material is “hydraulically equivalent” to the material being replaced. Two materials are “hydraulically equivalent” if they conduct or pass floodwaters at the same velocity and flow rate. This allows design engineers to exercise professional judgment in determining whether a different, improved material can be used. For example, if a corrugated metal culvert is being replaced “in-kind,” the design engineer can determine whether the replacement culvert must also be made of corrugated metal or if it can be replaced with a concrete pipe, depending on the slope, diameter, length, and skew of the culvert being replaced.

295. COMMENT: The inclusion of the definition of the term “Pinelands Waters” at proposed N.J.A.C. 7:13-1.2 is appreciated. (146)

RESPONSE: The Department acknowledges this comment in support of the rule.

296. COMMENT: In order to harmonize the references to the Pinelands between the FHACA and CZM Rules, definitions should be incorporated for the following terms: “Pinelands National Reserve,” which is the area designated by the National Parks and Recreation Act of 1978, 16 U.S.C. § 471i, and referenced in Section 3(i) (N.J.S.A. 13:18A-3) of the Pinelands Protection Act; “Pinelands Commission," which is the Commission created by section 4 of P.L. 1979, c. 111 (N.J.S.A. 13:18A-4); and “Pinelands Comprehensive Management Plan,” which is the plan as defined in N.J.A.C. 7:50, adopted under the Pinelands Protection Act, N.J.S.A. 13:18A-1 et seq. (146)

RESPONSE: In the adopted FHACA Rules, the New Jersey Pinelands Commission and the area under the jurisdiction of the Commission are referenced only at N.J.A.C. 7:13-18.4, Additional application requirements for a verification, for an authorization under a general permit, or for an individual permit, and N.J.A.C. 7:13-19.3, Contents and recipients of public notice of an application. The FHACA Rules additionally do not refer to the "Pinelands Comprehensive Management Plan." It is therefore not necessary to incorporate the definitions suggested by the commenter. However, to ensure that the FHACA Rules accurately refer to the Commission and the area under its jurisdiction, N.J.A.C. 7:13-18.4(b) is changed to require that an application for an individual permit for a regulated activity or project in the "Pinelands Area as designated by Section 10(a) of the Pinelands Protection Act, N.J.S.A. 13:18A-1 et seq.," shall include a Certificate of Filing, a Certificate of Completeness, or a resolution approving an application for public development, issued by the New Jersey Pinelands Commission." Further, proposed N.J.A.C. 7:13-19.3(f), which requires that an applicant for a verification, authorization under a general permit, individual permit, or major technical modification for a delineation, regulated activity, or project in the "Pinelands Preservation Area or the Pinelands Protection Area" shall provide a copy of the entire application, as submitted to the Department, to the New Jersey Pinelands Commission, is changed to instead reference the "Area as designated by Section 10(a) of the Pinelands Protection Act, N.J.S.A. 13:18A-1 et seq."

297. COMMENT: The FHACA Rules use, but do not define, the terms “residential” and “non-residential.” Both terms are defined in the New Jersey Uniform Construction Code (UCC) by reference to ASCE 24 Flood Resistant Design and Construction. The FHACA Rules do define the terms “building” and “habitable building” and the latter includes occupancies other than those generally residential in nature. The term “multi-residence building” is defined and excludes single-family homes, duplexes, and critical buildings. The lack of clarity regarding the term “non-residential” complicates comparison with the National Flood Insurance Program (NFIP) dry floodproofing requirements. (110)

RESPONSE: The FHACA Rules include a number of definitions that do not appear in the UCC because the purpose and scope of the FHACA Rules differs from the UCC. Whereas the UCC incorporates portions of national model codes related to the safe construction of buildings, which include flood-resistant construction standards, the FHACA Rules set forth additional requirements on the lowest floor elevation of buildings, which generally exceed UCC minimum requirements, and require dry access to and from certain buildings or groups of buildings during a flood, which is not covered under the UCC. Specifically, the FHACA Rules set forth different lowest floor and access requirements for single-family homes and duplexes, residential subdivisions, multi-residence buildings, critical buildings, buildings that are substantially damaged or substantially improved, and buildings that do not meet any of these defined terms. These lowest floor and access standards differ due to the relative risk to persons using such buildings and the feasibility of elevating and/or providing access. For example, the FHACA Rules have higher access standards for multi-residence buildings, which include buildings such

as hotels and apartment complexes, than for the construction of a single-family home. This is appropriate because hundreds of people could be trapped in a multi-residence building during a flood if no means of safe ingress and egress is provided. However, these standards do not apply to the construction of one single-family home or duplex since it is not generally possible to elevate roadways leading to one home or duplex and also because the comparative risk of flood damage is much lower than a multi-residence building. With regard to NFIP flood-proofing requirements, the Department is proposing amendments elsewhere in this issue of the New Jersey Register that are intended to harmonize the flood-proofing standards of the FHACA Rules and the UCC and NFIP.

298. COMMENT: The proposed definition for the term “species of special concern” at N.J.A.C. 7:13-1.2 should not be used to determine riparian zone widths. (11, 37, and 148)

RESPONSE: The term “species of special concern,” which is referenced only in N.J.A.C. 7:13-12.7 in relation to the construction of bridges and culverts, does not affect or determine the width of the riparian zone under N.J.A.C. 7:13-4.1.

299. COMMENT: The definition of “structure” has been modified to include guiderails and stormwater management facilities. Please clarify why this is necessary and what the intent of the expanded definition is. (15)

RESPONSE: It has been the Department's experience that, even though the definition indicates that what is considered to be a structure is "not limited to" the list of examples that follow, the examples provided in the definition of "structure" are sometimes misunderstood as exhaustive. While the list is intended to merely reflect some of the more common structures that are subject to the FHACA Rules, the Department has always considered guiderails and stormwater management facilities to be structures under this chapter as evidenced through the requirements on the construction of guiderails and stormwater management facilities in regulated areas at N.J.A.C. 7:13-12.2, 12.3, and 12.4. Therefore, for the purposes of clarity, the Department has modified the definition of "structure" to include these as types of structures.

300. COMMENT: If the application is "technically complete" when submitted, when does the 90-day clock start? (157)

RESPONSE: The Department's 90-day review period of an application for a verification, a general permit, or an individual permit begins on the day that a technically complete application is received by the Department. For example, if an application is received by the Department on September 1 and Department staff, after conducting a review of the submitted material, determines on September 20 that the application as submitted meets the definition of "technically complete," then September 1 is the first day of the Department's 90-day review period for that application.

301. COMMENT: The proposed amendment to the definition of "temporary" in the rulemaking, which appropriately recognizes the nature and time frames associated with hazardous substance remediation activities, is supported. (13, 14, and 47)

302. COMMENT: The proposed amendment to the definition of "temporary" that recognizes a hazardous substance remediation activity may exceed six months in duration is supported. This amendment will enable the responsible party to remediate the environmental media and achieve regulatory time frames. (37 and 148)

RESPONSE TO COMMENTS 301 AND 302: The Department acknowledges these comments in support of the rule.

303. The definition of "temporary" should be expanded to accommodate long-term linear projects. (68)

RESPONSE: The definition of "temporary" was amended through this rulemaking to reflect that disturbance associated with certain regulated activities, such as hazardous substance remediation or solid waste facility closure, may necessarily exceed six months in duration. The adopted definition clarifies that the Department may consider an activity temporary where it lasts more than six months in cases where such longer duration is necessary to complete activities required to meet statutory or regulatory standards that cannot otherwise be completed within six months, provided appropriate restoration of disturbed regulated areas is undertaken. The term

"temporary" is used in a number of permits-by-rule that authorize short-term activities or site conditions, such as the construction and maintenance of a temporary forest road under permit-by-rule 26, temporary disturbance associated with soil borings under permit-by-rule 38, and the temporary storage of unsecured construction material outside a floodway under permit-by-rule 48. "Temporary" also describes certain construction practices, such as erecting temporary berms or sheet-piles around areas to be dredged under general permit 2 and the use of temporary bridges, culverts, coffer dams, and/or sediment control devices to minimize machinery contact with flowing water during work within a channel under N.J.A.C. 7:13-11.1(d)3. In concert with the intention of the term "temporary," such structures must be "removed from the channel as soon as possible after completion of the disturbance." As such, it is not clear how a similar circumstance would apply to long-term linear projects as suggested by the commenter. The Department does, however, recognize that large linear projects can in some cases take longer than five years to complete and has accordingly adopted proposed N.J.A.C. 7:13-10.2(b), which provides that an individual permit for a linear activity or project that is greater than 10 miles in length is valid for 10 years from the date of issuance.

304. COMMENT: What happens to a temporary condition of disturbance, such as a soil pile that has vegetated naturally? Please clarify the duration and any criteria used in the application of a "temporary" condition. (157)

RESPONSE: The Department believes the commenter is addressing situations in which a person removes topsoil from an area that is intended for development, such as to meet the requirements

of the local soil conservation district, or otherwise temporarily stockpiles materials intended to be used as part of a development, and vegetation begins to grow on these temporary piles of soil or materials. As this is a common occurrence, the Department has adopted permit-by-rule 48 to accommodate the temporary storage of unsecured construction material outside a floodway. Under permit-by-rule 48, any clearing, cutting, and/or removal of riparian zone vegetation must be limited to actively disturbed areas, and within six months of the placement of the material, all material must be removed from the site and all disturbed areas are restored to pre-storage topography. Any placement of soil or other materials within a riparian zone that does not meet the limitations of permit-by-rule 48 must meet the requirements for the clearing, cutting, and/or removal of riparian zone vegetation under an individual permit pursuant to N.J.A.C. 7:13-11.2.

However, in some cases, soil and materials are stockpiled within a riparian zone on paved areas or within areas otherwise devoid of vegetation. The temporary growth of vegetation on these piles is similar to vegetation that is temporarily planted within an area that is planned for redevelopment, as discussed in response to comment 281 above. The Department recognizes that vegetation that temporarily grows on these piles of soil or materials does not contribute to riparian zone functionality and is simply a necessary part of the development of a site. Therefore, the Department does not count the eventual removal of such vegetation toward the riparian zone disturbance limitations under this chapter, provided the pile is not abandoned for long periods of time such that woody vegetation begins to grow, as described in the response to comment 281 above, in which case the vegetation would be subject to the limitations on the removal of vegetation under this chapter.

305. COMMENT: If a water with a contributory drainage area of over 150 acres lacks a discernible channel, please confirm if the Department would base the "top of bank" on a two-year storm calculation. What information must be submitted (that is, cross section, a Manning's normal depth analysis)? (157)

306. COMMENT: Using the limits of the two-year flood for determining the limits of the top of bank will require development of engineering calculations, which would be costly and time consuming for the regulated community. A different method that does not require the use of engineering calculations should be developed. A linear regulated water that has a drainage area of 150 acres or more will likely have a discernible top of bank. (11, 37, and 148)

307. COMMENT: The top of bank should not be based on the limits of the two-year flood event and require hydrologic and hydraulic modeling. The cost associated with such modeling may be inappropriate for simply determining the location of the top of bank, which is necessary for knowing the location of the riparian zone, in cases where development is not located near a regulated water. (101)

RESPONSE TO COMMENTS 305 THROUGH 307: As indicated by commenters, in most cases a linear regulated water that has a drainage area of 150 acres or more will have a discernible top of bank. In such a case, the top of bank will be that discernible feature and engineering calculations will be unnecessary; paragraphs 1 through 5 of the definition are only applicable where the top of bank is not discernible. Where there is not a discernible top of bank on a

regulated water that possesses a drainage area of 150 acres or more, the regulated water contains water at all times and has a drainage area of 10 square miles or more, the top of bank shall be considered to be located at the limits of the two-year flood. In such cases, the Department is not intending applicants to provide an exhaustive hydrologic and hydraulic analysis of the watershed in order to determine the limits of the two-year flood. In most circumstances, the Department expects that the applicant will provide one or more cross sections of the channel where the top of bank in not discernible and will produce normal depth calculations using flow rates developed for a two-year flood event at the point in question. While the use of a more detailed analysis, such as a HEC-RAS model, is also permissible, the Department does not expect that such an analysis will be necessary except in rare circumstances where the top of bank is not discernible for long stretches along a regulated water. The Flood Hazard Area Technical Manual will include examples of analyses that are acceptable to demonstrate the limits of the two-year flood.

308. COMMENT: The top of bank along all linear non-tidal regulated waters should be based on the discernible and observable high water line of the feature seen in the field, rather than the observable break in the slope of the land above the feature as set forth in the proposed definition of “top of bank.” The riparian zone should start at this point and extend inland to the required width. (101)

RESPONSE: Based on field observations of many regulated waters, the Department does not believe that the high water line of a water feature can be regularly discerned or that the high water line is a consistent indicator of the location of bankfull flow, which is the periodic flow

understood to create channels through erosion over time. In fact, flood events can be of any frequency and therefore cause any number of high water marks to exist along a channel. A more consistent means of determining the location of the top of bank is observing a change or break in slope along the channel as described in the definition of "top of bank."

309. COMMENT: Where high embankments occur along waters, selecting the top of the embankment far from the actual level of the water feature starts the riparian zone too far away from the actual surface water, which is the intent of the riparian zone. (101)

RESPONSE: The Department agrees that high embankments sometimes occur along regulated waters, which are much farther from the edge of the channel than the actual top of bank. By defining "top of bank" to mean "the upper limit of the bank of a regulated water, which is typically characterized by an observable change or break in the slope of the land," the Department does not intend that the top of a large ravine or bluff near a regulated water should be considered to be the top of bank. In the majority of cases, the applicant and Department can agree on the location of the top of bank through observation of site conditions and topography. Where the Department and applicant cannot agree, provisions 1 through 5 within the definition of "top of bank" set forth standards for determining the location of the top of bank.

310. COMMENT: The definition of "tree" is proposed to be removed from the rules. The majority of riparian mitigation projects are proposed in order to compensate for temporary or permanent removal of woody vegetation, often times treed, forested riparian areas. A definition

of the word "tree" is required so as to distinguish trees from shrubs and clearly delimit mitigation requirements. (135)

RESPONSE: In many cases, the riparian zone standards in the FHACA Rules protect trees and/or prevent the removal of trees due to the important stability and water quality functions they provide within riparian zones. However, the deleted definition of "tree" limits trees to "woody plants that have a diameter of five inches or greater at a height of 4.5 feet above the ground." Since smaller trees can provide similar stability and water quality benefits within a riparian zone, the deletion of the definition increases the number of trees being protected within riparian zones.

With regard to the type of vegetation suitable for a mitigation project, it is not clear how a definition for "tree" would address the commenter's concern, given that the riparian zone mitigation standards set forth at N.J.A.C. 7:13-13 do not mention specific types of vegetation that must be planted and do not use the term "tree." Rather, N.J.A.C. 7:13-13.2(a) requires that riparian zone mitigation shall fully compensate for any ecological loss, and the requirements for riparian zone creation, restoration, enhancement, and preservation at N.J.A.C. 7:13-13.9 through 13.12 provide a wide range of options for mitigation, subject to Department review to ensure that the provided type and ratio of mitigation satisfies N.J.A.C. 7:13-13.2(a).

Similarly, with regard to replanting riparian zone vegetation that has been temporarily disturbed to conduct a regulated activity, N.J.A.C. 7:13-6.7(b)5 (for permits-by-rule, general permits-by-certification, and general permits) and 11.2(z) (for individual permits) require that all replanted vegetation must consist of "vegetation of equal or greater ecological function and value as the vegetation that was cleared, cut, or removed. For example, for both mitigation and

replanting of temporary disturbances, herbaceous vegetation may be replaced with the same type of vegetation or with trees, but the trees in forested areas must be replaced with trees of equal or greater density and ecological function and value." The Department believes this guidance is sufficiently clear and would not benefit from a definition of "tree."

311. COMMENT: Does a feature, such as a stream or ditch, have to be present for an area to be considered a regulated "water," even if the drainage area to a particular point is over 50 acres? (157)

RESPONSE: A linear topographic depression, such as a stream or ditch, or other discernible collection of surface water, such as a pond or basin, must be present to constitute a "water." The topography of an area may be such that runoff from greater than 50 acres of land may collect to a particular point. However, if no linear topographic depression or other collection of surface water is discernible at the point in question, then no "water" is present.

N.J.A.C. 7:13-1.3 Forms, Checklists, Information, Technical Manual; Department Address and Website

312. COMMENT: Will the Department provide a checklist for technical completeness? (157)

RESPONSE: The Department will, in accordance with the requirements of N.J.S.A. 13:1D-101, provide updated, detailed checklists for administrative completeness for applications under this

chapter. These checklists will identify all submissions required to be made as part of a filing of a permit application with the Department under the FHACA Rules as amended to be considered administratively complete. However, due to the wide array of technical requirements set forth in the FHACA Rules, it would not be practical for the Department to develop a checklist for technical completeness as such a checklist would necessarily repeat hundreds of standards and requirements.

313. COMMENT: Please clarify the status of the draft technical manual and why it was never formally approved. The Department has referred to it on projects; is it appropriate or legally valid to refer to a draft manual? The Department should also develop a list of Frequently Asked Questions and responses and post the information on-line to help provide guidance and clarification. This similar process was done for the SWM rules, which is helpful in some cases. (28)

RESPONSE: Pursuant to N.J.A.C. 7:13-1.3(b), the purpose of the Flood Hazard Area Technical Manual is to provide guidance concerning the basic engineering and environmental concepts that are the foundation of FHACA Rules, and it does not replace or supplement the requirements of the FHACA Rules. A draft version of the Flood Hazard Area Technical Manual was posted on the Department's website in 2008 in order to receive comments and suggestions from users before a final version was issued. For various reasons, the Department never finalized the manual, and due to the subsequent adoption of amendments to this chapter in 2010, emergency amendments in 2013 after Superstorm Sandy, and revised fees that were adopted in 2015, the

manual must be revised. The Department is currently preparing a new manual that that will reflect the rules after this adoption. The Department intends to proceed with the finalization of the manual in accordance with N.J.S.A. 13:1D-111. The Department also intends to post several frequently asked questions in order to help the public transition to the adopted rules.

Subchapter 2. Applicability and Activities for Which a Permit or Authorization is Required

N.J.A.C. 7:13-2.1 When a Permit or Authorization is Required

314. COMMENT: The proposed rule would significantly expand and retroactively define those instances when a permit or authorization is not required. The Department's stated objective of reducing regulatory burden and more reasonably balancing the needs of riparian zone protection with the needs of community development has resulted in a methodical and layered weakening of natural resource and hazard protection standards. This, coupled with a significant expansion of permits-by-rule, general permits, and a computer generated permit issuance system (permits-by-certification), will pose unacceptable harm to critical natural resources, frustrate efforts to protect high quality waters and de-list impaired waters, and reduce flood resiliency in the State. (5, 28, and 30)

315. COMMENT: Despite the Department's acknowledgement of the environmental and flooding impacts of dense development, these proposed rules would increase the number of situations where development within the riparian zone may be grandfathered in and thus avoid

compliance. This is contrary to the Department's statutory mandate. (27, 42, 56, 77, 122, 138, 170, 173, and 190)

316. COMMENT: This rulemaking expands the types of approvals that, if obtained prior to November 5, 2007, grandfather a project from the FHACA Rules; please remove this provision. (29, 30, 46, 69, 91, 189, and 195)

317. COMMENT: The Department provides no basis or background documentation or scientific grounds that can show that by adopting expanded grandfathering provisions, the Department is acting in the interest of the State or is responsive to the scope and purpose as stated in N.J.A.C. 7:13-1.1. In fact, the interests to which the Department responds throughout the rulemaking are solely those of the regulated community. (24 and 147)

318. COMMENT: Preliminary approval or mere subdivision approval should not be enough to support exemption from the requirements of these rules. In the case of primary site plan approval or simply securing a minor, final, or preliminary subdivision approval, all are projects that are at a point in the process when the intended project can be designed so as to accommodate the mandates of this rule. Allowing projects so early on in the process to avoid the mandates of this rule is a severe undermining that is neither necessary nor appropriate. (183)

319. COMMENT: The stakeholder process for this rulemaking was initiated in 2010 when the State's economy was struggling, but it is now several years later and there is no longer any

compelling reason to reach back nine years to change rule applicability. If the proposed changes to the grandfathering provisions are adopted, projects that may not receive an actual municipal construction permit for many years into the future would be exempt from these rules. This rulemaking would place additional riparian zone public trust resources at risk. This grandfathering provision should be stricken from the final rule. (30 and 189)

320. COMMENT: The proposed grandfathering provisions are much broader than those adopted in 2007 and are made retroactive to that date, which will allow projects that should not be built to go forward. (177)

RESPONSE TO COMMENTS 314 THROUGH 320: In implementing the FHACA Rules that became effective November 5, 2007, the Department determined that the "grandfathering" provisions at N.J.A.C. 7:13-2.1(c)4i were unintentionally limiting. The 2007 FHACA Rules greatly expanded the Department's jurisdiction through the incorporation of 50, 150, and 300-foot riparian zones, enforcement of standards in New Jersey's tidal flood hazard area areas, which had previously been exempt from the FHACA Rules, and many other new construction standards. The purpose of previous N.J.A.C. 7:13-2.1(c)4i was to ensure that projects that did not require a coastal or flood hazard area permit prior to November 5, 2007, but that possessed all other necessary approvals to enable construction prior to that date, would not be subject to the 2007 FHACA Rules. Grandfathering projects that were ready to begin construction prior to November 5, 2007, was appropriate because these projects would generally have undergone several years of planning and design, and had received all necessary Federal, State, county, and

municipal reviews and approvals, prior to that date and requiring such projects to meet the requirements of the FHACA Rules would have placed an unreasonable burden on the applicants and led to many hardship exception requests.

However, unintentional limitations of N.J.A.C. 7:13-2.1(c)4i prevented many projects that had received municipal approvals, but had not yet received a final approval, from being completed. For instance, a property owner or developer may have received final site plan approval for a residential subdivision prior to November 5, 2007, which enabled construction of site infrastructure, including roadways, utilities, and stormwater management facilities, that was grandfathered. However, as final building approval for the individual lots in a subdivision is received only as each house is constructed, if the development site were located along a regulated water that had a 25-foot riparian zone prior to November 5, 2007, but a 150- or 300-foot riparian zone after that date under the 2007 FHACA Rules, a large portion of the site that had not previously been subject to the FHACA Rules became regulated. Since there is no provision in the FHACA Rules allowing the construction of multiple houses within the riparian zone, a property owner or developer who made financial investments and commitments and who may have already constructed site infrastructure, could not construct individual houses as planned. This was not the Department's intention in adopting the prior N.J.A.C. 7:13-2.1(c)4i.

Furthermore, the economic downturn that started prior to the effective date of the FHACA Rules curtailed work on developments that had been previously initiated. If economic conditions had been normal, developments begun several years before the revised rules became effective would continue to be built and would likely have received all necessary construction approvals prior to November 5, 2007, and would therefore be grandfathered under N.J.A.C. 7:13-2.1(c)4i.

However, many such projects were stalled by market changes and other economic forces beyond the control of the property owner or developer, with the result that the projects were not eligible for grandfathering despite the economic investments that had already been made.

To address these inequities created by the grandfathering provisions, the Department has changed N.J.A.C. 7:13-2.1(c)4i to recognize a broader set of local approvals as qualifying for grandfathering under the FHACA Rules. The adopted amendments track the grandfathering provisions in the SWM rules at N.J.A.C. 7:8-1.6(b)1. Under the adopted provisions, rather than grandfathering only those regulated activities for which a valid municipal approval was issued prior to November 5, 2007, enabling commencement of construction of the regulated activity on a specific lot and/or easement, the provisions as proposed to be amended will grandfather regulated activities for which any one of five different types of approvals under the Municipal Land Use Law was obtained prior to November 5, 2007: (1) a preliminary or final site plan approval, (2) a final municipal building or construction permit, (3) a minor subdivision approval where no subsequent site plan approval is required, (4) a final subdivision approval where no subsequent site plan approval is required, or (5) a preliminary subdivision approval where no subsequent site plan approval is required.

321. COMMENT: The five proposed exemptions at N.J.A.C. 7:13-2.1(c)4i could encompass a lot of projects, including anything with preliminary approval. How many acres will this impact? How many of these are located on Category One streams? Why is hardship going back to 2007, and are there any statistics on how many projects/acres this may impact? Economic downturns from eight years ago do not justify reduced protection of riparian areas. (1)

RESPONSE: As noted in the Response to Comments 314 through 320, the purpose of prior N.J.A.C. 7:13-2.1(c)4i was to ensure that projects that did not require a coastal or flood hazard area permit prior to November 5, 2007, but which possessed all other necessary approvals to enable construction prior to that date, were not subject to the 2007 FHACA Rules. Adopted N.J.A.C. 7:13-2.1(c)4i sets forth the types of approvals that, if obtained prior to November 5, 2007, would grandfather a project from the FHACA Rules. However, it should be noted that the adopted grandfathering provision applies to a very narrow scope of projects. Specifically, N.J.A.C. 7:13-2.1(c)4i addresses only those projects that are currently authorized under a valid approval listed at N.J.A.C. 7:13-2.1(c)4i(1) through (5) prior to November 5, 2007 and that are located outside the jurisdiction of both the FHACA Rules and CZM Rules as these rules existed prior to November 5, 2007. Such a project could therefore not have been located within the coastal zone (unless the project was exempt from the CZM Rules), the flood hazard area, or the 25-foot and 50-foot stream corridor that applied under the FHACA Rules prior to November 5, 2007. Furthermore, most projects located immediately outside the flood hazard area or prior stream corridor would have required incidental disturbance within these areas, such as the construction of utilities or a stormwater discharge, and therefore would have required a flood hazard area approval prior to November 5, 2007. Therefore, while the number of projects or area of land to which N.J.A.C. 7:13-2.1(c)4i would apply is not known, the Department is confident that the limitations enumerated above apply to a tightly circumscribed set of projects, which, if the requirements of the adopted FHACA Rules were applied, would create an undue hardship on the property owner.

N.J.A.C. 7:13-2.2 Regulated Waters

322. COMMENT: There are various instances where the protection of waters with drainage areas of less than 50 acres is greatly reduced. This is quite unfortunate because many of these types of waters constitute headwaters of larger waters. The Department must be cognizant of the fact that such headwaters are some of the most ecologically sensitive and critical areas from water quality protection and flood prevention perspectives. (155)

323. COMMENT: There should be no exceptions to protecting headwater areas. (128)

324. COMMENT: Adding to the list of waters not regulated by the FHACA Rules would severely compromise our State's existing riparian zone protections and should therefore not be adopted. (29 and 46)

325. COMMENT: The Department proposes the elimination of all buffer protections for small headwater streams that are located in a drainage area of less than 50 acres, undermining protection for these incredibly sensitive and critical flood prevention waterways. (91 and 195)

326. COMMENT: The proposed rule changes will result in more flooding and lower water quality because they curtail the scope of the Department's regulations, particularly in small

headwaters with less than 50-acre drainages that are not subject to the jurisdiction of the FHACA Rules. (193)

327. COMMENT: The Department should revise the proposed changes as they remove headwater protections. (49 and 87)

328. COMMENT: The change eliminates protections for headwaters. Small headwater streams are important for water quality and flood prevention, but these rules will eliminate buffer protections for all of these waterways that have a drainage area of less than 50 acres. Once these headwaters are destroyed, a cascading effect in water quality and flooding downstream will occur. (103)

329. COMMENT: Why would the Department want to encourage more construction in vulnerable areas while simultaneously dismantling the natural areas that provide protection? Please do not weaken the protection of riparian corridors and headwaters. (150)

330. COMMENT: The proposed amendment to the definition of regulated waters removes protection of headwaters because headwaters do not always have discernible channels. As such, the proposed amendment should be withdrawn. (28A, 42, 56, 67, and 127)

331. COMMENT: “Regulated waters” should include those natural segments with a drainage area of less than 50 acres, particularly for Category One waterways, without exception.

Headwaters are especially sensitive to loss of riparian buffer zones. Proposed rule changes that would completely eliminate riparian buffers for areas that have a drainage area of less than 50 acres will result in negative water quality impacts in low order streams with cascading effects to downstream water quality. (76)

332. COMMENT: Previously, streams were defined as a system of connected manmade and natural waterways. A good analogy is the circulatory system. Headwater areas are like the capillaries, streams are like the veins, and rivers are like the arteries of the State. Now, this rulemaking is changing the definition of connectivity and reducing stream buffers, which will lead to more development in flood prone areas. These proposed changes will only make water quality and flooding worse. Under the change of definition for a stream, the areas that get buffers are areas that are in the regulated portion of the stream under the stream encroachment rules. This would eliminate buffers and protections to critical headwater areas. These are areas that drain under 50 acres and do not fall under the stream encroachment rules, which only regulate streams over 50 acres. This would cause major clean water impacts that would destroy water quality and cause downstream flooding. (177)

RESPONSE TO COMMENTS 322 THROUGH 332: This rulemaking does not reduce protection of headwaters. Headwaters are naturally-occurring sources of a surface water, such as a spring or where surface waters coalesce into a discernible linear feature. The Department's June 1, 2015, notice of proposal had amended for clarity N.J.A.C. 7:13-2.2(a)3, which sets forth the waters draining less than 50 acres that are not subject to the requirements of the FHACA

Rules. These amendments did not, and were not intended, to amend the number of headwaters regulated under the FHACA Rules. Nevertheless, since the proposed clarifications created confusion and led some commenters to conclude that headwater protections were being reduced, the Department has not adopted any of the proposed amendments to N.J.A.C. 7:13-2.2(a)3 in order to allay any concerns that headwater protections were being amended. The Department is additionally not adopting clarifications that were proposed to the location of riparian zones at N.J.A.C. 7:13-4.1(c), which also were perceived by some commenters as reducing the number of tributaries that possess a riparian zone. Thus, headwater protections under the adopted FHACA Rules are the same as under the prior rules and have not been modified or reduced.

333. COMMENT: The FHACA Rules have been revised such that all State open waters draining less than 50 acres will be assigned a regulated floodplain and riparian zone. It is not clear how an area draining less than 50 acres can be classified as a State open water. Please provide a formal definition of State open waters. (15)

RESPONSE: Regulated waters having a drainage area of less than 50 acres do not possess a flood hazard area that is regulated under this chapter in accordance with N.J.A.C. 7:13-2.3(b). Further, as discussed in the Response to Comments 322 through 332, the added reference to State open waters that was proposed at N.J.A.C. 7:13-2.2(a)3i has not been adopted.

334. COMMENT: Studies have proven that not protecting the first 10 percent of the stream corridor, including the headwater areas that do not look like streams but are just corrugated areas

in the soil on a slight slope that perhaps ultimately become streams or are springs, means the health of that stream corridor is not protected. The macroinvertebrates that need to be in the water supply are not going to be there, and it has been shown that downstream impacts to a stream cannot be mitigated in the future. The stream can never be restored to a healthy condition if that first 10 percent is not protected. However, the Department plans to remove some of the more stringent protections from these areas. A clean and adequate water supply is the most basic health need, and New Jersey will not be an economically thriving State in the future without it. (158 and 180)

RESPONSE: As noted in the Response to Comments 322 through 332, the adopted amendments do not reduce the number of headwaters protected by the FHACA Rules. Further, runoff from development reaching any surface water is subject to the stringent water quality, groundwater recharge, and runoff reduction standards of the Department's Stormwater Management rules at N.J.A.C. 7:8. These standards, in conjunction with the protections to riparian zones and channels at N.J.A.C. 7:13-11.1 and 11.2, respectively, and the timing restrictions for work within regulated areas set forth at N.J.A.C. 7:13-11.5, ensure that this rulemaking will not adversely impact aquatic biota or the State's water supply.

335. COMMENT: The definition of regulated water violates the Federal definition of "Waters of the United States." Previously, New Jersey policy defined a regulated water as a connected system, regardless of whether the components of the water were manmade or naturally-occurring. However, under this rulemaking, the Department has changed the definition of

regulated water such that those segments of the water that are manmade are no longer considered a regulated water. This change will lead to more pollution and runoff as well as development in flood prone areas and is in violation of Federal regulations, which defines the entire system as a water. (177)

RESPONSE: It is unclear why the commenter believes that the FHACA Rules as adopted are contrary to the Federal definition of "Waters of the United States." Further, as noted in the Response to Comments 322 through 332, the proposed amendments to regulated waters at N.J.A.C. 7:13-2.2(a)3 have not been adopted in order to underscore that the Department is not reducing headwater protections under this rulemaking.

336. COMMENT: The Department is redefining historically naturally occurring streams that have been converted into a pipe, culvert, or bridge as a non-regulated water. This action is contrary to the requirements of statutory law and will encourage development right up to the edge of the pipe, culvert, or bridge. Removal of the riparian zone along waters that have been converted into a pipe, culvert, or bridge will decrease the area's natural ability to slow, infiltrate, and filter runoff. This decreased capacity could increase flooding downstream. Also, roads are notorious in their ability to channel runoff directly into a stream without the benefits of a buffer. Removing the riparian zone around a bridge channels this runoff without the benefits of the riparian zone, exacerbating flooding and damaging water quality. Given the Department's acknowledgement of the benefits of buffers and the acknowledgment that overall water quality in

New Jersey is unacceptable, the Department should not reduce the riparian zone along any feature. (28A, 42, 56, 67, and 127)

RESPONSE: Pursuant to N.J.A.C. 7:13-2.2(a), all waters in the State are regulated under the FHACA Rules unless they are identified as exempt under that subsection. The Department had proposed to amend the exemptions applicable to segments of water that have a drainage area of less than 50 acres at N.J.A.C. 7:13-2.2(a)3 to distinguish between a water confined within a lawfully existing, manmade drainage feature such as a ditch, channel, or basin (see proposed N.J.A.C. 7:13-2.2(a)3iii) and a water confined within a lawfully existing conveyance structure such as a pipe, culvert, or bridge (see proposed N.J.A.C. 7:13-2.2(a)3iv). Pursuant to N.J.A.C. 7:13-2.3(b), a regulated water with a drainage area of less than 50 acres does not possess a flood hazard area. Further, as stated in the Response to Comments 347 and 348 of the Department's November 5, 2007 notice of adoption of the FHACA Rules at 39 N.J.R. 4620, and as codified at N.J.A.C. 7:13-2.3(c)1v and illustrated at N.J.A.C. 7:13-4.1(e) and (f), a regulated water that is enclosed within a lawfully existing pipe, culvert, or bridge, does not possess a riparian zone since disturbance of vegetation in an area where a regulated water is enclosed does not impact the functionality of the watercourse ecosystem. Therefore, a regulated water that has a drainage area of less than 50 acres and is confined within a lawfully existing conveyance structure does not possess either a flood hazard area or a riparian zone. For this reason, the Department had proposed at N.J.A.C. 7:13-2.2(a)3iv to exempt from regulation this class of waters. However, as the commenter notes, where a naturally-occurring stream has been enclosed within a pipe, culvert, or bridge, exempting such waters from regulation would inappropriately allow

individuals to channel stormwater runoff directly into the pipe, bridge, or culvert and thereby bypass the riparian zone protections upstream and downstream of the structure. Therefore, the proposed bifurcation of N.J.A.C. 7:13-2.2(a)3ii is not adopted.

337. COMMENT: For proposed N.J.A.C. 7:13-2.2(a)3iii, change "The water is confined within a lawfully existing, manmade [conveyance structure or] drainage feature, such as a [pipe, culvert,] ditch, channel, or basin …" to "The water is confined within a lawfully existing, manmade [conveyance structure or] drainage feature, such as a [pipe, culvert,] ditch, or basin ...." (158, 159, and 180)

RESPONSE: It is not clear why the commenter suggests deleting the example “channel” from the list of manmade features that are covered by N.J.A.C. 7:13-2.2(a)3iii as this would not change the meaning of the provision. The Department has therefore not adopted the commenter’s suggestion.

N.J.A.C. 7:13-2.3 Regulated Areas

338. COMMENT: The definition of a riparian zone has been revised to include not only the region offset from a main channel but also the main channel itself. Please clarify whether, in the event that riparian impacts exceed the maximum allowable, the impacts in the main channel will require riparian mitigation. If so, this would represent a second, duplicative layer of mitigation

since the FWPA Rules already require mitigation for the loss of State open waters. Such duplication is discouraged elsewhere in the rules. (15)

RESPONSE: The definition of riparian zone has not been amended under this rulemaking. As defined at N.J.A.C. 7:13-1.2, "riparian zone" means "the land and vegetation within and adjacent to a regulated water as described at N.J.A.C. 7:13-4.1 and illustrated at N.J.A.C. 7:13-2.3." Similarly, N.J.A.C. 7:13-2.3(a)2 under the prior rules provides that "The regulated water itself is also part of the riparian zone," and this provision has been continued at N.J.A.C. 7:13-2.3(c). Since the channel is part of a regulated water, vegetation within the channel of a regulated water is protected under this chapter and, where disturbance to vegetation exceeds the allowances under N.J.A.C. 7:13-11.2, mitigation is required in accordance with N.J.A.C. 7:13-13. This mitigation, which focuses on the benefits and functions provided by riparian zone vegetation, is separate from mitigation that may be required under the FWPA Rules, which focuses on the benefits and functions provided by freshwater wetlands. Since freshwater wetlands and riparian zones provide important water quality and habitat functions, where disturbance is proposed within an area that is designated as both a freshwater wetlands and a riparian zone, and where disturbance to these resources exceeds allowable limits, it is appropriate for permittees to provide both freshwater wetlands mitigation in accordance with N.J.A.C. 7:7A-15 and riparian zone mitigation in accordance with N.J.A.C. 7:13-13 to fully offset potential adverse impacts to the environment.

339. COMMENT: With reference to N.J.A.C. 7:13-2.3(c), the change to remove protections along a naturally occurring stream that had been piped violates the goals of the authorizing statutes. Under the Federal definition of "Waters of the United States," these streams would be considered a regulated water because a waterway is regulated under the Federal definition even if it has been placed in a bridge, culvert, or pipe (See 40 CFR 230.3(o)(3)(iii)). Given the obligation under Federal and State laws to protect and improve water quality, this provision would be less stringent than the Federal law. New Jersey's regulations cannot be less stringent. (28A, 42, 56, 67, and 127)

RESPONSE: N.J.A.C. 7:13-2.3(c)1v appropriately relieves regulated waters enclosed within a lawfully existing pipe, culvert, or bridge from riparian zone requirements since disturbance of vegetation in an area where the water is enclosed does not impact the functionality of the watercourse ecosystem, however, as discussed in the Response to Comment 336, and as set forth in the definition of "water" at N.J.A.C. 7:13-1.2, "a naturally-occurring water that is piped, relocated, or otherwise modified remains a naturally-occurring water for the purposes of this chapter." Bridges and culverts along regulated waters are additionally subject to stringent requirements to protect low-flow aquatic passage and new requirements for terrestrial passage, which will help to reduce habitat fragmentation. Furthermore, there is no Federal requirement for states to adopt regulatory buffers along surface waters.

340. COMMENT: The Department's explanation that lined channels or ditches do not function as a natural feature ignores that many of these systems discharge into natural streams.

This is especially true if the feature had been natural. Thus, protecting water quality that flows into these manmade structures protects that water quality and quantity that flows out of these manmade structures and into natural waterways. (28A, 42, 56, 67, and 127)

RESPONSE: N.J.A.C. 7:13-2.3(c)1vi provides that "any lawfully existing, manmade open channel that was created to convey stormwater" does not possess a riparian zone, provided the channel is "fully lined with manmade impervious material, such as a concrete low-flow channel within a stormwater basin or a ditch completely lined with concrete or asphalt." In many cases, these waters have been created in areas that are not otherwise regulated under this chapter and tend to flow through highly developed or previously disturbed areas, such as within stormwater management structures. It has been the Department's experience that these manmade waters and the land that borders them do not provide the beneficial functions of a natural channel and riparian zone, and therefore, protecting vegetation along such features is not appropriate. While such features often discharge into naturally-occurring regulated waters, such waters possess a riparian zone and are therefore suitably protected.

341. COMMENT: The rulemaking states that a riparian zone will not be assigned to manmade waterways created to convey stormwater as long as the waterway is lined with impervious material. The New Jersey Turnpike Authority owns and maintains several miles of roadside ditches lined with either grass or riprap. This proposed rule change implies that such ditches will be assigned a riparian zone upon adoption of the new rules. Please clarify as to whether that is the intention and if that is the case, whether such ditches draining less than 50 acres will be

assigned a riparian zone. Please address this question for both existing ditches and those constructed in the future. (15)

RESPONSE: Under N.J.A.C. 7:13-2.2(a)3ii, manmade features, such as ditches, with a drainage area of less than 50 acres that did not historically possess a naturally-occurring, discernible channel are not regulated under this chapter. As such, no flood hazard area or riparian zone exists along such features. However, ditches that have a drainage area of 50 acres or more possess both a flood hazard area and riparian zone, pursuant to prior and existing N.J.A.C. 7:13-2.3. A new exception is made at N.J.A.C. 7:13-2.3(c)1vi for ditches fully lined with manmade impervious material, as discussed in comment 340 above.

N.J.A.C. 7:13-2.4 Regulated Activities

342. COMMENT: The additions made to the regulated activities found in N.J.A.C. 7:13-2.4(a) are good additions that should be maintained as they all involve activities that can and do impact flooding, flood damages, and flood levels and have a direct effect on the carrying capacity of neighboring waterbodies. (183)

343. COMMENT: Adding language to assure converted non-residential buildings meet residential standards is very good, especially in urban areas where buildings are re-purposed. (1)

RESPONSE TO COMMENTS 342 AND 343: The Department acknowledges these comments in support of the rules.

N.J.A.C. 7:13-2.5 Applicability Determination

344. COMMENT: The allowance for an applicability determination in two circumstances (whether a particular activity is regulated and whether a particular water is regulated) adds another level of flexibility for permits. This amendment is supported as it will hopefully provide additional support to prospective applicants and developers while eliminating unnecessary applications for eligible projects. In addition, the removal of the existing expiration date for an applicability determination is supported, provided the specifications of the project remain the same, as noted in the notice of proposal. (119)

RESPONSE: The Department acknowledges this comment in support of the rules.

345. COMMENT: In light of there being no time limit for a decision on an applicability determination, would it be helpful to indicate when the applicability determination is needed by the applicant? (157)

RESPONSE: As noted in N.J.A.C. 7:13-2.5(a), “An applicability determination is optional, but the Department encourages persons to request one if there is uncertainty about whether a

particular water or activity is regulated, since conducting unauthorized activities may result in enforcement action."

346. COMMENT: The Department should keep the current 30-day deadline for processing applicability determinations. (37, 59, and 148)

RESPONSE: The prior FHA rule provided that, workload permitting, an applicability determination will be issued within 30 days of receipt of the application materials. This is not a deadline by which applicability determinations must be processed but rather an estimate of the time frame by which the Department should be able to process an applicability determination. However, there are several factors that affect the length of time necessary to review a request for an applicability determination, which are not under the Department's control, such as the availability of staff and the number of other applications being processed by the Department. In some cases, the Department can respond to a request for an applicability determination within several days, but where additional mapping, topography, or site plans are necessary, the applicability determination may take longer to process. Rather than provide an approximate time frame by which the Department may be able to process an applicability determination request, and thereby unintentionally mislead applicants, this statement has been deleted.

347. COMMENT: The existing requirement that an applicability determination expires within five-years of issuance or where site conditions change should not be deleted. With development, weather patterns, and land use practices so constantly in flux, including changes resulting from

climate change, it is important that there be an outside and obvious time boundary on how long a determination remains viable, while allowing the flexibility of earlier expiration where site conditions warrant. (183)

RESPONSE: Under N.J.A.C. 7:13-2.5(g), "amendments to this chapter, changes in site conditions, changes to the limits of the flood hazard area, floodway, or riparian zone, and/or changes to proposed activities may result in the water in question or proposed activities becoming regulated." Therefore, an applicability determination is valid only so long as these factors remain unchanged. This clarifies and expands language continued from previous N.J.A.C. 7:13-5.1(g). Since it cannot be anticipated if or when the factors listed at N.J.A.C. 7:13-2.5(g) may occur, placing a specific expiration date on applicability determinations is not appropriate.

348. COMMENT: Copies of signed and sealed plans should not be required to request an applicability determination as such a request would occur early in the planning process when site plans are not yet finalized. By eliminating this requirement, it will help reduce project costs. (11, 37, 59, and 148)

RESPONSE: Site plans, signed and sealed by an engineer, land surveyor, or architect, are required only where an applicant requests a determination whether a proposed activity is regulated under the FHACA Rules. This is necessary since the Department cannot determine whether an activity is regulated unless the applicant provides details regarding the size, shape, and location of the activity. It should be noted that conceptual plans in some cases provide

sufficient detail for the Department to determine applicability under N.J.A.C. 7:13-2.5. Prospective applicants are encouraged to contact the Department to determine whether the level of detail provided by a conceptual plan is sufficient for the Department to determine applicability for a given proposed activity.

349. COMMENT: The Department should adopt a uniform policy regarding how applicability determinations are processed and, where practicable and allowed by law, permit licensed professionals to make these determinations. (37 and 148)

RESPONSE: The process by which the Department will review and respond to a request for an applicability determination is set forth at N.J.A.C. 7:13-2.5(f). Applicability determinations are an optional service provided to prospective applicants who are uncertain about whether a particular water or activity is regulated. Since conducting unauthorized activities may result in enforcement action, it is appropriate that the Department issue applicability determinations rather than licensed professionals.

Subchapter 3. Determining the Flood Hazard Area and Floodway

General Comments

350. COMMENT: The Department has recently been requiring a hydrologic analysis of flood flows within a regulated water that ignores existing attenuation provided by certain types of existing infrastructure within the watershed. The Department has indicated this new policy is based on recent experiences during flood events, such as Hurricane Sandy. For example,

hydrologic routings are allowed for railroad culverts but not for other bridges or culverts that are not regularly inspected. Nevertheless, the existing and proposed FHACA Rules do not include guidance on this topic. Current Department policy requires an increase of 25 percent to flow rates and the addition of one foot of freeboard to the water surface elevation for Department-approved fluvial flows as an additional factor of safety. However, most of the current Department delineations do account for some flood storage within the contributory watershed since the delineations have been based on gauge data or are calibrated against historic flows that account for existing storage in some manner. It is important that the Department clarifies and explains any new policies and criteria and compares them with the current methods used in Department delineations to ensure the resulting analyses do not produce overly conservative results. (28)

RESPONSE: The Department recognizes that existing road crossings along many regulated waters prevent the free flow of flood waters, which therefore serves to temporarily hold and attenuate peak flow rates downstream of these crossings. When calculating the peak flow rates downstream of these crossings for the purposes of delineating the extent of the flood hazard area, the Department does not generally allow peak flow rate attenuation that results from these crossings to be considered. This is appropriate because many such road crossings are damaged or destroyed during storm events, thereby reducing or eliminating the attenuation provided by these crossings. Calculating a regulatory peak flow rate that considers an attenuated flow rate in such cases may therefore severely underestimate the extent of downstream flooding and result in flood mapping that is not sufficiently protective of public safety. However, the Department

notes that the likelihood of failure for certain types of crossings is very small. Therefore, attenuation of peak flow rates in such cases may be appropriate where an applicant demonstrates that the resultant hydrologic modelling is suitably protective of public safety. In order to guide prospective applicants in this regard, the Department recommends that applicants discuss the feasibility of the use of attenuated peak flow rates prior to submittal of any application which seeks to delineate the limits of the flood hazard area. This holds true regardless of whether or not the attenuation is provided by a road crossing, a railroad crossing, or any other type of flood storage area.

Additionally, while the Department acknowledges that some flood studies may rely on gauge data, which may include a degree of attenuation, these flood studies are limited to the larger watercourses where many years of statistically-relevant data exists upon which to rely with respect to the validity of the reported peak flow rates used for regulatory purposes. Such statistically-significant data is not generally available for unstudied regulated waters.

The Department further notes that the required 25 percent increase in the calculated 100-year peak flow rate used to determine the peak flow rate for the design flood elevation, as well as the one foot of freeboard required for roads and buildings in flood hazard areas, address issues other than attenuated peak flow rates. How peak flow attenuation is taken into account impacts what would happen to downstream properties and people should a crossing that constrains flow fail and whether those people and properties are adequately protected. In contrast, the 25 percent increase and the one foot of freeboard requirement are intended to provide a level of protection against the possibility of increased flooding resulting from factors including future development. The safety factors are therefore distinctly different from the use of attenuated peak flow rates.

351. COMMENT: Please clarify the procedure for establishing the design flood elevation in tidal and fluvial areas, including the design flood that should be utilized. For example, is the fluvial analysis based on 125 percent of the 100-year flow to establish the fluvial flood elevation? Are un-routed flows used to establish worst-case conditions? Are conservative fluvial flood elevations compared to the 100-year tidal flood elevation, which does not represent worst-case conditions such as the inclusion of sea level rise? (28)

RESPONSE: Flood elevations can be established in several ways in fluvial areas, in accordance with N.J.A.C. 7:13-3.2. In many instances, Department delineations and/or FEMA flood mapping may be available for a regulated water. Under Method 1 at N.J.A.C. 7:13-3.3, the flood hazard area design flood elevation is depicted on the Department delineation, while under Method 3 at N.J.A.C. 7:13-3.4(e), one foot is added to the FEMA 100-year flood elevation to determine the design flood elevation. In cases where both a Department delineation promulgated prior to January 24, 2013, and FEMA flood mapping exist for a fluvial area and the applicant does not choose to determine the flood hazard by calculation, the design flood elevation is the higher of Method 1 or Method 3, as indicated at N.J.A.C. 7:13-3.2(c)1.

In a tidal flood hazard area, the process is similar, except that under Method 2 at N.J.A.C. 7:13-3.4(d), the design flood elevation is equal to the FEMA 100-year flood elevation, as defined at N.J.A.C. 7:13-1.2. Department delineations and FEMA mapping do not incorporate sea level rise but rather depict the design flood under existing conditions. However, as noted in the response to comment 350 above, both the additional 25 percent increase to flow under Method 1

and the one foot of freeboard required for buildings and roadways under the FHACA Rules serve to address the possibility of increased flooding.

Applicants may alternately choose to approximate the design flood elevation under Method 5 at N.J.A.C. 7:13-3.5 or to self-calculate the design flood elevation under Method 6 at N.J.A.C. 7:13-3.6. Additionally, the use of FEMA's 100-year flow rate to calculate the design flood elevation under Method 4 is available in the cases set forth at N.J.A.C. 7:13-3.4(f). When calculating the design flood elevation under Methods 4 and 6, hydraulic modelling is based on the peak 100-year flow rate in tidal areas and 125 percent of this flow rate in fluvial areas. In some cases, both fluvial and tidal flooding may occur in an area, such as along a linear regulated water that is inundated by tidal backwater during the 100-year flood but that is fluvial for more frequent flood events. In such a case, compliance with the offsite impact limitations of N.J.A.C. 7:13-12.1(f) and/or (g) and/or 12.7 may necessitate undertaking a fluvial analysis of the regulated water in addition to relying upon and/or recalculating tidal flood elevations. The design flood elevation in such a case is the higher of the fluvial and tidal elevations.

352. COMMENT: It is a very serious concern that the Department is not requiring the adoption of the most recent flood hazard mapping, including FEMA maps and data collected from Superstorm Sandy. The State continues to default in its responsibility to protect the public from flooding. (177)

RESPONSE: Under the Department's January 24, 2013 emergency rulemaking, which was readopted on May 6, 2013, the FHACA Rules were amended to require applicants to utilize the

best available flood data. As indicated in the definition of "FEMA 100-year flood elevation" at N.J.A.C. 7:13-1.2 and as applied under Methods 2, 3, and 4 at N.J.A.C. 7:13-3.4, where FEMA has provided advisory or preliminary flood mapping that exceeds the flood elevation depicted on FEMA's effective mapping, the higher elevation must be used unless an applicant can demonstrate through a detailed hydrologic and hydraulic analysis that another flood elevation is appropriate at a given site. Further, where FEMA flood mapping depicts higher flood elevations than NJDEP flood mapping, FEMA's higher flood elevation must be utilized. An additional one foot is further added to FEMA's flood elevation in fluvial areas under Method 3. Therefore, the Department is utilizing the best available flood data provided by FEMA.

N.J.A.C. 7:13-3.6 Flood Hazard Area and Floodway Determined by Calculation (Method 6)

353. COMMENT: It is very wise that the Department is modifying the language at N.J.A.C. 7:13-3.6(c)1i to require a hydrologic analysis that considers existing land use coverage as opposed to simply existing development conditions. Land use cover, including different types of vegetation from lawnscapes to forests, can have a significant impact on the outcome of the calculation – having this more precise capture of the existing condition for purposes of this calculation is wise. (183)

RESPONSE: The Department acknowledges this comment in support of the rules.

354. COMMENT: It is good that the Department, at a minimum, continues to use 125 percent of the 100-year flow rate and flood for purposes of the calculations at N.J.A.C. 7:13-3.6(c)1ii. Doing so ensures the additional protection necessary to account for future development, to recognize possible variabilities in hydrologic modeling, to consider temporary blockages to culverts and other hydraulic impediments, and to allow for error, bias, manipulation, and changing conditions. But given the dramatic effect of climate change on sea level rise, and the number, duration, and intensity of storm events in New Jersey, it would be more appropriate for the rules to be focused on the 500-year event. This would ensure that we are not continuing to build structures that will be the subject of flooding and flood damages in the foreseeable future given climate change predictions for our region. (183)

RESPONSE: The FHACA at N.J.S.A. 58:16A-55.2 generally authorizes the Department to regulate the "making, rebuilding or renewing of any structure or alteration and the development or use of land in the area which would be inundated by the 100-year design flood of any nondelineated stream." The Department therefore regulates the 100-year design flood of all nondelineated streams in accordance with N.J.S.A. 58:16A-55.2 and, as noted by the commenter, includes the 25 percent factor-of-safety to account for potential future increases in flood discharges. The Department also regulates flood hazard areas of certain streams under delineations adopted in accordance with N.J.S.A. 58:16A-52 and may, as appropriate, revise or otherwise update those delineations as appropriate in the future.

Subchapter 4. Determining the Riparian Zone

N.J.A.C. 7:13-4.1 The Riparian Zone

355. COMMENT: Across the board, protective measures should be maintained to protect the many benefits that buffers provide, such as water quality improvements and flood attenuation. Generally speaking, the minimum protective width of 50 feet mandated is effective for stream stabilization, but in order for riparian areas to support healthy populations of many wildlife species, a 300-foot buffer is recommended for all streams in New Jersey. For water quality benefits, a minimum of a 100-foot buffer is recommended. And to realize measurable flood attenuation benefits, 25 feet beyond FEMA's 100-year floodplain is recommended. These recommended widths may need to be increased depending on species present, as well as the presence of steep slopes and highly erodible soils. (30 and 189)

356. COMMENT: The importance of streamside buffers in protecting and enhancing water quality cannot be overstated. In addition to preventing water pollution, buffers enhance the health of stream ecosystems, allowing them to provide important services that further reduce the impacts of water quality pollutants to downstream environments. The scientific literature supports the conclusion that a minimum of a 100-foot riparian buffer must be maintained to provide both the upland and instream services necessary to protect the water quality of adjacent streams and rivers. Although the optimal buffer width may vary from site to site, a 100-foot fixed-width minimum buffer policy is both scientifically supported and administratively simpler to implement with larger buffer requirements being important and necessary for preserving the health and integrity of anti-degradation waters. Furthermore, minimum 100-foot buffers not only

help filter out pollution but preserve the instream ecological systems that help remove pollution, which benefits aquatic life and animal life but also protects drinking water, and recreation in the form of fishing, swimming, wading, and boating, as well as protects and enhances the fair market value of nearby homes.

Forests and riparian vegetation play an important role in ensuring stormflows are stored and released gradually rather than immediately surging downstream in large flood pulses. The dissipation of flood energy will vary with the width of the riparian buffer in comparison with the channel width. It is essential to have riparian buffers that are wide enough to provide adequate flood control, damage reduction, erosion prevention, and the many other non-flood related benefits. Scientific evidence suggests that a minimum buffer of 100 feet is needed to provide essential flood protection benefits. Smaller widths do not adequately maintain most of the beneficial function of riparian buffers and therefore, are of much more limited value. One literature review found that for flood attenuation the science pointed to a range of widths from 65 feet to 492 feet. This review demonstrates that for flood attenuation a mandatory 100-foot minimum is actually on the smaller side of the range; a more conservative approach would actually mandate a larger buffer requirement closer to 250 feet. For example, modeled overbank flow widths for watersheds in Kansas indicate that a stream-buffer ordinance of 100 feet would not provide the maximum peak-flow attenuation for storms greater than the 10-year return interval, but 250-foot buffers would contain the average overbank top width for up to the 500-year storm. Given the above, the FHACA Rules should apply a 100-foot riparian zone along all streams that currently possess a 50-foot riparian zone. Furthermore, waters that USEPA has

determined are 303(d) water quality impaired streams should have a 150-foot riparian zone.

(183)

RESPONSE TO COMMENTS 355 AND 356: The Department acknowledges the essential functions provided by riparian zones and, for this reason, incorporates the most stringent Statewide stream corridor protection regulations in the nation. The Department additionally recognizes that differing riparian zone widths are appropriate depending on the resource value of a regulated water. Accordingly, the Department establishes a 300-foot riparian zone along Category One waters and upstream regulated waters located within the same HUC-14 watershed pursuant to N.J.A.C. 7:13-4.1(c)1. The Department additionally establishes a 150-foot riparian zone, pursuant to N.J.A.C. 7:13-4.1(c)2, along: (1) trout production waters and all upstream regulated waters; (2) trout maintenance waters and all upstream regulated waters within one mile; and (3) any segment of a regulated water flowing through an area that contains a threatened or endangered species, and/or present or documented habitat for those species, which is critically dependent on the regulated water for survival, and all upstream regulated waters within one mile. Upon review of the material provided by the commenter, the Department has determined that the 50-foot riparian zone widths set forth at N.J.A.C. 7:13-4.1(c)3 afford appropriate water quality protection, bank stabilization, temperature moderation, flood attenuation, and habitat protection for these waters. It is also worth noting that, in many cases the flood hazard area extends outward from the top of bank 100 feet or more. As such, areas outside of the 50-foot riparian zone are in many cases afforded additional protections under this chapter.

With regard to the commenters suggestion that all 303(d) water quality impaired streams should have a 150-foot riparian zone, many water quality impaired streams already possess 300-foot or 150-foot riparian zones under N.J.A.C. 7:13-4.1(c)1 and 2 as noted above. It has further been the Department's experience that water quality impaired waters in many cases flow through urbanized or developed areas that are largely devoid of vegetation. The purpose of establishing riparian zones under this chapter is to protect vegetated areas near regulated waters from indiscriminate clearing, cutting, and/or removal in order to preserve existing riparian zone functionality. Placing larger riparian zones along regulated waters in areas that are predominately developed does not increase water quality protections. Further, as the majority of vegetation in such cases lies within 50 feet of the top of bank, a 50-foot riparian zone provides adequate water quality protections. Therefore, the Department did not propose to expand the width of riparian zones under this rulemaking.

357. COMMENT: In all provisions regarding a mandatory buffer width for trout production waters, trout maintenance waters, and waters flowing through endangered or threatened wildlife or plant species habitat, there should be a provision that allows for a demonstration by interested parties regarding the appropriateness for mandating a wider buffer if needed to properly support the particular species associated with the waterway at issue. For example, there are a number of species of birds for which 300 feet or more are necessary to properly support the species. If it can be shown that regulated waters flow through habitat for a threatened or endangered species that require this larger buffer width, then the Department should have the authority to mandate it in any coastal zone, stormwater, or flood hazard area. (183)

RESPONSE: The Department believes that having predictable riparian zone widths is essential to provide consistent and predictable guidance to all interested parties on how the Department will exercise its jurisdiction in the two regulated areas established under this chapter: flood hazard areas and riparian zones. Further, the Department has reviewed the available literature and research regarding riparian zone widths and has determined that the riparian zones promulgated in the FHACA Rules provide suitable water quality protection, habitat preservation, stream channel stability, temperature moderation, and other important functions. Allowing the Department's riparian zone widths to be amended on a case-by-case basis would inject uncertainty into the permitting process. Without the ability to determine riparian zone widths with certainty prior to submittal of an application would create a difficult situation for both applicants and the Department as it would not be clear which riparian zone standards should apply to a particular development. Further, such a change would render applicability determinations and verifications under N.J.A.C. 7:13-5 and 6, respectively, ineffectual and undermine portions of these rules. Further, it should be noted that, pursuant to N.J.A.C. 7:13-5.3(e), where the Department determines that a verification is based on "inaccurate or incomplete information," the Department may "void the original verification and issue a new verification reflecting the actual conditions on the site." This provision ensures that flood hazard areas and riparian zone widths accurately reflect site conditions and provides an opportunity for interested parties to supplement information that was submitted to or otherwise available to the Department. Further, applicants seeking the Department's verification of the riparian zone on a

given site must provide public notice in accordance with N.J.A.C. 7:13-19, which provides interested parties an opportunity to comment on the accuracy of the contents of the verification.

Further, with regard to the protection of threatened or endangered species, N.J.A.C. 7:13-6.7(b)4 and 11.6(d) require that permitted "regulated activities shall not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species, and shall not jeopardize the continued existence of any local population of a threatened or endangered species." N.J.A.C. 7:13-4.1(c)2 additionally provides a 150-foot riparian zone along any segment of a regulated water flowing through an area that contains a threatened or endangered species, and/or present or documented habitat for those species, which is critically dependent on the regulated water for survival, and all upstream regulated waters located within one mile of such habitat (measured along the length of the regulated water). In addition, the Department's Stormwater Management rules at N.J.A.C. 7:8 set forth stringent water quality, groundwater recharge, and runoff quantity standards. Therefore, the protections afforded under N.J.A.C. 7:8 and N.J.A.C. 7:13 are suitably protective.

358. COMMENT: The Department should not cut stream buffers in half. Please consider keeping buffers 300 feet wide "along both sides" of Category One waters in N.J.A.C. 7:13-4.1(c)1, and keep them 150 feet wide "along both sides" of the other designated waters referenced by N.J.A.C. 7:13-4.1(c)2. Accordingly, it is suggested that the Department at N.J.A.C. 7:13-4.1(c)1 change the proposed language to the following: "The width of the riparian zone is 300 feet wide along both sides of any regulated water designated as a Category One

water, and all upstream regulated waters situated within the same HUC-14 watershed." (158, 159, and 180)

RESPONSE: The Department is not cutting riparian zone widths in half. Both N.J.A.C. 7:13-2.3(c) and 4.1(a) provide that the riparian zone lies “along both sides” of regulated waters. Further, as indicated in N.J.A.C. 7:13-4.1(b), the portion of the riparian zone located outside of a regulated water is measured landward from the top of bank. Accordingly, for a water subject to either a 150-foot or a 300-foot riparian zone, the 150 or 300-foot riparian zone is measured from the top of bank on both sides of the stream. Therefore, it is not necessary to reiterate that the riparian zone is on both sides of the regulated water in N.J.A.C. 7:13-4.1(c)1 and 2.

359. COMMENT: The FHACA Rules should not be modified to only apply the buffer mandate to regulated waters upstream from Category One waters, trout production waters, trout maintenance waters – the requirement that buffers be required on all tributaries instead of the more limited regulated waters category is important to ensure full protection for the waterways and watersheds that feed our higher quality waterways. To not mandate the riparian buffers be on all tributaries, as opposed to simply regulated waters, will actually result in less buffers upstream, which will result in an increase in polluted runoff and a decrease in the capacity of upstream tributaries that become less protected by buffers to help remove instream pollution. The result will be degradation of the C-1 and trout production and maintenance waters, thus violating the anti-degradation requirements of the Clean Water Act and implementing State laws. (183)

360. COMMENT: The modification that limits the riparian buffer mandate to only regulated waters, as opposed to all waters, flowing through threatened and endangered species habitats, and to only upstream regulated waters, will have the net effect of degrading water quality and healthy habitats necessary for providing best protection to species that are important ecologically and are most at risk from decline and/or extinction. To allow this degradation of habitat for threatened and endangered species (plant and/or animal), whether designated by Federal or State law, can result in illegal takings and habitat degradation. (183)

RESPONSE TO COMMENTS 359 AND 360: The Department has not reduced the number of headwaters that are regulated under the chapter or that possess a riparian zone. N.J.A.C. 7:13-4.1(c)1 sets forth 300-foot riparian zones along Category One waters and “all upstream tributaries” situated within the same HUC-14 watershed. Similarly, N.J.A.C. 7:13-4.1(c)2 sets forth 150-foot riparian zones along various waters “and all upstream waters (including tributaries).” Since the term "upstream tributaries" is not defined, some have interpreted these provisions as applying riparian zones to any surface water that eventually drains into a water with a 150 or 300-foot riparian zone, whether the surface water is regulated under this chapter or not. N.J.A.C. 7:13-2.2 sets forth the waters that are regulated under this chapter, N.J.A.C. 7:13-2.3(c) sets forth which regulated waters possess a riparian zone, and N.J.A.C. 7:13-4.1 sets forth the width of the riparian zone along both sides of various regulated waters. N.J.A.C. 7:13-4.1 does not expand, reduce, or alter the number of waters that possess a riparian zone. In order for a surface water to be subject to this chapter, and therefore possess a riparian zone under N.J.A.C. 7:13-2.3(c), the surface water must first meet the definition of a “regulated water” under

N.J.A.C. 7:13-2.2. However, in order to allay any concerns that the Department is reducing protections of headwaters under this rulemaking, the proposed replacement of the term "upstream tributaries" with "regulated waters" at N.J.A.C. 7:13-4.1 has not been adopted.

361. COMMENT: The riparian buffers mandate should apply "to all waters designated Category One under the Surface Water Quality Standards (N.J.A.C. 7:9B) and all perennial or intermittent streams that drain into or upstream of the Category One waters" within the associated HUC 14 drainage whether or not shown on the USGS Quadrangle Maps or County Soil Surveys. (183)

RESPONSE: Prior N.J.A.C. 7:8-5.5(h) stated: "Special water resource protection areas shall be established along all waters designated Category One at N.J.A.C. 7:9B and perennial or intermittent streams that drain into or upstream of the Category One waters as shown on the USGS Quadrangle Maps or in the County Soil Surveys, within the associated HUC 14 drainage." In contrast, the riparian zone protections provided by both the prior and adopted FHACA Rules do not rely on mapping as it has been the Department's experience that mapping can sometimes be outdated, incorrect, or difficult to obtain and therefore does not provide a reliable indication of the presence of a surface water (see 47 N.J.R. 1053-1054). Instead, the FHACA Rules broadly define "regulated waters" to include all surface waters except for manmade canals, coastal wetlands, and certain features that drain less than 50 acres (see N.J.A.C. 7:13-2.2). The FHACA Rules therefore establish 300-foot riparian zones along more Category One waters and tributaries than prior N.J.A.C. 7:8-5.5(h).

362. COMMENT: The buffer mandate for tributaries upstream from trout maintenance waters should not be limited to those tributaries located within one mile of the trout maintenance water – doing so will result in an increasing level of pollution and therefore a degradation of water quality. (183)

RESPONSE: As noted by the commenter, any trout maintenance water and all upstream regulated waters located within one mile of a trout maintenance water (measured along the length of the regulated water) possess a 150-foot riparian zone pursuant to N.J.A.C. 7:13-4.1(c)2ii. The location of the 150-foot riparian zone in relation to trout maintenance waters has not been proposed to be amended because the Department has determined that the existing protections afforded trout maintenance waters under this chapter are suitably protective of these resources.

363. COMMENT: For proposed N.J.A.C. 7:13-4.1(c)2, the Department is advised to change "[The] Except for regulated waters listed at (c)1 above, the width of the riparian zone along the following regulated waters is 150 feet [wide along both sides of the following waters not identified in (c)1 above]:" to "The width of the riparian zone along the following regulated waters is 150 feet wide along both sides of the following waters not identified in (c)1 above:". (158, 159, and 180)

NOTE: THIS IS A COURTESY COPY OF TIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 20, 2016 NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

RESPONSE: As indicated in response to comment 358 above, it is not necessary to reiterate that the riparian zone is on both sides of the regulated water. Once that is taken into account, the language suggested by the commenter is very similar to the adopted language and carries the same meaning.

364. COMMENT: Do not remove the Department's responsibilities for regulating riparian zones in areas containing acid-producing soil deposits. Should enforcement be transferred to the Soil Conservation Districts, do not reduce buffer widths to the 50 foot-width required by the NRCS. (158, 159, and 180)

RESPONSE: As discussed in the notice of proposal Summary at 47 N.J.R. 1052-1053, the Department has determined that establishing a 150-foot riparian zone along regulated waters flowing through areas containing acid-producing soil deposits resulted in unanticipated adverse environmental impacts. Soil Conservation District staff, who implement the standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90, are trained and equipped to guide prospective developers to design projects that will avoid exposing acid-producing soil deposits and mitigate any impacts resulting from exposure of such deposits during construction. It should be noted that neither the Soil Conservation Districts nor NRCS establish buffers along streams. However, regulated waters that possessed a 150-foot riparian zone under the previous FHACA Rules will possess a 50-foot riparian zone under N.J.A.C. 7:13-4.1(c)3 except where the presence of threatened or endangered species habitat and/or trout production or maintenance waters require a 150-foot riparian zone under N.J.A.C. 7:13-4.1(c)2.

365. COMMENT: The Department should not reduce riparian zone buffers near bridges, culverts, or stormwater management basins. Narrowing the buffers by bridge and culvert crossings will undermine stream protections and will actually lead to more flooding. Almost all of the impairments for water quality analysis and high quality streams are at road crossings; therefore, buffers by road crossings are the most vital. Allowing more developments in these areas makes impairments worse. This does not comport with science and the anti-degradation criteria in the Clean Water Act. (177)

RESPONSE: As stated in the Response to Comments 347 and 348 of the Department's November 5, 2007 adoption of the FHACA Rules at 39 N.J.R. 4620, and as codified at N.J.A.C. 7:13-2.3(c)1v and illustrated at N.J.A.C. 7:13-4.1(e) and (f), a regulated water that is enclosed within a lawfully existing pipe, culvert, or bridge does not possess a riparian zone since disturbance of vegetation in an area where a regulated water is enclosed does not impact the functionality of the watercourse ecosystem. However, pursuant to N.J.A.C. 7:13-2.2, all waters that have a drainage area of 50 acres or more are regulated under this chapter as well as all naturally-occurring waters that possess a discernible bed and bank irrespective of drainage area. Therefore, while a regulated water enclosed in a bridge or culvert does not possess a riparian zone, the water is regulated and subject to the requirements at N.J.A.C. 7:13-11.2 for activities within a channel, N.J.A.C. 7:13-11.7 where an existing bridge or culvert is being replaced, the stormwater management requirements of N.J.A.C. 7:13-11.2, and the Department's Stormwater Management rules at N.J.A.C. 7:8 where a project is a major development. As such, discharging

stormwater into a bridge or culvert is a regulated activity and, where part of a major development, is subject to the water quality, runoff quantity, and groundwater recharge standards of N.J.A.C. 7:8.

Regarding riparian zones along stormwater management basins, the exception from the riparian zone requirement for a lawfully existing stormwater management basin at N.J.A.C. 7:13-2.3(c)1v is appropriately continued from prior N.J.A.C. 7:13-2.3(a)2 without amendment. Stormwater management basins are manmade features designed to receive runoff from developed areas in order to provide water quality or quantity treatment of stormwater and/or to promote groundwater recharge. Frequently, stormwater management basins are constructed very close to or in the midst of developed areas, and there is little or no existing vegetated buffer around them to preserve or protect by imposing a riparian zone. In this aspect, stormwater management basins are similar to manmade lagoons, which are similarly exempted from riparian zones at N.J.A.C. 7:13-2.3(c)1vi. However, as set forth and illustrated at N.J.A.C. 7:13-4.1(g), riparian zones are applicable along naturally-occurring ponds or other surface waters that have been converted into and/or are being used as stormwater management basins. In cases where a stormwater management basin has been constructed on-stream (such that a regulated water flows into one end of a basin and out of the other end), while the basin itself does not have a riparian zone, the regulated water that flows into and through the basin does have a riparian zone. Finally, it should be noted that a stormwater management basin with a drainage area of 50 acres or more will, like any regulated water having a drainage area of 50 acres or more, possess a flood hazard area, pursuant to N.J.A.C. 7:13-2.3(b). Stormwater management basins that drain less than 50 acres are exempt from regulation under this chapter pursuant to N.J.A.C. 7:13-2.2(a)3ii.

N.J.A.C. 7:13-4.2 Determining if a Riparian Zone is Forested or Unforested

366. COMMENT: The adoption of more stringent standards for forested riparian disturbance is supported. In addition, consistency in the methodology for determining if an area is forested across the CZM Rules and Highlands rules is supported. (1)

RESPONSE: The Department acknowledges this comment in support of the rule.

367. COMMENT: In a determination of whether an area is "forested," you must delineate that area using the methodology found in the rules. In other applications where the forested condition is not a relevant regulatory parameter, must you delineate forested versus non-forested area anyway for the application to be considered administratively and technically complete? (157)

RESPONSE: The Department will apply the methodology under N.J.A.C. 7:13-4.2 only if there is reason to believe that an area is forested and additionally subject to requirements in this chapter related to forested areas. In such cases, the forest delineation will be required for an application to be considered administratively and technically complete. For example, under the individual permit standards for the construction of a new aboveground or underground utility line that results in the clearing, cutting, and/or removal of riparian zone vegetation, N.J.A.C. 7:13-11.2(k)5 requires that, to the maximum extent practicable, forested areas are not disturbed.

It would therefore be necessary for an applicant to delineate forested areas along the proposed utility line route in order to demonstrate that this requirement is met.

368. COMMENT: The proposed scoring system to determine whether a disputed region is forested or not effectively replaces the previous definition of a tree, which is proposed for deletion. The proposed scoring system will require extensive field measurements and the cost associated with this more complex evaluation will be significant for the applicant. Hence, the Department is urged to consider removing the point system from the new rules. (15)

RESPONSE: The method for determining whether an area is forested at N.J.A.C. 7:13-4.2 is not intended to replace the definition of “tree” but rather to determine if the trees in a given area have the size and density to constitute a forest. It is necessary to use this method only where the FHACA Rules have a requirement related to forested areas and where it is additionally unclear whether an area proposed for development constitutes a forest. For example, an “actively disturbed area” is defined to exclude forested areas. The individual permit standards for utility lines at N.J.A.C. 7:13-11.2(k) and (l) also require that, to the maximum extent practicable, forested areas are not disturbed. The Department anticipates that the majority of applicants will not propose activities within forested areas and therefore not be required to use the method at N.J.A.C. 7:13-4.2 and that, when it is necessary to employ that method, the method will not be either difficult or expensive to undertake.

369. COMMENT: Proposed N.J.A.C. 7:13-4.2(c) outlines the Department's method for determining if a riparian area is forested or unforested. The Department's method yields results that depart from the common understanding of the term "forested." This relates to the fact that under the proposed regulation a single plot of 25 feet by 25 feet that has only one tree (with a diameter of 12 inches or more) could qualify an entire half-acre as "forested" given the regulation's requirements that (1) where only one plot is used to measure forestation, the number of trees identified is automatically doubled and (2) as few as two trees (with a diameter of at least 12 inches) would qualify as a "forested area" under the regulation. Such minimal tree cover does not meet the commonly understood meaning of "forested." It also seems unlikely that such a small number of trees would have the 33 percent canopy coverage used to determine an existing forested area under New Jersey's No Net Loss Reforestation Act. (51 and 92)

RESPONSE: The commenter's example, while mathematically correct, is highly unlikely. It is important to note that the onsite methodology will only be applied in those cases where the Department and applicant disagree on whether an area meets the definition of forest after reviewing aerial photos and applying the grid system. A grid block must contain 33 percent or greater forest cover in order to be considered forest. An applicant is not required to perform onsite sampling unless the Department identifies additional areas of potential forest that were not identified by the applicant using aerial photography. Therefore, a site with one or two 12-inch diameter trees, as suggested by the commenter, would not appear forested on aerial photos, and therefore would not be a forest using the grid analysis. In such a case, there would be no need to apply the onsite methodology at N.J.A.C. 7:13-4.2.

370. COMMENT: As indicated in the notice of proposal, the values of a riparian forested buffer are scientifically proven of tremendous benefit for the natural resources and residents of the State. Because of the unquestionable value/ecosystem services they provide, any opportunity to be more stringent on protecting these forested riparian buffers is supported. Further, where a plot score of greater than 16 occurs, the entire plot as well as the adjacent plots are considered forested. This is also supported due to the ecosystem services all forested riparian buffers provide. However, where a plot scores less than 16 using the prescribed methodology, thereby deeming the area to be unforested, the adjacent half-acre plot is also deemed unforested. This is opposed. If there is the presence of a forested riparian buffer and it is not the land area of interest, the FHACA Rule should not be providing incentive/encouragement to eliminate that buffer. (183)

RESPONSE: The Department acknowledges that forested riparian zones generally provide greater water quality treatment, temperature moderation, habitat, bank stability, and erosion control than actively disturbed riparian zones, such as periodically maintained lawns or gardens, or actively farmed areas. For this reason, the FHACA Rules set forth more stringent standards for disturbance to forested riparian zones than for disturbance to riparian zone vegetation in an "actively disturbed area," which, as defined at N.J.A.C. 7:13-1.2, does not include forested areas or non-ornamental woody vegetation.

The methodology for determining if a riparian zone is forested or unforested at N.J.A.C. 7:13-4.2 is consistent with the methodology in the CZM Rules at N.J.A.C. 7:7-13.5 and is

supported by data from the U.S. Forest Inventory (USFI) Field Procedures Manual (U.S. Forest Service), Forest Statistics for New Jersey 1987 and 1999 (Griffith and Widmann, 2001), and Forests of the Garden State Resource Bulletin NE163 (Widmann, 2005). The USFI program provides an overall analysis of tree size Statewide and the percentage of such trees per acre in New Jersey's forests. Similar methodology has been used by the Department since 1996 in determining forested areas under the CZM Rules and since 2006 in the Highlands Water Protection and Planning Act Rules, N.J.A.C. 7:38.

It is important to note that the onsite methodology will only be applied in those cases where the Department and applicant disagree on whether an area meets the definition of forest after reviewing aerial photos and applying the grid system. To assist applicants in locating the outermost limits of the forest, where a sampled acre is determined to be forested, an area totaling one-half acre surrounding the sampled acre is also considered forested with the limit of the forested area being determined. Forested areas generally do not form linear boundaries with unforested areas, and therefore, it is unlikely that the limit of forested areas would coincide with a grid line. Consequently, a sampled acre found to be forested is typically surrounded by additional forested areas. An exception is made for those surrounding areas that are sampled by the applicant and that score less than 16 using the adopted methodology. In such a case, a sufficient number of plots must be sampled to delineate the forested portion of the surrounding area.

Similarly, in those cases where the Department and applicant disagree on whether an area meets the definition of forest after reviewing aerial photos and applying the grid system, where a sampled acre is determined to be unforested, an area totaling one-half acre surrounding the plot

is also considered to be unforested. This is appropriate since, as noted above, forested areas generally do not form linear boundaries with unforested areas, and therefore, it is unlikely that the limit of either forested or unforested areas would coincide with a grid line. However, N.J.A.C. 7:13-4.2(c)7 provides that the area totaling one-half acre surrounding an unforested plot may be considered forested if a site visit, photographs, or other information indicates that it contains forested areas.

Since the same methodology is applied to determining both forested and unforested areas, N.J.A.C. 7:13-4.2 is biased toward neither forested nor unforested areas. Accordingly, the rule is not providing an incentive for eliminating a riparian zone that is immediately adjacent to an unforested sampled plot. The Department has determined that this methodology appropriately accounts for forested areas that remain in dispute after reviewing aerial photos and applying the grid system.

Subchapter 5. Verifications

N.J.A.C. 7:13-5.3 Duration of a Verification

371. COMMENT: For proposed N.J.A.C. 7:13-5.3, an applicant should be able to rely on a flood hazard and riparian zone verification for at least five years. Applicants make decisions, sign contracts, and expend significant funds in reliance on riparian zone width determinations. (59)

RESPONSE: A verification is generally valid for either five years under N.J.A.C. 7:13-5.3(a) or for 10 years under N.J.A.C. 7:13-5.3(b) (when issued concurrently with an individual permit that

is valid for 10 years). However, the rules do provide an exception at N.J.A.C. 7:13-5.3(e), which provides that the Department can void a verification that it has determined is based on inaccurate or incomplete information and issue a new verification that reflects actual site conditions including, by way of example, where new information becomes available that reflects additional flood hazard areas or riparian zones identified after verification issuance or if a threatened or endangered species habitat is disclosed or discovered after the verification was issued. While the Department anticipates that it will infrequently void and issue new verifications under this provision, it is appropriately protective of public safety and the environment to provide the Department the ability to do so. Consistent with the goal of the chapter to ensure that this appropriate level of protection is achieved, the Department verifies the location of flooding on a site based on the best available data. If, subsequent to the issuance of a verification, the Department or FEMA adopts more accurate flood mapping that indicates flooding is deeper on a given site than previously understood, it would be unsafe for the owners of the site to rely on the approved verification, which was based on outdated flood mapping. In such a case, buildings could be constructed at an elevation below the actual flood elevation and subject the occupants to unnecessary flood damage.

N.J.A.C. 7:13-5.6 When a Verification is Required for Issuance of an Authorization under a General Permit or an Individual Permit

372. COMMENT: The elimination of verifications for public entities working in the existing rights-of-way is supported. As a public entity, we feel that this is a common-sense response to an existing problem that will save staff and taxpayer time. (119)

RESPONSE: The Department acknowledges this comment in support of the rule.

Subchapter 6. General Provisions for Permits-By-Rule, General Permits-By-Certification, and General Permits

General Comments

373. COMMENT: The new structure of the adopted 63 permits-by-rule, 15 general permits-by-certification, and 13 general permits allows for increased flexibility of permits while staying true to the intent of the rules. (119)

374. COMMENT: The expanded use of general permits-by-certification, additional new general permits, and steps to implement 19 new permits-by-rule for activities that have a *de minimis* impact on flooding and the environment is applauded. (11)

375. COMMENT: The expansion of permits-by-rule, general permits-by-certification, and general permits is welcome. (68)

376. COMMENT: The approach of offering permit-by-rule and permit-by-certification for activities that have a net conservation benefit, such as the activities promoted by the United States Fish and Wildlife Service Partners program, is generally supported. (45 and 152)

RESPONSE TO COMMENTS 373 THROUGH 376: The Department acknowledges these comments in support of the rules.

377. COMMENT: The Department is expanding the number and types of projects covered under permits-by-rule, general permits-by-certification, and general permits. While some changes make sense, a number of changes leave decisions to be determined by the applicant, reducing the likelihood that the disturbance will be minimized. (1)

378. COMMENT: Nineteen new permits-by-rule are proposed as well as 15 general permits-by-certification. These permits make it easier to build high-tension power lines through rivers, allow the drilling of gas pipelines under streams, open forests up for more logging, and allow greenhouses to be built in flood hazard areas. (103 and 141)

379. COMMENT: The Department is turning six general permits into 15 general permits-by-certification, which means engineers that work for developers will basically give themselves permits, thereby preventing Department review and limiting public input. This will also eliminate Department oversight on projects like road widening projects and bridge and culvert replacements. The Department further includes 63 permits-by-rule under this rulemaking, which

is much more than the existing rule. There needs to be oversight to make sure that activities under these permits will not cause environmental damage. (177)

380. COMMENT: The Department is proposing to add additional general permits, permits-by-rule, and permits-by-certification. These types of permits can only be promulgated if there is a finding that the proposal has a *de minimis* impact on the environment individually as well as cumulatively. The rulemaking does not discuss the Department's analysis demonstrating the compliance with this requirement. Further, general permits-by-certification require relying on a third party to ensure compliance with the Department's requirements. There is little assurance that the Department will have the staff to inspect these proposals prior to their construction and little evidence that enforcement actions will be taken in situations where the certifications were incorrect. (27, 28A, 42, 56, 67, 77, 122, 127, 138, 170, 173, and 190)

381. COMMENT: The Department's rulemaking to weaken its rules by authorizing permits without meaningful Department review is outrageous and should not be adopted. (71, 161, and 162)

382. COMMENT: The proposed changes do not explain how the Department will ensure that many projects will have a *de minimis* impact on the environment. (69)

383. COMMENT: The Department's attempt to "reduce regulatory burden and more reasonably balance the needs of riparian zone protection with the needs of community development" has resulted in a methodical and layered degeneration of natural resource and

hazard protection standards through the significant expansion of permits-by-rule and general permits along with the creation of computer generated permits-by-certification. The Department is urged to amend its rulemaking and to re-engage stakeholders on the many problematic issues in the rulemaking. (29 and 46)

384. COMMENT: In an attempt to streamline permitting processes and requirements, the Department has likely decreased its ability to assess cumulative environmental impacts in certain circumstances. (175)

385. COMMENT: These rules inappropriately remove Department oversight for numerous projects. (63, 73, 80, 166, 179, 187, 194, and 196)

386. COMMENT: These proposed changes chip away at the protection of New Jersey's water supply and quality from every direction including eliminating the Department's review of projects. (87)

387. COMMENT: The rulemaking eliminates Department review of projects. Permits-by-rule and general permits-by-certification are not subject to Department review. These permits are essentially a checklist, and when all the boxes are checked, a permit is issued. Engineers that work for developers will basically give themselves permits, preventing Department review. These permits limit Department oversight and eliminate its oversight on projects such as road widenings and bridge and culvert replacements. (83, 90, 103, 141, and 177)

388. COMMENT: The large number of activities eligible for general permits and general permits-by-certification is troubling. This stems from the Department's expressed concern regarding its lack of resources and staff. This lack of resources may translate into a lack of oversight, bending the Department towards the tendency of professional engineers to favor the applicant's interest over those of the public. (24)

389. COMMENT: The Department is improperly relying on the accuracy of certified engineers. The Department must deny a permit application if the applicant cannot demonstrate that the project poses no threat to public health, safety, welfare, and the environment. Certified engineers will be relied on to determine this. If an engineer does determine that the project poses no threat, the Department should reserve the right to deny the permit if it determines the engineer may be wrong. (28A, 42, 56, 67, and 127)

390. COMMENT: The new general permit process mirrors New Jersey's relatively new Site Remediation Program, which is currently suspect by the environmental community. Through the proposed rule, the Department will adopt as many as 15 general permits that will be managed similar to the Site Remediation Program wherein Department staff serves only to ensure that project timetables and reports are filed in a timely manner. The applicants or their consultants will ensure that all the technical, on-site procedures are followed according to the rules and regulations. Department staff will not, as a matter of the permit procedure, go to the site and provide recommendations, thereby eliminating an important voice for the State, the resources of

New Jersey, and the people who depend on those resources. With the new regulations, permittees are in primary control of their own permit oversight through the consultants they hire. A number of problems with the Site Remediation approach have been experienced; it is not working and should not be mirrored in the FHACA Rules. (183)

RESPONSE TO COMMENTS 377 THROUGH 390: Prior to this rulemaking, the FHACA Rules contained 47 permits-by-rule. As a result of several of the previously existing permits-by-rule being combined due to the similar subject matter they addressed, and 18 new permits-by-rule being added, the rules now contain a total of 62 permits-by-rule. Permits-by-rule authorize minor construction activities that, as noted by several commenters, the Department has determined in accordance with N.J.A.C. 7:13-6.2(b)1 will cause only minimal adverse impacts on flooding and the environment when performed separately and will have only minimal cumulative adverse impacts on flooding and the environment. As the Department has made these findings for the promulgated permits-by-rule, this rulemaking conforms to the requirements of N.J.A.C. 7:13-6.2, Standards for issuance, by rulemaking, of permits-by-rule, general permits-by-certification, and general permits. Examples of new permits-by-rule include removal of accumulated sediment and debris from a regulated water by hand (permit-by-rule 5), construction of barrier-free access to a building (permit-by-rule 15), and a construction of a fence along and/or across a regulated water to manage livestock (permit-by-rule 60). A person may undertake the specific regulated activity governed by a permit-by-rule without having to obtain prior written approval from the Department, provided all conditions of the permit-by-rule are satisfied. This is appropriate given the minor nature of the proposed development when

constructed in accordance with the specified conditions and the highly prescriptive limitations on disturbance to riparian zones and flood hazard areas under each permit-by-rule. Requiring individuals undertaking these *de minimis* activities to apply for a permit or to provide the Department with prior notice is therefore unnecessary.

Regarding general permits-by-certification, six of the general permits under the previous FHACA Rules have been adopted as general permits-by-certification, and several new general permits-by-certification have been adopted, for a total of 15 general permits-by-certification. Similar to activities authorized under permits-by-rule, the tightly circumscribed limitations on the activities that can be authorized under the promulgated general permits-by-certification obviate the need for a case-by-case evaluation by the Department of whether the proposed manner of conducting the activity meets the conditions of the permit. Upon successfully completing the Department's online application and certifying the truth and accuracy of the information provided, the online submission process creates a complete and certified record by the applicant regarding the activity to be conducted, including the name, address, telephone number, and e-mail address of the person responsible for conducting the activity and the property owner (if different) and the specific location of the activity. Further, applicants undertaking activities authorized under a general permit-by-certification must provide the public notice of the proposed activity, which is the same as a general permit or individual permit. Therefore, local government entities and landowners proximate to the development will have an opportunity to provide comments on the proposed activities to the Department. The Bureau of Coastal and Land Use Enforcement has committed to audit 50 general permits-by-certification in the first year of the program to assess compliance and take corrective action to either clarify the

certification requirements if the audit reveals widespread misunderstanding and/or take enforcement action to bring projects into compliance.

Regarding general permits, the FHACA Rules contain 13 general permits as a result of this rulemaking. Activities authorized under general permits constitute a subset of activities that would otherwise require an individual permit from the Department but, by placing strict limitations on riparian zone and flood hazard area disturbance, the Department is providing an incentive for applicants to adjust and sometimes reduce proposed development to meet the prescribed limits under a general permit. Additionally, Department staff reviews each application for authorization under a general permit according to the process set forth at N.J.A.C. 7:13-21. Therefore, Department staff will ensure that projects for which an authorization under a general permit has been requested meet the requirements of the general permit authorization being requested.

The Department will continue to use its enforcement powers to ensure that proper permits are secured for all regulated activities, that those activities are conducted within the strict limitations of the general permit, general permit-by-rule, or permit-by-rule authorization, or require an individual permit when the scope of the activity exceeds those limitations, that any violation is removed and the resource restored where appropriate, and that penalties are assessed in appropriate circumstances to discourage future violations of the rules or permit conditions.

Additionally, with regard to accepting certifications from New Jersey licensed professional engineers, as noted in the Response to Comment 289, the definition of “engineering certification” at N.J.A.C. 7:13-1.2 provides that, upon “clear and compelling evidence of a threat to public health, safety, welfare, and the environment, a New Jersey licensed professional

engineer employed by the Department can reject an engineering certification submitted under this chapter." This provision enables the Department to prevent an applicant from undertaking activities that could exacerbate flooding or adversely impact the environment should the submitted certification prove to be inaccurate.

391. COMMENT: Permits-by-rule 8, 9, 10, and 29, general permit-by-certification 6, and general permits 6, 8, 9, and 10 all contain the caveat that the project must not be a "major development" under the Department's Stormwater Management rules. This single caveat leads to the need for an individual permit, where it would otherwise not be required, and leads to unnecessary and redundant review of stormwater management by NJDEP staff. In all cases, a jurisdictional entity at the municipal or county level, or a highway agency such as NJDOT, is responsible for the review of stormwater management design for compliance under N.J.A.C. 7:8. For example, permit-by-rule 9 authorizes general construction activities within a tidal flood hazard area, which meet certain standards, provided the project, in combination with all proposed activities, does not constitute a major development. The reconstruction of a roadway that involves the disturbance of more than one acre of pavement, and which is only partly located within a flood hazard area, would not qualify for permit-by-rule 9 simply because the overall project is a major development. This is unnecessary and results in additional work for Department staff and applicants alike. The "major development" exclusion described above should be eliminated from these permits. (68)

RESPONSE: The Department's SWM rules at N.J.A.C. 7:8-1.2 define a "major development" as any project that "provides for ultimately disturbing one or more acres of land or increasing impervious surface by one-quarter acre or more." In some cases, activities authorized under the FHACA Rules constitute a major development and are therefore subject to the design, maintenance, and operational requirements of N.J.A.C. 7:8. Due to the differing scope of FHACA permits-by-rule, general permits-by-certification, general permits, and individual permits, authorization or approval under these permit types appropriately addresses activities constituting a major development differently.

The general permit-by-certification and general permits cited by the commenter are not prohibited from constituting a major development. General permit-by-certification 6 at N.J.A.C. 7:13-8.6(a)8 requires that, "where the project, in combination with all proposed activities, constitutes a major development, as defined at N.J.A.C. 7:8-1.2," the applicant must obtain "an engineering certification confirming that all applicable requirements of the Stormwater Management rules, N.J.A.C. 7:8, are met." Additionally, general permits 6, 8, 9, and 10, at N.J.A.C. 7:13-9.6(a)10, 9.8(a)11, 9.9(a)9, and 9.10(a)9, respectively, require that, "where the project, in combination with all proposed activities, constitutes a major development, as defined at N.J.A.C. 7:8-1.2, all applicable requirements of the Stormwater Management rules N.J.A.C. 7:8" must be met.

Regarding permits-by-rule, the activities authorized under permits-by-rule are minor in nature and generally limited in size and scope such that the majority of authorized activities do not constitute a major development. However, the permits-by-rule cited by the commenter authorize a broader scope of activities, which could potentially constitute a major development.

Since the Department does not review activities authorized under permits-by-rule, and given the potential adverse impacts to water quality, flooding, and groundwater recharge that a major development can cause if runoff is improperly controlled, it is appropriate that these permits-by-rule be limited to projects that do not constitute a major development. Consequently, should an activity that would otherwise meet the requirements of these permits-by-rule constitute a major development, an individual permit for the activity is required, thereby ensuring that the Department reviews stormwater management calculations and confirms compliance with N.J.A.C. 7:8.

392. COMMENT: Several proposed permits-by-rule are inappropriate and degrade the value of environmental protection by virtue of the fact that they ignore compliance with the Stormwater Management rules for projects that are major developments. For example, permits-by-rule 26, 30, and 41, which deal with turf fields, solar panels, and guiderails, respectively, are not limited by whether the activity constitutes major development under the Department's Stormwater Management rules and offer less protection than what exists in the current version of the rules. Note that many artificial turf fields are constructed with underdrains, wherein all runoff is collected and discharged. Increases in peak flow rates are readily apparent when you convert a natural field to an artificial turf field. It is quite easy to have an artificial turf field exceed one acre in size. As such, it is a major development, and the Stormwater Management rules are applicable. Under the existing FHACA Rules, the Department can issue a flood hazard area permit only if a project meets the Stormwater Management rules, which is appropriate, because all potential flooding impacts must be considered. Much of what should concern the

Department when it comes to flooding is a result of cumulative impacts. Therefore, collections of smaller, seemingly harmless projects, when considered together, can negatively impact flooding. That is why compliance with the Stormwater Management rules is important. Furthermore, since the Stormwater Management rules do not establish their own regulatory program, it is of vital importance that they appropriately be implemented through other rule sets at the State level. This rulemaking weakens such protections with these permits-by-rule. (118)

RESPONSE: The Department acknowledges that robust stormwater management is essential to preserving the quality of New Jersey's surface waters and ameliorating development's potential impact on flooding. For this reason, any activity that constitutes a "major development," as defined in the Department's Stormwater Management rules at N.J.A.C. 7:8-1.2, is subject to the water quality, runoff quantity, and groundwater recharge requirements of N.J.A.C. 7:8. As noted in response to comment 391 above, due to the minor nature and limited scope of activities authorized under a permit-by-rule, permitted-by-rule activities could not generally constitute a major development.

The Department notes, however, that in certain cases such as indicated by the commenter, activities authorized under a permit-by-rule could potentially constitute a major development. While unlikely, it is not impossible that the placement of solar panels and associated equipment under permit-by-rule 30 and the placement of a guiderail along a lawfully existing public roadway under permit-by-rule 41 could be large enough to constitute a major development. (Note that, as explained in response to comment 455 below, the Department has not adopted proposed permit-by-rule 26 for the placement of artificial turf on an existing athletic field.) In the

very limited cases where a permitted-by-rule activity does constitute a major development, the municipality in which the project is situated is required, as part of its NJPDES stormwater permit, to ensure that the requirements of N.J.A.C. 7:8 are met. However, in consideration of the possibility that a permitted-by-rule activity could constitute a major development, as suggested by the commenter, and in an effort to ensure that permits-by-rule authorize only minor construction projects that do not require municipal review of stormwater calculations in order to determine compliance with N.J.A.C. 7:8, the Department is proposing language at N.J.A.C. 7:13-6.7, as part of the Department's concurrent rulemaking to amend portions of the CZM and FHACA Rules published elsewhere in this issue of the New Jersey Register, requiring that an activity authorized under a permit-by-rule does not constitute a major development, except in select cases where the activity would temporarily disturb greater than one acre of land and therefore meet the definition of major development at N.J.A.C. 7:8-1.2, but not alter the quality, quantity, or recharge volume of runoff.

N.J.A.C. 7:13-6.2 Standards for Issuance, by Rulemaking, of Permits-By-Rule, General Permits-By-Certification, and General Permits

393. COMMENT: The proposed rules provide for less transparency and rely on mechanisms that preclude public involvement, including permits-by-rule, general permits, and general permits-by-certification. The Department should withdraw the rulemaking. (193)

394. COMMENT: These rules inappropriately remove public input for numerous projects. (63, 73, 80, 166, 179, 187, 194, and 196)

395. COMMENT: The proposed changes to the FHACA Rules are opposed. The shore was devastated by Superstorm Sandy three years ago. Now the Department is moving toward further shoreline annihilation. Cutting the community's voice out of these decisions is dangerous. (168)

RESPONSE TO COMMENTS 393 THROUGH 395: N.J.A.C. 7:13-6.2 establishes the standards for issuance by rulemaking of permits-by-rule, general permits-by-certification, and general permits. Specifically, this section provides that the Department will, in accordance with the rulemaking provisions of the New Jersey APA, promulgate each permit-by-rule, general permit-by-certification, or general permit after publication of a notice of rulemaking in the New Jersey Register and consideration of public comment. In addition to publication of a notice of rulemaking in the New Jersey Register, notice of the rulemaking is published on the Department's website and is provided electronically to those requesting to receive notice of Department rulemaking actions. Further, notice of the proposed rulemaking is provided to news media maintaining a press office to cover the State House Complex and to other media outlets.

While no further public comment is involved when a person undertakes an activity authorized under a permit-by-rule, these activities result in a *de minimis* impact to flooding and the environment and therefore do not warrant public input each time the activity is undertaken. Notice of an individual application for an authorization under a general permit-by-certification and general permit is required pursuant to N.J.A.C. 7:13-19.3 and 19.4, respectively, and

specification of the form of public notice of an application that must be provided is set forth at N.J.A.C. 7:13-19. The recipients of public notice of an application for an authorization under a general permit-by-certification and general permit are set forth at N.J.A.C. 7:13-19.3 and include: the municipal clerk, construction code official, environmental commission or other government agency with similar responsibilities, and planning board of each municipality in which the site is located; the local Soil Conservation District, as applicable; and all owners of real property, including easements, located within 200 feet of the property boundary of the site.

The Department believes that the adopted rules provide adequate notice and opportunity for comment both on the promulgation of permits-by-rule, general permits-by-certification, and general permits, and on individual applications for authorization under a general permit-by-certification or general permit.

396. COMMENT: For proposed N.J.A.C. 7:13-6.2(b)1, please add that the Department will promulgate a permit-by-rule, general permit-by-certification, or general permit only where the Department determines that the regulated activity will result in “minimal cumulative adverse impacts on soils that are especially vulnerable to erosion, such as most of the acid soils of the Coastal Plain that downcut rather than erode laterally, and are no longer able to overflow into their original riparian wetlands during bankfull storms.” (158, 159, and 180)

RESPONSE: The Department agrees with the commenter’s observation that some soil formations are more susceptible to erosion than others and that downcutting within streams can lead to increased erosion and sedimentation, as well as disconnection between the channel and

overbank areas, which can result in significant impacts on flooding and the environment. N.J.A.C. 7:13-6.2(b)1 specifies that the Department will promulgate a permit-by-rule, general permit-by-certification, or general permit only where the Department determines that the regulated activity will "cause only minimal adverse impacts on flooding and the environment when performed separately, and will have only minimal cumulative adverse impacts on flooding and the environment." As such, the Department evaluates a regulated activity's potential for erosion and downcutting, as suggested by the commenter, as part of its determination that a regulated activity meets the requirements of N.J.A.C. 7:13-6.2(b)1. Accordingly, the concern reflected in the commenter's suggested language is already addressed by the rule.

N.J.A.C. 7:13-6.3 Use of a Permit-By-Rule, or an Authorization Pursuant to a General Permit-By-Certification or a General Permit to Conduct Regulated Activities

397. COMMENT: The Department is advised to add the following as a new provision under N.J.A.C. 7:13-6.3: "A permit-by-rule or an authorization under a general permit-by-certification or general permit does not relieve the Department from ensuring the person conducting the authorized regulated activities from the obligation to obtain any other applicable permits or approvals required by law." (158, 159, and 180)

RESPONSE: N.J.A.C. 7:13-22.2 sets forth conditions that apply to all permits, including activities conducted under a permit-by-rule, as well as authorizations under a general permit-by-certification or general permit. N.J.A.C. 7:13-22.2(c)3 requires that, "The permittee shall obtain

all applicable Federal, State, and local approvals prior to commencement of regulated activities authorized under a permit." N.J.A.C. 7:13-6.3(d) additionally provides that, "a permit-by-rule or an authorization under a general permit-by-certification or general permit does not relieve the person conducting the authorized regulated activities from the obligation to obtain any other applicable permits or approvals required by law." Therefore, the substance of the commenter's suggestion regarding the applicant's obligation to obtain all other required authorizations is already incorporated under this chapter. To the extent the commenter's suggested language is intended to impose upon the Department an obligation to ensure that any and all Federal, State, and local approvals necessary to construct a project are obtained prior to the Department issuing a permit, such a requirement is untenable and would preclude the Department staff from addressing those concerns that are within its authority and expertise.

N.J.A.C. 7:13-6.4 Use of More than One Permit on a Single Site

398. COMMENT: The allowance for the use of more than one permit-by-rule, general permit-by-certification, or general permit on a site needs to be explicit that when determining whether the individual limits and conditions of these permit options are or are not exceeded, this determination must be based upon a cumulative consideration of the projects at the single site at issue. (183)

RESPONSE: Under N.J.A.C. 7:13-6.4(a), a person may undertake a regulated activity more than once on a single site. The activity may be authorized each time under a single permit-by-rule,

general permit-by-certification, or general permit, provided the individual limits and conditions of the permit are not exceeded. As indicated in the Summary of the notice of proposal at 47 N.J.R. 1123, this requirement is necessary to ensure that the cumulative total of any adverse environmental impacts on a given site as a result of the use of the permit is minimal and to ensure that a person does not exceed or circumvent a particular limit or condition of a given permit when various authorizations that pertain to one site are considered collectively. Accordingly, utilizing permit-by-rule 12 at N.J.A.C. 7:13-7.12, which allows construction of additions to a habitable building that increase the footprint of the building by up to 400 square feet cumulatively since November 5, 2007, there could be two additions that each increase the footprint of the building by 200 square feet for a cumulative total of 400 square feet provided all other conditions of the permit-by-rule are met. However, in accordance with N.J.A.C. 7:13-6.4(c)1, after those two additions, no further additions would be authorized under that permit-by-rule, regardless of the passage of time or change of ownership. Similarly, under N.J.A.C. 7:13-6.4(b), one or more permits-by-rule, general permits-by-certification, and/or general permits may be used on a single site to conduct different activities on that site, provided the individual limits and conditions of each permit are not exceeded. Accordingly, as indicated in the notice of proposal Summary, a person could elevate a building under the permit-by-rule at N.J.A.C. 7:13-7.11, construct an addition to the building under the permit-by-rule at N.J.A.C. 7:13-7.12, and build a fence around the building under the permit-by-rule at N.J.A.C. 7:13-7.20, provided each activity meets the requirements of the respective permit-by-rule.

Furthermore, where the same regulated activity is authorized under a permit-by-rule, a general permit-by-certification, and/or a general permit, the overall cumulative impact from that

regulated activity is taken into account. For instance, if the footprint of a habitable building has been increased by 400 square feet since November 5, 2007, under permit-by-rule 12, that 400-square-foot expansion must be taken into account if further expansion of the footprint is to occur under general permit-by-certification 8, which authorizes the construction of an addition provided the footprint of the building does not increase by more than 750 square feet, cumulatively, since November 5, 2007, provided additional conditions, not applicable to the permit-by-rule, are met. In such a situation, a person could construct a 400-square-foot addition under permit-by-rule 12 and subsequently construct a 350-square-foot addition under general permit-by-certification 8 without exceeding the limitation applicable to general permit-by-certification 8 that no more than 750 square feet of disturbance may have occurred since November 5, 2007, as a result of expansion of the footprint of the habitable building. However, once the limits of both of these permits have been reached (in other words, the 750-square-foot cumulative increase since November 5, 2007), the applicant would need an individual permit for any further expansion of the footprint of the habitable building. Similarly, should the applicant seek to further expand the footprint through an individual permit, the 2,000 square foot limitation on riparian zone disturbance applicable under the individual permit pursuant to Table 11.2 and N.J.A.C. 7:13-11.2(n) would take into account the 750 square feet of disturbance already authorized pursuant to permit-by-rule 12 and general permit-by-certification 8. In this way, the use of multiple permits at a single site is based upon a cumulative consideration of the projects at that site, as suggested by the commenter. Further, in order to reduce potential misinterpretation of the Department's intention regarding the use of more than one permit on a single site,

N.J.A.C. 7:13-6.4(a) and (d) are changed upon adoption to clarify the Department's intent and to add an illustrative example.

399. COMMENT: The proposed rule would institute permits-by-rule and general permits-by-certification that would prevent tracking of cumulative impacts to riparian zones. As currently proposed, the Department's permits-by-rule and general permits-by-certification do not allow for appropriate tracking of the cumulative impacts of many allowable disturbances of the riparian zones. It is recommended that the Department amend the proposed allocation of authorizations among the permit-by-rule, general permit-by-certification, and general permit categories prior to final adoption to enhance the Department's ability to track and account for changes to riparian zone quantity and quality. All permits-by-rule should be re-designated to the new general permit-by-certification category so that the Department has a record of the approved riparian zone disturbances. In addition, general permits-by-certification 2, 6, and 7 for the construction of an agricultural roadway crossing, for construction of one single-family home or duplex in a tidal flood hazard area, and for removal of accumulated sediment and debris from an engineered channel, respectively, should be treated as general permits to ensure some level of Department and public review. (29 and 46)

RESPONSE: Permits-by-rule and permits-by-certification are intended to authorize only regulated activities that have a *de minimis* impact on flooding and the environment both individually and cumulatively. In developing permits-by-rule, in addition to meeting the criteria set forth at N.J.A.C. 7:13-6.2(b), the Department takes into consideration the fact that no formal

approval for the specific activity is required. Accordingly, the scope of the permits-by-rule are limited to activities that will have *de minimis* impacts on flooding and the environment, such as activities located in lawns, gardens, and other actively disturbed areas.

Furthermore, should a person undertake activities authorized by a permit-by-rule and subsequently propose additional activities on a site that require a general permit-by-certification, general permit, or individual permit, the Department will account for the prior disturbance under the permit-by-rule in its review of the authorization or permit, as discussed in the Response to Comment 398. Specifically, because activities authorized under a general permit-by-certification are larger in scope and area of disturbance than activities authorized under a permit-by-rule, the Department tracks the cumulative impact of general permits-by-certification, as well as general permits and individual permits, per site. Once cumulative disturbance on a site exceeds allowable limits, the Department will require an individual permit, pursuant to N.J.A.C. 7:13-6.4(c). Regarding public review, individuals requesting an authorization under a general permit-by-certification must provide public notice in accordance with N.J.A.C. 7:13-19, which is the same as the public notice required for an authorization under a general permit and an individual permit.

As explained in the notice of proposal Summary at 47 N.J.R. 1043, a general permit-by-certification applies to a tightly circumscribed subset of activities that might be authorized under a general permit. The tight limitations on the activity or activities that can be authorized obviate the need for a case-by-case evaluation of whether the particular proposed manner of conducting the activity meets the conditions of the general permit because the applicant has to certify that it does. General permits-by-certification are intended to authorize only regulated activities that

have a *de minimis* impact on flooding and the environment. Accordingly, in developing the adopted general permits-by-certification, including permits 2, 6, and 7 as noted by the commenter, the Department limited the activities subject to the general permit-by-certification to those that do not require Departmental review or that the impacts of which can be certified by a professional engineer. For example, general permit-by-certification 6 incorporates portions of prior general permit 7, previously codified at N.J.A.C. 7:13-8.9. Whereas prior general permit 7 authorized the construction of a private residence as well as appurtenant structures, general permit-by-certification 6 authorizes the construction of only a single-family home or duplex. This is appropriate since the set of regulated activities covered under a general permit-by-certification are intended to be prescriptive and not as broad as activities authorized under a general permit, which is reviewed by Department staff.

Finally, in many cases, activities authorized under a permit-by-rule require municipal approval, such as a building or zoning permit. In those cases, the Department anticipates that municipalities, who are continually trained by the Department regarding the types of activities that are subject to the FHACA Rules, will assist the Department's efforts by advising individuals as to the requirements of the applicable permit-by-rule or will recommend that individuals proposing regulated activities seek an applicability determination from the Department where it is not clear whether the FHACA Rules apply to a project.

400. COMMENT: Under the proposed rules, you can get multiple permits-by-rule and general permits. There is no cap and no looking at cumulative and secondary impacts. (177)

RESPONSE: N.J.A.C. 7:13-6.4 limits the use of more than one permit on a single site. As noted in the Response to Comments 398 and 399, the use of multiple permits at a single site is based upon a cumulative consideration of the projects at that site. N.J.A.C. 7:13-6.2(b)1 further ensures that the Department will promulgate a permit-by-rule, general permit-by-certification, or general permit only if the Department determines that the regulated activity will cause only minimal adverse impacts on flooding and the environment when performed separately and will have only minimal cumulative adverse impacts, both in looking at the total amount of activity that could be authorized under that permit-by-rule, general permit-by-certification, or general permit and the impacts from that authorization in combination with other activities that could be accomplished through other permits-by-rule, general permits-by-certification, or general permits for that type use (such as a residential property use).

N.J.A.C. 7:13-6.6 Duration of an Authorization under a General Permit

401. COMMENT: Proposed N.J.A.C. 7:13-6.6(d)2 requires that the Department issue a new general permit authorization for activities begun under an expired general permit authorization only where the project "is revised where feasible to comply with the requirements of this chapter in effect when the application for the new authorization is declared complete for review." In determining the feasibility of compliance with the requirements in effect at the time the application is declared complete for review, the Department shall consider several factors. Please add to these factors that the Department will consider whether the authorized activities will have an adverse impact on "soils that are especially vulnerable to erosion, such as most of the acid

soils of the Coastal Plain that downcut rather than erode laterally, and are no longer able to overflow into their original riparian wetlands during bankfull storms." (158, 159, and 180)

RESPONSE: As noted in the Response to Comment 396, the Department agrees with the commenter's observation that some soil formations are more susceptible to erosion than others and that downcutting within streams can lead to increased erosion and sedimentation, as well as disconnection between the channel and overbank areas, which can result in significant impacts on flooding and the environment. Under N.J.A.C. 7:13-6.6(d)2, the Department will consider as part of its decision to issue a general permit authorization whether continuing construction as approved under the original authorization would have "an adverse impact on flooding or the environment." As such, a regulated activity's potential for erosion and downcutting is already covered as one of the things the Department will evaluate as part of its determination that a regulated activity meets the requirements of N.J.A.C. 7:13-6.6(d)2.

402. COMMENT: There should be no allowance for an extension of a general permit authorization beyond the initial five-year term. In addition, if it is demonstrated that conditions have changed upstream, downstream, or at the project site such that the impacts of the authorized project exceed what was originally anticipated or envisioned, the general permit must become invalid. (183)

RESPONSE: Because the activities that can be authorized under general permits are limited in size and scope, five years is usually a sufficient period of time to complete those activities.

However, allowing one five-year extension is appropriate where the applicant demonstrates under N.J.A.C. 7:13-22.3 that regulated activities approved under the authorization have not been revised or amended, unless a modification was obtained in accordance with N.J.A.C. 7:13-22.5, and there has been no significant change in the overall conditions of the site, including regulated waters, flood hazard areas, and riparian zones. Where an extension of an authorization does not meet the requirements at N.J.A.C. 7:13-22.3 and the authorization expires, an applicant must obtain a new authorization or permit to continue the regulated activities.

Further, in situations where the Department determines that conditions have changed upstream, downstream, or at the project site such that the impacts of the authorized project exceed what was originally anticipated or envisioned, as specified in N.J.A.C. 7:13-6.6(d)2, the Department will take those impacts into account in determining whether issuing a new authorization to continue construction as approved under the original authorization would have an adverse impact on flooding and the environment. This determination will consequently impact whether a new authorization is approved. Additionally, the Department may suspend activities under a general permit authorization that has not expired where the authorized activities have caused unanticipated environmental impacts under N.J.A.C. 7:13-22.7(a)6 and/or where suspension of the authorization is necessary to protect public health, safety, and welfare of the environment under N.J.A.C. 7:13-22.7(a)8. Therefore, if it is demonstrated or determined that conditions have changed upstream, downstream, or at the project site such that the impacts of the authorized project exceed what was originally anticipated or envisioned, the Department can suspend the authorization.

N.J.A.C. 7:13-6.7 Conditions Applicable to a Permit-By-Rule, or to an Authorization Pursuant to a General Permit-By-Certification or a General Permit

403. COMMENT: The Department is commended for protecting low-flow passage for aquatic organisms at N.J.A.C. 7:13-6.7(b)2. In addition, the aspects of the proposed rules that are intended to protect threatened and endangered species habitat, such as proposed N.J.A.C. 7:13-6.7(b)4, are supported. (45 and 52)

RESPONSE: The Department acknowledges this comment in support of the rule.

404. COMMENT: At proposed N.J.A.C. 7:13-6.7(b)2, the Department is advised to change "The regulated activity shall not adversely affect low-flow aquatic passage in any regulated water" to "The regulated activity shall not adversely affect low-flow aquatic passage in any regulated water, or increase erosion downstream, or increase the amount of fines in the sediment, or impair or degrade macroinvertebrate habitat."

Further, at proposed N.J.A.C. 7:13-6.7(b)4, please change "shall not jeopardize the continued existence of any local population of a threatened or endangered species" to "shall not jeopardize the continued existence of any local population of a threatened or endangered species, or increase erosion downstream, or increase the amount of fines in the sediment, or impair or degrade macroinvertebrate habitat." (158, 159, and 180)

RESPONSE: Each promulgated permit-by-rule, general permit-by-certification, and general permit contains strict limits on the type, location, and area of riparian zone vegetation that can be

cleared, cut, and/or removed for the authorized activity as well as the proximity of the activity to the top of bank. For example, construction of a non-habitable building under permit-by-rule 13, at N.J.A.C. 7:13-7.13, may only occur if the building is located outside the floodway, the cumulative total footprint of all buildings constructed under the permit-by-rule since November 5, 2007 does not exceed 200 square feet, there is no disturbance within 25 feet of the top of bank on a property that does not have a lawfully existing bulkhead or similar structure, and no trees are cleared, cut, or removed outside of a limited 10-foot area around the building if disturbance is necessary in that area for construction or placement of the building. These requirements are necessary to ensure that activities authorized under each permit do not adversely impact riparian zone functionality and bank stability, which can lead to increased erosion, an increase in the amount of suspended or accumulated sediment, and further degradation of aquatic habitat within regulated waters. Additionally, all permits-by-rule, general permits-by-certification, and general permits are subject to the conditions specified in N.J.A.C. 7:13-6.7(b), including the prohibition referenced by the commenter at paragraph (b)2 that prohibits activities that adversely affect low-flow aquatic passage in any regulated water and the prohibition in N.J.A.C. 7:13-6.7(b)3 that forbids any regulated activity that results in unset or raw cement being exposed to flowing water within any channel or regulated water during construction. These requirements ensure that regulated activities do not lead to the adverse impacts noted by the commenter.

405. COMMENT: The proposed rules, in an effort to “streamline the rules and avoid unnecessary repetition,” set forth umbrella conditions applicable to all permits-by-rule, general permits-by-certification, and general permits under proposed N.J.A.C. 7:13-6.7(b). While the

goal of simplification is a laudable one, the rulemaking ultimately creates new substantive requirements by consolidating these conditions into a single rule. Specifically, certain conditions that have heretofore been applicable primarily to general permits are, in the proposed rules, extended to all permits-by-rule and general permits-by-certification, which undermines the objectives of both of these permitting systems. Permits-by-rule are meant to facilitate certain low-impact categories of activity without detailed review or additional Department approval. Given that objective, the proposed rules have introduced permits-by-certification in part to "obviate the need for a case-by-case evaluation of whether the particular proposed manner of conducting the activity meets the conditions." (See 47 N.J.R. 1041, 1043.) The proposed rules advance certain changes in keeping with these objectives – for instance by emphasizing under N.J.A.C. 7:13-6.7(c) that the "person undertaking a regulated activity under a permit-by-rule, or seeking authorization under a general permit-by-certification, is responsible for ensuring that each condition of the permit-by-rule . . . is met. The Department will not entertain a request to review engineering calculations, in the context of an applicability determination or otherwise, for the purpose of determining that a proposed activity will meet any condition of a permit-by-rule or general permit-by-certification." Unfortunately, by burdening all permits-by-rule and general permits-by-certification with umbrella conditions that require intensive case-by-case investigation, proposed N.J.A.C. 7:13-6.7(b) nullifies much of their intended benefit. (51 and 92)

RESPONSE: In accordance with N.J.A.C. 7:13-6.2(b)1, a regulated activity may only be authorized by a permit-by-rule, general permit-by-certification, or general permit if the permit will "cause only minimal adverse impacts on flooding and the environment when performed separately, and will have only minimal cumulative adverse impacts on flooding and the

environment." The standard conditions at N.J.A.C. 7:13-6.7(b) are minimum requirements that all regulated activities conducted under a permit-by-rule, general permit-by-certification, or general permit must meet in order to ensure that the activity authorized will have only minimal adverse impacts on flooding and the environment, both separately and cumulatively. The requirement that structures must be secured to resist flotation, collapse, and displacement due to hydrostatic and hydrodynamic forces from floodwaters, that low-flow aquatic passage cannot be adversely affected, that unset or raw cement cannot contact flowing water, that threatened or endangered species and their habitats must be protected, and that temporarily disturbed riparian zone vegetation must be restored are necessary to ensure that the authorized activities do not exacerbate flooding or adversely impact the environment.

Regarding the commenter's assertion that certain conditions that were applicable primarily to general permits under the prior FHACA Rules have now been extended to all permits-by-rule and general permits-by-certification, the Department notes that general permits-by-certification are a new type of approval that authorize a subset of activities that, under the prior FHACA Rules, would have qualified for authorization under a general permit or an individual permit. Therefore, the conditions applicable to general permits-by-certification at N.J.A.C. 7:13-6.7(b) were applicable to the same activities under the prior FHACA Rules.

With regard to conditions applicable to permits-by-rule, in certain cases, the conditions at N.J.A.C. 7:13-6.7(b) also applied to permits-by-rule under the prior FHACA Rules. For example, prior N.J.A.C. 7:13-7.1(b)2 required that all structures authorized under a permit-by-rule must be suitably anchored. The prior definition of suitably anchored meant "secured to resist flotation, collapse and displacement due to floodwaters…," which is continued in the requirement that

permitted-by-rule structures must be secured to resist flotation, collapse, and displacement due to hydrostatic and hydrodynamic forces from floodwaters. Furthermore, like general permits-by-certification, a number of activities that are authorized under a permit-by-rule were, under the prior FHACA Rules, authorized under a general permit or individual permit, therefore necessitating the application of certain conditions to ensure that the authorized activities do not exacerbate flooding or adversely impact the environment.

Where a condition did not previously apply to permits-by-rule, the Department has appropriately added the condition for all permits-by-rule to ensure that authorized activities do not exacerbate flooding or adversely impact the environment. For example, the condition that a regulated activity cannot adversely affect low-flow aquatic passage within any regulated water applied to all general permits through prior N.J.A.C. 7:13-8.1(b)2. During dry periods of the year, water typically collects in small rivulets in the stream bed, thereby allowing aquatic species to migrate upstream and downstream in search of food or for spawning. Manmade structures can sometimes eliminate this passage and form a barrier to aquatic species, causing them to be trapped on one side of the structure until flow in the stream increases again. Several permits-by-rule and general permits-by-certification authorize activities within a channel, such as bridge and culvert replacements and sediment removal activities, which could adversely affect low-flow aquatic passage if not undertaken with the proper precautions. Accordingly, to ensure that aquatic species are not adversely impacted, this condition is appropriately made applicable to permits-by-rule, general permits-by-certification, and general permits under N.J.A.C. 7:13-6.7(b)2.

406. COMMENT: One area of particular difficulty is proposed N.J.A.C. 7:13-6.7(b)4, which would expand conditions for the protection of threatened and endangered species to all permits-by-rule and general permits-by-certification. The current regulations do not impose additional conditions for the protection of threatened and endangered species for permits-by-rule, except for the permit-by-rule for wind turbines at N.J.A.C. 7:13-7.2(b)19. The sparing use of conditions for the protection of threatened and endangered species within the existing system of permits-by-rule recognizes that such conditions would require a level of investigation by applicants that would be inconsistent with the purposes of the permit-by-rule rubric. Reservations about applying N.J.A.C. 7:13-6.7(b)4 to permits-by-rule and permits-by-certification therefore grow out of practical concerns. The proposed rules, by design, would charge permittees with responsibility for determining whether their activity will "destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species," or "jeopardize the continued existence of any local population of a threatened or endangered species." These determinations fall more squarely within the expertise of the Department, and N.J.A.C. 7:13-6.7(b)4 would present very significant compliance challenges for permittees, such as public utilities.

Further, because State and Federal laws provide compelling disincentives, such as monetary penalties, to injuring threatened and endangered species and habitat, the compliance risks introduced by N.J.A.C. 7:13-6.7(b)4 are not justified by the negligible deterrent benefit that these conditions might add. Both New Jersey and Federal law prohibit the "taking" of endangered species and provide for civil and criminal penalties. See 16 U.S.C. §§ 1532(19) (defining "take" as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct"); and 1538(a)(1)(B) (making it unlawful to "take any

such species within the United States or the territorial sea of the United States"); N.J.S.A. 23:2A-3e (defining "take" as "to harass, hunt, capture, kill, or attempt to harass, hunt, capture, or kill"); 23:2A-6 (prohibiting the taking of endangered and threatened species); 23:2A-10(a) (providing civil and criminal liability for violations of the "take" prohibition). New Jersey law also provides robust protection for threatened and endangered species habitat. See N.J.S.A. 23:2A-10c(4) (authorizing the Department to recover compensatory and actual damages in a civil action against anyone found to have caused loss or destruction of protected habitat). Finally, Federal law prohibits "habitat modification, or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding or sheltering." See 50 CFR 17.3. Under EPA regulations, habitat destruction or degradation constitutes a "take" if it results in the actual killing or injury of a protected species.

Finally, the scope of this concern as it relates to utility linear development infrastructure cannot be overstated. In that regard, the Department has estimated that approximately 35 percent of New Jersey's land mass is subject to regulation under FHACA. As a result, tens of thousands of miles of electric power transmission and distribution lines would be subject to proposed N.J.A.C. 7:13-6.7(b)4. Moreover, the increased risk described above would be confronted not just daily, but literally hour-to-hour as dozens of line maintenance and repair orders are undertaken throughout the companies' service areas on a 24/7 basis. In short, given the strong existing mechanisms for protection of threatened and endangered species under State and Federal law, the marginal deterrent benefits of incorporating conditions to protect such species into permits-by-rule are outweighed by the significant costs and risks to permittees. The Department

is requested to amend proposed N.J.A.C. 7:13-6.7(b)4 such that it applies only to general permits and not to permits-by-rule and general permits-by-certification. (51 and 92)

RESPONSE: As explained in the notice of proposal Summary at 47 N.J.R. 1124, the Department determined that it is appropriate to require that any regulated activity performed under a permit-by-rule, general permit-by-certification, and general permit not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species and not jeopardize the continued existence of any local population of a threatened or endangered species. Accordingly, the condition formerly codified at N.J.A.C. 7:13-8.1(b)3 that was applicable only to general permits has been modified and extended under this rulemaking to also apply to permits-by-rule and general permits-by-certification. As noted by the commenters, a vast array of State and Federal laws underscore the importance of ensuring that threatened and endangered species and their habitats are not adversely impacted due to human activity with certain responsibilities to protect threatened or endangered species already in place. These State and Federal laws further apply to a wide range of activities, including many construction and maintenance activities performed by public utilities. Since activities that are authorized under permits-by-rule and general permits-by-certification are additionally subject to these requirements cited by the commenter, the Department anticipates that compliance with N.J.A.C. 7:13-6.7(b)4 will not constitute an additional burden on public utilities or the regulated public in general. Additionally, the public can obtain information about the presence of threatened and endangered species on a given site via the Department's online NJ-GeoWeb application by selecting the appropriate Landscape Project mapping layer (see www.nj.gov/dep/gis/geowebsplash.htm).

407. COMMENT: The impact of proposed N.J.A.C. 7:13-6.7(b)4, which provides that a regulated activity "shall not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species, and shall not jeopardize the continued existence of any local population of a threatened or endangered species," is concerning. Will the Landscape Project be the basis for such determinations? Concerns have been voiced for some time regarding the overuse of this software, which was originally intended as an advisory tool but is too often misused as a mechanism for excessive land use regulation. An over-reliance on the Landscape Project that renders large swaths of privately-managed farmland ineligible for permit consideration will undercut the myriad improvements proposed herein, limiting farmer access to much-needed permits for the various agricultural activities eligible for permits-by-rule and general permits-by-certification. (171)

RESPONSE: This rulemaking does not alter the usage of, or increase reliance on, Landscape Project mapping, which is a useful tool with many applications that the Department is continually improving. Pursuant to N.J.A.C. 7:13-6.7(c), the person undertaking a regulated activity under a permit-by-rule, or seeking authorization under a general permit-by-certification, is responsible for ensuring that each applicable condition of the permit-by-rule or general permit-by-certification is met. The Department will therefore not review, or consult Landscape Project mapping for, activities authorized under a permit-by-rule or general permit-by-certification. However, an individual unsure of whether an activity qualifies for a permit-by-rule or general permit-by-certification can request an applicability determination from the Department, at which time the Department may consult Landscape Project mapping to determine the likelihood that the

activity could adversely impact threatened and endangered species and their habitats, as the Landscape Project is an appropriate screening tool for this purpose. (See N.J.A.C. 7:13-11.6.)

With regard to potential impacts to activities on actively farmed land, adopted permits-by-rule 56 and 58 through 62, as well as general permits-by-certification 1, 2, and 3, authorize agricultural activities on actively farmed land, provided the activities are approved by and performed under the supervision of the USDA Natural Resource Conservation Service and/or local Soil Conservation District, as appropriate. These agencies are equipped to ensure that all standard conditions applying to these permits-by-rule and general permits-by-certification under N.J.A.C. 7:13-6.7(b) are met.

408. COMMENT: N.J.A.C. 7:13-6.7(b)5 requires that, except for normal property maintenance conducted in accordance with permit-by-rule 1 at N.J.A.C. 7:13-7.1, all riparian zone vegetation that is cleared, cut, and/or removed to conduct a regulated activity, access an area where regulated activities will be conducted, or otherwise accommodate a regulated activity shall be replanted immediately after completion of the regulated activity, unless prevented by seasonal weather, in which case the vegetation shall be replanted as soon as conditions permit. The Department should clarify that the requirement to immediately replant does not pertain to agricultural crops that were removed or harvested in coordination with an activity carried out in a riparian zone under a general permit-by-certification. While such a crop replanting requirement is not likely the intent of this rule revision, language should nevertheless be added to explain this for farm operators considering a practice in a riparian zone. (171)

RESPONSE: N.J.A.C. 7:13-6.7(b)5i(1) requires that temporarily disturbed riparian zones shall be replanted with vegetation of equal or greater ecological function and value as the vegetation that was cleared, cut, or removed. N.J.A.C. 7:13-6.7(b)5i(2) additionally requires that the replanted vegetation shall consist of native, non-invasive vegetation, except in an actively disturbed area, in which case vegetation may be replaced with the same type of vegetation that was cleared, cut, or removed or with another kind of vegetation typical of an actively disturbed area. Agricultural crops are considered a type of "actively disturbed area," as defined at N.J.A.C. 7:13-1.2. Therefore, where crops are temporarily harvested to accommodate an activity under a general permit-by-certification, any type of vegetation typical of an actively disturbed area may be planted. For example, crops can be replaced with grass rather than crops. This is necessary to ensure that riparian zone functionality is not unnecessarily impaired as well as to provide stability to disturbed land. Such planting is additionally required under the Standards for Soil Erosion and Sediment Control at N.J.A.C. 2:90, administered by local Soil Conservation Districts.

409. COMMENT: N.J.A.C. 7:13-6.7(b)5i(2) requires that replanting be limited to native, non-invasive vegetation, except in an actively disturbed area. While the goal of rapid replanting and the use of native vegetation wherever practicable is recognized and appreciated, some flexibility should be afforded to landscape professionals to make replanting decisions on a case-specific basis. This might include a combination of native and non-native plants in some instances, if non-natives are hardier and more conducive to erosion control, for example. Such flexibility is essential to ensure planting decisions that are reflective of on-the-ground conditions. (171)

RESPONSE: As noted by the commenter, N.J.A.C. 7:13-6.7(b)5i(2) provides that, in an actively disturbed area, vegetation may be replaced with the same type of vegetation that was cleared, cut, or removed or with another kind of vegetation typical of an actively disturbed area. Therefore, a temporarily disturbed actively disturbed area that contains non-native vegetation can be replanted with non-native vegetation should it be determined that such plants are typical of the actively disturbed area and more suitable to the site conditions. However, it has been the Department's experience that native, non-invasive plants are generally better suited for long-term stability and habitat. For this reason, native, non-invasive vegetation must be used to replant areas other than actively disturbed areas.

410. COMMENT: At proposed N.J.A.C. 7:13-6.7(b)5i, it should be made explicit that the revegetation required by this provision must be native vegetation in every instance – the allowance in N.J.A.C. 7:13-6.7(b)5i(2) for the use of non-native and even invasive vegetation in actively disturbed areas must be removed. In no instance should lawnscapes be allowed, even if that was the vegetative condition that pre-existed project construction. Lawnscapes provide little ecological value, do not filter pollution, and do not reduce runoff or encourage infiltration. As such, to allow the revegetation requirement to be fulfilled via lawn grass will result in degradation from a water quality, water quantity, and habitat perspective. When new development or redevelopment projects occur, as an appropriate mechanism to help counter the inevitable environmental degradation that will result from the creation or maintenance of impervious cover and land disturbance, taking the opportunity to enhance vegetation quality and

quantity should be a high priority – restoration of areas with enhanced forested and high value vegetative communities is an opportunity that should be embraced, not avoided. Mandating enhanced vegetation, including native, non-invasive, forested habitats, will help prevent and reduce pre-existing runoff volumes and peaks, and pollution inputs, thereby enhancing the health and safety of the creek and both adjacent and downstream communities. Trees and shrubs, whether immediately adjacent to a stream, in its floodplain, or outside the floodplain are beneficial to downstream flows and quality; they are more effective at infiltrating, reducing pollution, and preventing erosion and so should be mandated to the greatest degree possible in order to reverse and prevent degradation of water quality and in order to reverse and prevent an increase in downstream flood peaks and volumes, as is the mandate of the laws discussed in this rulemaking. (183)

RESPONSE: The Department understands the commenter's use of the term "lawnscape" to refer to lawns and landscaped areas that often consist primarily of non-native, manicured grasses. The Department acknowledges that native, non-invasive trees and shrubs generally provide superior riparian zone functionality than non-native plants, lawns, landscaped areas, and crops. For this reason, the previous FHACA Rules required that all temporarily disturbed riparian zone vegetation be replanted with native, non-invasive vegetation. However, in some instances this requirement proved to be unreasonable. For example, a house or business is typically surrounded by a grass lawn or landscaping, which may contain non-native and/or invasive species. An applicant could propose to temporarily disturb a section of lawn or landscaping to repair a failing septic system under permit-by-rule 10. Requiring the temporarily disturbed lawn

or landscaping to be replanted with only native, non-invasive vegetation or with trees and shrubs is often inconsistent with use of the site. Further, in agricultural fields, temporarily disturbed crops could not be replanted in-kind under this requirement. It is therefore appropriate for the Department to allow flexibility in replanting vegetation in such areas. Vegetation in actively disturbed areas can be replaced with the same type of vegetation that was cleared, cut, and/or removed because this will have no net adverse impact on the functionality of the riparian zone. For the same reason, the vegetation in an actively disturbed area may be replaced with another kind of vegetation that is typical of an actively disturbed area. For example, garden plants can replace lawn grass, and lawn grass can be replaced with agricultural crops. This is codified at N.J.A.C. 7:13-6.7(b)5i(2) as well as N.J.A.C. 7:13-11.2(f)2, which exempts from the limitations under Table 11.2 the conversion of "riparian zone vegetation within an actively disturbed area from one type to another, such as converting an actively farmed area into a lawn or garden."

411. COMMENT: The Department is commended for proposing a standard condition allowing flexibility in selecting replacement vegetation in actively disturbed areas at N.J.A.C. 7:13-6.7(b)5i(2). (51 and 92)

RESPONSE: The Department acknowledges this comment in support of the rule.

Subchapter 7. Permits-By-Rule

General Comments

412. COMMENT: The expansion of the permits-by-rule included in this rulemaking is supported. The expansion of the activities covered by permit-by-rules will allow some applicants to proceed in a timely fashion with even more very minor activities in areas regulated pursuant to N.J.A.C. 7:13. The activities that are proposed under the permit-by-rules are so minor in nature that they don't warrant Department review. (101)

413. COMMENT: The expansion of permits-by-rule available to agricultural operations and the recognition of the NRCS farm conservation plan as a mechanism to implement the resource protection goals of the rules are supported. (131)

414. COMMENT: The proposed repeal and repromulgation of the existing 47 permits-by-rule into separate and clarified categories and sections is supported. Permits-by-rule will only be allowed when a set of tightly regulated circumstances are met, which would allow for very specific permits to be granted without excessive staff or agency review. (119)

415. COMMENT: The addition of new permits-by-rule for common agricultural practices, such as natural resource conservation activities, the construction of livestock fencing and fords across waterways to manage livestock, and forest management, will provide welcome relief for farmland owners whose property includes areas covered by the FHACA. (171)

416. COMMENT: The proposed increase in the use of permits-by-rule for additional activities such as construction associated with existing buildings, which will assist private property owners doing work on their homes by allowing them to utilize permits-by-rule as opposed to obtaining prior written approval from the Department, is supported. This change

along with other changes in this rulemaking will assist property owners doing work on their homes or land who are subject to these rules while also maintaining key environmental protections. (156)

417. COMMENT: The agricultural community will benefit from the new permits-by-rule that apply to many agricultural projects implemented by farmers and landowners with the assistance of the Natural Resources Conservation Service. (111)

RESPONSE TO COMMENTS 412 THROUGH 417: The Department acknowledges these comments in support of the rules.

418. COMMENT: All permits-by-rule should be re-designated to the new permit-by-certification category so that the Department has a record of the approved riparian zone disturbances. (30, 189)

419. COMMENT: Increased permits-by-rule means decreased protection of the environment and public safety. (96)

420. COMMENT: Activities permitted-by-rule are characterized as regulated activities that have been found to have a *de minimis* impact of flooding and the environment. Given this definition/goal of the permit-by-rule program, the kinds, quality, and number of activities that are included in the permit-by-rule section as proposed are hugely overbroad and allow activities that

individually and, particularly, cumulatively can have significant impacts on water quantity, water quality, infiltration, water pollution, erosion, and habitat degradation. For example, activities that could be conducted under permits-by-rule under the rulemaking include stream cleaning, forestry activities, construction of roadways, and utility lines, construction activities in the tidal flood hazard area, barrier free access to a building, construction of water dependent structures, construction of fencing, swimming pool construction, foot bridge construction, tank construction, athletic and recreational structure construction, etc. These all require disturbance in the riparian zone and/or flood hazard area, result in new impervious cover, and/or result in the loss of or the inability for regrowth of native vegetation. As such, these activities cannot be said to have a *de minimis* impact on flooding and the environment, especially when considered cumulatively across a watershed and across projects, and so should not be included as activities that can be conducted under permits-by-rule – they all require some higher level of scrutiny and implementation guidance than what has been provided. (183)

421. COMMENT: The lack of DEP monitoring and oversight for the proposed new permits-by-rule is opposed, especially when considered in addition to the existing permits-by-rule. Many of the activities allowed under this regime have the potential to be very damaging to the environment and should be subjected to NJDEP oversight before the activity commences. Without oversight prior to issuance, the cumulative effect of these permits-by-rule would go unnoticed until the impacts are magnified. (91 and 195)

RESPONSE TO COMMENTS 418 THROUGH 421: As explained in the Response to Comments 393 through 395, permits-by-rule are intended to authorize only regulated activities that have a *de minimis* impact on flooding and the environment both individually and cumulatively. When proposing permits-by-rule, the Department focused on common activities that have a very limited scope, are often accomplished by homeowners and public entities, and are generally limited to actively disturbed areas, such as lawns. For example, permit-by-rule 16 at N.J.A.C. 7:13-7.16 authorizes the construction of a deck that is connected to a lawfully existing building, provided a number of conditions are met. Specifically, the deck, if located in a flood hazard area, cannot be enclosed with walls either above or below its floor, except for protective or decorative fencing, banisters, or latticework that allow floodwaters to pass freely. Furthermore, no disturbance can be located within 25 feet of any top of bank, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water, and the project cannot result in a net loss of greater than 2,000 square feet of riparian zone vegetation. The general conditions that apply to all permits-by-rule, general permits-by-certification, and general permits at N.J.A.C. 7:13-6.7 additionally ensure that the deck will be secured to resist flotation, collapse, and displacement from floodwaters, will not expose unset or raw cement to flowing water within any channel or regulated water during construction, will not adversely affect low-flow aquatic passage in any regulated water, and will not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species or jeopardize the continued existence of any local population of a threatened or endangered species. Finally, all riparian zone vegetation that is cleared, cut, and/or removed to construct the deck must be replanted with native, non-invasive vegetation. These stringent

requirements, in concert with the very limited scope of the authorized activity, ensure that the deck will not exacerbate flooding or adversely impact the environment.

Because the regulated community must make an assessment as to the applicability of a permit-by-rule, the activities authorized and the limits of authorization must be easily understood by the regulated community. This necessity is reflected in the types of activities that may be authorized by a permit-by-rule. Therefore, less regulatory oversight is needed for authorization of activities complying with the limitations applicable to each permit-by-rule to ensure the consistency of these activities. The Department will additionally continue to use its enforcement powers to ensure that proper permits are secured for all regulated activities when the scope of the activity exceeds the permit-by-rule limitations, that any violation is removed and the resource restored where appropriate, and that penalties are assessed in appropriate circumstances to discourage any future violations of the rules or permit conditions. In the normal course of performing their investigations, Department inspectors visit numerous construction sites. If the observed construction appears to exceed the threshold of an exempt activity or a permit-by-rule, the inspector will check the Department's database to determine whether proper permits have been issued. If no Department permit is reflected in the database, an investigation will be initiated, and an enforcement action will be taken if a violation is confirmed.

In addition to investigating complaints or inquiries received regarding whether particular activities impacting resources in the coastal area have been approved by the Department, the Department relies on construction officials to determine whether a permit-by-rule is applicable to a particular construction project. The Department, in conjunction with the Department of

Community Affairs, provides both training and written guidance concerning activities covered by permits-by-rule.

422. COMMENT: Please add the following requirement to permits-by-rule 2, 3, 4, 8 through 14, 16, 17, 18, 21, 22, 24, 25, 26, 30, 32, 37 through 40, 43, 48, 49, 50, 51, 53, 55, 56, 57, and 59 through 63: "All increased runoff is infiltrated, unless soils and water table make that impractical, and the disturbed area is mitigated with habitat of the highest value at a creation to loss ratio of 5:1." In addition, permit-by-rule 7 should be modified to include the following: "The landscaping material does not increase runoff. This may require additional runoff to be infiltrated, unless soils and water table make that impractical, and mitigated with habitat of the highest value at a creation to loss ratio of 5:1." Further, please add the following to permit-by-rule 26: "Since turf and compacted soils are impervious, all increase in runoff volume and velocity must be infiltrated, and the disturbed area is mitigated with habitat of the highest value at a creation to loss ratio of 5:1." Finally, the following language should be added to permit-by-rule 30: "Since solar panels are impervious and sloped, all increased runoff must be infiltrated, unless soils and water table make that impractical, and mitigated with habitat of the highest value at a creation to loss ratio of 5:1." (158, 159, and 180)

RESPONSE: The Department's Stormwater Management rules at N.J.A.C. 7:8 establish water quality, runoff quantity, and groundwater recharge requirements. These requirements apply to "major developments," which are projects that the Department has determined are of sufficient size and/or scope to generate a significant volume of stormwater runoff and that could therefore

impair water quality or result in increased flooding. Most permitted-by-rule activities are very minor in scope and do not constitute a major development. In limited cases where a permitted-by-rule activity does constitute a major development, the municipality in which the project is situated is responsible for ensuring that the requirements of N.J.A.C. 7:8 are met. It is therefore not necessary to require that all increased runoff must be infiltrated as suggested by the commenter. Regarding mitigation, N.J.A.C. 7:13-13 sets forth several riparian zone mitigation options with differing ratios depending on the nature of the mitigation. However, requiring riparian zone mitigation for impacts associated with activities authorized under a permit-by-rule is not necessary given the minor scope of the authorized activities and the *de minimis* impact on riparian zone functionality that these activities would cause. Finally, with respect to permit-by-rule 26, for the reasons explained in the Response to Comment 455 below, the Department has determined not to adopt this proposed permit-by-rule.

423. COMMENT: Newly constructed utility lines, such as traditional telephone poles, monopole towers, and lattice towers, would require an established “fall-down zone,” requiring a substantial, significant, and measurable right-of-way impacting the riparian zone functionality. Mitigation/compensation should be a requirement. Further, over the course of the entire linear project, even if one pole is considered *de minimis*, the total and cumulative impact of all the poles will add up to a substantial, significant, and measurable impact and should therefore require mitigation/compensation. (183)

RESPONSE: Permit-by-rule 33 for the placement of one or more utility poles, permit-by-rule 34 for the placement of one or more utility open-frame towers, and permit-by-rule 35 for the placement of one or more utility monopole towers contain strict limitations on the size and location of authorized structures as well as limitations on impacts to riparian zone vegetation, including the requirement that no trees are cleared, cut, and/or removed in a riparian zone. These permits-by-rule do not authorize the creation of easements or provide for any vegetation disturbance beyond the placement of the utility structure as enumerated in each permit-by-rule. Given the tight limitations on authorized structures and their allowable disturbance and the general distance between utility structures, placement of utility structures under these permits-by-rule will constitute a *de minimis* impact on flooding and the environment, irrespective of the number of utility structures placed.

424. COMMENT: In all provisions where there is an allowance for the removal of riparian zone vegetation to accommodate a permit-by-rule activity, there must be a mandate that the vegetation be restored with native, non-invasive species with a minimum requirement for tree and shrub plantings and an absolute prohibition on the use of lawn grass to fulfill this revegetation mandate. (183)

RESPONSE: N.J.A.C. 7:13-6.7(b)5i(1) requires that temporarily disturbed riparian zones shall be replanted with vegetation of equal or greater ecological function and value as the vegetation that was cleared, cut, or removed. N.J.A.C. 7:13-6.7(b)5i(2) additionally requires that the replanted vegetation shall consist of native, non-invasive vegetation, except in an actively

disturbed area, in which case vegetation may be replaced with the same type of vegetation that was cleared, cut, or removed or with another kind of vegetation typical of an actively disturbed area. While the Department acknowledges that native, non-invasive trees and shrubs generally provide superior riparian zone functionality than non-native plants, lawns, landscaped areas, and crops, in some instances this requirement has proven to be unreasonable. For example, a house or business is typically surrounded by a grass lawn or landscaping that may contain non-native and/or invasive species. A person could propose to temporarily disturb a section of lawn or landscaping to undertake a permitted-by-rule activity. Requiring the temporarily disturbed lawn or landscaping to be replanted with only native, non-invasive vegetation or with trees and shrubs is often inconsistent with the existing use of the site.

425. COMMENT: Permit-by-rule allowances for a quarter of an acre of riparian zone disturbance without mitigation should be withdrawn. (177)

RESPONSE: Select permits-by-rule authorize up to one-quarter of an acre of riparian zone disturbance in limited circumstances for activities such as repairing, replacing, or removing a lawfully existing structure (permits-by-rule 2 through 4), for general construction activities in an actively disturbed area (permits-by-rule 8 through 10), construction of a trail or boardwalk (permit-by-rule 22), and construction of an aboveground athletic and/or recreational structure (permit-by-rule 25). The Department has determined that this area of riparian zone disturbance permitted under these particular permits-by-rule, in combination with the other limitations set forth in these select cases, such as not raising the ground in a fluvial flood hazard area and

preventing disturbance within 25 feet from any top of bank, is appropriate for these types of activities and that activities authorized under these permits-by-rule will not exacerbate flooding or adversely impact the environment.

426. COMMENT: The substantial increase in permits-by-rule in the rulemaking may provide a reduction in the ability to identify cumulative water resource impacts. However, in circumstances where a Federal or State agency is already providing oversight or authorization, the permit-by-rule should serve to advance conservation and restoration efforts for the benefit of wildlife, habitat, and water quality. (175)

RESPONSE: In accordance with N.J.A.C. 7:13-6.2(b)1, the promulgated permits-by-rule authorize minor construction activities that the Department has determined will cause only *de minimis* adverse impacts on flooding and the environment when performed both individually and cumulatively. Further, the Department agrees that, in cases where State or Federal oversight is provided, a wider range of activities can be authorized under a permit-by-rule, which would benefit wildlife and water quality since the required governmental oversight will help ensure that the authorized activities are constructed as permitted and will not result in adverse impacts on flooding and the environment. For example, the construction of an aquatic habitat enhancement device is authorized under permit-by-rule 32 provided that the device is approved by U.S. Fish and Wildlife Service and/or the Department's Division of Fish and Wildlife, and the construction of a fence along and/or across a regulated water to manage livestock is authorized under permit-by-rule 60 provided all work is approved by and performed under the supervision of the USDA

Natural Resource Conservation Service and/or local Soil Conservation District, which would help keep livestock away from riparian zone vegetation and stream channels.

427. COMMENT: The limitations on clearing and removal of vegetation to actively disturbed areas provided in several of the permits-by-rule may cause conflicts with stormwater discharges that may require extension into the riparian zone for erosion and stability reasons. (131)

RESPONSE: The Department recognizes that stabilizing a stormwater discharge may in some cases require exceeding the limitations on riparian zone disturbance set forth in a permit-by-rule. In such a case, authorization under a general permit-by-certification or general permit or an individual permit is required for the regulated activity. This is appropriate in order to ensure that the project does not exacerbate flooding or adversely impact the environment. It should be noted that a new or extended stormwater discharge could be constructed under only permits-by-rule 8, 9, or 10, as appropriate, and that under each of these permits-by-rule, the project cannot constitute a major development under the Department's Stormwater Management rules.

428. COMMENT: Some permits-by-rule miss the impact of fill and structures in the floodway, which is counter to the purpose of the flood hazard rules. The flood hazard rules have always placed particular importance on the floodway, so much so as to prohibit most development therein. If floodway protection is so important because of well-accepted negative impacts of disturbance therein, then any activity in a floodway cannot be regulated under a

permit-by-rule. Therefore, these permits-by-rule need to be revised accordingly. Otherwise, it cheapens the notion of floodway protection. (118)

RESPONSE: The Department acknowledges that construction within a floodway, if improperly undertaken, can obstruct flows and exacerbate flooding. For this reason, the majority of permits-by-rule do not permit fill or construction within a floodway. However, in select cases, the Department has determined that construction in a floodway will not obstruct flows or exacerbate flooding, provided the authorized activity is constructed within the tight limitations set forth in these permits-by-rule. For example, under permit-by-rule 15, which authorizes barrier-free access to a building when the access is required by a public entity and is constructed in accordance with the Americans with Disabilities Act of 1990, the access must be constructed outside a floodway, unless locating the access in the floodway is unavoidable. Where the access is unavoidably located in a floodway, it must be "oriented to minimize obstruction to flow and shall be constructed of material that will remain open to the passage of floodwaters, such as stairs and ramps that are open underneath and not placed on fill material." Barrier-free access to a building constructed in this way will not exacerbate flooding.

429. COMMENT: Several stream activities will be regulated via permit-by-rule under the proposed changes. Some of these activities, utility line maintenance in particular, may cause a decrease in water quality without Department oversight. A significant portion of the North Branch Metedeconk River, nearly six river miles, flows through a utility line easement. Statistical analysis of over 20 years of sampling data has shown that this section of river is the

most impaired in the watershed. Lessening Department oversight for sensitive activities taking place in this area may hasten the decline in water quality that we are already seeing. (76)

RESPONSE: Permits-by-rule 33 through 39 authorize a variety of activities associated with construction and maintenance of utility infrastructure. Activities authorized under these permits-by-rule are tightly limited to ensure that construction and maintenance does not exacerbate flooding or adversely impact the environment. Each permit-by-rule allows a small amount of construction and associated riparian zone disturbance, which cumulatively will result in a *de minimis* impact on flooding and the environment. For example, permits-by-rule 33 through 36 do not authorize any clearing, cutting, and/or removal of trees, permit-by-rule 37 authorizes no disturbance to riparian zone vegetation, and permits-by-rule 38 and 39 allow temporary disturbance to riparian zone vegetation to accommodate construction. Further, as noted in the Response to Comment 424 above, all temporarily disturbed riparian zones must be replanted with vegetation of equal or greater ecological function and value as the vegetation that was disturbed and consist of native, non-invasive vegetation, except in an actively disturbed area, in which case vegetation may be replaced in-kind or with another kind of vegetation typical of an actively disturbed area. Given these limitations on disturbance, undertaking activities authorized by these permits-by-rule will not adversely impact riparian zone functionality or lead to the deleterious impacts to water quality referenced in the comment.

430. COMMENT: In May 2012, the Department shared draft amendments to the FHACA Rules with various stakeholders. Included in those draft amendments was a new permit-by-rule

that authorized the use of herbicides to maintain vegetation in utility linear development infrastructure (LDI) corridors. Specifically, the draft permit-by-rule authorized management of riparian zone vegetation, including cutting, removal, and use of herbicides, as necessary "to comply with all State or Federal laws . . . governing the safe operation of utility lines." This draft permit-by-rule was not only beneficial for utilities and their ratepayer-consumers, it was also good public policy and the most protective alternative for the environment. Unfortunately, the permit-by-rule was not included in the Department's June 1, 2015, notice of proposal.

The selective use of herbicides for vegetation management in utility LDI corridors readily meets the Department's standard for the issuance of a permit-by-rule at N.J.A.C. 7:13-6.2; that is, the proposed activity has minimal adverse impacts on flooding and the environment when performed separately and minimal cumulative adverse impacts on flooding and the environment. Without an efficient permit mechanism for herbicide usage in utility LDI corridors, utility companies will resort more frequently to mechanical cutting and removal of trees, which are practices that are more destructive to the environment than integrated vegetation management with selective use of herbicides. Mechanical cutting involves the use of heavy equipment and can destroy both compatible and incompatible vegetation. It also causes deterioration in wildlife habitat, can lead to erosion, and can introduce invasive species by disturbing and rutting soils. Those more intrusive measures can, however, be reduced to only once every four years when coupled with selective and cyclical herbicide treatments. A recent study found that butterflies were most abundant two to four years after tree and shrub cutting along power line corridors across wetlands (or "mires" in the European terminology) and concluded that a four-year, not annual, cycle would be the "ecologically optimal vegetation clearing cycle" (Komonen et al.,

Optimal Timing of Powerline Rights-of-Ways Management for the Conservation of Butterflies, Insect Conservation and Diversity, 6:522-529 (2013)).

In addition to providing enhanced environmental protection, herbicide use also has a significant cost advantage. The ability to reduce intrusive mechanical measures for vegetation management to once every four years represents a significant cost savings. It is estimated that the inability to use herbicides (for example, being confined to the mechanical measures authorized under current and proposed permits-by-rule) will cause a threefold increase in their overall vegetation management expense, in other words, tripling what is already the second highest cost category for utility companies.

Since there is no permit-by-rule for these activities, the only means for obtaining FHACA approval for herbicide usage is through the issuance of an individual permit. As the Department recognizes, however, the individual permit process under the FHACA is cumbersome, complex, and expensive. In fact, the current FHACA rules description of the requirements for an individual permit at N.J.A.C. 7:13-9.1(b) acknowledges that an individual permit is typically subject to multiple requirements.

Based on the above, it is requested that the Department reconsider its decision to not propose a permit-by-rule for the use of herbicides to maintain vegetation in utility LDI corridors, which furthers Governor Christie's common sense principles. It is suggested that the Department either add a specific utility LDI provision to the existing permit-by-rule 1 for normal property maintenance or add a new permit-by-rule for such activities. (51 and 92)

RESPONSE: Permit-by-rule 1 authorizes normal property maintenance activities that generally do not result in a permanent loss of vegetation, such as pruning, mowing, and removing dead

vegetation by hand. However, that permit-by-rule does not authorize the application of herbicides. The application of herbicides can often have unintended consequences depending on the diligence and attentiveness of the applicator. Unless carefully administered, herbicide applications can kill or suppress the growth of vegetation that was not targeted within large areas of cleared right of ways. As such, subsequent to sharing draft language with stakeholders in 2012, the Department determined that that the use of herbicides to manage riparian zone vegetation is more appropriately reviewed through the individual permitting process. For this reason, N.J.A.C. 7:13-12.8(g) provides for an individual permit that allows, over the five-year term of the permit, the necessary and periodic maintenance, repair, or replacement of any section of a lawfully existing above or below ground utility line.

N.J.A.C. 7:13-7.1 Permit-By-Rule 1 – Normal Property Maintenance

431. COMMENT: Normal property maintenance does not allow for management of invasive species either before commencement of riparian restoration or after. Land owners and managers need to control invasive species to facilitate successful riparian restoration projects. (111)

RESPONSE: Permit-by-rule 1 allows for pruning, selective tree cutting, and planting native non-invasive plant species. Therefore, some management of invasive species can be accomplished under permit-by-rule 1. However, should a landowner desire to conduct activities to remove invasive plant species that go beyond those allowed under permit-by-rule 1 at N.J.A.C. 7:13-7.1(a), such activities may be authorized under general permit-by-certification 4 or general

permit 4, at N.J.A.C. 7:13-8.4 and 9.4, respectively, so that the Department can ensure that the removal of invasive plants does not destabilize regulated waters or impair riparian zone functionality. Where an applicant proposes the management of invasive species that exceeds the limits of general permit 4, the applicant can seek an individual permit for the activities.

432. COMMENT: Please add under N.J.A.C. 7:13-7.1(b) that "changing the amount of fines in the sediment, or increasing erosion downstream, or increasing the amount of fines in the sediment, or impairing or degrading macroinvertebrate habitat" does not constitute normal property maintenance under this permit-by-rule. (158, 159, and 180)

RESPONSE: Permits-by-rule are adopted with prescriptive limits that are intended to avoid subjectivity, such as situations where an individual must determine whether a particular impact might occur. For this reason, flood hazard area permits-by-rule establish strict limits on the size and type of proposed construction or other disturbance as well as the area and type of riparian zone vegetation that can be cleared, cut, and/or removed. The prescriptive limits on normal property maintenance under permit-by-rule 1 ensure that authorized activities do not change or increase fines, sediment, or erosion potential within nearby regulated waters or lead to impaired or degraded macroinvertebrate habitat.

433. COMMENT: The Department is proposing to disallow application of herbicides when clearing vegetation in riparian zones under utility lines. The Department has not provided any basis for this prohibition. If the application of herbicides is done in compliance with the

Department's Pesticide Control Program, the use of herbicides should be allowed to control vegetation in a utility line ROW even if the ROW is in a riparian zone. (59)

434. COMMENT: The Department is modifying how herbicides are used when clearing vegetation in riparian zones under utility lines. If the application of herbicides is done in compliance with the Department's Pesticide Control Program and an NJDEP Aquatic Pesticide Permit, the use of herbicides should be allowed to control vegetation in a utility line ROW even if the ROW is in a riparian zone and should be authorized under a general permit, which would provide greater predictability than an individual permit. (11, 37, and 148)

RESPONSE TO COMMENTS 433 AND 434: The FHACA Rules do not prevent the use of herbicides. Permit-by-rule 1 continues, with amendments unrelated to herbicide application, the permit-by-rule for normal property maintenance at previous N.J.A.C. 7:13-7.2(b)1. Both the previous and adopted permits-by-rule do not authorize the use of herbicides to manage riparian zone vegetation. This is consistent with the FWPA Rules at N.J.A.C. 7:7A-2.6(b), which does not consider the application of herbicide to constitute normal property maintenance. The Department does not believe that it is appropriate to allow herbicides to be administered in riparian zones without Department oversight under an individual permit. For example, an applicant can obtain an individual permit under N.J.A.C. 7:13-12.8(g), which would authorize for five years any maintenance, repair, and replacement activities within a utility line easement that are not covered under the adopted permits-by-rule.

N.J.A.C. 7:13-7.4 Permit-By-Rule 4 – Removal of any Lawfully Existing Fill or Structures

435. COMMENT: To the extent this provision allows for the removal of riparian zone vegetation, it must also mandate that it be replaced with healthy native vegetation with an emphasis on trees and shrubs and must absolutely prevent the use of nonnative and invasive species. (183)

RESPONSE: Authorization under all permits-by-rule, general permits-by-certification, and general permits are subject to the conditions listed at N.J.A.C. 7:13-6.7(b). Under N.J.A.C. 7:13-6.7(b)5, all temporarily disturbed riparian zone vegetation must be replanted with native, non-invasive vegetation of equal or greater ecological function and value as the removed vegetation. Flexibility is provided for temporary disturbance to actively disturbed areas and where replanting certain types of vegetation would interfere with maintenance or access to a structure. However, since permit-by-rule 4 does not authorize new construction, all disturbed areas must be replanted. Therefore, activities under permit-by-rule 4 will not adversely impact riparian zone functionality.

N.J.A.C. 7:13-7.5 Permit-By-Rule 5 – Removal of Accumulated Sediment and Debris from a Regulated Water by Hand

436. COMMENT: It is inappropriate to allow removal of accumulated sediment and debris as a permit-by-rule activity. There is too much opportunity for abuse and also uneducated implementation of this provision/activity. The provision does not provide the kind of guidance

necessary to ensure that uneducated individuals and/or municipalities do not undertake activities that will, in fact, impact stream flows and health of stream habitats. The allowance for the removal of riparian vegetation to "gain access" to the waterway provides no limitation on what that means; for example, is it access for people or equipment, what is the size of the vegetative cut, and what must be done to repair the vegetative removal after the activity is done? The allowance of stream cleaning projects has been abused time and again by municipalities – sometimes intentionally and sometimes not, but always with adverse impacts. "Stream cleaning" activities should always require a heightened level of scrutiny. (183)

437. COMMENT: Limits for stream desnagging operations were eliminated, so people can go in and under justification of desnagging and/or sediment removal, take out very valuable resources without any effective oversight or effective regulatory limits. (193)

RESPONSE TO COMMENTS 436 AND 437: It has been the Department's experience that removing accumulated sediment and debris by hand does not adversely impact the environment or exacerbate flooding and may improve local drainage, provided the prescriptive and limiting requirements under permit-by-rule 5 are satisfied. It is also appropriate to allow temporary disturbance to riparian zone vegetation to permit people and equipment to access the regulated water from which sediment and debris is being removed. The requirement that no trees may be cleared, cut, and/or removed in combination with N.J.A.C. 7:13-6.7(b)5, which provides that all temporarily disturbed riparian zone vegetation must be restored, ensures that riparian zone functionality will not be adversely impacted. Any sediment removal project that involves the use

of machinery within the regulated water that requires the removal of trees to access the regulated water, or that does not meet the other requirements under permit-by-rule 5 would require a general permit-by-certification, general permit, or individual permit, depending on the scope of the activity.

438. COMMENT: At proposed N.J.A.C. 7:13-7.5, the Department should delete reference to "by hand." Removal of debris and materials by mechanized means should be allowed as well. (59)

439. COMMENT: The Department should not limit the removal of accumulated sediment and debris to only work "by hand" under this permit-by-rule. Removal of accumulated sediment and debris by mechanized means should be allowed as well. (11, 37, and 148)

RESPONSE TO COMMENTS 438 AND 439: Permit-by-rule 5 does allow the use of handheld machinery within a regulated water, such as hoses and hydraulic pumps. However, the use of larger machinery within a regulated water can, if improperly undertaken, lead to increased erosion and sedimentation within the channel as well as the loss of a significant amount of riparian zone vegetation for access to the channel. As such, any sediment removal project that involves the use of machinery within the regulated water appropriately requires Department oversight via a general permit-by-certification, general permit, or individual permit, depending on the scope of the activity.

N.J.A.C. 7:13-7.5 Permit-By-Rule 5 – Removal of Accumulated Sediment and Debris from a Regulated Water by Hand; and N.J.A.C. 7:13-7.6 Permit-By-Rule 6 – Removal of Major Obstructions from a Regulated Water with Machinery

440. COMMENT: While it was never a hardship to email the Department to complete a permit-by-rule desnagging project, removing the two-week notification will allow projects to start more quickly and as the need arises, as long as there are no timing restriction conflicts. It also helps that permits-by-rule 5 and 6 have clearly defined rules associated with each. (35)

RESPONSE: The Department acknowledges this comment in support of the rules.

N.J.A.C. 7:13-7.6 Permit-By-Rule 6 – Removal of Major Obstructions from a Regulated Water with Machinery

441. COMMENT: N.J.A.C. 7:13-7.6 creates a permit-by-rule for the removal of a major obstruction from a regulated waterway with machinery. While the permit language does state that the machinery must be outside the regulated water, placing heavy equipment in the riparian area can cause severe damage to the vegetation and trees. (96)

RESPONSE: Permit-by-rule 6 continues with amendments the previous permit-by-rule at N.J.A.C. 7:13-7.2(a)6 and authorizes the use of machinery to remove major obstructions from a regulated water that cannot be removed by hand. It has been the Department's experience that

allowing people to use machinery to remove such debris from a channel is both beneficial to the environment and helps to ameliorate nuisance flooding, provided proper measures to prevent adverse impacts to the aquatic biota of the waterway are followed. Under the previous permit-by-rule, trees could not be disturbed in a riparian zone. However, removing major obstructions from a regulated water often requires selectively cutting or clearing trees to access the obstruction. Since removing a major obstruction from a regulated water can result in significant environmental benefits, permit-by-rule 6 instead requires that disturbance to riparian zone vegetation is limited to situations where it is unavoidable, necessary to gain access to the regulated water, and minimized. The general condition at N.J.A.C. 7:13-6.7(b)5, which provides that all temporarily disturbed riparian zone vegetation must be restored, ensures that riparian zone functionality will not be adversely impacted.

N.J.A.C. 7:13-7.7 Permit-By-Rule 7 – Placement of No More than Five Cubic Yards of Landscaping Material

442. COMMENT: The Department should delete the word “landscaping” from this permit-by-rule. The placement of five cubic yards of any type of material will have *de minimis* impact on flooding, and flexibility for homeowners and small projects should be allowed without the need for a flood hazard permit. There is no reason to limit the five cubic yards of fill to landscaping materials only. (11, 37, 59, and 148)

RESPONSE: The Department agrees that five cubic yards of fill within a flood hazard area represents a *de minimis* loss of flood storage volume. For this reason, N.J.A.C. 7:13-11.4(d)1 provides an exemption from the flood storage volume displacement limits under an individual permit. Permit-by-rule 7 authorizes only landscaping material, and not structures in general, because fill resulting from structures, such as roads, buildings, and utility lines, is necessarily subject to additional standards necessary to protect public health, safety, and welfare and the environment. For example, a building constructed on pilings or a crawl space could result in less than five cubic yards of flood storage displacement. However, additional requirements, such as ensuring that the lowest floor of the building is suitably elevated and that the building, in certain cases, has dry access during a flood event, are necessary to protect people using the building during a flood and to ensure the building is suitably flood resistant. Therefore, the limitation under permit-by-rule 7 that the fill must consist of landscaping material is appropriate. It should be noted that other permits-by-rule authorize the construction of "small projects" as mentioned by the commenter, with limitations appropriate to the particular activity to ensure that it will not exacerbate flooding or adversely impact the environment. Permit-by-rule 12 at N.J.A.C. 7:13-7.12, for example, authorizes the construction of an addition to a lawfully existing habitable building provided certain requirements are met.

N.J.A.C. 7:13-7.8 Permit-By-Rule 8 – Construction at or Below Grade in a Fluvial Flood Hazard Area; and N.J.A.C. 7:13-7.9 Permit-By-Rule 9 – General Construction Activities in a Tidal Flood Hazard Area

443. COMMENT: These permits-by-rule exclude underground gas work in flood hazard areas and there is no corresponding general permit-by-certification, requiring that an individual permit be obtained for even minor underground gas work. It is recommended that the Department not exclude gas facilities from permits-by-rule and general permits-by-certification by broadening the scope of the proposed permits-by-rule to include these facilities. (11, 37, 47, and 148)

RESPONSE: The Department has adopted permits-by-rule 8, 9, and 10 to authorize a wide range of construction activities that, due to the limited nature of authorized activities, would not exacerbate flooding or adversely impact the environment. Due to the broad scope of these permits-by-rule, a particular activity covered by another permit-by-rule could potentially be covered by permits-by-rule 8, 9, or 10 as well. For example, the construction of a fence within a riparian zone that is outside a flood hazard area could potentially qualify under both permit-by-rule 10 for "general construction activities located outside a flood hazard area in a riparian zone" and permit-by-rule 20 for the "construction of a fence." While this is appropriate for some regulated activities, the Department has determined that certain activities require specific limitations in order to protect public health, safety, and welfare and the environment. Specifically, the Department has determined that the construction of a habitable building, fuel tank, solar panel, or underground utility line that conveys a gas or liquid are more appropriately authorized under specialized permits-by-rule rather than permits-by-rule 8, 9, and 10. As such, the permits-by-rule cited by the commenter exclude underground utility lines that convey a gas or liquid because such utility lines require special conditions to be met in order to protect public health, safety, and welfare and the environment, which are covered under different permits-by-

rule that are specifically designed to address the unique issues related to utilities. Permit-by-rule 36 authorizes placement of an underground utility line using directional drilling or jacking, permit-by-rule 37 authorizes the placement of an underground utility line beneath existing pavement, and permit-by-rule 39 authorizes the placement of an underground utility line that does not cross a regulated water. These permits-by-rule include the necessary requirements to ensure that the placement of an underground utility line that conveys a gas or liquid will not exacerbate flooding or adversely impact the environment.

N.J.A.C. 7:13-7.10 Permit-By-Rule 10 – General Construction Activities Located Outside a Flood Hazard Area in a Riparian Zone

444. COMMENT: There should be no permit-by-rule allowance for general construction activities; construction should always require permitting and review. (183)

RESPONSE: Permit-by-rule 10 authorizes general construction activities located outside a flood hazard area in a riparian zone under tightly limited circumstances that ensure the authorized activities will not exacerbate flooding or adversely impact the environment. Under permit-by-rule 10, no habitable building, fuel tank, solar panel, or underground utility line that conveys a gas or liquid may be constructed, no disturbance may be located within 25 feet of any top of bank, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water, and any clearing, cutting, and/or removal of riparian zone vegetation must be limited to actively disturbed areas. Further, the project, in

combination with all activities onsite, must not result in a net loss of greater than one-quarter acre of riparian zone since November 5, 2007, or constitute a major development. Activities that meet the limitations under this permit-by-rule cannot therefore adversely impact flooding since the permit-by-rule does not authorize activities located within a flood hazard area. Furthermore, the limitations on the area of disturbance within the riparian zone, the type of vegetation that can be disturbed, and the proximity of the project to the top of bank all ensure that the authorized activities will have a *de minimis* impact on riparian zone functionality. Given the tight limitations on activities authorized under this permit-by-rule, requiring people who propose such minor activities to apply to the Department for a permit would result in unnecessary cost, paperwork, and construction delays. It is appropriate, therefore, for the Department to authorize those activities that the Department has determined will cause a *de minimis* impact to public health, safety, and welfare and the environment through flood hazard area permits-by-rule.

N.J.A.C. 7:13-7.11 Permit-By-Rule 11 – Reconstruction, Relocation, and/or Elevation of a Lawfully Existing Building

445. COMMENT: The Department is commended for proposed permit-by-rule 11 for replacement of lawfully existing buildings at N.J.A.C. 7:13-7.11. (51 and 92)

RESPONSE: The Department acknowledges this comment in support of the rules.

N.J.A.C. 7:13-7.12 Permit-By-Rule 12 – Construction of an Addition(s) to a Lawfully Existing Habitable Building; N.J.A.C. 7:13-7.13 Permit-By-Rule 13 – Construction of a Non-Habitable Building(s); and N.J.A.C. 7:13-7.14 Permit-By-Rule 14 – Construction of a Partially-Open Structure(s)

446. COMMENT: It is inappropriate to allow any increase in the size of a building or construction of new structures without review and permitting. Allowing these kinds of increases can result, in time and over space, to an increase in cumulative impacts on a waterway and downstream communities. They result in new impervious cover; in every instance, there is the allowance of vegetation removal, and the placement of the structure that prevents the regrowth of any healthy vegetation, and so the cumulative impacts of these kinds of projects are significant, particularly in developed communities where there are a lot of property owners taking on a lot of projects, large and small. (183)

RESPONSE: Under permit-by-rule 12, an addition to a building can be constructed, provided the footprint of the existing building does not increase by more than 400 square feet, cumulatively, since November 5, 2007. Under permit-by-rule 13, a non-habitable building like a shed can be constructed, provided the footprint of all buildings constructed under this permit-by-rule does not exceed 200 square feet, cumulatively, since November 5, 2007. Additionally, under permit-by-rule 14, partially-open structures with a roof, such as a car port, covered patio, or pole barn, can be constructed, provided the footprint of all structures constructed under this permit-by-rule does not exceed 5,000 square feet, cumulatively, since November 5, 2007. Further, each of these

permits-by-rule limit the project's proximity to a regulated water, with no structures authorized within a floodway, and the area of riparian zone vegetation that can be cleared, cut, and/or removed is similarly limited. Given limitations on the size of the development and the area and location of disturbance as well as the consideration of cumulative impacts that are included in each permit-by-rule, the Department has determined that activities conducted under these permits-by-rule will cause a *de minimis* impact to public health, safety, and welfare and the environment.

N.J.A.C. 7:13-7.13 Permit-By-Rule 13 – Construction of a Non-Habitable Building(s)

447. COMMENT: The Department is commended for proposed permit-by-rule 13 for construction of non-habitable buildings. (51 and 92)

RESPONSE: The Department acknowledges this comment in support of the rule.

N.J.A.C. 7:13-7.15 Permit-By-Rule 15 – Construction of Barrier-Free Access to a Building

448. COMMENT: Permit-by-rule 15 should be expanded to include all structures needed to achieve Federally mandated ADA compliance. Such structures should also be permitted within flood hazard areas, floodways, and riparian zones under this permit-by-rule. The Department must approve these facilities regardless of the permit process, so why not expand this permit-by-

rule to be all-inclusive and save everyone the time and effort of going through the individual permit process? (68)

RESPONSE: While the Department acknowledges that providing barrier free access is required in many cases under Federal law, such access needs to be constructed in accordance with the requirements of the FHACA Rules in order to ensure that the construction does not exacerbate flooding, adversely impact the environment, or potentially put users at risk. Permit-by-rule 15 allows barrier free access in both areas regulated under the FHACA Rules: flood hazard areas and riparian zones. The access must be required by a public entity and constructed in accordance with the American with Disabilities Act of 1990 in order to ensure that the access is suitable. Therefore, the permit-by-rule requires that the structure is ADA compliant. A prohibition on construction within a channel is necessary since construction within a channel can lead to significant flood impacts and erosion that are more appropriately reviewed under an individual permit. Nevertheless, the Department does not anticipate that barrier free access to a building is likely to be situated within the channel of a stream or river. Finally, limitations on construction within the floodway are necessary to ensure that construction does not obstruct flood flows and damage the access, the building it serves, or nearby structures and property or potentially put users at risk. While the Department anticipates that nearly all barrier free access will be covered under this permit-by-rule, in rare cases where construction must occur within a floodway in a manner not authorized by the permit-by-rule or within a channel, the Department will review the access under an individual permit to ensure that public health, safety, and welfare as well as the environment are suitably protected.

N.J.A.C. 7:13-7.16 Permit-By-Rule 16 – Construction of a Deck

449. COMMENT: Decks can easily obstruct flood flows within a flood hazard area. Therefore, they need to be thoroughly examined by the Department before a decision is made as to whether or not they can be accepted. (118)

RESPONSE: Under permit-by-rule 16, a deck can be constructed in a flood hazard area only if the deck is not enclosed with walls either above or below its floor, except for protective or decorative fencing, banisters, or latticework that allow floodwaters to pass freely. These limitations will ensure that the deck does not obstruct flows. Further, permit-by-rule 16 sets forth limitations on the areas of riparian zone vegetation that can be disturbed and the deck's proximity to any top of bank. Decks that meet the requirements of this permit-by-rule will not exacerbate flooding or adversely impact the environment and therefore do not require individual Department review under a general permit authorization or individual permit.

N.J.A.C. 7:13-7.20 Permit-By-Rule 20 – Construction of a Fence

450. COMMENT: Please expand permit-by-rule 20 to include fencing sufficient to keep deer out of mitigation sites, a common requirement of the Department. The term "sufficiently large openings" is vague. The requirement that the fence be 25 feet back from the top of the bank is

problematic; this leaves the riparian zone buffer of 50 feet along the stream unprotected from deer herbivory. (135)

RESPONSE: As noted in permit-by-rule 20, barbed-wire, split-rail, and strand fences generally have sufficiently large openings so as not to catch debris during a flood and thereby obstruct floodwaters. Where a mitigation site requires fencing that does not meet the limitations of permit-by-rule 20, general permit 4, N.J.A.C. 7:13-9.4, authorizes activities for the creation, restoration, and enhancement of habitat and water quality values and functions and allows for the installation of fences provided the applicant demonstrates that the fence will not obstruct flood flows, exacerbate flooding, or adversely impact the environment. General permit 4 does not have a limitation on how close a fence can be located from the top of bank.

N.J.A.C. 7:13-7.21 Permit-By-Rule 21 – Construction of a Swimming Pool Associated with Residential Use

451. COMMENT: Pools are not an appropriate use for the flood hazard area or riparian zone – they are luxury features that should be accommodated elsewhere on a property. (118)

RESPONSE: Permit-by-rule 21 establishes tight limitations on the size and location of a pool as well as the area of riparian zone vegetation that can be disturbed. Pools authorized within the strict confines of this permit-by-rule will not exacerbate flooding or adversely impact riparian zone functionality.

N.J.A.C. 7:13-7.22 Permit-By-Rule 22 – Construction of a Trail and/or Boardwalk

452. COMMENT: Many of the proposed revisions to the current FHACA Rules are supported, particularly the inclusion of footbridge construction as being permissible under a permit-by-rule. As the designated trail maintaining organization for hundreds of miles of hiking trails on State land in northern New Jersey, the permit-by-rule will allow the commenter to undertake restoration projects in a timelier, efficient manner alongside its State partners. (31)

RESPONSE: The Department acknowledges this comment in support of the rule.

N.J.A.C. 7:13-7.23 Permit-By-Rule 23 – Construction of a Footbridge

453. COMMENT: Permit-by-rule 23 requires that a footbridge may not exceed six inches in thickness. A professional engineer who works with the commenter has stated emphatically that such a restriction is unrealistic and needs to be increased to ensure that bridges meet safe, sustainable specifications. (31)

RESPONSE: The thickness of a footbridge across a regulated water is dependent on a number of factors, such as the length of the span, the weight that it is intended to carry, and the material with which it is constructed. A footbridge that is no more than six inches thick can be constructed to accommodate certain applications, such as a pedestrian walkway over a small

channel. The tight limitations established under permit-by-rule 23 are necessary to ensure that a footbridge will not obstruct flood flows and therefore exacerbate flooding, while also ensuring that riparian zone functionality and aquatic resources are not impaired. Footbridges that cannot meet the limitations of permit-by-rule 23 can obtain authorization under general permit 12, which authorizes footbridges with a greater thickness, or an individual permit under N.J.A.C. 7:13-12.7, Requirements for a bridge or culvert, which does not limit the thickness of the span.

N.J.A.C. 7:13-7.24 Permit-By-Rule 24 – Construction of a Tank

454. COMMENT: Tanks are not an appropriate use in a flood hazard area or riparian zone; they should be accommodated elsewhere on the property. Regardless of how firmly one believes a tank is situated above ground, the opportunity for failure and the tank to be released into the waterway and to cause downstream and instream harm is too great. (183)

RESPONSE: Hundreds of thousands of the State's existing homes and businesses lie within flood hazard areas. As many of these buildings are situated in rural areas where tanks are a common and necessary means of providing fuel oil, it would not be reasonable for the Department to prevent the placement of tanks in a flood hazard area or riparian zone in all circumstances. Therefore, provided the tank is constructed in such a way as to result in a *de minimis* impact on flooding and the environment, it is allowed under permit-by-rule 24. For this reason, permit-by-rule 24 sets tight limitations on the size and use of a tank, its proximity to a

regulated water, and the area of riparian zone vegetation that can be disturbed and requires that any tank located in a flood hazard area is designed to remain watertight during a flood.

N.J.A.C. 7:13-7.26 Permit-By-Rule 26 – Placement of Artificial Turf on an Existing Athletic Field

455. COMMENT: The inclusion of artificial turf as a permit-by-rule activity is a huge mistake given the science available that links artificial turf with water quality degradation, particularly when located nearby, and/or discharging to, local waterways. The pollutant substances found in artificial turf contribute to contamination of soil, plants, and aquatic ecosystems and pose a risk of toxic effects for aquatic and sediment dwelling organisms. The resulting environmental harm is on-going and long-term, happening over many years. The varying content of tires used for infill of turf systems makes this threat a moving target. A growing body of scientific analysis is documenting a concerning level of environmental threat and harm and is further demonstrating the need for more research regarding artificial turf and its ramifications for the environment. (183)

RESPONSE: A review of the research provided by the commenter reveals that further investigation into artificial turf fields should be undertaken before adopting the proposed permit-by-rule in order to ensure that the authorized activities do not exacerbate flooding or adversely impact the environment. Therefore, due to concerns raised by commenters, this permit-by-rule is

not adopted. Proposed permit-by-rule 63 for forest management activities is additionally recodified as permit-by-rule 26.

N.J.A.C. 7:13-7.27 Permit-By-Rule 27 – Repair, Maintenance, and/or Dredging of a Manmade Canal

456. COMMENT: For dredging of a manmade canal, please remove reference to a "public" entity having jurisdiction over the canal, or expand this paragraph to include a private entity as well. (11, 37, 59, and 148)

RESPONSE: Permit-by-rule 27 authorizes the "repair, maintenance, and/or dredging of the channel and/or embankments of a currently serviceable, manmade canal, which passes through a regulated area" in cases where a "public entity having jurisdiction over the canal determines that the proposed repair, maintenance, and/or dredging is necessary for proper operation of the canal." A private entity can undertake the authorized repair, maintenance, or dredging, provided the appropriate public entity makes this finding. For example, the Delaware and Raritan Canal Commission and New Jersey Water Supply Authority can make this determination regarding the Delaware and Raritan Canal and could employ a private entity to undertake the authorized activities. The permit-by-rule is appropriately limited to public entities having jurisdiction over the canal as the public entity will be responsible for overseeing the repair, maintenance, and/or dredging to ensure that the authorized activities do not exacerbate flooding or adversely impact the environment. Should any privately owned, currently serviceable manmade canals exist and

require maintenance, the Department can authorize such work under an individual permit, pursuant to N.J.A.C. 7:13-11 and 12, provided all applicable requirements are met.

N.J.A.C. 7:13-7.29 Permit-By-Rule 29 – Placement of One to Three Wind Turbines

457. COMMENT: Wind turbines are large structures. As such, they can displace significant flood storage. Since flood storage is a surrogate standard for not increasing flooding, it does not make sense that the net fill standards would not apply to this type of activity. This permit-by-rule should not be valid in areas where flood storage is an issue. (118)

RESPONSE: Permit-by-rule 29 authorizes the placement of one to three wind turbines that are less than 200 feet tall, provided no tower or site disturbance is located in a floodway and provided additional requirements are met, as set forth in the permit-by-rule, to ensure that the towers do not exacerbate flooding or adversely impact the environment. This permit-by-rule is specific to small wind turbines, and many of these turbines are built on lattice towers. While the permit-by-rule does not specify whether the tower be lattice or monopole, the limitation on construction in the floodway is comparable to that of permit-by-rule 34 for open-frame towers at N.J.A.C. 7:13-7.34, which must also be located outside the floodway because of concerns with structural integrity of a tower and potential to obstruct flow. Given the tight limitations of the permit-by-rule, the volume of flood storage displacement resulting from authorized wind turbines in a fluvial flood fringe is *de minimis*.

N.J.A.C. 7:13-7.30 Permit-By-Rule 30 – Placement of Solar Panels and Associated Equipment

458. COMMENT: This permit-by-rule has the potential to be disastrous. When solar farms are created, they entail more than the solar panels. Accessory roads for maintenance are also constructed. The proposed permit-by-rule ignores the roads altogether. Worse yet, in many instances throughout the State, forests are cleared specifically for the creation of a solar farm. This entails a huge stormwater implication. With the permit-by-rule as written, lacking a stormwater management limitation, flooding will only be made worse where these facilities are proposed, which is antithetical to the purpose of the flood hazard rules. This needs to change before the rule is adopted. (118)

RESPONSE: Permit-by-rule 30 authorizes only the placement of solar panels within tightly limited circumstances and does not authorize any associated construction activities, such as the placement of roadways, utility lines, or other infrastructure. Where construction associated with solar panels is proposed within a flood hazard area or riparian zone, such construction is subject to appropriate requirements of this chapter. For example, a road constructed within a flood hazard area and/or riparian zone that does not meet the requirements of permits-by-rule 8, 9, or 10 would require an individual permit. Further, as solar plans under the permit-by-rule must be situated within actively disturbed areas, which, as defined at N.J.A.C. 7:13-1.2, precludes forested areas and non-ornamental trees, activities under this permit-by-rule will not adversely impact riparian zone functionality. Finally, in cases where activities under this permit-by-rule

constitute a major development pursuant to N.J.A.C. 7:8-1.2, the municipality in which the project is situated is required, under their municipal NJPDES stormwater permit, to determine that the activities meet the requirements of the Department's Stormwater Management rules at N.J.A.C. 7:8.

N.J.A.C. 7:13-7.33 Permit-By-Rule 33 – Placement of One or More Utility Poles

459. COMMENT: The Department is commended for the increased allowance for disturbance relative to the "top of bank" under permit-by-rule 33 for placement of utility poles at N.J.A.C. 7:13-7.33. (51 and 92)

RESPONSE: The Department acknowledges this comment in support of the rules.

N.J.A.C. 7:13-7.33 Permit-By-Rule 33 – Placement of One or More Utility Poles; N.J.A.C. 7:13-7.34 Permit-By-Rule 34 – Placement of One or More Utility Open-Frame Towers; and 7:13-7.35 Permit-By-Rule 35 – Placement of One or More Utility Monopole Towers

460. COMMENT: These permits do not allow trees to be cleared, cut, and/or removed when placing utility structures. However, there are times when trees can present an unsafe or hazardous condition when utility structures are being placed within these restricted areas. Therefore, the Department should allow for some clearing of trees needed for safety reasons. (11, 37, 47, and 148)

RESPONSE: Authorization under these permits-by-rule is necessarily tightly limiting in order to ensure that activities do not exacerbate flooding or adversely impact the environment. The Department acknowledges that tree removal is sometimes necessary to accommodate the construction or maintenance of overhead utility lines. For this reason, N.J.A.C. 7:13-11.2(k) and (l) provide for riparian zone disturbance, including the removal of trees, within certain limits where necessary to accommodate the requirements of the New Jersey Board of Public Utilities and other State and Federal requirements governing the construction and maintenance of utility lines. However, because of the potential for flooding and other environmental impacts where such riparian zone disturbance is required, Department oversight through the individual permit process is necessary.

N.J.A.C. 7:13-7.34 Permit-By-Rule 34 – Placement of One or More Utility Open-Frame Towers; N.J.A.C. 7:13-7.35 Permit-By-Rule 35 – Placement of One or More Utility Monopole Towers

461. COMMENT: The linear nature of electric power transmission systems often makes it necessary to construct transmission lines using open-frame towers and monopole towers in the flood fringe and, at times, in floodway areas. Accepted engineering design criteria for these structures help to assure their stability and structural integrity.

In the case of open-frame towers, concrete footings that extend above the design flood elevation protect a tower's structural steel components from corrosion and reduce environmental

impact by facilitating less frequent tower maintenance, repair, and replacement. One of the conditions under proposed permit-by-rule 34 for construction of open-frame towers requires that the tower's concrete footing be "primarily at or below grade, such that the top of the footing lies no more than 12 inches aboveground." While the Department's rulemaking is appreciated, as the permit-by-rule at existing N.J.A.C. 7:13-7.2(c)2 requires that each tower's footing is constructed at or below grade, proposed permit-by-rule 34 will unfortunately have little, if any, practical benefit in reducing corrosion of metal tower components. Open-frame towers have four concrete footings, and well-established engineering criteria dictate that the aboveground portion of each footing (such as the footings for a 230-kilovolt transmission line) must be approximately 30 to 36 inches in diameter and three to five feet in height. Needless to say, utility companies do not have any motivation to construct oversize concrete footings.

In the case of monopoles, a minimum diameter, which varies based on the height of the monopole, is necessary to provide adequate weight-bearing (or load-bearing) capacity and assure the monopole's stability. Proposed permit-by-rule 35, which addresses monopole towers, restricts the diameter of each monopole to no more than five feet. Although the Department rationale for these restrictions would appear to be the structures' potential to obstruct flood flows and displace flood storage, each restriction is unsound and should be modified. Utility companies do not have any motivation to oversize monopoles, and the restriction the Department proposes would preclude a considerable number of monopoles that currently serve New Jersey.

Further, it is difficult to reconcile the above-described restrictions with a number of other proposed permits-by-rule. For example, permit-by-rule 29 for wind turbine monopoles has no restriction on aboveground footings or monopole diameter even though wind turbine monopoles

are invariably larger structures than power line monopoles and have greater potential to obstruct flood waters. Permit-by-rule 14 for partially open structures with a footprint of up to 5,000 square feet and permit-by-rule 57 for fully enclosed agricultural buildings with a footprint of up to 2,000 square feet have far greater potential to obstruct flood waters than power lines on open-frame towers and monopoles. For comparison, an agricultural building with a footprint of 2,000 square feet and 10-foot walls occupies 20,000 cubic feet, whereas the initial 10 feet of a monopole tower that is six feet in diameter has a volume of only 283 cubic feet. Additionally, the aboveground portion for the four footings that support an open-frame tower, which each are 36 inches in diameter and five feet high, occupies only 141 cubic feet of volume combined.

As such, the Department is requested to amend proposed permit-by-rule 34 to increase the aboveground allowance for concrete footings based on sound engineering design without specifying a maximum height and to remove the maximum diameter of a monopole under proposed permit-by-rule 35. In considering this request, it is useful to note that the Department has previously determined in its March 20, 1995, adoption of the FHACA Rules at N.J.A.C. 7:13-1.3(e)1 and 1.3(f)1 that utility towers in floodway and flood fringe areas “do not further obstruct flood flow . . . require channel modification . . . [or] increase off-site flood damage potential.” (51 and 92)

RESPONSE: It is not the Department’s intention to authorize all open-frame and monopole towers that could be constructed within a flood hazard area or riparian zone under permits-by-rule 34 and 35. Both of these permits-by-rule establish tightly limiting requirements on these structures in order to ensure that their construction will not exacerbate flooding or adversely

impact the environment. It is appropriate for the Department to review under an individual permit application the potential impacts to flooding and the environment that may be caused by towers that do not meet the limitations of these permits-by-rule.

With regard to the examples provided by the commenters, unlike permit-by-rule 29, which authorizes no more than three wind turbines, permits-by-rule 34 and 35 do not limit the number of towers that can be constructed. As overhead utility lines can extend for many miles, necessitating the construction of potentially hundreds of support towers, it is essential that towers built under permits-by-rule 34 and 35 are suitably limited to ensure that the cumulative impact of these towers is *de minimis*, as required under N.J.A.C. 7:13-6.2(b)1. Under permit-by-rule 14 for a partially-open structure with a roof, such as a car port, covered patio, or pole barn, the footprint of all structures constructed under this permit-by-rule cannot exceed 5,000 square feet, cumulatively, since November 5, 2007. Since only support poles, which are generally only a few inches in diameter, can be constructed below the flood hazard area design flood elevation, the volume of fill under this permit-by-rule is similarly *de minimis*. Finally, under permit-by-rule 57 for the construction of a non-habitable building for agricultural purposes, such as a greenhouse, only the walls and material stored inside would constitute flood storage displacement since such a structure is generally unable to keep out floodwaters. In such a case, the flood storage displacement is *de minimis*.

However, as the FHACA Rules limit flood storage displacement only within a fluvial flood fringe since the placement of fill in tidal flood hazard areas does not exacerbate flooding, in order to accommodate a wider set of structures under permits-by-rule 34 and 35, the Department has changed the restrictions on the height of the footing under permit-by-rule 34 and

the diameter of the monopole tower under permit-by-rule 35 to apply only within a fluvial flood hazard area.

N.J.A.C. 7:13-7.36 Permit-By-Rule 36 – Placement of an Underground Utility Line Using Directional Drilling or Jacking

462. COMMENT: Exempting soil borings in directional drilling or jacking from the prohibition on disturbance of regulated waters should not be allowed. (69)

463. COMMENT: The rulemaking includes 63 permits-by-rule, almost double the existing amount, which include all kinds of things like being able to drill gas pipelines under Category One streams. Further, the amount of disturbance for those drillings has doubled. This is unconscionable. (177)

RESPONSE TO COMMENTS 462 AND 463: Permit-by-rule 36 is intended to facilitate directional drilling or jacking as a means of constructing utility lines beneath a regulated water in place of constructing utility lines within an open trench or other methods that can result in adverse impacts to riparian zone functionality and aquatic biota. Due to the strict limitations on directional drilling or jacking water under the permit-by-rule, the authorized activities will not exacerbate flooding or adversely impact the environment. Specifically, the regulated water cannot be disturbed, except for temporary disturbance associated with soil borings that are conducted to ensure that the project is viable, taking into account site-specific conditions.

Performing soil borings is a necessary part of constructing an underground utility line using directional drilling or jacking. Additionally, no trees can be cleared, cut, and/or removed in a riparian zone, and all disturbed areas in the flood hazard area must be restored to their original topography upon completion of the work. Where the utility line is drilled or jacked beneath a bridge or culvert, all work must be accomplished without displacing or damaging the bridge or culvert. Further, where the utility line is drilled or jacked beneath an open channel, the top of the line must be placed at least four feet below the channel invert and remain nominally horizontal at this depth at least 10 feet beyond the top of each bank. The utility line must further be sealed to ensure that there will be no leakage or discharge in a regulated area. Additional standards are also in place to ensure that any manholes constructed along a utility line, such as a sewer main, are watertight, do not obstruct flood flows, and do not compromise the integrity of the channel being crossed. The general conditions that apply to all permits-by-rule, general permits-by-certification, and general permits at N.J.A.C. 7:13-6.7 additionally ensure that any structure is secured to resist flotation, collapse, and displacement from floodwaters, will not expose unset or raw cement to flowing water within any channel or regulated water during construction, will not adversely affect low-flow aquatic passage in any regulated water, and will not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species or jeopardize the continued existence of any local population of a threatened or endangered species. Finally, all riparian zone vegetation that is cleared, cut, and/or removed to construct the deck must be replanted with native, non-invasive vegetation.

Given the environmental benefits of directional drilling for the placement of utility lines over other methods of constructing utility lines and given the strict limitations enumerated by

this permit-by-rule, the Department believes that authorizing temporary disturbance associated with activities under this permit-by-rule is both necessary and appropriate and will result in a *de minimis* impact on flooding and the environment.

N.J.A.C. 7:13-7.36 Permit-By-Rule 36 – Placement of an Underground Utility Line Using Directional Drilling or Jacking; and N.J.A.C. 7:13-7.38 Permit-By-Rule 38 – Attachment of a Utility Line to a Lawfully Existing Roadway or Railroad that Crosses a Regulated Water

464. COMMENT: Please amend permits-by-rule 36 and 38, which require that the constructed "utility line is sealed to ensure that there will be no leakage or discharge in a regulated area," to refer to leakage or discharge "in a regulated area and above and below the regulated area." (158, 159, and 180)

RESPONSE: A leak or discharge from a utility line situated above or below a regulated area would create a discharge within the regulated area itself, which is proscribed by permits-by-rule 36 and 38. Therefore, the proposed and adopted requirements include the concept described by the commenter without need for amendment.

N.J.A.C. 7:13-7.39 – Placement of an Underground Utility Line that does not Cross a Regulated Water

465. COMMENT: N.J.A.C. 7:13-7.39 applies to utility lines, which can stretch for miles, cover multiple municipalities, and cross numerous streams. These projects also require numerous work zones where vehicles are parked, equipment is stored, and other operations are undertaken. Allowing for a permit-by-rule for projects that may not cross a waterbody but are developed in the riparian zone or flood fringe is inappropriate. These projects must provide detailed analysis of the impacts to the riparian zone and water quality as required by the U.S. Army Corps of Engineers. Therefore, it is inappropriate for these large projects to qualify for a permit-by-rule. Permits-by-rule should be limited to small scale projects with truly *de minimis* impacts to the environment. (28A, 42, 56, 67, and 127)

RESPONSE: Permit-by-rule 39 incorporates with amendments the previous permit-by-rule at N.J.A.C. 7:13-7.2(c)6 that authorized the placement of an underground utility line in a flood hazard area outside a riparian zone. The permit-by-rule was expanded to allow the placement of an underground utility line to have limited riparian zone impacts, provided that the utility line does not cross a regulated water. Given the tight limitations on construction authorized by this permit-by-rule, such as that all disturbed areas in the flood hazard area are restored to pre-construction topography upon completion of the regulated activity, that any clearing, cutting, and/or removal of riparian zone vegetation is limited to actively disturbed areas and, as set forth in N.J.A.C. 7:13-6.7(b)5, which applies to all permitted-by-rule activities, all temporarily disturbed riparian zones must be replanted with vegetation of equal or greater ecological function and value as the vegetation that was cleared, cut, or removed, the placement of an underground utility line under this permit-by-rule will not exacerbate flooding or adversely impact the

environment. While the United States Army Corps of Engineers (ACOE) has regulatory jurisdiction over wetlands in New Jersey, that authority does not extend to riparian zones under the FHACA Rules. Therefore, it is unclear why the commenter would suggest a detailed analysis is required by the ACOE.

N.J.A.C. 7:13-7.40 Permit-By-Rule 40 – Milling, Repaving, and/or Resurfacing of a Lawfully Existing Pavement

466. COMMENT: The inclusion of this permit-by-rule to facilitate repaving of roadways, bridges, and culverts located in floodplain areas outside of floodways is appreciated. In particular, the Department has recognized the importance of taking steps to reduce the generation of asphalt millings in road resurfacing projects in recognition of the fact that while some material milled from roadways can be reused to manufacture new asphalt pavement, a large amount must be disposed of consistent with the Department's Solid Waste rules. The proposed permit-by-rule accordingly revises the existing blanket limitation on raising the surface of pavement by no more than three inches such that the limitation will not apply to areas that are outside of areas mapped as fluvial fringe by Department delineation or mapped by FEMA as within the 100-year floodplain. These revisions are appropriate, and this important first step towards reducing the generation of asphalt millings by permitting fill in areas in the tidal fringe, or outside the flood hazard area altogether, is appreciated. Further discussions with the Department regarding other opportunities to adopt future amendments to the rule to reduce the generation of asphalt millings in areas that are not significant flood risks would be welcome. For example, the Department

should consider removing the limitation on increasing pavement height by a maximum of three inches in areas of the A Zone that are not at risk of likely inundation by floodwaters during the 100-year storm and restricting that limitation only to the V Zone and portions of the A Zone on the coastal side of the Limit of Moderate Wave Action (LiMWA) where 1.5 foot or greater breaking waves would be expected during the one percent annual chance flood event. By removing the restriction on the thickness of pavement in areas in the A Zone on the inland side of the LiMWA, contractors will be able to further reduce and/or avoid milling existing pavement before repaving, thus reducing the generation of millings without exacerbating flooding in these areas. This type of revision to permit-by-rule 40 would result in a requirement that less asphalt millings be generated during road resurfacing because milling can be avoided in areas designated in the A Zone that are not at risk of likely inundation during the 100-year storm. Permitting repaving without milling in such areas will not exacerbate flooding, but it would reduce the amount of millings being generated. Further dialogue to discuss this and other future potential revisions to the above-referenced rule would be appropriate and could be conducted at the Department's convenience. (109)

RESPONSE: The Department is always open to discussing means of improving its rules with any interested parties. The Department believes, however, that the adopted permit-by-rule balances the need for flood protection with the volume of solid waste that results from milling and repaving activities. The requirement limiting the elevation of the surface of the pavement by no more than three inches in any area mapped as a fluvial flood fringe on a Department delineation or within any area mapped by FEMA as a fluvial 100-year floodplain is necessary to

ensure that excessive flood storage displacement does not occur in fluvial areas. Fill placed within fluvial flood hazard areas occupies an area of space that would be filled by floodwaters during a flood event. By occupying this space, flood waters are forced to move elsewhere, which results in increased flood depths. However, flood storage displacement in tidal areas, such as areas designated as a V Zone or on the coastal side of the LiMWA, which is designated by FEMA as a Coastal A Zone, does not exacerbate flooding. Therefore, the permit-by-rule appropriately does not place a restriction on the elevation of pavement in these areas. It should be noted that some areas on the inland side of the LiMWA may also be tidal and therefore not subject to the elevation restrictions of this permit-by-rule. FEMA mapping and Department delineations generally indicate whether a flood hazard area is tidal or fluvial based on the reported flood elevation. The Department can assist individuals who are unable to determine whether an area is subject to fluvial or tidal flooding.

N.J.A.C. 7:13-7.41 Permit-By-Rule 41 – Placement of a Guiderail Along a Lawfully Existing Public Roadway

467. COMMENT: While it may seem harmless to allow a guiderail under a permit-by-rule, the current trend in the industry is the placement of impervious surface beneath guiderails. But this permit-by-rule would ignore the stormwater impact of this impervious surface when it comes to quantity control and recharge. (118)

RESPONSE: The Department acknowledges that it is not uncommon for a guiderail to be anchored by concrete footings or for pavement or other impervious surface to be placed beneath

a guiderail. However, such impervious surface would have a *de minimus* impact on runoff rates, groundwater recharge volumes, and water quality. In rare cases where the placement of a guiderail constitutes a major development under the Department's Stormwater Management rules at N.J.A.C. 7:8, the municipality in which the project is situated is required, under their municipal NJPDES stormwater permit, to ensure that the activities meet the requirements of N.J.A.C. 7:8.

Further, the Department is proposing elsewhere in this issue of the New Jersey Register to amend N.J.A.C. 7:13-6.7 to ensure that activities authorized under a permit-by-rule, general permit-by-certification, or general permit do not constitute a major development, which ensures Department review of the project under an individual permit.

N.J.A.C. 7:13-7.42 Permit-By-Rule 42 – Reconstruction of all or Part of a Lawfully Existing Bridge Superstructure

468. COMMENT: In the case of bridge superstructure reconstruction, while limiting activities to "in kind" replacement helps address the potential flooding issue, it is offered that this safeguard is insufficient, and as such, this permit-by-rule should not be allowed. Many people have different opinions of what "in kind" means. As such, the Department needs to be involved to make sure that there will be no additional flooding in the likely case that "in kind" is not achieved. (118)

RESPONSE: The Department has adopted a detailed definition of "in-kind" at N.J.A.C. 7:13-1.2 to set forth the types of activities that can be undertaken via this permit-by-rule and under other similar provisions of the FHACA Rules. Due to the prescriptive nature of the definition of "in-kind" and given that this permit-by-rule authorizes only the replacement of an existing bridge superstructure and does not authorize the replacement of support structures such as piers or abutments, the Department believes that the availability of permit-by-rule 42 will encourage prospective superstructure replacements to be planned and conducted in conformance with its limitations, thereby ensuring that the proposed work is conducted in a manner that will not exacerbate flooding or adversely impact the environment. This will have the corresponding benefit of reducing the number of general permit authorizations and individual permit applications received by the Department, which will allow the Department's available resources to be focused on proposed activities that have a greater potential to exacerbate flooding or adversely impact the environment.

N.J.A.C. 7:13-7.43 Permit-By-Rule 43 – Placement of Traffic Safety Structures on Poles

469. COMMENT: This proposed permit-by-rule requires that any footing necessary to support the structure be constructed primarily at or below grade such that the top of the footing lies no more than 12 inches above ground. As written, this permit-by-rule will only be applicable to ground-mounted sign structures that have footings that extend just a few inches above grade. The Turnpike Authority utilizes overhead sign structures for large sign panels where the footings are completely below grade; however, a concrete pedestal extends approximately four feet above

grade to support the sign structure itself. The Authority requests that this permit-by-rule be revised to authorize the construction of such pedestals. (15)

RESPONSE: The Department recognizes that overhead utility signs and other structures authorized under this permit-by-rule may in some cases require the construction of a concrete pedestal as indicated by the commenter. Nevertheless, it is necessary to limit the height of the footing or pedestal in order to minimize the volume of flood storage displacement created by these structures and thereby ensure that flooding is not increased. However, for the same reasons discussed in the Response to Comment 461 above, the Department recognizes that the proposed limitation that any footing necessary to support the structure must be constructed primarily at or below grade such that the top of the footing lies no more than 12 inches above ground is necessary only in fluvial flood hazard areas since the placement of fill in tidal flood hazard areas does not exacerbate flooding. Therefore, in order to accommodate a wider set of structures under permit-by-rule 43, the Department has amended the restrictions on the height of the footing to apply only within a fluvial flood hazard area.

470. COMMENT: In the case of traffic safety structures, note that many “ditches” exist along roads. Many of these are regulated waters with regulated floodways. Placement of a structure in the floodway here can be very detrimental to flooding. Structures should not be allowed in the floodway at all, much less so through an authorization under a permit-by-rule. (118)

RESPONSE: The Department acknowledges that construction within a floodway, if improperly undertaken, can obstruct flows and exacerbate flooding. For this reason, the majority of permits-by-rule do not permit fill or construction within a floodway. However, in select cases, the Department has determined that construction in a floodway will not obstruct flows or exacerbate flooding, provided the authorized activity is constructed within the tight limitations set forth in these permits-by-rule. It has been the Department's experience that the size of structures authorized under permit-by-rule 43, such as overhead signs, variable message signs, streetlights, and traffic signal equipment, are sometimes unavoidably located within a floodway due to the location of an existing roadway and that the minimal size of such structures would not significantly obstruct flood flows.

N.J.A.C. 7:13-7.45 Permit-By-Rule 45 – Geotechnical and Archeological Investigation Activities

471. COMMENT: The Penneast pipeline project has demonstrated that the allowance of geotechnical investigations, in that case drilling, in close proximity to a waterway is damaging. While vegetation was not removed, the drilling operations resulted in polluted runoff entering a natural pond and a driller unilaterally deciding that it could withdraw water from the pond to support its drilling operations. In addition, the nearby drilling resulted in drilling fluids entering the natural waterway through rock fissure/fractures either pre-existing or created by the drilling activity. Drilling, geotechnical, and archaeological investigations are invasive and fraught with peril and require review and oversight by DEP. (183)

RESPONSE: The Department acknowledges that geotechnical and archeological investigation activities in close proximity to regulated waters can lead to adverse environmental impacts without appropriate Department oversight. For this reason, permit-by-rule 45 requires that authorized activities cannot be located within a regulated water or within 25 feet of any top of bank. Further, each excavated area must not be greater than three feet in diameter. Given these limitations, the Department is confident that geotechnical and archeological investigation under this permit-by-rule will not lead to the adverse environmental impacts noted by the commenter.

472. COMMENT: The permit-by-rule for surveying, geotechnical, and archeological investigation activities that is part of this rulemaking should be expanded to include environmental remediation investigation activities as well. (101)

RESPONSE: Permit-by-rule 45 authorizes a broad range of geotechnical and archeological investigation activities, such as conducting survey borings or excavation for the purpose of obtaining information on subsurface conditions, determining the presence or extent of contamination in subsurface soils or groundwater, and/or obtaining seismic information. Environmental remediation investigation activities can therefore be conducted under this permit-by-rule, provided the requirements at N.J.A.C. 7:13-7.45 are met.

N.J.A.C. 7:13-7.47 Permit-By-Rule 47 – Construction of a Gauge, Weir, or Similar Device

473. COMMENT: Permit-by-rule 47 is cognizant of the fact that placing devices in the water can lead to additional flooding. And it is right to require that there will be no increases in water surface elevation. But it leaves it upon the applicant to make that determination when that determination is more appropriately assigned to the Department. (118)

RESPONSE: Permit-by-rule 47, which continues the permit-by-rule at prior N.J.A.C. 7:13-7.2(a)8, authorizes the construction of a gauge, weir, or other similar device to measure the depth, velocity, and/or rate of flow in a regulated water, provided the construction of the gauge, weir, or device is approved by the United States Geological Survey, New Jersey Water Supply Authority, and/or New Jersey Geological Survey. This permit-by-rule was proposed and adopted for, and in consultation with, these agencies, who possess the expertise to analyze the potential impacts of the gauge, weir, or device and who have agreed to ensure that construction will not cause erosion in the regulated water, cause any rise in the flood hazard area design flood elevation outside the regulated water, or cause any existing building to be subject to increased flooding during any flood event described in N.J.A.C. 7:13-12.1(i), as required by the permit-by-rule. Therefore, it is not necessary for the Department to require the submittal of an application for a general permit authorization or individual permit for the tightly limited activities authorized under this permit-by-rule.

N.J.A.C. 7:13-7.48 Permit-By-Rule 48 – Temporary Storage of Unsecured Construction Material

474. COMMENT: This permit-by-rule should be expanded to allow for more than six months for linear development projects. (68)

RESPONSE: "Temporary," as defined at N.J.A.C. 7:13-1.2, means a regulated activity that "occupies, persists, and/or occurs on a site for no more than six months," with certain exceptions for disturbance associated with hazardous substance remediation or solid waste facility closure, provided all disturbed areas are "restored to their original topography, and all necessary measures are implemented to ensure that the original vegetative cover onsite is restored to its previous (or an improved) condition." These limitations are necessary to avoid long-term impacts to flooding and the environment that can be caused by storage of construction material in flood hazard areas and riparian zones. For the temporary storage of construction material that persists for greater than six months, applicants can apply for an individual permit under N.J.A.C. 7:13-12.16, which includes specific individual permit requirements for the storage of unsecured material in the flood hazard area or riparian zone.

N.J.A.C. 7:13-7.48 Permit-By-Rule 48 – Temporary Storage of Unsecured Construction Material; and N.J.A.C. 7:13-7.49 Permit-By-Rule 49 – Storage of Unsecured Material Associated with a Single-Family Home or Duplex

475. COMMENT: These permits-by-rule, which address storage of unsecured materials, do not go far enough to protect the public. They should contain language so that the unsecured

materials must be isolated from floodwaters during any flood event. Otherwise, there will be damage and decreased water quality. (118)

RESPONSE: While the Department acknowledges that storage of unsecured material outside the flood hazard area reduces potential flood damages, it is often not practical or feasible to store such material outside the flood hazard area or to isolate stored material from floodwaters due to the location of the construction project. Hundreds of thousands of the State's existing homes and businesses and a significant number of roadways and other infrastructure lie within flood hazard areas. A construction project within the flood hazard area would necessarily need to temporarily store some unsecured material to accommodate the project, in many cases on a site that is entirely within a flood hazard area. Limiting the storage of such material to six months under permit-by-rule 48 suitably reduces flood damage potential. With regard to storage of unsecured material associated with a single-family home or duplex under permit-by-rule 49, it would not be reasonable to require that all unsecured material, such as lawn and garden equipment and materials, shelters for animals, trash receptacles, toys, vehicles, and wood piles, be isolated from floodwaters during any flood event. Many properties on which homes and duplexes are constructed lie completely within the flood hazard area, and homeowners would not be able to meet this requirement. Vehicles, for example, would also be subject to such a requirement. Since many homes do not have garages, parking within the flood hazard area would be prohibited if the permit-by-rule was limited as suggested. Therefore, the Department believes that permits-by-rule 48 and 49 appropriately balance flood protection with the needs of the community.

N.J.A.C. 7:13-7.51 Permit-By-Rule 51 – Storage of Unsecured Material Associated with a Facility that Stores and Distributes Material; N.J.A.C. 7:13-7.52 Permit-By-Rule 52 – Placement, Storage, or Processing of Hazardous Substances; and N.J.A.C. 7:13-7.53 Permit-By-Rule 53 – Placement, Storage, or Processing Solid Waste or Recyclable Materials at a Lawfully Existing Facility

476. COMMENT: Instead of seeking to reduce the likelihood of pollution when flood waters come into contact with hazardous substances, solid waste, or recyclable materials, the proposed rulemaking grandfathers in these facilities under these permits-by-rule. The rule does not mandate better housekeeping practices or even encourage the removal of these items from a vulnerable area. In the aftermath of Superstorm Sandy, it was revealed that several industrial facilities along the lower Passaic River and Newark Bay flooded, mixing hazardous materials into the floodwaters that then entered nearby homes. This created a significant public health concern as many of the residents cleaned out their homes on their own, likely without protective clothing or equipment. The Department should be working to eliminate hazardous materials and solid waste from riparian areas, not grandfathering these facilities. (96)

RESPONSE: The purpose of permits-by-rule 51, 52, and 53 is to ensure that facilities that predate the November 5, 2007 FHACA Rules may continue to operate while also limiting expansion of the facilities and potentially increasing flood damage potential. The Department does not believe that it would be reasonable to require facilities that existed prior to the effective date of the rule, and which are located within flood hazard areas, to retrofit their facilities to meet

the current requirements of this chapter. In fact, such retrofitting would prove to be a hardship in the vast majority of cases. However, where an expansion or change of use is proposed, such activities are subject to the requirements of this chapter.

N.J.A.C. 7:13-7.55 Permit-By-Rule 55 – Commencement of New Agricultural Activities; N.J.A.C. 7:13-7.56 Permit-By-Rule 56 – Continuation or Commencement of Natural Resource Conservation Practices Associated with Agricultural Activities; and N.J.A.C. 7:13-7.57 Permit-By-Rule 57 – Construction of a Non-Habitable Building for Agricultural Purposes

477. COMMENT: These permits-by-rule should be revised to include an allowance for minimal clearing of vegetation if necessary for the implementation of an agricultural conservation plan or practice. As currently written, this rulemaking would render ineligible for permit-by-rule consideration any agricultural conservation projects that include minimal clearing of vegetation, for example, drainage pipe construction, under permits-by-rule 55, 56, and 57. Instead, such projects would require general permit-by-certification submission, a process that carries with it a permitting fee and online application submission requirement. Minimal clearing as a component of a conservation plan approved by NRCS or a local Soil Conservation District should be permissible under these permits-by-rule. (171)

RESPONSE: Riparian zone disturbance is permissible under these permits-by-rule provided that the disturbance is limited to actively disturbed areas, such as maintained lawns and cultivated

areas. Where riparian zone vegetation outside actively disturbed areas is proposed to be cleared, cut, and/or removed to accommodate an agricultural conservation project, it is appropriate for the Department to provide oversight. However, the Department acknowledges that it is sometimes appropriate for limited clearing of riparian zone vegetation outside of actively disturbed areas in order to accommodate a project under permit-by-rule 56, which authorizes continuation or commencement of beneficial natural resource conservation practices associated with agricultural activities. Therefore, the Department is proposing elsewhere in this issue of the New Jersey Register to amend the adopted permit-by-rule to permit the clearing, cutting, and/or removal of no more than 2,000 square feet of riparian zone vegetation outside of actively disturbed areas where necessary to accommodate these beneficial projects.

N.J.A.C. 7:13-7.56 Permit-By-Rule 56 – Continuation or Commencement of Natural Resource Conservation Practices Associated with Agricultural Activities

478. COMMENT: Implementing permit-by-rule 56, which applies to soil and water conservation practices if they are designed and certified by the USDA National Resource Conservation Service or local Soil Conservation District, would help to remove barriers to constructing beneficial conservation projects. This permit-by-rule would remove a currently cumbersome process and serve to encourage the installation of soil and water conservation on private lands. Projects such as grassed waterways and other soil and water conservation practices on private lands result in tremendous downstream benefits that improve water quality. (175)

RESPONSE: The Department acknowledges this comment in support of the rules.

N.J.A.C. 7:13-7.56 Permit-By-Rule 56 – Continuation or Commencement of Natural Resource Conservation Practices Associated with Agricultural Activities; N.J.A.C. 7:13-7.58 Permit-By-Rule 58 – Filling or Modification of a Manmade Regulated Water for Freshwater Wetlands Restoration; and N.J.A.C. 7:13-7.61 Permit-By-Rule 61 – Construction of a Pump and/or Water Intake Structure In or Along a Regulated Water for Livestock

479. COMMENT: Proposed permits-by-rule 56, 58, and 61 should be modified to allow that a maximum of 2,000 square feet of riparian vegetation can be cleared, cut, and/or removed in areas that are not currently actively disturbed. Permit-by-rule 58 has great potential to assist USDA wetland restoration activities. One concern with this permit-by-rule is that it does not allow for any clearing in areas that are not actively disturbed. It is common to find when evaluating sites for wetland restoration that a ditch is still functioning and draining the land but has been abandoned and now has woods on either side. In this case, to plug the ditch and restore the wetland, a limited amount of tree and shrub clearing would be needed in the immediate vicinity of the ditch plug. Further, amending permit-by-rule 61 to allow 2,000 square feet of riparian vegetation to be cleared, cut, and/or removed would help to facilitate the implementation of many more projects addressing environmental resource concerns. Alternately, or in addition, soil erosion projects should be included in the proposed general permit-by-certification 3 so that

there is some provision other than an individual permit for projects requiring limited disturbance of riparian vegetation. (111)

RESPONSE: The Department acknowledges that it is sometimes appropriate for limited clearing of riparian zone vegetation outside of actively disturbed areas in order to accommodate a project under permits-by-rule 56, 58, and 61. In response to the commenter's request, the Department is proposing elsewhere in this issue of the New Jersey Register to amend the adopted permit-by-rule to permit the clearing, cutting, and/or removal of no more than 2,000 square feet of riparian zone vegetation outside of actively disturbed areas where necessary to accommodate these beneficial projects. The Department anticipates that these proposed amendments will greatly reduce the number of individual permit applications required for these projects.

N.J.A.C. 7:13-7.57 Permit-By-Rule 57 – Construction of a Non-Habitable Building for Agricultural Purposes

480. COMMENT: The Department should not allow building greenhouses in a flood hazard area. (177)

RESPONSE: Permit-by-rule 57, which was adopted in 2007, continues the permit by-rule previously codified at N.J.A.C. 7:13-7.2(f)4 with amendments. A greenhouse or other non-habitable building for agricultural purposes is eligible for permit-by-rule 57 only where the tightly limiting requirements on the size and location of the building are met. These

requirements ensure that the building will not exacerbate flooding or adversely impact the environment.

N.J.A.C. 7:13-7.58 Permit-By-Rule 58 – Filling or Modification of a Manmade Regulated Water for Freshwater Wetlands Restoration

481. COMMENT: This permit-by-rule would seek to allow a filling or modification of manmade water, but who will verify that a watercourse is manmade? Department oversight here is necessary since this can cause serious environmental harm. (118)

RESPONSE: All work under permit-by-rule 58 must be approved by and performed under the supervision of the USDA Natural Resource Conservation Service and/or local Soil Conservation District, as appropriate. These agencies possess the expertise to determine whether a regulated water is manmade. Therefore, Department oversight for these tightly limited and beneficial projects is not necessary.

482. COMMENT: Permit-by-rule 58, which allows for the filling of manmade regulated water for freshwater wetland restoration (such as constructing a ditch plug), should be expanded. The permit-by-rule requires that all work be "approved by and performed under the supervision of the USDA Natural Resource Conservation Service and/or local Soil Conservation District." It is requested that the U.S. Fish and Wildlife Service also be listed as an approved supervisory entity. Through the *Partners for Fish and Wildlife* program, the U.S. Fish and Wildlife Service (the

Service) regularly works with landowners to restore wetland habitat, and ditch plugging is a common practice that is implemented under this program. Oftentimes, work under this program is accomplished with farmers and landowners who do not quality for Natural Resource Conservation Service (NRCS) programs. For example, a farmer with an adjusted gross income that exceeds the NRCS threshold is ineligible for NRCS programs. Additionally, private landowners that do not have enough tillable farmland are ineligible for some NRCS programs. Including the Service as a supervisory entity under this permit-by-rule would allow the Service to restore wetland habitat on lands that cannot be serviced by NRCS programs. In addition, the Service has the expertise to provide the necessary oversight for these projects that is comparable to that provided by NRCS and the Soil Conservation Districts. (45 and 152)

RESPONSE: The Department acknowledges that the U.S. Fish and Wildlife Service has appropriate expertise to oversee activities authorized under permit-by-rule 58. As such, the Department is proposing elsewhere in this issue of the New Jersey Register to amend the adopted permit-by-rule to include the U.S. Fish and Wildlife Service as an approved supervisory entity.

N.J.A.C. 7:13-7.63 Permit-By-Rule 63 – Forest Management Activities

483. COMMENT: Permit-by-rule 63 not only codifies what has already proven to be a very successful process for maintaining environmental protections while allowing forest management to occur but also provides further clarification that other associated forestry practices, such as the

installation of deer exclusion fencing that may be essential to regenerate native forests, is also authorized under the FHACA. For these reasons, permit-by-rule 63 is fully supported. (34)

484. COMMENT: Permit-by-rule 63, which intends to codify the existing procedures and conditions that allow certain forest management activities near wetlands and flood hazard areas, stands to benefit conservation efforts. This permit-by-rule provides for silviculture and allows the regeneration to occur while maintaining environmental protections, an approach that has been working successfully in recent years. For example, New Jersey Audubon is engaged in efforts to establish Atlantic White Cedar at its Hovnanian Sanctuary, and the approach provided by an existing agreement that would be codified by permit-by-rule 63 has proven critical to ensuring this work could occur. Permit-by-rule 63, like permit-by-rule 56, provides a path to encourage, rather than discourage, private landowners embarking in conservation efforts. As an organization that works cooperatively and extensively with landowners both in agricultural and forestry contexts, New Jersey Audubon views these specific permits-by-rule as essential to ongoing conservation efforts. (175)

RESPONSE TO COMMENTS 483 AND 484: The Department acknowledges these comments in support of the rules.

485. COMMENT: There is a discrepancy between N.J.A.C. 7:13-7.63(b)2ii and 6.7(b)5i. Although the former allows natural regeneration, which is a critical component of most, if not all, silvicultural systems in New Jersey, to be considered towards the requirement that a site be

replanted, the latter does not appear to allow natural regeneration to be counted. Please clarify verbiage in N.J.A.C. 7:13-6.7(b)5i in regards to permit-by-rule 63. (34)

RESPONSE: The two replanting requirements cited by the commenter do not conflict. N.J.A.C. 7:13-6.7(b)5i(1) requires that temporarily disturbed riparian zones shall be replanted with vegetation of equal or greater ecological function and value as the vegetation that was cleared, cut, or removed. N.J.A.C. 7:13-6.7(b)5i(2) additionally requires that the replanted vegetation shall consist of native, non-invasive vegetation, except in an actively disturbed area, in which case vegetation may be replaced with the same type of vegetation that was cleared, cut, or removed or with another kind of vegetation typical of an actively disturbed area. However, N.J.A.C. 7:13-6.7(b)5ii provides that, where replanting in accordance with N.J.A.C. 7:13-6.7 (b)5i would interfere with continued access to or maintenance of a structure that is required by Federal, State, or local law or would impede forest management activities under permit-by-rule 63, the vegetation replanted shall meet the requirements of N.J.A.C. 7:13-6.7(b)5i to the extent feasible. N.J.A.C. 7:13-7.63(b)2ii provides for the harvest of trees and other vegetation cultivated as forest products under a forest management plan, provided the harvested area is revegetated with vegetation determined by the State Forester to be of equal or greater ecological function and value as the vegetation that was cleared, cut, and/or removed, with the revegetation/regeneration of the area allowed to be accomplished through replanting, natural regeneration, or a combination thereof. Meeting the requirement of N.J.A.C. 7:13-7.63(b)2ii therefore satisfies N.J.A.C. 7:13-6.7(b)5ii. However, in order to clarify the intent of these provisions, the

Department has changed N.J.A.C. 7:13-6.7(b)5 to indicate that the replanting requirement does not apply to proposed permit-by-rule 63, recodified upon adoption as permit-by-rule 26.

486. COMMENT: Please require under permit-by-rule 63 that forestry management activities shall not increase erosion downstream or increase the amount of fines in the sediment or impair or degrade macroinvertebrate habitat. (158, 159, and 180)

RESPONSE: Permit-by-rule 63 authorizes the forest management activities identified at N.J.A.C. 7:13-7.63(b), provided they are conducted in accordance with a forest management plan that has been approved by the New Jersey State Forester or designee before the activities are undertaken. As part of the review of a proposed forest management plan, the New Jersey State Forester or designee ensures that the planned activities are undertaken in a manner that minimizes disturbance to stream channels, transport of sediment, and other potential environmental degradation. Accordingly, reiterating those requirements in the FHACA Rules is unnecessary.

487. COMMENT: Permit-by-rule 63 will assist NRCS in forest management activities with landowners and managers. One modification that would further aid the USDA in habitat management projects on forest land is the addition of the following language at N.J.A.C. 7:13-7.63(d)4, which would permit clear-cutting of trees where it is unavoidably necessary as part of a silviculture prescription for the “management of a wildlife species as stated in a wildlife habitat/forest management plan approved or written by the U.S. Fish and Wildlife Service, New

Jersey Division of Fish and Wildlife or the USDA-Natural Resources Conservation Service." This additional language will allow habitat management projects that will benefit a range of species, including listed threatened and endangered species and species of concern. (111)

488. COMMENT: Permit-by-rule 63 authorizes forest management activities approved by the New Jersey State Forester. Typically, when the State Forester is viewing forest management activities, they are presented in a Woodland Management or Forest Stewardship Plan. Many forest management practices implemented by the Service and NRCS that benefit imperiled species are small in scope and do not require a full plan, which costs at least $1,000 to prepare. For example, NRCS and the Service regularly work on forest management projects that are too small in scope to justify the expense of a plan but that restore habitat for Federally listed species, such as the bog turtle (*Clemmys muhlenbergii*), or for candidate species, such as the golden-winged warbler (*Vermivora chrysoptera*). Therefore, it is recommended that the Department add language to this provision that allows forest management activities that are approved by and performed under the supervision of the U.S. Fish and Wildlife Service and/or NRCS in addition to the State Forester. (45 and 152)

489. COMMENT: Regarding approved certification entities for permits-by-rule that are designed to improve wildlife habitat, the addition of the U.S. Fish and Wildlife Service as a certification entity is supported. New Jersey Audubon partners with the U.S. Fish and Wildlife Service Partners for Fish and Wildlife program on numerous projects occurring on private lands that result in benefits to wildlife, habitat, and water quality, and taking this step to include U.S.

Fish and Wildlife Service as an approved entity will allow more projects to be completed and reduce regulatory burden to projects that are in the public's best interest. Similarly, under permit-by-rule 63, the State Forester, through oversight of Woodland Management Plans and Forest Stewardship Plans, authorize the implementation of activities contained in these plans. Properties for which these plans are not a fit, given size and agricultural status, should be allowed to have conservation practices implemented when those practices are overseen or fall under the guidance of the U.S. Fish and Wildlife Service or the NRCS. These agencies, through their contracting processes and staff oversight, should be granted the ability to implement projects under permit-by-rule 63. (175)

RESPONSE TO COMMENTS 487 THROUGH 489: In response to the commenters' request, the Department is proposing elsewhere in this issue of the New Jersey Register amendments to permit-by-rule 63 that would authorize the requested activities.

Subchapter 8. General Permits-By-Certification

General Comments

490. COMMENT: The addition of general permits-by-certification into the FHACA Rules is supported. The continued expansion of the general permit program, including the addition of general permits-by-certification, will allow some applicants to proceed with very minor work in areas regulated pursuant to N.J.A.C. 7:13 in a timely fashion that previously would have required three to four months to obtain an individual permit. (101)

491. COMMENT: The addition of permits-by-certification, which allow a permit applicant to apply online, thereby creating a record that is certified by the same, eliminating the need for a long application process, is supported. (119)

RESPONSE TO COMMENTS 490 AND 491: The Department acknowledges these comments in support of the adopted rules.

492. COMMENT: This subchapter authorizes various general permits-by-certification. The use of a general permit-by-certification is fundamentally flawed in that it transfers the responsibility of the Department to the regulated community, and it does so for no good reason. What data does the Department have that indicates that it must essentially privatize environmental protection? Of all the flood hazard applications submitted to the Department over the years, how many of them needed significant revision because of issues like flooding before the Department could authorize a project? Perhaps the problem is not the Department's review process but more likely the quality of the applications it receives from the design professionals. But this is not addressed. Is the general permit-by-certification an attempt to privatize the Department? Are they a reaction to a problem that does not exist? What exactly is the Department reacting to that necessitates general permits-by-certification? The Department issues hundreds of flood hazard permits every year. What about the Department's process is so broken that a general permit-by-certification is the answer? (118)

493. COMMENT: The adoption of general permits-by-certification is opposed. The proposed general permits-by-certification should be treated as general permits to ensure some level of Department staff review. (177)

494. COMMENT: For general permits-by-certification, there is no public participation or input. There is very little, if any, Department review. Staff engineers would not be able to review important structures like stormwater discharges, for example. For those who do not understand the proposed certification process, an engineer basically writes his own permit and grants it to himself. That is akin to the fox designing the hen house and saying it is safe. There is no other way to look at it. (177)

RESPONSE TO COMMENTS 492 THROUGH 494: The adoption of general permits-by-certification is not an attempt to privatize environmental protection. In creating the adopted general permits-by-certification, the Department identified a tightly circumscribed subset of activities that obviate the need for a case-by-case evaluation by Department staff. The online submission process creates a complete record by the applicant regarding the activity to be conducted, including the name, address, telephone number, and e-mail address of the person responsible for conducting the activity and the property owner (if different) and the specific location of the activity. Only if the applicant has submitted all the required detail, site information, and signed certifications of compliance will the Department generate a permit. This permit will include project specific information, detailed conditions related to the specific activity, as well as standard permit conditions to ensure compliance with the Department's rules.

This electronic record, including the required certifications, will be utilized by Department staff during audits and site inspections to determine compliance with the issued authorization. Engineering certifications are required in a number of places throughout the chapter. It is appropriate in certain limited circumstances to require a New Jersey licensed professional engineer to confirm that one or more requirements of the FHACA Rules are met. For example, General permit 3 at N.J.A.C. 7:13-9.3(a)3i requires an engineering certification confirming that the stabilizing material for the scour protection at a bridge or culvert is minimized. The definition of "engineering certification" at N.J.A.C. 7:13-1.2 explains that an engineering certification must be signed and sealed and be accompanied by the material and information that the certifying engineer used to base the certification, which enables the Department to review the certification and confirm that it accurately reflects the conditions of the site and the requirements of this chapter. Where a New Jersey licensed professional engineer employed by the Department reviews the certification and determines that clear and compelling evidence of a threat to public health, safety, or welfare or the environment exists, the Department engineer can reject a submitted certification. This enables the Department to prevent an applicant from undertaking activities that could exacerbate flooding or adversely impact the environment should the submitted certification prove to be inaccurate. Where necessary, as with all issued permits, the Department has the right to terminate a general permit-by-certification for good cause.

Regarding public participation or input, in accordance with N.J.A.C. 7:13-19.1(a)2, applicants seeking authorization under a general permit-by-certification are required to provide notice complying with the requirements of that subchapter. This includes notice to various local and county officials and all owners of real property within 200 feet of the property boundary of

the site on which the activity is to be conducted. The applicant for authorization under a general permit-by-certification must certify that public notice pursuant to N.J.A.C. 7:13-19 has been provided for the permitted activities. The electronic record is also available to the public for viewing under the Open Public Records Act. Further, the rulemaking process affords interested parties the ability to evaluate and comment on the proposed adoption of any proposed new permits-by-rule, general permits-by-certification, and general permits.

495. COMMENT: For general permits-by-certification 2, 5, 6, 8, and 13, please add the following requirement: "All increased runoff is infiltrated, unless soils and water table make that impractical, and the disturbed area is mitigated with habitat of the highest value at a creation to loss ratio of 5:1." (158, 159, and 180)

RESPONSE: The Department's Stormwater Management rules at N.J.A.C. 7:8 establish stringent water quality, runoff quantity, and groundwater recharge requirements. These requirements apply to "major developments," which are projects that the Department has determined are of sufficient size and/or scope to generate a significant volume of stormwater runoff and that could therefore impair water quality or result in increased flooding. Most activities authorized under general permits-by-certification are minor in scope and do not constitute a major development. Under general permit-by-certification 6 for the construction of one single-family home or duplex in a tidal flood hazard area, where the project, in combination with all proposed activities, constitutes a major development, the applicant must obtain an engineering certification confirming that all applicable requirements of the Stormwater

Management rules, N.J.A.C. 7:8, are met. In other limited cases where a permitted activity does constitute a major development, the municipality in which the project is situated is responsible for ensuring that the requirements of N.J.A.C. 7:8 are met. It is therefore not necessary to require that all increased runoff must be infiltrated as suggested by the commenters. Regarding mitigation, N.J.A.C. 7:13-13 sets forth several riparian zone mitigation options with differing ratios depending on the nature of the mitigation. However, requiring riparian zone mitigation for impacts associated with activities authorized under a permit-by-rule is not necessary given the minor scope of the authorized activities and the *de minimis* impact on riparian zone functionality that these activities would cause.

General Comments on General Permits-By-Certification 1, 2, and 3 Applicable to Agricultural Operations

496. COMMENT: The inclusion of the permit-by-certification process for several agricultural activity areas will provide significant relief for farm businesses, provided that the fee is reviewed and reduced accordingly. Enabling farm operators to obtain a permit-by certification will further encourage the adoption of practices recommended by NRCS or a local Soil Conservation District that enhance natural resource protection while mitigating runoff and erosion. If these changes take effect, farm businesses may revisit or explore for the first time projects that had heretofore been rendered cost-prohibitive because of the exorbitant fees associated with individual permit application submissions. (171)

RESPONSE: The Department acknowledges this comment in support of the adopted general permits-by-certification with respect to the conversion of these activities to an online system.

497. COMMENT: The creation of general permits-by-certification for agricultural operations is supported as a way to simplify the permitting process for agricultural maintenance activities. However, the $1,000 fee associated with these permits will be a major deterrent, preventing farmers from implementing conservation practices that would be beneficial to the farm and the surrounding area. This fee is counterproductive to the intent of the permit-by-certification process. The Department should reduce the fee substantially. (131)

498. COMMENT: The proposed $1,000 fee for farmer-applicants for activities covered under a permit-by-certification is excessive. The activities authorized under these permits are common farming practices intended to help manage runoff and maximize productivity in farm fields. Additionally, such practices must be carried out in accordance with an NRCS-approved plan or under the guidance of a local Soil Conservation District. While these practices should be encouraged, the proposed $1,000 fee will likely have the opposite effect, acting as a deterrent for farm operators otherwise interested in conducting these activities in a responsible manner. However, due to the administrative cost constraints in all levels of State government, including the Department, a fee-structure specific to agricultural applicants that softens the blow for farm businesses while enabling the Department to recoup the administrative costs necessary to administer the permit application process is proposed. Specifically, a $250.00 fee should be applicable to all applications in an Agricultural Development Area (ADA) as designated by the

State Agricultural Development Committee (SADC) or comprehensive county/municipal farmland preservation plan. Additionally, the $250.00 fee should likewise apply to any parcel permanently preserved as farmland, most, if not all, of which are already included in the aforementioned ADAs throughout the State. (171)

499. COMMENT: While the general permit-by-certification will help to facilitate the permit process for some agricultural projects, the currently proposed fee of $1,000 may discourage farmers and landowners from the voluntary implementation of projects benefitting the resource base. Consideration should be given to waiving the fee, as with general permits-by-certification 4 and 5. It is important to remember that these are projects providing an environmental uplift, taking a degraded site and making an improvement. Permit fees are a serious disincentive for landowners to participate in voluntary conservation programs. (111)

500. COMMENT: The current fee in place for permitting projects such as grassed waterways was recently doubled from $500.00 to $1,000. This has resulted in a disincentive to landowners that seek to undertake valuable conservation work, including efforts to repair and restore waterway functions. The commenter has experienced circumstances where landowners back away from their commitment to improve habitat and address water quality issues because of the fee change and other situations where the cost prevents a landowner from considering these critical projects at all. A number of conservation organizations are engaged in efforts to make expensive erosion control practices more affordable for farmers, and the current permit fee is counterproductive to these important conservation efforts that benefit people and wildlife. (175)

RESPONSE TO COMMENTS 497 THROUGH 500: The prior FHACA Rules contained seven general permits for agricultural activities at N.J.A.C. 7:13-8.4. Four of these general permits have been adopted as permits-by-rule at N.J.A.C. 7:13-7.58 through 7.61. An additional permit-by-rule for certain agricultural activities has further been adopted at N.J.A.C. 7:13-7.62. The Department anticipates that a number of agricultural projects that previously qualified for general permits, which require a $1,000 application fee, now qualify for these permits-by-rule, which do not require an application to the Department or application review fee. The remaining three general permits for agricultural activities at N.J.A.C. 7:13-8.4 have been adopted as general permits-by-certification. While applications under these general permits-by-certification require a $1,000 fee, which is necessary to offset the Department's cost of creating the online portal and automated functionality required to generate electronic authorizations, the overall cost of compliance with general permits-by-certification is lower than the cost of compliance with general permits for two reasons. First, since an authorization under a general permit-by-certification does not require submittal of an application to the Department, applicants save time and expend fewer resources as compared to an authorization under a general permit, which requires the applicant to provide application materials to the Department, such as detailed drawings depicting the work, photographs of the site, and application forms. Second, since the electronic authorization under a general permit-by-certification is immediately issued upon certification by the applicant, prospective applicants can much more easily time the receipt of the permit with the proposed activities.

501. COMMENT: Problems exist between the Department and the farmers of the State of New Jersey regarding agricultural stormwater runoff with the Department being more interested in collecting permit fees than it is in protecting water quality. The commenter was working with NRCS engineers to upgrade an existing waterway that was engineered by NRCS about 30 years ago on his farm to address existing erosion problems. When the check for the permit fee was submitted, the farmer was informed by the Department that the permit fee had doubled. Why is the Department asking for a permit fee for a project that is neither flowing water nor even damp except in times of heavy rains? Why has the fee been doubled when no fee should be required for a project of this nature? The position that the Department should have taken would have been to thank the NRCS and the farmer for taking the initiative to protect water quality for the residents of the State. At this point in time, this waterway project has been cancelled. Restrictive policies and out of control fees are not the path this State should be taking if it really is interested in water quality and farmland soil erosion issues. (4)

RESPONSE: While the Department does not have sufficient information to address the details of the application referenced by the commenter, by adopting nine permits-by-rule and three general permits-by-certification for agricultural activities, the Department intends to encourage beneficial agricultural practices, such as those designed and/or overseen by NRCS. As noted in the Response to Comments 497 through 500, the application fee for general permits-by-certification is necessary to offset the Department's cost of creating the online portal and automated functionality required to generate electronic authorizations. However, the Department anticipates that a number of agricultural projects that previously qualified for prior general

permits, which require a $1,000 application fee, now qualify for these permits-by-rule, which do not require an application to the Department or an application review fee.

N.J.A.C. 7:13-8.1 General Permit-By-Certification 1 - Removal of Accumulated Sediment and Debris from a Regulated Water for Agricultural Purposes

502. COMMENT: The proposed rule revisions will provide much-needed relief in instances where farm fields greater than 50-acres in size drain into a single-source ditch or other adjacent water feature. Farmers in this circumstance seeking to conduct sediment and debris-clearing activities have, for the most part, been required to obtain an individual permit for such work, an unduly burdensome process that carries with it significant expenses related not only to the individual permit fee itself but also the associated engineering and site plan development planning work. Currently, this requirement is a significant impediment for farm businesses seeking to carry out these activities. There exists a demand for work by farmers, but projects are being impeded by the onerous fee structure associated with individual and general permit issuances. This rulemaking would encourage these on-farm Best Management Practices (BMPs) by making these activities eligible for permit-by-rule or permit-by-certification consideration, provided that certain criteria are met, including that any such activities are carried out in accordance with NRCS and/or the local Soil Conservation District. (171)

RESPONSE: The Department acknowledges this comment in support of the rules.

N.J.A.C. 7:13-8.3 General Permit-By-Certification 3 - Agricultural Bank Stabilization and/or Bank Restoration Activities

503. COMMENT: Within this rulemaking, there has been a general shift from general permits to permits-by-rule or general permits-by-certification, there are some activities that now no longer seem covered under either and therefore will require individual permits under the new rules. Specifically, these activities include projects where some disturbance of riparian vegetation is required to connect an erosion control practice to a stable outlet at a stream. Such work can currently be accomplished under general permit 2A for agricultural "soil erosion control, bank stabilization or bank restoration" projects. However, under the proposed rules, this general permit will become general permit-by-certification 3 for agricultural "bank stabilization and/or bank restoration activities along a regulated water on land that is actively farmed." Eliminated are soil erosion projects. The commenter provided an example of a current project to illustrate the issue. Their issued involved the runoff from an existing riding area and barn that currently flows through horse paddocks into a regulated water and its riparian zone; existing downspouts are to be connected to an underground outlet that will convey uncontaminated runoff to the stream, and the pipe outlet is to be stabilized. Under the current rules, the project would qualify for general permit 2A, but under the proposed rules, an individual permit must be obtained as no alternative will be available allowing the disturbance of riparian vegetation. (111)

504. COMMENT: As many of the practices associated with bank stabilization and bank restoration also involve soil erosion protection measures, the inclusion of the term "soil erosion

control" in this section would be more representative of the broader approach utilized with these practices. (131)

RESPONSE TO COMMENTS 503 AND 504: N.J.A.C. 7:13-8.3 incorporates with amendments prior general permit 2A and authorizes bank stabilization and/or bank restoration activities, provided certain requirements are met. The reference to soil erosion control activities under prior general permit 2A was not continued since these activities are authorized under proposed permit-by-rule 56, which does not require an application to the Department. The Department anticipates that all activities authorized under prior general permit 2A are now authorized under either general permit-by-certification 3 or permit-by-rule 56. Additionally, elsewhere in this issue of the New Jersey Register, the Department is proposing to amend permit-by-rule 56 to allow additional riparian zone disturbance to provide additional flexibility to these beneficial projects.

505. COMMENT: The language found in N.J.A.C. 7:13-8.3(a)6 should be applied to all agricultural permits-by-rule. (131)

RESPONSE: N.J.A.C. 7:13-8.3(a)6 requires that, for agricultural bank stabilization and/or bank restoration activities under general permit-by-certification 3, "clearing, cutting, and/or removal of riparian zone vegetation is the minimum necessary to successfully implement the project." The Department acknowledges that minimizing disturbance to riparian zone vegetation is important for preserving riparian zone functionality. Permits-by-rule are designed to be self-certifying and therefore must have clear, easily-discernible limitations and standards that

minimize situations that require judgment on the part of the person undertaking the authorized activity. For this reason, permits-by-rule contain specific limitations on riparian zone disturbance rather than general guidelines for minimization and avoidance. For example, under permit-by-rule 60 for the construction of a fence along and/or across a regulated water to manage livestock, no trees can be cleared, cut, and/or removed in a riparian zone except where necessary to accommodate the placement of a fence across a regulated water, and no more than 2,000 square feet of riparian zone vegetation can be cleared, cut, and/or removed. These are clear standards that are easier for people to understand and implement than if the Department required riparian zone disturbance to be minimized.

506. COMMENT: Removing permitting for bank stabilization/channel restoration projects is opposed because it will increase disturbance and eliminate oversight by an already understaffed Department. (69)

RESPONSE: General permit-by-certification 3 authorizes bank stabilization and bank restoration activities on land that is actively farmed, provided the prescriptive requirements of N.J.A.C. 7:13-8.3(a)1 through 7 are met. These requirements greatly limit potential impacts to flooding and riparian zone functionality and require that all activities are approved by and performed under the supervision of the USDA Natural Resource Conservation Service and/or local Soil Conservation District, as appropriate. Department oversight is not eliminated because the online application process creates an electronic record of the application and certifications, which

Department staff can utilize during site inspections to determine compliance with the issued authorization.

N.J.A.C. 7:13-8.4 - General Permit-By-Certification 4 - Enhancement of a Riparian Zone through the Planting of Native, Non-Invasive Plant Species

507. COMMENT: The prohibition against the clearing, cutting, or removal of trees within a riparian zone of a Pinelands water under general permit-by-certification 4 is supported. (146)

RESPONSE: The Department acknowledges this comment in support of the rules.

508. COMMENT: This proposed general permit-by-certification does not allow for the removal of trees identified as invasive species within 25 feet of the top of bank. However, it is unclear if this permit-by-certification authorizes the removal of other invasive vegetation, such as shrubs and herbaceous plants that do not meet the definition of a tree provided at N.J.A.C. 7:13-1.2, within 25 feet of the top of bank. To avoid misinterpretation, the proposed regulation should be clarified. If the intent of this general permit-by-certification is not to authorize removal of invasive vegetation within 25 feet of the top of bank, then provisions should be made under proposed general permit 4 to allow for the removal of invasive vegetation within 25 feet of the top of bank provided the methods used minimize disturbance to the soil surface and root structure of the plants, such as foliar applications of herbicides approved for use in sensitive

areas, cut stump treatments, or mowing followed by replanting and seeding the areas, when appropriate. (126)

RESPONSE: N.J.A.C. 7:13-8.4(a)4 requires that no trees are cleared, cut, and/or removed within 25 feet of any the top of bank under this general permit-by-certification unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water. This requirement applies only to trees and does not prevent the removal of other invasive vegetation, such as shrubs and herbaceous plants, provided all requirements under this general permit-by-certification are met. In cases where invasive trees are proposed to be removed within 25 feet of top of bank, Department review and approval of the proposed activity is required. Accordingly, such activities can be authorized under general permit 4 at N.J.A.C. 7:13-9.4 for creation, restoration, and enhancement of habitat and water quality values and functions.

509. COMMENT: Enhancement of a riparian zone through the planting of native, non-invasive plant species appears to require a landowner or manager to hire an engineer to lawfully plant a tree along a stream. It is understandable that in some areas with high flood frequency planting riparian vegetation may have an impact on upstream flooding. However, not allowing a vegetated buffer of any size in any location in the State to be established without first hiring an engineer seems excessive and would seem to negatively impact the multitude of non-governmental organizations working around the State to promote riparian plantings on a variety of land uses. (111)

510. COMMENT: Engineering certification is not necessary for planting a riparian zone; this is a burden to permittees and mitigation providers. Many mitigation providers are professionals in environmental mitigation and have professional certifications of more relevance, such as Professional Wetland Scientists or Certified Ecologists. Particularly, when no regrading is required, such credentials should be employed instead of a certification from an engineer or added to the permitted certifications. (135)

511. COMMENT: General permit-by-certification 4 requires that an applicant retain an engineering certification. This provision will serve to discourage planting a vegetated riparian buffer because an applicant would first need to hire an engineer to certify the planting plan. The US Fish and Wildlife Service does not have an engineer on staff and most private landowners do not have access to an engineer. Certification by an engineer of a riparian planting plan is neither valuable nor necessary. Rather than discourage riparian planting, it is requested that this provision be eliminated. (45 and 152)

512. COMMENT: Please note that a component of permit-by-certification 4 may prove an obstacle to beneficial restoration efforts. While the enhancement of a riparian zone through the planting of native, non-invasive plant species is certainly a beneficial practice that should be promoted, the requirement for anyone planting native plants in a riparian zone to obtain an engineer's certification will discourage beneficial riparian buffer planting projects from moving

forward. Many individuals or organizations conducting beneficial riparian plantings will lack the resources to hire an engineer. (175)

RESPONSE TO COMMENTS 509 THROUGH 512: N.J.A.C. 7:13-8.4(a)2 requires that the applicant obtains an engineering certification confirming that the existing ground elevation is not being raised in any floodway or fluvial flood hazard area. Since many projects undertaken pursuant to this general permit-by-certification require minor grading to accommodate the removal and planting of vegetation, this requirement is necessary to ensure that the project will not result in flood storage displacement or an obstruction to flow within a flood hazard area. The Department anticipates that, for the vast majority of projects authorized under this permit, obtaining such a certification will not be difficult or expensive. Further, permit-by-rule 1 for normal property maintenance authorizes activities, such as selective tree cutting, planting native, non-invasive plant species, and the periodic clearing, cutting, and/or removal of vegetation within an actively disturbed area, in cases where no grading, changes in topography, or placement of fill is proposed. The Department anticipates that a number of minor riparian zone restoration projects can be authorized under permit-by-rule 1, which does not require the permittee to obtain an engineering certification.

N.J.A.C. 7:13-8.5 General Permit-By-Certification 5 - Reconstruction, Relocation, Expansion, and/or Elevation of a Building Outside a Floodway; and N.J.A.C. 7:13-8.6 General Permit-By-Certification 6 - Construction of One Single-Family Home or Duplex in a Tidal Flood Hazard Area

513. COMMENT: Existing general permits 6 and 7, which are proposed to be converted to general permits-by-certification, should not be amended. Instead, these activities should continue to require general permit approval in order to ensure some level of Department and public review. (29, 30, 46, and 189)

RESPONSE: As noted in the Response to Comments 492 through 494, the adopted general permits-by-certification authorize a tightly circumscribed subset of activities that do not require case-by-case evaluation by Department staff. The online application process furthermore creates an electronic record of the application and certifications, which Department staff can utilize during site inspections to determine compliance with the issued authorization. Furthermore, the adopted general permits-by-certification authorize a smaller scope of construction as compared to the prior general permits cited by the commenters. For example, under general permit-by-certification 5, construction is limited to flood hazard areas that have been mapped by the Department or FEMA in order to ensure that the design flood elevation is publically available and easily verified. Further, the requirement to obtain an engineering certification confirming that the building is not being expanded within or relocated into a floodway and that the lowest floor of the building is being reconstructed or elevated to at least one foot above the flood hazard area design flood elevation ensure that residents using the building are suitably protected from flood damage. Similar certifications and limits are required under general permit-by-certification 6. These requirements and limitations, in concert with engineering certifications where

applicable, ensure that the authorized activities will not exacerbate flooding or adversely impact the environment.

N.J.A.C. 7:13-8.9 General Permit-By-Certification 9 - Sediment and Debris Removal Within and/or Adjacent To a Bridge, Culvert, or Outfall by a Public Entity

514. COMMENT: The Department should delete reference to "public" entity or expand the wording of this general permit-by-certification to include private entities as well. (11, 13, 37, and 59)

RESPONSE: This permit-by-certification authorizes the removal of sediment with machinery provided the work is performed by, or under the supervision of, a public entity, which is necessary to ensure that the authorized activities are performed with suitable oversight. Removal of accumulated sediment and debris from a regulated water using handheld equipment, such as hoses and hydraulic pumps, is authorized under permit-by-rule 5 at N.J.A.C. 7:13-7.5 irrespective of whether a public entity is involved.

N.J.A.C. 7:13-8.10 General Permit-By-Certification 10 - In-Kind Replacement of a Culvert

515. COMMENT: General permit-by-certification 10 for in-kind culvert replacement (regardless of size) needs to be modified to allow for a change of pipe materials. The majority of

culvert replacements are necessary due to corroding corrugated metal pipes that need to be replaced with a more suitable, non-corrosive material, such as reinforced concrete pipe. (68)

RESPONSE: Pursuant to N.J.A.C. 7:13-8.10(a)3i, as confirmed by an engineering certification, the replacement culvert must be constructed of the same material as the culvert being replaced unless the width or diameter of the culvert is no more than two feet and/or the length of the culvert is no more than 20 feet. Culverts can be constructed of a variety of materials, such as concrete, galvanized steel, aluminum, or high density polyethylene, all of which have a different roughness coefficient. A change in the internal roughness of a culvert can affect the amount of water that a culvert can convey and therefore affect flood elevations upstream or downstream of the structure. However, flow through culverts having a diameter of no more than two feet and/or having a length of no more than 20 feet is governed by the diameter of the culvert rather than the internal roughness of the structure. In cases where the proposed replacement of a culvert does not qualify for general permit-by-certification 10, general permit 10 under N.J.A.C. 7:13-9.10, which has the same application fee as general permit-by-certification 10, authorizes the reconstruction of a bridge or culvert in a wider set of circumstances. Because general permit 10 is reviewed by Department staff, the limitations on the type of culvert utilized is not restricted.

516. COMMENT: The creation of a permit-by-certification for in-kind replacement of culverts undermines the protection of riparian zones and the attendant ecological, economic, and flood protection value. (91, 128, and 195)

517. COMMENT: The Department should not adopt the proposed general permit-by-certification for the in-kind replacement of a culvert as this represents a rollback of important protections under the existing rules. (29 and 46)

518. COMMENT: This general permit-by-certification should not be adopted. (177)

RESPONSE TO COMMENTS 516 THROUGH 518: General permit-by-certification 10 authorizes in-kind replacement of culverts in a limited set of circumstances that ensure the authorized activities will not exacerbate flooding or adversely impact the environment. Under the general permit-by-certification, a lawfully existing culvert can be replaced only with a structure having the same dimensions, position, and location as the existing culvert. Further, as noted in the Response to Comment 515 above, the replacement culvert must be constructed of the same material except in limited cases. Additionally, the replacement culvert must have the same wingwall configuration as the existing culvert, and the elevation of the crown of the roadway profile above the culvert and the dimensions of any parapets cannot be altered within the flood hazard area. In some cases, an existing culvert may be inadequately sized to convey flows under a roadway, and floodwaters will overtop the roadway surface. Changing the geometry of the road surface can therefore affect upstream or downstream flooding, which the Department must evaluate under a general permit or individual permit application. All of these requirements ensure the hydraulic capacity of the culvert will not be affected and therefore will not alter existing flooding conditions.

Further, the culvert being replaced must not have been removed more than one year prior to replacement. Removing a culvert will allow a channel to revert to its pre-construction condition. More than a year after the removal of a culvert, a channel will generally have reverted enough that constructing a replacement structure can impact flooding and the environment similar to the construction of a new structure. Therefore, a culvert that has been removed for more than one year can be replaced only under an application for an individual permit, allowing for appropriate Department review of the project and its impacts.

Additionally, the channel along which the culvert is being replaced cannot be scoured, incised, or otherwise situated such that the culvert invert (the lowest point on the inside of the culvert) lies more than six inches above the invert of the regulated water. Replacing such a culvert in-kind will not likely be stable and could exacerbate erosion and flooding. Finally, limits on riparian zone disturbance and timing restrictions set forth at N.J.A.C. 7:13-11.5(d) must be observed for activities under this general permit-by-certification in order to minimize impacts to riparian zone functionality and fishery resources. These requirements ensure that the authorized activities will not exacerbate flooding or adversely impact the environment.

N.J.A.C. 7:13-8.11 General Permit-By-Certification 11 – Maintenance of Existing Manmade Stormwater Management Structures and Conveyances

519. COMMENT: Maintenance of existing stormwater management structures is beneficial and essential to their function. Mosquito control agencies are often faced with maintaining or

restoring these stormwater management structures back to their original design. The Department's efforts to make this work more efficient and effective are appreciated. (35)

RESPONSE: The Department acknowledges this comment in support of the rules.

520. COMMENT: Private entities do not always have the equipment or expertise to maintain stormwater management structures. Permit requirements are not the only thing hindering private homeowners or companies from completing routine maintenance. Public entities should still have an active part in supervising maintenance activities in stormwater management structures, especially those that become or are a public health threat. (35)

RESPONSE: N.J.A.C. 7:13-8.11 incorporates with amendments prior N.J.A.C. 7:13-8.6, which authorized the maintenance, repair, and replacement of lawfully existing stormwater management structures and conveyance features by a public entity. These activities are necessary for the continued operation of stormwater management facilities as well as commonly undertaken in response to requirements of State approvals and local ordinances. Periodically, undertaking these activities is furthermore essential in ensuring that stormwater management systems continue to provide the important flood attenuation, groundwater recharge, and water quality functions they were intended to perform. The Department has therefore determined that maintenance of existing stormwater management structures and conveyance features, in the manner set forth in this general permit-by-certification, is beneficial irrespective of whether the entity performing the work is public or private. As such, given the beneficial nature of the

maintenance, repair, and replacement of these structures and the frequency at which such activities are required to be performed, and in an effort to reduce regulatory burdens for entitles who intend to, or are being required to, perform such activities, general permit-by-certification 11 includes the conduct of the specified activities regardless of the entity performing or supervising the work.

521. COMMENT: The engineering certificate could be better defined. This could quickly become cost prohibitive as well as confusing to both private and public agencies. What engineer should be used: a municipal engineer, county engineer, a private engineer? Will there be a fee set for this certification? How long will the designated engineer have to produce a certificate? Sometimes, the window of opportunity for a mosquito control commission to do work is small based upon staffing and timing restrictions; waiting for a certification from an engineer will impact the timeliness of the mosquito commission's jobs. (35)

RESPONSE: N.J.A.C. 7:13-8.11(a)4 requires the applicant to obtain an engineering certification confirming that the activities will not increase the frequency or depth of flooding during any flood event up to and including the flood hazard area design flood, either upstream or downstream of the site. This certification must be obtained prior to application for a general permit-by-certification and can be produced by any New Jersey licensed professional engineer (see definition of “engineering certification” at N.J.A.C. 7:13-1.2). There is no set fee for this certification. The Department anticipates that the certifying engineer will charge an amount appropriate to the time and effort necessary to review the project and create the certification.

Once produced, the applicant should retain the certification for the duration of the permit authorization.

522. COMMENT: If an organization has an FHACA individual permit or a new general permit 2, is the engineering certificate still required and is it still required to file a general permit-by-certification 11? (35)

RESPONSE: If a person obtains an FHACA individual permit or an authorization under general permit 2, which authorizes activities that could otherwise be covered by general permit-by-certification 11, there is no need to obtain authorization under general permit-by-certification 11.

523. COMMENT: Under this general permit-by-certification, please require that the stormwater management basin shall be constructed as an infiltration basin unless soils and water table make it more practical to construct a retention basin with constructed wetlands. (35)

RESPONSE: General permit-by-certification 11 authorizes the maintenance of one or more lawfully existing manmade stormwater management structures and conveyances, such as a pipe, culvert, ditch, channel, or basin. This permit does not authorize the construction of a new stormwater basin, which generally requires an individual permit. Further, the proper siting, design, construction, and application of stormwater management basins is set forth in the Department's Stormwater Management rules at N.J.A.C. 7:8 with additional guidance provided in the associated Best Management Practice Manual.

N.J.A.C. 7:13-8.12 General Permit-By-Certification 12 - Surveying and Geotechnical and Archeological Investigation Activities

524. COMMENT: The Department is asked to consider expanding the general permit-by-certification for surveying, geotechnical, and archeological investigation activities to include environmental remediation investigation activities as well. (101)

RESPONSE: Environmental remediation investigation activities can be conducted under general permit-by-certification 12, provided the requirements of N.J.A.C. 7:13-8.12(a)1 through 4 are met. As indicated in N.J.A.C. 7:13-8.12(a), activities covered by this general permit-by-certification include those conducted with the purpose of determining the presence or extent of contamination in subsurface soils or groundwater.

N.J.A.C. 7:13-8.15 General Permit-By-Certification 15 - In-Kind Replacement of Public Infrastructure

525. COMMENT: The replacement in-kind of all types of infrastructure, including water, wastewater and electric, should be allowed under this permit-by-certification. (11, 13, 37, and 59)

RESPONSE: General permit-by-certification 15 authorizes the in-kind replacement of public infrastructure in certain circumstances. N.J.A.C. 7:13-8.15(a) states that, "For the purposes of this general permit-by-certification, public infrastructure means any roadway, railroad, bridge, culvert, storm sewer system, utility, and associated structure that are maintained by a public entity." As water, wastewater, and electric lines are types of utilities, the replacement of these structures is authorized, provided the requirements of the general permit-by-certification are met. Furthermore, the in-kind replacement of water, wastewater, and electric utility lines located outside a floodway is, in many cases, authorized under permit-by-rule 3 at N.J.A.C. 7:13-7.3 for in-kind replacement of a lawfully existing structure. The in-kind replacement of infrastructure can, in additional cases, be authorized under permits-by-rule 33 through 39, which cover a variety of construction activities associated with utility lines. In situations where the in-kind replacement of water, wastewater, and electric utility lines is not authorized under a permit-by-rule or general permit-by-certification, it is appropriate for the Department to review the activities under an individual permit in order to ensure that the activities do not exacerbate flooding or adversely impact the environment.

526. COMMENT: This section should state clearly that this general permit-by-certification applies to privately owned utilities as well as public. This would be consistent with the coastal rules, which classify electric, gas, sewer, and water lines as public development. (59)

RESPONSE: As noted in the Response to Comment 525, this general permit-by-certification is designed to apply only to public infrastructure as set forth at N.J.A.C. 7:13-8.15(a). This

authorization is intended to enable public entities to take immediate action to reduce the harm that may result from flooding or any related severe weather event since public infrastructure damaged by flooding can hamper relief efforts by preventing essential services from reaching residents in impacted areas and can impede the social and economic recovery of the State. Where a privately-owned utility is damaged and is in need of repair or replacement and where such repair or replacement is not authorized under a permit-by-rule as noted in the Response to Comment 525 above, it is appropriate for the Department to consider the repair or replacement in the context of an emergency authorization in accordance with N.J.A.C. 7:13-16, which is followed up by the review of the activities under an individual permit in order to ensure that the activities do not exacerbate flooding or adversely impact the environment.

Subchapter 9. General Permits

General Comments

527. COMMENT: Increasing the review time for general permits to 90 days is appropriate and supported. (183)

RESPONSE: The Department acknowledges this comment in support of the rules.

528. COMMENT: For general permits 6, 8, 12, and 13, please add the following requirement:

"All increased runoff is infiltrated, unless soils and water table make that impractical, and the disturbed area is mitigated with habitat of the highest value at a creation to loss ratio of 5:1." (158, 159, and 180)

RESPONSE: The Department's Stormwater Management rules at N.J.A.C. 7:8 establish stringent water quality, runoff quantity, and groundwater recharge requirements for development that exceeds one acre of disturbance or includes one quarter of an acre of new impervious cover. Those projects are classified as "major developments" as the Department has determined they are of sufficient size and/or scope to generate a significant volume of stormwater runoff and could therefore impair water quality or result in increased flooding. Most activities authorized under a general permit are minor in scope and would never constitute a major development and are therefore not subject to the stringent groundwater recharge requirements of the Stormwater rule. However, the Department recognizes that it is possible the activities associated with general permits 6 and 8 could be of a scope to be classified as "major development." Subsequently, the adopted rule includes specific language for general permits 6 and general permit 8 at N.J.A.C. 7:13-9.6(a)10 and 9.8(a)11 that should a project constitute a major development, all applicable requirements of the Stormwater rules at N.J.A.C. 7:8 are met. In addition, and in response to other comments, the Department has proposed language in the concurrent rulemaking at N.J.A.C. 7:13-6, General Provisions for Permits-By-Rule, General Permits-By-Certification, and General Permits, to specify that any activity authorized by a permit-by-rule, general permit-by-certification, or general permit that meet the definition of "major development" are subject to the provisions of the Stormwater Management rules at N.J.A.C. 7:8. As previously noted, the Flood

Hazard Area Control Act Rules provide provisions for the authorization of permits-by-rule, general permits-by-certification, general permits, and individual permits. With the exception of an individual permit, the Department has determined that the activities authorized by the other permits are of such a *de minimis* nature, or provide an environmental uplift, that mitigation is not necessary.

529. COMMENT: Several general permits rely on an engineering certification to ensure that flooding will not be increased. This is apparent in N.J.A.C. 7:13-9.3 and 9.5. If the flood plain and flooding are at all important, then how can the Department let the regulated community decide what will and what will not cause flooding? This seems irresponsible. (118)

RESPONSE: Engineering certifications are required in a number of places throughout the chapter. It is appropriate in certain limited circumstances to require a New Jersey licensed professional engineer to confirm that one or more requirements of the FHACA Rules are met. For example, general permit 3 at N.J.A.C. 7:13-9.3(a)3i requires an engineering certification confirming that the stabilizing material for the scour protection at a bridge or culvert is minimized. The definition of “engineering certification” at N.J.A.C. 7:13-1.2 explains that an engineering certification must be signed and sealed and be accompanied by the material and information that the certifying engineer used to base the certification, which enables the Department to review the certification and confirm that it accurately reflects the conditions of the site and the requirements of this chapter. Where a New Jersey licensed professional engineer employed by the Department reviews the certification and determines that clear and compelling

evidence of a threat to public health, safety, or welfare or the environment exists, the Department engineer can reject a submitted certification. This enables the Department to prevent an applicant from undertaking activities that could exacerbate flooding or adversely impact the environment should the submitted certification prove to be inaccurate.

530. COMMENT: Removing utility line permitting for drainage areas of less than 50 acres should not be allowed. (69)

531. COMMENT: The Department should not adopt general permits for pipelines and other utility projects within stream buffers. (177)

RESPONSE TO COMMENTS 530 AND 531: General permit 8 under prior N.J.A.C. 7:13-8.10 authorized the construction of a utility line across or along a regulated water that has a drainage area of less than 50 acres. This general permit was not continued because the Department determined that activities previously authorized by this general permit are more appropriately reviewed under an application for an individual permit. However, the adopted rulemaking does include three permits-by-rule that authorize the construction of a utility line across or along a regulated water in limited circumstances: permit-by-rule 36 for the placement of an underground utility line using directional drilling or jacking, permit-by-rule 37 for the placement of an underground utility line beneath existing pavement, and permit-by-rule 38 for the attachment of a utility line to a lawfully existing roadway or railroad that crosses a regulated water. Permit-by-rule 36 does not allow for the disturbance of any trees in the riparian zone, permit-by-rule 37

does not allow for any riparian zone vegetation disturbance, and permit-by-rule 38 allows for the disturbance of up to 1,000 square feet of periodically mowed and/or cleared right-of-way. In contrast, existing general permit 8 allowed for up to 12,000 square feet of riparian zone disturbance. As such, utility lines that do not meet the requirements of permits-by-rule 36, 37, or 38 must obtain an individual permit from the Department.

532. COMMENT: The Department should develop a general permit for the investigation and cleanup of hazardous sites and landfills. The permit should authorize the cleanup of sites in the floodplain and riparian zone provided the site is returned to its original elevation and that temporarily disturbed vegetation in the riparian zone is restored at a 1:1 ratio in place and in kind. This riparian restoration ratio is the current successful practice of the Department. This general permit would be consistent with the intent of the Site Remediation Reform Act (SRRA) and also consistent with the provisions of general permits 4 and 5 in the Freshwater Wetlands Protection Act rules. The remediation process results in a significant ecological uplift to riparian zones and removes contamination from the flood hazard area, thereby protecting water resources. (59)

RESPONSE: While the Department acknowledges that some site remediation projects and landfill closures can be accomplished at or below existing grade, many such projects require grading, the placement of fill, and/or capping land within flood hazard areas, which can displace flood storage volume and potentially exacerbate flooding. In cases where site remediation projects and landfill closures can be accomplished without raising the ground elevation in a flood

hazard area, such activities may qualify under permit-by-rule 8 at N.J.A.C. 7:13-7.8. Permits-by-rule 9 and 10 at N.J.A.C. 7:13-7.9 and 7.10 may also cover certain site remediation and landfill closure activities. However, where these activities do not qualify for a permit-by-rule, the Department has adopted standards at N.J.A.C. 7:13-12.17 for the investigation, cleanup, or removal of hazardous substances and N.J.A.C. 7:13-12.19 for solid waste landfill closure. Given the size and scope of many of these projects as well as the general need to alter existing topography in a flood hazard area in order to meet the Department's rules governing these activities, it is appropriate for the Department to review such projects under an application for an individual permit.

533. COMMENT: Lakefront property owners, lake associations, and many other entities involved with recreational and commercial use of lakes and ponds have a strong interest in seeing water resources improved. There is a strong demand for the removal of weeds and other organic materials that decrease water temperatures in these water areas. The removal of such material would greatly improve water quality.

It is suggested that a new general permit for the dredging of waterfront property along lakes and ponds be added. This general permit should be limited to the cleaning of organic accumulations such as weeds. The permit should specify the acceptable equipment and techniques for the removal of such material and should prohibit the use of excavators and draglines due to their deleterious impacts on water resources. In addition, the general permit should be limited to the removal of 2,500 cubic yards of material or less. Rather than a case-by-case review of each individual project, template plans developed by the company conducting the

activity should be approved thereby streamlining these projects and making dredging an economically viable option. Further, the fee for the general permit should be reasonable unlike the existing $2,500 application fee; perhaps the fee could be based on a percentage of the project costs (for example five to 10 percent of the costs) or some similar construct.

Stakeholders want to clean-up lakes and ponds in the most environmentally protective manner and as efficiently as possible. They are willing to use personal income for the improvement of these public resources. The Department has the opportunity to utilize this market-based approach in order to reduce costs of land and pond management to the State and increase stakeholder satisfaction, while restoring impaired water resources. This process is being adopted for many aspects of Federal and State levels of government and is proven to work. If the streamlined permitting process was adopted, the Department could expect to see substantial improvements in surface water quality, and increased ecosystem health, stakeholder satisfaction, and economic activity.

RESPONSE: The Department acknowledges the benefits associated with the removal of accumulated sediment and biological material from impounded waterbodies in certain cases. However, without proper controls and oversight, sediment and debris removal from regulated waters can greatly increase sediment loading and cause deleterious impacts to aquatic biota. For this reason, N.J.A.C. 7:13-12.15 establishes standards for sediment and debris removal from a regulated water, and N.J.A.C. 7:13-12.15(c) provides additional standards particular to lake and pond dredging activities. Due to the potential adverse impacts of such activities, the Department has determined that a site-specific review is warranted under an individual permit. It should be noted that an individual permit with an application fee of $3,000 can be issued for multiple

sediment and debris removal projects over a five-year period. Accordingly, where multiple communities wish to conduct sediment and debris removal activities on their portion of a common regulated water, those communities could share permitting costs.

N.J.A.C. 7:13-9.1 General Permit 1 - Channel Cleaning under the Stream Cleaning Act

534. COMMENT: The inapplicability of the general permit 1 to Pinelands waters at N.J.A.C. 7:13-9.1 is supported. (146)

RESPONSE: The Department acknowledges this comment in support of the rules.

535. COMMENT: The language as provided in this general permit places undue responsibility on the local Soil Conservation District. Not all districts have a licensed professional engineer on staff nor are they equipped to assume such authority. It is recommended that the section be amended to limit certification responsibility to the local municipality or county. (131)

RESPONSE: General permit 1 provides permitting standards for channel cleaning activities that are authorized under the “Stream Cleaning Act” at N.J.S.A. 58:16A-67. Under this statute, “… a county or municipality, or designated agency thereof, before undertaking any project to clean, clear, or desnag a stream within its jurisdiction, shall submit to the Department … a written notice of intent to undertake a project to clean, clear, or desnag a stream and a certification attested to by the county or municipal engineer or the local Soil Conservation District, provided

that the certification is made by a licensed professional engineer." (See N.J.S.A. 58:16A-67a.) This provision does not require local Soil Conservation Districts to employ a licensed professional engineer or mandate that districts must provide the required certification. Rather, the statute provides that the required certification can be attested to by a licensed professional engineer under the local Soil Conservation District.

N.J.A.C. 7:13-9.2 General Permit 2 - Mosquito Control Water Management Activities

536. COMMENT: This general permit is a welcome addition for mosquito control agencies. It helps to define work areas and helps to insure mosquito control agencies' ability to protect public health. (35)

RESPONSE: The Department acknowledges this comment in support of the rules.

537. COMMENT: Is there no longer a companion flood hazard area permit for a freshwater wetlands general permit 1? Does this replace a blanket individual permit for any mosquito control activities? (35)

RESPONSE: N.J.A.C. 7:13-9.2 sets forth a new general permit to authorize mosquito control activities as a companion to existing general permit 15 in the FWPA Rules at N.J.A.C. 7:7A-5.15. The prior FHACA Rules did not provide a general permit for regulated activities related to mosquito control and instead allowed limited mosquito control activities under an individual

permit at prior N.J.A.C. 7:13-11.15(d). Given the beneficial nature of mosquito control activities and the fact that these projects are routinely authorized under a freshwater wetlands general permit, the Department has adopted general permit 2, which incorporates with amendments the prior individual permit requirements, in order to facilitate these projects in a way that will not exacerbate flooding or adversely impact the environment.

Regarding an FHACA Rules companion to freshwater wetlands general permit 1 at N.J.A.C. 7:7A-5.1 for the maintenance and repair of existing features, flood hazard area permit-by-rule 1 at N.J.A.C. 7:13-7.1 authorizes normal property maintenance, permit-by-rule 2 at N.J.A.C. 7:13-7.2 authorizes repair of a lawfully existing structure, and permit-by-rule 3 at N.J.A.C. 7:13-7.3 authorizes the in-kind replacement of a lawfully existing structure.

538. COMMENT: Three examples of authorized activities are listed at proposed N.J.A.C. 7:13-9.2(a). A fourth example could be added: remove accumulated silt, sediment, and debris from any stormwater management structure. (35)

RESPONSE: The maintenance of a stormwater management structure is authorized pursuant to the general permit-by-certification at N.J.A.C. 7:13-8.1. That permit-by-certification allows for the maintenance of existing manmade stormwater management structures and conveyances. Furthermore, N.J.A.C. 7:13-9.2(a) provides that mosquito control water management activities authorized under general permit 2 include the removal of accumulated silt, sediment, and debris from any water, creation of ditches and channels where appropriate for mosquito control, and improvements to flow in manmade waters, such as the excavation of an existing manmade ditch

or channel to provide positive drainage. Therefore, removing accumulated silt, sediment, and debris from any stormwater management structure, to the extent it qualifies as a water as defined in N.J.A.C. 7:13-1.2, may be conducted under a general permit 2, provided all requirements of N.J.A.C. 7:13-9.2 are met.

539. COMMENT: Would this permit be required for all mosquito control water management projects that fall into flood hazard areas, replacing the existing general permit 4? (35)

RESPONSE: Prior general permit 4 for stormwater maintenance by a public entity has been adopted as general permit-by-certification 11 at N.J.A.C. 7:13-8.11, where authorization is not limited to public entities. Depending on the scope and size of a mosquito control water management project, authorization under either general permit-by-certification 11 or general permit 2 may be appropriate, provided all permitting requirements are met.

N.J.A.C. 7:13-9.4 - General Permit 4 - Creation, Restoration, and Enhancement of Habitat, and Water Quality Values and Functions

540. COMMENT: This proposed general permit allows for "removing, planting, cutting, burning, or otherwise managing vegetation in order to increase habitat diversity or control nuisance flora." However, it is unclear if acreage limits for disturbances associated with invasive species management in the riparian zone are waived under this general permit. Since invasive

species management, if properly implemented, would result in a temporary disturbance to the plant community, acreage limits for those activities should be waived. (126)

541. COMMENT: It is unclear if the proposed general permit allows for removal of invasive trees and other invasive vegetation within 25 feet of the top of bank. Many degraded riparian zones that would benefit from invasive species management include plant communities dominated by invasive plant species in multiple stratum right up to the top of bank. The importance of maintaining stream bank integrity is understood, but restricting management activities within 25 feet along the top of bank not only allows invasive plants to keep a foothold in the community but also leaves an established seed source for downstream expansion of the population. If the habitat enhancement and/or restoration projects involve invasive species control, general permit 4 should provide an allowance for treatment of target invasive plant species within 25 feet of the top of bank, provided the methods of control do not significantly disturb the soil and/or physical root structure of the target plants. Methods that achieve the desired level of control while maintaining stream bank integrity include foliar and basal herbicide applications, cut stump herbicide treatments, and mowing of aboveground biomass to prevent seed propagation. Seeding and replanting should be required at an appropriate time pending control of the target invasive species. If invasive species management within 25 feet of the top of bank is conducted using the methods described and does not disturb the soil surface or physical root structure, then the activities should not require individual permit review and should qualify for general permit 4. (126)

RESPONSE TO COMMENTS 540 AND 541: General permit 4 does not limit the area of disturbance to riparian zone vegetation necessary to accomplish creation, restoration, and enhancement of habitat and water quality values and functions, nor does it place restrictions on activities undertaken within 25 feet of any top of bank.

542. COMMENT: In a July 2014 comment letter on the draft FHACA Rules, the USDA Natural Resource Conservation Service requested that general permit 4 be modified to pull out voluntary habitat creation and enhancement activities that are planned by the NJDEP Division of Fish and Wildlife, US Fish and Wildlife Service, or USDA Natural Resource Conservation Service and that these projects instead be included under a no fee permit-by-certification category. As Federal agencies, both NRCS and US Fish and Wildlife Service are subject to compliance with the National Environmental Policy Act (NEPA) and have environmental evaluation protocols that must be followed when planning such projects. These projects provide environmental uplift and wildlife habitat, which should be encouraged by the Department, not discouraged. With the general permit fees increased to $1,000, this request is even more important now than when requested a year ago as many landowners will likely not participate in Federal voluntary habitat programs when they need to pay a $1,000 permit fee in addition to their share of the habitat restoration cost. (111)

543. COMMENT: The Department should adopt a permit-by-rule that authorizes Federally sponsored habitat restoration projects, such as those sponsored by the US Fish and Wildlife Service or the Natural Resources Conservation Service. The rulemaking requires submission of

an application for a general permit authorization for these activities. While the intent of providing a general permit for this type of activity is appreciated, a permit-by-rule is preferred to the general permit process. Preparation of a general permit package requires two full business days and public notice. Recovering two business days that would otherwise be used to work on a new habitat restoration project will benefit the environment and the public serves in the Service's *Partners* program. Recovery of this time would lead to approximately four additional habitat improvement projects annually in the program. A permit-by-rule for Federally sponsored habitat improvement would remove the need for certified mailings for public notice and will save time and money. The Service is subject to compliance with the National Environmental Policy Act (NEPA) and must follow strict environmental protocols, including hearing public comment. Any project undertaken by the Service will already have a high standard for planning and evaluation to be compliant with NEPA; therefore, the need for a general permit is considered redundant and costly. (45 and 152)

RESPONSE TO COMMENTS 542 AND 543: As noted in the Response to Comments 540 and 541, general permit 4 authorizes a broad range of activities and does not limit the area of disturbance to riparian zone vegetation necessary to accomplish creation, restoration, and enhancement of habitat and water quality values and functions, nor does it place restrictions on activities undertaken within 25 feet of any top of bank. For this reason, it is appropriate for the Department to review applications for authorization under this general permit in order to ensure that the project will not exacerbate flooding or adversely impact the environment. It should be

noted that, in order to facilitate these environmentally beneficial projects, no application fee is required for authorization under this general permit. (See N.J.A.C. 7:13-20.1(b)4ii.)

544. COMMENT: Please specify that this general permit applies to entities implementing mitigation banks inclusive of private sector mitigation providers and bankers. This general permit should not exclude private sector mitigation providers, regardless of sponsorship by any entity including governmental organizations and charitable conservancies. There is no ecological reason why this general permit should be limited or exclusionary. (135)

RESPONSE: The purpose of general permit 4 is to facilitate creation, restoration, and enhancement activities approved by certain State or Federal agencies, a government resource protection agency such as a parks commission, or a charitable conservancy. These agencies have experience with creation, restoration, and enhancement activities and assume a level of oversight to ensure the authorized activities are successfully implemented and maintained. While it is not the Department's intention to discourage riparian zone banking, the wide range of regulated activities that may be associated with the creation of a riparian zone bank are better reviewed by the Department under the context of an individual permit in order to ensure that the activities will not exacerbate flooding or adversely impact the environment.

N.J.A.C. 7:13-9.7 General Permit 7 - Relocation of Manmade Roadside Ditches to Facilitate Public Roadway Improvements

545. COMMENT: This general permit will allow for stream relocation, provided that the ditch is manmade. It is not understood why the rules devalue manmade watercourses since they can offer as much, if not better, environmental value as naturally existing watercourses. That needs to be acknowledged. Beyond that, this general permit does not address how the relocated stream is to be constructed. Many times, a stream channelization results in a rock-lined ditch. This is of the poorest of environmental values. A relocated stream must be stable without the use of hard armoring. Otherwise, it is little more than an open sewer. Without such a requirement in this general permit, applicants will make the ditch as small as possible, which thereby necessitates the need for rock armoring. The end result is a watercourse of little remaining environmental value. This cannot be the intent of the rules. Please correct this. (118)

RESPONSE: N.J.A.C. 7:13-9.7 establishes a new general permit that authorizes the relocation of manmade roadside ditches to facilitate public roadway improvements. Manmade ditches are commonly created adjacent to existing public roadways in order to provide roadway drainage. Pursuant to N.J.A.C. 7:13-2.2(a)3ii, manmade ditches that have a drainage area of less than 50 acres are not regulated under this chapter. However, in cases where a roadside manmade ditch has a drainage area of 50 acres or more, the ditch possesses both a riparian zone and flood hazard area under N.J.A.C. 7:13-2.3. Public entities sometimes find it necessary to straighten, widen, relocate, or otherwise modify existing roadway geometry in order to ensure the safety of the travelling public. Such activities can require that an existing roadside ditch be relocated. Manmade roadside ditches can be relocated without adverse impacts to flooding or the

environment, provided relocation is undertaken within certain parameters as set forth in this general permit.

To be eligible for this general permit, the public entity responsible for maintaining the roadway must determine that relocation of the roadside ditch is necessary for the continued safe use of the roadway, thereby justifying the need for environmental impacts. The ditch cannot be enclosed in a pipe since that would eliminate the riparian zone of the feature under N.J.A.C. 7:13-2.3(c)1v. The relocated ditch must furthermore possess equal flood carrying capacity as the existing ditch, which is necessary to ensure that the relocation of the ditch does not adversely impact upstream or downstream flooding. Meeting this requirement will generally result in no significant change in the cross-sectional area of the ditch, thus reducing the need for armoring. Finally, in order to ensure that riparian zone functionality is not significantly impacted, the project cannot result in a net loss of greater than one-quarter acre of riparian zone vegetation. These limitations ensure that the project will not exacerbate flooding or adversely impact the environment.

N.J.A.C. 7:13-9.9 General Permit 9 - Construction or Reconstruction of a Bridge or Culvert Across a Regulated Water with a Drainage Area of Less than 50 Acres

546. COMMENT: This general permit should emphasize the use of a three-sided culvert. This is better for the environment. (118)

RESPONSE: The Department acknowledges that the use of bridges that span a regulated water or the use of arch or three-side culverts, which are culverts that are designed without a bottom so as to allow a natural stream bed to remain intact, provide superior ability for low-flow aquatic passage to continue through the structure after construction is complete. Under the adopted general permit, the proposed bridge or culvert must match or exceed the dimensions of the existing channel, where feasible, so that the size and shape of the natural channel is preserved throughout the structure. Additionally, at adopted N.J.A.C. 7:13-6.7(b), low-flow aquatic passage must additionally be preserved through a stable, natural, earthen channel, where feasible; limitations are placed on the placement of armor within the channel; all temporary disturbances to the channel must be restored; and applicable timing restrictions must be observed. These requirements incorporate the individual permit requirement for bridges and culverts and are necessary to minimize adverse impacts on aquatic biota and avoid increased erosion within the channel. Except in those cases where the drainage area is so small that a pipe is more appropriate, the Department anticipates that, in order to comply with these requirements, most applicants will employ the use of arch or three-side culverts.

N.J.A.C. 7:13-9.10 General Permit 10 - Reconstruction of a Bridge or Culvert Across a Regulated Water with a Drainage Area of 50 Acres or More

547. COMMENT: This general permit is potentially dangerous. It relies on the regulated community to determine what will and will not result in flooding. This responsibility cannot be

taken away from the Department. Please leave final authority with the Department to be the judge of what will and will not cause flooding. This is the Department's mission. (118)

RESPONSE: General permit 10 authorizes the reconstruction of a bridge or culvert in certain circumstances where the Department has determined flooding will not be exacerbated and the environment will not be adversely impacted. While many bridge and culvert reconstruction projects require Department review of detailed engineering calculations in order to ascertain whether the replacement structure will possess equivalent hydraulic characteristics as the existing structure, certain types of bridge and culvert replacements can be undertaken without an engineering analysis, in cases where the structure is replaced "in-kind," as that term is defined at N.J.A.C. 7:13-1.2, or where the replacement structure varies only slightly in shape or dimension as compared with the structure being replaced. This general permit therefore establishes limitations on minor variations in size and dimensions that are permissible for a replacement bridge or culvert to be approvable under this general permit without the need for review of detailed engineering calculations.

To qualify for this general permit, and to ensure that the replacement structure will not exacerbate flooding, the applicant must provide an engineering certification confirming that the proposed bridge or culvert is designed to not increase the frequency or depth of offsite flooding during the flood events set forth at proposed N.J.A.C. 7:13-12.1(i). The general permit also sets limitations on the structural alterations that can be made to the shape, size, and location of the existing bridge or culvert in order to ensure that the hydraulic capacity of the reconstructed bridge or culvert is substantially equivalent to the hydraulic capacity of the existing bridge or

culvert. In the rare instance where the Department determines that a project under this general permit would, in fact, likely result in increased flooding, the definition of "engineering certification" at N.J.A.C. 7:13-1.2 provides that a New Jersey licensed professional engineer employed by the Department can, upon clear and compelling evidence of a threat to public health, safety, welfare, or the environment, reject the submitted engineering certification. In such a case, the general permit authorization would not be approved without necessary amendments to the project to ensure that the bridge or culvert will not exacerbate flooding or adversely impact the environment.

N.J.A.C. 7:13-9.12 General Permit 12 – Construction of Footbridges

548. COMMENT: Proposed N.J.A.C. 7:13-9.12(a)8i states all stairs, ramps, or other structures necessary for access to the footbridge must "remain open underneath to allow floodwaters to pass freely." How does this impact common construction techniques, such as graded earthen ramps with stone cribbing or gabion and timber cribbing abutments? Structural support will always be needed to lend integrity to the steps or ramp, so what constitutes "remaining open"? (31)

RESPONSE: The purpose of N.J.A.C. 7:13-9.12(a)8 is to ensure that stairs, ramps, or other structures necessary for access to the footbridge do not unnecessarily obstruct flood flows. In cases where the walking surface of the footbridge is set above the elevation of the ground adjoining the channel being bridged, ramps or stairs that are constructed to remain open

underneath, such as wooden or metal ramps or stairs supported beneath by a wooden or metal structural lattice, would be required to access the footbridge, as opposed to ramps or steps that are constructed of compacted earth or stone as these would introduce more fill within the flood hazard area. Where the walking surface of the footbridge is set to match the elevation of the ground adjoining the channel being bridged or is somewhat below the adjoining ground elevation, graded earthen ramps would generally satisfy N.J.A.C. 7:13-9.12(a)8 as such ramps would not typically require the existing ground elevation to be raised in a flood hazard area.

N.J.A.C. 7:13-9.13 General Permit 13 - Construction of Trails and Boardwalks

549. COMMENT: N.J.A.C. 7:13-9.13(a)8 requires the incorporation of educational/interpretive signage. This small point would prove extremely difficult to implement successfully in many areas. In addition to the construction/installation price of signs, there are costs for graphic design, fabrication, materials shipping, and transportation to a site. In order to address a riparian area in proximity to a trail, signage materials might have to be carried and assembled miles from the nearest trailhead. Additionally, signs and kiosks are frequently targets of vandalism. The time, effort, and money required to maintain these signs after assembly would be substantial. The rulemaking does not address who (if anyone) would be responsible for upkeep and maintenance after installation. This sign requirement is out of character with many primitive hiking trails and should either be removed or clarified to explain where and when such signage is required. (31)

RESPONSE: The purpose of N.J.A.C. 7:13-9.13(a)8 is to help educate trail users on the importance of riparian zones, flood hazard areas, and stream corridors. This requirement is not intended to be burdensome or unsightly or to require signage to be installed at close intervals along the entirety of a trail. The length of a trail and the particular features that the trail encounters would dictate the appropriate location, frequency, and location of signage. For example, maps and other signage are typically provided at the termini of a trail to indicate the length of the trail and to illustrate common plants or wildlife that might be encountered. Signage may also be appropriate where a trail passes near a particularly interesting environmental feature, near look-out points, or by benches or tables that are sometimes provided along trails. Department staff will provide guidance to prospective applicants regarding the appropriate use of signage under this general permit.

Subchapter 11. Area-Specific Requirements for Individual Permits

N.J.A.C. 7:13-11.1 Requirements for a Regulated Activity in a Channel

550. COMMENT: Please amend proposed N.J.A.C. 7:13-11.1(b)8 and 9 to include protections for sediment habitat for macroinvertebrates. (158, 159, and 180)

RESPONSE: N.J.A.C. 7:13-11.1(b)8 requires that aquatic habitat is preserved where possible, and N.J.A.C. 7:13-11.1(b)9 requires that aquatic habitat is enhanced where preservation is not possible. The term “aquatic habitat” is a broad term that includes sediment habitat for

macroinvertebrates. Accordingly, adopted N.J.A.C. 7:13-11.1(b)8 and 9 (which were previously codified at N.J.A.C. 7:13-10.1(b)8 and 9 and were not amended as part of this rulemaking) continue to provide protection for aquatic habitat for macroinvertebrates.

551. COMMENT: While there are cases in which a channel must be modified to accommodate a bridge project, the current rules place a limitation of 200 feet on the modification; more than that is deemed excessive. The rulemaking inappropriately removes this limitation. Without set limitations, designers and applicants will no longer be required to minimize their environmental impacts. What is the reason for removing this layer of protection? It seems unnecessary. (118)

RESPONSE: Under prior N.J.A.C. 7:13-10.1(c)2iv, a regulated activity that would result in a channel modification of greater than 200 feet of channel, including any bridge or culvert structure, would require a hardship exception request. A number of factors can necessitate the disturbance of greater than 200 feet of channel, such as an irregular channel configuration that may require some additional grading within the channel to properly transition the new structure into the bed and banks and to stabilize the altered channel configuration and thereby minimize the potential for erosion after construction is completed. In order to meet the hardship exception requirements of prior N.J.A.C. 7:13-9.8, an applicant proposing a channel modification of greater than 200 feet would have to demonstrate that “there is no feasible and prudent alternative to the proposed project, including not pursuing the project, which would avoid or substantially reduce the anticipated adverse effects of the project, and that granting the hardship exception would not

compromise the reasonable requirements of public health, safety, and welfare, or the environment." It has been the Department's experience that bridge projects of this type could often not be accomplished without a disturbance of greater than 200 feet of channel, therefore necessitating a hardship exception for projects with potential public benefits. Therefore, in order to reduce the regulatory burden and administrative costs associated with the preparation and review of a hardship exception request, the adopted FHACA Rules include a requirement at N.J.A.C. 7:13-11.1(c)2iv that the applicant must demonstrate that disturbance to greater than 200 feet of channel cannot feasibly be avoided. This standard requires a showing similar to that of a hardship exception while placing substantial limits on when a disturbance greater than 200 feet may occur.

N.J.A.C. 7:13-11.2 Riparian Zone

General Comments

552. COMMENT: If disturbance in the buffer zone is allowed by virtue of a special exception or waiver, the rule should ensure that intrusion is minimized to the maximum extent possible, that significant actions are taken to enhance the integrity of the buffer area that remains, that intrusion by degrading invasive plant species is prevented, and that new buffers are created within the same subwatershed. (183)

RESPONSE: Under N.J.A.C. 7:13-11.2(b), riparian zone disturbance can occur only where the basic purpose of the regulated activity or project cannot be accomplished without such

disturbance and where the clearing, cutting, and/or removal of vegetation is minimized through a variety of methods. N.J.A.C. 7:13-11.2(c) and (d) further protect the portion of the riparian zone within 25 feet of the top of bank of regulated areas, which is the most crucial area to preserve for increased bank stability and water quality benefits. N.J.A.C. 7:13-11.2(z) additionally requires that temporarily disturbed areas are replanted with native, non-invasive vegetation. Mitigation in accordance with N.J.A.C. 7:13-13 is furthermore required for the entire amount of riparian zone disturbance for many activities located within a 300-foot riparian zone and for activities falling under N.J.A.C. 7:13-11.2(r) and (s). Mitigation is similarly required for all other activities where disturbance exceeds the limits set forth in Table 11.2.

It is not clear what the commenter is referring to with regard to creating new buffers. The FHACA Rules do not allow riparian zone averaging, which may be what the commenter is suggesting. Riparian zone creation is a type of mitigation that is provided at N.J.A.C. 7:13-13.9, subject to the overall mitigation requirements of N.J.A.C. 7:13-13. For example, N.J.A.C. 7:13-13.2(a) requires that any riparian zone mitigation "shall fully compensate for any ecological loss" that the mitigation is intended to offset. Where riparian zone mitigation is required under N.J.A.C. 7:13-11.2, Department staff will ensure that any proposed mitigation will meet this and all other relevant requirements, including, where necessary to satisfy N.J.A.C. 7:13-13.2(a), requiring mitigation to be situated in the same watershed as the project requiring mitigation.

553. COMMENT: Areas of vegetation along waterways provide shelter and habitat to various species of wildlife that would be compromised if this section is adopted. (96)

RESPONSE: Given the many protections and limitations placed on disturbance within riparian zones, including N.J.A.C. 7:13-11.2(c) and (d), which specifically protect and seek to improve the portion of the riparian zone within 25 feet of the top of bank as enumerated in the notice of proposal Summary and outlined in the Response to Comment 552 above, the requirements at N.J.A.C. 7:13-6.7(b)4 and 11.5 protecting threatened or endangered species habitat and populations, and the requirements at N.J.A.C. 7:13-12.7(d)3 and (e)3 requiring bridges and culverts to provide wildlife passage for threatened or endangered species and species of special concern where habitat fragmentation is a concern, the Department does not believe that the adopted rules will adversely impact wildlife habitat.

554. COMMENT: At proposed N.J.A.C. 7:13-11.2(b), (c), (d), (e)3, (f) through (i), (k) through (n), (q) through (t), (v), (x), and (y), please add the following requirement: "All increased runoff is infiltrated, unless soils and water table make that impractical, and the disturbed area is mitigated with habitat of the highest value at a creation to loss ratio of 5:1." (158, 159, and 180)

RESPONSE: The Department agrees that infiltration of stormwater runoff is often an efficient means of providing stormwater management. For this reason, the Department's Stormwater Management rules establish minimum design and performance standards for groundwater recharge at N.J.A.C. 7:8-5.4(a)2. The Department's Stormwater Management Best Management Practices Manual additionally provides guidance for constructing infiltration basins where existing soils and groundwater table levels allow. Given the robust stormwater management

requirements set forth at N.J.A.C. 7:8, and given the different scope and purpose of the FHACA Rules, it is not appropriate to adopt additional stormwater management protections under N.J.A.C. 7:13.

With regard to the mitigation ratio suggested by the commenter, N.J.A.C. 7:13-13 sets forth five types of riparian zone mitigation that, appropriately, provide mitigation at different ratios depending on the attendant value of the mitigation. For example, riparian zone creation at N.J.A.C. 7:13-13.9, in which a regulated water that is enclosed by a structure, such as a pipe or culvert, is restored to a natural condition, generally provides superior riparian zone mitigation compared to riparian zone preservation under N.J.A.C. 7:13-13.12. Accordingly, the required mitigation ratios vary according to the mitigation option proposed with a smaller ratio required for mitigation that provides superior benefits. Requiring riparian zone mitigation at a flat 5:1 ratio as suggested by the commenter is therefore not appropriate.

555. COMMENT: The Department should not make it easier for people to build in the riparian zone. With the amount of runoff that lawns can produce, streams require as much protection as possible. Further, this section will encourage building in the flood fringe, which could put people in harm's way. The goal of the FHACA is to protect people from harm, not move them closer to it. (28A, 42, 56, 67, 127, and 170)

RESPONSE: The Department's intention under this rulemaking is not to make it easier for people to develop the riparian zone or flood fringe but rather to recognize that disturbance to riparian zone vegetation is sometimes unavoidable, can result in a public or environmental

benefit, and/or would have *de minimis* impact on riparian zone functionality. Additionally, as noted in the Response to Comment 552 above, riparian zone disturbance can occur only where the basic purpose of the regulated activity or project cannot be accomplished without such disturbance and where the clearing, cutting, and/or removal of vegetation is minimized through a variety of methods.

As noted in the Response to Comment 554, the Department's Stormwater Management rules provide robust water quality, runoff quantity, and groundwater recharge protections, which are applied irrespectively of a project's location within or outside areas regulated under this chapter.

556. COMMENT: Current Department practices require riparian impact analyses and mitigation based on disturbances outside the top of bank. The regulations imply that the entire channel and the buffer areas outside the top of bank are part of riparian impacts. Wetlands and State open water areas typically exist within these same riparian areas. The Department should provide further clarification on riparian impacts and means to address the overlap of wetlands/State open waters with riparian areas. (28)

RESPONSE: The FHACA Rules set forth standards for development within flood hazard areas and riparian zones, which are independent of the requirements of the FWPA Rules. Where activities are located under the jurisdiction of both the FHACA and FWPA Rules, the requirements of each chapter must be met. For example, filling an isolated freshwater wetlands under FWW general permit 6 or a ditch under FWW general permit 7 may satisfy the requirements of the FWPA Rules, but the area, if located within a flood hazard area or riparian

zone, would additionally be subject to the flood storage displacement and riparian zone disturbance limits of the FHACA Rules. This is appropriate since the FHACA and FWPA Rules operate under different legislative mandates and have a different scope and purpose.

557. COMMENT: Riparian buffers should apply to both new development and redevelopment projects. Further, new development projects should be prohibited within riparian zones. (183)

RESPONSE: The riparian zones under this chapter apply irrespective of the type or presence of development. As previously noted in this adoption, FEMA estimated that 35 percent of New Jersey's land area lies within a flood hazard area. Since riparian zones sometimes extend outside the flood hazard area, the area of land subject to the FHACA Rules is well over 35 percent of New Jersey. Many thousands of the State's existing homes and businesses and a significant number of roadways and other infrastructure lie within flood hazard areas or riparian zones. Preventing all development within the State's flood hazard areas and riparian zones would therefore have significant adverse impacts on numerous communities. Under the Flood Hazard Area Control Act at N.J.S.A. 58:16A-50 and 52, the Department is given discretion to adopt land use regulations for the flood hazard area, to control stream encroachments, and to delineate as flood hazard areas such areas the improper development and use of which would, in the judgment of the Department, constitute a threat to safety, health, and general welfare from flooding. The Act further requires the Department to delineate portions of the flood hazard area for "reasonable and proper use." Therefore, the FHACA presupposes that development can occur within flood hazard areas, provided protections are put in place to ensure that such development

does not threaten public health, safety, and welfare. Within this framework, the Department has adopted the FHACA Rules, which provide robust protections for the riparian zone and ensure that, where riparian zone disturbance is proposed, disturbance to vegetation is avoided where practicable, minimized in area, located as far from a regulated water as possible, and mitigated where impacts would alter riparian zone functionality.

558. COMMENT: This section of the rules would allow piping of a stream. Since open waters are valued, the piping of a stream should not be allowed except under the most extreme circumstances. The hardship exception should be the only mechanism in the rules to allow piping. If piping is allowed, creation of a surrogate open water should be required as mandatory compensation. (118)

RESPONSE: Enclosing a regulated water within a pipe, culvert, or bridge is permitted only for the construction or improvement of a railroad or roadway under N.J.A.C. 7:13-11.2(g) and (h) and for the construction of a footbridge under N.J.A.C. 7:13-11.2(u), provided the stringent requirements included therein are met. The construction of a railroad or roadway under N.J.A.C. 7:13-11.2(g) and (h) requires a demonstration of need for the proposed disturbance and an examination of alternative designs that would avoid or reduce riparian zone disturbance. All such construction under N.J.A.C. 7:13-11.2 is further subject to the general requirements at N.J.A.C. 7:13-11.2(b) to avoid and reduce riparian zone impacts as well as the requirements at N.J.A.C. 7:13-12.7 for bridges and culverts. Enclosing a regulated water within a pipe, culvert, or bridge

to accommodate any other type of project would necessitate a hardship exception request under N.J.A.C. 7:13-15.1.

With regard to the commenter's suggestion that the enclosure of any regulated water within a pipe should be offset by the creation of a new open water at another location, while the Department supports and encourages "daylighting" streams, as evidenced by the riparian zone creation criteria at N.J.A.C. 7:13-12.14(d) and 13.9, requiring the creation of an open water to offset each railroad, road, or footbridge would be onerous and create an undue hardship on the vast majority of applicants and could unintentionally discourage projects that would provide important benefits for public safety and the environment. For example, a public entity may propose to construct a new road across a regulated water that could significantly increase public safety and reduce miles driven or a new railroad line crossing regulated waters that would improve mass transit options within a community. Similarly, an applicant could demonstrate that there is no feasible alternative to piping a severely eroded stream in order to protect the integrity of nearby structures or reduce a significant sediment load entering the stream that is adversely affecting downstream aquatic biota.

559. COMMENT: The Department's assertion that increasing riparian zone encroachment and disturbance limits for lawns, gardens, and other actively disturbed areas will not impact riparian zone function is fundamentally flawed; lawns, gardens, and actively disturbed areas are damaging to riparian zone functionality. The science shows that wider, vegetated buffers are more effective than smaller ones, that 100-foot forested buffers are the absolute minimum that should be required for water quality and flood protection, that lawnscapes create almost the same

volume of polluted runoff as pavement, and that larger buffers are critical for providing quality bird and wildlife habitat. Permitting encroachment in the riparian buffer for these kinds of land uses will increase the volume of polluted runoff and decrease ecological habitat, water quality protection, and flood protection. (183)

RESPONSE: The Department agrees that lawns, gardens, and other actively disturbed areas provide diminished riparian zone functionality as compared with forested areas and other types of vegetation. The adopted rules are not intended to facilitate the conversion of natural areas into lawns, gardens, and other actively disturbed areas. Rather, the FHACA Rules encourage development to be situated within such areas, recognizing their diminished riparian zone functionality.

560. COMMENT: The proposed maximum allowable area of riparian zone vegetation that can be temporarily cleared, cut, or removed for habitat restoration and enhancement under an individual permit is 2,000 square feet. That area restriction would limit invasive species management activities to approximately 80 linear feet within 25 feet of top of bank along any regulated waterbody. The limit of disturbance for invasive species control should be increased to at least 5,000 to 7,500 square feet (approximately 200 to 300 linear feet of stream bank) to allow for implementation of a project of worthwhile size. (126)

RESPONSE: It is not clear which individual permit standard the commenter references under N.J.A.C. 7:13-11.2. Riparian zone disturbance to accommodate a bank stabilization and channel

restoration accomplished using solely vegetation and/or soil bioengineering is not limited where the disturbance is justified in accordance with N.J.A.C. 7:13-11.2(i). Adopted N.J.A.C. 7:13-11.2(y) additionally permits some riparian zone disturbance for activities not listed in Table 11.2, which could be applied to a habitat restoration and enhancement project. However, the Department anticipates that the majority of habitat restoration and enhancement projects will be authorized under general permit 4 at N.J.A.C. 7:13-9.4 for the creation, restoration, and enhancement of habitat and water quality values and functions. This general permit has no limit on riparian zone disturbance and requires no application fee.

561. COMMENT: It appears that habitat restoration and enhancement activities that would require individual permit review will still incur a permit application review fee. Regardless of the type of permit required, no review fee should be charged for proactive restoration and habitat enhancement. Costs covered by the applicant to implement habitat restoration and enhancement activities, which NJDEP would not otherwise be able to fund, should be viewed by NJDEP as an investment in the natural capital of the State. (126)

RESPONSE: As noted in the Response to Comment 560, the Department anticipates that the majority of habitat restoration and enhancement projects will be authorized under general permit 4 at N.J.A.C. 7:13-9.4 for the creation, restoration, and enhancement of habitat and water quality values and functions. This general permit has no limit on riparian zone disturbance and requires no application fee. In rare instances where habitat restoration and enhancement activities exceed the scope of general permit 4 and require an individual permit, it is appropriate for the

Department to perform an individualized review of the proposed activities and to assess a fee in accordance with N.J.A.C. 7:13-20 in order to remunerate the Department for costs associated with reviewing and processing the individual permit application.

N.J.A.C. 7:13-11.2(b)

562. COMMENT: Proposed N.J.A.C. 7:13-11.2(b) will remove the requirement that an applicant explore reducing the size or scope of a project in the riparian zone. This is a significant change that dramatically reduces the Department's role in actively working with applicants to limit project impacts. Instead, this provision concedes that project size and scope should be determined by the applicant. Supporting data or statistics are not provided to prove that project size is determined by zoning or to demonstrate the results of past Department involvement in reducing project size and scope. This change appears to provide a significant reduction in the protection of riparian zones, and without supporting data to justify the statements, this provision should not be adopted. (1)

563. COMMENT: The Department should not abandon the regulatory requirement for an applicant to scale back a project in order to avoid impacts to the riparian zone. The Department blames municipal land use, which is a misunderstanding of the Municipal Land Use Law. A municipality's zoning requirements are generalized requirements over large geographic areas. They rarely take environmental resources or constraints into consideration. The Department is not required to issue permits that are contrary to the goals of the FHACA and the Water Quality

Planning Act simply because a zoning ordinance allows the project. The Department's past decisions regarding wetlands permits, sewer service areas, and many other issues prove this. This rulemaking justification is contradictory to the hierarchy of statutory authority. (28A, 42, 56, 67, and 127)

564. COMMENT: The proposed revisions state that the Department "is not proposing to continue the general requirement that an applicant in all cases explore reducing the size or scope of the project as this requirement has proven generally unmanageable since the type of development that is permitted is a function of local zoning and the requirements that the applicant demonstrate that the purpose of the project cannot be accomplished without disturbing vegetation, that disturbance to riparian vegetation is minimized through methods such as those indicated in the examples, and that other requirements of this section have been satisfied will ensure that riparian zone impacts are appropriately limited." This change in the underlying principles of the FHACA Rules is unacceptable and is symptomatic of the multitude of defects contained in the proposed revisions. (91 and 195)

565. COMMENT: The proposed changes to the rules diverge from the natural resource conservation principle of avoid, minimize, and mitigate. The notice of proposal Summary states that the existing rules require applicants to demonstrate that the basic purpose of their project cannot be accomplished onsite without disturbing vegetation in the riparian zone, that disturbance is eliminated where possible and minimized where unavoidable, that temporarily disturbed vegetation is replanted with appropriate replacement vegetation, and that any

restrictions specified in the FHACA Rules as applicable to the specific proposed activity are satisfied. The Department is not proposing to continue the general requirement that an applicant explore reducing the size or scope of the project in all cases as this requirement has proven generally unmanageable because the type of development that is permitted is a function of local zoning and because the requirements regarding the disturbance of vegetation will ensure that riparian zone impacts are appropriately limited. The proposed amendments to the riparian zone requirements of this chapter seem to be at odds with longstanding construction of the Department's Land Use rules, which have traditionally identified select resources as "special areas." These areas are defined in the CZM Rules as areas that are so naturally valuable, important for human use, hazardous, sensitive to impact, or particular in their planning requirements as to merit focused attention and special management rules. Similarly, the vegetated areas adjacent to Category One waters were classified as SWRPAs in the SWM rule. Contrary to arguments presented in the notice of proposal Summary, State regulations to protect special areas are systems driven and therefore supplemental to local zoning. (29, 46, 96, and 177)

RESPONSE TO COMMENTS 562 THROUGH 565: Prior N.J.A.C. 7:13-10.2(d)1 and 2 set forth basic avoidance and minimization requirements that an applicant must demonstrate prior to obtaining an individual permit for riparian zone disturbance. For example, prior N.J.A.C. 7:13-10.2(d)2 required that "disturbance to the riparian zone is eliminated where possible; where not possible to eliminate, disturbance is minimized through methods including relocating the project, reducing the size or scope of the project and/or situating the project in portions of the riparian zone where previous development or disturbance has occurred." This concept is continued and

expanded at N.J.A.C. 7:13-11.2(b)2, which requires that, "clearing, cutting, and/or removal of riparian zone vegetation is minimized through methods including situating the regulated activity or project as far from any regulated water as feasible and limiting construction to areas devoid of vegetation, actively disturbed areas, or other areas wherein the benefits and functions of a riparian zone are considerably deteriorated and impaired as a result of previous development, such as abandoned pavement that has partially revegetated, areas of dirt and gravel that are primarily devoid of vegetation, eroded embankments, areas covered with structures or other impervious surface, and landscape islands within a paved parking area."

The only aspect of prior N.J.A.C. 7:13-10.2(d)2 that is not continued is the general requirement that an applicant in all cases explore reducing the size or scope of the project. This requirement has proven unmanageable for several reasons. First, no matter what size or scope of development a person may propose, a smaller project could potentially be constructed. For example, a person proposing to construct a single-family home with a footprint of 1,000 square feet could be told that they need to construct a home with a footprint of 500 square feet or smaller. There is no basis for determining how small this house needs to be to meet this requirement. Second, the only type of development that can be reasonably expected to be constructed on a lot is that which meets the existing local zoning requirements. Requiring an applicant to seek rezoning of a commercial lot into a residential lot, for example, simply because the construction of one home on that lot would result in less riparian zone disturbance than a small commercial building, is not reasonable. Third, the purpose of the FHACA Rules is not to completely prohibit development but to ensure that development within flood hazard areas and riparian zones does not exacerbate flooding or adversely impact the environment. Finally, the

requirement at N.J.A.C. 7:13-11.2(b)1, which continues N.J.A.C. 7:13-10.2(d)1, that the basic purpose of the regulated activity or project cannot be accomplished onsite without the clearing, cutting, and/or removal of vegetation in the riparian zone, in conjunction with the requirements discussed above and the remaining requirements in N.J.A.C. 7:13-11.2, ensures that the minimum area of riparian zone disturbance occurs for a given project.

N.J.A.C. 7:13 -11.2(c) and (d)

566. COMMENT: N.J.A.C. 7:13-11.2(c)1 and (d)1 allow significantly more disturbance than the existing rules where the riparian zone is “actively disturbed” or if a bulkhead exists. There is no reason for such additional disturbance without compensation. This disturbance inadvertently devalues the riparian zone. The Department is concerned with improving the environment, but this section seems to indicate that this concern is reduced when conditions are not ideal. The lack of protection in an actively disturbed area is not consistent with the Department’s objective, and the proposed rule must be changed. (118)

567. COMMENT: Increasing riparian zone disturbance limits for roadway and utility line easements adjacent to bulkheads and revetments is counterproductive as it fails to encourage, require, and challenge developers, utility and pipeline companies, and road managers to better plant, construct, and maintain their projects. ROWs for roadways, utilities, and pipelines can be vegetated with valuable shrubs, low growing trees, and other native vegetation beneficial for reducing rainfall runoff, providing habitat, and protecting stream quality. Allowing increased

levels of riparian zone encroachment sacrifices the communities streamside and downstream for the ease of road managers and utility companies; this is not the correct balance. (183)

568. COMMENT: The increased construction and activity permitted within areas adjacent to an existing bulkhead, retaining wall, or revetment along a tidal or impounded fluvial water is entirely inadequate as evidenced by the devastation caused by Hurricane Irene and Superstorm Sandy. (96)

RESPONSE TO COMMENTS 566 THROUGH 568: The Department acknowledges that the protection of areas adjacent to a top of bank is particularly important as vegetation in this area is essential for maintaining bank stability and discouraging channel migration. The clearing, cutting, and/or removal of vegetation in this area can easily destabilize a channel, and lead to increased erosion and flooding, and adverse water quality impacts. For this reason, the FHACA Rules, both before and after these adopted amendments and new rules, generally prevent the clearing, cutting, and/or removal of riparian zone vegetation within 25 feet of any top of bank. However, the Department recognizes that in some cases disturbance within this area will not result in adverse impacts or, in other cases, that disturbance within this area is unavoidable and can be properly mitigated. Where riparian zone disturbance is located adjacent to a bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water and disturbance is limited to actively disturbed areas, then such impacts to erosion, flooding, and water quality will not occur. Therefore, N.J.A.C. 7:13-11.2(c)1 permits new development to occur in these areas, and N.J.A.C. 7:13-11.2(d)1 allows existing development to remain in these areas. Note that the

additional riparian zone requirements set forth in N.J.A.C. 7:13-11.2 further limit disturbance in this area by limiting the overall area of vegetation that can be cleared, cut, and/or removed and providing for only limited types of development.

569. COMMENT: Proposed N.J.A.C. 7:13-11.2(c) and (d), which allow the clearing, cutting, and/or removal of vegetation within 25 feet of the top of the bank, are entirely inadequate as evidenced by the devastation caused by Hurricane Irene and Superstorm Sandy. (96)

570. COMMENT: The general prohibition on new development within 25 feet of the top of bank under N.J.A.C. 7:13-11.2(c) is a good provision as is the requirement to remove existing impervious surfaces from previous activities. Also, allowing for redevelopment in these areas is reasonable in certain circumstances. However, proposed N.J.A.C. 7:13-11.2(d) would allow existing impervious surfaces located within 25 feet of any top of bank to remain where removal or replacement would prevent reasonable use or access to the site. Reasonable use or access may be maintained with a reduction to the area of impervious surface. Current levels of protection are reduced with the removal of the Department's staff input regarding "reasonable use or access" and without a requirement for some reduction in riparian area disturbance; this should not be permitted. (1)

RESPONSE TO COMMENTS 569 AND 570: The Department acknowledges the comment in support of N.J.A.C. 7:13-11.2(c). The Department agrees that protection of the area located within 25 feet of a top of bank is particularly important as disturbance within this area can easily

destabilize a channel and lead to increased erosion, flooding, and adverse water quality impacts. However, the Department recognizes that in some cases disturbance within this area will not result in adverse impacts or, in other cases, that disturbance within this area is unavoidable and can be properly mitigated. Under N.J.A.C. 7:13-11.2(c), the clearing, cutting, and/or removal of vegetation within 25 feet of the top of bank is generally prohibited. However, certain disturbances in this area have little impact or may lead to overall environmental benefits, such as temporary disturbance to vegetation related to restoration and enhancement activities. Other disturbances are necessary to accommodate in-water activities, such as sediment removal from a channel, or the erection of structures that require proximity to a regulated water, such as linear infrastructure that must cross the channel, stormwater discharges, and bank stabilization activities. These types of projects are allowed under N.J.A.C. 7:13-11.2(c)1 through 4.

The Department also agrees that existing development within 25 feet of a top of bank should, wherever practical and feasible, be removed, and the area should be restored to a natural condition using native, non-invasive vegetation. This concept is reflected in N.J.A.C. 7:13-11.2(d), which requires such restoration, with exceptions listed at N.J.A.C. 7:13-11.2(d)1, 2, and 3, representing cases where restoration would not result in an environment gain, would threaten public health, safety, or welfare or the environment, or would prevent reasonable use or access to the site and/or cause an unreasonable burden upon the applicant.

“Reasonable use or access to the site” refers to situations where removing the existing development would prevent the applicant from accessing the site or a feature within an existing facility. For example, an existing commercial building may be located near a regulated water. Further, pavement likely exists around such a commercial building, which may lie even closer to

the regulated water, and that could be necessary to provide access for fire trucks, deliveries, and maintenance vehicles. Requiring the removal of this pavement, which provides essential safety and service-related functions to the building, would not be practical and could, in many cases, violate local ordinances and/or place the users of the building at increased risk.

N.J.A.C. 7:13-11.2(e)

571. COMMENT: The narrative for proposed N.J.A.C. 7:13-11.2(e) indicates that "riparian zone allowance is insufficient to accommodate responsible development" under the current rules. This statement indicates that the priority is development and not riparian zone protection. (1)

572. COMMENT: The Department's rules should discourage development in any riparian zone and encourage the restoration of previously disturbed riparian zones. (28A, 42, 56, 67, 127, and 170)

573. COMMENT: The Department's rulemaking to increase the amount of disturbance allowed in a riparian zone is contrary to the requirements of the law. The Department's comment that "in some cases the riparian zone disturbance allowed for certain projects is of insufficient area to appropriately accommodate responsible development" is misguided. There should be limited development in a riparian zone. The limited exceptions allowed under the existing regulations have not improved water quality or reduced flooding, so expanding those exceptions could only serve to exacerbate the problems. Further limiting the amount of disturbance and

strictly enforcing those limits would send the clear message that projects should be designed first to avoid, then (if avoidance is not possible) to minimize incursions into the riparian zone. (28A, 42, 56, 67, 127, and 170)

RESPONSE TO COMMENTS 571 THROUGH 573: The purpose of the FHACA Rules is not to prevent all development within riparian zones but to ensure that riparian zone development is limited to appropriate cases where disturbance is unavoidable, to minimize impacts from such development, and to require mitigation where development exceeds acceptable limits. Table 11.2 provides for riparian zone disturbance only for necessary linear development (railroads, roads, utility lines, stormwater discharges, public access, trails, boardwalks, and footbridges), environmentally beneficial projects (bank stabilization projects, repairing failing subsurface sewage disposal systems, hazardous substance remediation, and solid waste facility closures), projects that reduce flooding (flood control projects, removing sediment and debris from a regulated water, and removing existing fill or structures), impacts from one single-family home or duplex, and limited water dependent development that meets the CZM Rules. General development within riparian zones, such as constructing commercial buildings or residential subdivisions, is not addressed under Table 11.2. While minor disturbance to riparian zone vegetation is permitted under limited situations pursuant to N.J.A.C. 7:13-11.2(y), which addresses activities not listed in Table 11.2, the small area of disturbance afforded to such activities would not support any significant amount of development. Further, the limits on riparian zone disturbance in Table 11.2 are intended to represent the maximum area of clearing, cutting, and/or removal of vegetation associated with each type of development. Prior Table C in

some cases underestimated the area of riparian zone disturbance that is reasonably required for the activities listed in the table. Table 11.2 presents more accurate areas of disturbance based on the Department's experience administering the FHACA Rules since 2007. With regard to the restoration of previously disturbed riparian zones, N.J.A.C. 7:13-11.2(d) requires in many cases that existing development within 25 feet of a top of bank be removed and the area restored. Further, general permit-by-certification 4 and general permit 4 have been adopted in order to encourage riparian zone restoration.

With regard to the commenter's assertion that the increased amount of disturbance permitted in a riparian zone under this rulemaking is contrary to the requirements of law, the enabling statues vest the Department with discretion to delineate the location and scope of development in areas under the jurisdiction of the FHACA Rules. Under this discretion, the Department has determined that the limits of riparian zone disturbance under these rules are appropriate and protective of public health, safety, and welfare.

574. COMMENT: The proposed rules intend to clarify that an individual permit can cover multiple activities and that the allowable area of disturbance is for each individual activity. This policy is concerning because the allowable disturbance area for a single project may grow quite large. Fortunately, this does not apply to the construction of single-family homes or duplexes and any additions or accessory structures where the allowable area of disturbance is cumulative. (1)

RESPONSE: In some cases it is appropriate to allow more than one occurrence of a regulated activity on a given site. For example, it is common for large developments to have multiple

stormwater discharges into a regulated water. Multiple streams sometimes exist on a site, necessitating more than one road crossing to access a site. While N.J.A.C. 7:13-11.2(e) permits multiple regulated activities on a single site, the avoidance and minimization standards at N.J.A.C. 7:13-11.2(b), (c), and (d) as well as the specific requirements for regulated activities set forth at N.J.A.C. 7:13-11.2(g) through (x) ensure that the cumulative impact of development within riparian zones is minimal.

Notwithstanding the above, in certain cases, N.J.A.C. 7:13-11.2 limits impacts cumulatively since the adoption date of the prior chapter. For example, N.J.A.C. 7:13-11.2(n) provides for the construction of an addition to a lawfully existing single-family home or duplex or the construction of an accessory structure to an existing single-family home or duplex, such as a barn, deck, detached garage, fence, pool, or shed, only if the total area of riparian zone disturbance does not exceed the limits set forth in Table 11.2, cumulatively since November 5, 2007. In order to ensure that riparian zone functionality is not impaired as a result of the construction of multiple additions and accessory structures on a given lot, riparian zone disturbance associated with activities under this subsection are appropriately considered cumulatively.

N.J.A.C. 7:13-11.2(e) and (f)

575. COMMENT: Under proposed N.J.A.C. 7:13-11.2(e) and (f), what does the Department consider disturbance? (157)

RESPONSE: N.J.A.C. 7:13-11.2(e)1 explains that, except for activities covered by N.J.A.C. 7:13-11.2(f), the total area of riparian zone vegetation cleared, cut, and/or removed for a given regulated activity is calculated by adding the area of any vegetation within the project's limit of disturbance shown on the site plans submitted by the applicant, the area under the canopy of any trees to be cleared, cut, or removed, and all other areas from which vegetation is to be temporarily or permanently cleared, cut, and/or removed to conduct the regulated activity. N.J.A.C. 7:13-11.2(e)1iii further notes that areas containing vegetation for a portion of the year, such as agricultural areas that are periodically plowed and cultivated, are considered vegetated for the purposes of this chapter.

N.J.A.C. 7:13-11.2(f)

576. COMMENT: The rulemaking is not limited to areas where human usage or intervention was legally permitted. A strict reading of this rulemaking reveals that it rewards those who have actively disturbed the riparian zone without the legal right to do so. (28A, 42, 56, 67, and 127)

RESPONSE: The definition of "actively disturbed areas" at N.J.A.C. 7:13-1.2 explains that it applies only to "lawfully existing" land uses. The term "lawfully existing" is defined at N.J.A.C. 7:13-1.2 to mean "an existing fill, structure and/or use, which meets all Federal, State and local laws, and which is not in violation of this chapter because it was established: (1) Prior to January 31, 1980; or (2) on or after January 31, 1980, in accordance with the requirements of this chapter as it existed at the time the fill, structure and/or use was established." Therefore, an area within a

riparian zone from which vegetation has been cleared, cut, and/or removed in violation of this chapter is not considered to be an actively disturbed area and is therefore not subject to the exemptions and incentives for regulated activities located in actively disturbed areas set forth at N.J.A.C. 7:13-11.2(f). However, in order to clarify that the provisions at N.J.A.C. 7:13-11.2(f) apply only to lawfully existing conditions and structures, the term "lawfully existing" has been added at N.J.A.C. 7:13-11.2(f)1, 6, and 7, as recodified upon adoption.

577. COMMENT: The proposed exceptions at N.J.A.C. 7:13-11.2(f) to allow more development in the buffers should not be approved. (128)

578. COMMENT: The proposed exceptions at N.J.A.C. 7:13-11.2(f) provide too many loopholes as well as undue flexibility for actively disturbed areas, which will mean more development and destruction for buffers, which is opposed. (177)

579. COMMENT: The added flexibility for disturbance to "actively disturbed areas" and the creation of exceptions to Table 11.2 under N.J.A.C. 7:13-11.2(f) undermines the protection of riparian zones and their attendant ecological, economic, and flood protection value. (91 and 195)

580. COMMENT: The Department provides no basis or background documentation or scientific grounds that can show that by adopting new exceptions from riparian zone requirements, the Department is acting in the interest of the State or is responsive to the scope

and purpose as stated in N.J.A.C. 7:13-1.1. In fact, the interests to which the Department responds throughout the rulemaking are solely those of the regulated community. (24 and 147)

RESPONSE TO COMMENTS 577 THROUGH 580: The exemptions from Table 11.2 adopted at N.J.A.C. 7:13-11.2(f) are appropriate for several reasons and were developed not to encourage development or respond to a specific segment of the regulated community but as an incentive to reduce riparian zone impacts. First, by encouraging development to be situated within areas that already provide limited riparian zone functionality, such as actively disturbed areas, these exemptions provide an incentive for development that could otherwise disturb areas of better riparian zone functionality, such as forested areas, to be relocated to actively disturbed areas. Second, the adopted exemptions generally focus on activities that would not alter riparian zone functionality, such as construction within an area that does not contain vegetation, temporary disturbances to actively disturbed areas that will be fully restored after construction, or activities that result in no net loss of vegetation. For example, subsurface sewage disposal systems are generally located within actively disturbed areas, such as a maintained lawn. Repairing a failing sewage disposal system therefore typically involves temporary disturbance to the lawn in order to excavate the area and subsequently replace or reconstruct the system. Once the system has been repaired, the lawn is replanted with grass so that there is no net loss of riparian zone vegetation and therefore no further impairment to riparian zone functionality. In such a case, applying the limits on disturbance set forth under Table 11.2 is not necessary. The adopted rules, therefore, do not contradict with the scope and purpose of the FHACA Rules.

581. COMMENT: The Department should not exempt activities from the limits of Table 11.2. Similarly a blanket exemption for one-quarter acre of disturbance with no mitigation required should not be allowed under the rules. (29, 30, 46, 91, 96, 189, and 195)

582. COMMENT: The devastation caused by Hurricane Irene and Superstorm Sandy illustrates the importance of riparian zone vegetation. The cumulative net loss of up to one-quarter acre of riparian zone vegetation proposed at N.J.A.C. 7:13-11.2(f)1 should not be adopted. (96)

583. COMMENT: The Department should not allow automatic clearing of one-quarter acre of buffer without examining the environmental impacts or requiring any mitigation. (177)

584. COMMENT: Many permitted activities are allowed up to one-quarter acre of vegetation loss in an actively disturbed area. Some of these activities, such as replacing vegetation, are understandable, but others are not. (1)

585. COMMENT: The proposed allowance for the clearing of one-quarter acre of riparian vegetation is of particular concern and should not be adopted. (24)

586. COMMENT: The Department’s plan to permit a free quarter-acre of riparian zone disturbance without requiring restoration is against the requirements of the FHACA, Water Quality Planning Act, and Water Pollution Control Act. Implementing this provision will not

achieve the goals of the FHACA and may in fact increase degradation of water quality and harm people and property. The Department's claim that these impacts are *de minimis* is without scientific support within the rulemaking. Cumulatively, multiple quarter-acre clearings in the riparian zone along a waterway or watershed will almost certainly have a negative impact on water quality. (28A, 42, 56, 67, and 127)

587. COMMENT: The proposed provision at N.J.A.C. 7:13-11.2(f)1 that allows for one-quarter acre of additional disturbance to the riparian zone without requiring mitigation is opposed. This provision will lead to water quality degradation; at the very least, it is counter to the goal of maintaining existing water quality. (27, 42, 56, 77, 122, 138, 170, 173, 175, 190, and 191)

588. COMMENT: The quarter-acre disturbance allowance misses the opportunity to require reforestation of buffer areas for new development and redevelopment as a way to compensate for the inevitable ecological harm they create. The one-quarter acre allowance should not be approved; instead, as part of the approval process, riparian restoration should be required. (183)

589. COMMENT: Given New Jersey's obligation to issue permits and implement regulations that lead to cleaner water, the rulemaking to allow the removal of up to one-quarter acre of riparian zone vegetation is contrary to statutory requirements. The rules should require the on-site restoration of all riparian zone disturbances. The Department has acknowledged that historic impacts to the riparian zone have resulted in flooding and water quality degradation. The

cumulative impacts of further degradation to the riparian zone must be taken into consideration. The Department notes that one-quarter acre of disturbance will have a *de minimis* impact, but it does not address aggregate impacts. The impacts should be analyzed through a comparison between disturbed areas and the natural conditions of the riparian zone. The Department should provide an analysis proving that the net loss of a quarter-acre of riparian vegetation will not adversely impact riparian zone functionality as compared with fully functioning, naturally occurring riparian zones. New Jersey needs to stop allowing death by a thousand brush clearings and pretending there are no consequences. The facts demonstrate the contrary. (28A, 42, 56, 67, and 127)

RESPONSE TO COMMENTS 581 THROUGH 589: The Department had proposed at N.J.A.C. 7:13-11.2(f)1 to exempt from the limits of proposed Table 11.2 the net loss of up to one-quarter acre of riparian zone vegetation within an actively disturbed area, measured cumulatively since the adoption date of the existing chapter, as a means of encouraging development to be situated within actively disturbed areas. This exemption was proposed because actively disturbed areas have diminished riparian zone functionality as compared to forested areas or other areas where riparian zone functionality is superior. However, in consideration of the comments received on this proposed exemption and in recognition of the fact that the proposed exemption would, in fact, simply increase the amount of riparian zone disturbance on a site without providing an incentive to reduce impacts to other areas, the Department is not adopting the exemption at proposed N.J.A.C. 7:13-11.2(f)1.

590. COMMENT: Is one-quarter acre of encroachment into actively disturbed areas allowed in addition to the disturbances under Table 11.2? (157)

RESPONSE: As proposed, the one-quarter acre exemption would have been in addition to disturbances allowed under Table 11.2. However, as explained in the Response to Comments 581 through 589, the Department is not adopting the exemption at proposed N.J.A.C. 7:13-11.2(f)1.

591. COMMENT: The proposed exemption at N.J.A.C. 7:13-11.2(f)3 for conversion of riparian zone vegetation within actively disturbed areas should not be adopted. This would provide entirely inadequate protections as evidenced by the devastation caused by Hurricane Irene and Superstorm Sandy. (96)

RESPONSE: This provision, adopted at N.J.A.C. 7:13-11.2(f)2, simply clarifies that converting vegetation within an actively disturbed area from one type to another is not subject to the requirements of Table 11.2 because this activity, which changes the type of vegetation but not the amount of vegetation, does not impair riparian zone functionality. Since forested areas and areas of non-ornamental woody vegetation are not part of an actively disturbed area in accordance with the proposed definition of that term, this paragraph does not allow conversion of these forms of vegetation to another type of vegetation. However, in order to clarify the Department's intention under this provision, the paragraph is adopted with a provision that the activities can result in no net loss in riparian zone vegetation.

592. COMMENT: Under proposed N.J.A.C. 7:13-11.2(f)5, when relocating an existing structure in the riparian zone, an applicant should be required to move the structure farther away from the waterway; at the very least, the applicant should be prohibited from relocating it closer to the waterway. This rulemaking does not contain any such requirement or prohibition. (28A, 42, 56, 67, and 127)

593. COMMENT: Septic systems and structures should not be relocated within a riparian zone. Water quality will not improve if the existing conditions are accepted as the baseline. (1)

RESPONSE TO COMMENTS 592 AND 593: Adopted N.J.A.C. 7:13-11.2(f)4, which was proposed at N.J.A.C. 7:13-11.2(f)5, provides that relocating a lawfully existing structure situated within a riparian zone to an actively disturbed area on the same site is not subject to the requirements of Table 11.2, provided all disturbed areas are adequately stabilized and replanted with vegetation in accordance with proposed N.J.A.C. 7:13-11.2(z). For example, a person may propose to relocate a small building or sidewalk from one location within the riparian zone to another. If a proposed new location for the structure is in an actively disturbed area and the former location of the structure is suitably revegetated, there is no net loss of riparian zone vegetation and therefore no adverse impact to riparian zone functionality. Further, all regulated activities under N.J.A.C. 7:13-11.2, including the activities listed at N.J.A.C. 7:13-11.2(f), are subject to the general conditions set forth at N.J.A.C. 7:13-11.2(b), including the requirement at N.J.A.C. 7:13-11.2(b)2 that all “clearing, cutting, and/or removal of riparian zone vegetation is

minimized through methods including situating the regulated activity or project as far from any regulated water as feasible ....” Activities under N.J.A.C. 7:13-11.2(f) will be reviewed by Department staff who will ensure that this standard is met. Therefore, relocating projects under N.J.A.C. 7:13-11.2(f)4 will in many cases result in structures being situated farther from regulated waters.

594. COMMENT: N.J.A.C. 7:13-11.2(f)7 exempts disturbance to vegetation within an existing ROW, and N.J.A.C. 7:13-11.2(f)8 exempts disturbance to vegetation in areas sloped away from regulated waters. ROWs should not be uniformly exempted; the Department should examine each one to determine which portions could be exempted and which should be protected. Information or statistics should be provided to justify the proposed changes, such as the impacts different ROWs (rail, highway, local roads, utilities) have had on riparian zones. Given the availability of GIS data, the Department should develop statistics and metrics to justify all proposed changes. (1)

RESPONSE: Adopted N.J.A.C. 7:13-11.2(f)6, which was proposed at N.J.A.C. 7:13-11.2(f)7, does not automatically exempt all disturbance to vegetation within an existing right-of-way; instead, it provides that disturbance to vegetation located within an existing right-of-way or easement of an existing public roadway is not subject to the limitations of Table 11.2 only if the activity meets enumerated requirements, including a requirement that the activity is necessary for the continued safe use of the public roadway. Actively disturbed areas along public roadways that are situated on an existing roadway embankment or within an area adjacent to an existing

roadway and that were disturbed for the initial construction of the roadway do not provide significant riparian zone benefits. Therefore, in cases where the disturbance of such vegetation is necessary for the continued, safe use of a public roadway, it is not necessary to apply the limitations of Table 11.2. Similarly, adopted N.J.A.C. 7:13-11.2(f)7, which was proposed at N.J.A.C. 7:13-11.2(f)8, provides that disturbance to riparian zone vegetation located within certain areas that are separated from the regulated water that creates the riparian zone is not subject to the limitations of Table 11.2 only if certain conditions are present. To qualify under the adopted paragraph, not only must the area not slope toward the regulated water, it must be separated from the regulated water by a lawfully existing railroad or public roadway, and stormwater runoff from the area does not drain to the regulated water through any mechanism. Portions of a riparian zone that are separated from a regulated water by a roadway or railroad and that do not slope toward the regulated water or otherwise ultimately drain to the regulated water do not provide riparian zone benefits to the regulated water. In such cases, it is not necessary to apply the limitations of Table 11.2.

595. COMMENT: In proposed N.J.A.C. 7:13-11.2(f)8, roads are exempted without compensation or protection of riparian buffers because roads allegedly serve as barriers to the runoff flow, supposedly rendering the riparian buffer unnecessary, and because they are seen as a community benefit. Roads do not serve as a barrier to runoff in many, if not most, instances; in fact, they often become a hotter and faster pathway for overland flow to reach streams. Even when roads are sloped away from waterways, many are still connected to an adjacent waterway through subsurface drainage systems, making the functionality of the riparian buffer important

for treatment (even though the road might be graded in the opposite direction). In addition, while they do serve a community function, roads also have negative community impacts; their contribution to the increased volume of hot and polluted water that poses very significant community harm must be addressed. Those who suffer from the road-contributed pollution and increased flows suffer adverse impacts that should not be their burden to bear. Riparian buffers are an important, beneficial, and relatively easy way to mitigate the harms that roads inflict, and they should be an ongoing and even increased priority. (183)

596. COMMENT: The clearing, cutting, and/or removal of vegetation in truncated portions of a riparian zone at N.J.A.C. 7:13-11.2(f)8 should not be adopted. This would provide entirely inadequate protections as evidenced by the devastation caused by Hurricane Irene and Superstorm Sandy. (96)

RESPONSE TO COMMENTS 595 AND 596: As noted in the Response to Comment 594, adopted N.J.A.C. 7:13-11.2(f)7 exempts the clearing, cutting, and/or removal of riparian zone vegetation from the limitations of Table 11.2 in very limited cases where a riparian zone is separated from a regulated water by a railroad or public roadway, provided the area does not slope toward the regulated water and stormwater runoff from the area does not drain into the regulated water. Areas within a riparian zone from which runoff reaches the regulated water that creates the riparian zone do not meet the exemption at N.J.A.C. 7:13-11.2(f)7. The purpose of this paragraph is not to exempt any roadway or its runoff from regulation by the Department or to facilitate the construction or expansion of roadways. Instead, this provision has been adopted

in recognition of the fact that portions of the riparian zone that are separated from the regulated water by a railroad or public roadway and that neither slope toward the regulated water nor contribute stormwater runoff to the regulated water do not provide significant riparian zone benefits to the regulated water. Development within areas exempted from Table 11.2 under N.J.A.C. 7:13-11.2(f) are subject to all other requirements of N.J.A.C. 7:13-11.2, including the need to justify, avoid, and minimize riparian zone disturbance under N.J.A.C. 7:13-11.2(b), the additional protections for land within 25 feet of any top of bank under N.J.A.C. 7:13-11.2(c) and (d), and any applicable specific requirements for regulated activities set forth at N.J.A.C. 7:13-11.2(g) through (y).

597. COMMENT: Under this section of the rules, the Department's prohibition of converting forest in riparian zones to other vegetation because it reduces their capacity to protect waterways is appreciated. This also reinforces the concept that the rules should encourage the restoration of disturbed riparian zones and not allow negative impacts to these areas. (28A, 42, 56, 67, and 127)

RESPONSE: The Department acknowledges this comment in support of the rules.

Table 11.2

598. COMMENT: The increased allowances and exemptions for projects related to public need, health, and safety are supported. Such allowances and exemptions should not be applicable

to projects that do not meet these criteria as the vegetation in the riparian zone provides necessary health and ecosystem benefits that cannot immediately be restored. While private development and projects are essential, increasing the allowances and exemptions afforded to them is not supported unless they can prove that no other feasible alternative exists and that the disturbance is necessary for the successful implementation of their approved project. (119)

RESPONSE: The Department acknowledges this comment in support of the rule provisions related to projects necessary for public need, health, and/or safety. As noted in the Response to Comments 571 and 573, Table 11.2 provides for riparian zone disturbance only for necessary linear development, environmentally beneficial projects, projects that reduce flooding, impacts from one single-family home or duplex, and limited water dependent development that meets the CZM Rules. General development within riparian zones, such as constructing commercial buildings or residential subdivisions, is not specifically provided for under Table 11.2. While N.J.A.C. 7:13-11.2(y) permits a small amount of riparian zone disturbance for projects that are not listed under Table 11.2, the strict limits on disturbance (1,000 square feet in a 50-foot riparian zone, 3,000 square feet in a 150-foot riparian zone, and 6,000 square feet in a 300-foot riparian zone) would preclude all but small encroachments into the riparian zone, such as for an addition to an existing commercial building or the construction of a small auxiliary building, and would not support general commercial or residential development.

Further, the limits on riparian zone disturbance in Table 11.2 are intended to represent the maximum area of clearing, cutting, and/or removal of vegetation associated with each type of development; approval of any individual permit that results in the clearing, cutting, and/or

removal of vegetation in a riparian zone is subject to the requirements specified at N.J.A.C. 7:13-11.2(b), including the requirements that impacts be minimized and that the basic purpose of the activity or project cannot be accomplished without the clearing, cutting, and/or removal of riparian zone vegetation. Where the proposed activity does not satisfy the requirements specified in N.J.A.C. 7:13-11.2(b), an individual permit will not be issued until the rulemaking is modified in a manner that brings it into compliance with those requirements even if the activity as initially proposed does not result in the clearing, cutting, and/or removal of riparian zone vegetation in excess of the limits specified in Table 11.2. Prior Table C in some cases underestimated the area of riparian zone disturbance that is reasonably required for the activities listed in the table. Table 11.2 presents more accurate areas of disturbance based on the Department's experience administering the FHACA Rules since 2007.

599. COMMENT: This expansion to the disturbance limits in the riparian zone should be extended to publicly-owned greenways and trails as well as their access roads. As population increases, traffic to and through these publicly-owned lands also increases. Public entities need the ability to expand these greenways and trails as more open space is purchased and preserved and as the population grows. (119)

RESPONSE: Table 11.2 includes a provision for riparian zone disturbance associated with trails. Further, roads constructed on public land for public access can be constructed under N.J.A.C. 7:13-11.2(g).

600. COMMENT: The riparian zone disturbances proposed in Table 11.2 should only apply to permanent riparian zone disturbances. The increased disturbances for the various activity-specific categories are likely sufficient for most of the permanent projects for these types of activities, such as roads, utilities, and stormwater outfalls. Any temporary disturbances should have minimal limitations if they do not impact forests and are reseeded with herbaceous/scrub/shrub vegetation. (19 and 101)

RESPONSE: Temporary disturbance to vegetation within an actively disturbed area is exempt from the limitations of Table 11.2, pursuant to adopted N.J.A.C. 7:13-11.2(f)3. This is appropriate since actively disturbed areas that have been temporarily disturbed can be easily restored or enhanced, as required under N.J.A.C. 7:13-11.2(z). However, temporary disturbance to other types of vegetation, such as woody vegetation and forested areas, takes greater effort and time to restore and can require log-term monitoring to ensure successful restoration. Further, even where a forested area is not impacted, during the period of time between the temporary disturbance and the restoration of disturbed areas, riparian zone functionality can be greatly diminished, thereby adversely impacting water quality. As such, it is appropriate that Table 11.2 limit the total area of temporary and permanent clearing, cutting, and/or removal of riparian zone vegetation, with the exception of those impacts listed at N.J.A.C. 7:13-11.2(f).

601. COMMENT: The increase in the allowable area of riparian zone disturbance under Table 11.2 undermines the protection of riparian zones and their attendant ecological, economic, and flood protection value. (91 and 195)

602. COMMENT: Table 11.2 proposes to increase the maximum areas of disturbance allowed to vegetated buffers before mitigation is required and to add to the types of disturbance allowed. This proposes a wholesale increase in disturbances to riparian zones across the State. Instead of prohibiting development in the most valuable riparian zones and flood hazard areas, the rulemaking encourages more disturbances, which will result in a net loss of the functional values currently provided by riparian buffers with adverse impacts to water quality and flood control. (24 and 147)

603. COMMENT: The significant expansion of disturbance limits in riparian zones under proposed Table 11.2 reduces overall flood hazard protections, especially along urban waterways. This would provide entirely inadequate protections as evidenced by the devastation caused by Hurricane Irene and Superstorm Sandy (96)

604. COMMENT: The Department's statement that "in some cases the disturbance to vegetation in riparian zones allowed under permits-by-rules, general permits, and individual permit standards under existing FHACA Rules for various projects has been insufficient to appropriately accommodate responsible development, particularly for infrastructure projects" (47 N.J.R. 1054) is contrary to the goals underlying the rules and does not comply with the law. New Jersey's national ranking as second in FEMA flood claims, along with the State's existing water quality impairments, demonstrates that New Jersey has already allowed too much development in the riparian zones. The solution is to reduce the impacts to the riparian zones and require strict

demonstrations under the hardship rules, not to expand allowable impacts for the sake of development. (28A, 42, 56, 67, and 127)

605. COMMENT: The high number of hardship exception applications that the Department has received due to the current limits of allowable disturbance is not cause to increase the limits of disturbance. Rather, it demonstrates unwillingness on the part of applicants to engage in proper design. Existing Table C and proposed Table 11.2 should be restructured to first avoid impacts to the riparian zone and then, if that is not possible, to minimize those impacts. Increasing these limits removes the incentive to minimize impacts. This section of the rulemaking is contrary to the goals of achieving high water quality standards, clearing floodways, and protecting ecologically valuable lands. (28A, 42, 56, 67, and 127)

606. COMMENT: The current limits of riparian zone vegetation that can be cleared, cut, and/or removed for various regulated activities under an individual permit are appropriate and necessary for the protection of water quality as required by State and Federal law and for the protection of communities from flooding and flood damages. The disturbance limits in riparian zone areas should most certainly not be increased. (183)

607. COMMENT: The expansions to riparian zone encroachment limits are too broad and will result in increased runoff, flooding, flood damages, pollution, and ecological harm. (183)

608. COMMENT: The increased limits for disturbance to riparian vegetation as revealed in Table 11.2 are concerning. The rulemaking does not provide scientific support for the proposed increases. The limits are too high and arbitrary as they are without scientific basis. Although mitigation is sometimes required within the limits of Table 11.2, mitigation is the least desirable option in the face of disturbance. (24)

609. COMMENT: The Department has not provided any justification for the disturbance allowances. (1)

610. COMMENT: The disturbance limits for the following activities are overly generous and should be reduced to the limits set forth in the previous FHACA Rules: hard armoring of streams; stormwater pipe, headwall, and outlet projection; single-family homes or duplexes and appurtenant structures; new individual subsurface sewage disposal systems; and the removal of sediment and/or debris from a regulated water. (29, 30, 46, 91, 96, 177, 189, and 195)

611. COMMENT: The riparian zone disturbance limits have been overly expanded and represent a significant roll back in waterway protection. Any disturbance limits that exceed the authorizations found in Table C of the existing rules should be removed from the proposed revisions. (91 and 195)

612. COMMENT: Table 11.2 allows too much disturbance and should be withdrawn. (177)

613. COMMENT: The Department is expanding the limits to riparian zone impacts that will be granted a permit without a hardship exception. The Department indicates at 47 N.J.R. 1042 that "many projects do not meet the limits of N.J.A.C. 7:14-10.2 for a given activity and applicants therefore seek a hardship exception." This expansion is problematic and contrary to the goals of the applicable statutes. The regulations should be designed and implemented to discourage development in the riparian zone. The Department's explanation and solution achieve the opposite. (28A, 42, 56, 67, and 127)

RESPONSE TO COMMENTS 601 THROUGH 613: The FHACA Rules recognize that some projects within riparian zones are unavoidable, beneficial, and/or would have a *de minimis* impact on riparian zone functionality and therefore allow the construction of certain infrastructure projects (roads, utilities, stormwater discharges, trails, footbridges), projects that reduce flooding and/or benefit the environment (bank stabilization, public access, repairing septic systems, site remediation, solid waste facility closures, flood control projects, stream cleaning, removing fill/structures), and *de minimis* disturbances associated with a single-family home or duplex. Further, the FHACA Rules establish limits to the amount of riparian zone disturbance that can occur for each type of activity in order to limit impacts to riparian zone functionality. The Department has determined that allowing riparian zone disturbance up to the revised limits set forth in Table 11.2 will have only a *de minimis* impact on riparian zone functionality.

The limits set forth in prior N.J.A.C. 7:13-10.2, Table C, represented the maximum area of riparian zone disturbance that the Department anticipated would be reasonably required to

undertake various regulated activities, as noted above. However, in practice, the application of prior Table C to these types of projects demonstrated the inadequacy of the prescribed disturbance limits to account for the size and type of activities that are unavoidably located within riparian zones or that would reduce flooding and/or benefit the environment. In such cases, applicants were required to seek approval of a hardship exception, which typically involves the preparation of a detailed alternatives analysis through which the applicant demonstrates that compliance with the riparian zone limits creates an exceptional and undue hardship. In the majority of cases, applicants proposing such projects have successfully demonstrated that strict compliance with the limits under prior Table C did, in fact, create a hardship due to a number of factors. In these cases, the Department subsequently approved the application and permitted the limits of Table C to be exceeded with cause.

In accordance with the hardship exception rules previously codified at N.J.A.C. 7:13-9.8 (recodified and amended at adopted N.J.A.C. 7:13-15.1), all cases where hardship was found to exist warranting the grant of a hardship exception included a demonstration by the applicant that the proposed activities, including the required riparian zone vegetation impacts, would not adversely affect the use of contiguous or nearby property and that the proposed activities did not pose a threat to the environment or to public health, safety, and welfare (prior N.J.A.C. 7:13-9.8(b)2 and 3; adopted N.J.A.C. 7:13-15.1(c)2 and 3). In light of the findings made in many cases for these types of hardship exceptions that impacts at the increased disturbance levels would not adversely affect use of nearby properties and would not pose a threat to public health, safety, and welfare or the environment, the Department, based on its experience of reviewing and issuing flood hazard area permits since 2007, determined that the increased maximum allowable

disturbance to riparian zone vegetation for regulated activities in Table 11.2 will have a *de minimis* impact on riparian zone functionality while reducing the unnecessary regulatory burden of seeking a hardship exception for activities having such a minimal impact.

The Department anticipates that the adopted limits in Table 11.2 more accurately represent the maximum area of riparian zone disturbance necessary to undertake authorized activities while continuing to protect public safety and the environment. As indicated in prior responses, all individual permits are subject to other requirements designed to protect the riparian zone and the benefits it provides. For example, under N.J.A.C. 7:13-11.2(b), riparian zone disturbance can occur only where the basic purpose of the regulated activity or project cannot be accomplished without such disturbance and where the clearing, cutting, and/or removal of vegetation is minimized through a variety of methods even if the activity as initially proposed does not result in the clearing, cutting, and/or removal of riparian zone vegetation in excess of the limits specified in Table 11.2. N.J.A.C. 7:13-11.2(c) and (d) additionally protect the portion of the riparian zone within 25 feet of the top of bank of regulated areas, which is the most crucial area to preserve for increased bank stability and water quality benefits. Finally, the increased area of disturbance associated with adopted Table 11.2 represents a modest increase compared to the limits contained in prior Table C.

To illustrate the application of these provisions, the Department offers the following example. Under prior Table C, the construction of a new private roadway, such as to access a proposed residential subdivision, across a regulated water with a 150-foot riparian zone was permitted a maximum area of riparian zone disturbance of 9,000 square feet (0.21 acres). Since the riparian zone lies along both sides of the regulated water and includes the regulated water

itself (see prior N.J.A.C. 7:13-4.1(b) and (c)2 and adopted N.J.A.C. 7:13-4.1(a)), the total riparian zone width would be 150 feet on either side of the channel plus the width of the channel. Assuming a relatively small stream with a channel width of 10 feet, the total width of the riparian zone to be traversed by the roadway in question would be 310 feet. Prior N.J.A.C. 7:13-10.2(g)3, continued at N.J.A.C. 7:13-11.2(h)8ii, required that the crossing must be "designed and constructed as nearly perpendicular to the channel as possible" since a perpendicular crossing (at a 90 degree angle to the stream) would result in the minimum area of riparian zone disturbance. In order to not exceed the 9,000-square-foot limitation under prior Table C, a roadway constructed perpendicularly across this 310-foot riparian zone could be no more than 29.0 feet wide. However, in order to meet New Jersey's Residential Site Improvement Standards and to account for necessary grading along the roadway as it crosses through the riparian zone, applicants in many cases found that constructing a roadway within these limitations was not practicable. Further, if it were not possible to construct the roadway perpendicularly due to the topography of the site or other factors not under the applicant's control, the width of the roadway would need to become even smaller to meet the limitations of prior Table C. For example, a roadway constructed at a 60 degree angle across this stream could not exceed 25.1 feet in width. Therefore, where the applicant demonstrated that there was "developable land onsite that cannot feasibly be accessed without crossing the water, including accessing the site through neighboring properties" (prior N.J.A.C. 7:13-10.2(g)6, continued at adopted N.J.A.C. 7:13-11.2(h)8i) but the crossing could not be accomplished due to the limitations of Table C, the applicant often sought and was granted a hardship exception for the construction of a roadway that exceeded the

limitations of Table C, after demonstrating compliance with prior N.J.A.C. 7:13-9.8 as noted above.

Given the additional protections adopted at N.J.A.C. 7:13-11.2(b), (c), (d), and elsewhere throughout the chapter, such as increased justification and mitigation requirements, and given that Table 11.2 simply represents the maximum amount of disturbance for a given regulated activity without the need for additional justification, mitigation, and/or a hardship exception request, the Department believes the adopted changes are appropriate and will not lead to the adverse impacts to water quality and flooding noted by the commenters.

614. COMMENT: Increasing the disturbance limits for roadways, utility lines, buildings, and other construction activities to "better reflect the Department's experience in permitting" is misguided. The fact that these kinds of construction projects have sought to increase levels of riparian disturbance does not mean that increased disturbance is necessary. Pipelines are a good example; while 100-foot right-of-ways (ROWs) for pipelines are now the norm, 30 to 50–foot ROWS were commonplace in the past and are still commonplace today when there is a need to protect an area for a rare plant or animal or for a wetland or other special ecosystem. While the pipeline companies present applications for larger ROWs, seeking greater disturbance of natural areas, including riparian zones, this increased level of disturbance is not needed. The same is true for many other kinds of projects. The Department's job is to ensure such projects minimize their footprint in order to protect communities from flooding and flood damages instead of creating regulations to accommodate larger proposals because the projects are more commonplace and easier for the Department. (183)

615. COMMENT: Do not increase utility-crossing riparian disturbance limits by 50 percent or more. (69)

RESPONSE TO COMMENTS 614 AND 615: As indicated in the Response to Comments 601 through 613, the determination to increase the maximum allowable area of disturbance for various activities was based upon the Department's review of numerous hardship exception requests where the applicants demonstrated that the impacts were the minimum necessary to accomplish the project proposed and that the proposed activity, including the impact to riparian zone vegetation, would not adversely affect use of nearby properties and would not pose a threat to public health, safety and welfare or the environment. Further, it must be kept in mind that the limits specified in Table 11.2 are the maximum levels of disturbance that will be allowed for the specified activities without a further showing of need; they are not levels that are automatically authorized. Instead, all applicants for individual permits proposing to impact riparian zone vegetation must comply with N.J.A.C. 7:13-11.2(b), which requires a demonstration that impact cannot be avoided and that the proposed area of impact is the minimum necessary to accomplish the basic purpose of the activity or project.

616. COMMENT: The proposed rule changes allow areas of maximum disturbance that are excessive and unwarranted and that will reduce waterway and community protections, increasing ecological and community harms. As an example, a private residence is currently permitted 5,000 square feet of disturbance and an adjoining septic would get 2,500 square feet more.

Sometimes, hardship exception requests were needed to enlarge these footprints another 1,000 square feet, for instance, which generally made sense, so Department staff would permit it, as appropriate. But the new rules allow 7,000 square feet for the private residence and as much as 5,000 square feet more for the septic system, opening the possibility that a septic system could be added, expanding the maximum allowable disturbance on the site to 12,000 square feet, which ushers in the potential for much bigger homes and/or cleared riparian zones. (183)

RESPONSE: A variety of factors, such as topography, slope, zoning, local setbacks, proximity to top of bank, and existing land usage, contribute to the area of land that is disturbed when constructing a single-family home or duplex. Based on individual permit applications that were submitted since 2007, the Department determined that the area of disturbance permitted under prior Table C was insufficient to uniformly cover the construction of a new single-family home or duplex throughout the State. However, in order to ensure that lots are not further subdivided to create additional opportunities for new homes and duplexes in the riparian zone, N.J.A.C. 7:13-11.2(m)2 requires that for the construction of a new single-family home or duplex on a lot that was created or subdivided after November 5, 2007, the applicant must demonstrate that none of the lots created in the subdivision contain a habitable building or possess a valid authorization from the Department to construct a habitable building in the riparian zone. This requirement ensures that riparian zone vegetation impact limits are not evaded through the subdivision process.

617. COMMENT: Permitting an additional 2,000 square feet of permanent disturbance for the enlargement of a home under Table 11.2 is contrary to statutory requirements and is therefore opposed. (27, 56, 77, 122, 138, 155, 170, 173, and 190)

618. COMMENT: It appears that the proposed rules allow for basically anything to be built in a riparian area as long as clearing is limited and compensated for when limits are exceeded. And by enlarging the allowable limits, building in the riparian corridors will be substantially impacted. A shocking example is allowing a 2,000-square-foot expansion to an existing home, which can and will result in excessive destruction. The entire set of new rules appears to establish high thresholds of riparian corridor loss and then rely on mitigation to achieve even more flexibility. (150)

619. COMMENT: Please provide the justification for allowing an additional 2,000 square feet of disturbance in the 150-foot riparian zone for the construction of a single-family home or duplex. The increase from 5,000 square feet to 7,000 square feet seems excessive, even where the proposed increase would cover the repair or replacement of a malfunctioning system. (119)

RESPONSE TO COMMENTS 617 THROUGH 619: None of the statutes enabling the FHACA Rules set limits on the amount of riparian zone vegetation that can be cleared, cut, and/or removed for a given activity. The purpose of Table 11.2 is to set forth the maximum area of riparian zone disturbance that is reasonably required for a variety of types of development that have been deemed suitable within riparian zones. Subsequent to the adoption of the prior rules,

the Department reviewed many applications for the construction of a private residence (redesignated as the single-family home or duplex category under the adopted rules). Under prior Table C, a total of 2,500 square feet of disturbance was allowed within a 50-foot riparian zone and a total of 5,000 square feet of disturbance was allowed within a 150-foot or 300-foot riparian zone for the construction of a private residence. However, the Department's review of applications for development of single-family homes and duplexes impacting riparian zone vegetation demonstrated in many circumstances that the limits allowed under prior Table C were not sufficient for construction of a single-family home or duplex in a riparian zone under typical circumstances, such as the slope of the ground and the type of vegetation onsite. As indicated in the Response to Comments 601 through 613, the determination to increase the maximum allowable area of disturbance for various activities listed in prior Table C was based upon the Department's review of numerous hardship exception requests where the applicants demonstrated that the impacts were the minimum necessary to accomplish the project proposed and that the proposed activity, including the impact to riparian zone vegetation, would not adversely affect use of nearby properties and would not pose a threat to public health, safety and welfare or the environment. Further, the limits specified in Table 11.2 are the maximum levels of disturbance that will be allowed for the specified activities without a further showing of need; they are not levels that are automatically authorized. Instead, all applicants for individual permits proposing to impact riparian zone vegetation must comply with N.J.A.C. 7:13-11.2(b), which requires a demonstration that impact cannot be avoided and that the proposed area of impact is the minimum necessary to accomplish the basic purpose of the activity or project

For example, a building with a dimension of 40 feet by 50 feet would have a footprint of 2,000 square feet, which is not an exceptional size for a new single-family home or duplex in many New Jersey communities. The construction of a single-family home or duplex building necessitates some clearing around the proposed footprint for construction equipment to access the building site. Assuming an equal area of disturbance is required around the perimeter of the footprint for access to the building, the maximum allowable disturbance of 7,000 square feet would permit clearing of riparian zone vegetation approximately 20 feet outside the building's footprint, which is a reasonable area of clearing to access the building. The Department has therefore increased the limits under Table 11.2 to permit 3,500 square feet of disturbance within a 50-foot riparian zone and 7,000 square feet of disturbance within a 150-foot or 300-foot riparian zone. This modest increase in riparian zone disturbance will not have a significant adverse impact on riparian zone functionality.

620. COMMENT: Regarding the provision under Table 11.2 for the reconstruction of a single-family home or duplex, the Department should not allow individuals to increase the square footage of development and disturbed areas in the riparian zone during reconstruction on a permanent basis. While permitting the rebuilding of a damaged structure in these areas may be appropriate, expansion into the riparian zone or flood fringe should not be allowed. The 2,000-square-foot limit of disturbance should be temporary and only for the purposes of reconstructing damaged property. (28A, 42, 56, 67, and 127)

RESPONSE: The 2,000 square feet of riparian zone disturbance permitted under N.J.A.C. 7:13-11.2(m) for the reconstruction of a single-family home or duplex is necessary for incidental clearing around the structure, a modest expansion of the structure, and also to accommodate access to the structure being reconstructed. The rules prior to adoption of these amendments did not establish a separate limit for riparian zone disturbance for the reconstruction of a private residence. As such, the Department allowed up to 5,000 square feet of riparian zone disturbance outside the existing footprint of the private residence, pursuant to Table C, which established these limits for the construction of a private residence. As this amount of riparian zone disturbance is excessive for the reconstruction of a single-family home or duplex, Table 11.2 limits riparian zone disturbance to 2,000 square feet. This is appropriate since the reconstructed house may include a modest footprint expansion, as noted above, and/or be slightly relocated to accommodate existing setbacks and other zoning requirements. Accessing the building during reconstruction may also necessitate the removal of trees in close proximity to the structure. During the initial construction of a house, trees around the perimeter of the building are generally removed to provide access to construction vehicles and personnel. However, these trees may grow back over time and be very close to the building. Therefore, as noted in the Response to Comments 617 and 619, disturbance related to the construction (or reconstruction) of a single-family home or duplex necessarily involves some disturbance outside of the building's footprint. Where riparian zone vegetation is removed to access the building, all such areas are required to be replanted in accordance with N.J.A.C. 7:13-11.2(z). Therefore, the only permanent loss of riparian zone vegetation would be limited to the area occupied by the single-family home or

duplex itself and the loss of some trees that were in very close proximity to the building and were necessarily removed to accommodate the project.

621. COMMENT: Allowing 4,000 square feet of disturbance for an accessory structure (except for a fence) is very significant. Accessory structures should be provided minimum disturbance allowances. They should only be placed in a riparian zone or flood fringe if there is absolutely no other viable location for them. (28A, 42, 56, 67, and 127)

622. COMMENT: Proposed N.J.A.C. 7:13-11.2(n) is opposed because granting 4,000 square feet of additional disturbance for accessory structures will place people and property in harm's way and will increase the amount of runoff that will enter waterways. (27, 42, 56, 77, 122, 138, 155, 170, 173, and 190)

RESPONSE TO COMMENTS 621 AND 622: The limits set forth in prior Table C represented the maximum area of riparian zone disturbance that the Department anticipated would be reasonably required to undertake various regulated activities. Prior Table C permitted 1,000 square feet of disturbance in a 50-foot riparian zone and 2,000 square feet of disturbance in a 150-foot or 300-foot riparian zone for an addition to a private residence or construction of a garage, barn, or shed. As indicated in the Response to Comments 601 through 613, the determination to increase the maximum allowable area of disturbance for various activities, including activities under previous N.J.A.C. 7:13-10.2(m) and(n), was based upon the Department's review of numerous hardship exception requests where the applicants

demonstrated that the impacts were the minimum necessary to accomplish the project proposed and that the proposed activity, including the impact to riparian zone vegetation, would not adversely affect use of nearby properties and would not pose a threat to public health, safety, and welfare or the environment. Therefore, the Department has increased the limit of riparian zone vegetation disturbance provided for accessory structures to 4,000 square feet. Similar to the limit of disturbance for an addition, this limit of disturbance under Table 11.2 is cumulative; all structures accessory to a single-family home or duplex that are constructed on or after November 5, 2007, the date of adoption of a new chapter that incorporated protection of riparian zone vegetation into the rules, are considered when calculating the total amount of riparian zone vegetation that can be disturbed under Table 11.2 for multiple structures accessory to the same single-family home or duplex. This modest increase in riparian zone disturbance will have a *de minimis* impact on riparian zone functionality and will help facilitate minor construction activities associated with a lawfully existing single-family home or duplex. It should also be noted that the FHACA Rules contain additional flood protection standards for activities in flood hazard areas that ensure that buildings and other structures are anchored and resistant to damage, displacement, and buoyancy from floodwaters, thereby suitably protecting public health, safety, and welfare.

623. COMMENT: Under the current rules, if a hardship waiver is granted to exceed the maximum disturbance thresholds listed in Table C, the applicant must provide compensation at a 2:1 ratio. Before granting the waiver, Department staff reviews the design and footprint of the project with the aim of reducing the impacts to the functionality of the riparian zone. Currently,

the Department regularly grants hardship waivers, particularly in residential areas. This process is working since it relies on experienced regulators who apply applicable science and experience and who, as employees of the State, always consider the State's resources. The proposed new rules still require compensation, but they eliminate the authority and ability of Department staff to question the design and footprint, thereby eliminating an important system of checks and balances. (183)

RESPONSE: Under N.J.A.C. 7:13-11.2(b)1 and 2, Department staff ensure for all individual permit applications that (1) the basic purpose of the regulated activity or project cannot be accomplished onsite without the clearing, cutting, and/or removal of vegetation in the riparian zone and that (2) the clearing, cutting, and/or removal of riparian zone vegetation is minimized. This is accomplished through methods including situating the regulated activity or project as far from any regulated water as feasible and limiting construction to areas devoid of vegetation, actively disturbed areas, or other areas wherein the benefits and functions of a riparian zone are considerably deteriorated and impaired as a result of previous development, such as abandoned pavement that has partially revegetated, areas of dirt and gravel that are primarily devoid of vegetation, eroded embankments, areas covered with structures or other impervious surface, and landscape islands within a paved parking area. The authority and ability of Department staff to question the design and footprint of a project is therefore no less stringent under the adoption than under the prior FHACA Rules.

624. COMMENT: How many hardship waiver requests, under Table C criteria, does Department receive annually, and what is the percentage of approvals/denials? (183)

RESPONSE: As hardship exception requests can be submitted for relief from strict compliance with any individual permit requirement, the Department did not keep records of the number of hardship requests received that were specifically requesting to exceed the limitations of Table C. The Department estimates that approximately 75 such requests have been received per year since the FHACA Rules were adopted in 2007, and in the majority of cases, applicants making hardship requests related to Table C were able to demonstrate compliance with the requirements of prior N.J.A.C. 7:13-9.8 and therefore received authorization to exceed the limitations within the table.

625. COMMENT: Will the removal of the requirement to obtain a hardship exception to exceed the limitations under Table C cause an overall, deleterious impact on riparian functionality statewide? (183)

626. COMMENT: The removal of the need to request a hardship exception when the limits in Table 11.2 are exceeded undermines the protection of riparian zones and their attendant ecological, economic, and flood protection value. (91 and 195)

627. COMMENT: The rulemaking makes allowances for activities that currently require hardship exceptions, such as site remediation, footbridges, and septic system reconstruction. If a

project cannot feasibly meet riparian disturbance limits, hardship exceptions will no longer be required. Although the proposed changes provide for riparian zone mitigation for all vegetation removed in excess of the limits, increasing the limits will automatically increase riparian area disturbance without anticipated restoration or mitigation. This is a net loss to the State. (1)

628. COMMENT: The Department indicates that most projects qualify for a hardship exception but most applicants have difficulty meeting the compensation requirements. This does not justify increasing the allowable disturbance areas or increasing the types of projects that qualify for permits-by-rule or general permits. The individual permit process affords the Department the opportunity to review the project and assure that all options have been considered. It provides Department input on the extent of disturbance, the ways to reduce or limit the disturbance, and the options for mitigation or restoration. The Department should provide statistics or data to support and justify the proposed changes with respect to hardship exceptions such as the number of hardship exceptions that were received, the types of hardship, and the amount of mitigation that occurred as a result of granted hardships. Will that mitigation now be lost? (1)

629. COMMENT: The existing rules were structured to ensure that riparian zone disturbance activities did not occur or were at least minimized to the furthest extent practical. The proposed FHACA Rules rely on a justification that does not make rational sense. The Department determines what development can occur within a riparian zone. The logic behind removing hardship requirements because the Department is issuing too many hardship exceptions is

circular. The strict hardship exception requirements should remain intact to ensure that only those projects that truly meet these criteria are permitted to occur in the riparian zone, and they should not be used as a loophole as the proposed rules allow. (91 and 195)

630. COMMENT: The proposed rule discontinues the practice of requiring that hardship be demonstrated when applicants propose that allowable disturbances of riparian areas be exceeded. Requiring demonstrations of hardship when proposals are made to exceed allowable riparian zone disturbances has been a fundamental element of the existing FHACA rule to assure that riparian zone disturbance activities are avoided and/or minimized. The significantly expanded disturbance limits to be authorized in Table 11.2 already serve “flexibility” interests (in some cases too generously), and proposed exceedances of those more flexible limits should require a demonstration of hardship. This rulemaking should be withdrawn. (30 and 189)

631. COMMENT: Please do not remove hardship exception requirements if limits under an individual permit are exceeded. (29, 30, 46, and 189)

632. COMMENT: Disturbance that exceeds the disturbance limits in Table 11.2 should continue to be subject to hardship exception requirements. (29, 46, 91, 96, 177, and 195)

RESPONSE TO COMMENTS 625 THROUGH 632: As noted in the Response to Comments 601 through 613, the Department has determined that it is necessary to raise the maximum allowable area of riparian zone disturbance to reasonably accommodate certain types of

development within riparian zones and that the adopted limits will have only a *de minimis* impact to water quality and flooding. Further, the removal of the prior requirement that an applicant proposing an activity exceeding the maximum allowable limits for riparian zone disturbance must obtain a hardship exception will not increase the area of riparian zone disturbance that will occur. N.J.A.C. 7:13-11.2(g)1, (h)1, (i)2, (j)1, (k)1, (q)1, (t), (u)1, (v), and (w)1 incorporate specific requirements that an applicant must meet in order to justify that the limits of Table 11.2 are necessarily exceeded. These added requirements are appropriate to the type of development being proposed and are better suited to accommodate the particular justifications that would be associated with a given activity. As these new requirements are no less stringent than the hardship exception requirements at N.J.A.C. 7:13-15.1 but are simply focused on the particular issues related to riparian zone disturbance, the Department anticipates that the number of individual permits for which activities are allowed to exceed the limits of Table 11.2 will be no greater than if the hardship exception requirements at N.J.A.C. 7:13-15.1 were applied.

For example, under N.J.A.C. 7:13-11.2(g)1, the total area of riparian zone vegetation to be cleared, cut, and/or removed to construct a railroad or public roadway cannot exceed the limits set forth in Table 11.2 unless "the applicant demonstrates that compliance with all Federal, State, and local requirements governing railroads and public roadways cannot be achieved, and that public safety cannot be adequately ensured, without exceeding these limits." Preventing a railroad or public roadway from meeting these standards would constitute an undue hardship on the community and could lead to adverse impacts to public health, safety, and welfare. Rather than require the submittal of a hardship exception request under N.J.A.C. 7:13-15.1, which focuses on general criteria that may not be well suited to address the specific issues related to

riparian zone disturbance for railroads and public roadways, the change from requiring a hardship exception to instead meeting the specific requirements incorporated at N.J.A.C. 7:13-11.2(g)1, (h)1, (i)2, (j)1, (k)1, (q)1, (t), (u)1, (v), and (w)1 focuses the individual permit review process on the specific reasons why the applicant believes that meeting the limitations in Table 11.2 are not feasible or result in compliance costs that are unreasonably high when compared to environmental benefits to be gained if compliance with the limits in Table 11.2 is required. It should be further noted that activities under N.J.A.C. 7:13-11.2(m), (n), (x), and (y) cannot exceed the limitations of Table 11.2 without a hardship exception since the incidence of these activities justifiably exceeding these limits is exceptionally low. Finally, with regard to riparian zone mitigation, N.J.A.C. 7:13-13 sets forth improved methods of providing riparian zone mitigation that ensure the quality of mitigation meets or exceeds the requirements of prior N.J.A.C. 7:13-10.2(t).

633. COMMENT: The proposed rules lack definitive criteria for mitigation; therefore, the one-quarter acre threshold should be eliminated, and the disturbance levels of Table 11.2 should be reduced and justified scientifically before they replace the limits adopted in the 2007 rules. (24)

RESPONSE: Specific requirements for riparian zone mitigation are set forth at N.J.A.C. 7:13-13, which includes definitive criteria for riparian zone creation, restoration, enhancement, and preservation. Regarding the exemption for disturbing one-quarter acre of actively disturbed riparian zone vegetation under proposed N.J.A.C. 7:13-11.2(f)1, as noted in the Response to

Comments 581 through 589, in consideration of the comments received on this proposed exemption and in recognition of the fact that the proposed exemption would, in fact, simply increase the amount of riparian zone disturbance on a site without providing an incentive to reduce impacts to other areas, the Department is not adopting the proposed exemption.

634. COMMENT: The mitigation compensation should apply to all activities impacting vegetation in riparian zones, not just those that are in excess of the limits in Table 11.2. Ninety percent of New Jersey's waters do not meet water quality standards. Riparian buffers are one of the best methods of protecting water quality. Removing or degrading buffers reduces protections for these waterways. (28A, 42, 56, 67, and 127)

635. COMMENT: A vast body of academic, scientific, and professional literature recognizes the "mitigative hierarchy" that should be followed when considering environmental impacts: avoidance of impacts, minimizing impacts, and, only lastly, compensation, or mitigation, of impacts. This rulemaking ignores this accepted hierarchy. Rather than avoiding impacts, the Department is actively promoting development that will create negative impacts. Rather than minimizing impacts, the Department is maximizing impacts before any mitigation is required at proposed Table 11.2. Rather than mitigating as a last resort, the Department is avoiding mitigation and only requiring developers to bear the external costs of their projects as a last resort. These rules must be rewritten to reflect accepted professional standards, including the mitigative hierarchy. (81)

RESPONSE TO COMMENTS 634 AND 635: Where vegetation is cleared, cut, and/or removed within a 300-foot riparian zone pursuant to N.J.A.C. 7:13-11.2(g)3, (h)3, (j)4, (r)2, (s)3, and/or (y), riparian zone mitigation is required for the entire area of disturbance. For all other impacts to riparian zone vegetation under Table 11.2, providing riparian zone mitigation for the area of disturbance in excess of the limits set forth in Table 11.2 provides adequate water quality protection and preservation of riparian zone functionality. The amount of mitigation required to compensate for activities that exceed the limits in Table 11.2 is commensurate with the anticipated potential impact of the activity on riparian zone functionality. Where vegetation is cleared, cut, and/or removed pursuant to N.J.A.C. 7:13-11.2 (r)2 for site remediation activities, paragraph (s)3 for solid waste facility closures, or subsection (y) for miscellaneous activities not listed in Table 11.2, riparian zone mitigation is required for the entire area of disturbance. This is appropriate due to the size, scope, and purpose of the proposed activity. Similarly, for roads and railroads located within a 300-foot riparian zone under N.J.A.C. 7:13-11.2(g)3 and (h)4, riparian zone mitigation is required for the entire area of disturbance. For all other activities, the Department has determined that impacts to riparian zone functionality are *de minimis* provided the limits of Table 11.2 are not exceeded. However, in order to further improve water quality protection along Category One waters, the Department is proposing elsewhere in this issue of the New Jersey Register to amend the mitigation standards at N.J.A.C. 7:13-13 to apply to all activities within a 300-foot riparian zone, whether or not it is a major development under the SWM rules, unless the activity would have been exempt from the prior SWRPA requirements under N.J.A.C. 7:8-5.2(d).

N.J.A.C. 7:13-11.2(g)

636. COMMENT: The existing rules require compensation for roads and railroads. This requirement should not change; if anything, the amount of compensation should be increased. The biomass, including the tree canopy, shrubs, and ground cover, of the riparian zone serves a valuable function by retaining and slowing rainwater and allowing it to infiltrate into the groundwater, thereby protecting waterway baseflow. These important eco-system functions will be lost if riparian buffers may now be cleared for roads regardless of whether or not the runoff effectively flows away from them or not. (183)

RESPONSE: The prior FHACA Rules did not require riparian zone compensation for roads and railroads unless the riparian zone disturbance associated with these activities exceeded the limits under prior Table C. However, under the adopted rules, riparian zone mitigation is required for all disturbance associated with the construction of roads and railroads within a 300-foot riparian zone, pursuant to N.J.A.C. 7:13-11.2(g)3 and (h)3. Therefore, the mitigation requirements for railroads and roadways in some cases exceed the requirements under the prior FHACA Rules.

637. COMMENT: The Department’s comment that roadways and railroads are vital infrastructure is generally true. That does not mean that all proposed roadways are vital, and it certainly does not mean that all proposed locations are essential, even for vital roadways. A vital road that is incorrectly or carelessly sited can impact water quality. A vital roadway, in many cases, can be designed to avoid streams and riparian zones and still achieve its purpose. This can

be accomplished through strict enforcement of the clearing limits in existing Table C and strict application of the hardship requirements. (28A, 42, 56, 67, and 127)

RESPONSE: Under N.J.A.C. 7:13-11.2(b)1 and 2, Department staff ensure for all individual permit applications that the basic purpose of the regulated activity or project cannot be accomplished onsite without the clearing, cutting, and/or removal of vegetation in the riparian zone and that the clearing, cutting, and/or removal of riparian zone vegetation is minimized through methods including situating the regulated activity or project as far from any regulated water as feasible and limiting construction to areas devoid of vegetation, actively disturbed areas, or other areas wherein the benefits and functions of a riparian zone are considerably deteriorated and impaired as a result of previous development. The width of disturbance associated with the construction, expansion, reconstruction, or improvement of any railroad, public roadway, or private roadway must be minimized under N.J.A.C. 7:13-11.2(g)4 and (h)4, and any new crossing of a regulated water must be designed and constructed to be as nearly perpendicular to the channel as possible under N.J.A.C. 7:13-11.2(g)5 and (h)8ii. Further, under N.J.A.C. 7:13-11.2(g)6, where a railroad or public roadway impacts a 150-foot or 300-foot riparian zone, the applicant must demonstrate that there is a compelling public need for the project that cannot be satisfied without impacting the riparian zone. This demonstration must include an analysis of alternate routes and other alternative projects that would avoid impacting the riparian zone. Additionally, under N.J.A.C. 7:13-11.2(h)6, 7, and 8, construction of a private roadway is limited only to those cases where a roadway is unavoidably necessary to access a site that was created prior to the November 5, 2007, adoption of this chapter. These standards, as well as other

requirements related to proximity to top of bank under N.J.A.C. 7:13-11.2(c), limitations on the area of riparian zone disturbance that can occur under Table 11.2, and mitigation requirements at N.J.A.C. 7:13-13, ensure that roadways and railroads are constructed, expanded, or improved only where there is a compelling public need or an unavoidable means of accessing a private site.

638. COMMENT: Existing N.J.A.C. 7:13-10.2 prohibits the subdivision of a property in a way that creates the need to build a road in a riparian zone. This rulemaking allows such subdivisions to occur. This change in the rules will encourage subdivisions that increase the impacts to the riparian zone. The Department should not increase impacts to the riparian zone. (28A, 42, 56, 67, and 127)

639. COMMENT: A person can put a driveway through a Category One buffer anywhere, which is ridiculous. The Department should not give an automatic waiver for a driveway in a buffer. (177)

RESPONSE TO COMMENTS 638 AND 639: Prior N.J.A.C. 7:13-10.2(g)4 specified that a new private roadway could be approved only to provide access to a lot that did not receive preliminary or final subdivision approval after the October 2, 2006, proposal date of the prior rules. This was adopted to prevent people from subdividing large properties and selling off lots to individual owners, each of which could build a separate roadway and thus cause a large amount of riparian zone disturbance over time. However, some properties subdivided after October 2, 2006, were not subdivided in such a way that additional riparian zone disturbance

would occur on the original site. For example, in certain situations it is possible for a lot that includes a riparian zone to be subdivided into two lots either in a way that creates two lots containing a riparian zone that necessarily must be crossed to create access to each lot or in a way that results in only one of the created lots containing the riparian zone with only one access path continuing to be needed to access a non-riparian portion of the site where a regulated activity is planned. While subdivision in the first case would create the additional riparian zone disturbance the rules seek to avoid, subdivision in the second case would not increase riparian zone disturbance from roadway access to that site. To better reflect the intent of this limitation to ensure that riparian zone impacts are not increased as a result of subdivision of properties while allowing development that does not increase impacts to proceed, adopted N.J.A.C. 7:13-11.2(h)6 provides that, in cases where the construction of a new roadway serves or accesses a lot that received preliminary or final subdivision approval after November 5, 2007, the effective date of the amendments proposed on October 2, 2006, the applicant must demonstrate that none of the lots created in the subdivision are currently served or accessed by a roadway and that none of the lots created in the subdivision possess a valid authorization from the Department to construct a new roadway in the riparian zone. This is necessary to ensure that no more than one roadway is constructed within a riparian zone on the original parcel. Additionally, the applicant must demonstrate that the area of riparian zone disturbance to construct the roadway does not exceed the area of riparian zone disturbance that would have been allowed by this chapter to construct a roadway to serve or access the original parcel. A parcel could be subdivided in such a way that constructing a roadway to access one of the subdivided lots may result in much greater riparian zone disturbance than would have been required to construct a roadway to access the original

parcel prior to its subdivision. This requirement ensures that the subdivision process does not result in greater impacts to riparian zone functionality.

N.J.A.C. 7:13-11.2(h)

640. COMMENT: Proposed N.J.A.C. 7:13-11.2(h)3 seems positive if it will discourage development within the riparian zone. As the notice of proposal states, restoration/mitigation should be required for all impacts to the 300-foot riparian zone. However, the Department should also require restoration/mitigation for all impacts to the 150-foot and 50-foot riparian zones. (28A, 42, 56, 67, and 127)

RESPONSE: The Department acknowledges this comment in support of N.J.A.C. 7:13-11.2(h)3 as it applies to 300-foot riparian zones. As noted in the Response to Comments 634 and 635, the amount of mitigation required to compensate for activities under Table 11.2 is commensurate with the anticipated potential impact of the activity on riparian zone functionality. Where vegetation is cleared, cut, and/or removed pursuant to N.J.A.C. 7:13-11.2(r)2 for site remediation activities, paragraph (s)3 for solid waste facility closures, or subsection (y) for miscellaneous activities not listed in Table 11.2, riparian zone mitigation is required for the entire area of disturbance. This is appropriate due to the size, scope, and purpose of the proposed activity. Similarly, for roads and railroads located within a 300-foot riparian zone under N.J.A.C. 7:13-11.2(g)3 and (h)4, riparian zone mitigation is required for the entire area of disturbance. For all

other activities, the Department has determined that impacts to riparian zone functionality are *de minimis* provided the limits of Table 11.2 are not exceeded.

N.J.A.C. 7:13-11.2(j)

641. COMMENT: Proposed N.J.A.C. 7:13-11.2(j)1 limits the amount of riparian zone disturbance for an outfall unless the local Soil Conservation District determines that exceeding the limit is necessary. This effectively negates the value of a disturbance limit. The rules appear to accede to the argument that the Department and Soil Conservation Districts cannot coexist. When the standards of these agencies seem to clash, an alternate project design can easily rectify the apparent conflict. But this rule would limit creativity and in so doing, sacrifice both the intent of the FHACA Rules and necessary environmental protection. The limit on riparian disturbance should be a set, non-negotiable limit because a world of solutions are available that should be explored before a limit is waived. The proposed rules would squash such necessary creativity. (118)

642. COMMENT: The Department is proposing new requirements for stormwater outfall structures. These include a new policy described by the Department as "Added deference to local Soil Conservation Districts for stability issues." This policy lacks any asserted legal and scientific basis and is unsound public policy; therefore, it is *ultra vires* as well as an arbitrary, capricious abuse of discretion. (193)

RESPONSE TO COMMENTS 641 AND 642: The area of disturbance to riparian zone vegetation associated with the construction of a stormwater discharge depends upon a number of variables, including the type of soil present at the discharge, the slope of the receiving area, the size and configuration of the regulated water into which the stormwater is being discharged, the diameter of the discharge pipe, and the size of the attendant conduit outlet protection required under the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90. N.J.A.C. 7:13-11.2(j)1 permits applicants constructing stormwater discharges to exceed the limitations set forth in Table 11.2 only in cases where the Soil Conservation District with jurisdiction over the site determines that exceeding these limits is necessary to meet the requirements of N.J.A.C. 2:90. While the Department anticipates that the majority of stormwater discharges can be constructed without exceeding the limits set forth in Table 11.2, it is appropriate to allow additional riparian zone disturbance where necessary to meet N.J.A.C. 2:90 in order to ensure stability of the receiving area. Further, the mitigation requirements at N.J.A.C. 7:13-11.2(j)2, 3ii, and 4ii ensure that suitable riparian zone mitigation is provided to preserve existing riparian zone functionality.

643. COMMENT: The rulemaking at N.J.A.C. 7:13-11.2(j)3 and 4 to allow stormwater discharges within 150-foot and 300-foot riparian zones and directly into surface waters is extremely concerning. This component of the rule is particularly damaging, substantially weakening existing protections; additional opportunities for stakeholder engagement and comment prior to consideration of adoption should be provided for such a major and potentially devastating change to existing rules. This reduction in water quality protections impacts wildlife;

as an example, the contamination of aquatic life due to water pollution jeopardizes many State trust species, including migratory birds, native fish, and importantly, the insect populations that form the bases of food webs necessary for a wide range of wildlife. Environmental contaminants often found in stormwater have been shown to have direct impacts on fish, wildlife, and invertebrates. (175)

644. COMMENT: This rulemaking at N.J.A.C. 7:13-11.2(j)3 and 4 eliminates the prohibition on stormwater discharges within 150-foot and 300-foot riparian zones and allows discharges directly into surface waters. The existing rules prohibit riparian zone disturbance in excess of the limits specified in existing Table C and prohibit any portion of the stormwater discharge, including conduit outlet protection and/or conveyance swale, from being located within a 150-foot or 300-foot riparian zone unless specific conditions are met (see existing N.J.A.C. 7:13-11.2(j)1 and 2). The proposed revisions to this section are strongly opposed as direct discharge into streams will increase sediment and pollution loading and will increase the amount of scouring and erosion in vital riparian habitat. While it is acknowledged that there might be special circumstances where an absolute prohibition is not possible, the sort of wide ranging elimination of the stormwater discharge prohibition that these proposed rules dictate far overreaches its intended “flexibility” and will result in more damage to riparian habitat and water quality and pollution impacts to waterways, including sedimentation. (29, 30, 42, 46, 91, 96, 189, and 195)

645. COMMENT: The rulemaking to allow direct discharges into the 150-foot or 300-foot riparian zone in order to avoid erosional features outside of the riparian zone only relocates erosional features; it does not prevent them. The Department should, under its Stormwater Management rules, require green infrastructure and the infiltrating or retaining of all stormwater that enters a site. The Soil Erosion and Sediment Control Rules already contain provisions to protect more than just water channels against erosion from discharges. Projects that cannot meet the necessary design conditions should be redesigned. (28A, 42, 56, 67, and 127)

646. COMMENT: Current CZM and FHACA Rules establish a 150-foot buffer along waters with acid producing soils and define excavation requirements. The Department indicates that these rules have resulted in significant erosion. However, this issue should not be addressed by allowing direct discharge into streams. (1)

647. COMMENT: Please do not delete the prohibition on stormwater discharges within 150-foot and 300-foot riparian zones, allowing discharges directly into surface waters. These provisions constitute a major shift in stormwater management policy and are at odds with decades of research regarding buffer science and non-point source pollution control. Direct discharge into streams will facilitate transfer of sediment and pollutants contained in stormwater and may cause stream bank scouring and erosion. This kind of sweeping change in water quality management protocol must be accompanied by a basis and background assessment by the Department. The Department has been provided with information on buffer science and state-of-the-art non-point source pollution control. These provisions should be withdrawn pending a

careful policy assessment in the form of a comprehensive basis and background document and a continuing stakeholder process on this issue. (29, 30, 42, 46, 96, and 189)

648. COMMENT: The Department provides no basis or background documentation or scientific grounds that can show that by repealing prohibitions on stormwater discharges within the 150 and 300-foot riparian zone and allowing stormwater discharges directly into surface waters, the Department is acting in the interest of the State or is responsive to the scope and purpose as stated in N.J.A.C. 7:13-1.1. In fact, the interests to which the Department responds throughout the rulemaking are solely those of the regulated community. (24 and 147)

649. COMMENT: Stormwater discharges directly into surface waters should be banned. Stormwater should be infiltrated outside the riparian zone where possible. (177)

RESPONSE TO COMMENTS 643 THROUGH 649: The adopted rules do not contradict with the scope and purpose of the FHACA Rules. While the Department previously required stormwater discharges to be located outside of a 150 or 300-foot riparian zone or SWRPA, the implementation of this requirement brought unintended consequences. In a significant number of cases where a stormwater discharge from a proposed development is situated outside a riparian zone, as required by the prior rules, an erosional feature has formed over time downstream of the stormwater discharge as runoff seeks a stable path from the discharge point to the receiving surface water. These erosional features are sometimes significant in size and depth and have led to unsafe conditions as well as increases in the sediment load of the regulated water the

Department has sought to protect, which can impair water quality. This dynamic has been verified by a number of New Jersey's Soil Conservation Districts, which have worked with the Department to develop a more effective standard for stormwater discharges. In response to these issues, the Department has amended the requirements for riparian zone disturbance for stormwater discharges within 150-foot and 300-foot riparian zones to allow appropriate discharges provided certain requirements are met.

An applicant proposing a stormwater discharge within a 150-foot or 300-foot riparian zone must demonstrate that situating the stormwater discharge outside the riparian zone is likely to result in greater erosion or other deleterious environmental impacts than situating the stormwater discharge and associated disturbance within the riparian zone. The applicant is further required to provide riparian zone compensation for all vegetation disturbed in excess of that which is allowed in proposed Table 11.2 for a 150-foot riparian zone (see N.J.A.C. 7:13-11.2(j)3) and to provide riparian zone compensation for all disturbed vegetation in a 300-foot riparian zone (see N.J.A.C. 7:13-11.2(j)4). This is consistent with the mitigation recommended by the Department's functional value analysis.

Additional requirements are applicable to any stormwater discharge impacting a 300-foot riparian zone when the discharge, conduit outlet protection, and/or conveyance swale is associated with a major development, as that term is defined in the SWM rules at N.J.A.C. 7:8-1.2. The Department offers two water treatment options for applicants proposing a stormwater discharge associated with a major development in a 300-foot riparian zone to protect water quality. First, stormwater discharges or structures associated with major development may be located within a 300-foot riparian zone if the applicant demonstrates that all runoff from the

water quality design storm is infiltrated or discharged outside the riparian zone to the maximum extent practicable (see proposed N.J.A.C. 7:13-11.2(j)4iii). The water quality design storm is defined in the SWM rules at N.J.A.C. 7:8-5.5(a) to be a rainfall of 1.25 inches over a two-hour period. Erosion related to stormwater discharges is generally the result of runoff from larger storm events. As such, runoff from the water quality design storm can be discharged outside a riparian zone, and therefore farther from surface waters, without the likelihood of developing erosion downstream of the discharge. Given the relatively small volume of runoff resulting from the water quality design storm, the Department believes that, in a majority of cases, runoff from the water quality design storm can be captured and infiltrated outside the riparian zone.

In cases where onsite soils are not amenable to infiltration, runoff from the water quality design storm can alternately be discharged outside the riparian zone and allowed to flow overland through the riparian zone. In such cases, applicants may be directed by local Soil Conservation Districts to discharge stormwater from larger storms into a stable portion of the riparian zone or, where necessary, into the regulated water itself since the Standards for Soil Erosion and Sediment Control at N.J.A.C. 2:90 require the applicant to analyze certain storm events, such as the 25-year storm, and demonstrate that stormwater discharge during such storms is stable.

The Department also recognizes that there will be cases where the water quality design storm cannot safely or feasibly be infiltrated or discharged outside the riparian zone, such as sites with steep slopes, proximity of offsite properties that could be affected by a stormwater discharge, and existing structures that could be situated between the regulated water and the proposed discharge location. The adopted rules establish water quality treatment criteria for

impacts to 300-foot riparian zones in such a case (see N.J.A.C. 7:13-11.2(j)4iii). Particularly, the rules require that runoff from the water quality design storm must be infiltrated or discharged outside the riparian zone to the maximum extent practicable. This will assure that any impacts to the riparian zone and to water quality are minimized. Any runoff from the water quality design storm that is discharged within the riparian zone is required to be treated in accordance with N.J.A.C. 7:8-5.5 to reduce the post-construction load of total suspended solids by 95 percent of the anticipated load from the developed site, expressed as an annual average. The requirement to remove 95 percent of total suspended solids is consistent with the requirements of the SWM rules at N.J.A.C. 7:8-5.5(h)3ii and will further assure that water quality is protected.

The Department believes that these standards will prevent the negative erosive effects of the prior requirements while maintaining water quality treatment standards.

650. COMMENT: The inclusion of the local Soil Conservation Districts is appreciated; however, the proper implementation of this subsection is a concern. Applications to Soil Conservation Districts are typically submitted after the Department permits have been secured. A more coordinated process must be established to minimize the burden on the various agencies and the regulated community. (131)

RESPONSE: The Department agrees that coordinating with local Soil Conservation Districts in cases where an applicant proposes to construct a stormwater discharge that results in disturbance to riparian zone vegetation that exceeds the limitations of Table 11.2 under N.J.A.C. 7:13-11.2(j)1 is essential. Where Soil Conservation District review takes place after an individual

permit has been issued and the District determines that compliance with N.J.A.C. 2:90 necessitates exceeding the limitations of Table 11.2, the permittee would be required to apply for a modification to the individual permit, pursuant to N.J.A.C. 7:13-22.5.

651. COMMENT: It is unconscionable and ludicrous that the Department would allow stormwater runoff from roadways to be discharged directly into streams in such a way that no natural filtration from riparian zone vegetation can occur and without benefit of grassed swales or other measures to absorb pollutants. It appears the Department is anticipating that such stormwater will eventually reach and be treated by a stormwater management basin somewhere downstream. However, even if this did occur, there is no means of ensuring that the stormwater management basin is properly maintained. (177)

RESPONSE: Stormwater runoff from roadways cannot be discharged within a flood hazard area or riparian zone, or directly into a surface water, without meeting the requirements of the Department's SWM rules at N.J.A.C. 7:8 in cases where the project constitutes a major development. Further, under N.J.A.C. 7:13-11.2(j)3 and 4, no stormwater discharge is permitted within a 150-foot or 300-foot riparian zone unless the applicant demonstrates that situating the stormwater discharge and associated disturbance outside the riparian zone is likely to result in greater erosion or other deleterious environmental impacts than situating the stormwater discharge and associated disturbance within the riparian zone. Further, under N.J.A.C. 7:13-11.2(j)4iii, where a stormwater discharge is associated with a major development, as defined at N.J.A.C. 7:8-1.2, the applicant must demonstrate that all runoff from the water quality design

storm, as defined at N.J.A.C. 7:8-5.5(a), is infiltrated outside the riparian zone and/or discharged outside the riparian zone to the maximum extent practicable. Where all runoff from the water quality design storm cannot practicably be infiltrated outside the riparian zone and/or discharged outside the riparian zone, all runoff from the water quality design storm that is discharged within the riparian zone shall be treated, in accordance with the methods set forth at N.J.A.C. 7:8-5.5, to reduce the post-construction load of total suspended solids by 95 percent of the anticipated load from the developed site, expressed as an annual average. These stringent standards ensure that the placement of stormwater discharges within riparian zones and therefore in close proximity to regulated waters is avoided to the maximum extent practicable, and further, where such discharges are unavoidable, suitable water quality treatment is provided. Furthermore, with regard to maintenance of stormwater management basins, the Department's SWM rules at N.J.A.C. 7:8-5.8 require robust maintenance requirements to ensure that stormwater management facilities are inspected regularly and function as designed.

N.J.A.C. 7:13-11.2(k)

652. COMMENT: Simply demonstrating that utility construction is a "compelling public need" should not be enough to obtain a permit under this rule. (69)

RESPONSE: A demonstration of compelling public need under N.J.A.C. 7:13-11.2(k)1 for the construction of a new aboveground or underground utility line that results in the clearing, cutting, and/or removal of riparian zone vegetation is one of several standards that must be met

before the Department can issue an individual permit for a new utility line. The applicant must additionally demonstrate, pursuant to N.J.A.C. 7:13-12.8(c)1 through 4, that the clearing, cutting, and/or removal of riparian zone vegetation is unavoidable and that the area of riparian zone disturbance is the minimum necessary to meet the applicable requirements of the New Jersey Board of Public Utilities and all other State and Federal requirements governing the construction of the utility line. Additionally, staging, storing, and stockpiling materials and equipment must, to the maximum extent practicable, be accomplished outside the riparian zone.

Where it is necessary to conduct these activities within a riparian zone, these activities, as well as access to the utility line during construction, must, to the maximum extent practicable, be undertaken in actively disturbed areas. Preservation of forested areas and trees within 25 feet of the top of bank of any regulated water is given additional priority.

Given these standards, as well as the general standards that require avoidance and minimization of riparian zone disturbance at N.J.A.C. 7:13-11.2(b), and the mitigation requirements of N.J.A.C. 7:13-13, the Department will issue an individual permit for the construction of a new aboveground or underground utility line that results in the clearing, cutting, and/or removal of riparian zone vegetation only where riparian zone disturbance is unavoidable, minimized, in the public interest, and suitably mitigated.

653. COMMENT: It is concerning that these changes will enable gas pipelines to be constructed through New Jersey without public awareness and action. The State needs transparency; the current regulations should be maintained for this purpose. (22)

RESPONSE: The Department values public input during its review of permit applications and agrees that agency transparency is essential for adequate environmental protection. For this reason, any person submitting an application for an individual permit must provide suitable public notice that meets the requirements of N.J.A.C. 7:13-19.

654. COMMENT: New power lines are essential public service infrastructure. Their construction is very costly and must be preceded by various regulatory approvals, which include (particularly for new high voltage lines) a determination of need. Proposed N.J.A.C. 7:13-11.2(k) imposes various conditions on construction of new aboveground and underground power lines that require the clearing, cutting, or removal of riparian zone vegetation. If the area of disturbance exceeds the limits in Table 11.2, proposed N.J.A.C. 7:13-11.2(k)1 requires the applicant to demonstrate "a compelling public need to construct the utility line that cannot feasibly be accomplished without exceeding these limits." Please clarify whether approval of a new power line by the NJ Bureau of Public Utilities would satisfy the "compelling public need" criterion. (51 and 92)

RESPONSE: The Department acknowledges the essential public services provided by New Jersey's energy companies and further acknowledges that the construction of new infrastructure in some cases cannot feasibly avoid riparian zone disturbance. For this reason, Table 11.2 permits the clearing, cutting, and/or removal of riparian zone vegetation in cases where such disturbance is demonstrated to be unavoidable (see N.J.A.C. 7:13-11.2(k)2) and where the area of riparian zone disturbance is the minimum necessary to meet the applicable requirements of the

New Jersey Board of Public Utilities (BPU) and all other State and Federal requirements governing the construction of the utility line (see N.J.A.C. 7:13-11.2(k)3). However, the Department draws a distinction between a compelling public need to construct a utility line and a compelling public need to disturb riparian zone vegetation in excess of the limitations set forth in Table 11.2. The fact that a new utility line is approved by BPU does not automatically indicate that its construction must necessarily exceed the limitations set forth in Table 11.2. While BPU approval justifies the need to construct the utility line, utility companies must demonstrate, pursuant to N.J.A.C. 7:13-11.2(k)1, that "there is a compelling public need to construct the utility line that cannot feasibly be accomplished without exceeding these limits." Further, N.J.A.C. 7:13-11.2(k)3 requires riparian zone disturbance to be the minimum necessary to meet the requirements of BPU and all other government entities. This provision accommodates riparian zone disturbance in excess of the limits set forth in Table 11.2 in cases where compliance with State-mandated vegetation management plans (referenced in the comment below) require a greater area of disturbance to riparian zone vegetation.

655. COMMENT: The proposed rule requires mitigation for construction of utility lines for the portion of disturbed vegetation that exceeds the Table 11.2 limits even though the new line satisfies a "compelling public need" under N.J.A.C. 7:13-11.2(k)1. This mitigation requirement is of particular concern and is unjustified.

Preventing trees and other vegetation from encroaching or making contact with power lines and related equipment is critical to mitigating fire hazards, avoiding power outages and ensuring the safety of workers and the general public. Numerous studies confirm that trees and

their branches growing or falling into overhead power lines are the single greatest cause of electric power outages. In addition to power failures caused by direct contact between trees and power lines, electrical arcing between high-voltage conductors and trees has resulted in devastating wildfires and widespread cascading black-outs in the United States. Given these serious impacts, vegetation management is a very important aspect of electric utility operations, and both Federal and State laws establish comprehensive standards for vegetation management by electric utilities. These standards address, among other things, clearance zones in which certain types of vegetation cannot be allowed to grow (such as trees that could reach or exceed a specified maximum height) and requirements for removing, trimming, or otherwise reducing and controlling vegetation.

Notwithstanding the above, Table 11.2 limits the clearing, cutting, and removal of riparian zone vegetation to 30 square feet for each linear foot of power line. Utility companies, however, are legally bound by their State-mandated vegetation management plans to minimum clearance zones that range from 40 to 200 linear feet. Thus, with few, if any, exceptions, the construction of new high voltage power lines cannot feasibly be accomplished – nor could the new transmission line be lawfully operated – if restricted to the Table 11.2 limit.

Further, the focus of the mitigation requirement is, by definition, essential public service infrastructure for which a demonstration will have been made to show both i. “a compelling public need” and ii. that construction and operation of the power line “cannot feasibly be accomplished without exceeding” the Table 11.2 limits. Whatever may be the justification for mitigation in other contexts, it is not justified for public service infrastructure that is required by “a compelling public need” and that “cannot feasibly be accomplished” by other means.

Moreover, unlike many other disturbances of riparian zone vegetation, most of the disturbance associated with utility lines is only temporary; vegetation is allowed to regenerate, which occurs rapidly, and the new vegetation is highly desirable. For example, wildlife biologists indicate that properly managed utility corridors "could be the last best hope for many birds, pollinators, and other species that are otherwise dramatically declining" (Richard Conniff, Electric Power Rights of Way: A New Frontier for Conservation, Yale Environment 360 (Oct. 16, 2014) (http://e360.yale.edu/feature/electric_power_rights_of_way_a_new_frontier_for_conservation/2816/)). In short, the added expense of mitigation under Subchapter 13 is an unjustified additional cost burden for the New Jersey consumer. (51 and 92)

RESPONSE: The intention of N.J.A.C. 7:13-11.2(k) is not to prevent the construction of utility lines that are found to satisfy a compelling public need but rather to ensure that riparian zone disturbance is the minimum necessary to satisfy that need and that riparian zone mitigation is undertaken where necessary to preserve riparian zone functionality. For this reason, mitigation for new utility lines is required only in cases where riparian zone disturbance exceeds the limitations set forth in Table 11.2. The Department notes that, under N.J.A.C. 7:13-11.2(f)3, the temporary clearing, cutting, and/or removal of riparian zone vegetation within an actively disturbed area is not subject to the limitations of Table 11.2, provided all disturbed areas are adequately stabilized and replanted with vegetation in accordance with N.J.A.C. 7:13-11.2(z). Therefore, where the construction of a utility line temporarily disturbs an actively disturbed area, no mitigation is required.

656. COMMENT: N.J.A.C. 7:13-11.2(k)2 requires applicants to "demonstrate, pursuant to N.J.A.C. 7:13-12.9(b)1 through 4, that clearing, cutting, and/or removal of riparian zone vegetation is unavoidable." This appears to be a typographical error since proposed N.J.A.C. 7:13-12.9(b)1 through 4 addresses storm water outfalls. (51 and 92)

RESPONSE: The commenter is correct that the reference to N.J.A.C. 7:13-12.9(b)1 through 4 is a typographic error. N.J.A.C. 7:13-11.2(k)2 has been changed to refer to N.J.A.C. 7:13-12.8(c)1 through 4, which continue the requirements of prior N.J.A.C. 7:13-11.9(b)1 through 4 as referred to by prior N.J.A.C. 7:13-10.2(k).

N.J.A.C. 7:13-11.2(l)

657. COMMENT: Proposed N.J.A.C. 7:13-11.2(l) specifies conditions for clearing, cutting, or removing riparian zone vegetation in connection with individual permits to "reconstruct, replace, repair, or maintain" existing aboveground and underground power lines. Two aspects of the proposed regulation should be clarified. First, N.J.A.C. 7:13-11.2(l)1 provides that "any disturbance to riparian zone vegetation proposed outside the existing easement or right-of-way of the utility line is subject to the requirements of (k) above." At times, it is necessary for public safety and grid reliability to cut or prune vegetation, particularly large trees, growing into a right-of-way (ROW) from outside its boundaries. While clarification would be helpful, N.J.A.C. 7:13-11.2(l)1 does not appear to restrict corrective measures to remove the vegetation.

Second, proposed N.J.A.C. 7:13-11.2(l)2 limits vegetation clearing, cutting, and removal to actively disturbed areas unless there is a demonstration of "a compelling public need." The "compelling public need" criterion seems to be satisfied if disturbance outside of actively disturbed areas is required to comply with applicable State and Federal requirements for vegetation management in utility linear development infrastructure corridors. That this is the case should be clarified. (51 and 92)

RESPONSE: Pruning trees and branches that hang over or extend into a lawfully existing right-of-way or easement, which is necessary for the continued maintenance of a lawfully existing utility line, is authorized under permit-by-rule 1 at N.J.A.C. 7:13-7.1 for normal property maintenance, provided no clearing, cutting, and/or removal of riparian zone vegetation occurs outside the existing right-of-way or easement. Permit-by-rule 1 additionally authorizes the periodic clearing, cutting, and/or removal of vegetation within an actively disturbed area, such as mowing and clearing nuisance vegetation as would be necessary within a utility right-of-way or easement. Where disturbance to riparian zone vegetation outside of actively disturbed areas is required to comply with applicable State and Federal requirements for vegetation management as noted by the commenter, this satisfies the requirement under N.J.A.C. 7:13-11.2(l)3.

N.J.A.C. 7:13-11.2(m)

658. COMMENT: Proposed N.J.A.C. 7:13-11.2(m) is contrary to the Department's statutory obligations and increases permissible construction in the riparian zone on subdivided properties.

Under the existing rules, a property had to be subdivided prior to November 2007, in order for both new lots to be eligible for a Flood Hazard Area permit. (27, 56, 77, 122, 138, 170, 173, and 190)

659. COMMENT: Proposed N.J.A.C. 7:13-11.2(m) is opposed as it increases permissible construction in the riparian zone on subdivided properties. Under the existing rules, a property had to be subdivided prior to October 2, 2006, in order for both new lots to be eligible for a Flood Hazard Area permit. As flooding presents a significant risk to the public health, safety, and welfare due to loss of life, injury, and property, the rules should minimize situations that result in impacts to the riparian zone, and proposed N.J.A.C. 7:13-11.2(m) does not accomplish that goal. (27, 56, 77, 122, 138, and 170)

660. COMMENT: Streamlining the rules for building houses in riparian zones is appalling. Developers will profit, but residents will pay more for flood insurance and water related repairs as oceans rise and violent storms increase. Clean water must be protected. Houses in riparian zones will compromise the quality of water regardless of the number of regulations. (16)

RESPONSE TO COMMENTS 658 THROUGH 660: The purpose of N.J.A.C. 7:13-11.2(m) is not to encourage more development within riparian zones but rather to avoid an argument for takings in cases where a residential lot has been created prior to the November 5, 2007, adoption of the prior rules, which first set forth riparian zone limitations. Under prior N.J.A.C. 7:13-10.2(m)2, construction of a new private residence was permitted only where the lot on which the

residence is proposed to be located did not receive preliminary or final subdivision approval after October 2, 2006, which was the proposal date of the prior rules. This restriction was adopted to prevent people from subdividing large properties and selling off lots to individual owners, each of which could build a separate private residence, creating a significant cumulative increase in the amount of disturbance to riparian zone vegetation. N.J.A.C. 7:13-11.2(m)2 provides that, in cases where the construction of a new single-family home or duplex is proposed on a lot that received preliminary or final subdivision approval after the November 5, 2007 effective date of the amendments proposed on October 2, 2006, the applicant must demonstrate that none of the lots created in the subdivision contain a habitable building or possess a valid authorization from the Department to construct a habitable building in the riparian zone. This is necessary to ensure that no more than one single-family home or duplex is constructed within a riparian zone on the original parcel prior to its subdivision and thereby minimize adverse impacts to riparian zone functionality. It further acknowledges situations in which a lot was subdivided between the proposal and adoption date of the prior rules.

661. COMMENT: Existing N.J.A.C. 7:13-10.2(m)4i should remain. Municipal zoning regulations are broad and do not necessarily take environmental constraints on a particular property into consideration. Before disturbance is permitted in the riparian zone, an applicant should first apply for a variance requesting permission for different types of development or for different setbacks to avoid impacts to the riparian zone. Only if the variance is denied and a permit is necessary to avoid a regulatory taking should the Department issue a permit that allows

for development to occur closer to a waterway or to cause disturbance to the riparian zone. (28A, 42, 56, 67, and 127)

RESPONSE: Prior N.J.A.C. 7:13-10.2(m)4i required applicants to demonstrate there was no other reasonable use for the site under the applicable zoning for the property that would reduce or eliminate the impact to the riparian zone. Municipal zoning generally dictates the use of a site. A person proposing the construction of a private residence or duplex on a site that is zoned for residential development often does so because there is no other type of development that would be permitted under municipal zoning. As such, the rules prior to this adoption did not require the applicant to look for other types of uses that would require a variance, only that they demonstrated that other uses allowed by zoning applicable to the property were not reasonable. Further, under N.J.A.C. 7:13-11.2(b)1 and 2, Department staff ensure for all individual permit applications that the basic purpose of the regulated activity or project cannot be accomplished onsite without the clearing, cutting, and/or removal of vegetation in the riparian zone and that the clearing, cutting, and/or removal of riparian zone vegetation is minimized through methods including situating the regulated activity or project as far from any regulated water as feasible and limiting construction to areas devoid of vegetation, actively disturbed areas, or other areas wherein the benefits and functions of a riparian zone are considerably deteriorated and impaired as a result of previous development. N.J.A.C. 7:13-11.2(b) and (m) therefore ensure that the construction of a single-family home or duplex within a riparian zone will result in the minimum possible impact to riparian zone functionality.

N.J.A.C. 7:13-11.2(m) and (n)

662. COMMENT: N.J.A.C. 7:13-11.2(m) and (n) are contrary to the obligations under the FHACA to protect human health and wellbeing. Where the flood fringe and the riparian zone are co-extensive, this rulemaking puts people and property in harm's way. Furthermore, it impairs the functionality of the riparian zone by allowing disturbance to it. The Department should only allow development within the riparian zone for a single-family home or duplex if refusing would lead to regulatory taking. In this circumstance, development should only be permitted after variances have been obtained to minimize impacts to the riparian zone. In some instances, the need to develop in the riparian zone is the result of setbacks or other zoning requirements. Only after an attempt has been made to secure these variances from the municipal land use board and/or the county planning board should the Department consider granting approval for development in the riparian zone. (28A, 42, 56, 67, and 127)

RESPONSE: With regard to the safety of individuals residing in a single-family home or duplex constructed within a flood hazard area, N.J.A.C. 7:13-12.5 sets forth stringent standards for the lowest floor elevation and for access to a single-family home or duplex that are intended to ensure that such development does not threaten public health, safety, and welfare; the allowance for a residential structure or duplex to potentially impact riparian zone vegetation does not relieve the proposed structure from complying with all other requirements of the rules.

As noted in the Response to Comment 661, a person proposing the construction of a private residence or duplex on a site that is zoned for residential development often does so

because there is no other type of development that would be permitted under municipal zoning. Further, for the construction of a new single-family home or duplex on a lot that was created or subdivided after November 5, 2007, the applicant must demonstrate that none of the lots created in the subdivision contain a habitable building or possess a valid authorization from the Department to construct a habitable building in the riparian zone. This ensures that no more than one single-family home or duplex will be constructed per lot that existed prior to the November 5, 2007, adoption of the prior FHACA Rules, under which riparian zones were first established. As additionally noted in the Response to Comments 617 and 619, the allowable riparian zone disturbance is the minimum necessary to reasonably accommodate a single-family home or duplex. This is true also for the limitations set forth for riparian zone disturbance under Table 11.2 associated with N.J.A.C. 7:13-11.2(n), which addresses impacts from the construction of an addition to a lawfully existing single-family home or duplex or the construction of an accessory structure to an existing single-family home or duplex, such as a barn, deck, detached garage, fence, pool, or shed. The limitations set forth for activities under N.J.A.C. 7:13-11.2(m) and (n) cannot be exceeded without approval of a hardship exception request pursuant to N.J.A.C. 7:13-15.1. These protections as well as the general requirements for development within riparian zones set forth at N.J.A.C. 7:13-11.2(b) and (c) ensure that only a *de minimis* impact to riparian zone functionality would occur under an individual permit.

N.J.A.C. 7:13-11.2(n)

663. COMMENT: Proposed N.J.A.C. 7:13-11.2(n) is concerning as it allows for the "construction of an addition to a lawfully existing single-family home or duplex, or the construction of an accessory structure to an existing single-family home or duplex" if "the total area of riparian zone vegetation to be cleared, cut, and/or removed within the riparian zone does not exceed the limits set forth in Table 11.2 above, cumulatively since November 5, 2007." While this provision attempts to limit riparian zone disturbance and riparian vegetation clearing, it does not specify any plans for record keeping and enforcement. The inability to enforce this provision will result in the degradation of riparian buffers and their ability to manage flood water to protect property and the environment from flood damages. The limits of disturbance for additions and accessory structures are excessive and not supported by science. The thresholds should be restored to those found in the 2007 rules, and only one permit for additions and accessory structures should be allowed per site. (24)

RESPONSE: The Department acknowledges the important benefits and functions provided by riparian zone vegetation as noted by the commenter. For this reason, the FHACA Rules establish maximum limits on the area of vegetation that can be cleared, cut, and/or removed in order to ensure that impacts to riparian zone functionality are *de minimis*. Accordingly, applicants for an individual permit under N.J.A.C. 7:13-11.2(n) must demonstrate to the Department that the total area of riparian zone vegetation to be cleared, cut, and/or removed within the riparian zone does not exceed the limits set forth in Table 11.2, cumulatively since November 5, 2007. Furthermore, applications for authorization under general permits-by-certification and general permits and applications for individual permits are tracked in the Department's database for a given site.

Accordingly, the Department has the information necessary to ensure that the cumulative limit imposed in Table 11.2 is not exceeded without the applicant making an appropriate hardship demonstration and obtaining Department approval of any exceedance, with mitigation for the exceedance required in accordance with N.J.A.C. 7:13-11.2(e).

N.J.A.C. 7:13-11.2(q)

664. COMMENT: Septic system reconstruction should be discouraged in a riparian area. (1)

665. COMMENT: Without careful and location-specific analysis, allowing increased encroachment for subsurface sewage disposal systems is counterproductive for water quality and community protection. For example, on-lot septic systems that are not properly sited, constructed, or maintained become significant sources of contamination that can degrade the quality of streams. Nitrate-nitrogen levels in septic tank effluent vary greatly and are a significant source of groundwater contamination. Allowing increased encroachment into the buffer diminishes one of the protective barriers that exists to protect streams and communities from pollution associated with subsurface sewage disposal systems. (183)

666. COMMENT: The rule will allow new septic systems within 50 feet of a stream. For years, efforts have been made to relocate septic systems farther away from streams for water quality purposes; now, the 150-foot restriction is reduced to 50 feet. The rationale for placing a septic system closer to a stream is incomprehensible. The scientific and public policy bases are

questionable, and the statement in this rulemaking that this amendment is based on the Department's experience was not accompanied by any support or rational. (193)

RESPONSE TO COMMENTS 664 THROUGH 666: As noted in the Response to Comment 662, N.J.A.C. 7:13-11.2(m) provides for the construction of a single-family home or duplex within a riparian zone provided specific conditions are met to avoid unnecessary riparian zone disturbance. In areas where sewer service is unavailable, the construction of a single-family home or duplex must be accompanied by the construction of an individual subsurface sewage disposal system. In some cases, especially on small lots that are mostly or entirely located within a riparian zone, the construction of an individual subsurface sewage disposal system within the riparian zone is unavoidable. If such a sewage disposal system could be constructed within a previously disturbed area, such as a lawn, and where the ground is not raised within a flood hazard area, the sewage disposal system would qualify for the permit-by-rule at prior N.J.A.C. 7:13-7.2(a)2, in which case the system could be constructed up to 25 feet from any top of bank. However, in cases where it was necessary to construct a mounded disposal field within a flood hazard area and/or where trees would necessarily be removed to accommodate the system, the prior FHACA Rules did not provide for such construction. Therefore, many applicants were required to seek a hardship exception to construct the system, which was generally granted by the Department due to the demonstrable need for the system to be constructed within a riparian zone. Similarly, the prior FHACA Rules did not provide for the repair of any malfunctioning sewage disposal system, which therefore also required applicants to seek a hardship exception.

Due to the obvious environmental benefits of repairing a malfunctioning sewage disposal system, these requests were approved by the Department.

Given the above, N.J.A.C. 7:13-11.2(q) was proposed and adopted in order to set forth standards for the construction of an individual subsurface sewage disposal system that serves one new single-family home or duplex or to repair or alter a lawfully existing, malfunctioning individual subsurface sewage disposal system that serves any building. By adopting these standards, the maximum area of riparian zone disturbance was established along with other criteria necessary to reduce impacts to riparian zone functionality. N.J.A.C. 7:13-11.2(b) ensures that such a system is located within a riparian zone only where no feasible alternative exists and that attendant disturbance to riparian zone vegetation is minimized and located as far from any regulated water as possible. N.J.A.C. 7:13-11.2(q) additionally requires that any new system be located at least 50 feet from the top of bank and that an existing system being reconstructed is relocated, where feasible, to be at least 50 feet from any top of bank. The Department believes that N.J.A.C. 7:13-11.2(q) will encourage individual subsurface sewage disposal systems that are unavoidably located within riparian zones to be constructed in such a way as to minimize impacts to riparian zone functionality. Additionally, the Department's Standards for Individual Subsurface Sewage Disposal Systems at N.J.A.C. 7:9A ensure that these systems do not contribute to water quality degradation. Therefore, the adoption of N.J.A.C. 7:13-11.2(q), in concert with N.J.A.C. 7:13-11.2(b) and 7:9A, is appropriate.

667. COMMENT: Proposed N.J.A.C. 7:13-11.2(q) requires that repair and/or reconstruction of an existing individual subsurface sewage disposal system can only occur if the use of the

building is not changing. The clause appears to be somewhat onerous. Building use must change as businesses change; some businesses will require a larger and/or upgraded system. Not allowing for the repair and/or reconstruction of an existing system for a change in use, especially where the size of the building remains the same, seems to limit business and could lead to further economic problems. The Department should revisit this language and revise it where necessary to allow for changes in use, with restrictions on the increase of the system in question. (118)

RESPONSE: The purpose of N.J.A.C. 7:13-11.2, as noted in the Response to Comments 664 through 666, is to accommodate new individual subsurface sewage disposal systems that are unavoidably located within riparian zones and to facilitate the repair of existing malfunctioning sewage disposal systems currently located within riparian zones. It is not the Department's intention to encourage the placement of new sewage disposal systems or the expansion of existing sewage disposal systems within riparian zones except where such activities are unavoidable. However, the Department recognizes that it is in the best interest of public health, safety, and welfare and the environment to facilitate the repair of malfunctioning systems, which in some cases requires the expansion of such a system. However, where a change in the use of the building the system serves is proposed, including a change from disuse or abandonment to any type of use, an expansion of the system is likely. In cases where a change in use would not result in the expansion of the system, applicants can request a hardship exception to permit the system's repair.

668. COMMENT: Technologically-advanced and eco-friendly systems should also be encouraged in these rules. (118)

RESPONSE: The Department encourages the use of technologically-advanced and ecologically-beneficial sewage disposal systems, particularly where such methods result in less disturbance to riparian zone vegetation and flood hazard areas. The Department's Standards for Individual Subsurface Sewage Disposal Systems at N.J.A.C. 7:9A additionally encourage the use of such systems.

669. COMMENT: The proposed rules do not address repair and/or replacement of malfunctioning sewage disposal systems that are negatively impacting the riparian zone in their present condition. The rules should incorporate requirements and standards for the immediate replacement of these malfunctioning systems. The rules should also address existing structures that are causing deterioration of the riparian zone. (118)

RESPONSE: In cases where a malfunctioning sewage disposal system is negatively impacting the riparian zone in its present condition, the Department can issue an emergency authorization pursuant to N.J.A.C. 7:13-16 for the immediate repair or replacement of the system.

N.J.A.C. 7:13-11.2(r) and (s)

670. COMMENT: Special analysis and consideration of requested encroachments into the riparian zone for remediation projects and landfill closures are very appropriate and necessary; these operations have an adverse environmental footprint and should not be allowed to expand without a clear demonstration of need. (183)

RESPONSE: The Department agrees that special analysis and consideration of encroachments into the riparian zone for site remediation projects and solid waste landfill closures are both appropriate and necessary. For this reason, N.J.A.C. 7:13-11.2(r) and (s) set forth stringent standards that limit the area of riparian zone disturbance to the minimum necessary to accommodate such projects and also require mitigation for all riparian zone vegetation that is cleared, cut, and/or removed.

671. COMMENT: N.J.A.C. 7:13-11.2(r)2 refers to mitigation requirements at N.J.A.C. 7:13-13 that should include an allowance for the 1:1 in-kind restoration of temporarily disturbed riparian zone vegetation for site remediation activities. This will facilitate remediation of contaminated sites and restoration of riparian zone vegetation in the remediation area. It is onerous to require a greater ratio of riparian mitigation, which would entail acquiring land or easements offsite in order to effect mitigation. The FWPA Rules include an allowance for the 1:1 restoration of temporarily disturbed vegetation where restoration is provided in six months or less. This should be adopted for riparian zone temporary disturbance as well. (59)

RESPONSE: Site remediation can take many forms. In some cases, existing vegetation is cleared from the area being remediated, contaminated soil is removed or treated, and vegetation is replanted in-kind. Where replanting consists of vegetation of equal or greater ecological function and value as the vegetation that was cleared, cut, or removed, as described in N.J.A.C. 7:13-11.2(z), no additional riparian zone mitigation is required. This therefore constitutes 1:1 restoration as described by the commenter.

However, in some cases, existing vegetation is cleared from the area being remediated and the area is subsequently covered or capped with an impermeable layer intended to prevent subsequent infiltration of precipitation and associated movement of groundwater contamination. Such a cap may consist of compacted soil or clay upon which grass is planted or else it may consist of pavement, buildings, or other areas devoid of vegetation. Trees and other vegetation whose roots could puncture the cover are not generally permitted to grow. If the site prior to remediation constituted an actively disturbed area, such as a lawn (see definition of “actively disturbed area” at N.J.A.C. 7:13-1.2), replanting the remediated area with grass would generally meet the requirements of N.J.A.C. 7:13-11.2(z), and the project would warrant no additional mitigation. However, where trees and other vegetation outside of actively disturbed areas are removed to remediate a site and the area is simply replanted with grass, mitigation in accordance with N.J.A.C. 7:13-13 is required for the disturbed area to offset adverse impacts to riparian zone functionality.

N.J.A.C. 7:13-11.2(t) and (u)

672. COMMENT: Special analysis and consideration of requested encroachments into the riparian zone for trails, boardwalks, and footbridges are very appropriate; these facilities are designed for public access to nature and enhanced recreation, so it is counterproductive to allow them to damage nature. (183)

RESPONSE: The design and construction standards set forth at N.J.A.C. 7:13-11.2(t) and (u) are intended to ensure that trails, boardwalks, and footbridges that are constructed within riparian zones have minimal environmental impact.

N.J.A.C. 7:13-11.2(w)

673. COMMENT: Please clarify whether there is a limit on the number of access points along a waterway. Access is often accomplished with heavy equipment that can severely damage the existing vegetation. (96)

RESPONSE: N.J.A.C. 7:13-11.2(w) does not establish a limit on the number of access points along a regulated water to facilitate sediment and debris removal. This is appropriate since sediment and debris removal projects can involve numerous miles of streams and rivers that defy a preset number of access points. However, N.J.A.C. 7:13-11.2(w) also provides that the number of proposed access points is the minimum necessary to conduct the project; where possible, the project is conducted within actively disturbed areas and from only one bank; the use of heavy equipment in the regulated water is avoided unless the applicant demonstrates that there is no

feasible alternative that would result in less environmental damage; and vegetation and tree canopy on the more southerly or westerly bank is preserved in order to shade the regulated water. These requirements, in concert with the requirement to avoid and minimize disturbance to riparian zone vegetation under N.J.A.C. 7:13-11.2(b), will ensure that the minimum number of access points will be used along a regulated water to facilitate sediment and debris removal under an individual permit.

N.J.A.C. 7:13-11.2(y)

674. COMMENT: Please remove the exemption from mitigation for disturbed areas of less than 2,000 square feet. (158, 159, and 180)

RESPONSE: As proposed, N.J.A.C. 7:13-11.2(y) expanded the area of disturbance to riparian zone vegetation permitted under prior N.J.A.C. 7:13-10.2(r) for regulated activities not listed in prior Table C and also proposed an exception from mitigation for activities under this subsection that would result in disturbance of no greater than 2,000 square feet of riparian zone vegetation. However, upon further consideration of this change, the Department has determined that proposed N.J.A.C. 7:13-11.2(y) would inappropriately increase the area of riparian zone disturbance afforded to regulated activities not listed in Table 11.2.

Table 11.2 provides for riparian zone disturbance only for projects that are, in certain instances, justifiably located within a riparian zone. Specifically, Table 11.2 provides for necessary linear development projects (railroads, roads, utility lines, stormwater discharges,

public access, trails, boardwalks, and footbridges), environmentally beneficial projects (bank stabilization projects, repairing failing subsurface sewage disposal systems, hazardous substance remediation, and solid waste facility closures), projects that reduce flooding (flood control projects, removing sediment and debris from a regulated water, and removing existing fill or structures), minor impacts from one single-family home or duplex, and limited water dependent development that meets the CZM Rules. Since the FHACA Rules cannot capture every case where riparian zone disturbance is justifiable, it is appropriate to adopt a category of activities that provides for unforeseen situations. However, the proposed increase in riparian zone disturbance for these unforeseen activities would have been much greater than the riparian zone disturbance permitted for many other activities listed in Table 11.2.

Given the above, N.J.A.C. 7:13-11.2(y) is not adopted as proposed. Instead, the substance of prior N.J.A.C. 7:13-10.2(r) has been continued at N.J.A.C. 7:13-11.2(y) with clarifying amendments and updated citations. Specifically, proposed N.J.A.C. 7:13-11.2(y)1 is adopted without modification as it is equivalent in meaning to prior N.J.A.C. 7:13-10.2(r)1, adopted N.J.A.C. 7:13-11.2(y)2 and 3 continue prior N.J.A.C. 7:13-10.2(r)2 and 3 without amendment, and proposed N.J.A.C. 7:13-11.2(y)4 is adopted without modification as it sets forth mitigation requirements that provide equal or superior riparian zone functionality as prior N.J.A.C. 7:13-10.2(r)4.

N.J.A.C. 7:13-11.2(z)

675. COMMENT: At proposed N.J.A.C. 7:13-11.2(z)1i, please change "Consist of vegetation of equal or greater ecological function and value as the vegetation that was cleared, cut, or removed" to "Consist of vegetation three times the ecological function and value as the vegetation that was cleared, cut, or removed." (158, 159, and 180)

RESPONSE: It is not clear how an applicant or the Department would be able to determine whether vegetation being planted under N.J.A.C. 7:13-11.2(z) possesses three times the ecological function and value as the vegetation that was cleared, cut, or removed, as suggested by the commenter. The purpose of N.J.A.C. 7:13-11.2(z) is to ensure that any area from which vegetation is temporarily cleared, cut, and/or removed is restored to match or exceed pre-construction riparian zone functionality. N.J.A.C. 7:13-11.2(z)1i therefore requires that the vegetation being replanted must consist of vegetation of equal or greater ecological function and value as the vegetation that was cleared, cut, or removed. Further, N.J.A.C. 7:13-11.2(z)1ii requires that the vegetation being replanted must consist of native, non-invasive vegetation except in an actively disturbed area where appropriate flexibility is provided to restore the pre-construction vegetation in-kind.

676. COMMENT: The requirement for all temporary disturbances to riparian zones to be restored to their original condition is supported. The restoration should be with native, non-invasive vegetation. Replanting a functioning riparian zone with lawn degrades that riparian zone and, quite likely, the waterway. (28A, 42, 56, 67, and 127)

677. COMMENT: Since all disturbances to riparian zones should be temporary (other than the actual structure and any immediate and necessary area of permanent disturbance), disturbed areas should be restored as closely as possible to their naturally functioning condition. Roadways channel runoff toward streams, and a healthy and fully functioning riparian zone is vital to intercepting, slowing, infiltrating, and filtering the runoff before it reaches a waterway. (28A, 42, 56, 67, and 127)

RESPONSE TO COMMENTS 676 AND 677: The Department acknowledges the commenter's support of this provision. As noted in the Response to Comment 675, the purpose of N.J.A.C. 7:13-11.2(z) is to ensure that any area from which vegetation is temporarily cleared, cut, and/or removed is restored to match or exceed pre-construction riparian zone functionality. Further, N.J.A.C. 7:13-11.2(z)1i requires that the vegetation being replanted must consist of vegetation of equal or greater ecological function and value as the vegetation that was cleared, cut, or removed, and N.J.A.C. 7:13-11.2(z)1ii requires that the vegetation being replanted must consist of native, non-invasive vegetation except in an actively disturbed area where appropriate flexibility is provided to restore the pre-construction vegetation in-kind.

N.J.A.C. 7:13-11.3 Requirements for a Regulated Activity in a Floodway

678. COMMENT: Proposed N.J.A.C. 7:13-11.3 has requirements for regulated activities in floodways, allowing "construction or conversion of a building on a pier in the Hudson River," and N.J.A.C. 7:13-12.5(e) governs permits issued for "construction of a new building in a

floodway," listing three requirements that must all be satisfied. One requirement is that "the building is located on a pier in the Hudson River." The Preliminary Flood Insurance Rate Maps, dated December 20, 2013, identify Zone V in some areas along the shore of the Hudson River. Allowing new construction over water in Zone V is not consistent with the NFIP, which prohibits new construction of buildings in Zone V if located seaward of the reach of mean high water. This prohibition does not apply in Zone A although Federal flood insurance is not available for buildings over water. (110)

RESPONSE: It is not the Department's intention to permit activities that do not comply with the minimum standards set forth in the National Flood Insurance Program. N.J.A.C. 7:13-11.3(c)1 and 12.5(e) are intended to address the situation where a building is constructed on a pier within the floodway of the Hudson River, which meets the applicable requirements for development under the CZM Rules at N.J.A.C. 7:7-9.46 (formerly N.J.A.C. 7:7E-3.48). Such development would require an upland waterfront development permit and therefore not require a separate flood hazard area permit, pursuant to N.J.A.C. 7:13-2.1(b)6. This is appropriate since N.J.A.C. 7:7-9.25(f)1 (formerly N.J.A.C. 7:7E-3.25(f)1) requires that all activities within a flood hazard area for which an applicant seeks approval under N.J.A.C. 7:7 must meet the requirements of the FHACA Rules. Where such development is proposed waterward of the mean high water line within Zone V and is therefore not in compliance with the National Flood Insurance Program as noted by the commenter, the development would not satisfy N.J.A.C. 7:7-9.25(f)3 (formerly N.J.A.C. 7:7E-3.25(f)3), which requires development in flood hazard areas to conform with Federal flood reduction standards, 44 CFR Part 60.

679. **(Agency Note:** There is no comment 679.)

N.J.A.C. 7:13-11.4 Requirements for a Regulated Activity in a Flood Fringe

680. COMMENT: The Department is commended for the proposed changes in N.J.A.C. 7:13-11.4, particularly with respect to N.J.A.C. 7:13-11.4(d)10, which recognizes that providing full compensation for the volume of flood storage displacement necessitated by the investigation, cleanup, and removal of hazardous substances may not be possible or feasible. (13, 14, 37, 47, and 148)

RESPONSE: The Department acknowledges this comment in support of the rules.

681. COMMENT: The Department does not provide credit for excavation in the flood fringe related to net-fill if the area does not efficiently drain to the river. Therefore, any proposed fill within the same areas should not be considered proposed fill. (28)

RESPONSE: Floodplain systems are dynamic and complex. During the course of a flood, floodwaters continually enter and exit the flood hazard area. A site that lies in a flood fringe does not generally fill up with floodwaters at the beginning of a flood and then release that same water at the end of the event. However, the Department recognizes that not all portions of a site provide equal flood attenuation abilities. Depending on the topography of a site, the duration and

intensity of a flood, and the presence of manmade structures, floodwaters can sometimes enter an area and become trapped in small pockets of land or become temporarily detained within an area until the flood subsides. Nevertheless, in order to protect public health, safety, and welfare, it is important that areas excavated by applicants to offset fill or structures placed within a flood fringe provide fully effective flood storage compensation. Further, while today's computer models offer an increasingly accurate simulation of flood dynamics, the exact pattern of flooding at a given site during an actual storm event cannot be predicted. For this reason, N.J.A.C. 7:13-11.2(j)1 ensures that all compensatory flood storage created under an individual permit is designed to remain open to flow such that floodwaters can freely enter and exit the area during the entire flood event. This requirement ensures that all compensatory flood storage provides equal or greater flood attenuating ability as the flood fringe occupied by fill or structures for which the compensation is being offered.

682. COMMENT: The net-fill standards are surrogate standards to ensure that additional flooding does not occur as a watershed develops. This was so important in the 2007 version of the rules that the standards were tightened, decreasing allowable displacement from 20 percent to zero percent. The proposed rules have reverted to 20 percent for certain projects, such as site cleanups. This implies that flooding is considered less of a problem now. Experience says otherwise. While site cleanups are positive, the rules cannot allow them to create flooding problems. Sites can be remediated at grade. Sites do not need to be filled to be remediated. The extra cost to haul contaminated fill away is necessary. Allowing displacement of flood storage in

order to remediate a site is not proper. Please continue to enforce the zero percent net-fill standard. (118)

683. COMMENT: The proposed exemptions from flood storage requirements for single family homes, site remediation projects, and landfill closure projects should be removed from the rulemaking. Although the latter two categories have some benefit, they must mitigate for those impacts. (29, 30, 46, 91, 177, 189, and 195)

RESPONSE TO COMMENTS 682 AND 683: Under this notice of adoption, four types of projects are exempt from the flood storage displacement limitations at N.J.A.C. 7:13-11.4(d)7, 9, 10, and 11: the restoration of a regulated water to a natural condition; the repair, modification, or reconstruction of a malfunctioning individual subsurface sewage disposal system; investigation, cleanup, and removal of hazardous substances; and landfill closure activities. These environmentally beneficial activities cannot in many cases be undertaken without flood storage displacement. Removing structures that enclose a regulated water can cause a decrease in upstream flood elevations, therefore causing a loss in flood storage volume, which can exacerbate flooding downstream of the project. Subsurface sewage disposal systems often malfunction due to poorly draining soils, high groundwater tables, and other factors, which require the construction of a mounded (aboveground) system in order to properly remediate the malfunction. Similarly, hazardous site investigation and cleanup activities and landfill closure activities often require grading and/or the placement of fill material, such as to construct a cap to prevent or reduce further groundwater contamination. In cases where these activities take place

within flood hazard areas, the Department recognizes that it may not be possible or feasible to fully compensate for the volume of flood storage displacement necessitated by the activity. Since these activities are being undertaken to ameliorate impacts on the environment and/or to provide an environmental benefit to degraded areas, individuals who cannot provide sufficient compensatory flood storage have historically requested and received hardship exceptions for these activities. In order to reduce the regulatory burden for these environmentally beneficial projects, the Department has exempted these projects from the flood storage displacement limitations of N.J.A.C. 7:13-11.4, provided several conditions are met to ameliorate any potential offsite impacts to flooding and the environment.

For each of these projects, the applicant must demonstrate that the proposed volume of flood storage displacement is the minimum necessary to accomplish the project in accordance with State and local requirements. Additionally, for the repair, modification, or reconstruction of a malfunctioning individual subsurface sewage disposal system, hazardous site investigation and cleanup activities, and landfill closure activities, the applicant must demonstrate that, to the maximum extent practicable, all flood storage displaced by the project is provided compensation using one or more of the methods set forth in N.J.A.C. 7:13-11.4. However, in no case can a project under this section displace more than 20 percent of the flood storage volume existing at the time of the individual permit application. These limitations are necessary to ensure that the project does not potentially exacerbate offsite flood conditions. For the repair, modification, or reconstruction of a malfunctioning individual subsurface sewage disposal system, two additional limitations apply, which mirror the requirements for freshwater wetlands general permit 25 at N.J.A.C. 7:7A-5.25 for the same activity within freshwater wetlands. The applicant must

demonstrate that the project is not being undertaken to accommodate any expansion or change in use and that the system will continue to serve existing volumes of sewage. These limitations are necessary to ensure that any loss of flood storage results only from activities necessary to restore a malfunctioning system to working order and not to accommodate proposed new development. Any flood storage displacement that does not meet the requirements of these proposed new exemptions can be authorized only through a hardship exception. Given these limitations and requirements, allowing these beneficial activities to result in some flood storage displacement where no feasible alternative exists is appropriate and will not exacerbate local or regional flooding.

684. COMMENT: The Department should not allow for filling of flood hazard areas in the Highlands. (177)

RESPONSE: This adoption does not alter or affect the authority or standards under the Highlands Water Protection and Planning Act rules, which apply to major Highlands development. In cases where development is proposed within flood hazard areas or riparian zones in the Highlands Preservation Area that does not constitute a major Highlands development, approval under the FHACA Rules is required. N.J.A.C. 7:13-11.4 sets forth stringent standards preserving flood storage within New Jersey's flood hazard areas. Except for the cases set forth at N.J.A.C. 7:13-11.4(d), which describe situations where a loss of flood storage volume is unavoidable and/or *de minimis*, all projects in fluvial flood hazard areas must comply with the Department's zero flood storage displacement requirements. As noted in the

Response to Comments 682 and 683, limited flood storage displacement is sometimes necessary to accommodate environmentally beneficial projects in cases where an applicant can demonstrate that the proposed volume of flood storage displacement is the minimum necessary to accomplish the project in accordance with State and local requirements and flood storage displacement is compensated for to the maximum extent, not to exceed 20 percent on a given property.

685. COMMENT: Asphalt in flood hazard areas should be considered fill. With these rules, a person can re-grade a property, create a pad site, and make the parking area asphalt in a flood hazard area. (177)

RESPONSE: The Department acknowledges that the placement of impervious surface, such as asphalt, increases runoff volumes and reduces groundwater recharge. For this reason, the Department's Stormwater Management rules set forth standards limiting runoff rates, preserving annual groundwater recharge volumes, and requiring water quality treatment for runoff from new impervious surface. The FHACA Rules at N.J.A.C. 7:13-11.4 set forth standards related to the volume of flood storage displacement that can be permitted on a site in order to ensure that development does not exacerbate existing flooding conditions. The majority of development in fluvial flood hazard areas must meet the Department's zero flood storage displacement requirement pursuant to N.J.A.C. 7:13-11.4(f). Where a site is graded and construction is undertaken in such a way that the volume of flood storage on the site is not diminished, this standard has been met. Whether the ground surface has been covered with impervious surface

does not alter the flood storage volume of the site, provided the ground elevation has not been raised.

686. COMMENT: The flood storage trading program should be eliminated. Allowing for fill in flood hazard areas and then removing fill somewhere else does not mitigate for flooding because the flood mitigation bank is in another sub-watershed. This program does not deal with localized flooding and will make flooding worse in those areas. History and nature have shown that the purchase of fill credits to compensate for proposed flood storage displacement, such as in the Passaic basin, does not work. (177)

RESPONSE: The Department acknowledges that the creation and trading of fill credits from one watershed or sub-watershed to another does not generally provide adequate flood protection as flood storage created in this way can be miles away from the fill for which it is intended to compensate and could be located along another stream entirely. For this reason, as of October 2, 2006, the Department stopped accepting new applications to create fill credits and further provided that any previously-approved fill credits must be created by the applicant prior to October 2, 2011. Since these dates have passed, N.J.A.C. 7:13-11.4(s) was amended to state that no person or facility shall create new or additional fill credits in this manner and that fill credits can be bought or sold only if lawfully created under a previously-approved permit under this chapter. Once all previously approved fill credits have been purchased, offsite compensation in the Central Passaic Basin will no longer be possible through fill credits.

N.J.A.C. 7:13-11.5 Requirements for a Regulated Activity In or Along a Regulated Water with Fishery Resources

687. COMMENT: The inclusion of the local Soil Conservation Districts at N.J.A.C. 7:13-11.5(d)2 is appreciated; however, the proper implementation of this subsection is a concern. It appears to place a significant liability on the Soil Conservation Districts should the temporary erosion control measures fail to fully "prevent sediment from reaching the channel" due to unforeseen circumstances, such as a high intensity, short duration storm event that may exceed the limitations of the temporary controls. (131)

RESPONSE: The purpose of N.J.A.C. 7:13-11.5(d)2 is to ensure that appropriate soil erosion and sediment control measures are put into place to prevent sediment from reaching the channel, as determined by the local Soil Conservation District with jurisdiction over the site. This requirement is satisfied where the local Soil Conservation District determines that the proposed activity complies with the Standards for Soil Erosion and Sediment Control at N.J.A.C. 2:90. The new provision is not intended to place extra burden or responsibility on Soil Conservation Districts but merely to clarify that Soil Conservation Districts determine compliance with N.J.A.C. 2:90 rather than the Department.

688. COMMENT: Proposed N.J.A.C. 7:13-11.5(f) lists the U.S. Fish and Wildlife Service as the coordinator for the Delaware River Basin Commission (DRBC). While the Service does

serve on the advisory council, the DRBC is a tri-State coalition and is not under the administrative authority of the Service. (45 and 152)

RESPONSE: Prior N.J.A.C. 7:13-10.5(f) advised applicants that DRBC may impose timing restrictions in addition to those listed in prior Table E on certain activities in waters under DRBC jurisdiction and that applicants should contact the U.S. Fish and Wildlife Service's River Basin Coordinator through the DRBC at (609) 883-9500 for information on these additional timing restrictions. As proposed and adopted, N.J.A.C. 7:13-11.5(f) deletes the reference to U.S. Fish and Wildlife Service and provides instead that information related to the DRBC and its requirements can be obtained at www.nj.gov/drbc or by calling (609) 883-9500.

Subchapter 12. Activity-Specific Requirements for Individual Permits

N.J.A.C. 7:13-12.1 Requirements that Apply to all Regulated Activities

689. COMMENT: The Department should exempt responsible parties conducting remediation in channel, floodway, and flood fringe areas from the strict requirements of N.J.A.C. 7:13-12.1(g). This section conflicts with the purpose of remediating hazardous substances in a timely and efficient manner and with the flood displacement exemptions and allowances for hazardous substance remediation in a flood fringe area. Two commenters provided an example of the types of activities that should be exempt from the requirements of proposed N.J.A.C. 7:13-12.1(g). Specifically, the use of temporary sheet-piles necessary to isolate dredging or capping of contaminated sediments from flowing waters, as required at proposed N.J.A.C. 7:13-12.15(b)3,

should be exempt from subsection (g) provided attempts are made to displace the minimum flood depth necessary during a flood event to implement the remediation. The remediation of the channel, floodway, and flood fringe is an environmental benefit that should not be made more difficult to achieve as a result of the requirements of N.J.A.C. 7:13-12.1(g). (13, 14, 37, 47, and 148)

RESPONSE: N.J.A.C. 7:13-12.1(g) sets forth conditions that constitute adverse impacts to offsite properties: that is, unacceptable increases in erosion or flooding and/or changes in the riparian zone location on properties not owned by the applicant. While the Department acknowledges the environmental benefits associated with site remediation activities and, as such, has facilitated these projects through the adoption of new standards at N.J.A.C. 7:13-12.17 as well as permit-by-rule 45 for geotechnical and archeological investigation activities and general permit-by-certification 12 for surveying and geotechnical and archeological investigation activities, it is not appropriate to permit site remediation projects to result in increased offsite flooding.

690. COMMENT: Federal funding constraints and impacts to private property typically result in large flood control projects being constructed in multiple segments rather than all at once. Temporary flood increases may result in the segmentation of the project, which would not occur once the project is complete. However, the current regulations require that flood elevations cannot be increased for buildings and therefore do not address the issue of temporary flooding in these cases. (28)

RESPONSE: The Department recognizes that Federally funded flood control projects may take many years to construct and that individual phases or sections of the project may not comply with the requirements of N.J.A.C. 7:13-12.1(f) or (g). However, the Department also recognizes that through the course of undertaking a long-term project, such as a flood control project, there is a greater likelihood of storm events occurring that could significantly impact property not owned by the applicant. While the Department supports efforts to mitigate flood impacts and flood damage in existing communities, these efforts must be undertaken in such a way that residents and their property are not placed at increased risk of flood damage during the conduct of the project. For this reason, an applicant proposing a project that would result in adverse impacts to a property not owned by the applicant, as set forth at N.J.A.C. 7:13-12.1(g), must satisfy the requirements of N.J.A.C. 7:13-12.1(f), which require the applicant to appropriate the impacted property through eminent domain, purchase the impacted property, obtain an easement that encompasses the area to be impacted, or obtain written permission from the owners of the impacted property. In cases where the requirements of N.J.A.C. 7:13-12.1(f) cannot be satisfied, the Department encourages communities seeking an individual permit for one or more phases of a flood control project to request a hardship exception from strict compliance with N.J.A.C. 7:13-12.1(f) and (g) and to demonstrate that the conditions of N.J.A.C. 7:13-15.1 are met.

691. COMMENT: The rulemaking at N.J.A.C. 7:13-12.1(i) requires analysis of the potential for offsite flooding impacts by modeling the 2-year, 10-year, 25-year, 50-year, 100-year, and flood hazard area design floods; this is excessive in terms of the types of floods to be analyzed.

Currently, the Department only requires analysis of the flood hazard area design flood. Requiring the analysis of six design floods will further complicate flood hazard area control plans and associated engineering design reports. These reports could double or triple in size. The cost of performing all these analyses outweighs any incremental assessments of offsite flooding that would otherwise result from performing an analysis of only the flood hazard area design flood.

(19)

RESPONSE: In order to analyze potential offsite impacts during the flood hazard area design flood, an applicant would generally need to perform a hydrologic analysis of the contributory drainage area of the regulated water in question and develop a peak flow rate for the 100-year flood event. This flow rate would then be increased by 25 percent and entered into a hydraulic model that includes channel geometry and overbank topography. To analyze the additional flood events prescribed at N.J.A.C. 7:13-12.1(i), the hydrologic model would simply need to be provided additional precipitation data in order to generate the required flow rates, and these flow rates would then be entered into the hydraulic model that had already been created. The Department does not anticipate that this requirement will significantly increase the amount of time and effort required to perform calculations necessary to analyze potential offsite impacts or significantly increase the size of the resulting engineering report. Furthermore, the Department has adopted N.J.A.C. 7:13-12.1(i) to ensure that projects do not adversely impact offsite properties during a range of storms, rather than focusing solely on the 100-year flood or flood hazard area design flood. For example, a bridge over a large river may be inundated by several feet of water during the flood hazard area design flood. As such, the size of the bridge's opening

may not significantly affect the water surface elevation during the flood hazard area design flood because the majority of floodwaters are flowing over the bridge rather than through it. However, changing the size of the bridge could greatly impact the water surface elevation during smaller flood events. The 10-year flood, for example, might be able to pass through the existing bridge, but if that bridge were replaced with a much smaller bridge, the 10-year flood may be unable to pass through it, thereby significantly expanding flooding upstream of the bridge. The Department therefore believes that the minimal additional effort required to analyze the flood events listed at N.J.A.C. 7:13-12.1(i) is necessary to protect public health, safety, and welfare.

692. COMMENT: This section of the proposed rules requires examination of the 2-, 10-, 25-, 50-, and 100-year floods, as well as the flood hazard area design flood, when stream hydraulics are impacted. But often with bridges, the floods that cause the additional, negative, hydraulic impact do not fall neatly into one of the prescribed ranges. Often, the critical floods to be analyzed are where a bridge flows under open channel flow in the existing condition but pressure flow in the proposed condition or conversely, pressure flow in the existing condition but pressure and weir flow, or open channel flow, in the same flood event in the post-developed condition. The proposed standard will miss these critical storms, and additional flooding will result. It is very easy to use HEC-RAS computer modelling to cover all necessary floods. As such, a standard that considers only these six flood events is unnecessary. The Department does not seem to realize that the current standard is workable. This is an unnecessary and dangerous revision. (118)

RESPONSE: In many cases, the FHACA Rules prior to the adoption of these amendments and new rules did not specify the flood events that a person was required to analyze in order to demonstrate compliance with a number of provisions. The Department historically required modeling of the flood hazard area design flood, as well as some smaller flood events, in order to evaluate the potential flooding impacts of a bridge or culvert. For example, prior N.J.A.C. 7:13-11.1(f) required that a project not exacerbate flooding "during any flood event up to and including the flood hazard area design flood elevation." This implies that a wide range of flood events would need to be analyzed in order to demonstrate compliance with these requirements. Since specific flood events were not listed, applicants interpreted this requirement with great variety and provided hydrologic and hydraulic modeling of any combination of flood events. Since the events selected by the applicant might not have succeeded in demonstrating compliance with the requirements of this chapter or else were more numerous than would be required to demonstrate compliance, achieving compliance with this requirement was unpredictable, overly costly, and time-consuming for applicants. In order to provide more predictable application preparation costs, as well as more predicable review times and outcomes for submitted applications, N.J.A.C. 7:13-12.1(i) requires an analyses of the six specific flood events listed therein. Analysis of this set of flood events adequately models and compares existing and proposed flood conditions for bridges and culverts and will similarly be predictive for other activities requiring analysis of flood events.

N.J.A.C. 7:13-12.5 Requirements for a Building

693. COMMENT: The FHACA Rules do not appear to include specific requirements for the location or protection of utilities and equipment that serve buildings, including electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities. They also do not require use of flood damage-resistant materials below the base flood elevation. Only the definition for flood-proofing mentions these topics, and thus, these elements of flood resistant construction are not generally applicable to all buildings. (110)

RESPONSE: With regard to buildings constructed in flood hazard areas, the FHACA Rules establish lowest floor elevation standards, limitations on the size and location of buildings, and other basic standards intended to ensure buildings are designed to resist hydrostatic and hydrodynamic loads and the effects of buoyancy resulting from flooding. All other aspects of flood resistant design and construction of buildings, such as specific standards related to foundation type, electrical, heating, ventilation, plumbing, and HVAC, are set forth in the Uniform Construction Code at N.J.A.C. 5:23, which is overseen by the New Jersey Department of Community Affairs and administered locally by municipal construction officials. As the UCC is compliant with minimum NFIP requirements, and as all buildings in New Jersey are subject to the UCC, a building constructed to meet both the FHACA Rules and the UCC meets or exceeds NFIP minimum requirements.

694. COMMENT: Proposed N.J.A.C. 7:13-12.5 is not consistent with the NFIP in that no distinctions are made between Zone A and Zone V, coastal high hazard areas where wave heights are predicted to be three feet or more during base flood conditions. In addition, the rules

are inconsistent with the New Jersey Uniform Construction Code (UCC), which also distinguishes requirements for coastal high hazard areas. The rule does not address NFIP specifics about foundation limitations in Zone V, it does not require buildings in Zone V to be landward of the reach of mean high tide, it does not require the design of buildings in Zone V to be certified by an architect or engineer, and it only uses the undefined term “breakaway walls” in the definition for wet flood-proofing. In addition, the next edition of the New Jersey UCC is expected to contain requirements for areas subject to moderate wave action, which will create another inconsistency with the FHACA Rules at N.J.A.C. 7:13. (110)

RESPONSE: The Department recognizes that the UCC contains additional standards related to V zones and coastal A zones that are not repeated in the FHACA Rules. As noted in the Response to Comment 693, since all buildings in New Jersey are subject to the UCC, a building constructed to meet both the FHACA Rules and the UCC meets or exceeds NFIP minimum requirements. However, as discussed in more detail in the Response to Comments 91 through 97, in order to reduce confusion amongst the regulated public and increase protection of people and property in areas that are particularly vulnerable to the negative impacts of flooding, the Department is proposing elsewhere in this issue of the New Jersey Register to amend lowest floor requirements and other standards within the FHACA Rules as necessary to ensure that the Department does not permit buildings in V zones and coastal A zones that do not meet minimum NFIP lowest floor requirements in these zones.

695. COMMENT: Proposed N.J.A.C. 7:13-12.5(i) contains requirements for construction of new habitable buildings. If the test for feasibility results in lowest floors that are lower than the Base Flood Elevation, this is inconsistent with the NFIP, which has no such test. Under proposed N.J.A.C. 7:13-12.5(i)3iv, the lowest floor of the non-residential portions of multi-residence buildings may be set as close as feasible to one foot above the flood hazard area design flood elevation while N.J.A.C. 7:13-12.5(i)3v allows multi-family residence buildings to have non-residential portions flood-proofed, referring to flood-proofing requirements at subsection (q). The application of this is unclear as "non-residential" is not defined. If a building and all portions of that building are used only by residents, FEMA guidance does not allow dry flood-proofing of any portion of the building. Wet flood-proofing measures are allowed only for enclosures used solely for parking, storage, and building access. Proposed N.J.A.C. 7:13-12.5(i)4 provides the same allowance for feasibility for buildings not covered by N.J.A.C. 7:13-12.5(i)1, 2, or 3. (110)

RESPONSE: In the context of N.J.A.C. 7:13-12.5, "residential" refers to a single-family home or duplex or a multi-residence building as defined at N.J.A.C. 7:13-1.2 (see, for example, N.J.A.C. 7:13-12.5(n), which, as indicated in the notice of proposal Summary at 47 N.J.R. 1088, was amended as part of this rulemaking to list single-family homes, duplexes, and multi-family residence buildings as the types of structures that are considered to fall within the residential use category and also expanded to make the requirements of N.J.A.C. 7:13-12.5(i) applicable to conversion of an existing building to a critical building). N.J.A.C. 7:13-12.5(i)3 requires that the lowest floor of a multi-residence building be set at least one foot above the flood hazard design flood elevation; only if all conditions specified in N.J.A.C. 7:13-12.5(i)3i-v are satisfied would

the allowance cited by the commenter be applicable. One of the conditions that must be satisfied before consideration of an alternate floor level is allowed for a multi-residence building that was not amended as part of this rulemaking is that the building must be used for both residential and non-residential purposes (see N.J.A.C. 7:13-12.5(i)3i). Accordingly, consistent with FEMA guidelines, if a building and all portions of that building are used only by residents, N.J.A.C. 7:13-12.5(i)3i would not be satisfied, and the FHACA Rules would not allow dry flood-proofing of any portion of the building. (See N.J.A.C. 7:13-12.5(t), which provides that the Department shall not issue an individual permit to flood-proof a single-family home, duplex, or critical building or any residential portions of a multi-residence building.) However, in some cases, a multi-residence building may have a combination of residential and non-residential uses. For example, hotels and apartment buildings, which are types of multi-residence buildings, may have retail or other non-residential uses on the ground floor and hotel rooms or apartment units on higher floors. N.J.A.C. 7:13-12.5(i)3 requires that the lowest floor of a multi-residence building is set at least one foot above the flood hazard area design flood elevation, with an exception for these non-residential portions of a mixed-use building. The lowest floor of the non-residential portion of such buildings can be set below the design flood elevation in certain cases set forth at N.J.A.C. 7:13-12.5(i)3i though v, provided the non-residential portion of the building is flood-proofed in accordance with N.J.A.C. 7:13-12.5(q). It should be noted that N.J.A.C. 7:13-12.5(q) addresses flood-proofing other than wet flood-proofing of enclosures used solely for parking, storage, and building access, which are addressed under N.J.A.C. 7:13-12.5(p).

696. COMMENT: At N.J.A.C. 7:13-12.5(j), regarding substantial improvement of "a lawfully existing habitable building that has been subject to substantial damage," only elevation of the lowest floor and enclosed areas is addressed. The NFIP requires all substantially improved and substantially damaged buildings to be brought into compliance with all requirements for new buildings based on flood zone, including equipment, utilities, materials, and limitations on foundations (only pilings and columns in Zone V, for example), in addition to the two requirements specified in the proposed rule. (110)

RESPONSE: As noted in the Response to Comment 693, specific standards related to foundation type, electrical, heating, ventilation, plumbing, and HVAC are set forth in the Uniform Construction Code at N.J.A.C. 5:23. However, as additionally noted in the Response to Comment 694, the Department is proposing elsewhere in this issue of the New Jersey Register to amend lowest floor requirements and other standards within the FHACA Rules as necessary to ensure that the Department does not permit buildings in V zones and coastal A zones that do not meet minimum NFIP lowest floor requirements in these zones.

697. COMMENT: "Flood-proofing" is defined at existing N.J.A.C. 7:13-1.2 to include both dry flood-proofing and wet flood-proofing. New language is proposed at N.J.A.C. 7:13-12.5 (q)that specifies that individual permits may in certain cases be issued for buildings that are flood-proofed "except for an enclosure that meets the requirements" at N.J.A.C. 7:13-12.5(p). However, N.J.A.C. 7:13-12.5(p) describes a type of wet flood-proofing for enclosures below the

lowest floor of a building. Therefore, the meaning of the proposed new language at N.J.A.C. 7:13-12.5(q) is unclear. (110)

RESPONSE: N.J.A.C. 7:13-12.5(p), which continues portions of prior N.J.A.C. 7:13-11.5(n), (o), and (p), sets forth standards related to any enclosure below the lowest floor of a building, as well as any enclosure that lies below the flood hazard area design flood elevation, that is either attached to or detached from a habitable building and is intended to be used as a garage or parking area, provided the enclosure is used solely for parking of vehicles, building access, or storage and additional measures are met, which parallel the wet flood-proofing requirements of the UCC. N.J.A.C. 7:13-12.5(q) through (t), which continue prior N.J.A.C. 7:13-11.5(q) through (t), set forth flood-proofing requirements for a building that cannot feasibly be elevated under N.J.A.C. 7:13-12.5(i) and therefore apply to a different set of buildings than N.J.A.C. 7:13-12.5(p). The wording of prior N.J.A.C. 7:13-11.5(q) through (t) has been misunderstood by some to indicate that all flood-proofed buildings are subject to their requirements, which appeared to conflict with the flood-proofing requirements for enclosures under prior N.J.A.C. 7:13-11.5(n), (o), and (p). As such, the Department had proposed additional language at N.J.A.C. 7:13-12.5(q) through (t) to clarify the differences between these subsections and the provisions at N.J.A.C. 7:13-12.5(p). However, since the proposed language has not fully clarified these subsections as intended, the Department has additionally clarified on adoption that N.J.A.C. 7:13-12.5(q) applies to a building that is flood-proofed, other than an enclosure that is wet flood-proofed under N.J.A.C. 7:13-12.5(p). The Department is additionally proposing to clarify, in a notice of proposal published elsewhere in issue of the New Jersey Register, that an enclosure under

N.J.A.C. 7:13-12.5(p) is subject to the wet flood-proofing requirements of the UCC by adding a requirement to this effect.

698. COMMENT: Proposed N.J.A.C. 7:13-12.5(q)1 permits dry flood-proofing if the building is designed to at least one foot above the flood hazard area design flood elevation without placing a limitation on occupancy. However, proposed N.J.A.C. 7:13-12.5(t), as proposed to be modified, states that an individual permit for flood-proofing will not be issued for a "single-family home, duplex, or critical building, or any residential portions of a multi-residence building." It is confusing that subsection (q) broadly permits something, and then subsection (t), three subsections later, constrains that permission. N.J.A.C. 7:13-12.5(q)2 permits wet flood-proofing if "not feasible to dry flood-proof" as floodwaters can enter a building through permanent openings without damaging the structural integrity of the building. Despite the aforementioned limits of N.J.A.C. 7:13-12.5(t), this item is not consistent with the NFIP, which does not have a test of feasibility for wet flood-proofing and does not allow measures considered "wet flood-proofing" for any area of a building except enclosed areas below elevated buildings used solely for parking of vehicles, storage, and building access. By policy, the NFIP also allows use of wet flood-proofing measures only for detached accessory structures used for parking or storage, agriculture structures, functionally dependent structures, historic structures, and buildings that are not substantially improved or substantially damaged. (110)

699. COMMENT: N.J.A.C. 7:13-12.5(s) explicitly permits wet flood-proofing. The NFIP regulations do not use or define the term "wet flood-proofing." The FHACA Rules, as proposed,

use the term in only two places, N.J.A.C. 7:13-12.5(q) and (s). Because the Department's rule already has requirements for enclosures, removal of the definition "wet flood-proofing" is recommended; if it is retained, it should apply only to accessory buildings used for parking or storage. (110)

RESPONSE TO COMMENTS 698 AND 699: It is not the Department's intention to facilitate the construction of buildings that do not comply with minimum NFIP requirements. N.J.A.C. 7:13-12.5(q) sets forth standards for flood-proofing under this section, except for wet flood-proofing of enclosures below the lowest floor of a building under N.J.A.C. 7:13-12.5(p). The provisions of N.J.A.C. 7:13-12.5(q) apply only in two specific cases: (1) where the lowest floor of non-residential portions of a mixed-use building is constructed below the design flood elevation under N.J.A.C. 7:13-12.5(i)3; and (2) where the lowest floor of a non-residential building is constructed below the design flood elevation under N.J.A.C. 7:13-12.5(i)4. In no other case can dry or wet flood-proofing be approved for residential or critical buildings, as clarified at N.J.A.C. 7:13-12.5(t). Wet flood-proofing is permitted only for non-residential buildings in cases where suitably elevating the lowest floor and/or dry flood-proofing the building are not feasible. However, in order to ensure that the FHACA Rules do not permit buildings to be wet flood-proofed in cases other than permitted by FEMA, the Department is proposing elsewhere in this issue of the New Jersey Register to amend N.J.A.C. 7:13-12.5(r) and (s) to require flood-proofed buildings to meet the flood-proofing standards of the UCC, which is compliant with NFIP minimum standards.

N.J.A.C. 7:13-12.6 Requirements for a Railroad, Roadway, and Parking Area

700. COMMENT: Excluding vehicular parking areas from the requirements for buildings in the FHACA Rules is supported. In the past, hardship exceptions have been required for the parking areas of several redevelopment projects because they were proposed below the flood hazard elevation for redevelopment sites within cities along major tidal waterways. The Department's new position that parking areas do not constitute habitable spaces and therefore should not be included in the "lowest floor" policy, which requires the lowest floor be constructed one foot above the flood hazard design flood elevation, is agreeable. (101)

RESPONSE: The Department acknowledges this comment in support of the rules.

N.J.A.C. 7:13-12.7 Requirements for a Bridge or Culvert

701. COMMENT: Crossings should be oriented perpendicularly with the natural channel and should not present any angular deviation from the natural channel contour. (30, 177, and 189)

RESPONSE: The individual permit standards for activities within a riparian zone at N.J.A.C. 7:13-11.2(g)5, (h)8ii, and (u)3 require that railroad, roadway, and footbridge crossings of a regulated water must be designed and constructed as perpendicular to the channel as possible in order to minimize adverse impacts to the regulated water and riparian zone functionality. Additionally, the individual permit standards for bridges and culverts at N.J.A.C. 7:13-12.7(f)1

require that any new bridge or culvert "completely spans the regulated water and, to the extent feasible, matches or exceeds the dimensions of the existing channel so that the size and shape of the natural channel is preserved through the structure," with limited exceptions provided at N.J.A.C. 7:13-12.7(g) and (h). Together, these requirements ensure that impacts to the riparian zone and channel being crossed are minimized.

702. COMMENT: Stream crossing structures should be designed to accommodate high flows and to mimic the natural stream conditions. (177)

RESPONSE: As noted in the Response to Comment 701, N.J.A.C. 7:13-12.7(f)1 requires a bridge or culvert to completely span the regulated water and, to the extent feasible, match or exceed the dimensions of the existing channel so that the size and shape of the natural channel is preserved through the structure. Further, N.J.A.C. 7:13-12.7(d)1 and 2 (for new bridges and culverts) and (e)1 and 2 (for the reconstruction of an existing bridge or culvert) require that the applicant demonstrate that the proposed structure is able to convey the 2-, 10-, 25-, 50-, 100-year, and flood hazard area design floods (via reference to these flood events at N.J.A.C. 7:13-12.1(i)) without exacerbating flooding.

703. COMMENT: Road-stream crossing structures can also significantly impair the movement of fish and other aquatic wildlife as well as harm stream and river ecosystems in general by changing water flow, stream substrates, and the transport of sediment and organic material. As culverts and bridges need replacement, stream health and the safety of the

surrounding areas could be improved if the rules were to require new structures built to standards that will protect stream ecology and prevent flooding. (177)

704. COMMENT: All culverts and bridges should be constructed with natural bottoms to facilitate fish passage and ecological connectivity throughout each watershed. When these structures need eventual replacement, they should be required to conform to best ecological practices rather than simply being replaced in-kind. Of particular concern is the passage of anadromous fish. Their movements should be accommodated even if no anadromous species are currently present in order to provide for the enhancement and restoration of waters in the future. (24)

RESPONSE TO COMMENTS 703 AND 704: The Department acknowledges that existing bridges and culverts in some cases adversely impact the environment and that their eventual replacement is an opportunity to improve conditions for aquatic and terrestrial biota. For this reason, N.J.A.C. 7:13-12.7 requires replacement bridges and culverts to meet a number of stringent standards that serve to improve existing conditions for aquatic and terrestrial resources, as well as to ensure that the replacement structure does not exacerbate flooding, which parallel the requirements for a new bridge or culvert. For example, replacement bridges and culverts must be designed to (1) remain stable and scour resistant during flood conditions (see N.J.A.C. 7:13-12.7(c)), thereby reducing the potential for erosion, incising, and sedimentation within channels, which can adversely impact aquatic species; (2) ensure that the replacement structure does not exacerbate flooding while also providing wildlife passage along regulated waters where

certain species are present (see N.J.A.C. 7:13-12.7(e)); and (3) span the channel, matching or exceeding the dimensions of the channel, and preserving low-flow aquatic passage to the maximum extent practicable (see N.J.A.C. 7:13-12.7(f) and (h)).

With regard to providing passage for anadromous species, N.J.A.C. 7:13-12.7(f)2 requires that a "stable, earthen low-flow aquatic passage is provided within" any bridge or culvert as well as "any section of channel disturbed to accommodate its construction." This requirement applies in all cases where any fishery resources exist, whether trout, anadromous, or another species or classification of fish is present (see N.J.A.C. 7:13-12.7(g)2, where this requirement is waived only if the channel does not contain fishery resources). While the commenter suggests that aquatic passage should be provided even in channels that do not currently contain fishery resources in anticipation that the channel may someday support such species, the Department does not believe that the possibility of future fishery resources justifies the added cost associated with the construction of a structure that meets the requirements of N.J.A.C. 7:13-12.7(f).

705. COMMENT: The requirement for new bridge and culvert construction to incorporate terrestrial wildlife passages when such construction would fragment habitat at N.J.A.C. 7:13-12.7(d)3 is supported. (45 and 152)

RESPONSE: The Department acknowledges this comment in support of the rules.

706. COMMENT: Stream crossing structures should allow for recreation and wildlife corridors. (177)

RESPONSE: The Department acknowledges the many social, economic, and environmental benefits afforded by wildlife crossings through bridges and culverts. For this reason, N.J.A.C. 7:13-12.7(d)3 requires that any new bridge or culvert and associated construction that would cause fragmentation of habitat for terrestrial threatened or endangered species and/or any terrestrial species of special concern must incorporate a preserved or restored natural bank of sufficient width to allow the species to pass through the structure, with artificial banks to be utilized only in limited circumstances. N.J.A.C. 7:13-12.7(e)3 similarly requires that any reconstructed bridge or culvert and associated construction that currently causes fragmentation of habitat for terrestrial threatened or endangered species and/or any terrestrial species of special concern must incorporate a preserved or restored natural bank of sufficient width to allow the passage of terrestrial wildlife through the structure, including the incorporation of additional appropriate measures to encourage the species to pass through the structure. The term “species of special concern” is additionally defined at N.J.A.C. 7:13-1.2 to identify one of the categories of species for which wildlife passage is required.

With regard to the inclusion of recreation corridors within stream crossings as mentioned by the commenter, the Department assumes that the commenter is suggesting that bridges and culverts be large enough to allow humans to pass through the structure along paths that parallel the regulated water being crossed. While the Department acknowledges that this type of passage may be appropriate for large bridge crossings that span the channel at a sufficient height to allow for the construction of a path, the majority of bridges and culverts in New Jersey cross small waters that would not support such a recreational corridor.

707. COMMENT: N.J.A.C. 7:13-12.7(d)3 is new and requires that any new bridge or culvert and associated construction that would cause fragmentation of habitat for terrestrial threatened or endangered species and/or any terrestrial species of special concern must incorporate a preserved or restored natural bank of sufficient width to allow the species to pass through the structure, with artificial banks. Since these requirements are to be utilized only in limited circumstances, the need for this added layer of regulation is questioned. (11, 37, and 148)

RESPONSE: While the Department acknowledges that wildlife passage is not necessary through every bridge or culvert, N.J.A.C. 7:13-12.7(d)3 and (e)3, which require the creation of such passage in appropriate cases, are necessary to combat wildlife fragmentation of habitat for terrestrial threatened or endangered species and/or any terrestrial species of special concern, where such fragmentation exists.

Numerous studies have shown that aboveground, manmade, linear infrastructure such as roads, railroads, utilities, and canals can create a barrier to the natural and necessary movement of wildlife, which leads to a number of detrimental impacts to a variety of species. For example, linear infrastructure can isolate species from food, water, shelter, and mates and subdivide wildlife populations into smaller and more vulnerable sub-populations. Populations surrounded by roads and other infrastructure are also less likely to receive immigrants from other habitats, which results in a lack of genetic diversity. The relationship between roads and this process, known as fragmentation, is well documented and can lead to high mortality rates and even extinction if access to resources is significantly precluded or a species' gene pool is severely

restricted. Wildlife-vehicle collisions resulting from species attempting to cross roadways to reach necessary resources located on the other side can furthermore present a significant hazard to both the survival of a species and the travelling public.

One solution to help ameliorate these adverse impacts is to provide permanent structural openings beneath a roadway to allow species to freely cross from one side of the road to the other. Such crossings allow connections or reconnections between suitable habitats otherwise isolated by the road and reduce collisions between vehicles and animals. A successful means of incorporating wildlife crossings beneath roadways is to modify the design of bridges and culverts so that a portion of the natural bank of the channel is preserved or restored in order to allow terrestrial species to cross through the bridge or culvert on dry land adjacent to the channel. If a bridge or culvert is flowing full, terrestrial species are unlikely to attempt to walk or swim through the water to reach the other side. However, if a portion of dry bank is provided next to the channel within the bridge or culvert, the species is more likely to attempt crossing through the structure. Fencing, embankments, and other structural means of funneling wildlife to the bridge or culvert are also sometimes incorporated into the design of wildlife crossings. Because of the many social, economic, and environmental benefits afforded by wildlife crossings, it is appropriate that the Department has adopted new standards to require wildlife crossings to be incorporated as described above.

708. COMMENT: N.J.A.C. 7:13-12.7(d)3 proposes that the construction of new or replacement bridges must include a passageway for threatened or endangered species and/or any species of special concern whose habitats may be bifurcated by the road. Projects involving the

replacement of existing bridges along existing roadway rights-of-way should be excluded from this requirement based on the fact that wildlife passage has already been impeded for many years by the presence of the bridge and the construction of the new bridge will not exacerbate that situation. When such a requirement was suggested by the Department in conjunction with the widening of the Garden State Parkway, the Turnpike Authority demonstrated that the construction of such a wildlife crossing was cost prohibitive. Additionally, the presence of tunnels underneath roadways pose significant security concerns in that they could be utilized by individuals with bad intentions. In addition to these concerns, the proposed rules require clarity where they state that appropriate measures must be taken where necessary to encourage the species to pass through the structure. The phrase “appropriate measures” is vague and should be defined. (15)

RESPONSE: For the reasons discussed in the Response to Comment 707, it is necessary and appropriate to combat wildlife fragmentation of habitat for terrestrial threatened or endangered species and/or any terrestrial species of special concern by both preventing additional fragmentation and reducing fragmentation where it exists. Where an applicant believes that incorporation of wildlife passage as part of the reconstruction of a bridge or culvert is unnecessary, cost prohibitive, or would pose a significant security concern, the Department encourages applicants to request a hardship exception from strict compliance with N.J.A.C. 7:13-12.7(e)3 and to demonstrate that the conditions of N.J.A.C. 7:13-15.1 are met. Regarding the “appropriate measures” that must be adopted to encourage the species to pass through the structure, this typically includes construction of berms and fences to discourage the species from

crossing the roadway and to instead funnel the species into the proposed bridge or culvert but can only be determined on a case-by-case basis after review of specific site conditions. The Department will assist applicants in designing appropriate measures depending on the species for which wildlife crossings are being incorporated.

709. COMMENT: The use of the word “species” without a modifier at N.J.A.C. 7:13-12.7(d)3 makes no biological sense. It is not possible to allow or encourage an entire species population to pass safely through a structure. A structure that may allow for the passage of certain individuals can be created, but unless it is proven that the vast majority of individuals in a population will behave positively with regard to the intended use of the structure, the existence of a passage will not ameliorate the negative impacts of a new barrier. The single word “species” should be replaced in every instance by “overwhelming majority of individuals within a population of a rare species that can be expected to encounter the proposed barrier.” Without a proper biological phrase rooted in the science of population ecology, there is a vast opportunity for abuse in this section. If a few turtles, snakes, mammals, or fish of a certain species are observed utilizing a passage of a certain design, an inappropriate claim could be made that the new barrier does not pose a threat to the surrounding population. Such small positive impacts of a passage should never be considered as a replacement for land acquisition and mitigation to offset the potentially enormous negative impact of new barriers on the connectivity of sub-populations. Passages should be required in every case of new construction where connectivity in populations of a rare species is reduced, but the assumption should not be made that the creation of a passage automatically means that impacts on connectivity will be minimal or nonexistent. This

conclusion can only be reached after years of long-term study on a population after a new barrier is put in place. In contrast, in proposed N.J.A.C. 7:13-12.7(e)3, regarding the reconstruction of an existing bridge or culvert, wildlife passages can only improve upon situations where connectivity was impeded or lost in the past. Reconnecting populations in these instances will always provide a positive benefit, even if small and difficult to quantify. Such renewed connectivity should be encouraged at every instance, and these reconstruction projects afford an opportunity for studies that can determine the effectiveness of different passage designs without creating new negative impacts to connectivity. New development and fragmentation should not be allowed with unproven passage designs that assume their very existence means that connectivity impacts will be minimal or nonexistent. (29 and 46)

RESPONSE: The Department recognizes that wildlife fragmentation is a complicated issue that does not always have simple solutions. The purpose of N.J.A.C. 7:13-12.7(d)3 is to help avoid fragmentation where a new roadway is proposed through habitat for terrestrial threatened or endangered species and/or any terrestrial species of special concern. N.J.A.C. 7:13-11.6 establishes additional requirements to protect habitat for threatened or endangered species, which would also need to be met for any project that could adversely impact such species and their habitat. N.J.A.C. 7:13-12.7(d)3 requires that, “where a new bridge or culvert and/or the railroad or roadway it serves would cause fragmentation of habitat for terrestrial threatened or endangered species and/or any terrestrial species of special concern, the bridge or culvert incorporates a preserved or restored natural bank of sufficient width to allow the species to pass through the structure.” The Department agrees that a proposed design that provides passage for

only a few individuals of a certain species would be unlikely to meet the requirements of N.J.A.C. 7:13-12.7(d)3 for the construction of a new bridge or culvert or N.J.A.C. 7:13-12.7(e)3 for reconstruction of an existing bridge or culvert. Department staff will evaluate the efficacy of each proposed wildlife passage to ensure that it meets the Department's intention of providing adequate passage for the population of species expected to encounter the proposed barrier so as to protect against adverse impacts to those species and their habitat from the impacts of fragmentation.

710. COMMENT: Under N.J.A.C. 7:13-12.7(f), the standards for individual permits for bridge and culvert construction or reconstruction, which contain many sound principles, should be strengthened to require that a structure's crossing span be 1.2 times the bankfull width rather than the same dimensions as the existing channel. This design helps to provide terrestrial connectivity for many riparian species, not just those listed as a special concern, threatened, or endangered. A minimum openness ratio of 0.82 feet is also recommended to facilitate wildlife passage. (30 and 189)

RESPONSE: The Department acknowledges that bridges and culverts that have a large area open to flow generally help to preserve or improve wildlife passage and other natural conditions. For this reason, N.J.A.C. 7:13-12.7(f)1 requires that any new or reconstructed bridge or culvert must completely span the regulated water and, to the extent feasible, match or exceed the dimensions of the existing channel so that the size and shape of the natural channel is preserved through the structure, with certain exceptions at N.J.A.C. 7:13-12.7(g). With regard to new bridges, meeting

this requirement will typically require abutments to be constructed outside the channel and behind the tops of bank in order to provide a stable footing for the bridge superstructure, the low chord of which will generally be set well above the top of the channel. Therefore, the Department anticipates that most new bridges will exceed the dimensions of the channel. For similar reasons, the Department anticipates that new culverts will in many cases exceed the width of the channel. However, it is not clear what particular benefit would be provided by a span that is 1.2 times the width of the channel as suggested by the commenters. In some cases this width may not be sufficient to carry flood flows and may exacerbate flooding. In other cases, the replacement of an existing bridge or culvert with a structure that has a much larger area to flow can reduce flood storage upstream of the structure and cause downstream flood conditions to worsen. Therefore, establishing a requirement for the exact width of a span in relation to the channel, or an openness ratio, would not be appropriate for all bridges and culverts.

711. COMMENT: At proposed N.J.A.C. 7:13-12.7(f)2, new and reconstructed bridges must be able to convey the flood hazard area design flood without a significant increase in flow velocity through the channel. The word “significant” should be defined. (15)

RESPONSE: In this context, a significant increase in flow velocity is an increase that promotes or exacerbates channel erosion. For example, if the channel substrate beneath an existing bridge is stable up to a velocity of 2.0 feet per second, the existing channel has a velocity for a given flood event of 1.5 feet per second, and a proposed bridge or culvert design increases the velocity to 1.8 feet per second, then this would not constitute a significant increase in velocity because the

post-construction velocity would remain below the level where the channel would be expected to remain stable. However, if a proposed design increases the velocity to 2.2 feet per second, thereby necessitating the placement of armoring within the channel, this would constitute a significant increase in velocity.

712. COMMENT: At proposed N.J.A.C. 7:13-12.7(f)3, new and reconstructed bridges will now be required to include a stable, low-flow, earthen aquatic passage in the main channel. This measure will increase disturbance to the stream's main channel, which will require additional riprap for stabilization to comply with the Soil Conservation Districts' transition riprap standard, and will discourage the use of three-sided structures. Hence, this requirement should be deleted. (15)

RESPONSE: N.J.A.C. 7:13-12.7(f)3 requires that "any existing stable, natural, earthen channel with low-flow aquatic passage is preserved, to the maximum extent practicable, and stable, earthen low-flow aquatic passage is provided within the bridge or culvert as well as any section of channel disturbed to accommodate its construction." This is similar to prior N.J.A.C. 7:13-11.7(i)2, which required that a "stable, natural, earthen channel with low-flow aquatic passage shall be provided throughout the structure." The prior requirement did not result in increased channel disturbance or armoring, and the Department does not anticipate that meeting N.J.A.C. 7:13-12.7(f)3 will further increase channel disturbance or require additional armoring. Further, N.J.A.C. 7:13-12.7(f)4 requires that "no armoring is placed under or across the channel bed, unless such armoring is necessary to prevent scour along the proposed abutments or footings…,"

and N.J.A.C. 7:13-12.7(f)2 requires that a bridge or culvert is "adequately sized to convey the flood hazard area design flood without a significant increase in the velocity of water in the channel." As noted in the Response to Comment 711, a design that increases velocity such that channel armoring is required does not meet N.J.A.C. 7:13-12.7(f)2. The Department has therefore determined that meeting the requirement at N.J.A.C. 7:13-12.7(f)3 to preserve or create low-flow aquatic passage is not in conflict with the Standards for Soil Erosion and Sediment Control at N.J.A.C. 2:90.

713. COMMENT: Under N.J.A.C. 7:13-12.7(f)4, the placement of armor within the channel should be avoided, not limited; however, if absolutely necessary, armoring should be buried beneath at least two feet of native substrate. (30 and 189)

RESPONSE: The purpose of N.J.A.C. 7:13-12.7(f)4 is to ensure that channel armoring is used only where necessary to prevent scour along the proposed abutments or footings. Where a proposed design incorporates armoring, Department staff will explore alternate designs with the applicant, such as the possibility of enlarging the proposed bridge or culvert opening or other methods that would reduce channel velocity and thereby avoid the use of armoring. Where the use of armoring is unavoidable, the armoring must be "buried beneath at least two feet of native substrate, where placement of the native substrate is feasible and effective in stabilizing the channel and protecting aquatic habitat under expected flood conditions." In some cases, existing channel velocity is too high to support the placement of native substrate. In such a case, alternate

methods of providing low-flow aquatic passage will be explored, such as provided at N.J.A.C. 7:13-12.7(h)1 and 2.

714. COMMENT: Proposed N.J.A.C. 7:13-12.7(g) should consider costs. Allowances should be made, without the necessity of a hardship exception, for the use of closed bottom bridges and culverts where HEC-18 computations result in excessively deep scour and expensive, deep foundations. In most cases, these channels need to be armored anyway due to erosive velocities (see New Jersey Soil Erosion and Sediment Control Table 11-1), so prohibiting a closed bottom structure is without benefit. (68)

RESPONSE: The Department recognizes that conditions may exist where spanning the channel is not practicable. For this reason, N.J.A.C. 7:13-12.7(g)6 provides for cases where spanning the channel under N.J.A.C. 7:13-12.7(f) would not be practicable due to: unstable substrate, which would likely undermine any proposed footing within or adjacent to the channel; irregular channel configuration; anticipated adverse hydraulic impact to the channel; or anticipated adverse impacts to offsite flooding, the environment, or public safety. Should one or more of these physical constraints be present, construction or reconstruction of a circular, elliptical, or box culvert may be acceptable as long as the construction standards specified at N.J.A.C. 7:13-12.7(h) are satisfied. Where an applicant believes that strict compliance with the requirements of N.J.A.C. 7:13-12.7 is cost prohibitive, it is appropriate to require applicants to request a hardship exception and demonstrate that the conditions of N.J.A.C. 7:13-15.1 are met. This is necessary for the Department to fully evaluate the extenuating circumstances that the applicant believes

exist for a particular project and to ensure that granting the applicant's request for relief from strict compliance with one or more standards of the FHACA Rules does not exacerbate flooding or adversely impact public health, safety, and welfare or the environment.

715. COMMENT: Under N.J.A.C. 7:13-12.7(g) and (h), because of the long-term reduction in economic costs associated with ecologically-friendly crossing structures, a high threshold should be set for the "prohibitively high construction costs" that would allow for the construction or reconstruction of structures that do not require the placement of a structure beneath the channel, such as the construction of a single bridge that spans a channel or the placement of an arch culvert or three-sided culvert, which have no bottom. (30 and 189)

RESPONSE: The language regarding prohibitively high construct costs in prior N.J.A.C. 7:13-11.7 has not been continued because, as the commenter suggests, the long-term reduction in economic costs associated with ecologically-friendly bridges and culverts often outweighs the initial cost of construction. As noted in the Response to Comment 714, where an applicant believes that strict compliance with the requirements of N.J.A.C. 7:13-12.7 is cost prohibitive, the applicant can request a hardship exception pursuant to N.J.A.C. 7:13-15.1.

716. COMMENT: Where a circular culvert, elliptical culvert, or system of parallel circular and/or elliptical culverts are necessary, the culvert(s) should be embedded at a minimum of two feet; round pipe culverts should be embedded at least 25 percent. (30 and 189)

RESPONSE: N.J.A.C. 7:13-12.7(h)1 requires that the invert of any circular, elliptical, or box culvert must be "installed at least two feet below the invert of the natural channel. In order to create a contiguous flow-path through the culvert that meets and matches the bottom inverts, cross-sections, and profile of the channel beyond the culvert, the culvert shall be filled with native substrate up to the invert of the natural channel." This will ensure that any culvert that has a height or diameter of eight feet or less, which captures the vast majority of culverts, will be embedded by at least 25 percent as suggested by the commenters.

N.J.A.C. 7:13-12.8 Requirements for a Utility Line

717. COMMENT: At N.J.A.C. 7:13-12.8(b)2, please change "The applicant provides an engineering certification confirming that any utility line that conveys a gas or liquid is sealed to ensure that there will be no leakage or discharge in a regulated area" to "The applicant provides an engineering certification confirming that any utility line that conveys a gas or liquid is sealed to ensure that there will be no leakage or discharge in a regulated area and above and below the regulated area." (158, 159, and 180)

RESPONSE: A utility line that is placed underground through a regulated area or overhead above a regulated area are both considered to exist within regulated areas. A leak or discharge from a utility line situated within, above, or below a regulated area would therefore create a discharge within the regulated area itself, which is covered by the requirement at N.J.A.C. 7:13-

12.8(b)2. Therefore, the proposed and adopted requirements include the concept described by the commenter without need for amendment.

N.J.A.C. 7:13-12.11 Requirements for a Dam

718. COMMENT: The clarification of Dam Safety's jurisdiction in permitting a dam removal project that is not associated with a stormwater management basin at N.J.A.C. 7:13-12.11 is appreciated. These rule changes are supported as they serve to protect wildlife and aquatic habitat and to reduce regulatory burden for dam removal projects. (45 and 152)

RESPONSE: The Department acknowledges this comment in support of the rules.

N.J.A.C. 7:13-12.14 Requirements for Bank Stabilization and Channel Restoration

719. COMMENT: Proposed N.J.A.C. 7:13-12.14(d)5 should require that additional floods beyond those proposed, including the bank-full event, must be considered. This omission severely undermines the point of stream stability. The proposed standard is inadequate in this regard. (118)

RESPONSE: N.J.A.C. 7:13-12.14(d)5 sets forth standards designed to minimize increases in offsite flooding that could result from daylighting a stream. The Department recognizes that restoring to a natural condition a regulated water that is enclosed by a structure can sometimes

alter local flood depths and flood storage volume. For example, while daylighting a stream can lower flood elevations adjacent to the project, the increased hydraulic capacity of the newly-restored open channel could cause floodwaters to reach downstream areas more efficiently and, in limited cases, exacerbate flooding in downstream communities. Since stream reclamation projects seek to restore natural hydraulic conditions that have been artificially altered by prior human intervention, N.J.A.C. 7:13-12.14(d)5 appropriately allows flexibility for these beneficial projects. Unlike a bridge or culvert, the construction of which can alter the natural flood elevation of a waterway, daylighting a stream generally restores offsite flood elevations closer to their original depths. For example, daylighting a stream reconnects the flood hazard area outside the channel with the channel itself, which can provide additional flood storage volume while reducing flooding. The Department anticipates that the standards set forth in N.J.A.C. 7:13-12.14(d) will encourage stream daylighting projects and effect a significant positive environmental benefit in urban communities and other developed areas while ensuring that potential alterations in flood depths are appropriately limited in order to protect public health, safety, and welfare and the environment. Finally, regarding the commenter's suggestion that the Department require an analysis of bank-full flows, N.J.A.C. 7:13-12.1(i) requires, among other flood events, an analysis of the two-year flood event, which, in the Department's experience, adequately represents conditions during bank-full flow.

720. COMMENT: Reference to the Soil Bioengineering Standard as a required design methodology within the soil erosion and sediment control program should be added to this section. (131)

RESPONSE: The use of soil bioengineering is referenced a number of times throughout the chapter and in N.J.A.C. 7:13-12.14. For example, N.J.A.C. 7:13-12.14(c)2 requires that soil bioengineering shall be used to stabilize an eroded bank and/or restore the channel in cases where an applicant demonstrates that cutting the bank and planting vegetation as set forth in N.J.A.C. 7:13-12.14(c)1 cannot adequately restore the channel and/or fully prevent erosion due to excessive channel velocity. "Soil bioengineering" is defined at N.J.A.C. 7:13-1.2 to mean “the method of stabilizing eroded banks using vegetation, and sometimes in conjunction with other natural materials, as described at section 650.1601(d)(2) of Chapter 16 in the USDA Natural Resource Conservation Service Engineering Field Handbook, published December 1996, incorporated herein by reference.” The definition also notes that “Copies of the Engineering Field Handbook can be obtained from local NRCS offices.”

N.J.A.C. 7:13-12.17 Requirements for the Investigation, Cleanup, or Removal of Hazardous Substances

721. COMMENT: The new requirements for the investigation, clean-up, and removal of hazardous substances at N.J.A.C. 7:13-12.17 are supported. The existing FHACA Rules do not address the remediation of contaminated sites. With this rulemaking, many applicants who are merely trying to comply with the remediation requirements set forth by Licensed Site Remediation Professionals and the Department’s site remediation regulations will not need to file hardship exception requests. (101)

RESPONSE: The Department acknowledges this comment in support of the rules.

N.J.A.C. 7:13-12.18 Requirements for the Placement, Storage, or Processing of Hazardous Substance; and N.J.A.C. 7:13-12.20 Requirements for the Placement, Storage, or Processing of Solid Waste or Recyclable Materials

722. COMMENT: Hazardous materials are bad for the environment. Staging, storing, or processing them in regulated areas must be prohibited, as in the existing rules. Site remediation professionals should not ignore this fact. Do not allow hazardous materials in regulated areas. (118)

723. COMMENT: This rulemaking allows more hazardous materials to be stored in flood hazard water areas, which will create a bigger hazard. Further, the State continues to allow factories that store toxic chemicals in them in flood prone areas and is now allowing more and more development in these areas. (177)

724. COMMENT: According to the notice of proposal Summary, the Department has determined that these amendments are appropriate to allow certain unavoidable development, subject to standards set forth in the amended rules, without requiring the applicant to undertake the burden of applying for a hardship exception. This represents a fundamental shift in policy for the Department. The requirement to demonstrate a hardship has been a fundamental element of

the existing FHACA Rules to assure that riparian zone disturbance activities are avoided and/or minimized. Specifically, proposed N.J.A.C. 7:13-12.18 and 12.20 remove the hardship requirement for the placement, storage, or processing of hazardous substances, solid waste, or recyclable materials in a regulated area. The proposed amendment removes the presumption that the Department shall not issue an individual permit for these activities. Only last year, the Department issued permits allowing the placement of millions of tons of petroleum-contaminated soil along the banks of the lower Rahway River. The applicant skirted the existing requirement to demonstrate a hardship by having the facility classified as a Class B Recycling Facility, despite the fact that all the imported material never actually left the site to return to the market. Now, these amendments will allow these types of facilities, which place local communities at risk, to conduct such activities even more easily. This rulemaking should be withdrawn. (96)

RESPONSE TO COMMENTS 722 THROUGH 724: It is not the Department's intention to encourage the placement, storage, or processing of hazardous substances within flood hazard areas or riparian zones. However, it has been estimated that 35 percent of New Jersey's land area lies within a flood hazard area. Given that riparian zones often extend outside flood hazard areas, the total area of the State's land subject to this chapter somewhat exceeds 35 percent. Hundreds of thousands of the State's existing homes and businesses therefore lie within flood hazard areas and riparian zones. As such, many individuals and businesses necessarily place, store, and process hazardous substances in regulated areas both within and outside of hazardous waste facilities, such as fuel distribution centers, automobile repair shops, and dry cleaners. Rather than

completely prohibit the placement, storage, or processing of hazardous substances in regulated areas, the Department is continuing its prior standards with amendments designed to improve environmental protection while adding flexibility for facilities that are established after the October 2, 2006, notice of proposal date of the prior chapter.

Specifically, whereas the prior standards limited the placement, storage, or processing of hazardous substances to a lawfully existing hazardous waste facility established on or before October 2, 2006, the adopted standards instead require that the placement, storage, or processing of hazardous substances is necessary for the normal conduct of a facility operating in compliance with all Federal, State, and local requirements. Limiting the placement, storage, or processing of hazardous substances to facilities that have existed since 2006 is unnecessarily restrictive since the requirements of this section minimize the likelihood of hazardous substances being transported offsite during flood conditions. Before hazardous substances can be placed within a flood hazard area or riparian zone, applicants must demonstrate the hazardous substances cannot feasibly be placed, stored, or processed outside the flood hazard area and riparian zone onsite (see N.J.A.C. 7:13-12.18(c)3). If the applicant has demonstrated that placement, storage, or processing cannot occur outside of the flood hazard area and riparian zone, to ensure that hazardous substances are not transported offsite by floodwaters, thereby impairing the environment and exacerbating flooding, the adopted requirements clarify that the structures that isolate the hazardous substances from floodwaters must be flood-resistant. Specifically, hazardous substances must be isolated from floodwaters by constructing flood-resistant berms around the substances or by situating the substances within a flood-resistant containment area so that, in the event of a flood, the hazardous substances will not be transported offsite by

floodwaters (see N.J.A.C. 7:13-12.18(c)4). The Department must additionally determine that the placement, storage, or processing of hazardous substances in the flood hazard area and riparian zone will not pose a threat to the environment or to public health, safety, or welfare (see N.J.A.C. 7:13-12.18(c)6).

Regarding riparian zone disturbance, prior N.J.A.C. 7:13-11.17(d)1 required that no vegetation was cleared, cut, or removed in a riparian zone. However, this requirement is unnecessarily restrictive since disturbance to riparian zone vegetation is sometimes required to undertake these regulated activities. Furthermore, any disturbance to riparian zone vegetation under an individual permit is subject to the requirements of N.J.A.C. 7:13-11.2, which ensure that riparian zone functionality is not impaired. As Table 11.2 does not provide a category for disturbance to riparian zone vegetation for the placement, storage, or processing of hazardous substances, an applicant proposing to clear, cut, and/or remove riparian zone vegetation for these purposes must demonstrate compliance with N.J.A.C. 7:13-11.2(y), which, in limited cases, permits a small amount of riparian zone disturbance for activities not listed in Table 11.2, provided the applicant demonstrates that: there is no other reasonable means of accomplishing the project that would reduce or eliminate the impact to the riparian zone; there is no other feasible location onsite to undertake the project that would reduce or eliminate the impact to the riparian zone; and all disturbance within the riparian zone is located as far from the regulated water as possible. Finally, the applicant must provide mitigation, in accordance with N.J.A.C. 7:13-13, for the total area of vegetation that is cleared, cut, and/or removed. These stringent standards ensure that riparian zone disturbance for placement, storage, or processing of hazardous substances occurs only where unavoidable, minimized, and fully offset by mitigation.

Regarding recyclable materials, the prior FHACA Rules did not specifically address the placement of recyclable materials within flood hazard areas or riparian zones. The Department's practice was to consider the storage and processing of recyclable materials in a regulated area to be equivalent to the storing and processing of solid waste. The Department recognizes that recyclable materials in a flood hazard area can displace flood storage volume, present an obstruction to flow in a floodway, and/or become buoyant during a flood event and be transported offsite. As such, the Department clarified at N.J.A.C. 7:13-12.20 that the requirements related to the storage and processing of solid waste also apply to recyclable materials in order to ensure that the storage and processing of recyclable materials does not exacerbate flooding or adversely impact the environment. Also, as noted above for the placement, storage, or processing of hazardous substances within riparian zones, the placement, storage, or processing of solid waste or recyclable materials within a riparian zone can be undertaken only in conformance with the strict limitations of N.J.A.C. 7:13-11.2(y).

N.J.A.C. 7:13-12.19 Requirements for Solid Waste Landfill Closure

725. COMMENT: At proposed N.J.A.C. 7:13-12.19(b)3, regarding requirements for solid waste landfill closure, please change "hazardous waste" to "solid waste." (59)

RESPONSE: The commenter is referring to a typographical error at N.J.A.C. 7:13-12.19(b)3, in which hazardous substances are mentioned rather than solid waste, which is the subject of the section. The Department appreciates the commenter's observation and has corrected the error.

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Subchapter 13. Riparian Zone Mitigation

General Comments

726. COMMENT: The proposed FHACA Rules are commended for establishing a flexible mitigation framework that allows entities undertaking riparian zone mitigation to choose from a range of alternative strategies at proposed N.J.A.C. 7:13-13.8. Existing regulations at N.J.A.C. 7:13-10.2(t) provide two unlabeled mitigation options to those performing regulated activities in the riparian zone: mitigation by restoration (the removal of existing structures or impervious surfaces in the restored area) and mitigation by enhancement (the replanting of indigenous, non-invasive vegetation). The proposed regulations preserve these options at proposed N.J.A.C. 7:13-13.10 and 13.11 while offering several new alternatives including riparian zone creation at proposed N.J.A.C. 7:13-13.9, the purchase of credits from an approved mitigation bank at proposed N.J.A.C. 7:13-13.13, and riparian zone preservation at proposed N.J.A.C. 7:13-13.12. (51 and 92)

RESPONSE: The Department acknowledges this comment in support of the rule.

727. COMMENT: The Department seeks to eliminate virtually all current buffer protections and to replace those prohibitions on disturbance of riparian habitat with a mitigation scheme that does not restrict the location and ownership of the land selected for the mitigation activity. A new streamlined mitigation program with the option for mitigation banking is a poor substitute

for actual regulatory buffer protections as there is no ecological substitute for existing, natural riparian zone habitat. The structural changes in the FHACA Rules that will replace protections that emphasize avoidance and minimization of disturbance with a regime that will encourage and expand development in riparian zone habitat while seeking to mitigate its impacts elsewhere are opposed. The current FHACA Rules should remain intact, and a separate, focused, and location-specific mitigation program should be developed to supplement, rather than replace, the current protections. (91 and 195)

RESPONSE: Under this adoption, the Department has not eliminated riparian zone protections nor has it attempted to substitute mitigation as a surrogate for regulatory protections. Prior to this adoption, it was necessary for a permittee to obtain a hardship exception to exceed the limits of riparian disturbance as set forth in Table C. In every case where the Department agreed that a limit within Table C was justifiably exceeded, the permittee was required to provide mitigation in accordance with former N.J.A.C. 7:13-10.2(t) and (u).

The adopted rules continue to require avoidance and minimization of impacts. Specifically, N.J.A.C. 7:13-11.2(b) provides that the Department will only issue an individual permit for any regulated activity that results in the clearing, cutting, and/or removal of vegetation in a riparian zone if: the basic purpose of the regulated activity cannot be accomplished onsite without the clearing, cutting, and/or removal of riparian zone vegetation; the clearing, cutting, and/or removal of riparian zone vegetation is minimized; the requirements for each specific regulated activity are satisfied, including mitigation, as applicable; and all areas in which riparian zone vegetation is temporary disturbed are replanted.

Mitigation for impacts to riparian zones is necessary to ensure that the functions and values of the riparian zone are appropriately protected. Under the adopted rules, the Department has increased the available mitigation options by expanding the locations where restoration and enhancement may occur and also by providing additional means by which mitigation can be performed, specifically, riparian zone creation and preservation (see 47 N.J.R. 1067). These options will provide additional opportunities for the restoration and enhancement of degraded riparian zones and will promote the creation of new riparian zones through "daylighting" streams. Provisions encouraging riparian zone preservation and creation of riparian zone mitigation banks will provide additional incentives for the protection of forested riparian zones and contiguous areas.

However, it is important to note that the adopted new mitigation subchapter contains one overarching requirement that must be satisfied regardless of which mitigation option is utilized; the mitigation provided must fully compensate for any ecological loss (N.J.A.C. 7:13-13.2(a)). This requirement ensures that the mitigation option chosen, as well as the location where the mitigation is performed, is sufficient to fully compensate for any impacts to the riparian zone that the Department has determined are necessary and have been minimized. The Department discusses how this requirement may impact the location of mitigation in the Response to Comments 781 through 786 and 788 through 799. The Department also discusses equal ecological functions and values in the Response to Comments 732, 743, 744, 781 through 786, 788 through 799, 804, and 812 and 813.

728. COMMENT: Please provide the authority under which the Department is authorized to approve mitigation banks for riparian areas. (96)

729. COMMENT: The rulemaking includes a new Subchapter 13, Riparian Zone Mitigation, which is broad in scope and significant in substance, both economically and environmentally. A change in regulatory policy of this magnitude requires express statutory authorization by the Legislature. The FHACA does not authorize the Department to create a mitigation scheme or a mitigation bank. The act does not specifically or implicitly provide for a mitigation program or a mitigation bank, nor does any other authority the Department relies on as the legal basis for the rulemaking. However, the act does establish clear legislative standards and authorizes the Department to enact regulations to enforce those standards via a traditional regulatory permit program. Because the proposed program is a radical departure from the Department's traditional regulatory policy and practice, the rulemaking is *ultra vires*, legislatively unauthorized, and contrary to the express framework and provisions of the act. The mitigation scheme and mitigation bank are also inconsistent with legislative intent. The rulemaking must be withdrawn. (193)

RESPONSE TO COMMENTS 728 and 729: While the Flood Hazard Area Control Act is the primary enabling legislation for the Flood Hazard Area Control Act Rules, the rules are also adopted under the authority of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.), the Highlands Water Protection and Planning Act (N.J.S.A. 13:20-1 et seq.), the Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq.), and the Ninety Day Construction Law (N.J.S.A.

13:1D-29 et seq.). The Department's ability to protect the environment, including flora and fauna, as it implements the Flood Hazard Area Control Act Rules, was affirmed by the Appellate Division Court in 1985 (see *Society for E.E.D. v. New Jersey DEP*, 208 *N.J. Super*. 1 (App. Div., 1985)). In addition, the Department's authority to use stream buffers to protect water quality was affirmed in *In the Matter of Stormwater Management Rules*, 384 *NJ Super*. 451, *cert. denied* 188 *NJ* 489 (2006). Taken together, these authorities vest the Department with broad discretion to promulgate these rules to address flooding, protect water quality, provide protection of natural resources, and to protect public health and safety. It is well documented that vegetation adjacent to surface waters is essential for maintaining bank stability and water quality. The indiscriminate disturbance of such vegetation destabilizes the shorelines of surface waters, which leads to increased erosion and sedimentation that exacerbates the intensity and frequency of flooding. The loss of vegetation adjacent to surface waters also reduces filtration of stormwater runoff and subjects surface waters to increased sun exposure, which causes water temperatures to rise and dissolved oxygen content to fall. Such impacts adversely affect the health and habitat of fish and wildlife that depend upon clean surface waters and therefore disrupt the ecological balance that is necessary for life. Under this adoption, the Department has not eliminated riparian zone protections nor has it attempted to substitute mitigation as a surrogate for regulatory protections.

As indicated in the Response to Comment 727, the adopted rules continue to require avoidance and minimization of impacts. However, when this is not feasible, the Department will require mitigation. The requirement to allow for mitigation is not inconsistent with the intent of the statutes. The authority to protect water quality under these various statutes is clear, with determination of the specific means to achieve that protection left to the Department. As stated

above, one method that has been demonstrated through numerous studies to protect water quality is the protection of riparian areas and the vegetation therein because of the benefits they provide. Where it is necessary to allow appropriate impacts to buffer areas, mitigation has been demonstrated to be an effective mechanism to achieve equivalent water quality benefits, including mitigation through methods such as creation of alternate buffer areas, restoration or enhancement of other buffer areas, or preservation of large areas that provide the water quality benefits sought. The benefits sought through mitigation are achieved regardless of whether the mitigation is performed by a permittee or by someone else with the mitigation funded by the permittee. Utilization of mitigation banks as one mechanism to reach the desired positive water quality impacts has proven to be a valuable tool in protection of freshwater wetlands. In fact, in some cases, larger projects performed by a mitigation bank can provide greater benefits than the sum of the many small projects that would have been performed if those purchasing mitigation credits from the bank had been required to satisfy their separate mitigation obligations through small individual projects. The Department has determined that the same positive benefits achieved by mitigation banks in that context can be achieved in protecting riparian zones and is, accordingly, utilizing this as one available option to protect the quality of waters regulated under the FHACA Rules in accordance with the statutory authorities specified above.

730. COMMENT: Please add a permit-by-rule for mitigation sites and banks. A rule that is similar to GP-16 in the FWPA Rules but without the requirement for governmental sponsorship would suffice. (135)

RESPONSE: A permit-by-rule is not an appropriate vehicle for the approval of mitigation sites and banks. By definition, a permit-by-rule is a permit to undertake a regulated activity for which the terms and conditions are established by rule and that is effective without prior written approval from the Department provided all requirements of the permit-by-rule are satisfied. Permits-by-rule are intended to authorize only regulated activities that have minimal environmental impact both individually and cumulatively. In contrast, mitigation projects must be designed and executed taking into account site-specific conditions to ensure that they will ultimately be successful in the long term and to ensure that the project will satisfy the rules' requirement that it fully compensate for all ecological losses to riparian zone functions resulting from the activity that created the need for mitigation. Mitigation banks in particular generally involve larger projects, making establishment of standards under which they could be performed without Department approval and oversight impossible. Further, mitigation projects require Department oversight to ensure that they continue to provide the benefits they are designed to provide long after initial planting occurs, with many requirements, including the requirement that financial assurance be provided for mitigation projects involving creation or restoration activities, reflecting this need to ensure long-term viability of the project. Therefore, mitigation banks and mitigation sites are more appropriately reviewed by Department staff under a general permit or an individual permit.

731. COMMENT: The proposed rules identify many changes and expansions to mitigation. The Department's willingness to expand upon mitigation techniques and processes is appreciated; this offers applicants and existing permit holders the ability to restore and enhance

the riparian zone in a common sense fashion. The Department is applauded for creating two new methods of mitigation – creation and preservation. These additional methods will allow applicants flexibility and creativity in their mitigation projects, which will lead to overall health and improvement of the riparian zone. (119)

RESPONSE: The Department acknowledges this comment in support of the rule.

732. COMMENT: The ability for applicants to choose their mitigation techniques, or combination of techniques, is a valuable addition to the rules. Applicants will now be able to implement more common sense mitigation projects without being limited to native and non-invasive species. The complete lack of regulations regarding the types of plants that are to be used is somewhat concerning; however, the Department is trusted to ensure that the riparian zone is restored to its pre-disturbed state or better. (119)

RESPONSE: The adopted rules at N.J.A.C. 7:13-13.2(a) require that the mitigation fully compensate for any ecological loss. Additionally, N.J.A.C. 7:13-13.6, basic requirements for a mitigation proposal, identifies the information that is required to be provided as part of a mitigation proposal. Each of the items identified at N.J.A.C. 7:13-13.6(f) is necessary to ensure compliance with the FHACA Rules and is intended to eliminate or reduce the possibility of failure after construction of the mitigation area. The Department has found that if a site is well planned and is constructed properly, the likelihood of success significantly increases. The items required at N.J.A.C. 7:13-13.6(f) provide the Department with information on the impact that

necessitated the mitigation, information allowing the Department to understand existing and proposed conditions at the site, including a planting plan, information on the sequencing proposed to be utilized in completing the mitigation project, and an understanding of what measures will be taken if any portion of the proposed mitigation does not perform as planned during the post-construction monitoring period. These requirements will ensure that a proposed riparian zone mitigation plan will be restored to its pre-disturbed condition or to an ecologically greater condition. While limited use of non-native species is allowed when replanting of actively disturbed areas is conducted in accordance with N.J.A.C. 7:13-11.2(z), in no case is the use of non-native vegetation allowed as part of a mitigation plan approved in accordance with N.J.A.C. 7:13-13. Specifically, N.J.A.C. 7:13-13.6(f)2, 13.9(d), and 13.10(d) prohibit the use of non-native, invasive species.

733. COMMENT: If the regulations reference a checklist that is not included in the adopted rules, can the checklist requirements be changed in the future even if the adopted regulations do not change? The checklist should be part of the regulations under public review and comment prior to adoption; the content of the checklist has great bearing on the actual implementation of mitigation under the FHACA Rules. (135)

RESPONSE: N.J.A.C. 7:13-13.6(f) sets forth the information required to be submitted as part of a request for approval of a mitigation proposal and will be reflected on the mitigation proposal checklists utilized by the Department. While this rule sets forth the information required to be

submitted, the checklist utilized by the Department may include direction of the required level of detail and format of this information.

The Department may request additional detail where needed to ensure that the submissions are sufficient to demonstrate compliance with the requirements of the particular permit. For example, where the rules require, as part of an application, the submittal of a site plan or photographs showing certain types of information, the corresponding checklist will indicate, based on the type of development the particular permit covers, the number of copies of the plan to be submitted, the scale and details of the information to be illustrated on the plan or drawing, and the number and orientation of photographs of the location of the proposed development. The checklist will also indicate whether the plan should be folded or prepared in a certain manner to facilitate processing.

734. COMMENT: The Department should clarify if mitigation sites may be composed of invasive species and compensate for impacts to invasive species. Is the Department implementing a strict interpretation of in-kind replacement mitigation? (135)

RESPONSE: Except as provided at N.J.A.C. 7:13-11.2(z), the Department does not allow a permittee or a mitigation banker to utilize non-native or invasive plant species in a mitigation proposal. For all mitigation sites, including mitigation banks, the Department will require the planting of native, non-invasive species. The planting of invasive species in an area that may contain no or very few invasive species can be environmentally damaging to that site as invasive species have the potential to disrupt the process of natural succession. In an attempt to manage

invasive plant species within mitigation sites, N.J.A.C. 7:13-13.6(f)2iii specifically requires a preventative maintenance plan detailing how invasive species or noxious vegetation will be controlled.

735. COMMENT: The restoration efforts to return degraded lands to higher levels of ecological function, to manage landscapes to foster native rather than invasive species, and to shade stream corridors, among other things, are strongly supported. Restoring and managing forests are desirable goals for many reasons, but attempting to replace a mature, native riparian forest is not justifiable. High quality landscapes cannot be replaced; they are few in number and very important to preserve. Restored landscapes are generally very poor quality, and the best of them at most achieve mediocrity. Wetlands mitigation has been an unmitigated failure. The fact that a more scientific evaluation of ecological function is required to make any claims regarding mitigation and its limits must be recognized, not conveniently ignored. (150)

736. COMMENT: The complex system of mitigation and mitigation banking established at N.J.A.C. 7:13-13 will allow new disturbances in naturally occurring, high value riparian buffers but will attempt to offset the loss of ecological values by enhancing or restoring vegetated buffers along existing waterbodies anywhere within the same or adjacent watershed management areas. Such a trading program can only result in a net loss of ecological values. Although the enhancement or restoration of previously disturbed areas should always be encouraged, they can never fully mitigate against the damage caused when a naturally occurring riparian buffer is disturbed, even when the mitigation ratio is greater than one-to-one. The administration of such a

system, with the required oversight, reporting, and monitoring, is complex and detailed. The rulemaking states that two significant reasons behind the extensive changes to the rules are the reduction of administrative burdens on an overworked, understaffed Department and the reduction of regulatory complexities afflicting the regulated community. An overwhelmed Department is in no position to propose a sophisticated mitigation program that carries the responsibilities of alleviating the full measure of ecological damage that it now intends to allow and of fully offsetting the associated new risks to water quality and flooding. (24 and 147)

737. COMMENT: The Department should discourage impacts to flood hazard areas and riparian zones instead of allowing mitigation, which rarely works. (63, 70, 73, 80, 90, 103, 133, 141, 144, 174, 179, 187, 194, and 196)

738. COMMENT: The proposed restoration program, which eliminates all disturbance requirements for restoration projects, will lead to abuses. Nonprofit involvement in the project or a restoration objective statement will not be sufficient to ensure protection and do not justify this program. (193)

739. COMMENT: The buffer restrictions under the Category One program do not allow disturbance between 300 and 150 feet of these waterways, but if an applicant can now provide an equivalent level of protection, the project is allowed. This whole concept destroys the idea of a buffer restriction and replaces it with a mitigation scheme. Now buffers can be disturbed wantonly as long as the disturbance is mitigated. The mitigation scheme is poorly defined, lacks

scientific rigor, will not provide an equivalent level of protection, and does not adhere to one of the objectives of the rulemaking. It does not allow for predictability and certainty, it is arbitrary, and it is subjective. This rulemaking is poor public policy, terrible rulemaking, and inadequate field level protection for resources. (193)

740. COMMENT: The Department proposes to delete the existing Special Water Resource Protection Area (SWRPA) buffer protections at N.J.A.C. 7:8-4.2 and 5.5 and to implement a complex system of mitigation and mitigation banking at N.J.A.C. 7:13-13. Intact, healthy stream buffers are among the best methods for protecting water. They are successful at improving water quality, cost-effective for minimizing flood damage, and easy to maintain. Experience shows that mitigation and banking practices are poor substitutes for preserving and protecting existing healthy wetlands and riparian buffers. Constructed wetlands and riparian buffers do not function as natural systems do; they are not as effective at protecting and improving water quality. The Department must protect existing buffers, not undermine them by allowing development with mitigation. (81)

741. COMMENT: The most fundamental problem with these rule revisions is their failure to recognize the irreplaceable functions of riparian corridors and headwaters, despite the many statements in the rules regarding the importance of those functions. With the proposed mitigation program, these rules imply that lost natural areas can be replaced. Engineered systems routinely fail in ways that natural systems do not. Mitigation sites are all too often examples of this problem. Preserving natural areas costs significantly less than relying on new engineering

solutions. The State appears willing to sacrifice taxpayer savings for the profit of developers and individuals. New Jersey should have learned by now that mismanaging water is very expensive. The term "flood hazard" should have some weight here. (150)

742. COMMENT: Allowing mitigation to be used as a truck-sized loophole to circumvent reasonable restrictions is not only bad policy, but one which future administrations will be hard pressed to recover from as the damage will already have been done. The Department is asked to do its job. It is the Department of Environmental Protection. Please begin to take that mission seriously. (143)

RESPONSE TO COMMENTS 735 THROUGH 742: As indicated at N.J.A.C. 7:13-13.2(b), "the determination as to whether a permit application should be approved shall be independent of the analysis of proposed mitigation for compliance with this subchapter." Accordingly, the determination as to whether an activity impacting the flood hazard area and/or the riparian zone is approvable is made entirely on the basis of whether the activity meets the applicable standards and independent of an analysis of what mitigation has been proposed; if a proposed activity does not meet the standards specified in the chapter designed to protect public health, safety, and the environment, the activity will not be approved regardless of the level or type of mitigation that is proposed.

With reference to proposed regulated activities that result in the clearing, cutting, and/or removal of vegetation in a riparian zone, the rules specify at N.J.A.C. 7:13-11.2(b) that an individual permit authorizing such activities will only be issued if the basic purpose of the

activity or project cannot be accomplished without impacting riparian zone vegetation and if all available methods are utilized to minimize any necessary impacts to riparian zone vegetation. These requirements reflect the Department's emphasis on protecting existing riparian zone wherever possible; only where these demonstrations have been made and other standards applicable to the particular proposed activity satisfied do the rules allow impacts leading to the mitigation requirements.

The rules prior to the adoption of these amendments and new rules allowed mitigation for riparian zone impacts to be accomplished through two methods, restoration, in which structures and/or impervious surfaces located in the riparian zone are removed and the area is replanted with vegetation, or enhancement, in which trees are planted in the riparian zone in an area that is substantially devoid of trees. To help facilitate effective compensation for unavoidable impacts to riparian zone vegetation, the adopted amendments and new rules add riparian zone creation, N.J.A.C. 7:13-13.9, and preservation, N.J.A.C. 7:13-13.12, to the mitigation options available to applicants. The adopted amendments and new rules additionally establish a mechanism for third parties, with Department approval and oversight, to perform mitigation projects with applicants allowed to purchase credits from the mitigation bank in an amount determined by the Department to adequately compensate for the proposed unavoidable riparian zone impact (see N.J.A.C. 7:13-13.13). These additional options for riparian zone mitigation will provide additional opportunities for individuals to restore and enhance degraded riparian zones and will promote the creation of new riparian zones through "daylighting" streams, which will restore waterways that have been previously piped or otherwise enclosed by structures to a natural condition. "Daylighting" streams that have long been enclosed can provide numerous benefits to

a community and provide significant ecological uplift and are an excellent example of mitigation activities that will be available to permittees in the rule under this adoption. In all cases, the Department will continue to ensure that mitigation proposed and approved continues to provide compensation for all riparian zone vegetation impacts, as specified in the adopted rules at N.J.A.C. 7:13-13.2(a). The presence of these additional options will not have an effect on the number of permits issued by the Department or on the Department's efforts to ensure that adequate compensation is provided for any impacts to riparian zone vegetation that are unavoidable. Furthermore, both the Department's wetland and riparian zone mitigation programs have demonstrated that they do provide successful compensation for authorized impacts. Consequently, there is no reason to expect that an expansion of the riparian zone mitigation program to include creation, preservation, and mitigation banking options will compromise the success of the existing program. The establishment of a riparian zone mitigation banking system will greatly benefit the environment as entrepreneurs seek out appropriate properties on which to restore, create, enhance, or preserve riparian zone areas. In the case of a mitigation bank, the release of credits is allowed only when certain milestones are met, as specified at N.J.A.C. 7:13-13.19(e). This ensures that milestones in the successful completion of the mitigation project are reached before credits from the mitigation may be used to satisfy mitigation requirements applicable to necessary impacts to riparian zone vegetation authorized on other sites with final credits created by the mitigation bank project not released until successful completion of the mitigation project has been demonstrated through monitoring for a period of five years. These limitations, in conjunction with the required recording of a conservation restriction covering the area of the mitigation project and the financial assurance

required to be posted for mitigation involving creation or restoration activities, ensure that mitigation fully compensating for all ecological impacts to riparian zone vegetation is provided, as required by the rules.

743. COMMENT: The establishment of mitigation banks is opposed. Most wetland mitigation banks have failed, so why try to implement riparian mitigation banks? The Department's mitigation measures, including flood credits that can be used to build in buffer areas, will not work. The rule allows almost anything to be built in a buffer as long as mitigation is provided for it. A house can be built next to a stream in Wayne, and then some trees can be planted in Sussex County to compensate for it. A septic system can be installed within 50 feet of a Category One stream, like the Metedeconk in Jackson, and then some grass can be planted down near the Delaware Bayshore to mitigate the impacts. This program does not consider local impacts to water quality and flooding and allows for more development and destruction of the environment without any real remediation. Mitigation should only be allowed for certain individual permits but not for dismantling forests. (77)

744. COMMENT: The proposed FHACA Rules consider the use of mitigation banks. This serves no environmental benefit. Degradation in one riparian zone cannot be mitigated in a completely different area. Banks do not address the impact area, which is the reason that net fill banks are no longer allowed. The creation of banks serves only to line the pockets of the bankers. It is environmentally inappropriate as far as riparian zones are concerned and should not be allowed. (118)

RESPONSE TO COMMENT 743 and 744: The practice of compensatory mitigation and mitigation banks is a nationally recognized strategy for offsetting lost ecological functions and is supported by Federal guidelines released by the USEPA and USACE. Additionally, New Jersey's 19 approved wetlands mitigation banks serving 19 of the 20 watershed management areas throughout the State are an example of success in implementing this strategy. Based on the Department's observation of the success of wetland mitigation banks, the intent of this subchapter is to implement a system of riparian zone banking similar to the existing wetland banking system. This allows the Department to align the mitigation strategies of the Flood Hazard Area Control Act Rules with the Freshwater Wetlands Protection Act Rules.

N.J.A.C. 7:13-13.2(a) requires that any mitigation fully compensate for any ecological loss. The Department acknowledges that mitigation sited in the northern region of the State will generally not satisfy this requirement. While every situation is fact sensitive as to how far removed a mitigation area could be from the area of disturbance and still fully compensate for the disturbance (for example, a mitigation project at the far upstream reaches of the Delaware River could potentially fully compensate for impacts many miles downstream adjacent to the southern portion of the Delaware River), it is unlikely that a project as far removed from the area of disturbance as the examples provided by the commenters would meet the standard required by the rules, regardless of the magnitude of the mitigation proposed . With reference to other potential factors limiting the location of the mitigation in relation to the impact being compensated for, see the Response to Comment 781 through 786 and 788 through 798.

745. COMMENT: Will the permitting team or the mitigation team review mitigation issues? (157)

RESPONSE: The Department has an established Mitigation Unit within the Division of Land Use Regulation. That unit is responsible for the review and approval of all wetland mitigation proposals and wetland mitigation banks. It is anticipated that this unit will be responsible for the review and approval of riparian zone mitigation banks and most riparian zone mitigation proposals, workload permitting; however, work may be reassigned as necessary.

746. COMMENT: The Department should adhere strictly to the mitigation policy of “avoid, minimize, mitigate” that is commonly invoked in mitigation policies from the National Environmental Policy Act down through State programs such as the FWPA. Disturbance of riparian buffer vegetation should first be avoided; secondly, if avoidance is not possible, disturbance should be minimized to the maximum extent possible. (24)

747. COMMENT: The vast body of academic, scientific, and professional literature recognizes the “mitigative hierarchy” that should be followed when considering environmental impacts: avoidance of impacts, minimization of impacts, and only lastly, compensation, or mitigation, of impacts. The Department, with this rulemaking, intends to allow more disturbances in riparian buffers at proposed N.J.A.C. 7:13-11.2. Only when the raised thresholds of disturbance are exceeded will mitigation be required as described in proposed N.J.A.C. 7:13-

13. This does not merely reverse the traditional mitigative hierarchy model but actually places "disturbance" as the very first step in the sequence. (24 and 147)

748. COMMENT: The Department must continue to follow the "avoidance, minimization, and then mitigation" hierarchy. Simply providing mitigation for proposed riparian zone disturbances should not serve as a justification for approving those proposed disturbances. (30 and 189)

RESPONSE TO COMMENTS 746 THROUGH 748: The FHACA Rules maintain the requirement that riparian zone impacts be avoided with disturbance only occurring where it is unavoidable and any unavoidable disturbance being minimized. Only when a disturbance is unavoidable and minimized is mitigation considered. This hierarchy is specified at N.J.A.C. 7:13-11.2(b), which states that the Department shall issue an individual permit for any regulated activity that results in the clearing, cutting, and/or removal of vegetation in a riparian zone only where the basic purpose of the regulated activity or project cannot be accomplished onsite without the clearing, cutting, and/or removal of vegetation in the riparian zone (Avoidance); the clearing, cutting, and/or removal of riparian zone vegetation is minimized through methods including situating the regulated activity or project as far from any regulated water as feasible and limiting construction to other areas wherein the benefits and function of a riparian zone are considerably deteriorated and impacted as a result of previous development (Minimization); and the requirements for each specific regulated activity are satisfied, including mitigation (Mitigation).

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749. COMMENT: The Department's rulemaking to provide the option of riparian mitigation banks due to their potential ability to produce lasting conservation benefits on a larger scale than project-by-project mitigation is supported. (30 and 189)

RESPONSE: The Department acknowledges this comment in support of the rule.

Ownership of Mitigation Sites

750. COMMENT: The definition of "mitigation banking instrument" at N.J.A.C. 7:13-13.1 includes "ownership of bank lands." This subchapter repeats this phrase in several places, stipulating that the land upon which the bank is sited must be owned in fee simple title that is ultimately transferred to a governmental agency or non-profit. This is a mistake. The same legal protection can be secured with a recorded conservation easement. The Department will eliminate the possibility that severely eroded stream banks can be restored if private property owners are willing to grant permanent easements but are unwilling to sell the land. This will also require the subdivision of parcels, which significantly increases costs, project duration, and the likelihood that owners will not participate. (89)

751. COMMENT: At proposed N.J.A.C. 7:13-13.4(b), the person performing the mitigation is required to own the land in fee simple. This should not be adopted. Mitigation should be allowed on land that is not owned in fee simple by the person performing the mitigation. An effective method of riparian mitigation is to perform the mitigation on land for which conservation

easements and rights of entry for purposes of performing and monitoring the mitigation have been granted by the property owner. Riparian mitigation sites are typically long and narrow as they are located along stream corridors. Acquisition of the entire lot on which the mitigation site is located may be unreasonably expensive. A municipal entity would not typically allow a subdivision of a larger lot for such a mitigation area. Proposed N.J.A.C. 7:13-13.4(c), which allows for mitigation on public property, is supported as it provides a vehicle and funding for restoration of riparian zones on public lands. (59)

752. COMMENT: N.J.A.C. 7:13-13.4(b) seems to only allow for mitigation on property purchased in fee simple title. It should perhaps be changed to "…only on property that is owned in fee simple or under legal control of the person …" At proposed N.J.A.C. 7:13-13.12(e)2, acquisition and transfer with fee simple title seems to be required rather than an easement. Proposed N.J.A.C. 7:13-13.19(h) and (j)2 suggest that mitigation banks can only be established on land that is owned in fee simple. The Department should eliminate the requirement that mitigation bank sites must be owned in fee simple. (89)

753. COMMENT: At N.J.A.C. 7:13-13.4(b), the proposed rules state that "the Department shall approve mitigation only on property that is owned in fee simple and under legal control of the person responsible for performing the mitigation, unless the person responsible for performing the mitigation demonstrates that they have legal rights to the property sufficient to enable compliance with all requirements of this chapter." This has no meaning if the land must eventually be acquired and transferred in fee simple. This section should be prefaced by, "If the

land proposed as mitigation will be acquired in fee simple …" All mitigation banks and sites should not need to be constructed on land owned in fee simple by the mitigator. A Department-approved conservation restriction should suffice as it does in all other states except in New Jersey. Requiring fee simple ownership will create problems; for example, it will preclude the use of public land for mitigation. Also, fee simple acquisition in riparian zones is not often feasible, so a requirement of fee simple ownership increases the costs of mitigation without an associated benefit for the people of New Jersey. Furthermore, the condition places an unfair burden on mitigation banks. Under USEPA's 40 CFR Part 230, Compensatory Mitigation for Losses of Aquatic Resources of April 10, 2008, mitigation banks and permittee-provided mitigation sites are treated identically, as they should be in this proposed rule. Currently in New Jersey, many mitigation sites are constructed on lands that are protected by a Department approved Conservation Restriction but are not owned in fee simple by the mitigators while most banks are constructed on lands that are both owned by the mitigators in fee simple and protected by a Department approved conservation restriction. Please clarify if a private property encumbered by a Department approved conservation restriction that is not owned by the mitigator in fee simple is suitable for riparian zone mitigation for both permittees providing offsite mitigation and mitigation banks. As riparian zone mitigation must, by definition, occur along a stream corridor, land acquisition often involves relatively narrow bands of land rather than entire parcels. As a result, acquisition is often via deed restriction, not fee simple acquisition. Please confirm that riparian zone mitigation sites and banks may both be acquired solely via deed restriction and do not require fee simple acquisition. If fee simple ownership will

be required for mitigation banks, it should also be required for permittee-provided mitigation sites. (135)

RESPONSE TO COMMENTS 750 THROUGH 753: Ownership and/or control requirements for mitigation sites depend upon whether the mitigation is performed as part of a mitigation bank or is mitigation performed to compensate for impacts to riparian zone vegetation from a specific project/activity.

With reference to a mitigation bank project site, ownership in fee simple is important and is therefore required with the mitigation site to ultimately be transferred to a non-profit or governmental entity when the project has been demonstrated through an extended monitoring period to have been successfully completed. The requirement to transfer a completed mitigation bank to a non-profit or government entity is intended to ensure that the land has a steward whose goal is the perpetual protection of that property. This is important because mitigation banks generally are larger projects representing compensation for many acres of riparian impacts mitigated for on behalf of multiple property owners. Because of the larger area and greater amount of riparian zone benefits and functions provided by a mitigation bank project, it is important to ensure that the public benefit provided by the site is protected by, and becomes part of, a public or non-profit land protection program, with the mitigation banker required to provide funding to ensure that this occurs. Because mitigation banks are located on properties obtained by the banker for purposes of mitigation and generally encompass the entire site, transfer of the site upon successful completion of the mitigation project does not entail subdivision and other issues referenced by the commenters.

For mitigation projects not being performed by a mitigation bank, the FHACA Rules do not limit mitigation to lands owned in fee simple as long as it is demonstrated to the Department's satisfaction that the person responsible for performing the mitigation has legal rights to the property sufficient to enable them to comply with the requirements of the FHACA Rules. When permittees conduct their own mitigation on the same site as the permitted impacts, the mitigation sites are a portion of a larger development site. There is a presumption that the property owner will act as a steward to the mitigation site since it is part of their overall property. Additionally, because mitigation projects to compensate for riparian zone impacts from a specific project are generally smaller and it may not be possible for the mitigation project to be accomplished onsite, allowing mitigation to occur on lands not owned in fee simple recognizes the reluctance that some owners of riparian areas who otherwise might be amenable to mitigation occurring on their property may have to a requirement that they subdivide the potentially small area from their property and transfer full ownership to the mitigator, as referenced by the commenters. Allowing these projects to occur either onsite or on a portion of another property for which the applicant has obtained legal rights sufficient to perform and permanently protect the mitigation area ensures that appropriate mitigation opportunities are realistically available for projects that cannot avoid riparian zone impacts without the need to subdivide the small mitigation area from the larger tract for purposes of transfer, which would both decrease likely mitigation options and unnecessarily increase costs.

While smaller project specific mitigation sites are not required to be transferred to a non-profit or governmental entity, all mitigation areas, whether associated with a mitigation bank or not, are required by N.J.A.C. 7:13-13.2(g) to be permanently protected from future development

by a conservation restriction. This requirement ensures that the mitigation area continues to provide the compensatory riparian zone functions and values in perpetuity.

N.J.A.C. 7:13-13.1 Definitions

754. COMMENT: The definition of "creation" should be broadened to include restoring a valley or channel in its approximate historic location in addition to "daylighting" a piped section of a stream. The former is far more common and may include historic channel restorations in farm fields and dam removals. This activity should also be added at N.J.A.C. 7:13-13.9. (89)

755. COMMENT: The definition of "restoration" should be broadened to include bank stabilization, head cutting, and channel incising. (89)

RESPONSE TO COMMENTS 754 AND 755: The adopted definitions for the terms "creation," "enhancement," "restoration," and "preservation" describe the acceptable means by which riparian zone mitigation can be accomplished. Specific requirements applicable to these forms of mitigation are located at N.J.A.C. 7:13-13.9, 13.10, and 13.12. As the benefits provided by each form of mitigation vary, the rules require mitigation to be performed at a different ratio of creation to loss depending upon the form of mitigation performed, with those forms of mitigation providing the greatest value required to provide a lower ratio of creation to loss. Accordingly, it is important that the definitions accurately and clearly describe the types of activities falling within that mitigation method to ensure that the appropriate mitigation area is provided.

The Department does not agree that the definition of "creation" should be broadened to include relocation of a water to its original location. Instead, relocation of a previously modified stream is more appropriately categorized as restoration because of the ecological benefits provided. Accordingly, the adopted rules define "restoration" as "the reestablishment of the functions and values of a riparian zone or certain lands outside the riparian zone as described at N.J.A.C. 7:13-13.10, such as the removal of impervious surfaces and planting the area with native, non-invasive vegetation species or restoring a regulated water that has been previously straightened, channelized, or lined with revetments, retaining walls, or other armoring to a natural condition" (N.J.A.C. 7:13-13.1). A valley or channel that may no longer be in its historic location still retains a riparian zone and the ecological functions that the zone provides, even if those ecological functions may have been diminished by the prior modification. In contrast, a regulated water that is enclosed by a structure, such as a pipe or culvert, does not have an associated riparian zone. The process of daylighting a stream will not only provide ecological benefits to the stream itself, but the stream will now have a riparian buffer assigned to it, thus the "creation" of a riparian zone. Accordingly, recognizing the superior benefits provided by creation mitigation as compared to restoration mitigation, such as that described by the commenter, the area of mitigation required to compensate for impacts to riparian zone vegetation when restoration mitigation is proposed is larger than that required for creation mitigation.

As discussed above, "restoration" is defined to mean the reestablishment of the functions and values of a riparian zone or certain lands outside the riparian zone to a natural condition. If a stream bank is experiencing severe erosion that is compromising the natural stream bank, a proposed mitigation plan to address that erosion in order to restore the functions and values of

the stream bank to its natural condition would be included within the adopted definition of this term.

756. COMMENT: Please define "ecological function and value" as well as "tree." Forests consist of stratified layers, including woody and herbaceous plants. Please define the vegetative density replacement requirements for a stratified forest. Experiences with the application of these regulations and the parallel regulations under the FWPA indicate that mitigation goals may not meet Department expectations when they are not quantified. Mitigation performance should be measurable and quantifiable in terms of numerical representations of plant survival, plant coverage, and plant height over time. The proposed regulations leave the interpretation ambiguous, causing differences of opinion with the Department as to performance metrics, successful criteria achievement, and numerical mitigation targets. (135)

RESPONSE: The Department does not believe a definition of ecological function and value is necessary as ecological function and value can mean a variety of things and is based on site conditions. For example, the ecological function and value provided by riparian zone vegetation on a specific site could be the benefit of bank and channel stability, removing contaminants in surface water runoff, or controlling water temperature in the regulated water through shading. The ecological function and value required of a mitigation project will necessarily depend upon the particular benefits provided by the area impacted that creates the need for compensation. Generally, vegetated buffers along waters help to provide channel stability, provide a buffer that removes contaminants before they reach the water, provide leaf debris and detritus that benefit

fish and wildlife, keep the water temperature cooler, thereby increasing the amount of oxygen in the water, and provide corridors for movement and dispersal of many species of wildlife. In addition, vegetated buffers next to surface waters provide flood storage capacity and groundwater recharge functions. Therefore, an individual site is evaluated to determine the extent to which the riparian zone is providing each of the above benefits, and then the required mitigation is detailed in the permit condition reflective of those functions.

Further, the Department does not agree that a definition of “tree” is necessary with respect to determining the type of plantings needed for a mitigation site. As stated in the Response to Comment 310, the Department has deleted the definition of a tree since it is unnecessary with the adoption of the definition of a “forested riparian zone.” The deleted definition of "tree" was limited and only referred to vegetation as “woody plants that have a diameter of five inches or greater at a height of 4.5 feet above the ground.” Since trees that have a diameter of less than 4.5 inches can provide similar stability and water quality benefits, the proposed deletion of the existing definition will broaden the type of vegetation protected in cases where limitations are placed on the clearing, cutting, and/or removal of trees.

When trees are removed from the riparian zone and riparian compensation is required, the goal of the compensation plantings is to replace the lost functions and values. N.J.A.C. 7:13-13.11(e) describes broadly the standards by which the mitigation project shall be determined to be successful, including a required demonstration that the goals of the approved riparian zone mitigation proposal have been achieved. If the goal of the mitigation project is to eventually create a forested riparian zone, then the performance standard will be that the riparian zone is dominated by tree species and that those trees are of sufficient vigor to survive and eventually

perform the functions and values associated with a forested riparian zone. As previously mentioned, the details regarding the success criteria for a specific riparian zone will depend on the functions performed by the impacted area. The density of the planting will also be dependent on the plant stock that will be used at the mitigation site. If an applicant chooses to use bare root stock, which often has a high mortality rate, the required planting density will probably be higher than balled and burlapped plant stock.

As part of this rulemaking, the Department will develop checklists for riparian zone mitigation that will list the required items for a complete mitigation proposal. That checklist, along with the detailed permit conditions, will provide the permittee the information they need to submit an approvable mitigation plan.

N.J.A.C. 7:13-13.2 General Mitigation Requirements

757. COMMENT: The proposed text at N.J.A.C. 7:13-13.2(f) should be replaced with "A mitigation proposal submitted as part of a remedy for a violation shall provide for mitigation that is three times as ecologically valuable as mitigation that would otherwise be required under this chapter under an individual permit. The Department may require a greater amount of mitigation than that required under an individual permit where necessary to provide at least three times the ecological value due to the duration of time that the environment was impaired as a result of the particular regulated activities undertaken in violation of this chapter." (158, 159, and 180)

RESPONSE: Under N.J.A.C. 7:13-13.2(f), mitigation as part of a remedy for a violation must be at least as ecologically valuable as mitigation that would otherwise be required under an individual permit. Mitigation provided to remedy a violation must meet the standards set forth under N.J.A.C. 7:13-13 for the mitigation alternative(s) chosen. The amount of mitigation required to remedy a violation may be greater in some cases than the amount that would be required under an individual permit to provide at least equal ecological value due to the duration of time that the environment was impaired as a result of the particular regulated activities undertaken in violation of this chapter. Otherwise, the standards for the particular mitigation alternative(s) required to remedy a violation are the same as for any other mitigation site. It is not appropriate to dictate a mitigation ratio as the circumstances of every enforcement case differ. Making such a standard requirement would undermine the Department's ability to develop a remedy for a violation that is appropriate for the particular enforcement action.

758. COMMENT: N.J.A.C. 7:13-13.2(i) specifically prohibits combining mitigation for multiple permittees on one site. This should be clarified to explain whether or not the rule applies to bank sites. (89)

RESPONSE: As indicated in N.J.A.C. 7:13-13.2(i), an aggregate mitigation project may not be used as mitigation for a person other than the permittee "unless the permittee obtains approval of the project as a mitigation bank." The Department believes that further clarification is unnecessary.

759. COMMENT: If mitigation is to be successful (an outcome that is by no means guaranteed), it must have rules and standards and must be undertaken by experienced professionals. The USEPA, the United States Fish and Wildlife Service, the Army Corps of Engineers, national conservation organizations, and many state agencies and universities have published standards, guidelines, and best management practices pertaining to riparian area mitigation and mitigation banking. Mitigation to the extent proposed in this rule must reference a set of acceptable standards that will be the benchmark for determining the success or failure of a project and to which participants and mitigation projects must adhere. (24 and 147)

RESPONSE: The adopted rules aim to provide expanded options for riparian zone mitigation. The Department believes the commenter is referring to the standards that have been published for wetlands mitigation and mitigation banking. Specifically, these standards apply to "Wetlands, streams, and aquatic resources" under USACE jurisdiction and authorized by Section 404 of the Clean Water Act. The standards as adopted at N.J.A.C. 7:13-13, particularly in regards to mitigation banking, do not conflict with these standards, particularly as related to riparian zones, and the proposed rules set forth sufficient standards to govern mitigation banking. All mitigation projects must submit a mitigation proposal to the Department for review in accordance with N.J.A.C. 7:13-13.6, and all mitigation banks must submit an application providing all details related to the proposed mitigation bank for Departmental approval as specified in N.J.A.C. 7:13-13.20. Both for a proposed individual mitigation project and a proposed mitigation bank, the Department would review compliance with best management practices in riparian area mitigation and would only approve projects that meet the requirements

at N.J.A.C. 7:13-13. Additionally, the Department has established a monitoring and reporting schedule for riparian zone creation, restoration, and enhancement (N.J.A.C. 7:13-13.11), which will allow the Department to track the success of mitigation projects and take corrective actions if mitigation project goals are not met.

760. COMMENT: Proposed N.J.A.C. 7:13-13.2(j) is unclear. If it allows a single mitigation project to represent credit for both riparian zone destruction and destruction under the Freshwater Wetlands Protection Act, it is allowing double counting. The environment does not receive the same benefits as it would if the features were not disturbed. (28A, 42, 56, 67, and 127)

761. COMMENT: Functionality loss and degradation due to utility lines and many other permitted land use activities that impact multiple regulated areas, such as flood hazard areas, riparian zones, and wetlands, require mitigation or compensation. All impacts should be addressed individually. If a wetland was located in the riparian zone, compensation should be required for the impacts to the functionality of both the wetland and the riparian zone. An applicant should not realize the cost benefits of compensating only for the loss of functionality of one State resource simply because one resource was located within another. (183)

RESPONSE TO COMMENTS 760 and 761: The Department acknowledges that while some mitigation projects may satisfy requirements applicable under other rules, such as the Department's Freshwater Wetlands Protection Act Rules, they will only be accepted to satisfy the requirements of the FHACA Rules if they fully satisfy all of the requirements of the

mitigation subchapter (N.J.A.C. 7:13-13) to ensure that the necessary compensatory ecological benefit is fully achieved (see N.J.A.C. 7:13-13.2(j)). In the event that an area in the riparian zone that also happens to be a wetland is impacted, the Department will work with the permittee to locate a suitable mitigation site where a wetland can be created, restored, or enhanced in a manner that will satisfy the requirements applicable to both rules. Since these types of ecosystems coexist in nature, the most appropriate form of mitigation would be to perform the mitigation at the same location. Where this is not possible, it is incumbent upon the permittee to locate mitigation sites that will cumulatively ensure that compensation is provided for both the freshwater wetlands and flood hazard riparian zone impacts in accordance with the standards specified in both rules. Please also see the Response to Comment 849.

762. COMMENT: Proposed N.J.A.C. 7:13-13.2(g) should exempt mitigation activities resulting from the restoration of a temporarily disturbed riparian zone from the requirement to impose a conservation easement on the site. That would be consistent with the FWPA Rules. (59)

RESPONSE: The Department agrees that an area that is temporarily disturbed and subsequently restored should not be subject to a conservation restriction. Accordingly, while N.J.A.C. 7:13-11.2(z) requires that any temporary disturbance to riparian zone vegetation is replanted upon completion of the regulated activity, the rules do not specify that such replanting occur in accordance with N.J.A.C. 7:13-13. Therefore, replanting of temporarily disturbed areas is not

subject to the provisions of N.J.A.C. 7:13-13.2(g).

763. COMMENT: The Department must realize that it has an obligation to periodically inspect, monitor, and, if necessary, take enforcement measures on sites, particularly mitigated parcels. To effectuate these functions as well as to ensure proper recording, the submission of a "Base Line Information Report" that describes, maps, and provides visual documentation of a property's condition at the time an easement is recorded should be required. The Department should also provide sufficient resources for the implementation of these critical functions. (24)

764. COMMENT: The Department must have rules and must perform inspections to ensure that a restoration/mitigation project is successful and has long term viability. The Department's five-year reporting requirements are appreciated. However, the Department should undertake periodic inspections in addition to the self-reporting. There should also be provisions for periodic monitoring after the initial five years in order to ensure that the riparian zone mitigation project continues to function as proposed. (28A, 42, 56, 67, and 127)

RESPONSE TO COMMENTS 763 and 764: The Department agrees that monitoring to ensure continued success of a mitigation project is important and has incorporated provisions in the FHACA Rules designed to provide for necessary follow up on the success of mitigation projects. N.J.A.C. 7:13-13.11 sets forth the standards for monitoring and reporting for riparian restoration, enhancement, and creation projects. The monitoring requirements are initiated with the submission of a construction completion report, generally within 60 calendar days of

construction completion. This report serves as the baseline from which subsequent post-construction monitoring will be compared. The construction completion report documents the as-built conditions of the riparian zone mitigation project, including an explanation of any deviation from the approved project plan. Thereafter, annual monitoring reports must be submitted, generally for a five-year period with the duration and frequency subject to modification by the Department as necessary. The rules dictate what information is required to be included in the report. The report is intended to provide information to identify any areas where the goals of the project are not being achieved and outline corrective actions to be implemented to correct any deficiencies (see N.J.A.C. 7:13-13.11(c) and (d)). The Department reviews all monitoring reports that are submitted and regularly conducts inspections of the mitigation projects. To be considered successful, the final post-construction monitoring report must demonstrate that the goals of the mitigation project are met, the percent coverage of the planted vegetation in the approved mitigation proposal has been achieved, the mitigation meets all applicable requirements of this subchapter, and a conservation restriction has been executed. At any time, if a project is not complying with the conditions of a permit, the permit can be referred for enforcement action.

765. COMMENT: The Department's assertion that riparian zone mitigation is more predictable than freshwater wetlands mitigation is questionable. Has the Department undertaken its own studies regarding the success rate of riparian zone mitigation? Has it reviewed the scientific literature to determine whether this assertion is accurate? Please provide references. (28A, 42, 56, 67, and 127)

RESPONSE: Riparian zone mitigation generally involves the revegetation of an area devoid of plants. In contrast, a freshwater wetland mitigation project is complicated and consists of three parameters that must be successfully replicated in order for the site to meet the definition of a freshwater wetland and thus be considered a successful project. These parameters include hydrology, soils, and plants. If any of these parameters are not replicated, the site does not meet the definition of a freshwater wetland. Generally speaking, it is the hydrology parameter that makes wetland mitigation projects more complicated than riparian zone mitigation because of the complexity of determining the hydrology source as well as elevation of the site to achieve mitigation goals and objectives. It has been the Department's experience that if the impacted riparian zone is strictly an upland area then the successful reestablishment of vegetation in that zone is far less complicated than trying to replicate the three required parameters of a wetland environment. Successful planting of upland areas can be accomplished by the average homeowner with a few directions from their local nursery. Successful planting and establishment of a wetland is far more complicated and requires an experienced expert to successfully effectuate the project. Several years of monitoring ensures that the site is maintained and is successful.

766. COMMENT: The proposed N.J.A.C. 7:13-13.4(c)1 and 2 allow publically owned land to be used for mitigation and promote the use of Green Acres land with approval from the Green Acres program. If public land can be used for mitigation, the use of private land would not be cost competitive. (89)

RESPONSE: The use of publically owned land for riparian mitigation is consistent with the Department's policy for the use of publically owned land for wetland mitigation. In developing the criteria for riparian zone mitigation in the adopted rule, the Department relied on its experience in implementing the wetlands mitigation aspect of the Freshwater Wetlands Protection Act. The Department has found that many public entities that are required to provide some form of mitigation as a result of a permitted activity often own property that is suitable for mitigation purposes. See also the Response to Comment 767 thorough 770 for additional discussion on the use of public lands for mitigation.

767. COMMENT: Mitigation should be discouraged on public lands. Public lands are for the use and enjoyment of the public, not for use as an inexpensive mitigation alternative. In order to utilize public lands in this way, a public hearing must be held in the impacted community, and the mitigation ratio must be increased to offset the savings that the permittee will realize by performing the mitigation on public land rather than on private land. (96)

768. COMMENT: At N.J.A.C. 7:13-13.4(c)2, the Department proposes to allow mitigation projects on public lands if approved by the Green Acres Program. Land preserved with public funds should not be provided for mitigation projects unless the ratio of mitigation to disturbance is extremely high. Mitigation on private land requires the recording of a conservation easement, which has a certain value. Public lands are already protected, and any additional deed limitations

to protect a mitigation project are only of marginal value. The use of public lands to facilitate the loss of riparian buffers in the service of private interests is opposed. (24 and 147)

769. COMMENT: While public land should be an option for mitigation, as is authorized under proposed N.J.A.C. 7:13-13.4(c)2, the ratio for mitigation on public land should be much higher than it would be for private land parcels that the developer would need to acquire. Developers should have to pay the public for the right to use public land for mitigation, either through substantially higher mitigation ratios (acreage requirements) or by paying a fee for each acre of public land equal to the purchase price for private land that must be used for additional open space acquisition by Green Acres or local open space trust funds rather than the general fund. The playing field must be level; otherwise, our vast history of acquiring public trust lands will be converted into free space for mitigation projects. (91 and 195)

770. COMMENT: The Department should not permit mitigation to occur on preserved public property unless that mitigation is at an enhanced ratio. An enhanced ratio will compensate the public for the cost savings applicants receive when they do not need to buy mitigation property or credits. (28A, 42, 56, 67, and 127)

RESPONSE TO COMMENTS 767 THROUGH 770: N.J.A.C. 7:13-13.4(a) states that mitigation may be carried out on private or public property. N.J.A.C. 7:13-13.4(c) further states that the Department shall approve mitigation on public property if: the public entity agrees to record a conservation on the area of the mitigation projects or can demonstrate that an existing

conservation restriction will protect the mitigation project in perpetuity or where the land was acquired using Green Acres funding or is encumbered with Green Acres restrictions, the use of the area for mitigation purposes must be approved by the Green Acres Program. These provisions will allow for a private entity to conduct mitigation on public lands only if approval by the public entity is received or if approval from Green Acres is received. However, the provision to allow for mitigation on public property also allows for a public entity to conduct mitigation on property already owned by the public entity, which would reduce costs and be a cost benefit to the public. The Department does not consider the cost of mitigation when reviewing a mitigation proposal, instead focusing on ensuring that the mitigation fully compensates for riparian zone values and functions lost, regardless of whether the land is publicly or privately owned. As stated in the Response to Comment 766, the Department has found that many public entities that are required to provide some form of mitigation as a result of a permitted activity often own property that is suitable for mitigation purposes. These entities should not be precluded from using property they own for mitigation as mitigation adjacent to waterways owned by a public entity may provide significant public benefit in the form of improved water quality, increased wildlife habitat, and the reduction in erosion of stream banks. Further, if a private entity wishes to use public land for mitigation, the private entity would have to receive approval from the public entity in order to conduct mitigation on the public land. In addition, the mitigation conducted on public land by a private developer may provide significant public benefits as noted previously. As a result of the probable public benefit, the Department does not concur with the suggestion to require a higher ratio for private mitigation conducted on public lands. Finally, the Department's review and required ratios ensures that all mitigation

projects fully compensate for any ecological loss. A higher ratio based on the land in question penalizes the permittee financially but has little effect on the ecology of the site.

771. COMMENT: Proposed N.J.A.C. 7:13-13.4(e)2 should include the use of former stormwater management facilities no longer used for purposes of stormwater management or those being brought offline for the express purpose of providing mitigation, where appropriate. (89)

RESPONSE: N.J.A.C. 7:13-13.4(e)2 provides that a stormwater management facility, such as a basin, shall not constitute mitigation under this chapter. The Department is not sure what the commenter is referring to with respect to a basin no longer serving the purpose of treating stormwater since the Department cannot think of any scenarios when this has happened. However, if a stormwater basin was truly not being used to treat stormwater, then this provision would not apply. However, if a former stormwater basin was indeed no longer serving its original function and an applicant could demonstrate compliance with the mitigation provisions of these rules, the Department would consider a rulemaking of the type envisioned by the commenter.

772. COMMENT: The Department's prohibition under proposed N.J.A.C. 7:13-13.4(f) on transforming property that has a high ecological or flood control value into another form of high quality property for the purposes of mitigation is supported. (28A, 42, 56, 67, and 127)

RESPONSE: The Department acknowledges this comment in support of the rule.

773. COMMENT: At proposed N.J.A.C. 7:13-13.4(g), please add: "3. That increases erosion downstream or impairs macroinvertebrate habitat or increases the amount of fines in the sediment." (158, 159, and 180)

RESPONSE: N.J.A.C. 7:13-13.4(g) specifies that mitigation will not be approved if it would jeopardize a local population of threatened or endangered species or if it would destroy or otherwise negatively impact their habitat. With reference to control of erosion, impairments of macroinvertebrate habitat, and the amount of fines in sediment, these issues are addressed in the rules as indicated in the Response to Comment 404.

774. COMMENT: The ecological risk standards under N.J.A.C. 7:13-13.4(h) should apply to all four forms of mitigation, including preservation and enhancement along with creation and restoration. Under N.J.A.C. 7:13-13.4(h)2, some consideration could be given in the form of favorable credit ratios for those projects that remediate then restore, create, or enhance. (89)

RESPONSE: The adopted FHACA Rules at N.J.A.C. 7:13-13.4(h) make clear that, where there is a potential that the conduct of certain forms of mitigation could pose an ecological risk, that risk must be addressed or mitigation will not be allowed to proceed. Creation and restoration mitigation proposals have the potential to require a significant amount of earth work and therefore pose the greatest potential for ecological risk. In contrast, preservation and

enhancement riparian mitigation proposals do not typically require any earth moving and therefore do not pose a significant ecological risk. Accordingly, the Department believes that limiting N.J.A.C. 7:13-13.4(h) to creation and restoration mitigation proposals is appropriate. The Department does not believe that it is necessary to assign more favorable credits to those sites that conduct remediation prior to creation or restoration. Because, while the Department recognizes that the remediation provides positive environmental benefits, the rules require that mitigation must fully compensate for any lost riparian zone functions, providing credit for other environmental benefits unrelated to the riparian zone benefits lost would not provide the intended result. In addition, in accordance with N.J.A.C. 7:13-13.4(h) all creation and restoration mitigation sites may not pose any ecological risk. An applicant therefore must provide a mitigation site that does not pose an ecological risk as a basic requirement to determine a suitable site for mitigation.

775. COMMENT: At N.J.A.C. 7:13-13.4(h), the requirement to perform soil sampling and an ecological risk analysis for all riparian zone mitigation is onerous and unnecessary. (59)

RESPONSE: Where creation and restoration projects are proposed, N.J.A.C. 7:13-13.4(h) requires soil sampling and ecological risk analysis for riparian zone mitigation located in all areas where the proposed mitigation poses an ecological risk. Where the types of risk identified in the rule are present, the rule requires that the proposed mitigation area be characterized and assessed in accordance with the requirements for site remediation codified at N.J.A.C. 7:26E-1.16 and 4.9. As specified at N.J.A.C. 7:13-13.4(h), ecological risk means that the mitigation

may result in the reintroduction of contamination to ecological communities, the exposure of humans to contamination, or the contamination of the mitigation site by subsequent exposure to new areas of contamination requiring remediation. The Department believes that it is appropriate to require an assessment to avoid potential impacts to human health and the environment prior to the construction of a mitigation project.

N.J.A.C. 7:13-13.5 Conceptual Review of a Mitigation Area

776. COMMENT: The rulemaking for a conceptual review for mitigation projects is well received. This non-binding guidance from the Department will be sent to the applicant within 30 days. This is an added benefit for the applicant and allows for flexibility, creativity, and transparency between the applicant and the Department. (119)

RESPONSE: The Department acknowledges this comment in support of the rule.

777. COMMENT: The qualifying language at N.J.A.C. 7:13-13.5(d) that "guidance on a proposed mitigation area is not binding" means that the conceptual guidance cannot be relied upon at all. The same language applies for bank approvals at N.J.A.C. 7:13-13.20(a). What is the point in seeking any preliminary feedback or conceptual approvals if the information cannot be relied upon to make business decisions? (89)

RESPONSE: A conceptual review of a mitigation area is optional and is similar to a pre-application meeting for regulated activities. The purpose of a conceptual review is for a prospective applicant to receive an initial determination from the Department as to whether there are any obvious issues with a proposed mitigation area that would preclude it from ultimately being approvable as a mitigation site before investing significant time and money into a potential project. Accordingly, the information required to be submitted to the Department and the level of review performed by the Department is limited. Ultimate approval of a mitigation site involves detailed review of the specific mitigation plan proposed and the characteristics of the site to determine the exact level and types of riparian zone benefit the proposed project will provide. In the case of a proposed mitigation project to compensate for impacts from a specific activity in the riparian zone, the Department's analysis must also include a determination whether the project will fully compensate for the ecological loss resulting from a proposed riparian zone impact. Accordingly, both for conceptual review of mitigation area associated with mitigation banks and for those intended to compensate for the riparian zone impacts from a specific project, it would be inappropriate for the Department to be bound by preliminary findings based upon limited information and would undermine the rules' requirement that any mitigation authorized is of a type and amount that fully compensates for the loss involved. Should a potential applicant believe that the preliminary information provided through a conceptual review is insufficient upon which to base business decisions, it may provide the Department with the information necessary to obtain a binding determination through a formal application for a permit in accordance with N.J.A.C. 7:13-18.

778. COMMENT: At N.J.A.C. 7:13-13.5, if mitigation sites and banks are to be treated equitably, why are the review standards for conceptual review different? The review standards should be the same for mitigation sites and banks. (135)

RESPONSE: Conceptual review of a potential mitigation area is optional. However, the Department does request additional information to be submitted for a potential mitigation bank because these projects are typically more involved. The request for additional information enables the Department to more accurately predict any issues that would prevent a mitigation bank from being approved. For example, the requirement to submit information on the proposed number of credits is important because it is often the number of credits that can be achieved on a potential mitigation site that will determine if a mitigation banker will move forward with a potential bank. While the guidance provided is not binding for the reasons explained in the Response to Comment 777, the Department's request for additional information is meant to increase the likelihood that the guidance provided will provide a useful reflection of the likely outcome of a potential permit application so as to be of assistance to mitigation bankers who are looking to make business decisions taking into account the guidance received.

N.J.A.C. 7:13-13.6 Basic Requirements for Mitigation Proposals

779. COMMENT: N.J.A.C. 7:13-13.6(f)5 should require preliminary site assessments/characterizations for enhancement and preservation sites as well as creation and restoration sites. All sites should be required to conform to ecological risk standards. (89)

RESPONSE: The adopted rules do not require preliminary site assessment/characterization for enhancement and preservation sites. This is only required for creation and restoration. As stated in the Response to Comment 774, the requirement for the assessment takes into account the relative likelihood that the performance of the different forms of mitigation will create the types of ecological risks identified at N.J.A.C. 7:13-13.4(h). Creation and restoration mitigation proposals have the potential to require a significant amount of earth work and therefore pose the greatest potential for the types of ecological risk identified in N.J.A.C. 7:13-13.4(h). Preservation and enhancement riparian mitigation proposals do not typically require any earth moving and therefore do not pose a significant ecological risk.

780. COMMENT: Proposed N.J.A.C. 7:13-13.6(f)9 requires the applicant to furnish the Department with any "contracts, agreements, easements …" necessary to ensure compliance with the FHACA Rules for every mitigation proposal. All three requirements under N.J.A.C. 7:13-13.6(g) should apply to enhancement projects as well, especially the requirement to supply the cost estimates that were presumably used to calculate the financial assurances. Additionally, N.J.A.C. 7:13-13.6(g)1 and 2 should apply to all four mitigation types, including preservation. (89)

RESPONSE: As indicated by the commenter, N.J.A.C. 7:13-13.6(f)9 requires all mitigation projects, regardless of the mitigation alternative, to provide as part of the request for approval of the mitigation area documents necessary to ensure compliance with the FHACA Rules. While it

is necessary for all types of mitigation to demonstrate compliance with all provisions of the rules applicable to the mitigation project proposed, the Department does not agree that the requirements under N.J.A.C. 7:13-13.6(g) should apply to enhancement and preservation mitigation projects. With reference to N.J.A.C. 7:13-13.6(g)1, only creation and restoration mitigation, which both require earthwork, would have calculations necessary to construct the riparian zone. With reference to N.J.A.C. 7:13-13.6(g)2, when riparian zone mitigation is proposed, the location of nearby riparian zones or preserved property can provide added ecological value to a proposed mitigation site, particularly if the proposed mitigation site can expand the ecological features on an adjacent property. This is not necessary on enhancement and preservation projects since the riparian zone already exists, while for creation and restoration riparian zone projects, this is important so that an isolated riparian zone is not established. Finally, N.J.A.C. 7:13-13.6(g)3, which requires provision of cost information, including costs related to maintenance of the mitigation after the area has been completed and/or transferred, does not apply to enhancement or preservation mitigation sites as financial assurance is not required for enhancement or preservation mitigation sites (see N.J.A.C. 7:13-13.14(a)). As stated in the notice of proposal Summary, because creation and restoration mitigation projects involve the most intensive amount of activity, including removal of structures, returning waters to their natural condition and function, and potentially extensive planting of native vegetation in the newly created/restored riparian area, they also entail the greatest potential for environmental damage should activities cease before construction of the project is completed with structures only partially removed or a stream channel exposed and returned to a prior location, but banks not stabilized as required, as well as a greater level of potential post-construction activity, such

as adjustments to correct unanticipated conditions or replanting plants that initially do not survive. Accordingly, it is most important to ensure that adequate resources are available both in the construction of these types of mitigation and during the post-construction monitoring period.

N.J.A.C. 7:13-13.8 Riparian Zone Mitigation Options and Mitigation Location

781. COMMENT: N.J.A.C. 7:13-13.8(b) should be converted into a mitigation hierarchy with banking as the preferred method. (89)

782. COMMENT: Is the order of the mitigation options representative of the Department's preferred mitigation hierarchy? Are bank credits preferred over site mitigation? Is creation preferred over enhancement? (135)

783. COMMENT: The rule should state that all other mitigation options should be exhausted prior to seeking approval for a preservation project. (89)

784. COMMENT: The Department is proposing two new mitigation methods, riparian zone creation and riparian zone preservation. Standards for riparian zone mitigation banks are also proposed for adoption. Please clarify whether one particular type of mitigation will be preferred over another. (15)

785. COMMENT: The proposed rules do not mention a mitigation hierarchy. One should be added under N.J.A.C. 7:13-13.13(a) with the purchase of credits listed as the preferred method in the hierarchy. This mitigation method is mentioned only in N.J.A.C. 7:13-13.8(b) but not as part of a hierarchy. The Department will need to determine an applicant's suitability for purchasing bank credits and how many credits that applicant will need to purchase. (89)

786. COMMENT: These mitigation provisions should have a hierarchical structure that would require mitigation to first be performed on the same waterbody as the disturbance and then within the same watershed. As the rules are now proposed, mitigation could be performed in Cape May County when the impacts occurred in Monmouth County. (91 and 195)

RESPONSE TO COMMENTS 781 THROUGH 786: As proposed and adopted, the rules do not include a mitigation hierarchy; as long as the proposed mitigation satisfies the overarching requirement that it fully compensate for any ecological loss as well as other requirements specified in the rules for the type of mitigation chosen, the choice of which form of mitigation works best in the specific circumstances of the particular impact that must be compensated for is left to the applicant seeking Department approval.

In response to the comments received and upon further consideration, the Department is proposing elsewhere in this issue of the New Jersey Register a limited hierarchy. The proposed hierarchy continues to allow the applicant to choose whether creation, restoration, enhancement, or preservation is the most appropriate option for mitigation in the circumstances of their particular application. However, for the reasons set forth in the Response to Comments 788

through 799, the proposed amendment makes clear that onsite mitigation is preferable to offsite mitigation. Accordingly, under the proposed amendment, only if a mitigator can demonstrate that onsite mitigation is not feasible can mitigation take place either offsite or through the purchase of credits from a mitigation bank. For similar reasons reflecting the requirement that mitigation fully compensate for any ecological loss, under the adopted amendments and new rules, where mitigation is to be provided through purchase of credits from a mitigation bank, it is required that mitigation credits be purchased from a mitigation bank that has an approved service area that includes the location where the disturbance to the riparian zone is to occur (N.J.A.C. 7:13-13.8(b)).

The Department has implemented a successful wetland mitigation program for over 25 years and a riparian zone mitigation program for over 8 years. A flexible program allowing the applicant to choose to propose a particular type of mitigation to satisfy the applicant's mitigation obligations is one factor that has led to that success. The adopted rules continue to provide for that same flexibility while including specific requirements to ensure a successful mitigation project, regardless of which option is chosen by the applicant. For example, N.J.A.C. 7:13-13.2(a) requires that mitigation compensate fully for any ecological loss. To ensure that all mitigation projects satisfy this overarching requirement, the rules require that all forms of mitigation provide specific information, identified at N.J.A.C. 7:13-13.6, to provide the Department with the information necessary to confirm that the proposed project will provide the appropriate level of compensation. Further, taking into account the different benefits achieved by the different forms of mitigation allowed under the rules, the rules establish specific ratios of area of mitigation provided as compared to the area of riparian vegetation disturbed for creation,

restoration, and enhancement mitigation. For preservation mitigation, the rules identify at N.J.A.C. 7:13-13.12 specific factors that determine the amount of mitigation required to ensure that the proposed mitigation fully compensates for any ecological loss resulting from the riparian zone vegetation disturbance. Those provisions provide the Department with the means to ensure that the proposed mitigation project, no matter which form is chosen, satisfies the requirements of the rules, making establishment of any hierarchy, other than the concurrently proposed preference for onsite mitigation, unnecessary. Should the applicant propose a mitigation option that for some reason is not able to provide the level of compensation needed to fully compensate for ecological loss resulting from unavoidable impacts to riparian zone vegetation, the proposed mitigation will be denied with the applicant left to choose one of the other options allowed by the rules that can be demonstrated to provide the required level of compensation.

With reference to the location of mitigation and whether mitigation in one part of the State could serve to compensate for impacts occurring in another part of the State, see the Response to Comments 788 through 799.

787. COMMENT: The proposition that mitigation should occur in the area of the disturbance impact is supported. Without this close proximity, the ability to reach water quality goals will be hampered. (28A, 42, 56, 67, and 127)

RESPONSE: The Department acknowledges this comment in support of the rule.

788. COMMENT: Mitigation rarely works. When it is successful, the benefit should occur in the same area as the disturbance. A great example is the Route 29 tunnel in Trenton; that project caused significant problems, but the mitigation occurred in the Delaware Bay. How does that help the people of Trenton and the people of Burlington County who were impacted by the Route 29 tunnel? In this rare instance when mitigation was successful, the Delaware Bay Shore received the benefit. This rulemaking should be rejected. (128)

789. COMMENT: The proposed service areas are based on the existing watershed management areas, but they should be smaller. The first priority should be to mitigate along the same waterway segment. As the mitigation moves farther away from the impact, the ratio should increase. (96)

790. COMMENT: To the extent that mitigation is allowed, it must occur within the same HUC-14 sub-watershed as the disturbance or impact and as close in proximity to it as possible. Further, it should, if possible, occur on the same stream or other waterbody as the disturbance or impact. The Department should not adopt the rules as proposed. (81)

791. COMMENT: Please do not allow mitigation to occur in broad service areas that can include the entire HUC-14 watershed and even adjacent watershed management areas. An area disturbed in tiny, first-order tributary headwaters cannot be restored by mitigating higher-order streams in the same watershed, let alone in different watersheds. Mitigation must be performed

adjacent to equal or lower order channels, not higher order ones. The rules propose a paper exercise that is transparently ineffective. (158, 159, and 180)

792. COMMENT: The goal of these regulations should be to avoid impacts to the riparian zone. Only after a comprehensive analysis reveals that impacts cannot be avoided should an applicant receive permits for those impacts with a requirement to restore the disturbance. In these cases, that restoration should be done as close to the damage as possible. Ideally, the restoration should occur on the same waterway in the same HUC-14. If that is impossible, then it should occur on the same waterway in the same HUC-11 or on a nearby waterway in the same HUC-14. (28A, 42, 56, 67, and 127)

793. COMMENT: The proposed mitigation credit plan should be reevaluated. The effectiveness of mitigation is questionable, and in the proposed rules, the acceptable mitigation area is too large. The Metedeconk River is located in WMA 13, which is roughly 660 square miles in size. Under the proposed rules, a disturbance to the stream bank of the Metedeconk River could be mitigated by stream stabilization on the Mullica River, located nearly 50 miles to the south. If mitigation is included in the new rules, it should occur within the HUC-14 or HUC-11 watershed that sustains the damage. (76)

794. COMMENT: Mitigation bank service areas are only mentioned in proposed N.J.A.C. 7:13-13.20(c)6, which only establishes a preference for mitigation within the same watershed management area. This language may provide flexibility for establishing larger service areas, but

it may prove problematic if the Department is to decide the appropriateness of every credit purchase and banking is not at the top of the mitigation hierarchy. (89)

795. COMMENT: Under N.J.A.C. 7:13-13.8(b)1 and (c), "service area" is only generally defined in the regulations. It needs to be specially defined in order that mitigation will be effective and will not result in impairment. (158, 159, and 180)

796. COMMENT: The provision allowing for the restoration of a riparian zone that is not truly functioning is good, but the rule does not require the restoration to occur in the area closest to the disturbance. It appears as if it could occur anywhere. There should be defaults. A disturbed riparian zone should be restored close to the new disturbance. Restoration should be in the same watershed or in the same waterway. Allowing it to occur anywhere does not protect the water quality of the disturbed waterbody. It does not protect people from harm. (28A, 42, 56, 67, and 127)

797. COMMENT: The requirement that compensation at a 2:1 ratio in the form of replanting vegetation or enhancement of vegetation in appropriate areas within the same regulated water as the disturbed riparian zone situated as close as possible to the area of disturbance is appropriate and should be maintained. It is crucial to maintain the integrity of the benefits of the riparian zone, including both water quality and flood damage reduction benefits. Allowing compensatory action for disturbances to riparian zones along another waterway deprives the impacted streams and communities of the benefits of a healthy riparian zone. Specifically, these areas are

damaged by the loss of the riparian zone and do not get the replacement protection or benefits that the compensation is supposed to provide. (183)

798. COMMENT: When riparian vegetation disturbance is unavoidable, mitigation should be targeted; it should be within the same HUC-14 watershed and in-kind, meaning that wetlands are mitigated with wetlands and not with uplands, for example. (24)

799. COMMENT: The proposed rules do not provide sufficient scientific basis to justify the types of mitigation that are to be allowed, the specific ecological values that are to be replaced, or the variety of locations where mitigation may take place. In a departure from the Department's existing requirement that riparian buffer replacement mitigation occur within the same waterway, mitigation under the proposed rule may occur anywhere within the same watershed management area or in an adjacent one. The State is divided into twenty watershed management areas that are similar to counties in terms of size. These areas are too large. As in the Stormwater and FWPA Rules, mitigation should occur in the same HUC-14 subwatershed, if not in the same waterbody. No scientific basis is provided to support the value or merit of mitigation that has neither a hydrological nor ecological connection with the disturbed area but does serve the convenience of the applicant. (24 and 147)

RESPONSE TO COMMENTS 788 THROUGH 799: N.J.A.C. 7:13-13.2(a) establishes an overarching requirement that all mitigation must fully compensate for any ecological loss resulting from an unavoidable riparian zone impact. To ensure that a mitigation project

adequately compensates for unavoidable impacts to the riparian zone, it is necessary that factors such as size of the area of mitigation provided, the proximity of the proposed mitigation area to the impact area, and the target plant community are all taken into consideration, recognizing that those factors, as well as others, can influence the relative level of benefit provided by the mitigation.

As stated above, multiple factors, such as site size and location, influence the likelihood of a proposed mitigation project successfully uplifting or creating the targeted ecological functions. The degree of uplift is dependent upon the interplay of those different factors on that particular site. Ideally, mitigation occurs on a property possessing those characteristics to ensure the mitigation will be successful and will remain undisturbed in perpetuity. Taking that all into consideration, it has been the Department's experience that limiting the location of the riparian zone mitigation to the same waterway was sometimes impossible due to the lack of suitable sites. Furthermore, limiting potential mitigation sites to HUC-14 subwatershed as the area of impact sometimes restricted the Department's ability to approve otherwise excellent sites for wetland mitigation. Consequently, the Department has determined that restricting offsite mitigation projects to the same watershed management area as the area impacted, in conjunction with the requirement that all mitigation must meet N.J.A.C. 7:13-13.2(a), will ensure that the riparian zone mitigation adequately compensates for the lost riparian functions. While it is often the location of the proposed mitigation area in relation to the area of impact that is the determinative factor in deciding if the proposed project satisfies the requirement that mitigation fully compensate for the impact, the hierarchy specified in the concurrent notice of proposal published elsewhere in this issue of the New Jersey Register will ensure that the overarching requirement

of full compensation is met while providing appropriate flexibility to approve a superior mitigation project that satisfies the full compensation requirement in the same watershed management area as the impact, even if there may be another possible location physically closer to the site of disturbance.

It has been the Department's experience that in some cases there is a greater benefit to allow mitigation to occur at an offsite location. For example, a mitigation project that restores a riparian zone that is denuded of vegetation and that is actively eroding sediment into an adjacent water may provide a greater ecological uplift than attempting to locate mitigation along the impacted water. As another example, mitigation that is conducted adjacent to public land or other preserved area could provide a greater benefit than mitigation at the site of the disturbance. Similarly, a project in an area suffering from significant erosional impacts and having other issues may be more beneficial than one in a more stable area, even if the more stable area is in closer proximity to the area of disturbance. Accordingly, it is the Department's experience that it is not reasonable to strictly require, in all cases, that the mitigation area be on site or as close as possible to the area of disturbance. However, if it is demonstrated that no feasible mitigation project is available in the same watershed management area as the area of impact, the adopted rules, at N.J.A.C. 7:13-13.8(c), do require that mitigation in another watershed management area must occur as close as possible to the watershed management area where the disturbance is to occur. This provision specifically reiterates, for emphasis, the requirement that any project outside the watershed management area where the disturbance is to occur must, like any other mitigation project, satisfy the requirement of full compensation for all ecological impacts.

In conclusion, while the Department does not agree that a strict requirement that the mitigation occur as close to the area of disturbance as possible is appropriate, because of the superior benefits provided by mitigation on the same site as the disturbance in the vast majority of instances, the Department has determined that it is appropriate to require that mitigation occur on the site of the disturbance, with offsite mitigation only being allowed where it is demonstrated that onsite mitigation is not feasible. Accordingly, the Department is proposing this change elsewhere in this issue of the New Jersey Register.

N.J.A.C. 7:13-13.9 Riparian Zone Creation

800. COMMENT: At N.J.A.C. 7:13-13.9(b), please change "If creation is the mitigation alternative, the Department shall require creation at a creation to loss ratio of 1:1 unless the applicant demonstrates in accordance with (b)1 below that creation at a ratio of less than 1:1 will provide equal ecological functions and values" to "If creation is the mitigation alternative, the Department shall require creation at a creation to loss ratio of five acres created to one acre disturbed as Michigan does." N.J.A.C. 7:13-13.9(b)1 should be deleted. (158, 159, and 180)

RESPONSE: A riparian zone mitigation creation ratio of 1:1 with the possibility that that ratio may be reduced in appropriate circumstances to a ratio no less than 0.5:1 is reasonable. The Department has defined "creation" as "restoring to a natural condition a regulated water that is enclosed by a structure, such as a pipe or culvert." Should a regulated water be "daylighted," the end result is also the creation of a riparian zone where none presently existed. Accordingly, all

ecological benefits provided by that newly created riparian zone are 100 percent attributable to the mitigation project. Where an authorized disturbance results in elimination of all riparian zone functions and values, such as where a structure is constructed in the riparian zone, the newly created riparian zone would be expected to compensate for the ecological functions and values lost at a ratio of 1:1. However, in a case where the disturbance does not entirely eliminate the functions and values provided by the riparian zone, such as the conversion of one vegetation type to another, a mitigation creation ratio of less than 1:1 may be acceptable. Recognizing this possibility, N.J.A.C. 7:13-13.9(b)1 provides a process by which a mitigator can attempt to demonstrate, through productivity models or other similar studies, that a lessor ratio than 1:1 provides equal ecological value and therefore satisfies the requirement at N.J.A.C. 7:13-13.2(a). The commenter recommends that, instead of the 1:1 ratio provided by the rules with the possibility that lesser mitigation may be allowed in limited circumstances, a creation to loss ratio of five acres created to one acre loss as used by the Michigan Department of Environmental Quality should be required. The Michigan Department of Environmental Quality applies a ratio of five acres created to one acre lost only for rare or imperiled wetland types. This ratio is not justified for use within a riparian zone.

801. COMMENT: Repealing the standard 2:1 mitigation ratio and creating a more flexible ratio based on the type of mitigation being implemented is approved. This flexibility will provide for better mitigation projects. (119)

RESPONSE: The Department acknowledges this comment in support of the rule.

802. COMMENT: The Department's failure to require mitigation in a 2:1 ratio is backsliding. Additionally, the required mitigation must be for the same type of riparian zone as the disturbance. Any mitigation in a lesser type of riparian zone should be at an enhanced ratio so that the functional equivalent is provided. The ratio should not be 1:1 when a forest riparian zone is damaged in exchange for the restoration of a grassland riparian zone. These two systems do not provide the same hydrologic and ecological benefits. (28A, 42, 56, 67, and 127)

RESPONSE: The rules prior to this adoption at N.J.A.C. 7:13-10.2(t) required 2:1 compensation for all authorized impacts to a riparian zone in the form of either restoration or enhancement. As indicated at N.J.A.C. 7:13-13.1, restoration mitigation is accomplished by the reestablishment of the functions and values of a riparian zone or certain lands adjacent to the riparian zone through activities such as the removal of impervious surfaces and planting the area with native, non-invasive vegetation species or restoring to a natural condition a regulated water that has been previously straightened, channelized, or lined with revetments, retaining walls, or other armoring. Enhancement mitigation results in the improvement of the functions and values of a degraded riparian zone or certain adjacent areas by activities such as the removal of invasive plant species or the planting of native, non-invasive vegetation.

N.J.A.C. 7:13-13.10 provides further detail as to what is required for a proposed project to qualify as one of these forms of mitigation under the amended rules, including the type and location of land on which the mitigation may be performed, the level of restoration or enhancement that must be provided, and the ratio of mitigation area to riparian zone impacted

that is required depending upon which type of mitigation project is proposed. Both restoration and enhancement mitigation projects must result in land restored to a natural condition, free from any gravel, impervious surface, or manmade structures and manmade materials, except for structures necessary to support the proposed mitigation plan. The mitigation area must additionally be planted with native, non-invasive vegetation of equivalent or superior density and ecological functions and values as the disturbed area (N.J.A.C. 7:13-13.10(d)1 and 2). These requirements are designed to maximize the ecological values and functions that will result from the mitigation.

A two acres created to one acre lost compensation ratio (2:1) required under the prior regulations for the planting of trees in an area that is substantially void of trees is not always appropriate. For example, if the riparian zone to be disturbed by the regulated activity is grassland bird habitat, in order to replace that habitat, it would be necessary to plant grasses and shrubs instead of trees. Therefore, the Department is requiring that enhancement ratios generally be provided at an enhancement to loss ratio of three acres enhanced to one acre lost (3:1) and allowing vegetation other than trees to be planted as long as the vegetation is native, non-invasive, and of equivalent or superior density and provides equivalent ecological functions as the disturbed vegetation. Restoration ratios will generally be provided at a restoration to loss ratio of 2:1 as in the existing rule. The 2:1 ratio for restoration is still appropriate because, while enhancement includes planting vegetation in an area void of vegetation, in addition to the planting of vegetation, restoration also includes the removal of existing structures, such as parking lots. The ratios specified for these two continuing mitigation options are set at a level determined to be appropriate to ensure that performance of these forms of mitigation will result

in the mitigation satisfying the requirement specified at N.J.A.C. 7:13-13.2(a) with the mitigation provided fully compensating for any ecological loss.

Similar to creation mitigation, both enhancement and restoration mitigation do allow a mitigator to show through studies that a smaller ratio will fully replace the riparian zone functions and values lost or disturbed at the disturbance site. However, as is also required for creation mitigation, in no case will a lesser ratio be approved unless the Department is satisfied that the studies provided demonstrate that the lesser ratio continues to fully compensate for any ecological loss, thus continuing to provide the benefit sought to be ensured by the generally applicable ratios. The Department, therefore, is not backsliding; it is simply expanding the options of mitigation and in many cases requiring more compensation than what has previously been required. In all mitigation alternatives, the applicant must provide mitigation that has equal ecological functions and values to what was disturbed. In no instance would a permittee be permitted to mitigate a forested impact with grass. In this case, the permittee would be required to provide forested mitigation.

803. COMMENT: At N.J.A.C. 7:13-13.9(c)2 and 13.10(e)2, how will “maximum extent practicable” be determined? How will benthic characteristics be determined? Such nebulous phrasing exemplifies the Department’s need for an oversight committee, represented by academic experts, water advocacy groups, and Department staff and appointees, with open public meetings. (158, 159, and 180)

RESPONSE: "Creation," the requirements for which are specified at N.J.A.C. 7:13-13.9, means restoring to a natural condition a regulated water that is enclosed by a structure, such as a pipe or culvert. "Enhancement," which N.J.A.C. 7:13-13.10(e)2, cited by the commenter, addresses, is the reestablishment of the functions and values of a riparian zone or certain lands outside the riparian zone through activities such as the removal of impervious surfaces and planting the area with native, non-invasive vegetation species or restoring a regulated water that has been previously straightened, channelized, or lined with revetments, retaining walls, or other armoring to a natural condition.

The Department has considerable experience in the review and approval of the restoration of regulated waters that were once piped or culverted or were relocated due to remediation activities. Each case is unique, and the final condition of the restoration is based on the site conditions. For example, in the Borough of Pine Hill the Department issued a permit that authorized the reconstruction of 900 feet of a trout production stream that had been routed through a pipe for decades (Masons Run). The design of the daylighted stream was based on the existing conditions of the stream, both upstream and downstream of the piped section. The Department worked closely with the permittee's engineer on the design, and the project was successfully completed in 2000. A site inspection conducted in November of 2015 demonstrated that the physical characteristics of the daylighted segment of the stream were identical to the upstream waters and are consistent with the adjacent portions of the stream. Due to the individual nature of each site, the Department uses the term "maximum extent practicable" to ensure that all creation sites are established to natural conditions whenever feasible. Sometimes, these sites have been channelized for many decades, and it is nearly impossible to restore the site

to its natural condition prior to the channelization. However, it is possible for the site to be restored to closely resemble these historic conditions. For the reasons discussed at comment 208, it is the Department's legislative mandate to make decisions necessary to protect public health and safety and the environment. The Department seeks input where necessary and provides opportunity for public input both for rulemaking in accordance with the Administrative Procedure Act and for permit applications with the potential for significant impact in accordance with the notice provisions contained in this chapter. An oversight committee is unnecessary.

N.J.A.C. 7:13-13.10 Riparian Zone Restoration and Enhancement

804. COMMENT: When riparian areas are disturbed, erosion increases the amount of clay and silt fines in the sediment downstream, impairing or degrading macroinvertebrate habitat. Do not allow disturbed areas to be mitigated at ratios equal to or even less than the area that was disrupted. Mitigation must require that all increased runoff is infiltrated, unless soils and water table make that impractical, and that the disturbed area is mitigated with habitat of the highest value at a creation to loss ratio of at least 5:1, as Michigan's mitigation policy requires. The reason for this is that buffers are more effective when they are undisturbed and contiguous, rather than when they are a patchwork of mitigation projects. Please rewrite N.J.A.C. 7:13-13.10(b)1, (c), and (c)1 to prohibit restoration at a ratio of less than five acres created to one acre lost. Mitigation banks and river restoration projects are typically profitable for the purveyors of restoration work but disappointing for the environment. (158, 159, and 180)

RESPONSE: N.J.A.C. 7:13-13.10(b) and (c) require that restoration and enhancement mitigation be performed at ratios of mitigation area to area lost or disturbed of 2:1 and 3:1, respectively. In accordance with N.J.A.C. 7:13-13.10, in no case shall the Department approve a restoration or enhancement ratio of less than 1:1. In order for the Department to accept a ratio less than the generally applicable 2:1 and 3:1 standards at N.J.A.C. 7:13-13.10(b) and (c), the applicant will have to demonstrate that the smaller mitigation area will result in establishment of a riparian zone of equal ecological value to that lost or disturbed. The commenter recommends a restoration to loss ratio of five acres created to one acre lost as it is indicated is used by the Michigan Department of Environmental Quality. The Michigan Department of Environmental Quality applies a ratio of five acres created to one acres lost only for rare or imperiled wetland types. This ratio is not justified for use within a riparian zone. The Department has determined that, in the absence of the type of proofs required by N.J.A.C. 7:13-13.10(b)1 and (c)1, for riparian zone disturbance to be compensated for by a riparian zone restoration or enhancement project, minimum ratios of two acres restored to one acre lost and three acres enhanced to one acre lost ensure that the mitigation will compensate for any ecological loss and will provide equal ecological value as the area disturbed.

805. COMMENT: Riparian zone restoration should be completed at a 1:1 ratio. The Department has allowed this for many environmental remediation projects under the existing FHACA Rules. The rulemaking states that a mitigator may restore riparian zones at a ratio of less than 2:1 if studies are provided to demonstrate that restoring a smaller area of riparian zone will result in replacement riparian zones of equal ecological value to those lost or disturbed. In

order to demonstrate equal ecological value, the mitigator must survey the conditions on the site of disturbance and on the proposed mitigation area and then provide written documentation regarding the existing and proposed vegetation, including type, density, and ability to remove sediment and pollution; all proposed bank stability and erosion protection measures; and any anticipated wildlife habitat conditions. The documentation must also detail how the mitigation proposal will replace the ecological values of the lost or disturbed riparian zone. Sites that are contaminated and undergoing remediation as part of an approved remedial action work plan should be accepted for mitigation at a 1:1 ratio without requiring all of this additional documentation. (101)

806. COMMENT: The ratio for riparian zone restoration (the removal of pavement and planting) to riparian disturbance should be 1:1, not 2:1. Paved riparian zones do not provide any ecological benefit, and restoring them to vegetated areas should be sufficient to compensate for the removal of vegetation in a riparian zone. Once vegetated, a riparian zone immediately starts to provide water quality benefits. Riparian zone revegetation also involves less risk than restoring a wetlands area as wetland hydrology does not need to be achieved. A riparian zone is most similar to a wetland transition area. Wetland transition area compensation is allowed at a 1:1 ratio in transition area averaging. A 1:1 ratio should therefore be sufficient for riparian zone restoration. Similarly, the ratio for riparian zone enhancement should be no more than 2:1, not 3:1. Planting woody vegetation in a lawn area quickly provides riparian zone benefits and adequately replaces lost riparian zone function. (59)

RESPONSE TO COMMENTS 805 and 806: The adopted rule requires different levels of mitigation ratios in an attempt to fully compensate for the riparian zone area impacted by the regulated activity with the amount/ratio of mitigation area to area disturbed dependent upon the form of mitigation proposed. The Department has set standard mitigation ratios to ensure mitigation of equal ecological value with the adopted rule providing an opportunity for the mitigator to demonstrate that a lesser ratio fully compensates for any ecological loss. While the Department may have authorized environmental remediation projects under the existing FHACA Rule to allow for riparian zone restoration at a 1:1 ratio, such a deviation from the 2:1 ratio could only have been approved through the issuance of a hardship exception. As previously noted, the Department has determined in the adopted rule that it is appropriate to set forth a process to reduce a mitigation ratio without going through the effort to apply for a hardship exception. The level of justification required to demonstrate that a ratio should be reduced is dependent on the project, but in all instances, the mitigation must fully compensate for the loss of riparian zone functions and values. Consequently, the Department feels that a ratio of 2:1 for restoration and a ratio of 3:1 for enhancement, with a process to demonstrate that the ratio can be reduced, will adequately compensate for the loss of riparian zone functions and values.

807. COMMENT: The Department is cautioned to carefully review mitigation projects that propose less than a 2:1 mitigation ratio. The Department will also need to review proposals for the planting of native and non-invasive species to ensure that they are based on common sense rather than other factors, such as costs or time. The Department will need to monitor the

approved mitigation projects to ensure that they are completed in accordance with their permits and that they are mitigated in the manner in which they were approved. (119)

808. COMMENT: What standards will the Department use in assessing requests to reduce the mitigation ratios? (157)

809. COMMENT: N.J.A.C. 7:13-13.10 allows a mitigation ratio of less than 2:1. More specificity in the rule is required to determine ecological value in a universally accepted manner. The Department and others have used many methods to assess mitigation ecological value, but in the end, mitigation is too often reduced to prescribed ratios that, oddly, are all whole numbers or are simply based on precedent. If a mitigator and the Department are to realistically implement the ecological value assessment, a mutually accepted methodology and means of measurement that can stand up to independent review is necessary. Otherwise, this regulation has little applicability and will result in wasted analysis effort and subjective interpretation and decisions; mitigation will be reduced to ratios as detailed in the regulations or as established over time based on recent mitigation efforts and approvals. (135)

RESPONSE TO COMMENTS 807 THROUGH 809: N.J.A.C. 7:13-13.9(b), 13.10(b), and 13.10(c) specify the information that the Department will consider in reviewing a request to reduce the applicable mitigation ratio. Ultimately, the Department's determination to reduce the ratio will depend upon whether the studies and other information submitted by the applicant demonstrate that the proposed reduced area of mitigation will result in ecological values that are

equal or greater than the loss of ecological functions as a result of the riparian zone disturbance. With reference to ensuring that appropriate plantings are used and all other requirements of the approved mitigation project are complied with, this subchapter sets forth standards for monitoring designed to ensure that the mitigation site is constructed and achieves success in accordance with the approved mitigation plan. N.J.A.C. 7:13-13.11, Monitoring and reporting for riparian zone creation, restoration, and enhancement, sets forth the standards for reporting and monitoring of a mitigation site. Specifically, this section requires a construction completion report be submitted to the Department 60 days after the completion of construction to ensure that the mitigation site was constructed in accordance with the approved mitigation plan. In addition, the mitigator is required to monitor the site for five years and submit an annual post-construction monitoring report. N.J.A.C. 7:13-13 also includes specific standards that must be met for the mitigation project to be determined to be successful as well as a provision for corrective actions, should they be determined to be necessary, to achieve the standards resulting in a determination that the project has been successfully completed.

The Department reviews the required reports and conducts periodic site inspections based on the submission of those reports. Monitoring reports are reviewed annually, and the priority for conducting a site inspection depends on the review of the monitoring report. For example, if a monitoring report for the second year of a project documents that the site is doing well, then it is likely that the Department will forgo a site inspection that year. On the other hand, if a monitoring report indicates that a site is experiencing some problems, a site inspection would occur to determine what corrective actions are necessary to bring the site into compliance.

810. COMMENT: Similar to wetland transition area averaging plans found at N.J.A.C. 7:7A, instead of following prescribed ratios, an applicant should be allowed to compensate along the same water boundary as the disturbance with an area that provides an equal ecological value and is no more than half of the original riparian width. For example, a 50-foot riparian zone should be approved for expansion up to 75 feet to mitigate for lost riparian zones onsite. An applicant should not be required to examine ecological values through the completion of studies as the rulemaking suggests. (101)

RESPONSE: The Department believes that using prescribed ratios is the only effective, consistent, and predictable way to ensure that the riparian zone mitigation achieves equal functions and values as the impacted riparian zone. The expansion of a riparian zone on site may not fully achieve equal function and values as the commenter has implied. However, N.J.A.C. 7:13-13.9(b) and 13.10(b) allow an applicant to demonstrate that a ratio less than that required, but not less than 1:1, would provide equivalent functions and values.

N.J.A.C. 7:13-13.11 Monitoring and Reporting for Riparian Zone Creation, Restoration, and Enhancement

811. COMMENT: The last sentence of proposed N.J.A.C. 7:13-13.11(c) states that, “Post-construction monitoring shall begin the first full growing season after the mitigation project is completed.” This is inconsistent with mitigation monitoring for wetland sites, which begins immediately after completion of construction. If construction is completed on or before June 30,

it is considered complete within that calendar year, while projects completed after June 30 are considered complete in the following calendar year. The Department should use the same standards as required under Section 404 of the Federal Clean Water Act and under New Jersey's FWPA Rules. For example, the mitigation banking instrument text reads: If construction is completed prior to June 30 in a given year, the first full year of monitoring would run through one calendar year to the following June 30. If construction is completed after June 30 in a given year, the first full year of monitoring would run through December 31st of the following calendar year. (89)

RESPONSE: The standard at N.J.A.C. 7:13-13.11(c) requires that a post-construction monitoring begins the first full growing season. Accordingly, if the mitigation project, including required planting, was completed just prior to the conclusion of the growing season, that year would not count toward satisfying the five-year monitoring requirement. This ensures that the period of monitoring is adequate to judge the long-term success of the mitigation project.

812. COMMENT: The proposed 7:13-13.11(c) states that "In addition to the construction completion report required under (b) above, the mitigator shall submit a post-construction monitoring report to the Department each year for five years after completion of any creation, restoration, or enhancement project, unless a different timeframe for submittal is specified in the approved mitigation proposal. The Department may modify the frequency and/or duration of required reporting if it determines that such modification is necessary to ensure the success of the

mitigation." Please clarify which conditions would allow the Department to modify the frequency and/or duration of required reporting. (135)

813. COMMENT: At proposed N.J.A.C. 7:13-13.11(c), please reduce the requirement for post-construction monitoring from five years to three years. Three years is sufficient time to determine if woody vegetation will become established at a site. (59)

RESPONSE TO COMMENTS 812 and 813: As indicated in other responses to comments, the ultimate standard any mitigation project is required to satisfy is that the mitigation project must fully compensate for any ecological loss resulting from the riparian zone disturbance. The rules at N.J.A.C. 7:13-13.11(e) provide the standards a mitigation project must satisfy to be determined to be successful. These standards measure the mitigation project against the requirements outlined in the approved riparian zone mitigation plan and the FHACA Rules. Because mitigation projects vary in complexity, potentially including factors such as changes in topography and grading, different forms of vegetation at different stages of maturity being utilized, predation, and/or management of invasive species, it may be possible to determine that a simple project has been successfully completed with vegetation having become fully established and the project meeting the standards of this subchapter in less than 5 years. In other cases, five years will be insufficient to provide the level of assurance necessary to ensure that the required full compensation for the long term has been achieved. For example, if the approved mitigation plan required a forested riparian zone and at the completion of year five, the mitigation site has only a few trees, then corrective actions and a longer monitoring period will be required in order

to achieve the standards of this subchapter. N.J.A.C. 7:13-13.11(c) recognizes that, particularly for more complex projects but also potentially for even the most simple projects, unforeseen events may lead to the need for corrective actions such as those identified in N.J.A.C. 7:13-13.11(f). Ultimately, each case will be analyzed on a case-by-case basis to determine if the standards specified in N.J.A.C. 7:13-13.11(e) have been satisfied or if reporting for some period other than five years or more frequent reporting is necessary to ensure the rules' requirements have been satisfied.

814. COMMENT: The Department should add timelines for its responses to annual monitoring reports for mitigation sites and banks, including credit release notifications. The Department should visit all mitigation sites and banks during the growing season of the monitoring year even if that occurs before the monitoring report is submitted, which is often in December as per the permit conditions, or it should approve mitigation and release mitigation credits based on the report without using the lack of a field visit in the monitoring year as a reason to delay the release of credits or the mitigation site approval until the growing season of the following year. The Department is often slow to respond to monitoring reports due to its intensive monitoring requirements and field inspections, which are not detailed in the rules but significantly impact permittees and mitigation providers. (135)

RESPONSE: Most monitoring reports are submitted in December and January. In most cases, Department review of a monitoring report includes a visit to the mitigation site. Due to the timing of the submission, it is not always feasible or practical to conduct the site inspection

during the winter months, resulting in a delay in completing the review. It is not appropriate to conduct a site inspection without the monitoring report. The purpose of a site inspection following the submission of a monitoring report is to confirm the findings of the monitoring report. For mitigation bank sites where the review of the monitoring report is tied to a credit release, the Department prioritizes these site inspections.

815. COMMENT: Please define "growing season." Recently, the Department has grown proscriptive with regard to monitoring methods, preferring plots as opposed to transects even if transects were approved in the permit's monitoring plan. Please provide direction as to the monitoring methods the Department endorses, such as the Peet method, so that differing opinions as to data collected and results presented in annual monitoring reports can be avoided. (135)

RESPONSE: "Growing season" as it relates to mitigation means that the installed plantings were planted and have been in the ground throughout all four seasons and have survived. A growing season typically starts in March. For example, should a landscape plan for a mitigation project be fully implemented in June of 2016, the first full growing season would begin in 2017. This is critical to determining if the planted materials will continue to survive in the future since each season provides unique stresses on the plants. The goal of all monitoring is to reflect accurately the vegetative composition of the mitigation site. The Department has suggested using the Peet method (Peet, Robert K., Thomas R. Wentworth, and Peter S. White; A Flexible, Multipurpose Method for Recording Vegetation Composition and Structure; Castanea 63(3) 262-274) because it sets out a sampling protocol for systematically collecting information on the herbaceous, scrub

shrub, and forest layers of a site. However, other methods may be utilized if they are demonstrated to be accepted as successfully providing an accurate representation of this same information for riparian zone mitigation sites.

816. COMMENT: The standards for a successful mitigation project as outlined at proposed N.J.A.C. 7:13-13.11(e) are vague and not exemplary of the Department's expectations. The Department has and will require 85 percent survival, 85 percent cover, less than 10 percent invasive species, and that all trees are taller than five feet at the end of the monitoring period. With this opportunity to fix the mitigation omissions of the 2007 FHACA Rules, the Department should revise this rule to make mitigation success criteria clear and quantifiable. (135)

RESPONSE: The standards that the commenter is referring to are specific to the Freshwater Wetland Protection Act Rules. The adopted rules at N.J.A.C. 7:13-13.11(e) provide the standards for success. These standards will allow the Department and the permittee to have the flexibility to set site-specific goals and success criteria on a site-by-site basis. The success criteria can then be based on the required mitigation and site conditions and can be based on the highest ecological function that is possible for the site. This will allow for a higher level of success than the prescribed standards set forth in the FWPA Rules.

817. COMMENT: The Department has denied the use of certain native tree species, even those native to the watershed and impact zone, due to a desire to see more climax communities or mast producing trees. All native species of the region should be permitted in mitigation plans.

The Department generally requires herbivory control but has prohibited various means of herbivory control while expecting tree survival and growth to meet success criteria. The Department should not prohibit the means and methods of herbivory control on mitigation sites that must be guaranteed by permittees and mitigation providers. (135)

RESPONSE: The Department requires that mitigation fully compensate for the lost values and functions of the riparian zone. When projects are undertaken, the majority of cases that affect forest are not affecting early successional forest; they are affecting mature forest or a forest comprised of varying age classes. When a mitigation project is undertaken, the goal is to “jump start” nature in an attempt to get to a more mature forest condition as quickly as possible by planting species that under normal circumstances would not occur for decades by way of natural succession. Therefore, the Department is less amenable to the use of early successional tree species since they would colonize the mitigation site without human interference and since they are not the targeted forest type being mitigated. For example, red maple (Acer rubrum) often colonizes a disturbed site in one or two growing seasons as a result of the seed dispersal abilities of the genus. Climax forest tree species, such as oaks (Quercus), could take decades to colonize a mitigation site depending on the proximity of a mature tree seed source. It is the Department's goal to attempt to prevent native tree monocultures and to accelerate the process of succession to increase diversity. The Department acknowledges the need to protect plants against herbivory due to the high number of deer in the State of New Jersey. The Department supports the use of herbivory controls, such as fencing, provided the control complies with other requirements contained in the rules addressing potential flood impacts because it not only allows the tree to

achieve the desired height but will also allow the tree to thrive once the herbivory control is removed or decomposes. The Department does not support the use of tree tubes for use with seedlings for herbivory control because, although they may successfully keep wildlife away, they stunt and negatively alter the growth of the trees they are supposed to be protecting so that, when removed, the trees cannot stand on their own.

818. COMMENT: Proposed N.J.A.C. 7:13-13.11(e)2 states that the success of the mitigation project shall be determined through post-construction monitoring reports that must show that "The percent coverage of the planted vegetation as detailed in the approved mitigation plan has been achieved." Volunteer plant material should also be considered when determining the success of a mitigation site. Specifically, all native species should be valued and counted. The objective of mitigation is successful ecological restoration, not the survival of planted nursery stock. (135)

819. COMMENT: At proposed N.J.A.C. 7:13-13.11(e)2, it states, "The percent cover of planted vegetation as detailed in the approved mitigation plan …" This should be changed to "planted or recruited preferred/native species," as is more or less stated under N.J.A.C. 7:13-13.11(d)4iii. (89)

RESPONSE TO COMMENTS 818 and 819: The purpose of conducting active mitigation (for example, by planting) is two-fold: to "jump-start" the succession process and to ensure that the plants that inhabit a site are desirable species and not invasive. By jump-starting the succession

process, the Department works with a mitigator to bring a mitigation site to a climax condition in a shorter period of time than would occur naturally in the absence of human intervention. Therefore, when evaluating the success of a mitigation site, the Department assesses the survival of the vegetation that was planted and approved in the mitigation plan. If the site is dominated by volunteer vegetation and the planted vegetation is absent or dead, the Department may conclude that the implementation of the mitigation plan was not successful because the mitigator did not achieve success in accordance with the approved mitigation plan. If volunteer plants are of the appropriate species for the mitigation project and they contribute to achievement of the planned percentage cover detailed in the mitigation plan, they may be considered. However, acceptance of any volunteer native species would not ensure that the purpose of the mitigation project was being achieved.

N.J.A.C. 7:13-13.12 Riparian Zone Preservation

820. COMMENT: Please confirm that mitigation in the form of preservation is not acceptable for mitigation on public property since such property is protected from commercial development by virtue of public ownership. (135)

RESPONSE: The adopted rules at N.J.A.C. 7:13-13.4 set forth the criteria for where mitigation, including preservation, may take place. Specifically, the rules allow mitigation on both private and public property, provided the standards at N.J.A.C. 7:13-13.4 are met. This is appropriate because the level of protection realized by the recording of a preservation conservation

restriction is greater than the level of protection that comes only from public ownership and any associated development restrictions.

821. COMMENT: A maximum ratio of perhaps 7:1 should be required for riparian zone preservation in order to include predictability in planning for riparian mitigation. (59)

822. COMMENT: The Department uses an 8:1 ratio for riparian preservation mitigation. All other mitigation categories in these proposed rules have a starting ratio that may be lowered based upon ecological value analyses. Preservation requires a firm baseline ratio, which the Department does employ and those in the mitigation field are familiar with; this ratio should be stated in the rules. (135)

823. COMMENT: The new mitigation section of the rulemaking complicates the completion of riparian zone mitigation by including different mitigation ratios for different types of mitigation, including creation at a 1:1 ratio, enhancement at a 3:1 ratio, and restoration at a 2:1 ratio. However, no ratios are provided for riparian zone preservation. Preservation ratios should be considered under section N.J.A.C. 7:13-13.12. The absence of ratios may imply that preservation is far less expensive and thus to be preferred by the permittee. (89 and 101)

824. COMMENT: The Department should set a minimum ratio requirement of 27:1 for the use of preservation as a means of mitigation, which would be consistent with wetland mitigation rules. (29, 30, 46, 91, 96, 189, and 195)

825. COMMENT: At N.J.A.C. 7:13-13.12(c)3, please change “Significantly larger than the area that would be required for any other mitigation alternative” to “Significantly larger than the area that would be required for any other mitigation alternative; as a minimum, use the commonly accepted preservation/land donation ratio of 27:1.” The Department should specify how “significantly larger” will be determined? Such nebulous phrasing exemplifies the Department's need for an oversight committee, represented by academic experts, water advocacy groups, and Department staff and appointees, with open public meetings. (158, 159, and 180)

RESPONSE TO COMMENTS 821 THROUGH 825: The adopted rules do not set forth a standard ratio for preservation. The commenters have recommended 7:1, 8:1, or 27:1. The commonly accepted preservation/land donation ratio of 27 acres preserved to one acre impacted (27:1) is used for wetland mitigation. Since the FHACA Rules do not address wetland mitigation and wetlands and riparian zones have different functions and values, a standard 27:1 ratio is not appropriate in the context of riparian zone mitigation. The recommended ratios of 7:1 and 8:1 may be appropriate depending on the unique aspects of each site. The analysis of the functions and values of the impacted system to the function and values of the proposed preservation site will ultimately determine the ratio that the Department will utilize. The Department will, however, require ratios that are typically higher than the ratios prescribed for riparian zone creation, restoration, and enhancement. This type of analysis will not prevent the Department from utilizing a seven acre preserved to one acre impacted ratio (7:1) depending on the individual circumstances of the impacted site and the proposed preservation site.

826. COMMENT: Proposed N.J.A.C. 7:13-13.12(c)2 should include exceedance of the ecological screening criteria so that the preservation requirements are at least equivalent with the creation and restoration requirements as currently drafted. (89)

RESPONSE: The Department assumes that the commenter is referring to the requirement applicable to creation and restoration mitigation at N.J.A.C. 7:13-13.4(h), which specifies that the Department shall not approve creation or restoration mitigation in an area where the proposed mitigation poses an ecological risk. The Department believes that the requirement that the preservation mitigation area be “free of solid or hazardous waste, and water and soil pollution” is sufficient since there will be no earth work involved in the preservation of a riparian zone preservation property. The preservation of property for riparian zone mitigation does not pose an increase in ecological risk since there is no impact to the property. The only action on the property is the placement of the conservation restriction. The standards for creation and restoration are in place since these activities require earth moving and potentially a new surface that could create a new ecological risk. Therefore, to the extent the commenter is requesting that testing be conducted on all property proposed for preservation, the Department does not believe such testing is necessary.

827. COMMENT: Riparian zone mitigation in the form of preservation should not include a requirement for the area to be free of solid or hazardous waste and water and soil pollution. Project sites have been encountered that had bald eagles nesting within contaminated riparian

zones or other threatened or endangered species using riparian zones that contained some level of pollution, often in the form of historic fill. The presence of contamination should not preclude the use of mitigation in the form of preservation if the habitat is used by threatened or endangered species or includes highly valuable riparian zones, such as forested riparian zones, that could be at risk for development. (101)

RESPONSE: Habitat is only one of the functions and values provided by a riparian zone. As indicated in the rulemaking, among the many other important benefits provided by vegetated riparian zones that are to be protected are reduction of adverse effects to water quality by removing nutrients and pollutants from surface runoff and reduction of concentrations of nutrients and pollutants in subsurface water that flows into streams and other surface waters. A successful mitigation project addresses all the benefits provided by the riparian zone that have been impacted in the area of disturbance. The adopted riparian zone preservation standards are similar to the standards for freshwater wetlands and transition areas in the FWPA Rules. The Department believes that, in order to be a valuable component of a larger ecosystem and to provide all of the functions and values mitigation projects are required to provide to truly fully compensate for ecological impacts to the area of disturbance, the area should be free from solid or hazardous wastes and water and soil pollution.

828. COMMENT: At N.J.A.C. 7:13-13.12(d)3iii, please add “or have soils that are especially vulnerable to erosion such as acid soils of the Coastal Plain that down cut rather than erode

laterally, and are no longer able to overflow into their original riparian wetlands during bankfull storms." (158, 159, and 180)

RESPONSE: It is nearly impossible to identify within a rule all the potential unique aspects or characteristics of a site that would make a site a valuable preservation site. The additional factors identified at N.J.A.C. 7:13-13.12(d) are meant to capture broad categories of unique characteristics that may make a potential site and its relationship to other preserved or protected lands particularly valuable. However, as indicated in that subsection, the listed items are not intended to be all-inclusive. All factors that influence the ecological benefits to be provided by a site, both positive and negative, will be considered before a determination is made as to the suitability of a site and proposed project to satisfy the rule's requirements.

829. COMMENT: The introduction of these new mitigation alternatives is appreciated, but the requirements in the proposed rules for mitigation by preservation may unnecessarily prevent public utilities from qualifying for this mutually beneficial program. Specifically, the requirement for land set aside for preservation to be "transferred in fee simple to a government agency or a Department approved charitable conservancy," proposed at N.J.A.C. 7:13-13.12(e)2, will essentially preclude regulated public utilities from using this mitigation alternative because public utilities are generally not allowed to relinquish their rights to enter land that provides access to critical electric power infrastructure. As a result, it would be impossible, or at minimum impracticable, for public utilities to transfer title to any lands that, while otherwise

desirable and eligible for preservation, provide necessary access to linear development infrastructure. (51 and 92)

830. COMMENT: The New Jersey Board of Public Utilities (NJBPU) exercises careful control over public utilities, and its approval is usually required before a public utility may "sell, lease, mortgage, or otherwise dispose of or encumber its property, franchises, privileges, or rights, or any part thereof" (N.J.S.A. 48:3-7(a)). While this law carves out an exception for transfers to State agencies, even those transfers are subject to the blanket requirement to ensure that "unsafe, improper or inadequate" service does not occur, as stated at N.J.S.A. 48:3-3(a). This essentially provides the NJBPU with a veto power over asset transfers even in the case of transfers to State agencies. Any riparian zone preservation plan that would prevent essential LDI maintenance would risk compromising the safety and adequacy of transmission service, inviting intervention by NJBPU. The possibility that land transfers could be voided is a strong incentive for public utilities to avoid participation in a mitigation by preservation plan, as structured under the newly proposed rules at proposed N.J.A.C. 7:13-13.12(e)2. (51 and 92)

831. COMMENT: The commentary to the proposed rules notes that the new system of mitigation alternatives proposed in subchapter 13 mirrors systems that have already been implemented under the FWPA and, to a lesser extent, the CZM Rules. However, few similarities exist between the FWPA Rule, the CZM Rules, and the FHACA Rules – a fact that counsels against a "one size fits all" approach to regulating wetland, coastal, and riparian zones. Moreover, the FWPA and CZM Rules provide other equally effective preservation methods that

the Department should consider introducing as alternatives to the land transfer requirement under the FHACA Rules, particularly in the case of public utilities. In that regard, both the FWPA and CZM rules contain measures, at N.J.A.C. 7:7A-2.12 and 7:7-18.2, respectively, for establishing conservation restrictions and easements that provide for the permanent preservation of ecologically valuable lands and run with the land in perpetuity. Provided that an easement granted under such a system is sufficiently broad in scope, the ecological benefits of the easement would not differ appreciably from those of a transfer of title in fee simple; per the terms of the easements, the construction of permanent structures or impervious surfaces in the areas covered by the easements would be prohibited. (51 and 92)

RESPONSE TO COMMENTS 829 THROUGH 831: The Department believes that a site that is used for riparian zone preservation should meet very specific criteria. In addition, to ensure the long term protection of the preservation site, the mitigator should not only place a conservation restriction on the property but should transfer the site to a governmental agency or a Department approved charitable conservancy so that there is a third party monitoring the long-term protection of the site. That requirement is consistent with both the Freshwater Wetlands Protection Act rules and the Coastal Zone Management Rules. This does not preclude any applicant from utilizing another form of mitigation.

N.J.A.C. 7:13-13.13 Requirements for Credit Purchase from an Approved Mitigation Bank

832. COMMENT: Proposed N.J.A.C. 7:13-13.13(a) would be an appropriate place to stipulate that purchase of credits is the preferred method of mitigating riparian zone impacts. (89)

RESPONSE: Neither the adopted amendments and new rules nor the rules prior to this adoption stipulate that the purchase of credits is the preferred method of mitigating for riparian zone impacts. While, as indicated in the Response to Comments 781 through 786, the Department has determined that it is appropriate to require that onsite mitigation be provided where feasible and has proposed elsewhere in this issue of the New Jersey Register to amend the rules to include that requirement, the Department intends to allow for flexibility with reference to the form of mitigation chosen, including the option to purchase credits from a bank.

833. COMMENT: At proposed N.J.A.C. 7:13-13.13, if the Department determines that a proposal to provide mitigation through the purchase of credits from a mitigation bank is appropriate, the Department shall evaluate the values and functions lost as a result of the disturbance and then determine the number of credits required to ensure that the mitigation results in a riparian zone with functions and values equal to those lost. Using such an approach, a mitigation credit in a bank cannot be defined. The Department and the mitigation banking industry must understand the definition of a credit before bankers can risk investing in riparian mitigation banks. A banker must understand the value of the mitigation bank in order to assess cost benefit. A credit should be defined as the amount of mitigation required to offset one acre of riparian zone impact. (135)

RESPONSE: The Department determines how many credits a mitigation operator may receive or sell based upon the increase in values and functions created as a result of the proposed mitigation bank in accordance with N.J.A.C. 7:13-13.19. This will provide the banker certainty in the total number of credits that are possible at a bank. The amount of credits that a potential buyer would have to purchase should not have any effect on the economic viability of the bank. N.J.A.C. 7:13-13.13(a) describes the process used to determine the number of credits permittees must purchase from an approved mitigation bank to compensate for proposed impacts. This provision is intended to ensure that the amount of credits purchased from a mitigation bank represents an equivalent increase in functions and values to offset the impacts to functions and values resulting from the permitted activity. The number of credits required will vary depending on the individual circumstances of the impact, but in all cases the credits required will be the number determined to ensure that there is no loss in functions and values. To the extent the commenter is asking the price that should be charged for credits, the Department does not specify any price but anticipates that bank operators will set prices taking into account factors such as the costs involved in establishing and operating the mitigation bank as well as market forces.

N.J.A.C. 7:13-13.14 Financial Assurance for Mitigation Projects; General Provisions

834. COMMENT: At proposed N.J.A.C. 7:13-13.14, please define “independent contractor.” Is any professional mitigation provider who is not the permittee an “independent contractor?” (135)

RESPONSE: A mitigation project will only provide the benefits it was designed to provide to compensate for riparian zone impacts from a regulated activity if it is completed and post-project monitoring and maintenance is performed in accordance with the rules and the terms of the approval for the specific mitigation project. An unacceptable loss in riparian zone benefits will occur if the person or entity responsible for performing the mitigation either refuses to or becomes financially unable to perform all aspects of the mitigation project, including any required follow-up. To ensure that projects are completed and achieve the designed results, the Department requires financial assurance. In order to ensure that the amount of financial assurance meets the requirements of the rule, the Department requires that the cost estimates be provided by an independent contractor. The Department considers an independent contractor to be anyone that is not associated with the project but who has the experience and expertise to assess and itemize mitigation costs as required by the rules.

835. COMMENT: Financial assurance should be required for government agencies or those exempt from these requirements under Federal law. (89)

RESPONSE: In accordance with N.J.A.C. 7:13-13.14(a), financial assurance is not required for a mitigation proposal or mitigation bank proposal submitted by a governmental agency or an entity that is exempt from the requirement to provide financial assurance under Federal Law. This standard is consistent with financial assurance requirements under the Coastal Zone Management Rules and the Freshwater Wetlands Protection Act Rules, and the Department has determined that ensuring consistency in this regard is appropriate.

836. COMMENT: N.J.A.C. 7:13-13.14(d)5 appears to indicate that an insurance product is conditionally acceptable. (89)

RESPONSE: As adopted, N.J.A.C. 7:13-13.14(d)5 does not state that an insurance product is conditionally acceptable under these regulations. Instead, this provision states that other forms of financial assurance, other than self-insurance or self-guarantee, may be accepted if determined by the Department to meet the requirements of that section. Department staff will make the determination as to acceptable forms of financial assurance other than those specifically identified in N.J.A.C. 7:13-13.14(d)1 through 4, including potentially an insurance product, provided they meet the requirements of the rule.

837. COMMENT: N.J.A.C. 7:13-13.14(k) and (l) provide the banker 30 days to resolve mandated corrective measures before the bond is liquidated. These regulations should take into account the fact that corrective measures may not be possible until the next season; the time frame should be discussed and agreed upon by the banker and the Department. (89)

RESPONSE: As adopted, N.J.A.C. 7:13-13.14(k) does take into account that the timing of corrective measures may vary in particular cases. Specifically, while N.J.A.C. 7:13-13.14(k)2 generally requires that the mitigation project or bank be brought into conformance with the permit, mitigation banking instrument, enforcement document, or settlement agreement within 30 calendar days after receipt of this notice, specific provision is made for extension of the time

frame in writing by the Department. If the corrective measure is not feasible until the next growing season, then the Department can extend the time frame for compliance to allow the corrective measure to take place.

N.J.A.C. 7:13-13.19 Mitigation Banks

838. COMMENT: The additional flexibility provided by the creation of a mitigation bank will lead to better mitigation overall. Requiring letters of credit or bond sureties as financial assurances for creation and restoration mitigation projects is supported, but all mitigation projects utilizing a mitigation bank should require similar assurances. The level of assurance can be commensurate with the scale of the project; however, all mitigation bank projects should have financial backing. This ensures consistency for all projects and provides assurances for the Department. (119)

RESPONSE: In accordance with N.J.A.C. 7:13-13.14, financial assurance is required for mitigation projects involving creation or restoration activities as mitigation for disturbance to riparian zones. This includes both permittee responsible mitigation projects and mitigation banks. Any mitigation bank that includes restoration and creation would be required to post financial assurance; however, if that bank also includes preservation and enhancement activities, these activities would not be considered in the financial assurance requirement. Because creation and restoration mitigation projects involve the most intensive amount of activity, including removal of structures, returning waters to their natural condition and function, and

potentially extensive planting of native vegetation in the newly created/restored riparian area, they also entail the greatest potential for environmental damage should activities cease before construction of the project is completed with structures only partially removed or a stream channel exposed and returned to a prior location, but banks not stabilized as required, as well as a greater level of potential post-construction activity, such as adjustments to correct unanticipated conditions or replanting plants that initially do not survive. For a mitigation bank, even if financial assurance is not required for the enhancement and preservation components, there are still assurances that the amount of credits available for sale is commensurate with the progress of the mitigation bank. N.J.A.C. 7:13-13.19(e) sets forth a schedule for the release of credits. Specifically, N.J.A.C. 7:13-13.19(e) allows only 10 percent of the overall credits to be released upon the placement of a conservation restriction, obtaining all permits, and posting of financial assurance as required by the rule. The next potential round of credits may not be released until planting is successfully complete. In conclusion, for both enhancement and preservation mitigation components of a bank, there is little risk and that is why financial assurance is not required. Any applicant that purchases credits from a mitigation bank does not have to purchase financial assurance as completion of the mitigation represented by the credits purchased is already ensured by the financial assurance posted by the mitigation banker. Once a permittee purchases credits from a mitigation bank, the Department considers their mitigation obligation to be satisfied. An applicant that does a creation and restoration project on their own would have to post financial assurance in a similar manner to mitigation banks. These standards ensure a level of consistency for all projects.

NOTE: THIS IS A COURTESY COPY OF TIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 20, 2016 NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

839. COMMENT: A process for releasing financial assurances should be included in the rules. Although this will be detailed by the mitigation banking instrument, applicants should be aware of the requirements necessary for the assurances to be released, especially in instances where large sums are required. This provision should also alleviate concerns from the lenders. (119)

RESPONSE: The rules as adopted outline a process for releasing the financial assurance. Specifically, as set forth at N.J.A.C. 7:13-13.14(f), a mitigator is required to post two types of financial assurance: one covering estimated construction costs and one covering estimated monitoring and maintenance costs. N.J.A.C. 7:13-13.14(i) states that the portion of the financial assurance required under paragraph (f)1 (construction), shall be released when the Department determines that the construction phase (including grading and planting) of the mitigation bank or project has been successfully completed. N.J.A.C. 7:13-13.14(j) addresses when the portion of financial assurance attributable to monitoring and maintenance costs will be released, specifying that this will occur when the Department determines that the mitigation project to bank is successful, with cross-reference provided to the rule provisions specifying when riparian zone projects and mitigation banks are considered to have been successfully completed. Further, before the ultimate complete release of financial assurance for the two phases is reached, N.J.A.C. 7:13-13.14(g) provides that the Department shall review the financial assurance annually and adjust the amount as necessary to reflect any changes in the estimated construction or monitoring costs.

840. COMMENT: Allowing mitigation banks to compensate for impacts caused by violations is supported. The FWPA banking rules should be modified to encourage the same efficient relief. (89)

RESPONSE: The Department acknowledges the commenter's support of the rule. While not the subject of this rulemaking, the FWPA Rules at N.J.A.C. 7:7A-15.2(b)2 do allow a mitigation bank to compensate for impacts caused by violations.

841. COMMENT: If applicants wish to pursue mitigation banking, will they first have to prove that neither creation nor preservation is feasible? (15)

RESPONSE: In accordance with N.J.A.C. 7:13-13.8, the purchase of credits from a mitigation bank is identified as a mitigation alternative that can be utilized in consultation with the Department; an applicant does not have to prove that neither creation nor preservation is feasible. However, as indicated in the Response to Comments 781 through 786, the Department is proposing elsewhere in this issue of the New Jersey Register an amendment to N.J.A.C. 7:13-13.8(b) that would require that mitigation occur onsite where feasible. Accordingly, under the proposed amendment, only if a mitigator can demonstrate that onsite mitigation is not feasible could mitigation take place either offsite or through the purchase of credits from a mitigation bank.

842. COMMENT: At proposed N.J.A.C. 7:13-13.19(b), the Department's interests may be better served if the bank approval and permit review and approval processes run concurrently. (89)

RESPONSE: N.J.A.C. 7:13-13.19(b) does not discuss how or when bank approval and permit review and approval are conducted. This provision is simply intended to clarify that if the establishment of a mitigation bank involves regulated activities, then all necessary permits must be received from the Department prior to construction of a bank; those approvals must be obtained independent of any application for Department approval of a mitigation bank. There is nothing in this provision that would prevent a mitigation bank operator from pursuing a mitigation bank approval concurrently with application to the Department for all appropriate permits.

843. COMMENT: Proposed N.J.A.C. 7:13-13.19(c), does not provide a grace period between bank approval and the beginning of construction, regardless of whether or not there is a demand for credits. The banker is obligated to implement the bank upon approval. Please take into account that construction can be subject to seasonal conditions. (89)

RESPONSE: At N.J.A.C. 7:13-13.19(c) there is no specific time frame given on how long the mitigation banker has to start construction upon bank approval. Instead, this subsection indicates that, once a mitigation bank receives approval, the mitigation bank operator shall carry out all the requirements of the mitigation instrument, even if no credits are sold from the bank. The

schedule for construction of a mitigation bank is approved within the mitigation banking instrument; once a mitigation bank is approved, the Department expects and requires the mitigation project to be accomplished in accordance with the approval, regardless of any changes in demand for the bank credits. The Department encourages applicants to raise any factors that the applicant believes should be taken into account in establishing the project schedule during the application process.

844. COMMENT: At proposed N.J.A.C. 7:13-13.19(d), the number of credits generated in the bank is not necessarily tied to the ratios prescribed for creation, restoration, and enhancement for proposed riparian mitigation. (89)

RESPONSE: The number of credits assigned to the bank is based upon the Department's determination of the functions and values created by the mitigation project underlying the bank. This determination will be made based upon the type of mitigation proposed by the mitigation bank. Accordingly, a 100-acre mitigation bank project based upon creation mitigation will receive a greater number of credits than a similarly sized project based upon one of the other forms of mitigation. Assignment of mitigation credits necessarily involves analysis of the type of project proposed in accordance with the provisions of the FHACA Rules applicable to that project, including the ratios applicable to that form of mitigation.

845. COMMENT: At proposed N.J.A.C. 7:13-13.19(e), the credit release schedule is too restrictive relative to the ecological value delivered at the time of credit release. Year one should

be revised to 15 percent while the fifth-year balance should be reduced to 15 percent to match all other years. A fifth-year balance of 15 percent is substantial and protective of State interests. (135)

RESPONSE: Unlike permittee-constructed mitigation for a single project, a mitigation bank is a mitigation alternative where mitigation is provided for impacts associated with multiple projects for multiple permittees at a single site. Generally, due to the scope of the impacts compensated by a permittee-constructed mitigation site as opposed to a mitigation bank, it is much easier to find a solution for a failed permittee-constructed mitigation site than a failed mitigation bank. Accordingly, there is a significantly higher ecological risk associated with the failure of a mitigation bank. Failure of the bank means that compliance with the FHACA Rules and compensation for the losses associated with many permitted activities may not occur within a timely manner. Therefore, it is necessary for the Department to hold credits in reserve to ensure that the mitigation bank is successfully meeting certain milestones and compensating for the impacts for which mitigation is required.

846. COMMENT: At proposed N.J.A.C. 7:13-13.19(h), please define the meaning of “bank is transferred.” (135)

RESPONSE: “Bank is transferred” refers to the requirement at N.J.A.C. 7:13-13.19(j) that upon successful completion of the mitigation bank, the mitigation bank operator transfers the

mitigation bank property to a government agency or charitable conservancy whose goal is to manage land for the public good.

847. COMMENT: At proposed N.J.A.C. 7:13-13.19(j)3, a maintenance fund is not required for preservation, but some of the maintenance activities listed, which require funding, would certainly apply to preserved sites; after all, at the end of the monitoring and maintenance period, enhancement, restoration, and creation sites all become preservation sites. (89)

RESPONSE: Preservation means the permanent protection of undeveloped land in its natural state from disturbance or development through the execution of a conservation easement in accordance with N.J.A.C. 7:13-14. The maintenance fund required at N.J.A.C. 7:13-13.19(j)3 is required to fund maintenance activities, such as trash removal, maintenance of natural features, monitoring of the site to ensure proper upkeep, maintenance of water control structures, fences, or safety features, and any other activities necessary to ensure that the site complies with this chapter and all applicable laws. Since preservation, as defined above, is protection of undeveloped land in its natural state, a maintenance fund is not necessary since the site should not have any of the maintenance activities described above.

848. COMMENT: The mitigation banking section does not address banking multiple and overlapping types of mitigation credits within the same mitigation site or bank, specifically wetland and riparian mitigation credits within combination wetland/riparian mitigation banks. Often a riparian impact will overlap with a wetland impact. Similarly, mitigation sites and banks

often are comprised of lands with wetland and riparian mitigation value. How will the Department assess mitigation credits that overlap or are stacked (that is, they occur in the same footprint, such as an acre of enhanced wetland that is in the riparian zone)? To complete the goal of administrative alignment, the banking industry needs to understand the Department's procedures to assess and account for stacked mitigation value in mitigation sites and mitigation banks in the form of credits. This issue and varying the mitigation ratios by category often cause difficulty in determining the amount of mitigation that an impact requires. Temporary versus permanent impacts and conversions from woody to herbaceous vegetation also often lead permittees and Department staff to calculate different impacts and compensatory mitigation amounts. (135)

RESPONSE: The Department acknowledges that there are times when wetlands and riparian zones will occupy the same space within the ecosystem. It is for this reason that the Department has been working to align the mitigation bank requirements under all three land use regulations, FHACA, CZM, and FWPA. By aligning the standards for mitigation banking as much as possible, while recognizing that the regulated areas do have distinct differences, the Department is working towards consistency within the Mitigation Bank Program. Because each mitigation bank site is unique, with different functions and values, and each has the potential for various types of mitigation alternatives, such as creation or enhancement, it is not possible in a rule to prescribe exactly how credits will be determined at each bank. However, the Department is contemplating the issue raised by the commenter and is considering having the banker categorize a bank into "wetlands only," "riparian zone only," and "wetlands and riparian zone" segments

where appropriate. Credits could be determined in the wetlands and riparian zone only areas in accordance with the applicable rules (that is, under the FWPA Rules for the wetland areas and under the FHACA Rules for the riparian zone areas). Where the two resources overlap, the fact that the ratios have been somewhat standardized between the rules should assist in determining how many credits that area could be given. For example, under the FHACA Rules what has been traditionally considered enhancement (that is, the improvement of the functions and values of the riparian zone) would receive a 3:1 ratio unless the applicant can demonstrate that a different ratio would still provide the desired values and functions. While the FWPA Rules are silent on ratios for enhancement, traditionally the Department has approved ratios ranging from 3:1 for projects that make improvements to all three wetland features (hydrology, soils, and vegetation), to 10:1 for projects that make minimal improvements (often to the vegetation component only). Thus, the Department can foresee allowing the banker to determine whether he/she intends to enhance an area in accordance with the wetland standards or the riparian zone standards. The number and type of credits would depend upon which option is selected. The Department has provided the option for conceptual review of a proposed mitigation bank, where the Department and mitigation bank operator can candidly discuss these issues, so that the mitigation bank operator may decide how they wish to proceed. In regard to the commenter's statement about differing interpretations regarding the definition of a temporary impact, all temporary impacts are to be restored to pre-existing conditions within six months of the disturbance. This means that if an applicant is willing and able to replant forest vegetation within six months of removing forest vegetation, the adopted rules will not require additional mitigation. This provision is similar to

that contained in the FWPA Rules and should alleviate the confusion regarding when an impact is considered temporary for purposes of determining mitigation requirements.

849. COMMENT: The Department distinguishes between upland riparian and wetland riparian mitigation when assessing the applicability of wetland bank credits to offset riparian impacts. Will the rules distinguish between wetland and upland riparian credits, and if so, how? (135)

RESPONSE: As previously stated, the Department will likely distinguish between “wetland” and “upland” riparian zone. Credits could be determined in the “upland” riparian areas in accordance with the FHACA Rules. In the “wetland” riparian areas, which are those areas that are both wetlands and riparian zone, the Department can foresee allowing the banker to determine whether he/she intends to enhance an area in accordance with the wetland standards or the riparian zone standards. The number and type of credits would depend upon which option is selected.

N.J.A.C. 7:13-13.20 Application for a Mitigation Bank

850. COMMENT: At proposed N.J.A.C. 7:13-13.20(a), a conceptual bank review and approval is not binding on the Department, so what purpose does it serve? (89)

RESPONSE: As stated at N.J.A.C. 7:13-13.20, a conceptual bank review is optional. A potential applicant for a mitigation bank approval may seek a non-binding conceptual review of the proposed mitigation bank before significant resources are committed to complete development of the proposal and/or purchase of the proposed mitigation site. Because mitigation bank projects are generally larger in size and more complex than individual mitigation projects, the Department believes it beneficial to provide the option for a potential applicant to obtain a conceptual review. While a conceptual review of a proposed mitigation bank is required under the equivalent provision of the FWPA Rules, because riparian zone mitigation has a lesser chance of failure than wetland mitigation, it is an option available at the potential applicants' discretion under the adopted rule. See also the Response to Comment 776.

851. COMMENT: At proposed N.J.A.C. 7:13-13.20(b)3, preservation is not listed as a viable component of a mitigation bank. (89)

RESPONSE: Mitigation banks may utilize all four mitigation options with the rules specifying any differences that may be applicable based upon the mitigation option chosen by the mitigation banker (see, for example, N.J.A.C. 7:13-13.19(f), which specifies the schedule for release of mitigation credits based upon preservation mitigation). N.J.A.C. 7:13-13.20(b)3 does not preclude the incorporation of preservation as a mitigation alternative.

852. COMMENT: No more than one-half of the credits awarded to a mitigation bank should be based on preservation. (30 and 189)

RESPONSE: The Department believes that the amount of credits and type of credits available at a mitigation bank should be based on the characteristics of the proposed mitigation bank site and not predetermined by a specific rule provision. As set forth at N.J.A.C. 7:13-13, preservation ratios are determined by the ecological functions and values of the proposed site and are, therefore, very site-specific. The specifics of the individual site will also determine how much restoration, creation, and enhancement opportunities exist on a proposed mitigation site. All of these factors will determine the number and type of mitigation credits a mitigation bank receives.

Subchapter 14. Conservation Restrictions

N.J.A.C. 7:13-14.1 Conservation Restriction Form and Recording Requirements

853. COMMENT: The current form of the conservation restrictions found on the Department's website do not meet Federal requirements. As a result, Federal agencies are unable to accept a mitigation bank site upon completion of the monitoring period and all other requirements in the banking instrument approving the bank. This current language of the Department's conservation restrictions has prevented the National Wildlife Refuge System from accepting much desired mitigation lands in New Jersey. This issue has been raised to the Department many times. The Department's conservation restriction language should be revised to allow transfer of mitigation lands to Federal agencies. (135)

RESPONSE: The commenter does not explain how the form of the Department's conservation restrictions does not meet Federal requirements. The conservation restrictions are designed for

the purpose of permanent resource protection in accordance with the New Jersey Conservation Restriction and Historic Preservation Restriction Act, N.J.S.A. 13:8B-1 et seq., regardless of whether that purpose conflicts with the Federal requirements for mitigation banks. Further, the Department is unaware of circumstances where mitigated land has been offered to a Federal entity and rejected. The only Federal entity in New Jersey that may be appropriate to hold mitigated lands is the U.S. Fish and Wildlife Service. A conservation restriction must be placed on all mitigation projects and mitigation banks; without such protection, the Department cannot ensure that mitigated resources will be protected in perpetuity. This requirement is consistent and applied equally to all mitigated sites regardless of whether the site is used for permittee-responsible mitigation or for a mitigation bank. The rule provides options for the transfer of a mitigation bank at N.J.A.C. 7:13-13.19(j) and does not limit the transfer to Federal agencies. The Department believes the placement of a conservation restriction on the land is critical to the long term success of the project. With no restrictions on the land, the Federal government could more readily sell the property and/or modify the land for other purposes that may not protect the mitigation site.

854. COMMENT: The Department should not issue a permit for a project until it has approved the draft conservation restriction and received a copy of the recorded instrument. The Department often has a difficult time enforcing conservation restrictions against subsequent purchasers because they are not recorded prior to project completion. (28A, 42, 56, 67, and 127)

RESPONSE: Prior to July 6, 2015, under the coastal permitting program, a coastal permit was not effective until the conservation restriction had been filed. As a result, both the date the permit was effective and corresponding date of expiration could vary significantly between permits issued on the same day, making enforcement difficult. N.J.A.C. 7:13-14.1(b) addresses this issue by providing a certain date by which the restriction must be filed while continuing to ensure that the conservation restriction is in place prior to the start of construction. The 90-calendar-day time frame allows sufficient time for an applicant to complete the restriction and complete the filing process. Should a permit be obtained to construct a development on a property that is subject to an agreement of sale, the parties may include provisions in the contract of sale warranting that the contract seller will cooperate to assure that the conservation restriction is filed within the 90-day time frame.

855. COMMENT: The use of conservation restrictions to protect riparian areas, particularly those involved with mitigation activities, is supported. However, the Department should be cognizant of the fact that, by their nature, conservation easements are flexible instruments that can and should be tailored to the individual property and the goals that are being pursued. The challenge for the Department is to provide appropriate easements that remain effective. (24)

RESPONSE: The Department acknowledges this comment in support of the rule. N.J.A.C. 7:13-14.1(a) sets forth the form and content of conservation restrictions required under the FHACA Rules. Specifically, N.J.A.C. 7:13-14.1(a)3 requires that the conservation restriction be in the form and include such terms as specified by the Department. Form conservation

restrictions are available from the Department's web site at www.nj.gov/dep/landuse. Because the available forms of conservation restriction are drafted to include specific limitations and requirements designed to protect the public health, safety, and welfare, or to protect wildlife and/or fisheries, or to otherwise preserve, protect, and enhance the natural environment, the form conservation restrictions may only be altered with the explicit consent of the Department to assure the amended document continues to provide the appropriate level of protection.

856. COMMENT: The Department must realize, particularly in the case of mitigated parcels, that there is an obligation for periodic inspection and monitoring and, if necessary, enforcement. To effectuate these functions, in addition to the recording of the restriction, there must be a requirement for submission of a Base Line Information Report that describes, maps, and provides visual documentation of the property's condition at the time the easement is recorded. The Department should provide sufficient resources to carry out these critical functions. Accordingly, conservation easements should be mapped to Green Acres standards and entered in the GIS data base and shared with local jurisdictions. Overall, the Department should consult with Green Acres and several major private land trusts with easement experience to ensure that the use of this tool is provided for from "cradle to grave" prior to plunging ahead with a rule that mandates easements but lacks the necessary support system. (24)

RESPONSE: The Department acknowledges the responsibilities that result from placement of a conservation restriction. Before the Department accepts land to be preserved to satisfy a requirement of the FHACA Rules, an applicant provides a written description and photographs

of the proposed land for preservation, and the land is inspected by Department personnel. If the land is impaired in some way, it is not accepted for mitigation purposes. Thus, the Department is getting baseline data and is doing onsite verification before accepting a parcel for preservation. Further, if the Department agrees that land preservation is the appropriate mitigation option and requires the placement of a conservation restriction, the parcel upon which the restriction is placed receives a unique identification number based upon block and lot, if it is not located on the same site as the regulated activity (since those sites already contain an identification number). That unique identification number ensures that the parcel will be located and identified as having a conservation restriction whenever someone searches the Department's database. Over the past three years, the Division of Land Use Regulation has been working by way of a USEPA grant to document and digitize properties that the Division approved for mitigation purposes and that contain conservation restricted areas. In addition, as part of the grant, the Division created a GIS data layer. That data layer specifically depicts wetland and riparian mitigation sites and includes all sites that have a conservation easement in place. The long-term goal for that GIS data layer is to continue to update it in perpetuity and to provide it to the public online. Finally, all conservation restrictions are recorded in chain of title in the county where the parcel resides, providing an accessible, public record to ensure that any subsequent purchaser or other interested party has notice of the restriction.

Subchapter 15. Hardship Exception for an Individual Permit

N.J.A.C. 7:13-15.1 Hardship Exception for an Individual Permit

857. COMMENT: The Department is relaxing the conditions to qualify for a hardship exception at N.J.A.C. 7:13-15.1. Hardship exceptions are intended to offer relief from strict compliance with the regulations in rare situations with unique circumstances. The Department claims that too many applicants are applying for hardship exceptions. Instead of relaxing the rules to ease the Department's workload, the Department should be denying the requests for those applicants that do not qualify for a hardship exception. (24 and 147)

858. COMMENT: The proposed changes at N.J.A.C. 7:13-15.1 are opposed. The proposed modifications to the hardship exceptions incentivize riparian zone destruction and encourage developers and others to pursue projects that can result in riparian zone damage by making it easier to get approvals for compensation and by making the identification of that compensation strategy easier to accomplish and pursue. (183)

859. COMMENT: The proposed hardship waiver requirements go above and beyond any type of protections from taking claims and are actually a new excuse to destroy stream buffers. (177)

860. COMMENT: The rulemaking is softening the hardship provisions of the FHACA Rules, which is the wrong approach. The hardship provisions should act as a barrier to disturbance in flood-prone or sensitive riparian areas. (193)

861. COMMENT: The hardship exception should be applied to unique and unusual situations. Hardship exceptions should be strictly reviewed, and the requirements set forth at existing

N.J.A.C. 7:13-9.8 should be maintained. The existing requirements serve as incentives to keep development out of the riparian zones. The proposed amendments to the hardship exceptions encourage bad behavior and are contrary to the well-established statutory intent in land use law, where hardship is based on the character of the parcel rather than the action of the applicant. An applicant who creates his or her own need for a hardship waiver (including the subdivision of land such that one or more lots are deliberately compromised) regarding this rule should not be eligible for a hardship exception. (28A, 42, 56, 67, 127, and 170)

RESPONSE TO COMMENTS 857 THROUGH 861: The adopted hardship exception standards at N.J.A.C. 7:13-15.1 are no less stringent than the standards of prior N.J.A.C. 7:13-9.8. A number of clarifications and procedural improvements have been adopted, which are intended to standardize the language throughout the section to apply to both a project and a regulated activity, clarify that all requirements of N.J.A.C. 7:13-15.1(b) must be met and at least one requirement at N.J.A.C. 7:13-15.1(c) must be met, require additional detail from applicants seeking a hardship exception, and relocate the Department's procedure in cases where a hardship exception request is denied. Additionally, substantive amendments have been adopted to recognize cases where compliance with this chapter would adversely impact public health, safety, and welfare due to an extraordinary situation of the applicant or site condition as well as to enable the Department to consider the extent to which the applicant, prior or current property owners, and/or their agents may have directly caused or contributed to the hardship being requested. These amendments are necessary and appropriate as described below.

With regard to situations where compliance with this chapter would adversely impact public health, safety, and welfare, while the design and construction standards of this chapter are intended to minimize adverse impacts to flooding and the environment, it has sometimes been the case that strict compliance with these standards can prevent an applicant from undertaking necessary safety upgrades or from performing construction activities in order to ameliorate a present or anticipated risk to public health, safety, or welfare. In such a case, the Department may agree that the proposed activities are necessary and will benefit the public and therefore warrant a waiver of strict compliance with one or more requirements of this chapter even though the applicant cannot demonstrate that strict compliance would result in an exceptional and/or undue hardship for the applicant. For example, N.J.A.C. 7:13-12.7(e)3 requires that, where an existing bridge or culvert is proposed to be replaced and the existing structure causes "fragmentation of habitat for terrestrial threatened or endangered species and/or any terrestrial species of special concern," the replacement bridge or culvert must be designed to incorporate "a preserved or restored natural bank of sufficient width to allow the species to pass through the structure." However, an applicant must also demonstrate, pursuant to N.J.A.C. 7:13-12.7(e)1, that a replacement bridge or culvert will not exacerbate offsite flood conditions. However, providing wildlife passage in accordance with N.J.A.C. 7:13-12.7(e)3 may in some cases require the construction of a bridge or culvert with a significantly larger area that is open to floodwaters than the existing structure. Such a bridge or culvert could allow more floodwaters to pass downstream and exacerbate offsite flood conditions, in contravention of N.J.A.C. 7:13-12.7(e)1. In such a case, an applicant would not be able to meet the requirements of both N.J.A.C. 7:13-12.7(e)1 and (e)3 without adversely impacting public health, safety, and welfare. While the

Department does not anticipate that such situations will be common, adopted N.J.A.C. 7:13-15.1(c)1 provides an appropriate basis upon which the Department can issue a hardship exception in such a case.

As indicated in N.J.A.C. 7:13-15.1(d), the extent to which the applicant, prior or current property owners, and/or their agents directly caused or contributed to the hardship is taken into account by the Department in determining whether a hardship exception should be granted. For example, where lots have been subdivided such that one or more of the lots are deliberately compromised, as in the hypothetical posited by one commenter, a hardship exception would not be granted. However, there are situations in which the applicant, prior or current property owners, and/or their agents may have undertaken an action that inadvertently make strict compliance with the requirements of this chapter infeasible. For example, a person may obtain a permit to construct a building in a flood hazard area or undertake the construction of an addition to a building under a permit-by-rule that requires the building or addition to be situated at least 25 feet from any top of bank. However, due to a miscalculation in surveying or other error in measurement, the location of a building or addition could inadvertently be constructed 24 feet from the top of bank. Correcting this error would likely require relocating the building or addition by one foot which may very likely cost the building's owner an extremely large amount of money in order to achieve a relatively small environmental gain. In some cases, this could present an insurmountable hardship upon the owner while the effects on persons using the building or addition are not significant. In such a situation, the Department may, for example, agree to instead require certain flood-proofing or bank stabilization measures to be undertaken to protect the structure from potential flood damage rather than relocate the building or addition.

The adopted amendments therefore allow the Department to use its discretion in cases where an applicant or its agents take actions that unintentionally lead to severe consequences for a property owner seeking an exception from strict compliance with this chapter.

862. COMMENT: It is suggested that the phrase "alternative requirements that, in the judgment of the Department, provide equal or better protection to public health, safety, and welfare and the environment" at N.J.A.C. 7:13-15.1(b)3 be replaced with "alternative requirements that, in the judgment of the Department, and an Oversight Committee represented by academic experts, and water advocacy groups, as well as Department staff and appointees, with open public meetings, provide that all increased runoff is infiltrated, unless soils and water table make that impractical, and the disturbed area is mitigated with habitat of the highest value at a creation to loss ratio of 5:1, to protect the public health, safety, and welfare and the environment." (158, 159, and 180)

RESPONSE: As noted in the Response to Comment 268, the Legislature has mandated that the Department shall assume certain responsibilities and functions related to protecting the residents of New Jersey from the deleterious impacts of flooding, and the Department does not intend to delegate its responsibility in the fashion envisioned by the commenter.

Regarding infiltration, the Department's Stormwater Management rules at N.J.A.C. 7:8 establish water quality, runoff quantity, and groundwater recharge requirements, all of which take into account soils and water table conditions. These requirements apply to "major developments," which are projects that the Department has determined are of sufficient size

and/or scope to generate a significant volume of stormwater runoff and that could therefore impair water quality or result in increased flooding. Pursuant to N.J.A.C. 7:13-12.2, the Department shall issue an individual permit for a major development only if the requirements of N.J.A.C. 7:8 are met. It is therefore not necessary to require that all increased runoff must be infiltrated as suggested by the commenter.

Finally, regarding mitigation, N.J.A.C. 7:13-13 sets forth several riparian zone mitigation options with differing ratios depending on the nature of the mitigation. Individual permits are required, at N.J.A.C. 7:13-11.2, to meet certain standards and provide mitigation in cases where riparian zone impacts are not *de minimis* in nature. It is therefore not appropriate to require all projects that are approved via a hardship exception to provide mitigation at a creation to loss ratio of 5:1.

Subchapter18. Application Requirements

N.J.A.C. 7:13-18.2 General Application Requirements

863. COMMENT: The rules should require an applicant to demonstrate that the proposed regulated activity will not impact water quality. Without requiring an analysis of water quality, the rulemaking is *ultra vires*. The Department must analyze the impacts of a regulated activity within a riparian zone on water quality. If the Department cannot conclude that the proposed activity will have no adverse impact, it is required by law to deny the permit application. This requirement is even more important for Category One waters and Outstanding National Resource Waters. Pursuant to N.J.A.C. 7:9B-1.5(d)2, the Department is required to deny a permit for a

regulated activity that may individually or in concert with other activities cause detrimental changes to existing water quality characteristics. (28A, 42, 56, 67, and 127)

RESPONSE: In promulgating a permit-by-rule, general permit-by-certification, and a general permit under N.J.A.C. 7:13-6.2(b)1, the Department has determined that the authorized activity when performed in accordance with specific requirements will have a *de minimis* impact on flooding and the environment both when performed individually and cumulatively. N.J.A.C. 7:13-6.4 additionally provides that an activity authorized under a permit-by-rule, general permit-by-certification, or general permit cannot be undertaken more than once on a given site if any of the conditions of a permit are exceeded. The determination under N.J.A.C. 7:13-6.2(b)1 additionally includes consideration of a regulated activity's potential adverse impacts on water quality. Accordingly, a water quality analysis is not required for each activity authorized under a permit-by-rule, general permit-by-certification, or general permit.

The standards for a regulated activity subject to an individual permit are designed to address water quality impacts. For example, the individual permit standards for a regulated activity located within a channel require that disturbed portions of channels be restored to pre-disturbance conditions immediately after the regulated activity has been completed, the aquatic habitat be preserved when possible, and the aquatic habitat be enhanced when preservation is not possible, thereby minimizing impacts to water quality (see N.J.A.C. 7:13-11.1). Further, the standards for regulated activities in riparian zones at N.J.A.C. 7:13-11.2 require an applicant to demonstrate that the basic purpose of the activity cannot be accomplished without a disturbance of the riparian zone vegetation and that any disturbance to the riparian zone be minimized. If it is

demonstrated that exceedance of established limits of riparian disturbance is unavoidable, mitigation will be required in order to restore the lost ecological functions.

864. COMMENT: Proposed N.J.A.C. 7:13-18.2(g) provides that "[i]f an application includes activities within a right-of-way (ROW) or easement, the application shall include written consent for the activity from the holder(s) of the right-of-way or easement." While it is appropriate to provide notice to the owner of the parcel (or parcels) on which the applicant has an easement or ROW, a requirement for consent would generally not be required. That is because the terms of the easement or other legal instrument creating the ROW interest presumably already include consent; that is, the easement or ROW interest includes authority to take the actions described in the application. If that is not the case, then notification will allow the owner, such as a fee interest owner, to take appropriate action. (51 and 92)

RESPONSE: The purpose of N.J.A.C. 7:13-18.2(g) is to ensure that the holder of a right-of-way or easement does not dispute an applicant's ability to conduct the proposed activity within that area. For example, a person may propose to construct a building within a utility easement on his or her property. N.J.A.C. 7:13-18.2(g) requires the property owner to obtain written consent from the utility company who holds the easement since the building could potentially interfere with maintenance of the utility line and/or be prohibited under the terms of the easement. Accordingly, where the applicant is also the holder of the right-of-way or easement, this requirement would not be applicable.

N.J.A.C. 7:13-18.4 Additional Application Requirements for a Verification, for an Authorization under a General Permit, or for an Individual Permit

865. COMMENT: While referencing NGVD to describe existing and proposed topography on a site is practical and defensible, other reference data are also applicable for topography, and the use of such reference data should not be prohibited. (135)

RESPONSE: The Department recognizes that topographic information in use today varies and that not all mapping refers to the same datum. The National Geodetic Vertical Datum of 1929 (NGVD 1929) was established for vertical control surveying in the United States by the General Adjustment of 1929. All of the Department's promulgated flood hazard area maps, listed under Appendix 2, reference NGVD 1929. As such, it is essential that all topography submitted to the Department either reference NGVD 1929 or else show the appropriate conversion to NGVD 1929. This is necessary because, without reference to the same datum, the Department will not be able to determine in many cases whether the flood hazard area elevation and/or limits on a submitted drawing are accurate. Further, conversion between NGVD 1929 and other commonly used data, such as NAVD 1988, is not difficult or expensive. Therefore, the Department believes that requiring the use of, or a reference to, NGVD 1929 is appropriate.

866. COMMENT: Proposed N.J.A.C. 7:13-18.4(b) and 7:13-19.3(f), although referencing the Pinelands Area, do so in different ways. Specifically, N.J.A.C. 7:13-18.4(b) refers to "a regulated activity or project in an area under the jurisdiction of the Pinelands Commission." N.J.A.C. 7:13-

19.3(f), however, refers to "a delineation, regulated activity or project in the Pinelands Preservation Area or the Pinelands Protection Area." Both of these references, although different, refer to the same thing, the Pinelands Area as designated by Section 10(a) (N.J.S.A. 13:18A-11) of the Pinelands Protection Act, N.J.S.A. 13:18A-1 et seq. In order to avoid confusion, the Department should include a definition for the term "Pinelands Area" in N.J.A.C. 7:13-1.2 and revise both N.J.A.C. 7:13-18.4(b) and 19.3(f) to refer to the Pinelands Area. (146)

RESPONSE: The Department agrees with the commenter that consistent language is needed at N.J.A.C. 7:13-18.4(b) and 19.3(f). Therefore, since the Pinelands Area designated at N.J.S.A. 13:18A-10a includes both the preservation area and the protection area (see definitions of these terms at N.J.S.A. 13:18A-3h, j, and k), on adoption the Department is amending N.J.A.C. 7:13-18.4 and 19.3 to refer to the "Pinelands Area as designated by subsection a of section 10 (N.J.S.A. 13:18A-11) of the Pinelands Protection Act, N.J.S.A. 13:18A-1 et seq." A new definition of "Pinelands Area" is not necessary since the description of the area will be included at N.J.A.C. 7:13-18.4(b) and 19.3(f) through the inclusion of the statutory reference.

867. COMMENT: Although the retention of the requirement for submission of a Pinelands consistency determination for individual applications is appreciated, it is requested that the Department also require submission of a Pinelands consistency determination for general permit applications for regulated activities or projects to be conducted in the Pinelands that are not exempt under the Pinelands Comprehensive Management Plan. Additionally, this provision references a consistency document, "notice of filing," that is no longer issued by the Pinelands

Commission. In light of this, it is requested that the Department revise N.J.A.C. 7:13-18.4(b) as follows:

> "An Application for a general or individual permit for a regulated activity or project in the Pinelands Area, for an activity or project that is not exempt under N.J.A.C. 7:50-4.1, shall include a Certificate of Filing, Certificate of Completeness or a resolution approving an application for public development, issued by the Pinelands Commission or a certification by the applicant that the project is not subject to the requirements of the Pinelands Comprehensive Management Plan, N.J.A.C. 7:50." (146)

RESPONSE: The intent of N.J.A.C. 7:13-18.4 is to address situations where a proposed activity that requires a flood hazard area permit is also under the jurisdiction of the Pinelands Commission and ensure that the proper permits are secured. While many activities subject to authorization under a general permit are less likely to be regulated by the Pinelands Commission, in those instances where the proposed activity is regulated by the Pinelands Commission, it is appropriate to require the applicant to demonstrate that an application for approval was additionally submitted to the Pinelands Commission. Accordingly, the Department is amending N.J.A.C. 7:13-18.4 on adoption to require that an application for an authorization under a flood hazard area general permit for a regulated activity or project in an area under the jurisdiction of the Pinelands Commission include a Certificate of Filing, a Certificate of Completeness, or a resolution approving an application for public development, issued by the Pinelands Commission. Further, with respect to the use of the term "notice of filing," the Department is

amending N.J.A.C. 7:13-18.4 on adoption to include the language provided by the commenter to reflect the current requirements of the Pinelands Commission.

Notwithstanding the above, because the Stream Cleaning Act, N.J.S.A. 58:16A-67, provides for a specific application process that is incorporated at N.J.A.C. 7:13-9.1 and differs from the application requirements set forth at N.J.A.C. 7:13-18, the Department cannot extend this requirement to authorizations under general permit 1 for channel cleaning. However, it should be noted that, pursuant to N.J.A.C. 7:13-9.1(a)7iv, general permit 1 does not authorize stream cleaning activities within Pinelands waters.

Subchapter 19. Requirements for an Applicant to Provide Public Notice of an Application

868. COMMENT: The Department should require people who are undertaking an authorization under a permit-by-rule to provide public notice in accordance with N.J.A.C. 7:13-19. (158, 159, and 180)

RESPONSE: Each adopted permit-by-rule authorizes minor construction activities that, when undertaken in accordance with the permit's tightly circumscribed requirements, will have a *de minimis* impact on flooding and the environment and are therefore intended to be conducted without Department review or oversight, including the imposition of notice requirements. However, the FHACA Rules, at N.J.A.C. 7:13-6, require the Department to promulgate each permit-by-rule after public notice of the rulemaking in the New Jersey Register and consideration of public comment in accordance with the rulemaking provisions of the New

Jersey Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq. Accordingly, the public is afforded the opportunity to review and comment on the content of each permit-by-rule prior to their adoption. Further, the Department investigates all complaints received from the public or local officials and conducts compliance inspections when staff observe activities in areas regulated under the Flood Hazard Area Control Act Rules. If those activities are deemed to exceed a permit-by-rule authorization, appropriate enforcement action will be taken to compel compliance with the rules through formal permit application and issuance or removal and restoration of the impacted area. Individuals suspecting a violation of the FHACA Rules or any other environmental incidents, abuses, or related complaints impacting New Jersey are encouraged to contact the Department's 24-hour hotline at (877) 927-6337.

N.J.A.C. 7:13-19.3 Contents and Recipients of Public Notice of an Application

869. COMMENT: Although the requirement that an applicant provide the Pinelands Commission with a copy of the complete application submitted to the Department for a verification, general permit authorization, individual permit, or major technical modification for a delineation, regulated activity, or project to be conducted in the Pinelands at N.J.A.C. 7:13-19.3(f) is appreciated, it is suggested that the Department limit this obligation to applications that are not exempt from the application requirements of the Pinelands Comprehensive Management Plan in accordance with N.J.A.C. 7:50-4.1. This will limit the submission of copies of FHACA applications to the Pinelands Commission to those activities that require an application to the Pinelands Commission. (146)

RESPONSE: N.J.A.C. 7:13-19.3(f) is intended to provide the Pinelands Commission with notice of all flood hazard area applications occurring within the Pinelands Area. Amending the requirement as suggested by the commenter would require the Department to determine for applications not provided to the Pinelands Commission whether the proposed activity is exempt from the application requirements of the Pinelands Comprehensive Management Plan in order to determine if the applicant had complied with this notice requirement. The Department believes the applicability of the Pinelands Comprehensive Management Plan should be determined by the Pinelands Commission and not the Department. However, in light of this comment, the Department has re-evaluated this requirement and determined that the submission to the Pinelands Commission of a complete copy of the application as submitted to the Department is not necessary. Therefore, the Department is amending N.J.A.C. 7:13-19.3(f) to require the submission of only a copy of the application form that was submitted to the Department. The application form contains sufficient information for the Pinelands Commission to be notified of the type of activity for which a FHACA permit is being sought and its proposed location to determine whether any follow-up is required should the Pinelands Commission not receive an application.

Subchapter 21. Application Review

N.J.A.C. 7:13-21.2 Completeness Review

870. COMMENT: The 20-working-day administrative review period in some instances is used to not accept an application for technical reasons. The Department should not stop a project from being considered administratively complete as a result of the application of in-house policies or use the delays as a reason to afford more time for Department reviews. In addition, the Department's DataMiner is typically not current or not correct. (28)

RESPONSE: Pursuant to N.J.A.C. 7:13-21.2, the Department will, within 20 working days after receiving an application, take one of three actions. If the Department determines the application is administratively and technically complete, the Department will issue notification to the applicant that the application is complete for review. If the application is determined administratively complete but technically incomplete, such that the Department cannot continue review on the merits of the application, the Department will issue notification to the applicant and request the necessary information. If the application is determined to be administratively incomplete, the Department will return it to the applicant. For clarity, the Department has added definitions at N.J.A.C. 7:13-1.2 for "administratively complete," "technically complete," and "complete for review." "Administratively complete" means all of the information requested on the application checklist for the respective type of application has been submitted to the Department. "Technically complete" means that each item included in the application provides sufficient information for the Department to declare the application complete for review. "Complete for review" means that the application is administratively and technically complete and is ready for evaluation by the Department for compliance with the standards applicable to the verification, general permit authorization, or individual permit being sought.

Under this adoption, a default date that the application is complete for review should the Department not take affirmative action to either make the declaration or request further information has been added. Specifically, N.J.A.C. 7:13-21.2(e) provides that where the Department does not, within 20 days of receiving the application, declare the application complete for review or request necessary additional information, the application will be declared complete for review effective as of the date the Department received the application. Similarly, in the situation where the Department does not, within 15 days after receiving information from the applicant in response to a notice of technical incompleteness, either declare the application complete for review or again request additional information, N.J.A.C. 7:13-21.2(f) provides that the application will be declared complete for review as of the date the information in response to the initial notice of technical incompleteness was received.

With respect to the Department's DataMiner, the information contained in DataMiner is the best available according to the procedures and standards of each of the contributing programs. The Department's programs regularly maintain the information in their databases in order to maintain the quality and timeliness of the data. However, as with any system, unintentional inaccuracies may occur. The Department has made every effort to present the information in a clear and understandable manner for a variety of users.

N**.J.A.C. 7:13-21.3 Department Decision on an Application that is Complete for Review**

871. COMMENT: The Department's rulemaking to extend the review period for general permits from 45 to 90 days is supported. The additional time will allow for a complete review of

a project under the FHACA, SWM, FWPA, and CZM Rules resulting in a more streamlined application process. (119)

RESPONSE: The Department acknowledges this comment in support of the rule.

Subchapter 22. Permit Conditions; Extension, Modification, Transfer, Suspension, and Termination of Verifications, Authorizations, and Permits

N.J.A.C. 7:13-22.2 Conditions that Apply to All Permits

872. COMMENT: It is requested that the proposed text at N.J.A.C. 7:13-22.2(c)7 be replaced with "The permittee shall immediately inform the Department by telephone at (877) 927-6337 (Warn Department Hotline) of any noncompliance that may endanger the public health, safety, and welfare, or the environment, or increases erosion downstream, or increases the amount of fines in the sediment, or impairs or degrades macroinvertebrate habitat."

It is also requested that the proposed text at N.J.A.C. 7:13-22.2(d)5, be replaced with "If any condition or permit is determined to be legally unenforceable, modifications and additional conditions may be imposed by the Department as necessary to protect public health, safety, and welfare, or the environment, including an increase in erosion downstream, or an increase in the amount of fines in the sediment, or impairment or degradation of macroinvertebrate habitat." (158, 159, and 180)

RESPONSE: Noncompliance that increases downstream erosion, increases the amount of fine sediment, or impairs or degrades macroinvertebrate habitat are considered noncompliance that may endanger public health, safety, and welfare or the environment and is therefore already accounted for by the proposed rule language. Similarly, if any condition of a permit or the permit itself is determined to be legally unenforceable, modifications and additional conditions that may be imposed by the Department to protect public health, safety, and welfare, or the environment, would include any determined to be necessary to address an increase in erosion downstream, an increase in fine sediment, or an impairment or degradation of macroinvertebrate habitat. The use of the term "environment" at N.J.A.C. 7:13-22.2(c)7 and (d)5 is intentionally broad to capture all types of impacts to the environment. Accordingly, the Department has determined not to make the suggested changes on adoption.

N.J.A.C. 7:13-22.3 Extension of a Verification, an Authorization under a General Permit, and an Individual Permit

873. COMMENT: The Department, in its summary of proposed N.J.A.C. 7:13-5.3, acknowledges that "flooding and environmental conditions on a site change over time." Therefore, it is inappropriate to extend a verification beyond five years. (28A, 42, 56, 67, and 127)

RESPONSE: Pursuant to N.J.A.C. 7:13-22.3(b)2, the Department will issue one five-year extension of a verification only if the person requesting the extension demonstrates that there has

been "no significant change in the overall conditions of the site, including regulated waters, flood hazard areas, and riparian zones." Should significant changes to flooding or environmental conditions on a site occur, the Department will not approve the extension request be approved, and a new verification reflecting current site conditions will be required.

N.J.A.C. 7:13-22.5 Modification of a Verification, an Authorization under a General Permit, or an Individual Permit

874. COMMENT: When a project is under construction, the contractor may propose alternate designs or construction methods that could reduce costs and construction times based on the specific means and methods. If the alternatives do not result in additional environmental impacts, just different materials or products, then a modification of a permit may not be warranted. There are also no permit review times for permit modifications. Clarification should be provided by the Department on the process. Perhaps, if warranted, a copy of the modified plans could be submitted to the Department for its files, but construction should not be delayed until a modified permit is approved. An option is to have the engineer (the original design engineer or the contractor's engineer) certify the overall permit impacts or conditions are maintained. (28)

RESPONSE: A modification of an authorization or permit is necessary to ensure that the modified activity continues to comply with the FHACA Rules. The adopted rules establish three categories of modification: administrative, minor technical, and major technical. Pursuant to

N.J.A.C. 7:13-22.5(d), a minor technical modification applies to a change in the design or layout of a project or the flood hazard area design flood elevation, floodway limits, or riparian zone width, including any associated change to an approved site plan or other document, that, without hydrologic, hydraulic, flood storage, stability, or stormwater calculations, the applicant demonstrates does not result in new or additional impacts to the flood hazard area or riparian zone. A change in design or construction technique is likely to constitute a minor technical modification, for which the Department has adopted streamlined application requirements. For example, the Department will not review engineering calculations as part of an application, and no public notice of the application is required.

With regard to review times for modifications, the prior FHACA Rules set forth estimated review time frames for revisions, "workload permitting." There are several factors that affect the length of time necessary to review a request for a modification, such as the availability of staff and the number of other applications being processed by the Department. Rather than provide an approximate time frame by which the Department may be able to process a request for a modification, this statement has been deleted.

Subchapter 24. Enforcement

N.J.A.C. 7:13-24.6 Civil Administrative Penalties for Violations Other than Failure to Obtain a Permit Prior to Conducting Regulated Activities

875. COMMENT: Compensatory mitigation required for violators should meet the same standards required of mitigation sites and mitigation banks. This is often not the case for enforcement actions involving wetland and riparian impacts and compensatory mitigation. (135)

RESPONSE: Mitigation provided to remedy a violation must meet the standards set forth under N.J.A.C. 7:13-13 for the mitigation alternative(s) chosen. Specifically, N.J.A.C. 7:13-13.2(f) requires that mitigation as part of a remedy for a violation must be at least as ecologically valuable as mitigation that would otherwise be required under an individual permit. The amount of mitigation required to remedy a violation may be greater in some cases than the amount that would be required under an individual permit to provide at least equal ecological value due to the duration of time that the environment was impaired as a result of the particular regulated activities undertaken in violation of this chapter. Otherwise, the standards for the particular mitigation alternative(s) required to remedy a violation are the same as for any other mitigation site.

Summary of Agency-Initiated Changes:

In addition to the modification on adoption discussed above in response to comments, the Department is modifying the rules on adoption to make the below changes.

1. On July 6, 2015, the Department promulgated amendments, repeals, and new rules concerning coastal areas as part of a rulemaking that modified N.J.A.C. 7:7 and repealed N.J.A.C. 7:7E (see 46 N.J.R. 2405(c)). This rulemaking amended the heading of N.J.A.C. 7:7 as

the Coastal Zone Management Rules and modified citations throughout N.J.A.C. 7:7. Consequently, the Department is updating the heading of, and references to, N.J.A.C. 7:7 to be consistent with the CZM adoption, as well as deleting references to N.J.A.C. 7:7E.

2. Under CZM general permit 23 for geotechnical survey borings, N.J.A.C. 7:7-6.23(a)6 requires that, "Any acid-producing soils encountered shall be managed in accordance with the requirements for a regulated activity in an area with acid-producing soils in the Flood Hazard Area Control Act Rules (N.J.A.C. 7:13)." However, this rulemaking deletes all references to acid-producing soil deposits, including the requirements for a regulated activity in an area with acid-producing soils at prior N.J.A.C. 7:13-10.7. Therefore, on adoption, N.J.A.C. 7:7-6.23(a)6 is deleted and N.J.A.C. 7:7-6.23(a)7 is recodified as N.J.A.C. 7:7-6.23(a)6.

3. N.J.A.C. 7:7-17.12, Requirements for riparian zone mitigation, provides that, "mitigation for impacts to riparian zones shall be provided as required at N.J.A.C. 7:13-10.2(t) and (u) for a regulated activity in a riparian zone." This rulemaking repeals N.J.A.C. 7:13-10.2 and establishes new riparian zone mitigation standards at N.J.A.C. 7:13-13. Accordingly, the reference to N.J.A.C. 7:13-10.2(t) and (u) is replaced on adoption with a reference to N.J.A.C. 7:13-13.

4. Similar to the prior FHACA Rules at N.J.A.C. 7:13-17.1(g), the CZM Rules at N.J.A.C. 7:7-25.1(g) and the FWPA Rules at N.J.A.C. 7:7A-11.1(g) set forth an additional application fee for stormwater review if a project is a "major development" pursuant to the Department's Stormwater Management rules (see N.J.A.C. 7:8-1.2). In cases where any vegetation is removed

within a Special Water Resource Protection Area (pursuant to prior N.J.A.C. 7:8-5.5(h)), an additional $2,000 review fee is assessed. As this rulemaking repeals N.J.A.C. 7:8-5.5(h), this fee was proposed to be deleted from the FHACA Rules at prior N.J.A.C. 7:13-17.1(g). In order to harmonize the fees of the FHACA Rules, CZM Rules, and FWPA Rules, this fee is deleted on adoption from N.J.A.C. 7:7-25.1(g) and 7:7A-11.1(g).

5. The definition of "FEMA flood mapping" at N.J.A.C. 7:13-1.2 is modified on adoption to provide the correct website address to view various FEMA flood mapping products.

6. As noted in the Response to Comment 455, permit-by-rule 26 for the placement of artificial turf on an existing athletic field at N.J.A.C. 7:13-7.26 is not adopted. Rather than reserve N.J.A.C. 7:13-7.26 and have a discontinuous series of permits-by-rule, the permit-by-rule proposed at N.J.A.C. 7:13-7.63 for forest management activities is recodified as N.J.A.C. 7:13-7.26. Additionally, N.J.A.C. 7:13-6.7(b)5(ii) is modified on adoption to indicate the recodification of permit-by-rule 63 as permit-by-rule 26.

7. As proposed, N.J.A.C. 7:13-9.11(a)4 incorrectly required that the construction of a stormwater outfall structure must meet the requirements of N.J.A.C. 7:13-11.11, which does not exist. N.J.A.C. 7:13-9.11(a)4 is therefore modified on adoption to refer to N.J.A.C. 7:13-12.9, Requirements for a stormwater outfall structure.

NOTE: THIS IS A COURTESY COPY OF TIS RULE ADOPTION. THE OFFICIAL VERSION WILL BE PUBLISHED IN THE JUNE 20, 2016 NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

8. As proposed, general permit 12 for the construction of footbridges and general permit 13 for the construction of footbridge, trails, and boardwalks at N.J.A.C. 7:13-9.13 requires that, where the footbridge, trail, or boardwalk is designed for pedestrian use, the width of the trail or boardwalk must be no more than six feet unless it is demonstrated that a wider width is necessary in order to comply with the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 et seq., and the Barrier Free Subcode of the Uniform Construction Code at N.J.A.C. 5:23-7. These requirements were cited in the notice of proposal because the Department had previously understood that they provided guidance on the appropriate width of trails and boardwalks to accommodate barrier free access. However, a further review of these requirements revealed that they do not. Therefore, on adoption, the reference to the Americans with Disabilities Act of 1990 and the Barrier Free Subcode of the Uniform Construction Code is replaced with the provision that the width of the footbridge, trail, or boardwalk is no more than six feet unless it is demonstrated that a wider width is necessary in order to comply with all applicable State and Federal barrier free access requirements. General permit 12 is also modified upon adoption to indicate that this requirement applies only where the footbridge is designed solely for pedestrian use in order to match the language under general permit 13.

The notice of proposal at 47 N.J.R. 1103 further explains that the Department intended to limit the width of trails and boardwalks under this general permit to no more than 10 feet in order to minimize disturbance to riparian zone vegetation and potential impacts to flooding. The notice of proposal additionally noted that applicants proposing wider trails and boardwalks must apply for an individual permit to provide the Department with information sufficient to ensure that any impact from a wider trail or boardwalk is necessary and the proposed width is the minimum

necessary. Therefore, general permit 13 is additionally modified on adoption to note that, in no case, shall the width of the trail or boardwalk exceed 10 feet in order to incorporate the intent noted in the notice of proposal Summary, as referenced above.

9. N.J.A.C. 7:13-11.2(b) is modified on adoption to clarify that the standards at N.J.A.C. 7:13-11.2(b)1 and 2 apply to any regulated area, as well as any project, which is defined at N.J.A.C. 7:13-1.2 to mean all regulated activities occurring and proposed on a site, whether undertaken concurrently or in phases. On adoption, N.J.A.C. 7:13-11.2(b)2 is additionally reorganized to clarify the standards that must be met to demonstrate that clearing, cutting, and/or removal of riparian zone vegetation is minimized under an individual permit.

10. N.J.A.C. 7:13-11.2(d) is modified on adoption to correct a typographical error.

11. Proposed N.J.A.C. 7:13-11.2(f)3, 4, and 5, recodified on adoption as N.J.A.C. 7:13-11.2(f)2, 3, and 4, respectively, to accommodate the deletion of proposed N.J.A.C. 7:13-11.2(f)1 for reasons discussed in the Response to Comments 581 through 589, set forth cases in which disturbance to riparian zone vegetation is not subject to the limitations of Table 11.2 due to the temporary nature of the activities and/or due to the fact that the activities will not impact riparian zone functionality. For example, adopted N.J.A.C. 7:13-11.2(f)2 provides that converting riparian zone vegetation within an actively disturbed area from one type to another, such as converting an actively farmed area into a lawn or garden, is not subject to the limitations of Table 11.2 because such an activity would not alter the ability of riparian zone vegetation to

provide its important values and functions. However, the underlying reasoning for proposing these provisions is that the activities set forth at adopted N.J.A.C. 7:13-11.2(f)2, 3, and 4 would not constitute any net loss in the area of riparian zone vegetation. For example, "converting riparian zone vegetation within an actively disturbed area from one type to another" under N.J.A.C. 7:13-11.2(f)2 means fully replanting any disturbed areas. N.J.A.C. 7:13-11.2(f)3 provides for "temporary clearing, cutting, and/or removal of riparian zone vegetation within an actively disturbed area" and N.J.A.C. 7:13-11.2(f)4 provides for "relocating a lawfully existing structure, which is situated within a riparian zone, to an actively disturbed area on the same site" provided in both cases that "all disturbed areas are adequately stabilized and replanted with vegetation in accordance with" N.J.A.C. 7:13-11.2(z). Therefore, in order to clarify the purpose and intent of these provisions, N.J.A.C. 7:13-11.2(f)2, 3, and 4 are modified on adoption to specify that there can be no net loss in the area of riparian zone vegetation.

12. N.J.A.C. 7:13-11.2(i)3 is modified on adoption to correct a grammatical error.

13. N.J.A.C. 7:13-11.2(k)2 is modified on adoption to correct a codification error.

14. As discussed in the notice of proposal Summary at 47 N.J.R. 1083, N.J.A.C. 7:13-11.6, as proposed, recodifies prior N.J.A.C. 7:13-10.6, which sets forth requirements that must be met for the issuance of an individual permit for a regulated activity located in a regulated area with a threatened or endangered species of plant or animal or associated habitat. The Summary also explains that the rulemaking additionally amends the section to state that the standards therein

apply to both present and documented threatened or endangered species since a threatened or endangered species can be present, and therefore in danger of being adversely impacted, without having been documented. A similar amendment was proposed and adopted at N.J.A.C. 7:13-4.1, regarding how threatened or endangered species affect the width of a riparian zone along a regulated water, as well as at N.J.A.C. 7:13-6.7, which establishes standard conditions for all permits-by-rule, general permits-by-certification and, general permits. Specifically, the notice of proposal Summary at 47 N.J.R. 1124 states: "The proposed condition at N.J.A.C. 7:13-6.7(b)4 provides that the regulated activity shall not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species, and shall not jeopardize the continued existence of any local population of a threatened or endangered species. This represents a tightening of the similar condition protecting threatened or endangered species and their habitat that applies to all general permits under existing N.J.A.C. 7:13-8.1(b)3. To ensure that such species are not adversely affected by any regulated activity, the Department has determined it is appropriate to make this condition applicable to all permits-by-rule, general permits-by-certification, and general permits."

Notwithstanding the above, as proposed, N.J.A.C. 7:13-11.6(d) continued without amendment prior N.J.A.C. 7:13-10.6(d), which provided that the Department shall issue an individual permit for a regulated activity only if the activity will not adversely affect: (1) a threatened or endangered species; or (2) a documented habitat for a threatened or endangered species. However, the language as proposed to be continued does not accord with the adopted heading of N.J.A.C. 7:13-11.6, "Requirements for a regulated activity in or affecting a present or documented habitat for threatened or endangered species," or with the scope of the section at

N.J.A.C. 7:13-11.6(a), which states that, "This section sets forth specific design and construction standards that apply to any regulated activity proposed in or affecting a present or documented habitat for a threatened or endangered species."

Therefore, in order to harmonize the individual permit standards at N.J.A.C. 7:13-11.6(d) with the adopted heading and scope of the section, the adopted condition at N.J.A.C. 7:13-6.7(b)4 that applies to all permits-by-rule, general permits-by-certification, and general permits, and the purpose of the proposed amendments to the section as stated in the notice of proposal Summary, N.J.A.C. 7:13-11.6(d) is modified on adoption to clarify that the Department shall issue an individual permit for a regulated activity only if the activity will not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species and shall not jeopardize the continued existence of any local population of a threatened or endangered species.

15. N.J.A.C. 7:13-11.6(e) is modified on adoption to correct a codification error.

16. N.J.A.C. 7:13-12.19(b)3 is modified on adoption to correct an error.

17. N.J.A.C. 7:13-18.2(d) is modified on adoption to correct a typographical error.

18. N.J.A.C. 7:13-20.1(b) is modified on adoption to add an emergency authorization transfer and an administrative modification to the list of applications that do not require a fee. N.J.A.C. 7:13-22.4 allows for the transfer of emergency authorizations, and transferring an application

does not require a fee, as noted in the notice of proposal Summary at 47 N.J.R. 1136. Further, the notice of proposal Summary at 47 N.J.R. 1135 explains that there is no fee for an administrative modification. These approvals are therefore added to N.J.A.C. 7:13-20.1(b) for clarity. Table 20.1 is additionally amended to indicate that an administrative modification does not require an application fee.

19. N.J.A.C. 7:13-22.4(a) is modified on adoption to improve grammar and make the provision consistent with the parallel provisions in the CZM Rules at N.J.A.C. 7:7-27.4(a).

20. One major theme of this rulemaking is to align, to the extent permissible by statute and practicable in the context of the program, the flood hazard area permit processing and enforcement provisions with the parallel provisions in the CZM Rules that were adopted on July 6, 2015. Upon comparison of the proposed enforcement provisions at N.J.A.C. 7:13-24 with the enforcement provisions in the adopted CZM Rules at N.J.A.C. 7:7-29, a number of unintentional differences were found. In order to better harmonize N.J.A.C. 7:13-24 with 7:7-29, a number of provisions have been modified on adoption as follows.

- Where terminology unintentionally differs, such as at N.J.A.C. 7:13-24.2, 24.3(a)3, 24.3(d)1 and 2, 24.6(e)2, 24.6(g), and 24.8(a)5, the FHACA Rules were modified on adoption to match the language in the CZM Rules;
- Where the CZM Rules included additional language that clarifies the intent of the adopted provision, the additional language has been incorporated at N.J.A.C. 7:13-24.3(b) and 24.5(h)2; and

- Where grammatical and typographical errors and incorrect citations and references were discovered at N.J.A.C. 7:13-24.3(c), 24.4(e), and 24.11(c)2, (d)2 through 6, (e)4iv, and (f), they have been corrected.

21. N.J.A.C. 7:13-10.3(b) is modified on adoption to include an example of the type of individual permit condition that the Department may establish on a case-by-case basis in order to ensure that the authorized activity meets all applicable requirements of the FHACA Rules and its enabling statutes.

22. N.J.A.C. 7:13-12.20 is modified on adoption to provide the correct reference and citation for an authorization under a general permit for the placement of storage tanks.

Federal Standards Statement

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. (P.L. 1995, c. 65) require State agencies that adopt, readopt, or amend State regulations that exceed any Federal standards or requirements to include in the rulemaking document a comparison with Federal law.

The Department's authority for regulating development within flood hazard areas and riparian zones comes solely from State statute, specifically N.J.S.A. 58:16A-50 et seq., 58:10A-1 et seq., 58:11A-1 et seq., and 13:1D-1 et seq. The Flood Hazard Area Control Act Rules are not promulgated under the authority of, or in order to implement, comply with, or participate in any program established under Federal law or under a State statute that incorporates or refers to Federal laws, Federal standards, or Federal requirements. The Federal Emergency Management Agency (FEMA) delineates flood hazard areas in the State for the purposes of the National Flood

Insurance Program (NFIP). However, there is no Federal agency or program that directly regulates activities in flood prone areas based on their potential flooding impacts. The Code of Federal Regulations, at 44 CFR Part 60, enables FEMA to require municipalities who participate in the NFIP to adopt certain flood hazard reduction standards for construction and development in 100-year flood plains. However, a community's participation in the NFIP is voluntary, and FEMA does not otherwise regulate land uses in flood hazard areas. Furthermore, the Federal flood reduction standards at 44 CFR Part 60 are administered by local governments. The proposed amendments, repeals, and new rules do not derive authority from any Federal law or under any State statute that incorporates or refers to Federal laws, standards, or requirements.

Full text of the adopted recodifications, amendments, and new rules follows (additions to proposal indicated in boldface with asterisks ***thus***; deletions from proposal indicated in brackets with asterisks *[thus]*):

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CHAPTER 7

COASTAL ZONE MANAGEMENT

SUBCHAPTER 6. GENERAL PERMITS

7:7-6.23 General permit 23 –geotechnical survey borings

(a) This general permit authorizes geotechnical survey borings including survey borings or excavations constructed for the purpose of obtaining information on subsurface conditions, for the purpose of determining the presence or extent of contamination in subsurface soils or groundwater, and for obtaining seismic information, provided the following conditions are met.

1. – 5. (No change.)

[6. Any acid-producing soils encountered shall be managed in accordance with the requirements for a regulated activity in an area with acid-producing soils in the Flood Hazard Area Control Act rules (N.J.A.C. 7:13).]

[7.] ***6.*** (No change in text.)

SUBCHAPTER 9. SPECIAL AREAS

[7:7E-3.26] ***7:7-9.26*** Riparian zones

(a) – (d) (No change from proposal.)

(e) The width of the riparian zone is as follows:

1. The width of the riparian zone along any regulated water designated as a Category One water, and all upstream *[regulated waters]* ***tributaries*** situated within the same HUC-14 watershed, is 300 feet;

2. Except for the regulated waters listed at (e)1 above, the width of the riparian zone along the following regulated waters is 150 feet:

   i. Any trout production water and all upstream *[regulated]* waters ***(including tributaries)***;

   ii. Any trout maintenance water and all upstream *[regulated]* waters ***(including tributaries)*** located within one mile of a trout maintenance water (measured along the length of the regulated water); and

   iii. Any segment of a *[regulated]* water flowing through an area that contains endangered or threatened wildlife or plant species habitat, which is critically dependent on the regulated water for survival, and all upstream *[regulated]* waters ***(including tributaries)*** located within one mile of such habitat (measured along the length of the regulated water). A list of critically dependent species is available from the Department at the website set forth at N.J.A.C. 7:7-1.6; and

3. (No change from proposal.)

(f) – (h) (No change from proposal.)

(i) If endangered and/or threatened wildlife or species habitat is present within a riparian zone the requirements of N.J.A.C. *[7:7E-3.38]* ***7:7-9.36***, Endangered or threatened wildlife or plant species habitats, shall apply.

(j) – (k) (No change from proposal.)

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SUBCHAPTER 17. MITIGATION

7:7-17.12 Requirements for riparian zone mitigation

As provided at N.J.A.C. 7:7-9.26*[(e)]***(h)***, any development regulated under this chapter in a riparian zone shall meet the requirements for a permit under the Flood Hazard Area Control Act Rules, N.J.A.C. 7:13. Accordingly, mitigation for impacts to riparian zones shall be provided as required at N.J.A.C. *[7:13-10.2(t) and (u)]* ***7:13-13*** for a regulated activity in a riparian zone.

SUBCHAPTER 25. APPLICATION FEES

7:7-25.1 Application fees

(a) – (f) (No change.)

(g) The fees for applications under this chapter are set forth in Table A below:

Table A

APPLICATION FEES

…

Additional application fee for stormwater review if a project is a "major development" pursuant to the Stormwater Management Rules (see N.J.A.C. 7:8-1.2)

	Fee
...	

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*[Additional fee if project disturbs vegetation within a Special Water Resource Protection Area (see N.J.A.C. 7:8-5.5)	$2,000]*

CHAPTER 7A

FRESHWATER WETLANDS PROTECTION ACT RULES

SUBCHAPTER 11. APPLICATION FEES

7:7A-11.1 Application fees

(a) – (f) (No change.)

(g) The fees for applications under this chapter are set forth in Table A below:

Table A

APPLICATION FEES

…

Additional application fee for stormwater review if a project is a “major development”

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pursuant to the Stormwater Management Rules (see N.J.A.C. 7:8-1.2)

	Fee
...	
*[Additional fee if project disturbs vegetation within a Special Water Resource Protection Area (see N.J.A.C. 7:8-5.5)	$2,000]*

7:8-5.5 Stormwater runoff quality standards

(a) – (g) (No change.)

***(h) The Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-4.1(c)1 establish 300-foot riparian zones along Category One waters, as designated in the Surface Water Quality Standards at N.J.A.C. 7:9B, and certain upstream tributaries to Category One waters. A**

person shall not undertake a major development that is located within or discharges into a 300-foot riparian zone without prior authorization from the Department under N.J.A.C. 7:13.*

[(h)] ***(i)*** (No change in text from proposal.)

7:13-1.2 Definitions

The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise. Additional definitions specifically applicable to N.J.A.C. 7:13-13, Mitigation, are set forth at N.J.A.C. 7:13-13.1.

…

"Barrier island complex" means the landforms surrounded by both bay and ocean, including barrier islands, spits, and peninsulas, which are situated along New Jersey's Atlantic coastline, and which extend from the northern tip of Sandy Hook, in Monmouth County, to the southern tip of Cape May County. The barrier island complex includes the barrier island corridor, as defined in the Department's Coastal Zone Management *[rules at N.J.A.C. 7:7E-3.20]* ***Rules at N.J.A.C. 7:7-9.20***, as well as any associated wetland complex adjacent to the corridor. A barrier island is a long, narrow island that generally lies parallel to the mainland and serves to protect the coast from erosion. A spit is a long, narrow depositional landform projecting outward from the shoreline associated with a barrier island corridor. A peninsula is a narrow expanse of land surrounded by both bay and ocean waters, which is connected to the mainland. The barrier island complex does not include the entire Cape May peninsula, but the Cape May peninsula

does include barrier islands, spits and peninsulas along its Atlantic coastline. The barrier island complex does not include bay islands, which are islands or filled areas surrounded by tidal waters, wetlands, beaches, or dunes, lying between the mainland and barrier islands, but which may be connected to the mainland or barrier islands by elevated or fill-supported roads.

…

"Charitable conservancy" means a corporation or trust that meets the definition of a charitable conservancy at N.J.S.A. 13:8B-2. (Note: Effective as of *[{date of this amendment}]* ***June 20, 2016***, the definition of charitable conservancy at N.J.S.A. 13:8B-2 is a corporation or trust whose purposes include the acquisition and preservation of land or water areas or of a particular land or water area, or either thereof, in a natural, scenic or open condition, no part of the net earnings of which inures to the benefit of any private shareholder or individual, and which has received tax exemption under section 501(c) of the 1954 Internal Revenue Code.)

"Coastal permit" means a permit or an authorization issued under the *[Coastal Permit Program Rules, N.J.A.C. 7:7, and the]* Coastal Zone Management Rules, N.J.A.C. *[7:7E]* ***7:7***, pursuant to the Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq., the Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq., or the Waterfront Development Law, N.J.S.A. 12:5-3.

…

"FEMA flood mapping" means information published or publicly released by FEMA regarding the frequency, location, and/or extent of flooding in a community, such as flood elevations, flood profiles, flow rates, and floodway limits, and including FEMA 100-year flood elevation as defined above. For the purposes of this chapter, such information shall include only

that information adopted as part of the most recent effective FEMA Flood Insurance Study, dated on or after January 31, 1980, or any more recent advisory or proposed (preliminary) flood mapping, if the more recent advisory or proposed (preliminary) mapping results in higher flood elevations, wider floodway limits, or greater flow rates than depicted in the most recent effective FEMA Flood Insurance Study. Effective ***and proposed (preliminary)*** FEMA flood mapping can be viewed at https://msc.fema.gov and advisory *[or proposed (preliminary)]* flood mapping for coastal areas***, where available,*** can be viewed at *[http://www.region2coastal.com/bestdata]**** * **http://www.region2coastal.com***. Questions regarding the availability, use, derivation, or modification of FEMA flood mapping should be directed to FEMA at (800) 358-9616.

…

"Regulated activity" or “activity” means an activity that is regulated under this chapter as described at N.J.A.C. 7:13-2.4. Some regulated activities, when performed in a certain manner or to a specified degree, are permitted-by-rule at N.J.A.C. 7:13-6 and 7. All regulated activities *[which]* ***that*** are not permitted-by-rule require a general permit-by-certification under N.J.A.C. 7:13-6 and 8, a general permit under N.J.A.C. 7:13-6 and 9, an individual permit under N.J.A.C. 7:13-10, 11, and 12, an emergency authorization under N.J.A.C. 7:13-16, or a coastal permit under N.J.A.C. 7:7 *[and 7:7E,]* prior to commencement.

…

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7:13-2.1 When a permit or authorization is required

(a) No person shall engage in a regulated activity in a regulated area without a flood hazard area authorization or permit as required by this chapter, or a coastal permit as required by N.J.A.C. 7:7 *[and 7:7E]*, as set forth in (b) and (c) below. Initiation of a regulated activity in a regulated area without a flood hazard area authorization or permit or a coastal permit as set forth at (b) below (except as provided in (c) below) shall be considered a violation of this chapter and shall subject the party or parties responsible for the regulated activity to enforcement action, as set forth at N.J.A.C. 7:13-24. Regulated areas are set forth at N.J.A.C. 7:13-2.3 and regulated activities are set forth at N.J.A.C. 7:13-2.4.

(b) Except as provided in (c) or (e) below, a person undertaking any regulated activity in a regulated area shall do so only in accordance with one of the following:

1. – 5. (No change from proposal.)

6. A coastal permit, pursuant to N.J.A.C. 7:7 *[and 7:7E]*, provided:

i. – ii. (No change from proposal.)

(c) Undertaking a regulated activity in a regulated area does not require an approval listed at (b) above in the cases listed in (c)1 through 4 below. For the purpose of this subsection, each distinct construction activity in a project, such as each building, road**,** or utility crossing, is considered a distinct regulated activity.

1. – 3. (No change.)

4. The regulated activity is part of a project that was subject to neither the requirements of this chapter, nor N.J.A.C. 7:7 and *[7:7E]*, prior to November 5, 2007, and one of the following applies:

i.-ii. (No change from proposal.)

(d) If a regulated activity is approved under a qualifying approval listed at (c) above, and the regulated activity is subsequently revised, the original approval continues to satisfy the requirements of (c) above provided the Department determines that the revision will not result in one or more of the following:

1. – 2. (No change from proposal.)

3. For regulated activities under a qualifying approval under (c)1 or 2 above, additional regulated activities within a regulated area that have not been previously reviewed by the Department under N.J.A.C. 7:7*[, 7:7E]* and/or this chapter, as applicable; or

4. (No change from proposal.)

(e) (No change from proposal.)

7:13-2.2 Regulated waters

(a) All waters in New Jersey are regulated under this chapter except those described at (a)1 through 4 below. Every regulated water possesses a flood hazard area and/or a riparian zone as set forth at N.J.A.C. 7:13-2.3:

1. – 2. (No change from proposal.)

3. Any segment of water that has a drainage area of less than 50 acres, provided one or more of the following applies:

*[i. The water is not a “State open water” as defined in the Freshwater Wetlands Protection Act Rules at N.J.A.C. 7:7A-1.4;

ii. The water has no discernible channel, such as a “swale” as defined in the

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Freshwater Wetlands Protection Act Rules at N.J.A.C. 7:7A-1.4;

iii. The water is confined within a lawfully existing, manmade drainage feature, such as a ditch, channel, or basin (not including any water that historically possessed a naturally-occurring, discernible channel, which has been ditched or similarly modified);

iv. The water is confined within a lawfully existing conveyance structure, such as a pipe, culvert, or bridge; or

v. The water is not connected to a regulated water by a channel or pipe, such as an isolated pond or depression that has no outlet; and]*

***i. The water has no discernible channel;**

ii. The water is confined within a lawfully existing, manmade conveyance structure or drainage feature, such as a pipe, culvert, ditch, channel, or basin (not including any water that historically possessed a naturally-occurring, discernible channel, which has been piped, culverted, ditched, or similarly modified); and/or

iii. The water is not connected to a regulated water by a channel or pipe, such as an isolated pond or depression that has no outlet; and*

4. (No change from proposal.)

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7:13-4.1 The riparian zone

(a) – (b) (No change from proposal.)

(c) The width of the riparian zone is as follows:

1. The width of the riparian zone along any regulated water designated as a Category One water, and all upstream *[regulated waters]* ***tributaries*** situated within the same HUC-14 watershed, is 300 feet;
2. Except for ***the*** regulated waters listed at (c)1 above, the width of the riparian zone along the following regulated waters is 150 feet:
   i. Any trout production water and all upstream *[regulated]* waters ***(including tributaries)***;
   ii. Any trout maintenance water and all upstream *[regulated]* waters ***(including tributaries)*** located within one mile of a trout maintenance water (measured along the length of the regulated water); and
   iii. Any segment of a *[regulated]* water flowing through an area that contains a threatened or endangered species, and/or present or documented habitat for those species, which is critically dependent on the regulated water for survival, and all upstream *[regulated]* waters ***(including tributaries)*** located within one mile of such habitat (measured along the length of the regulated water). A list of critically dependent species is available from the Department at the website set forth at N.J.A.C. 7:13-1.3; and

3. (No change from proposal.)

(d) – (i) (No change from proposal.)

7:13-6.4 Use of more than one permit on a single site

(a) A person may undertake a regulated activity more than once on a single site. The activity may be authorized each time under a single permit-by-rule, general permit-by-certification, or general permit, provided the individual limits and conditions of the permit are not exceeded*[.]***, either individually or cumulatively. For example, if a particular activity may be conducted under a permit-by-rule with a disturbance limit of 750 square feet and the same activity may be authorized under a general permit with a disturbance limit of 1,500 square feet, a person who has disturbed 750 square feet of riparian zone vegetation under a permit-by-rule may apply for a general permit to increase the area of disturbance but would only be allowed a maximum of an additional 750 square feet so as not to exceed the 1,500 square feet total disturbance limitation applicable to the general permit.***

(b) – (c) (No change from proposal.)

(d) On a single site, one or more permits-by-rule, general permits-by-certification, and/or general permits may be used in combination with an individual permit, provided the individual limits and conditions of each permit are not exceeded***, either individually or cumulatively***.

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7:13-6.7 Conditions applicable to a permit-by-rule*[,]* or to an authorization pursuant to a general permit-by-certification or a general permit

(a) (No change from proposal.)

(b) The following conditions are incorporated by reference in each permit-by-rule, general permit-by-certification, or general permit:

1. – 4. (No change from proposal.)

5. Except for normal property maintenance conducted in accordance with permit-by-rule 1 at N.J.A.C. 7:13-7.1 ***and forest management activities under permit-by-rule 26 at N.J.A.C. 7:13-7.26***, all riparian zone vegetation that is cleared, cut, and/or removed to conduct a regulated activity, access an area where regulated activities will be conducted, or otherwise accommodate a regulated activity shall be replanted immediately after completion of the regulated activity, unless prevented by seasonal weather, in which case the vegetation shall be replanted as soon as conditions permit. Portions of the riparian zone occupied by an authorized structure need not be replanted.

   i. (No change from proposal.)

   ii. In cases where replanting in accordance with (b)5i above would interfere with continued access to or maintenance of a structure that is required by Federal, State, or local law, *[or would impede forest management activities under permit-by-rule 63 (N.J.A.C. 7:13-7.63),]* the vegetation replanted shall meet the requirements of (b)5i above to the extent feasible.

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(c) – (d) (No change from proposal.)

7:13-7.19 Permit-by-rule 19 – replacement, renovation, or reconstruction of certain water dependent structures

(a) Permit-by-rule 19 authorizes the replacement, renovation, or reconstruction of one or more of the following water dependent structures, provided the conditions at N.J.A.C. 7:13-6.7 are met, the timing restrictions set forth at N.J.A.C. 7:13-11.5(d) are observed, and the structure is not a habitable building:

1. Any dock, wharf, pier, or bulkhead that meets the requirements of N.J.A.C. 7:7-*[2.3(d)6]***2.4(d)6***; and
2. Any floating dock, mooring raft, or similar temporary or seasonal improvement or structure that meets the requirements of N.J.A.C. 7:7-*[2.3(d)7]***2.4(d)7***.

*[7:13-7.26 Permit-by-rule 26 – placement of artificial turf on an existing athletic field

(a) Permit-by-rule 26 authorizes the placement of artificial turf on an existing athletic field, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. The existing ground elevation is not raised in any floodway or fluvial flood hazard area;
2. Any clearing, cutting, and/or removal of riparian zone vegetation is limited to actively disturbed areas; and
3. No disturbance is located within 25 feet of any top of bank, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water

or impounded fluvial water.]*

7:13-*[7.63]***7.26*** Permit-by-rule *[63]* ***26*** – forest management activities

(a) Permit-by-rule *[63]* ***26*** authorizes the forest management activities identified at (b) below, provided they are conducted in accordance with a forest management plan that has been approved by the New Jersey State Forester or designee before the activities are undertaken. Information and guidance related to forest management activities in flood hazard areas and riparian zones are provided in the document entitled, "New Jersey Forestry and Wetlands Best Management Practices Manual," dated October 1995, which is available at www.state.nj.us/dep/parksandforests/forest/nj_bmp_manual1995.pdf.

(b) – (d) (No change from proposal.)

7:13-7.34 Permit-by-rule 34 – placement of one or more utility open-frame towers

(a) Permit-by-rule 34 authorizes the placement of one or more open-frame towers to provide cellular telephone service or to support a utility line, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. – 2. (No change from proposal.)

3. The footing of each tower ***within a fluvial flood hazard area*** is constructed primarily at or below grade, such that the top of the footing lies no more than 12 inches aboveground;

4. – 5. (No change from proposal.)

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7:13-7.35 Permit-by-rule 35 – placement of one or more utility monopole towers

(a) Permit-by-rule 35 authorizes the placement of one or more monopole towers to provide cellular service or to support a utility line, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. – 2. (No change from proposal.)

3. The diameter of each monopole tower ***within a fluvial flood hazard area*** is no greater than five feet;

4. – 5. (No change from proposal.)

7:13-7.43 Permit-by-rule 43 – placement of traffic safety structures on poles

(a) Permit-by-rule 43 authorizes the placement of one or more traffic safety structures on poles, such as overhead signs, variable message signs, streetlights, traffic signal equipment, and other similar structures intended to facilitate travel safety along a public roadway, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. Any footing necessary to support the structure ***within a fluvial flood hazard area*** is constructed primarily at or below grade, such that the top of the footing lies no more than 12 inches above ground;

2. – 3. (No change from proposal.)

(**Agency Note**: N.J.A.C. 7:13-7.63 is recodified upon adoption with amendments as N.J.A.C. 7:13-7.26.)

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SUBCHAPTER 9. GENERAL PERMITS

7:13-9.11 General permit 11 for a stormwater outfall along a regulated water with a drainage area of less than 50 acres

(a) General permit 11 authorizes the construction of one stormwater outfall structure along a regulated water that has a drainage area of less than 50 acres, provided the conditions at N.J.A.C. 7:13-6.7 are met and the structure:

1. – 3. (No change from proposal.)

4. Meets the requirements at N.J.A.C. 7:13-*[11.11]***12.9*** for the construction of a stormwater outfall structure.

7:13-9.12 General permit 12 – construction of footbridges

(a) General permit 12 authorizes the construction of one or more footbridges across a regulated water, or across another feature such as a manmade canal or roadway that lies within the flood hazard area or riparian zone of a regulated water, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-2. (No change from proposal.)

3. Where the footbridge is designed ***solely*** for pedestrian use, the width of the footbridge is no more than six feet, unless it is demonstrated that a wider width is necessary in order to comply with *[the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 et seq., and the Barrier Free Subcode of the Uniform Construction Code at N.J.A.C. 5:23-7]* ***all applicable State and Federal barrier-free access requirements. In no case shall the width of the footbridge exceed 10 feet***;

4.-11. (No change from proposal.)

7:13-9.13 General permit 13 - construction of trails and boardwalks

(a) General permit 13 authorizes the construction of a trail and/or boardwalk, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. (No change from proposal.)
2. Where the trail or boardwalk is designed solely for pedestrian use, the width of the trail or boardwalk is no more than six feet, unless it is demonstrated that a wider width is necessary in order to comply with *[the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 et seq., and the Barrier Free Subcode of the Uniform Construction Code at N.J.A.C. 5:23-7]* ***all applicable State and Federal barrier-free access requirements. In no case shall the width of the trail or boardwalk exceed 10 feet***;

3. – 8. (No change from proposal.)

7:13-10.3 Conditions applicable to an individual permit

(a) (No change.)

(b) In addition to the conditions that apply to every individual permit under (a) above, the Department shall establish conditions in a specific individual permit, as required on a case-by-case basis, to ensure the authorized regulated activity meets all applicable requirements of this chapter and its enabling statutes. ***For example, in cases where a proposed regulated activity involves disturbance to a Category One water or its riparian zone, the Department may**

impose additional conditions to ensure that the water quality of the regulated water is protected.*

7:13-11.2 Requirements for a regulated activity in a riparian zone

(a) (No change from proposal.)

(b) The Department shall issue an individual permit for any regulated activity ***or project*** that results in clearing, cutting, and/or removal of vegetation in a riparian zone *[provided]* ***only if***:

1. (No change from proposal.)
2. Clearing, cutting, and/or removal of riparian zone vegetation is minimized through methods including*[situating]***:***

   i. Situating the regulated activity or project as far from any regulated water as feasible***;*** and *[limiting]*

   ii. Limiting construction to *[areas devoid of vegetation,]* actively disturbed areas*[, or other]* ***and/or*** areas wherein the benefits and functions of a riparian zone are considerably deteriorated and impaired as a result of previous development, such as *[abandoned]* ***:***

   (1) Areas devoid of vegetation, including areas covered with structures or other impervious surface;

   (2) Abandoned* pavement that has partially revegetated*[, areas]***;**

   (3) Areas* of dirt and gravel that are primarily devoid of vegetation*[, eroded]***;**

   (4) Eroded* embankments*[, areas covered with structures or other impervious

surface,]****;*** and *[landscape]*

(5) Landscape islands within a paved parking area;

3. – 5. (No change from proposal.)

(c) (No change from proposal.)

(d) The Department shall issue an individual permit for a regulated *[activitiy]* ***activity*** within a riparian zone only if all existing onsite impervious surfaces located within 25 feet of the top of bank are removed and the riparian zone is replanted with vegetation in accordance with (z) below, except in the following cases:

1. – 3. (No change from proposal.)

(e) Table 11.2 below establishes the maximum allowable area of riparian zone vegetation that can be temporarily or permanently cleared, cut, and/or removed associated with the regulated activities identified at (g) through (y) below without Department approval based upon additional justification as set forth in (g)1, (h)1, (i)2, (j)1, (k)1, (q)1, (t), (u)1, (v), or (w)1 below or Department approval of a hardship exception. Where the area of riparian zone vegetation being cleared, cut, and/or removed exceeds a limit in Table 11.2, or where vegetation is cleared, cut, and/or removed pursuant to (g)3, (h)3, (j)4, (r)2, (s)3, and/or *[(y)3]* ***(y)*** below, mitigation, in accordance with N.J.A.C. 7:13-13, is required. Activities within riparian zones that are not subject to the limits set forth in Table 11.2 are identified in (f) below.

1. – 3. (No change from proposal.)

(f) The following regulated activities are not subject to the limits set forth in Table 11.2 below, and shall not be included when calculating the total area of vegetation to be cleared, cut, and/or removed under (e)1 above:

*[1. The cumulative net loss of up to one-quarter acre of riparian zone vegetation within an actively disturbed area per site since November 5, 2007;

i. The subdivision, sale, or transfer of ownership of a site after November 5, 2007, does not reduce or increase the area of riparian zone vegetation that can be cleared, cut, and/or removed under this paragraph;]*

[2.] ***1.*** Any regulated activity that will not result in clearing, cutting, and/or removal of riparian zone vegetation, such as construction on a lawfully existing impervious surface, or within a ***lawfully existing*** gravel roadway or parking area;

[3.] ***2.*** Converting riparian zone vegetation within an actively disturbed area from one type to another, such as converting an actively farmed area into a lawn or garden***, provided there is no net loss in the area of riparian zone vegetation***;

Recodify proposed 4. – 6. as ***3. – 5.*** (No change in text from proposal.)

[7.] ***6.*** Any regulated activity along *[an]* ***a lawfully*** existing public roadway, provided the activity is:

i. - iv. (No change from proposal.)

v. Situated on *[an]* ***a lawfully*** existing roadway embankment, or within an area adjacent to *[an]* ***a lawfully*** existing roadway, which was disturbed for the initial construction of the roadway; and

[8.] ***7.*** Any clearing, cutting, and/or removal of riparian zone vegetation within a truncated portion of a riparian zone. For the purposes of this paragraph, an area is considered to be a truncated portion of a riparian zone if:

i. The area is separated from a regulated water by a ***lawfully existing*** railroad or

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public roadway;

ii. – iii. (No change from proposal.)

Table 11.2

MAXIMUM ALLOWABLE AREA OF RIPARIAN ZONE VEGETATION THAT CAN BE TEMPORARILY OR PERMANENTLY CLEARED, CUT, AND/OR REMOVED WITHOUT ADDITIONAL JUSTIFICATION, MITIGATION, AND/OR A HARDSHIP EXCEPTION REQUEST, IN ACCORDANCE WITH (e) ABOVE

Proposed Regulated Activity	See Subsection Below for Additional Requirements	Allowable Disturbance Based on the Width of the Riparian Zone		
		50-foot Riparian Zone	150-foot Riparian Zone	300-foot Riparian Zone

…

*[• Any regulated activity not listed in this table above					
Where total disturbance associated with all regulated activities under this category is:	No greater than 2,000 ft^2	(y)	No mitigation required		
	Greater than 2,000 ft^2		One-quarter acre, all of which requires mitigation]*		
***Any regulated activity not listed in this table above**		**(y)**	**1,000 ft^2**	**3,000 ft^2**	**6,000 ft^2***

(g) – (h) (No change from proposal.)

(i) The Department shall issue an individual permit for the restoration to a stable condition of a bank or channel that has become eroded, unstable, ecologically degraded, and/or enclosed within a structure, which results in clearing, cutting, and/or removal of riparian zone vegetation, only if:

1. – 2. (No change from proposal.)

3. For a project to restore a regulated water that is enclosed by a structure to a natural condition in accordance with N.J.A.C. 7:13-12.14(d), only the limits set forth in Table 11.2 *****[to]* ***for*** access ***to*** the project shall apply.

(j) (No change from proposal.)

(k) The Department shall issue an individual permit to construct a new aboveground or underground utility line, which results in clearing, cutting, and/or removal of riparian zone vegetation, only if:

1. (No change from proposal.)

2. The applicant demonstrates, pursuant to N.J.A.C. 7:13-*[12.9(b)1 through 4]****12.8(c)1 through 4***, that clearing, cutting, and/or removal of riparian zone vegetation is unavoidable;

3. – 6. (No change from proposal.)

(l) – (n) (No change from proposal.)

(o) The Department shall issue an individual permit for the construction of a public access area along a tidal water, which results in clearing, cutting, and/or removal of riparian zone vegetation, only if:

1. The public access area is designed in accordance with the public access to the

waterfront rule, N.J.A.C. *[7:7E-8.11]* ***7:7-16.9***; and

2. (No change from proposal.)

(p) The Department shall issue an individual permit for the construction of a water dependent development, as defined in the Coastal Zone Management *[rules at N.J.A.C. 7:7E-8.11]* ***Rules at N.J.A.C. 7:7-1.5***, along a tidal water, which results in clearing, cutting, and/or removal of riparian zone vegetation, only if:

1. The water dependent development is designed in accordance with the Coastal Zone Management *[rules at N.J.A.C. 7:7E]* ***Rules at N.J.A.C. 7:7***; and

2. (No change from proposal.)

(q) – (x) (No change from proposal.)

(y) The Department shall issue an individual permit for a regulated activity that is not listed in (g) through (x) above, which results in clearing, cutting, and/or removal of riparian zone vegetation, only if:

1. The total area of vegetation cleared, cut, and/or removed within the riparian zone does not exceed the limits set forth in Table 11.2 above;

*[2. The applicant demonstrates that there is no other feasible use of the site that would reduce the area of riparian zone vegetation to be cleared, cut, and/or removed, such as constructing a different type of project onsite, reducing the size or scope of the project, or relocating the project to a different portion of the site; and

3. Where the area of riparian zone vegetation to be cleared, cut, and/or removed associated with regulated activities under this subsection is greater than 2,000 square feet, the applicant provides mitigation, in accordance with N.J.A.C. 7:13-13, for the total area of

vegetation that is cleared, cut, and/or removed.]*

***2. No building is constructed within 25 feet of any top of bank or edge of water;**

3. The applicant demonstrates the following:

i. There is no other reasonable means of accomplishing the project that would reduce or eliminate the impact to the riparian zone;

ii. There is no other feasible location onsite to undertake the project that would reduce or eliminate the impact to the riparian zone; and

iii. All disturbance within the riparian zone is located as far from the regulated water as possible; and

4. The applicant provides mitigation, in accordance with N.J.A.C. 7:13-13, for the total area of vegetation that is cleared, cut, and/or removed.*

(z) (No change from proposal.)

7:13-11.3 Requirements for a regulated activity in a floodway

(a) – (b) (No change.)

(c) Notwithstanding (b) above, the Department shall issue an individual permit for the following regulated activities in a floodway, provided all other requirements of this chapter are satisfied for each activity:

1. The construction or conversion of a building on a pier in the Hudson River, provided the requirements of the Coastal Zone Management *[rules at N.J.A.C. 7:7E-3.48]* ***Rules at N.J.A.C. 7:7-9.46*** are satisfied, in accordance with N.J.A.C. 7:13-12.5(e) or (f), as appropriate;

2. – 10. (No change from proposal.)

7:13-11.6 Requirements for a regulated activity in or affecting a present or documented habitat for threatened or endangered species

(a) – (c) (No change from proposal.)

(d) The Department shall issue an individual permit for a regulated activity only if the activity will not *[adversely affect either of the following:]* ***destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species, and shall not jeopardize the continued existence of any local population of a threatened or endangered species.***

*[1. A threatened or endangered species; or

2. A documented habitat for a threatened or endangered species.]*

(e) The Department shall require a survey and/or a habitat assessment for threatened or endangered species as part of an environmental report, as described at N.J.A.C. 7:13-*[18.5(c)]***18.6(b)***, for an individual permit for any regulated activity which is likely to do either of the following:

1. – 2. (No change from proposal.)

(f) – (g) (No change from proposal.)

7:13-12.5 Requirements for a building

(a) – (d) (No change from proposal.)

(e) The Department shall issue an individual permit for the construction of a new building in a floodway, only if the following requirements are satisfied:

1. (No change from proposal.)

2. The requirements of the Department's Coastal Zone Management *[rules at N.J.A.C. 7:7E-3.48]* ***Rules at N.J.A.C. 7:7-9.46*** are met; and

3. (No change from proposal.)

(f) – (t) (No change from proposal.)

7:13-12.13 Requirements for a retaining wall or bulkhead

(a) (No change from proposal.)

(b) This section does not apply to any retaining wall or bulkhead in a tidal flood hazard area that is authorized under a valid coastal permit, or is exempt from requiring a coastal permit under N.J.A.C. 7:7-*[2.3(d)6]***2.4(d)6***.

(c) – (d) (No change from proposal.)

7:13-12.18 Requirements for the placement, storage, or processing of hazardous substances

(a) (No change from proposal.)

(b) A lawfully existing facility established on or before November 5, 2007, may be eligible to place, store, or process hazardous substances under permit-by-rule 52 for the placement, storage, or processing of hazardous substances at N.J.A.C. 7:13-7.52, provided the size or capacity of the facility is not increased. In addition, the placement of a fuel or storage tank may be authorized in certain circumstances under permit-by-rule 22 for the construction of a fuel tank

at N.J.A.C. 7:13-7.22 or *[general permit-by-certification 15 for storage tanks at N.J.A.C. 7:13-8.15]* ***general permit 8 for the placement of storage tanks at N.J.A.C. 7:13-9.8***. All other placement, storage, or processing of hazardous substances in a regulated area is subject to this section.

(c) (No change from proposal.)

7:13-12.19 Requirements for solid waste landfill closure

(a) (No change from proposal.)

(b) The Department shall issue an individual permit for regulated activities under (a) above only if the applicant demonstrates that:

1. – 2. (No change from proposal.)

3. In order to minimize the potential that *[hazardous substances]* ***solid waste*** will be transported offsite by floodwaters after the completion of the landfill closure or disruption activities, all material permanently placed within a regulated area is stabilized and/or covered with suitable material such that the material will not be eroded, displaced, or transported offsite during the flood hazard area design flood.

SUBCHAPTER 13. RIPARIAN ZONE MITIGATION

7:13-13.8 Riparian zone mitigation options and mitigation location

(a)-(c) (No change from proposal.)

***(d) Mitigation to compensate for disturbance to vegetation within a 300-foot riparian**

zone, which is associated with a "major development" as defined in the Department's Stormwater Management rules at N.J.A.C. 7:8-1.2, shall be provided along either the same regulated water as the disturbance or an upstream tributary to that regulated water.*

7:13-13.10 Riparian zone restoration and enhancement

(a) – (b) (No change.)

(c) If enhancement is the mitigation alternative,*[.]* the Department shall require enhancement at an enhancement to loss ratio of 3:1, unless the applicant demonstrates in accordance with (b)1 below that enhancement at a ratio of less than 3:1 will provide equal ecological functions and values.

1. (No change.)

(d) – (e) (No change.)

7:13-18.2 General application requirements

(a) – (c) (No change from proposal.)

(d) An application *[for]* shall be certified as set forth in (l) below by the following individual(s), or by a duly authorized representative, as described at (e) below:

1. – 4. (No change from proposal.)

(e) – (k) (No change from proposal.)

(l) When a proposed regulated activity or project requires more than one approval under this subchapter, or requires, in addition, an approval under the *[Coastal Permit Program Rules at

N.J.A.C. 7:7 and]* Coastal Zone Management Rules at N.J.A.C. *[7:7E,]* ***7:7*** and/or the Freshwater Wetlands Protection Act Rules at N.J.A.C. 7:7A, an applicant may submit a single application for all of the approvals, except for an authorization under a general permit-by-certification, provided that the application meets all application requirements of each such approval included.

7:13-18.4 Additional application requirements for a verification, for an authorization under a general permit, or for and individual permit

(a) (No change.)

(b) An application for an individual permit for a regulated activity or project in *[an area under the jurisdiction of the Pinelands Commission]* ***the Pinelands Area as designated by Section 10(a) of the Pinelands Protection Act, N.J.S.A. 13:18A-1 et seq.,*** shall also include a Certificate of Filing, *[a Notice of Filing,]* a Certificate of Completeness, or a resolution approving an application for public development, issued by the ***New Jersey*** Pinelands Commission.

(c) (No change from proposal.)

SUBCHAPTER 19. REQUIREMENTS FOR AN APPLICANT TO PROVIDE PUBLIC NOTICE OF AN APPLICATION

7:13-19.1 Purpose and scope

(a) – (b) (No change from proposal.)

(c) When a proposed regulated activity or project requires more than one approval under this chapter, or requires, in addition, an approval under the Coastal *[Permit Program]* ***Zone Management*** Rules at N.J.A.C. 7:7*[,]* and/or the Freshwater Wetlands Protection Act Rules at N.J.A.C. 7:7A, an applicant may provide combined public notice for all applications submitted, provided the combined notice meets all of the notice requirements applicable to each application.

(d) (No change from proposal.)

7:13-19.3 Contents and recipients of public notice of an application

(a) – (e) (No change from proposal.)

(f) An application for a verification, authorization under a general permit, individual permit, or major technical modification for a delineation, regulated activity, or project in the Pinelands *[Preservation Area or Pinelands Protection Area]* ***Area as designated by Section 10(a) of the Pinelands Protection Act, N.J.S.A. 13:18A-1 et seq.,*** shall provide a copy of the *[entire application]* ***completed application form*** as submitted to the Department, to the New Jersey Pinelands Commission.

SUBCHAPTER 20. APPLICATION FEES

7:13-20.1 Application fees

(a) (No change from proposal.)

(b) There is no application fee for:

1. – 4. (No change from proposal.)

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[4.] ***5.*** An emergency authorization, pursuant to N.J.A.C. 7:13-16; *[and]*

[5.] ***6.*** A transfer of a verification, authorization under a general permit, *[or]* individual permit, ***or emergency authorization,*** pursuant to N.J.A.C. 7:13-22.4*[.]****; and**

7. An administrative modification, pursuant to N.J.A.C. 7:13-22.5.*

(c) – (d) (No change from proposal.)

(e) The fees for applications under this chapter are set forth in Table 20.1 below:

Table 20.1

APPLICATION FEES

…

Modification of a verification, authorization under a general permit, or individual permit pursuant to N.J.A.C. 7:13-22.5

	Fee
Administrative modification	*[$500.00 per approval modified]* ***No fee***
...	

…

7:13-22.4 Transfer of an emergency authorization, verification, authorization under a general permit, or an individual permit

(a) If the site for which the Department has issued a verification, or on which regulated activities are authorized *[under]* ***pursuant to*** an emergency authorization, an authorization under a general permit, or an individual permit, is transferred to a new owner, the verification, authorization, or individual permit, including all conditions, shall be automatically transferred to the new owner, provided the verification, authorization, or individual permit is valid on the date that the site is transferred to the new owner.

(b) (No change from proposal.)

7:13-24.2 Issuance of an administrative order

Whenever the Department finds that a person has violated any provision of N.J.S.A. 58:16A-50 et seq., or any regulation, rule, permit, or order adopted or issued by the Department pursuant thereto, the Department may issue an order specifying the provision or provisions of the act, regulation, rule, permit, or order of which the person is in violation citing the action which constituted the violation, ordering *[compliance and restoration]* ***abatement*** of the violation, and giving notice to the person of his or her right to a hearing on the matters contained in the order. The ordered party shall have 35 calendar days from receipt of the order within which to deliver to the Department a written request for a hearing in accordance with N.J.A.C. 7:13-24.4. After the hearing and upon finding that a violation has occurred, the Department may issue a final order. If a hearing is not requested within 35 calendar days of receipt of the order, then the

order shall become final on the 36th calendar day following receipt. A request for hearing shall not automatically stay the effect of the order.

7:13-24.3 Assessment, settlement, and payment of a civil administrative penalty

(a) To assess a civil administrative penalty under N.J.S.A. 58:16A-50 et seq., the Department shall notify the violator by certified mail (return receipt requested) or by personal service. This Notice of Civil Administrative Penalty Assessment (NOCAPA) shall:

1. – 2. (No change from proposal.)

3. *[State the basis for]* ***Specify*** the amount of the civil administrative penalty to be imposed and the fact that interest may be due in accordance with (c) below; and

4. (No change from proposal.)

(b) Payment of the civil administrative penalty is due ***upon receipt by the violator of the Department's final order in a contested case, or*** when a notice of civil administrative penalty assessment becomes a final order, as follows:

1. – 4. (No change from proposal.)

(c) In addition to the amount of the civil administrative penalty that is due and owing pursuant to (b) above, the violator shall also pay to the Department ***the*** interest on the amount of the penalty, at the rate established by the New Jersey Supreme Court for interest rates on judgments as set forth in the Rules Governing the Courts of the State of New Jersey, R. 4:42-11(a). Interest shall accrue on the amount of the civil administrative penalty due and owing from the date the payment is due and continuing until the civil administrative penalty is paid in full with interest if:

1. – 2. (No change from proposal.)

(d) The Department may, in its discretion, settle any civil administrative penalty assessed pursuant to N.J.A.C. 7:13-24.5 or 24.6 according to the following factors:

1. Mitigating or extenuating circumstances not previously considered in the ***notice of civil administrative penalty*** assessment *[of penalties]* ***pursuant to N.J.A.C. 7:13-24.5(h)4 or 24.6***;
2. The timely implementation by the violator of measures leading to compliance not previously considered in the assessment of penalties, ***pursuant to N.J.A.C. 7:13-24.5(g)1i or 24.6(h),*** including measures to clean up, reverse***,*** or repair environmental damage caused by the violation, or to remove*[,]* the violation;

3. – 4. (No change from proposal.)

7:13-24.4 Procedures to request and conduct an adjudicatory hearing to contest an administrative order and/or a notice of civil administrative penalty assessment

(a) – (d) (No change from proposal.)

(e) All adjudicatory hearings held pursuant to this section shall be conducted in accordance with the Administrative Procedure***s*** Act, N.J.S.A. 52:14B-1 et seq., and the Uniform Administrative Procedure Rules, N.J.A.C. 1:1.

7:13-24.5 Civil administrative penalties for failure to obtain a permit prior to conducting regulated activities

(a) – (g) (No change from proposal.)

(h) The Department may, in its discretion, adjust the amount of *[a]* ***any*** penalty assessed pursuant to (f) and, where applicable, (g) above based upon any or all of the factors listed in (h)1 through 4 below. No such factor constitutes a defense to any violation. The factors are:

1. (No change from proposal.)
2. The frequency with which *[a violation has occurred]* ***any violation of any provision of N.J.S.A. 58:16A-50 et seq., or rules, permit, or order adopted or issued pursuant thereto occurred, including environmental impacts***;
3. – 4. (No change from proposal.)

(i) – (j) (No change from proposal.)

7:13-24.6 Civil administrative penalties for violations other than failure to obtain a permit prior to conducting regulated activities

(a) – (d) (No change from proposal.)

(e) The seriousness of the violation shall be determined as major, moderate, or minor as follows:

1. (No change from proposal.)
2. Moderate seriousness shall apply to any violation which has caused or has the potential to cause substantial harm to human health, safety, ***or*** property, *[or]* the environment, ***or*** the flood hazard area regulatory program, or is a substantial deviation from the applicable law and/or condition. “Substantial deviation” includes, but is not limited to, violations which are in substantial contravention of the law, requirement, and/or condition, and/or which substantially impair or undermine the protection, operation, or intent of *[N.J.S.A. 58:16A-50 et seq. or any regulation, rule,

or permit condition issued by the Department pursuant thereto]* ***the law, requirement, and/or condition***. Violations of "moderate" seriousness include, but are not limited to:

i. – ii. (No change.)

3. (No change from proposal.)

(f) (No change from proposal.)

(g) The total civil administrative penalty shall be the daily civil administrative penalty determined under (d) through (f) above, multiplied by the number of calendar days during which each violation continued or remained in place *[prior to removal or restoration]* ***without the required permit***.

(h) (No change from proposal.)

7:13-24.8 Civil actions

(a) The Department may institute an action or proceeding in the Superior Court for injunctive and other relief, including the appointment of a receiver, for any violation of N.J.S.A. 58:16A-50 et seq., or any regulation, rule, permit, or order adopted or issued by the Department pursuant to this act, and the court may proceed in the action in a summary manner. Such relief may include, singly or in combination:

1. – 4. (No change from proposal.)

5. *[An]* ***Execution of an*** order requiring the violator to restore the site of the violation to the maximum extent practicable and feasible or, in the event that restoration of the

site of the violation is not practicable or feasible, provide for an off-site restoration alternative as approved by the Department.

(b) (No change from proposal.)

7:13-24.11 Grace period applicability; procedures

(a) – (b) (No change from proposal.)

(c) If a violation is not listed in Table 24.11 at (f) below, the designation of the violation as minor or non-minor is determined as follows:

1. (No change from proposal.)
2. If the violation is not listed in Table 24.11 at (f) below and is not comparable to a violation listed in Table 24.11 but the violation meets all of the criteria *[at]* ***of*** (d)1 through 9 below, then the violation is minor. The minor violation shall be subject to a grace period of 30 calendar days as described at (e) below.

3. – 5. (No change from proposal.)

(d) The Department shall provide a grace period of 30 calendar days for any violation identified as minor under this section, provided the following conditions are met:

1. (No change from proposal.)
2. The activity or condition constituting the violation has existed for less than 12 months prior to the date of discovery by the Department or a local *[government]* ***governmental*** agency;
3. In the case of a violation that involves a permit, the person responsible for the violation has not been identified in a previous enforcement action by the Department or a local

[government] ***governmental*** agency as responsible for a violation of the same requirement of the same permit within the preceding 12-month period;

4. In the case of a violation that does not involve a permit, the person responsible for the violation has not been identified in a previous enforcement action by the Department or a local *[government]* ***governmental*** agency as responsible for the same or a substantially similar violation at the same facility within the preceding 12-month period;

5. In the case of a violation of the N.J.S.A. 58:16A-50 et seq. or any rule or regulation promulgated thereunder, or permit issued pursuant thereto, the person responsible for the violation has not been identified in a previous enforcement action by the Department or a local *[government]* ***governmental*** agency as responsible for the same or a substantially similar violation at the same site or any other site within the preceding 12-month period;

6. In the case of any violation, the person responsible for the violation has not been identified by the Department or a local *[government]* ***governmental*** agency as responsible for the same or substantially similar violations at any time that reasonably indicate a pattern of illegal conduct and not isolated incidents on the part of the person responsible;

7.-9. (No change from proposal.)

(e) For a violation determined to be minor under (a) or (c) above, the following provisions apply:

1. – 3. (No change from proposal.)

4. If the person responsible for the minor violation seeks additional time beyond the specified grace period to achieve compliance, the person shall request an extension of the specified grace period in writing no later than one week before the expiration of the specified grace period. The request shall include the anticipated time needed to achieve compliance, the specific cause or causes of the delay, and any measures taken or to be taken to minimize the time needed to achieve compliance. The request shall be signed and certified to be true by the responsible party or their designee. The Department may, in its discretion, approve in writing an extension which shall not exceed 90 calendar days, to accommodate the anticipated delay in achieving compliance. In exercising its discretion to approve a request for an extension, the Department may consider the following:

i. – iii. (No change from proposal.)

iv. Whether the delay will materially *[or]* ***and*** substantially undermine or impair the goals of the regulatory program.

5. – 6. (No change from proposal.)

(f) The designations of violations relating to N.J.S.A. 58:16A-50 et seq. and this chapter as minor (M) *[and]* ***or*** non-minor (NM) are set forth in Table 24.11 below. The violation descriptions are provided for informational purposes only. In the event that there is a conflict between a violation description in Table 24.11 and the rule to which the violation description corresponds, the rule shall govern.

Table 24.11 (No change from proposal.)