## **ENVIRONMENTAL PROTECTION**

LAND USE MANAGEMENT

Flood Hazard Area Control Act Rules

**Coastal Zone Management Rules** 

**Freshwater Wetlands Protection Act Rules** 

Adopted Amendments: N.J.A.C. 7:7-6.4, 15.2, and 25.1; 7:7A-11.1; and 7:13-1.2, 6.7, 7.8

through 7.12, 7.29, 7.56, 7.58, 7.61, 8.5, 8.6, 8.8, 8.13, 9.5, 9.6, 9.8 through 9.10, 11.2, 12.5,

12.14, 13.1, 13.2, 13.6 through 13.8, 13.14 through 13.20, and 20.1

Adopted New Rule: N.J.A.C. 7:13-13.4

Proposed: June 20, 2016, at 48 N.J.R. 1014(a).

Adopted: June 19, 2017, by Bob Martin, Commissioner, Department of Environmental Protection.

Filed: June 20, 2017, as R.2017 d.141, 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: 05-16-05.

Effective Date: July 17, 2017

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

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

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.

The Department of Environmental Protection (Department) is adopting amendments and new rules in the Flood Hazard Area Control Act (FHACA) Rules, N.J.A.C. 7:13, the Coastal Zone Management (CZM) Rules, N.J.A.C. 7:7, and the Freshwater Wetlands Protection Act (FWPA) Rules, N.J.A.C. 7:7A, that address certain concerns raised through the public comment process for the FHACA Rules adopted effective June 20, 2016. The adopted amendments and new rules fall into six categories: improvements to riparian zone protections; improving the consistency of the FHACA Rules with the Uniform Construction Code (UCC) and National Flood Insurance Program (NFIP); improving the 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 implementation of a cap on stormwater calculation review fees and clarification regarding the appropriate application fee to modify these calculations.

**Summary** of Hearing Officer's Recommendation and Agency Response:

The Department held one public hearing on the notice of proposal on Friday, July 22, 2016 at 10:00 A.M, at the New Jersey Department of Environmental Protection Public Hearing Room, Trenton. Ms. Virginia Kop'kash, Assistant Commissioner, Land Use Management, was the hearing officer for the public hearing. Five persons provided written comments and/or oral

comments at the public hearing. The hearing officer recommended that the amendments and new rule 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. 05-16-05

Department of Environmental Protection

401 East State Street, 7th floor

Mail Code 401-04L

PO 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. David J. Charette, Langan Engineering and Environmental Services, Inc.
- 2. Jennifer Coffey, Association of New Jersey Environmental Commissions
- 3. Charles Dismukes
- 4. Elizabeth George-Cheniara, Esq., New Jersey Builders Association
- 5. Amy Hansen, New Jersey Conservation Foundation
- Valerie Hrabal
- 7. Alan R. Hunt, Friends of the Musconetcong
- 8. David Lavender

3

- 9. Michael Masley
- 10. Doug O'Malley, Environment New Jersey
- 11. Joanne Pannone
- 12. Michael Pisauro, Stony Brook Millstone Watershed Association
- 13. Michael L. Pisauro, Jr. on behalf of Stony Brook Millstone Watershed Association, Hackensack Riverkeeper, NY/NJ Baykeeper, Save Barnegat Bay, Lower Raritan Watershed Partnership, Musconetcong Watershed Association, Bergen SWAN, Lawrence Brook Watershed Partnership, Cohansey Area Watershed Association, Rahway River Watershed Association, and Great Swap Watershed Association
- 14. Sheila Reese
- 15. Elliott Ruga, New Jersey Highlands Coalition
- 16. Melissa Sadowski
- 17. Lee Snyder
- 18. Jeff Tittel, New Jersey Sierra Club

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**

1. COMMENT: The Department's efforts to provide consistency between the Federal Emergency Management Agency's (FEMA) NFIP standards and UCC program requirements regarding the definition of lowest floor, the clarification that regulated activities under a permit-by-rule, general permit-by-certification, or general permit shall not constitute a major

development as defined in the Stormwater Management (SWM) rules, N.J.A.C. 7:8-1.2, and the rule modifications that encourage and direct redevelopment activities to actively disturbed portions of the riparian zone while avoiding undisturbed areas are supported. (1) RESPONSE: The Department acknowledges this comment in support of the rules.

2. COMMENT: There are procedural concerns with the interplay of the June 20, 2016 adopted amendments, the June 20, 2016 concurrent proposal, and Administrative Order 2016-16. Please clarify how the Department will process pending and new applications. Specifically, under which rules will applications and requests for modifications of current permits be evaluated? (4) RESPONSE: In June 2016, the Department adopted comprehensive changes to the Flood Hazard Area Control Act (FHACA) Rules, N.J.A.C. 7:13 (see 48 N.J.R. 1067(a)). In the same rulemaking, amendments, repeals, and new rules were made to the Coastal Zone Management Rules, N.J.A.C. 7:7, and the SWM rules. Among other things, the amendments, repeals, and new rules consolidated similar provisions, simplified language, incorporated additional detail and description regarding the substantive standards that must be met to undertake regulated activities, and harmonized certain procedural provisions with the Department's other land use regulations. Also included were amendments to both the FHACA Rules and the SWM rules intended to consolidate the requirements of the SWM rules' Special Water Resource Protection Area (SWRPA) with the riparian zone standards of the FHACA rules, resulting in one set of protections codified in the FHACA Rules that would maintain equivalent protections for these near stream areas as those in place prior to the consolidation.

Administrative Order 2016-06 (AO), dated July 22, 2016, provides additional guidance to Department staff regarding how to apply the FHACA Rules, as amended on June 20, 2016, specifically, N.J.A.C. 7:13-10.3(b), 11.2(b)1, 2, and 3, 13.2(a), and 22.2(c)5, to ensure that 300-foot Category One riparian zones, including the inner 150-foot portion of a 300-foot Category One riparian zone, remain adequately protected and that mitigation fully compensates for any ecological loss. As explained therein, the AO was intended to guide Department staff's review of applications determined to be complete for review prior to the effective date of the amendments being adopted at this time.

Additionally, in accordance with N.J.A.C. 7:13-21.1(e), when reviewing an application, the Department shall apply the requirements of the FHACA Rules in effect at the time the application is declared complete for review. As defined at N.J.A.C. 7:13-1.2, "complete for review" means that an application for a verification, an authorization under a general permit, or an individual permit contains every item on the application checklist (in other words, is administratively complete), and the application provides sufficient information for the Department to evaluate it for compliance with the applicable requirements of the FHACA Rules (the application is technically complete). Accordingly, where an application was declared complete for review prior to the effective date of the amendments and new rule adopted in this rulemaking, the prior rules would be used in reviewing the application, with staff review guided by AO 2016-06. For an application that is declared complete for review after the effective date of these adopted amendments and new rule, review would be subject to the FHACA Rules as amended by this rulemaking.

With respect to requests for modifications of valid permits, the Department will apply the rules in effect at the time the request is declared complete for review in accordance with N.J.A.C. 7:13-21.1(e). These rules will be applied to the proposed modification and not the entire site.

# **General Opposition**

3. COMMENT: The changes proposed on June 20, 2016 are minimal and do not address the concerns raised on the July 1, 2015 notice of proposal regarding the negative impacts the rules will have on flooding, the riparian zone, or water quality. (5, 10, 12, 15, and 18) 4. COMMENT: The proposed amendments are opposed because both the United States Environmental Protection Agency (USEPA) and FEMA objected to the changes made in the June 20, 2016 FHACA Rule adoption and the changes proposed in the June 20, 2016 concurrent proposal are minimal and do not address the concerns raised previously. (8, 9, and 16) RESPONSE TO COMMENTS 3 AND 4: The FHACA Rules adopted on June 20, 2016, incorporate the most stringent Statewide flood mitigation and stream corridor protection standards in the nation and meet all State and Federal requirements for water quality as explained in the Response to Comments 16 through 29 on the 2016 adoption at 48 N.J.R. 1070-71. However, because vegetated riparian zones are such an essential component in maintaining adequate water quality standards, protecting people and property from flooding, and promoting healthy ecosystems, the Department proposed on June 20, 2016, and is adopting as this rulemaking, various amendments that further strengthen these standards, particularly in the 300foot riparian zones adjacent to Category One waters, in order to enhance protection of the exceptional ecological, water supply, recreational, and/or fisheries significance of these waters.

The USEPA's comment on the June 1, 2015 notice of proposal stressed the importance of ensuring that Category One waters continue to be protected from degradation. USEPA also stressed the importance of ensuring that the repeal of the special water resource protection areas (SWRPA) from the Department's Stormwater Management rules and consolidation of protections that had been provided by the SWRPA with the riparian zone standards in the FHACCA Rules did not result in a reduction of the protection of Category-one waters through the New Jersey Pollutant Discharge Elimination System (NJPDES) program, with concern focused specifically on New Jersey's municipal separate storm sewer system (MS4) permits, which cross-reference the Stormwater Management rules where the SWRPA had been codified. New Jersey's 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. Among other things, the USEPA suggested that the Department make clear how the rules maintain the same level of stringency as existed prior to the amendments proposed in the June 1, 2015 notice of proposal through measures, such as fact sheets. (See comments 178, 180, and 185 of the June 20, 2016 adoption at 48 N.J.R. 1092-1095.) As explained in response to those comments in the June 20, 2016 notice of adoption and in response to comments 6 and 7, 25, and 31 and 32 of this rulemaking, the FHACA Rules as adopted are as protective of water quality as the rules prior to the June 20, 2016 notice of adoption. Further, the rules do not revise any effluent limitations, standards, or conditions in a NJPDES permit.

With respect to the Federal Emergency Management Agency's comments on the June 1, 2015 notice of proposal, their concerns reflected inconsistencies amongst the standards of the FHACA Rules, Uniform Construction Code (UCC) and National Flood Insurance Program standards, particularly regarding elevation requirements and flood proofing standards. In response to these comments, the Department concurrently proposed and is adopting as this rulemaking amendments to the FHACA Rules that harmonize the standards of the FHACA Rules with the UCC and NFIP. (See comments 297, 678, and 693-699 of the June 20, 2016 notice of adoption at 48 N.J.R. 1113, 1172, and 1175-77, respectively.) Specifically, these adopted amendments modify definitions and building standards to address discrepancies in elevation requirements and flood proofing standards and require that construction comply with elevation requirements of both the FHACA Rules and the UCC to ensure the maximum level of protection is provided.

5. COMMENT: The Department has not conducted a study or analysis to demonstrate that the June 20, 2016, adopted rules and the concurrent proposal will not have a cumulative impact on Category One waters and water quality. (18)

RESPONSE: The FHACA Rules adopted June 20, 2016 continued to provide the same level of protection afforded to the 300-foot area adjacent to Category One waters and their upstream tributaries that was previously applicable under the combination of the SWRPA and the FHACA Rules riparian zone, as addressed in the Response to Comments 136 through 148 of the 2016 notice of adoption (see 48 N.J.R. 1084-87). However, the Department determined improvements to the protection of Category One Waters and their tributaries were appropriate due to the critical

importance of Category One waters to the State's ecosystem as a result of their exceptional ecological significance, recreational significance, water supply significance, and/or fisheries resource(s). In analyzing the prior SWRPA, the Department discovered gaps in its coverage of Category One waters and their tributaries since it only applied to mapped streams and major developments. The new standards for 300-foot riparian zones at N.J.A.C. 7:13-11.2(d) are more stringent than the SWRPA because they eliminate these gaps that were applicable to the SWRPA, and the Department believes they are necessary to ensure that the FHACA Rules are suitably protective of these vital waters. The improved protections for Category One waters and their tributaries adopted in this rulemaking will not adversely impact the absorption of pollutants or in any other way affect the FHACA Rules' continued compliance with Federal and State requirements for water quality. Because the adopted 300-foot riparian zone provides more stringent protection of Category One waters and associated ecosystems, the Department does not anticipate any cumulative adverse impacts as a result of the adopted amendments.

- 6. COMMENT: The rules continue to violate the antidegradation criteria of the Federal Surface Water Quality Standards and in addition, violate the New Jersey Clean Water Act, the New Jersey Water Pollution Control Act, and the total maximum daily load (TMDL) river clean-up process. (8, 9, 16, and 18)
- 7. COMMENT: The rules violate the Water Quality Planning Act, the Municipal Stormwater Rules, and the separation of powers between the Department and Natural Resource Conservation Service (NRCS). (8, 9, and 16)

RESPONSE TO COMMENTS 6 AND 7: The amendments to the FHACA Rules adopted herein do not violate any State or Federal laws and regulations as the adopted amendments to the Department's riparian zone standards provide water quality benefits and protections that satisfy or exceed the Federal Water Pollution Control Act (commonly known as the Clean Water Act), the New Jersey Water Pollution Control Act, the New Jersey Water Quality Planning Act, the TMDL process required by the Clean Water Act, and Federal and State municipal stormwater requirements. Indeed, the amendments adopted in this rulemaking further enhance the protections afforded to 300-foot Category One riparian zones, which were already compliant with all statutory and regulatory mandates.

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 antidegradation policies for Category One waters are set forth in the State's Surface Water Quality Standards at N.J.A.C. 7:9B-1.5(d)2iii and require that Category One waters "shall be protected from any measurable changes (including calculable or predicted changes) to the existing water quality." As discussed in the Response to Comments 180 through 186 in the June 20, 2016 notice of adoption at 48 N.J.R. 1093-95, the antidegradation policies in the Surface Water Quality Standards (SWQS) apply to point source discharges, including point source discharges that are nonpoint in origin. For point source discharges that are nonpoint source in origin, the Department uses a Best Management Practice (BMP) approach to protect water quality.

The Department established the now deleted 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 is the best and most reliable means to prevent the degradation of water quality from nonpoint source pollution that would be regulated under the NJPDES program and to 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 prior 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. Rather these measures presume that, if a vegetated area is maintained in accordance with Department's standards, which require avoiding disturbance, minimizing disturbance, and providing mitigation when disturbance is unavoidable, water quality will be protected.

The Federal Municipal Stormwater Regulations and the Department's Municipal Stormwater Regulation Program rules, which are part of the NJPDES rules at N.J.A.C. 7:14-25, are components of a State and Federal regulatory framework that ensures all waters, including Category One waters, are protected from impacts from nonpoint source pollution. The riparian zone provisions adopted in the FHACA Rules are another component of this framework protecting the State's water resources. The adopted amendments do not weaken or eliminate these buffers along Category One waters or other regulated waters, so, therefore, do not violate the Water Quality Planning Act or the Municipal Stormwater Regulations.

Additionally, as discussed in the Response to Comments 204 through 206 of the June 20, 2016 notice of adoption (see 48 N.J.R. 1098-99), a TMDL implementation plan identifies the regulatory and non-regulatory tool 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 BMPs, an implementation plan provides a basis for aligning available funding and stewardship building resources to assist with implementation activities. As discussed above, the 300-foot FHACA Rule riparian zone serves as the BMP to prevent the degradation of water quality from nonpoint source pollution that would be regulated under NJPDES program - protecting the chemical, physical, and biological integrity of the State's surface waters.

Upon adoption of the June 1, 2015 notice of proposal, a cross-reference was added in the SWM rules at N.J.A.C. 7:8-5.5(h) to eliminate any potential doubt that the FHACA Rules' riparian zone provisions would continue to protect the 300-foot area adjacent to Category One waters with respect to major development. 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.

With reference to the separation of powers between the Department and the Natural Resource Conservation Service, the commenters did not specify what conflict they perceive between these rules and any actions of the Natural Resource Conservation Service or what the separation of powers is that they believe exists and how such a separation of powers has been violated.

8. COMMENT: The proposed amendments to the FHACA Rules remove headwater protections. (8, 9, and 16)

RESPONSE: The adopted amendments do not remove headwater protections. The June 1, 2015 notice of proposal included proposed amendments of N.J.A.C. 7:13-2.2(a)3 to clarify which waters draining less than 50 acres are not subject to the requirements of the FHACA Rules, but these proposed amendments were not intended to and would not have changed the number of headwaters regulated under the FHACA Rules. Nevertheless, since the proposed clarifications created the mistaken impression that headwater protections were being reduced, the Department did not adopt any of those amendments. The June 20, 2016 notice of proposal being adopted at this time did not include any amendment to N.J.A.C. 7:13-2.2(a)3, which specifies waters regulated under the FHACA Rules, or any other provision that would remove protections provided by the rules for headwaters. Instead, the rules continue to provide protections for headwaters that were in place prior to this rulemaking with protection provided to headwaters protected by a 300-foot riparian zone increased, especially within the inner 150 foot portion of a 300-foot riparian zone. For information on the protections in place prior to this rulemaking, see

the Response to Comments 165 through 168 of the June 20, 2016 notice of adoption (48 N.J.R. 1090 –91).

9. COMMENT: The proposed amendments to the FHACA Rules promote overdevelopment in environmentally sensitive areas, which will result in more sprawl and water pollution while threatening open space and placing communities at risk from increased flooding. (2, 3, 5, 8, 9, 12, 14, 16, and 17)

RESPONSE: As indicated in the Summary of the notice of proposal of the amendments and new rules being adopted at this time and reiterated in the introduction to this notice of adoption above, the amendments and new rules adopted at this time fall into six categories: improvements to riparian zone protections; improving the consistency of the FHACA Rules with the UCC and NFIP; improving the consistency between the FHACA Rules and CZM Rules; facilitation of environmentally beneficial activities; clarification that permits-by-rule, general permits-bycertification, and general permits may not be used for activities qualifying as "major development"; and implementation of a cap on stormwater calculation review fees and clarification regarding the appropriate application fee to modify these calculations. As such, the adopted amendments strengthen protections (including the protections provided to Category One waters), ensure consistency with other rules, and promote environmentally beneficial activities associated with agriculture, wetlands restoration, and wildlife management activities performed with the approval and/or under the supervision of the United States Department of Agriculture and/or the United States Fish and Wildlife Service. The FHACA Rules remain the most stringent Statewide flood mitigation and stream corridor protection standards in the nation, meeting all

State and Federal requirements for water quality. The rules will not encourage development in flood hazard areas, threaten public open space, exacerbate flooding, or increase water pollution, but rather promote smart development, habitat and riparian zone restoration, and environmental enhancement activities. The Department's response to these concerns with reference to the amendments proposed in June of 2015, and adopted on June 20, 2016, appears in the Response to Comments 16 through 29 of the June 20, 2016 notice of adoption at 48 N.J.R. 1070-71.

The amendments adopted at this time will similarly not result in the impacts asserted by the commenters because, while the rules recognize that development within a riparian zone or a flood hazard area is sometimes unavoidable, the rules continue to be based upon a balance of the protection of natural resources with the health, safety, and welfare of New Jersey and its residents. Accordingly, when development of these areas is allowed, the rules ensure that impacts to riparian zones are avoided to the maximum extent possible and, where they cannot be completely avoided, they are minimized with mitigation required to offset impacts in appropriate circumstances. Further, the amendments adopted at this time at N.J.A.C. 7:13-13.9(b), establish a mitigation hierarchy to ensure that mitigation occurs on the same site as the disturbance, where feasible, and strengthen mitigation requirements, so that mitigation is required for all riparian zone disturbance associated with any activity under an individual permit (with limited exceptions) within a 300-foot riparian zone.

As with the amendments adopted on June 20, 2016, 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 to riparian zones 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 those 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 minimal cumulative adverse impacts to flooding and the environment to proceed. The amendments adopted at this time go further to ensure these types of permits only authorize activities with minimal impacts by establishing that an activity that is considered "major development" cannot be authorized under a permit-by-rule, general permit-by-certification, or general permit. Major development activities can only be authorized under an individual permit, which application includes the submission and review of stormwater calculations for the entire development.

- 10. COMMENT: How can the Clean Water Act be effectively enforced when sewage and runoff are directly discharged into New Jersey's waterways? These rules weaken that which is already weak by allowing more development, which in turn destroys clean water. (11)
- 11. COMMENT: The changes to riparian buffers will result in additional runoff of non-point pollution. In addition, no analysis has been provided to show that eliminating riparian buffers will not result in more point source pollution from sewer plants because the rules now allow for more development without any analysis of the flows from that new development, regardless of whether the flow is non-point or point source. (18)

RESPONSE TO COMMENTS 10 AND 11: The Department believes the commenters are referring to discharges in combined sewer overflow (CSO) communities, which is addressed by

the Department's NJPDES program. Typically, sanitary sewer systems transport household, commercial, and industrial wastewater to a sewage treatment plant for treatment and eventual discharge, while a separate network of storm sewers transport and discharge stormwater runoff from developed areas. In most communities, these piping systems function independently of each other. However, in some older communities, the sanitary and storm sewers are combined into one system, known as CSOs, which can overflow during flood events and result in the discharge of untreated sewage and stormwater to waterways.

Through the NJPDES program and individual permits that were issued to CSO communities in March 2015, the Department is committed to working to reduce or eliminate CSOs in New Jersey. Since the FHACA Rules do not contain standards related to CSOs or wastewater discharges, this rulemaking does not affect CSO communities. Similarly, the Department's comprehensive Stormwater Management rules at N.J.A.C. 7:8, which govern all impacts associated with runoff resulting from development, including the volume, rate, and quality of runoff, are not amended by this rulemaking. Finally, in response to one commenter's assertion regarding riparian zone protections in the FHACA Rules, which help to ensure that development does not adversely impact the quality of surface waters, the Department has not proposed to amend the location or extent of riparian zones under this rulemaking. As discussed in the Response to Comments 3 and 4 above, the previously adopted riparian zone standards provide suitable protections, with the amendments adopted in this rulemaking further enhancing these standards in recognition of the importance of vegetated riparian zones for maintaining adequate water quality, as well as protecting people and property from flooding, and promoting healthy ecosystems.

12. COMMENT: The proposed amendments to the FHACA Rules will overly limit development activities. The proposed 300-foot riparian zone requirements are more restrictive than the prior rules, which were already more restrictive than the SWRPA previously required under the SWM rules. The SWRPA protections only applied to Category One waters and tributaries that were either blue line streams on a United States Geological Survey (USGS) map or shown on a soil map. However, under the FHACA Rules, the 300-foot riparian zone requirements apply to small streams (that is, anything with bed and bank or a drainage area of more than 50 acres even if drainage is predominately through pipes rather than through the riparian zone). In addition, SWRPA protections applied only to major development, whereas, the 300-foot riparian zone requirements apply to all development. (4)

RESPONSE: Category One waters are critically important to the State's ecosystem as a result of their exceptional ecological significance, recreational significance, water supply significance, and/or fisheries resource(s) and, therefore, receive the highest levels of protection, including the maximum 300-foot riparian zone. In analyzing the SWRPA, the Department discovered gaps in its coverage of Category One waters and their tributaries since it only applied to mapped streams and major developments. These issues were addressed through the incorporation of new standards in the FHACA Rules in order to create a 300-foot riparian zone that applies to a uniform set of surface waters, obviating the need to continue to provide protections for this near stream area through both the FHACA Rules and the SWM rules. However, the Department determined that, in light of the critical functions riparian zones to Category One waters provide in maintaining water quality and temperature, stabilizing banks, providing protection from

flooding, and serving as wildlife habitat, that enhanced protection of these areas was appropriate. The amendments adopted at this time, among other things, increase protection of the inner 150 feet of a 300-foot Category One riparian zone and strengthen mitigation requirements to ensure that appropriate compensation for the riparian zone functions and values lost as a result of permitted riparian zone disturbance is provided. The new standards for 300-foot riparian zones adopted at this time are necessarily more stringent than the SWRPA, and the protections that were in place prior to this adoption and the Department believes they are necessary to ensure that the FHACA Rules are suitably protective of these vital waters. The Department believes the adopted rules appropriately take into account the interests of property owners in reasonable use of their property while ensuring protection of the environment.

### Senate Concurrent Resolution No. 66

- 13. COMMENT: The proposed rules are merely an attempt by the Department to prevent the Legislature from passing Senate Concurrent Resolution No. 66 (SCR66). (10 and 18)14. COMMENT: The Legislature should pass SCR66, which clearly states that the FHACA
- Rules adopted on June 20, 2016, violate the legislative intent of critically important legal protections for residents, businesses, and the environment. (5)
- 15. COMMENT: Responding to the Legislature's finding that the prior rules violated Legislative intent with the publication of a rule adoption with a concurrent proposal was ill-advised and has presented unnecessary difficulty in fully evaluating the impacts of a final, full, and complete rule proposal. In lieu of this approach, the Department should have proposed a comprehensive rulemaking that included the amendments proposed in both the June 1, 2015 and June 20, 2016

notices of proposal, as suggested by Senator Smith at the SCR66 hearing. The Department's approach has made evaluating and commenting on the June 20, 2016 notice of proposal challenging, requiring the reader to move between various documents.

The addition of the AO, providing Departmental guidance on rule implementation, created an additional layer of complexity in understanding the relationship between the documents and formulating comments. The administrative remedy that prevented further legislative action, the AO, does not satisfy any of the objections raised on the June 1, 2015 notice of proposal. (15)

RESPONSE TO COMMENTS 13 THROUGH 15: Comprehensive amendments to the FHACA Rules were proposed on June 1, 2015 and subsequently adopted on June 20, 2016. During the public comment process on the 2015 notice of proposal, the Department recognized that certain provisions of the proposed amendments required modification. The Department addressed some of these changes on adoption (such as concerns expressed regarding the intent of proposed amendments to N.J.A.C. 7:13-2.2(a)3 that would have clarified which waters draining less than 50 acres are not subject to the requirements of the FHACA Rules, which were not adopted to eliminated any misconception the changes could cause, as discussed in the Response to Comment 8). However, rather than publishing a notice of substantial change on adoption and delaying the adoption of the 2015 notice of proposal, the Department determined it was appropriate to adopt the majority of the 2015 notice of proposal to allow the amendments, such as the alignment of the permitting process, establishment of a comprehensive riparian zone mitigation program, removal of the acid producing soil provisions, and inclusion of terrestrial wildlife crossings, to be implemented.

In the same issue of the New Jersey Register, the Department proposed these new rules and amendments to the FHACA Rules, CZM Rules and FWPA Rules, to address the issues raised during the public comment process of the June 2015 notice of proposal that could not be addressed without providing additional opportunity for public input, including those that had led to introduction of SCR-66. As discussed above, the amendments and new rules proposed then, and adopted at this time, fall into six categories, with the notice of proposal Summary arranged thematically under headings reflecting those six categories to improve presentation and understanding of the intent of the various changes proposed. In accordance with New Jersey Register publication format, where provisions were proposed for amendment that had been amended through the 2015 notice of proposal, the adopted amendments were reflected in the proposal rule text as existing rule, allowing the reader to view how the further proposed amendment would effect what had been amended through the June 20, 2016 notice of adoption without the need to compare documents.

Outside of the June 2016 rulemaking initiated to address concerns identified through the original rulemaking process, the Department determined that it would be appropriate to provide guidance on implementation of the rules as amended through the June 20, 2016 notice of adoption. Accordingly, the July 22, 2016 AO, AO 2016-06, was issued to provide additional guidance to Department staff during the time period prior to adoption of the June 20, 2016, proposed amendments to ensure that 300-foot Category One riparian zones, including the inner 150-foot portion of a 300-foot riparian Category One riparian zone, remain protected and that mitigation fully compensates for any ecological loss. The AO did not include guidance regarding the amendments and new rules proposed on June 20, 2016; any information necessary

to understand the Department's intention with reference to that notice of proposal was included in the notice of proposal Summary.

## **Water Supply**

16. COMMENT: The water supply of New Jersey is threatened by suburban sprawl and development. Yet, this notice of proposal and the June 1, 2015 notice of proposal were written in a vacuum, without proper consideration of the State Plan, Highlands Water Protection and Planning Act, or the Water Supply Master Plan that, although 20 years out of date, had recommended buffers and other measures to protect reservoirs and high quality streams. The notice of proposal does not include any amendments that would protect the water supply. (18) RESPONSE: While the FHACA Rules address development and other activities within flood hazard areas and riparian zones, 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). The Water Supply Master Plan is currently being updated using the latest data. The State Plan is intended to serve as an instrument of State policy to guide State agencies and local government in the exercise of governmental powers regarding planning, infrastructure investment, and other public actions and initiatives that affect and support economic growth and development in the State. The Highlands Water Protection and Planning Act preserves open space and protects natural resources, such as water resources that supply drinking water, within the Highlands Region. The FHACA Rules are unrelated to and not

dependent on the State Plan, the Water Supply Master Plan, or the Highlands Water Protection and Planning Act.

17. COMMENT: Stream buffers need to remain 300 feet to protect the drinking water supply. (5)

RESPONSE: Under the FHACA Rules, a surface water designated as Category One by the Surface Water Quality Standards, N.J.A.C. 7:9B, assigned the widest riparian zone, that is 300 feet, in order to aid in the protection of the special features of Category One waters, such as their exceptional water supply significance. Riparian zone widths have not been altered or amended under this rulemaking. Further, the changes to the 300-foot riparian zones adjacent to Category One waters adopted herein enhance protection of the exceptional ecological, water supply, recreational, and/or fisheries significance of these waters. The adopted amendments also strengthen the mitigation requirements for riparian zone disturbances and ensure that appropriate compensation for the riparian zone functions and values lost as a result of permitted riparian zone disturbance is provided.

#### **Riparian Zone Protections**

18. COMMENT: The Department in its June 1, 2015 notice of proposal stated that, given New Jersey's "dense population and extensive level of existing development within flood hazard areas, this periodic flooding causes severe, repetitive, and deleterious social, economic, and environmental impacts. Flooding has and continues to be the most frequent, destructive, and costly natural hazard in New Jersey and is responsible for a large majority of disaster-related

damage reported in the State." Despite these statements, the adopted rules and concurrent proposal weaken riparian buffer protections. (10)

- 19. COMMENT: The changes to the FHACA Rules are an attempt to roll back the protections put in place over a decade ago. The buffer protections established under the McGreevey Administration were based on science and that science is not reflected in the June 20, 2016 adopted rules or in the concurrent notice of proposal. Buffers to Category One waters are necessary. Riparian zones survived legal challenge by the New Jersey Builders Association. Now, the same arguments used by the builders in those legal challenges are being reflected in the newly adopted rules and proposed amendments. (10)
- 20. COMMENT: In response to concerns expressed as part of the June 1, 2015 notice of proposal regarding increases to the maximum area of disturbances allowed to vegetated buffers before mitigation is required, the Department claims that experience shows that the riparian zone disturbance limits established under the 2007 FHACA Rules were inadequate for standard projects. Yet, the Department fails to provide any examples, documentation, or even empirical evidence that could justify the across-the-board increases in allowed disturbance reflected in the June 20, 2016 adopted rules. These increases will cause more flooding and flood damage and will place public health and safety at risk. (15)
- 21. COMMENT: Prior to proposing these amendments, the Department should have conducted a study or analysis examining the cumulative impacts of the FHACA rules on high quality riparian buffers. (18)
- 22. COMMENT: The concurrent notice of proposal continues the flawed theory that increasing the amount of disturbance within a riparian zone will not result in increased flooding and water

pollution. The changes in both the adopted and the proposed rules are opposed in light of the lack of scientific studies examining the impacts that the changes will have on riparian zones and water quality standards. (12)

23. COMMENT: Stream buffers need to remain 300 feet to protect homes and businesses from pollution and flooding. (5)

RESPONSE TO COMMENTS 18 THROUGH 23: Vegetated riparian zones provide many important functions, including protecting people and property from flooding, maintaining adequate water quality standards, and promoting healthy ecosystems. For this reason, as discussed in the Response to Comment 17, the widths of the riparian zone along both sides of waters regulated under the FHACA Rules were not amended by this rulemaking.

The FHACA Rules establish strict limits for the amount of riparian zone disturbance that can occur for each type of activity authorized under a permit-by-rule, general permit-by-certification, general permit, or individual permit. Additionally, for regulated activities requiring an individual permit, all riparian zone disturbance must meet the rigorous avoidance and minimization standards at N.J.A.C. 7:13-11.2(b).

The Department's response to concerns regarding the limits of riparian zone disturbance with reference to the amendments proposed in June of 2015, and adopted on June 20, 2016, appears in the Response to Comments 103 through 117 at 48 N.J.R. 1081-82.

Although the June 20, 2016, adopted rules remain the most stringent Statewide stream corridor protection standards in the nation, amendments have been introduced under the rulemaking adopted at this time to further enhance the riparian zone standards. For example, amendments at N.J.A.C. 7:13-11.2(y) ensure that impacts to riparian zone vegetation from

activities not listed in Table 11.2 are directed to actively disturbed areas wherever possible and require applicants to meet stricter standards before any impact to undisturbed areas will be allowed. The Department believes that these amendments will encourage prospective applicants to situate projects in actively disturbed areas, where riparian zone functionality is already diminished, rather than in forested areas, which provide maximum ecological functions and values.

Additionally, because of the special significance of Category One waters, this rulemaking also includes amendments specifically designed to improve protections in the 300-foot riparian zones adjacent to these waters. Under new N.J.A.C. 7:13-9.9(a)7, any new bridge or culvert or any new railroad or roadway the bridge or culvert conveys now requires an individual permit if construction is proposed within a 300-foot riparian zone to ensure that the construction will not adversely impact the exceptional ecological, recreational, water supply, or fisheries resources of the water. Additionally, mitigation must now be provided for all impacts (with certain limited exceptions) within a 300-foot riparian zone. Since the vegetation immediately adjacent to the regulated water is a crucial buffer against flooding and activities in the inner portion of the riparian zone may be more likely to destabilize the channel, result in erosion and sedimentation, and destroy habitat, the strict standards at new N.J.A.C. 7:13-11.2(d) ensure that disturbances in the inner 150-foot portion of the 300-foot riparian zone will only occur in those limited situations where conducting regulated activities within the inner half is both necessary and unavoidable. The amendments and new rules adopted at this time only further enhance the protections already provided by the FHACA Rules for these environmentally important areas.

24. COMMENT: The rules adopted on June 20, 2016 and the proposed rules will eliminate protections for important stream buffers, which will degrade water quality. (2, 5, 8, 9, 10, 12, 14, 16, 17, and 18)

RESPONSE: These amendments and new rules do not eliminate protections for important stream buffers. Rather, as indicated above, the FHACA Rules have been, and remain, the most stringent Statewide stream corridor protection standards in the nation. The amendments and new rules adopted at this time only further enhance the riparian zone standards through changes that, among other things, include strengthening of mitigation requirements for riparian zone disturbances to ensure that appropriate compensation for the riparian zone functions and values lost as a result of permitted riparian zone disturbance is provided. Specifically, the adopted amendments apply the mitigation standards at N.J.A.C. 7:13-13 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. In addition, the Department has amended certain permits-by-rule, general permits-by-certification, and general permits additional protections, by ensuring that disturbance within 150 feet of a Category One water does not occur. Further, additional protections at N.J.A.C. 7:13-11.2(d), and elsewhere in the FHACA Rules, have been included for activities proposed within 150 feet of the top of bank of regulated waters possessing a 300-foot riparian zone. Therefore, rather than reducing

protection of water quality, the amendments and new rules provide additional water quality protections.

25. COMMENT: The proposal fails to require the Department to perform an analysis of the effects of a proposed disturbance to a riparian zone on the water quality status of the stream.

Under N.J.A.C. 7:9B-1.5(a) and 40 CFR 131, activities that would continue any impairment or further deteriorate already impaired waterways cannot be permitted. An analysis of water quality data should be a factor in determining riparian zone widths and limits of disturbance allowed within a riparian zone. (12)

RESPONSE: The Federal Clean Water Act requires delegated states to establish and implement surface water quality standards, which must include antidegradation policies to maintain and protect high quality state waters from increased loadings of pollutants resulting from regulated activities. New Jersey's antidegradation policies for Category One waters are set forth at N.J.A.C. 7:9B-1.5(d)2iii and are implemented through the NJPDES permitting process.

For non-point source discharges and point source discharges that are non-point 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. The 300-foot riparian zone regulated by the FHACA Rules is a specific BMP, based on the Department's determination that restricting disturbances within a vegetated area along Category One waters and upstream tributaries is a reliable means to prevent the degradation of water quality from nonpoint source pollution that would be regulated under NJPDES and also protects the chemical, physical, and biological integrity of the State's surface waters. As with all BMPs, the FHACA riparian zone

does not require measurement of water quality before and after the imposition of the vegetated buffer or zone to determine its effectiveness. If a vegetated area is maintained in accordance with Department standards, which require avoiding disturbance, minimizing disturbance, and mitigating when disturbance is unavoidable, all applicable water quality requirements of the Federal Clean Water Act, 33 U.S.C. §§ 1251 to 1387, specifically 33 U.S.C. § 1342(p), and the State Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., which require the reduction of pollutants in stormwater discharges to the maximum extent practicable, will be met. This is because the functional values of the vegetated buffer are maintained (through avoidance or minimization) or replaced (through mitigation). By codifying avoidance and minimization standards at N.J.A.C. 7:13-11.2(b) and mitigation standards at N.J.A.C. 7:13-13.4(b), the Department is ensuring that these standards will be implemented in a predictable manner. The 50-foot and 150-foot riparian zones provide similar protections to waters other than Category One waters.

The improvements to riparian zone protections adopted at this time further protect the State's surface waters. As explained in the Response to Comments 18 through 23, several amendments are being adopted to strengthen the protections for Category One waters. The Department is additionally adopting amendments that strengthen the protections applicable to all regulated waters. For example, several general permits-by-certification and general permits are amended to establish limits of disturbance that differ based on the width of the riparian zone to ensure that the functions and values of riparian zones are maintained. Several permits also now prohibit disturbance within the "inner half" of the riparian zone (that is, the 75 feet adjacent to the top of bank of a 150-foot riparian zone and the 150 feet adjacent to the top of bank in a 300-

foot riparian zone; disturbance within 25 feet of top of bank is generally not permitted in all riparian zones). Additionally, the Department is adopting amendments to prohibit a regulated activity that would meet the definition of major development from being authorized under a permit-by-rule, general permit-by-certification, or general permit, to ensure that permits-by-rule, general permits-by-certification, and general permits authorize only relatively minor construction projects that do not require municipal review of stormwater calculations to determine compliance with N.J.A.C. 7:8. These and other amendments serve to strengthen riparian zone protections which in turn strengthens the protection of water quality of the State's regulated surface waters.

26. COMMENT: The deletion of the SWRPA is opposed as it reduces buffer protections and eliminates headwater protections by increasing riparian zone disturbance under the June 20, 2016 notice of adoption. (10 and 18)

RESPONSE: The June 20, 2016, amendments adopted herein do not delete the SWRPA or reduce buffer protections and do not affect headwater protections, as discussed in the Response to Comment 8. Instead the adopted amendments and new rules increase protections along Category One waters, as discussed in the Response to Comments 18 through 23. With reference to the prior rulemaking, as explained in detail in the Response to Comments 136 through 148 (see 48 N.J.R. 1084-87), and in the Response to Comment 149 (see 48 N.J.R. 1087-88) of the June 20, 2016 notice of adoption, the deletion of the SWRPA did not reduce protections afforded to Category One waters or headwaters. Rather, the FHACA Rules, as amended June 20, 2016, incorporated new standards applicable to a wider suite of waters than the prior SWRPA to create a 300-foot riparian zone with standards that apply to a uniform set of surface waters designated

VERSION WILL BE PUBLISHED IN THE JULY 17, 2017 NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN. as Category One and the tributaries of these waters. The FHACA Rules, as amended June 20, 2016, 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 and in fact, expand protections and provide water quality benefits not previously achieved

by the SWM SWRPA.

NOTE: THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL

27. COMMENT: New Jersey's waters are impaired under the Federal Water Pollution Control Act. According to the 2012 Integrated Water Quality Monitoring and Assessment Report, approximately 90 percent of New Jersey's assessed waterways are impaired for one or more designated uses. The report demonstrates that only 37 percent of designated waters met the standards for public water supply, only 16 percent for recreation, only 23 for aquatic life, only 58 percent for shellfish harvest for consumption, and only 0.3 percent for fish consumption. In fact, there is only one assessment unit that fully meets all of the designated units. Further, the Department noted in the Draft 2014 Integrated report that there was a negative trend toward impaired conditions, with those waters previously classified as excellent or good declining. According to the Department, 60 percent of the pollution is the result of non-point source pollution (New Jersey Pollutant Discharge Elimination System Municipal Stormwater Regulation Program, "Improving Water Quality and Quality of Life," November 12, 2014). Buffers or riparian zones are the best manner to protect water quality. In the 2006 notice of proposal of the FHACA Rules, the Department determined that expanding the riparian buffer was necessary as existing buffers were "not adequate to preserve the functions of the riparian system" and further noted that the scientific literature reinforced 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" (see 38 N.J.R. 3950(a)). In reviewing the scientific literature in support of riparian zones (citing Rabeni & Smale, 1995), the Department noted not only that the width of the riparian zone was important but also that breaks or gaps in the riparian zone reduced its effectiveness. In short, the wider and more intact a riparian zone remains, the better protection against the degradation of water quality a stream will be afforded.

In the June 20, 2016 notice of proposal Summary, the Department's heading of "Improvements to riparian zone protections" is telling. At 40 N.J.R. 1014(a), it states that the Department's notice of proposal will "strengthen mitigation requirements and ensure that appropriate compensation for the riparian zone functions and values lost as a result of permitted riparian zone disturbance is provided." It appears that the Department acknowledges the impacts of recently adopted rules on water quality. It is impermissible for the Department to set up a scheme that degrades riparian zones and, therefore, water quality, especially in Category One waters. State and Federal law have set Category One waters as anti-degradation waters. Under the New Jersey Surface Water Quality Standards at N.J.A.C. 7:9B-1.5(d)2iii, Category One waters are "protected from any measurable changes (including calculable or predicted changes) to the existing water quality." This requirement mirrors those in Federal law at 40 CFR 131. The Department should take the opportunity to propose regulations that protect water quality by ensuring that any permitted activity in the riparian zone will not have a negative impact to water quality.

At the very least, the Department should readopt the SWRPA in the SWM rules and institute similar protections in the FHACA Rules. Under the prior SWM rules, the SWRPA

provided additional protections against disturbance compared to those found in the riparian zone standards under the FHACA Rules. The 300-foot buffer under the SWRPA was split into an inner 150-foot section and an outer 150-foot section. The inner 150 feet of the 300-foot SWRPA buffer around Category One streams and their tributaries had to remain undisturbed by development pursuant to N.J.A.C. 7:8-5.5(h)1ii. In the outer 150 feet, the SWRPA rules allowed for development only if the area was previously disturbed or developed and an applicant could demonstrate that the functional value and overall condition of the SWRPA would be maintained pursuant to N.J.A.C. 7:8-5.5(h)1i and ii. The FHACA Rules adopted on June 20, 2016 permit disturbance to the inner and the outer 150 feet of the 300-foot riparian zone. There is no requirement in the concurrent notice of proposal or the June 20, 2016 notice of adoption for an applicant to demonstrate that the proposed incursion in the riparian zone will not have a measurable impact on the riparian zone or water quality.

It is important to note that the Department had repeatedly defended the SWRPA and explained its importance in protecting water quality. The Department has said "[t]he goal of the special water resource protection area is to main and/or create an unbroken, undisturbed vegetated buffer to meet these purposes and to prevent water quality degradation, along all Category One waters (894 *A.2d* 1241, 1246 (N.J. Super App Div. 2006))." In the challenge to the rule, the Court highlighted the fact that "the 300-foot special water resource protection area is the best and most reliable means to prevent the degradation of surface water quality from nonpoint source pollution and protect the chemical, physical and biological integrity of the State's surface waters." The Department's past defense of the SWRPA makes the abandonment of the SWRPA indefensible. Please identify all studies, calculations, or analyses that the

Department relied on or undertook to determine that these changes will protect water quality in Category One waters. (13)

RESPONSE: As explained in the Response to Comment 128 of the June 20, 2016 notice of adoption (see 48 N.J.R. 1084), while the 2012 Integrated Water Quality Monitoring and Assessment 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. The use assessment portion of the Integrated Reports is 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.

The commenter's statement that there was a negative trend towards impaired conditions discussed in the Draft 2014 Integrated Report seems to refer to Section 3.2: Trends in Biological Health of New Jersey Streams, which utilizes the Statewide Ambient Biological Monitoring Network (AMNET) to assess current status and historical trends in benthic macroinvertebrate populations. The commenter's assertion that this data reflects an overall trend towards more impaired waters is not entirely accurate. The report summarizes the results thus:

"The Department has now completed four rounds of AMNET sampling statewide. Overall, the statewide trend shows very little change from 1989 to 2014, although there was a slight negative trend toward impaired conditions (see Figure 3.2). Stations with the best results ("Excellent") and the worst conditions ("Poor") both showed decreasing numbers over the time period. The strongest trend was the steady increase in the number of "Fair" stations that contributed to the improvement at "Poor" stations and the decline of non-impaired ("Excellent" and "Good") sites."

There was also variation amongst regions of the State, such that the tendency towards "Fair" conditions of macroinvertebrate communities was not always evident. For example, in the Northwestern Region, there was an increase in the number of "Excellent" stations and a decrease in the number of "Poor" stations. The number of "Good" and "Fair" stations remained relatively constant.

As explained in the Draft 2014 Integrated Report, the assessment of macroinvertebrate communities cannot by itself determine if trends observed are related to water quality impairment or natural events, such as droughts and floods. Correlations can be made between

macroinvertebrate communities and the amount of urban land and wastewater flow upstream of a site and environmental variables, such as amount of impervious surface, but further investigation is needed to determine the reason for changes at specific sites.

The commenters' concerns regarding the prior amendment to the FHACA Rules adopted June 20, 2016, are addressed in detail in the Response to Comments 150 through 160 of the June 20, 2016 notice of adoption (see 48 N.J.R. 1088-90). 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 while the SWRPA was in place 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. However, the Department determined that it could improve the protections for the inner 150-foot portion of the 300-foot riparian zone, which is essential for maintaining water quality, and set out to do so in the rulemaking adopted at this time. Specifically, under new N.J.A.C. 7:13-11.2(d), to receive an individual permit for a regulated activity in the inner 150 feet of a 300-foot riparian zone, applicants must demonstrate that the activity has no practicable alternative that would result in fewer adverse impacts, that the activity will result in minimum alteration or impairment of the riparian or aquatic ecosystem, and that the activity is in the public interest. The Department has additionally adopted more stringent riparian zone mitigation requirements to ensure that functions and values impacted due to unavoidable disturbance to the riparian zone are

sufficiently restored, such as the requirement that mitigation be provided for all impacts, with limited exceptions set forth in N.J.A.C. 7:13-13.4, when a regulated activity under an individual permit is located within a 300-foot riparian zone and the requirement that mitigation be provided on the same site as the disturbance where feasible. Finally, amendments to general permits and general permits-by-certification prohibit a regulated activity that would meet the definition of major development from being authorized under a permit-by-rule, general permit-by-certification, or general permit. Therefore, should an activity that would otherwise meet the requirements of one of these permits 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 the SWM rules at N.J.A.C. 7:8.

The Department agrees that an intact riparian zone is effective in promoting water quality protection. Several requirements of the adopted rules promote a contiguous and intact riparian zone along the State's regulated waters. For example, most permits-by-rule, general permits-by-certification, and general permits contain the requirement that 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. Projects adjacent to hardened banks are excluded from the requirement because they do not provide the same functions as vegetated riparian zones. Similarly, at N.J.A.C. 7:13-11.2(b)3, the Department requires any permittee clearing, cutting, or removing riparian zone vegetation under an individual permit to remove all existing onsite impervious surface within 25 feet of the top of bank and replant the area with native riparian zone vegetation in most cases. Additionally, the standards for issuance of an individual permit within a riparian zone at N.J.A.C. 7:13-11.2(c) prohibit most projects

from being located within 25 feet of any top of bank. The Department, in accordance with N.J.A.C. 7:13-11.2(b)1, will not issue an individual permit for a regulated activity that involves riparian zone disturbance unless the applicant demonstrates that the basic purpose of the project cannot be accomplished without clearing, cutting, or removing riparian zone vegetation, while N.J.A.C. 7:13-11.2(b)2 requires applicants to minimize riparian zone vegetation disturbance by, among other methods, locating the activity or project as far from any regulated water as feasible.

For the reasons discussed in the Response to Comment 49, there is not a consensus in the scientific literature to support a specific riparian zone width. The Department believes that the riparian zone widths established under the FHACA Rules are appropriate protective.

## **Climate Change**

28. COMMENT: Similar to the June 1, 2015 notice of proposal, the June 20, 2016 notice of proposal fails to address climate change despite the tremendous amount of science, especially given last year's U.S. climate assessment which directly links climate change with increased flooding and extreme weather events. If the Department is truly serious about addressing flooding problems in New Jersey, the FHACA Rules need to reflect that flooding is going to increase due to climate change. (10)

29. COMMENT: Global warming will increase storm-related impacts to New Jersey's waterways, and the FHACA Rules weaken their protection from such impacts. (5)

RESPONSE TO COMMENTS 28 AND 29: The Department 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. As discussed in the Response to Comments

74 through 85 in the June 20, 2016 notice of adoption (see 48 N.J.R. 1076-77), the FHACA Rules include standards to address any potential future increases in flooding, including the requirement 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 use of the 100-year design flood for all non-delineated streams in accordance with N.J.S.A. 58:16A-55.2 with a 25 percent factor-of-safety, and provisions to ensure that the best available flood elevation data is used to determine the flood hazard area design flood elevation for a given site, including FEMA's advisory flood maps and subsequently released preliminary maps for New Jersey's coast, which include revised A and V zone limits.

Further, the amendments to definitions and building standards that address discrepancies in elevation requirements, flood-proofing standards, and standards for construction in V zones and coastal A zones between the FHACA Rules and the UCC adopted herein ensure that the building requirements under the FHACA Rules are at least as stringent as the UCC standards in all circumstances. In addition to these flood protection measures contained in the FHACA Rules, the Department's Blue Acres Program and the New Jersey Coastal Management Program both focus on flood protection, as described in the Response to Comments 60 to 63 of the June 20, 2016 notice of adoption (see 48 N.J.R. 1074), by removing families from harm's way while creating natural buffers against future severe weather events and returning flood carrying capacity to vital areas and by ensuring that coastal communities have consistent and comprehensive guidance to assess their vulnerability to coastal hazards and capacity for resilience.

### **Hazardous Materials**

30. COMMENT: The proposed rules fail to address hazardous material deposits along waterways in urban areas. The Department should protect all populations from interacting with hazardous materials, particularly already overburdened urban communities. (2)

RESPONSE: The FHACA Rules do not distinguish between urban areas and other areas in the State and afford appropriate protections to all New Jersey residents located along waterways. As explained in the Response to Comments 722 through 724 in the June 20, 2016 notice of adoption (see 48 N.J.R. 1181), the Department does not encourage the placement, storage, or processing of hazardous substances within flood hazard areas or riparian zones. However, hundreds of thousands of the State's existing residences and businesses lie within these areas, and as such, hazardous substances are placed, stored, and processed in flood hazard areas and riparian zones, both within and outside of hazardous waste facilities, such as at fuel distribution centers, automobile repair shops, and dry cleaners. The FHACA Rules are designed to ensure that such hazardous substances do not threaten the environment or to public health, safety, or welfare, by requiring 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, that applicants demonstrate the hazardous substances cannot feasibly be placed, stored, or processed outside the flood hazard area and riparian zone onsite, and that the structures that isolate the hazardous substances from floodwaters are flood-resistant, so that hazardous substances are not transported offsite by floodwaters. The Department believes these standards are suitably protective and therefore, this rulemaking does not amend the requirements for the placement, storage, or processing of hazardous materials.

### Permits-by Rule, General Permits-by-Certification, and General Permits

- 31. COMMENT: The Department has not addressed concerns raised previously in response to the June 1, 2015 notice of proposal regarding general permits-by-certification. The continuance of general permits-by-certification is opposed; allowing individuals to self-certify that they are complying with the FHACA Rules invites non-compliance. Self-certification weakens the FHACA Rules, which were intended to protect water quality, prevent flooding, manage stormwater, protect New Jersey's coastal areas, and manage wastewater. The Department has also inadequately responded to concerns regarding the expansion of permits-by-rule in the June 20, 2016 notice of adoption. (2, 5, 10, and 15)
- 32. COMMENT: Permits-by-rule, general permits-by-certification, and general permits violate the Clean Water Act, the anti-degradation criteria of the Surface Water Quality Standards, and the TMDLs. These permits should not be included in the FHACA Rules without any scientific demonstration that the permitted activities will have a *de minimis* impact on Category One waters, water quality, and the environment. (2, 12, and 18)

RESPONSE TO COMMENTS 31 AND 32: In creating the 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. General permits-by-certification, together with permits-by-rule and general 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. Under these types of permits, regulated activities are

tightly limited and can generally occur only within actively disturbed areas and/or within close proximity to structures and buildings to ensure that riparian zone impacts are minimal. However, 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, N.J.A.C. 7:13-6.7 has been modified to include a new condition that prohibits a regulated activity that would meet the definition of major development from being authorized under a permit-by-rule, general permit-by-certification, or general permit. Therefore, should an activity that would otherwise meet the requirements of one of these permits 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 the SWM rules at N.J.A.C. 7:8.

The FHACA Rules protect riparian zones, and their many critical functions, such as maintaining water quality and protecting people and property from flooding, through a variety of means, including encouraging the redevelopment of actively disturbed areas. General permits-by-certification, like permits-by-rule and general permits, act as an incentive to focus activities in such areas and, therefore, help protect undisturbed riparian zones from development.

A person conducting regulated activities pursuant to a general permit-by-certification, permit-by-rule, and/or general permit must also comply with all other applicable Federal, State, and local requirements, as indicated at N.J.A.C. 7:13-22.2(c)3. The inclusion of permits-by-rule, general permits-by-certification, and general permits in the FHACA Rules does not violate any Federal laws. 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. The State addresses antidegradation requirements in the manner discussed in the Response to Comments 180 through 186 in the June 20, 2016 notice of adoption (see 48 N.J.R. 1093-95). The inclusion of permits-by-rule, general permits-by-certification, and general permits in the FHACA Rules is consistent with the approach described there. For the reasons discussed in the Response to Comments 204 through 206 in the June 20, 2016 notice of adoption (see 48 N.J.R. 10980-99), the repeal of the SWPRA does not affect the Department's requirement to maintain TDMLs because the FHACA 300-foot riparian zone serves as the BMP for the protection of the same area previously protected under the SWRPA. Further, the amendments adopted herein include additional protections for the 300-foot riparian zone, as discussed in the Response to Comment 24, ensuring that the water quality is not impacted.

33. COMMENT: Agricultural permits-by-rule, general permits-by-certification, and general permits (for example, permit-by-rule 58) are not going to be useful because the condition that the projects be approved by and performed under the supervision of the United States Department of Agriculture Natural Resource Conservation Service (NRCS) or the local Soil Conservation District is not realistic. These agencies do not supervise construction projects. (6)

RESPONSE: The new and/or amended permits-by-rule, general permits-by-certification, and general permits for certain agricultural activities referred to by the commenter were adopted on June 20, 2016, and are not part of this rulemaking. Those permits-by-rule, general permits-by-certification, and general permits were developed in cooperation with the NRCS and authorize agricultural activities that provide environmental benefits that will reduce both flooding and

erosion, while simultaneously providing assistance to the agricultural community. The activities authorized under these permits must be approved by and performed under the supervision of the United States Department of Agriculture (USDA) or the local Soil Conservation District. These agencies are equipped to ensure that all standard conditions applying to these permits under N.J.A.C. 7:13-6.7(b) are met.

#### V Zones

34. COMMENT: The Department's prior position was that the FHACA Rules do not consider V zones, and as such, there was no reference to which FEMA maps would apply for these zones. Given the change in approach, there should be consistency with the recently amended UCC standards for construction in V zones. Therefore, the FHACA Rules should note that the most recent FEMA-approved or issued maps will be accepted, and since FEMA allows for construction in the V zone under the UCC if properly designed, such construction should also be permitted under these rules, similar to the provision for Coastal A zones. (4)

RESPONSE: V zones are areas subject to flooding that are potentially subject to breaking wave heights three feet or more above the tidal stillwater elevation during a 100-year flood. As explained in the Response to Comments 92 through 97 of the June 20, 2016 notice of adoption (see 48 N.J.R. 1078-79), the FHACA Rules address the minimum elevation at which the lowest floor of a building must be set when the building is constructed in a flood hazard area. Construction standards for buildings, including flood elevation requirements for buildings in a flood hazard area and flood-proofing standards, are established in the UCC, N.J.A.C. 5:23, by

the Department of Community Affairs. The standards established in the UCC for construction in a flood hazard area are consistent with FEMA's minimum NFIP standards.

In general, the FHACA Rules do not prohibit construction in a V zone. Instead, the rules set the minimum elevation of the lowest floor in a new habitable building at N.J.A.C. 7:13-12.5(i). Particularly, if other requirements of the rules are satisfied and the lowest floor is set at least one foot above the flood hazard area design flood elevation and no lower than the elevation required under the UCC, construction may occur in accordance with the construction standards specified in the UCC. Only if the minimum elevation of the lowest floor cannot be met is construction of a new habitable building in a V zone precluded.

With reference to acceptable mapping, as indicated above, required first floor elevations are set with reference to the flood hazard area design flood elevation, which is defined at N.J.A.C. 7:13-1.2 as the peak water surface elevation during the flood hazard area design flood. As indicated in the definition of "flood hazard area design flood," the various methods for determining the flood hazard area design flood are described in N.J.A.C. 7:13-3. FEMA mapping is included in the available methods to establish the flood hazard area design flood elevation acceptable by the Department.

### **Public Trust Doctrine**

35. COMMENT: Under the FHACA Rules, the Department fails to protect public trust resources. In response to concerns expressed regarding the June 1, 2015 notice of proposal that the rules will cause unacceptable losses to the public trust resources the Department has a fundamental and solemn responsibility to protect, the Department states, "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." The Department's understanding of its responsibilities in New Jersey under the Public Trust Doctrine is clearly at odds with the Legislature's understanding, which is that they extend to more than just navigable waters, as articulated in the 1981 Water Supply Act (P.L. 1981 c.262 s.2). "The Legislature finds and declares that the water resources of the State are public assets of the State held in trust for its citizens and are essential to the health, safety, economic welfare, recreational and aesthetic enjoyment, and general welfare, of the people of New Jersey; that ownership of these assets is in the State as trustee of the people...." (15)

RESPONSE: The FHACA Rules provide stringent protections for the State's water resources subject to the Public Trust Doctrine both as initially interpreted (see *Arnold v. Mundy*, 6 *N.J.L.* 1, 69-78 (Sup. Ct. 1821)), and in the subsequently expanded interpretation of this doctrine (see, for example, *Mayor v. Passaic Valley Water Comm'n*, 224 *N.J. Super.* 53 (Law Div. 1987) and *KSB Technical Sales Corp v. No. Jersey Dist. Water Supply*, 75 *N.J.* 272, 285-287 (1977)). The Department does not limit its protection of the public trust to navigable waters. To the contrary, as indicated in both the 2015 and 2016 notices of proposal and throughout this adoption, the FHACA Rules recognize the essential functions provided by riparian zones and, for this reason, the rules incorporate the most stringent Statewide stream corridor protection standards in the nation. Riparian zones are present adjacent to all waters regulated under the FHACA Rules, not just those that are navigable. Indeed, because vegetated riparian zones are such an essential

component in maintaining water quality, protecting people and property from flooding, and promoting healthy ecosystems, the amendments adopted at this time were specifically proposed to further strengthen these standards, particularly in the 300-foot riparian zones adjacent to Category One waters, in order to enhance protection of the exceptional ecological, water supply, recreational, and/or fisheries significance of these waters (see the notice of proposal Summary at 48 N.J.R. 1014 and responses herein, including the Response to Comment 17 above). In short, the protections provided by the FHACA Rules, including those that protect drinking water supplies, are entirely consistent with the Public Trust Doctrine. The protections provided by riparian zones under the FHACA Rules for water resources, including for waters that may serve as a source of drinking water, are only one component of the Department's efforts to protect drinking water resources. In addition to permitting and monitoring of discharges through programs such as the NJPDES program, the Department also provides a variety of regulatory measures pursuant to the Water Supply Management Act to ensure adequate, safe, and potable water (see also the Response to Comment 16).

### **Definitions**

36. COMMENT: Definitions for the terms "tree" and "vegetation," which are both used throughout the current rule and the rule proposal should be added. (4 and 6)

RESPONSE: In many circumstances, 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. A definition of "tree" was provided in the 2007 FHACA Rules but was deleted from the

June 20, 2016 notice of adoption because it limited 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 that are protected under the FHACA Rules.

Regarding a definition for "vegetation," as explained in the November 5, 2007 notice of adoption of the FHACA Rules in the Response to Comment 215 (see 39 N.J.R. 4601), these rules are intended to protect all vegetation within the riparian zones of the State, as defined at N.J.A.C. 7:13-4.1. The rules do not provide differentiated protection for one type of vegetation over another, and, therefore, no definition of "vegetation" is necessary. In certain circumstances, the rules necessarily do distinguish between types of vegetation. For example, in many instances the rules limit replacement vegetation to native species. The Department believes that it is more appropriate to leave the term "vegetation" to be understood in its commonly accepted, allencompassing meaning, with limitations such as a restriction of allowed vegetation to native species to be specified where applicable.

### Grandfathering

37. COMMENT: The proposed rules fail to address concerns raised on the June 1, 2015 notice of proposal with respect to the overly generous expansion of grandfathering provisions. (15) RESPONSE: As explained in the Response to Comments 314 through 320 in the June 20, 2016 notice of adoption (see 48 N.J.R. 1115-16), the Department determined that the "grandfathering" provisions under the November 5, 2007 FHACA Rules at N.J.A.C. 7:13-2.1(c)4i were unintentionally limiting. 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 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, the 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. Further, 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 have continued to be built and would likely have received all necessary construction approvals prior to November 5, 2007, and would, therefore, have been grandfathered under N.J.A.C. 7:13-2.1(c)4i. To address these inequities created by the grandfathering provisions, the Department modified 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 amendments in the June 20, 2016 rulemaking track the grandfathering provisions in the SWM rules at N.J.A.C. 7:8-1.6(b)1. It should be noted that this provision was not amended as part of the June 20, 2016 notice of proposal adopted herein.

### **Regulated Waters**

38. COMMENT: The methodology for defining drainage area, including a 50-acre drainage area, is not explained in the rules. A methodology with factors such as, but not limited to, whether the delineation must use 100-year flows, whether stormwater discharges from outside the natural drainage area must be considered, and topography, should be provided. (4) RESPONSE: N.J.A.C. 7:13-1.2 defines drainage area as "a geographic area within which water, sediments and dissolved materials drain to a particular receiving waterbody or to a particular point along a receiving waterbody." Because the boundaries of a drainage area are based upon topographic features, determination of the boundary of a particular drainage area is not impacted by the flow used. The limits of drainage areas are typically determined by identification of drainage divides, which are topographic high points in the landscape. These are identified through topographic mapping, such as the USGS quad map, other signed and sealed survey data, or a combination of both. In some cases, certain features assumed to act as drainage divides do not fully function as such. These features may not be used to delineate the limit of a drainage area. For example, because some roads typically have drainage systems, a temptation exists to use those roads as drainage divides by virtue of the fact that drainage systems are present. However, unless those roads are located on topographic drainage divides, they cannot be assumed to fully redirect the direction of the flow of water, and they do not act as true drainage divides.

The Department is in the process of updating its Flood Hazard Area Technical Manual to reflect both this adoption and the June 20, 2016 notice of adoption and will include a discussion on determining drainage areas, with examples. This technical manual is intended to provide

guidance concerning the basic engineering and environmental concepts that are the foundation of the FHACA Rules.

39. COMMENT: The methodology for how the Department determines which waters have "bed and bank" should be better defined. (4)

RESPONSE: All regulated waters have a bed and bank. N.J.A.C. 7:13-1.2 defines a bed as "the floor of a channel over which water flows continuously or intermittently" and defines bank as "the inclined side of a channel ... which confines and/or conducts water." While all channels have a bank, there are situations where the top of the bank of the channel, from which the applicable riparian zone is measured, may be difficult to discern. Recognizing this, the definition of "top of bank" in N.J.A.C. 7:13-1.2, explains in detail what shall be considered the top of bank in such a situation. As noted above in the Response to Comment 38, the Department is in the process of updating its Flood Hazard Area Technical Manual to reflect both this adoption and the June 20, 2016 notice of adoption and will include a discussion on determining the bed and bank of a regulated water.

40. COMMENT: Clarification is needed on the methodology to distinguish swales and streams.(4)

RESPONSE: The Department believes the commenter is referring to "swales" as defined and regulated under the Department's FWPA Rules and is requesting a method to distinguish between such features and the surface waters that are subject to the FHACA Rules. N.J.A.C. 7:7A-1.4 defines a "swale" as "a linear topographic depression, either naturally occurring or of

human construction" that meets several specific criteria, including that it must drain less than 50 acres, is not a seep, spring, or intermittent stream, and has no definite bed and banks. Any feature that meets this definition would qualify for the exemption at N.J.A.C. 7:13-2.2(a)3i for waters with a drainage area of less than 50 acres that have no discernible channel and would, therefore, not be subject to the FHACA Rules. Conversely, a naturally-occurring surface water feature that contains a discernible channel is not a swale and is considered a regulated water under the FHACA Rules.

## Determining if a Riparian Zone is Forested or Unforested

41. COMMENT: With respect to forested versus actively disturbed areas, clarification of forested areas is needed, specifically on an area of existing development. Would the Department consider a site to be "forested" if there are trees, but the understory is all maintained lawn at an existing residential or commercial site? If there are scattered, large trees in an existing backyard, the current definition would seem to consider that forested even if it is a maintained yard. While "forested" has the same meaning in the CZM Rules, those rules allow for a higher percentage of clearing based on planning area. (4)

RESPONSE: N.J.A.C. 7:13-4.2 defines a forested area based upon a review of the canopy from aerial photography or, alternately, from the grid methodology and point system. The condition of the understory does not affect the determination of whether or not the area is forested. The definition of "actively disturbed area" at N.J.A.C. 7:13-1.2 explains that, "Forested areas and areas of non-ornamental woody vegetation are not part of an actively disturbed area." However, if an activity disturbs a maintained lawn that lies beneath the canopy of a forested area, but does

not in any way disturb the trees themselves, the activity can be considered to be located within an "actively disturbed area" as defined at N.J.A.C. 7:13-1.2. For example, permit-by-rule 7 at N.J.A.C. 7:13-7.7 authorizes the placement of no more than five cubic yards of landscaping material within an actively disturbed area. Should a maintained lawn lie beneath the canopy of a forested area, and the placement of the landscaping material did not disturb the trees, the activity would qualify for that permit-by-rule. It also should be noted that aside from forest management activities under permit-by-rule 26 and mitigation of impacts to forested areas under N.J.A.C. 7:13-13, the FHACA Rules place restrictions on impacts to forested areas under only N.J.A.C. 7:13-11.2(k) and (l), with regard to riparian zone disturbance related to utility lines under an individual permit. Therefore, whether an area is forested does not generally affect development under the FHACA Rules.

In 2000, the Department adopted a comprehensive environmental design strategy to protect the coastal areas from inappropriate development (See 31 N.J.R. 2042(a); 32 N.J.R. 503(a)). The design strategy is based in large part on planning decisions at the State, county, and municipal levels and reflects the growth management principles of the State Development and Redevelopment Plan. This strategy furthers CAFRA's mandate to develop compatible land uses in order to preserve the most ecologically sensitive and fragile areas from development by encouraging development in compact growth areas and limiting it in outlying and environmentally sensitive areas. Under the CZM Rules, the amount of impervious cover allowed on a site and the required area of forest to be preserved was determined in consideration of the comprehensive planning efforts under the State Plan.

## **Impact Statements**

- 42. COMMENT: The statements indicating that the proposed amendments will not have a significant economic impact, jobs impact, and housing affordability impact is objectionable. The concurrent notice of proposal does not appear to support Statewide planning efforts and designated "smart growth" areas, as evidenced through the lack of consideration for infill development located within Category One riparian zones and the fact that the mitigation requirements for regulated activities within 300-foot riparian zones are more stringent than past versions of the FHACA Rules. (4)
- 43. COMMENT: The statements that the proposed amendments will not have a significant economic, jobs, and housing affordability impacts are unsubstantiated. (6)

  RESPONSE TO COMMENTS 42 AND 43: As discussed in the notice of proposal, particularly the Social Impact, Economic Impact, Jobs Impact, and Housing Affordability Impact Analysis, the Department believes that the adopted rules appropriately take into account the interest of property owners in reasonable use of their property while ensuring protection of the environment.

Category One waters are critically important to the State's ecosystem as a result of their exceptional ecological significance, recreational significance, water supply significance, and/or fisheries resource(s) and, therefore, receive the highest levels of protection, including the maximum, 300-foot, riparian zone. Protecting waters that are significant to the State's water supply has a positive economic benefit. In addition, protecting Category One waters from inappropriate development can benefit the recreation, fishing, and ecotourism industries. The Department believes the new standards for 300-foot riparian zones at N.J.A.C. 7:13-11.2(d) and

the amended mitigation requirements at N.J.A.C. 7:13-11.2(e) are necessary to ensure that the FHACA Rules are suitably protective of these vital waters.

It is correct that the adopted rules do not contain provisions for "infill" development, while other Department rules in some cases do. However, the Department considers the protection of undisturbed riparian zones paramount to protecting water quality, promoting the health of aquatic and riparian ecosystems, ensuring bank stability, and preventing the exacerbation of flooding, regardless of the existence of existing development on adjacent parcels. As the impact statements are intended to analyze the impact of amendments that are proposed in that rulemaking, they do not include analysis of all other alternate provisions that could have been proposed, but were not, including infill provisions that have never been part of the FHACA Rules. The FHACA Rules do contain numerous provisions for the development of actively disturbed areas without requiring mitigation that accommodates redevelopment activities without incurring new disturbances to riparian zone vegetation. As for designated "smart growth" areas, these are not likely to be located within 300-foot riparian zones since development is not generally encouraged in these environmentally sensitive areas.

<u>Subchapter 6. General Provisions for Permits-By-Rule, General Permits-By-Certification,</u> and General Permits

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

44. COMMENT: At N.J.A.C. 7:13-6.7, the application of the major development exclusion criterion to all permits-by-rule, general-permits-by-certification, and general permits is

unreasonable. While rare, a major development that meets the requirements of one of these permits should be allowed to obtain such a permit. This criterion will increase Department staff's workload for routine projects, such as public resurfacing and full depth reconstruction of roadway pavements, even when they remain within the exact same footprint. The criterion for stormwater management review is redundant and unnecessary since every project that triggers a stormwater management review is already subject to review by the pertinent NJPDES permittee (local, county, NJDOT, NJTA, etc.) under New Jersey's Municipal Separate Storm Sewer System (MS4) or Highway Agency permits. (4 and 6)

RESPONSE: N.J.A.C. 7:13-6.2(b)1 states that a permit-by-rule, general permit-by-certification, or general permit will only be promulgated 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 on flooding and the environment." In order to ensure this standard is met, the Department has evaluated each adopted permit-by-rule, general permit-by-certification, and general permit and has determined that the potential adverse impacts to flooding and water quality resulting from a "major development" are more appropriately reviewed by Department staff under an individual permit. However, the Department recognizes that there are certain public safety projects that are not stormwater generating, such as guide rails or bridge superstructure reconstruction, that may technically meet the definition of major development. In this limited public safety context where the activities proposed are not stormwater generating, it is not the Department's intent to require the detailed review of stormwater management calculations that would normally be part of an individual permit analysis. It is noted that, in addition to meeting the requirements of the

FHACA Rules, entities engaging in these types of public safety projects continue to be required to comply with all other requirements applicable to the proposed activity under other rules and permits, including requirements applicable to an MS4 permittee under that permit to comply with the Stormwater Management rules, N.J.A.C. 7:8.

Regarding resurfacing of road pavement, such activities do not constitute disturbance under the SWM rules, which is defined as "the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any building or structure, any mining excavation or landfill, and any use or change in the use of any building or other structure, or land or extension of use of land, for which permission is required under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq.," and, therefore, would not count toward the "major development" threshold at N.J.A.C. 7:8-1.2. Full-depth reconstruction activities, however, do constitute disturbance under the SWM rules, which is appropriate since, unlike resurfacing, full-depth reconstruction affords an opportunity to provide stormwater management.

The Department disagrees with the commenter's statement that every project that triggers a stormwater management review is already subject to review by the pertinent NJPDES permittee. While there are projects that are reviewed by both the MS4 permittee and the Department, there is a significant group of projects that are reviewed by the Department and are not required to be reviewed by MS4 permittees. First, the MS4 permits require the MS4 permittee to review projects that disturb one acre or more, including projects less than one acre that are part of a larger common plan of development or sale. However, the SWM rules require review of those same projects and, additionally, projects that result in an increase in impervious surface by one-quarter acre or more. Therefore, any project that creates at least one-quarter acre

of new impervious surface but does not disturb one acre of land is reviewed by the Department for compliance with the SWM rules if a permit from the Division of Land Use Regulation is required, but is not required to be reviewed by the MS4 permittee. Second, MS4 permittees are limited to reviewing projects over which they have review authority. For example, a municipality can review only those projects that require approval under the Municipal Land Use Law (N.J.S.A. 40:55D-1 et seq.). Projects that do not trigger review under the Municipal Land Use Law or are exempt from review under the Municipal Land Use Law would not be reviewed by a municipality, but would still be reviewed by the Department if a permit from the Division of Land Use Regulation were required.

# **Subchapter 9. General Permits**

N.J.A.C. 7:13-9.6 General Permit 6 – 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

45. COMMENT: General Permit 6 unreasonably requires that driveways for single-family homes and duplexes meet the roadway elevation standards at N.J.A.C. 7:13-12.6(c). (4 and 6) RESPONSE: In the interest of public safety, N.J.A.C. 7:13-12.6(c)3 requires the travel surface of a driveway and any associated parking area at a single-family home or duplex to be constructed at least one foot above the flood hazard design flood elevation unless the applicant demonstrates that construction at that elevation is not feasible, constructs the travel surface as close to the elevation standard as feasible, and adds specific information to the property deed, which is to be recorded in the Office of the County Clerk or the registrar of deeds and mortgages of the

applicable county, in order to provide notice to potential future purchasers of the potential for flooding of the driveway. The Department believes that general permits, as well as permits-by-rule and general permits-by-certification, should provide the same level of protection to public safety from the impacts of flooding as set forth in individual permits and that general permit 6 sets forth reasonable standards to accomplish this goal.

46. COMMENT: As proposed, under general permit 6 there is no differentiation between the setbacks for an actively disturbed versus an undisturbed riparian zone. This general permit should be amended to recognize variance from setbacks for actively disturbed areas. (4) RESPONSE: General permits are adopted to authorize a tightly circumscribed set of activities with standards that are relatively straightforward, allowing Department staff to evaluate applications quickly and easily. Because general permits may only authorize activities that will have minimal impact both singularly and cumulatively in accordance with N.J.A.C. 7:13-6.2, general permit 6 establishes setbacks from top of bank that are necessary to ensure that riparian zone functionality is not adversely impacted. The Department agrees that there may be situations where a project can occur closer to the top of bank without impacting riparian zone functionality, but such projects are more appropriately reviewed under an individual permit.

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

47. COMMENT: General Permit 9 unreasonably precludes construction or reconstruction of a bridge or culvert across a regulated water with a drainage area of less than 50 acres in a 300-foot

riparian zone. It is recommended that this general permit be amended to allow for such activities. (4 and 6)

RESPONSE: The FHACA Rules establish 300-foot riparian zones around Category One waters and their tributaries, as set forth at N.J.A.C. 7:13-4.1(c)1, in order to protect the exceptional ecological, water supply, recreational, and/or fisheries resources of these waters. The general permit does not preclude the reconstruction of a bridge or culvert in a 300-foot riparian zone. Rather, the general permit simply provides that the construction of any new bridge or culvert within a 300-foot riparian zone is not authorized by the general permit. Construction of new bridges and culverts can result in a significant amount of riparian zone disturbance, such as for the construction of the roadway the structure serves, as well as temporary and permanent impacts to the channel itself. Due to the importance of Category One waters and their riparian zones, it is appropriate for the Department to review new bridges and culverts within a 300-foot riparian zone under an individual permit.

48. COMMENT: In the notice of proposal Summary, regarding N.J.A.C. 7:13-9.9, the Department states that the construction of a bridge or culvert over Category One waters could allow a new roadway to be constructed, which could have potentially great consequences on the water supply, ecological, recreational, and fisheries significance of the water. However, at N.J.A.C. 7:13-9.9(a)8, the notice of proposal allows the removal of vegetation in the riparian zone as long as it does not exceed the limits set forth in Table 11.2. Given the acknowledgement of impacts to water quality, how does the Department justify the allowances in Table 11.2? (13)

RESPONSE: General permit 9 does not authorize the construction of new bridges or culverts within a 300-foot riparian zone. N.J.A.C. 7:13-9.9(a)8 limits the eligibility of this general permit to the reconstruction of bridges and culverts where the impact to the riparian zone has already occurred. The construction of new bridges or culverts within a 300-foot riparian zone may, therefore, only be allowed under an individual permit, which may require mitigation. General permit 9 requires that the total area of riparian zone vegetation to be cleared, cut, and/or removed not exceed the limits set forth in Table 11.2. The limit of riparian zone disturbance depends on whether the bridge or culvert is new construction or reconstruction and whether it conveys a public roadway, railroad, a private driveway, or any other roadway. The limits set forth in Table 11.2 are designed to ensure the scope and design of projects authorized under this permit have a minimal impact on the riparian zone and regulated water.

### Subchapter 11. Area Specific Requirements for Individual Permits

N.J.A.C. 7:13-11.2 Requirements for a Regulated Activity in a Riparian Zone

N.J.A.C. 7:13-11.2(b)

49. COMMENT: At N.J.A.C. 7:13-11.2(b)3 and in various other sections of the rules, a minimum 25-foot setback is required from the top of bank. The Department does not cite any research, scientific study, or analysis to demonstrate that a 25-foot setback is sufficient to reduce pollutant loading to streams. Studies will likely demonstrate that 25 feet is not sufficient. Since restoring and enhancing water quality is one of the major focuses of Federal and State legislation, scientific studies should be provided to ensure the setback requirement is consistent with legislative intent. (12)

RESPONSE: Under this rulemaking, previous N.J.A.C. 7:13-11.2(d) has been recodified as N.J.A.C. 7:13-11.2(b)3 with no substantive change in text. This recodification was made to facilitate the addition of new requirements at N.J.A.C. 7:13-11.2(d) and to clarify that the requirement for removing all existing onsite impervious surface within 25 feet of the top of bank and replanting the area, as well as the exceptions to this requirement, applies to the issuance of an individual permit for any regulated activity that involves riparian zone disturbance.

The 25-foot setback is the minimum distance most regulated activities must be located from the top of bank of most regulated waters. N.J.A.C. 7:13-11.2(b)2 requires applicants to minimize clearing, cutting, and/or removal of riparian zone vegetation through methods such as locating the activity or project as far from any regulated water as feasible. With limited exceptions, N.J.A.C. 7:13-11.2(b)3 requires that existing impervious surfaces within 25 feet of the top of bank be removed and the area be restored to a natural condition using native, non-invasive vegetation. As explained in the Response to Comments 566 through 568 and the Response to Comments 569 and 570 of the June 20, 2016 notice of adoption (see 48 N.J.R. 1156-57), the removal of onsite impervious surface located within 25 feet of the top of bank and the subsequent revegetation of this area provides ecological enhancement to previously disturbed areas, thereby enhancing the riparian zone functionality of an area that was previously devoid of such ecological functions.

The Department regulates riparian zones of 50, 150, or 300 feet in which activities are strictly limited. The 25-foot setback referenced by the commenter ensures that the portion of the riparian zone directly adjacent to the regulated water remains intact or is restored. Activities beyond this 25-foot setback are limited in size and scope by other standards in N.J.A.C. 7:13-

11.2 with mitigation that meets the standards of N.J.A.C. 7:13-13 required in appropriate circumstances to compensate for unavoidable riparian zone disturbance. Under the adopted rules, the Department has also strictly limited the activities that may occur within 150 feet of the top of bank of a Category One water, which further strengthens protections of the State's most pristine waters.

Published scientific literature does not form a consensus on ideal setback widths. According to Ellen and Markelle 2005, cited in Didanaroğlu et al. 2015, the ideal width of a vegetated buffer often depends upon site-specific conditions, such as slope and soil type, and also depends on the riparian zone function targeted for protection (Dindaroğlu T, Reis M, Akay AE, and Tonguç, F. (2015) Hydroecological approach for determining the width of riparian buffer zones for providing soil conservation and water quality. International Journal of Environmental Science and Technology 12:275-284 and Ellen H, Markelle S (2005) Riparian buffer zones: functions and recommended widths. Yale school of forestry and environmental studies. http://eighmileriver.org/appendicies/09c3\_Riparian%20Buffer%20Science\_YALE.pdf). In Fischer and Fischenich's 2000 Design Recommendations for Riparian Corridors and Vegetated Buffer Strips, the authors summarize the findings of a number of previous studies (Fischer RA, Fischenich JC (2000) Design recommendations for riparian corridors and vegetated buffer strips. Ecosystem Management and Restoration Research Program, U.S. Army Corps of Engineers.). In their review, they found that buffer zones of five meters to 61 meters (16 to 200 feet) were effective for certain water quality parameters. For example, Madison et al. reported that a grass filter strip greater than or equal to five meters wide trapped approximately 90 percent of nitrates and phosphates, while Lowrance et al. found that a vegetated buffer greater than or

equal to seven meters (23 feet) resulted in nitrate concentrations of runoff being almost completely reduced due to denitrification by microbes and plant uptake of nitrogen (Madison CE, Blevins RL, Frye WW, and Barfield BJ. (1992) Tillage and grass filter strip effects upon sediment and chemical losses. Agronomy abstracts, ASA. Madison, WI: 331; see also Lowrance, R. (1992) Groundwater nitrate and denitrification in a coastal plain riparian forest. Journal of Environmental Quality 21: 401-405). Fischer and Fischenich recommend 5 meters to 30 meters (16 to 98 feet) as a generally acceptable buffer width for water quality protection. Orewole et al. repeat this guidance in their 2015 paper (Orewole, M. O., Alaigba, D. B., & Oviasu, O. U. (2015). Riparian Corridors Encroachment and Flood Risk Assessment in Ile-Ife: A GIS Perspective. *Open Transactions on Geosciences*, 2(1), 19-20).

50. COMMENT: At N.J.A.C. 7:13-11.2(b)3, the Department should not require any riparian zone restoration within 25 feet of the top of bank if all of the regulated activities are performed within an actively disturbed area. N.J.A.C. 7:13-11.2(b)3i should be modified to "The regulated activity is performed only within an actively disturbed area along a tidal water or fluvial water." This will encourage applicants to avoid any undisturbed areas of the riparian zone for the redevelopment of previously disturbed properties. (1)

RESPONSE: When the area within 25 feet of top of bank has been previously disturbed, both the November 5, 2007, and June 20, 2016 FHACA Rules required the impervious surface to be removed and the area to be revegetated. In this rulemaking, that requirement has been relocated from prior N.J.A.C. 7:13-11.2(d) to subsection (b) with no substantive changes in text. However, both the prior and the current rules allow for redevelopment of disturbed portions of this area in

limited circumstances, including situations where removal of the impervious surface would threaten public safety, cause erosion, or create undue hardship. The rules additionally do not require removal of all existing impervious surface within 25 feet of top of bank with revegetation where the proposed development borders a tidal water or an impounded fluvial water and disturbance is proposed adjacent to a lawfully existing bulkhead, retaining wall, or revetment.

The commenter suggests that restoration within 25 feet of top of bank should not be required if disturbance is limited to actively disturbed areas. However, as stated in the June 1, 2015 notice of proposal Summary for the previously adopted FHACA Rules at 47 N.J.R. 1055, "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." Due to the importance of these areas, the Department believes that restoration within 25 feet of top of bank should be performed in accordance with adopted N.J.A.C. 7:13-11.2(b)3, regardless of whether the disturbance is confined to actively disturbed areas onsite.

### N.J.A.C. 7:13-11.2(d)

51. COMMENT: At N.J.A.C. 7:13-11.2(d), the notice of proposal addresses the disturbance of vegetation within the inner 150 feet of a 300-foot riparian zone. The SWRPA provided for impacts to both the inner and outer 150 feet of a 300-foot riparian zone. The Surface Water Quality Standards, at N.J.A.C. 7:9B-1.5, as well as Federal regulations, required a demonstration to the Department through a functional analysis that there would be no measurable changes to water quality for activities in the outer 150 feet of a 300-foot buffer. This rulemaking allows

impacts to not only the outer 150 feet but also to the inner 150 feet of a 300-foot riparian zone without any demonstration that those impacts will not have a detrimental impact to water quality.

(12)

RESPONSE: As explained in the Response to Comments 150 through 160 of the June 20, 2016 notice of adoption (see 48 N.J.R. 1088), the prior SWRPA was never a "no-build" regulation. Instead, disturbance, while discouraged, was allowed in limited circumstances. Under prior N.J.A.C. 7:8-5.5(h)ii, unlimited redevelopment in the outer 150 feet of the SWRPA was permitted, provided 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." Conversely, adopted N.J.A.C. 7:13-11.2(b) sets a more stringent standard for both new and redevelopment projects. For example, under the prior SWRPA, where the outer 150 feet was predominately occupied with pavement and buildings, prior N.J.A.C. 7:8-5.5(h)ii would have allowed a significant amount of redevelopment as the applicant could demonstrate through a functional value analysis that the functionality of the existing SWRPA was significantly impaired. However, under adopted N.J.A.C. 7:13-11.2(b), development in any portion of the riparian zone must be justified, all impacts must be avoided where practicable, and disturbances must be minimized with any impacts to the functional value of the riparian zone mitigated, except where noted in N.J.A.C. 7:13-13.4. Further, Table 11.2 provides for riparian zone disturbance only for projects that are for public benefit (infrastructure), for projects that are environmentally beneficial (such as stream bank stabilization and site remediation activities), for minor impacts associated with one single-family home or duplex, and for a small amount of disturbance with full mitigation for activities not listed in Table 11.2.

Under the amendments adopted at this time, the strict standards at new N.J.A.C. 7:13-11.2(d) ensure that disturbances in the inner 150-foot portion of the 300-foot riparian zone will only occur in those limited situations where conducting regulated activities within the inner half is both necessary and unavoidable. In addition, the Department has amended certain permits-by-rule, general permits-by-certification, and general permits to include additional protections, ensuring that disturbance within 150 feet of a Category One water does not occur. Further, mitigation must now be provided for all impacts (with certain limited exceptions) within a 300-foot riparian zone, regardless of whether the disturbance occurs in the inner or the outer 150 feet. Therefore, the adopted standards are more stringent, and consequently more protective of water quality, than the prior SWRPA.

It should also be noted that, as explained in the Response to Comments 150 through 160 of the June 20, 2016 notice of adoption, the adopted FHACA Rules extend the protections of the prior SWRPA to any clearing, cutting, and/or removal of vegetation within the riparian zone since the scope of activities and projects subject to the FHACA Rules is more encompassing than the SWM rules, which only apply to major development.

52. COMMENT: At N.J.A.C. 7:13-11.2(d), regulated activities in the riparian zone within 150 feet of the top of bank should not be permitted without the demonstrations required at N.J.A.C. 7:13-11.2(d)1, 2, and 3 and, in addition, a demonstration by the applicant that the activity will not have a measurable negative impact on water quality, as required by N.J.A.C. 7:9B-1.5(d)2iii. Not only should Category One waters be protected in this way, but under current regulations, the Department is required to determine whether the proposed activity will have a negative impact

on water quality before allowing regulated activities in the riparian zone under N.J.A.C. 7:9B-1.5(a) and (d)2iii, and 40 CFR 131. (13)

RESPONSE: As explained in the Response to Comment 25, for non-point source discharges, 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. With the consolidation of the SWRPA and the riparian zone standards of the FHACA Rules under the prior rulemaking, the 300-foot FHACA riparian zone is a specific BMP based on the Department's determination that restricting disturbances within a vegetated area along Category One waters and upstream tributaries is the best and most reliable means to prevent the degradation of water quality from nonpoint source pollution and to protect the chemical, physical, and biological integrity of the State's surface waters. As with all BMPs, the FHACA riparian zone does not require measurement of water quality before and after the imposition of the vegetated buffer or zone to determine its effectiveness. If a vegetated area is maintained in accordance with Department standards, which require avoiding disturbance, minimizing disturbance, and mitigating when disturbance is unavoidable, all applicable water quality requirements of the Federal Clean Water Act, 33 U.S.C. §§ 1251 to 1387, specifically 33 U.S.C. § 1342(p), and the State Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., which require the reduction of pollutants in stormwater discharges to the maximum extent practicable, will be met. This is because the functional values of the vegetated buffer are maintained (through avoidance or minimization) or replaced (through mitigation). By codifying avoidance and minimization standards at N.J.A.C. 7:13-11.2(b) and mitigation standards at N.J.A.C. 7:13-13.4(b), the Department is ensuring that these standards will be imposed in a predictable manner and that the FHACA Rules will provide suitable

protections for Category One waters and their riparian zones. The additional standards at N.J.A.C. 7:13-11.2(d) are intended to enhance protection of the inner 150 feet of the 300-foot riparian zone since the potential for water quality impairment increases the closer activities are situated to the regulated water.

53. COMMENT: At N.J.A.C. 7:13-11.2(d)1, for regulated activities within 150 feet of the top of bank along a regulated water with a 300-foot riparian zone, the Department should provide a two-part demonstration, similar to N.J.A.C. 7:13-11.2(y), to differentiate between actively disturbed and undisturbed areas. This will allow an applicant to demonstrate that regulated activities have been avoided to the maximum extent practicable within actively disturbed areas, compared to the more stringent "no practicable alternative" within undisturbed areas, which will further encourage applicants to avoid impacts to undisturbed riparian zones. (1) RESPONSE: The new standards for 300-foot riparian zones at N.J.A.C. 7:13-11.2(d) are necessarily stringent to ensure that the FHACA Rules are suitably protective of Category One waters. Since the vegetation immediately adjacent to the regulated water is a crucial buffer against flooding and activities in the inner portion of the riparian zone may be more likely to destabilize the channel, result in erosion and sedimentation, and destroy habitat, the strict standards at new N.J.A.C. 7:13-11.2(d) ensure that disturbances in the inner 150-foot portion of the 300-foot riparian zone will only occur in those limited situations where conducting regulated activities within the inner half is both necessary and unavoidable. When such a disturbance is deemed necessary and unavoidable, under N.J.A.C. 7:13-11.2(b)2ii, the applicant must demonstrate that disturbance to riparian zone vegetation is minimized by limiting construction to

actively disturbed areas and/or areas where the benefits and functions of a riparian zone are considerably deteriorated or impaired because of previous development.

54. COMMENT: The AO adds further flexibility to the FHACA Rules by introducing language that would allow additional exceptions to prohibitions on riparian area disturbances if the disturbance is found to satisfy an undefined "public interest." Projects that have progressed beyond municipal approval only because they have succeeded in the courts as builders' remedy lawsuits could be construed by the Department as in the "public interest." For example, in the cases of Mount Laurel I and Mount Laurel II, the courts determined there was a public interest obligation to provide realistic opportunities for affordable housing, but that was never intended to trump natural resource and environmental protections. Several large-scale projects in the Highlands are currently poised to submit FHACA and other Department permit applications under this scenario. These projects have other locations within the municipality that are more appropriate for the construction of housing, including affordable housing, yet the Department is not in a position to augment or challenge the Court-ordered builders' remedies. The added flexibility allowed by the AO was not subject to public input or comment. The public should have a voice as to how the AO may affect the actual implementation of the FHACA Rules. (15) 55. COMMENT: Proposed N.J.A.C. 7:13-11.2(d)3 and the interpretation of that paragraph under Administrative Order (AO) 2016-06, p. 4, 1(d) weaken stream protections for Category One waters and their tributaries. Particularly, where a "public interest," such as an affordable housing development, is proposed in a 300-foot riparian zone, including consideration of the "public interest" in the FHACA Rules allows a developer to argue that a regulated activity is in the

public interest and places the Department in the position of a conflict of interest in which it must balance the merits of the public interest in affordable housing development within a site's riparian zones against the public's interest in protection of the environmental benefits provided by the riparian zones, including water quality benefits and flood control. The Court has found that affordable housing is in the public interest, and it would seem that the Department could also consider affordable housing construction as within the public interest. This is a significant divergence from previous Department regulations, and years of judicial decisions, affirming that the Department's job is to assess the site for regulated features and not to make determinations of the site's suitability for affordable housing, which is in the jurisdiction of the Court.

Proposed N.J.A.C. 7:13-11.2(d)3iii, which indicates that in determining public interest, the Department will consider the practicability of using reasonable alternative locations and methods to accomplish the purpose of the proposed regulated activity, together with the language of the AO, would weaken stream protections by allowing development in the inner 150-foot portion of a 300-foot riparian zone when there is a lack of alternative sites. This could be of particular concern where a "builder's remedy" inclusionary development including both affordable housing units and market rate units necessary to subsidize construction of the affordable units is proposed. The proposed language at N.J.A.C. 7:13-11.2(d)1 and (d)3iii does not adequately mandate a public interest developer to consider other feasible options, such as infill development or the redevelopment of dilapidated properties, before making a determination that there is no other available site for the public interest development. Thus, a developer seeking approval of a "builder's remedy" inclusionary development could argue that there is no practical alternative site to accommodate an inclusionary development that would result in the required

number of affordable housing units in order to bypass the regulations and build on a site, rather than considering other sites with a smaller land area that could result in the needed number of affordable units through other methods that don't rely upon market rate units, with less environmental impact.

The proposed regulation change in N.J.A.C. 7:13-11.2(d)3iii and AO 2016-06, p. 2, para. 10 would weaken stream protections because it does not consider "public interest" projects where the majority of the proposed site is within riparian zones. For example, a property may not have sufficient land area for both the development and the required setbacks, parking, stormwater structures, and onsite sewage disposal fields, yet a developer could claim that the basic purpose of the regulated activity or project cannot be accomplished without disturbance to vegetation in the riparian zone and qualify for an exception under the proposed language. To maintain the Department's intent to avoid weakening Category One water protections while avoiding a "taking" of private land, the Department needs to modify the proposed regulations and AO 2016-06. A proposed solution is to replace N.J.A.C. 7.13-11.2(e) with the following and renumber subsequent sections: "(e) Regulated activities allowed within N.J.A.C. 7:13-11.2(d) are limited to exclude the construction of new buildings, structures, or impervious surfaces within a riparian zone when physically unconnected to pre-existing structures, except when intended to prevent damage to property from flooding, prevent harm from flooding, increase public recreational access, or facilitate access to an otherwise developable portion of a pre-existing lot." This language would still allow the construction of facilities with a public purpose, such as extensions of existing public utilities or rights of way (which are physically connected to existing infrastructure such as roads, pipelines, railroads, airports); repair, removal, or replacement of

dams; new construction of structures designed to prevent flooding in coastal areas or waterways; raised walkways for public trails; and bridges needed to access private property. (7)

RESPONSE TO COMMENTS 54 AND 55: AO 2016-06 provides additional guidance to

Department staff regarding how to apply the FHACA Rules as amended through June 20, 2016, specifically, N.J.A.C. 7:13-10.3(b), 11.2(b)1, 2, and 3, 13.2(a), and 22.2(c)5, to ensure that 300-foot Category One riparian zones, including the inner 150-foot portion of a 300-foot Category One riparian zone, remain protected and that mitigation fully compensates for any ecological loss. As explained in the AO, it only provides guidance to Department staff during the time period prior to when the June 20, 2016 proposed amendments are adopted. Both the amendments adopted on June 20, 2016 and the amendments adopted herein, which include the provision on public interest at new N.J.A.C. 7:13-11.2(d), were subject to the public comment process established under the Administrative Procedure Act. As such, the Department has solicited and is responding to the public's response to this new provision under this adoption.

The commenters' concern that the Department will approve inappropriate development if it is argued that the development is "in the public interest" is addressed by the cumulative effect of several different provisions in the FHACA Rules. When determining whether to issue an individual permit in the inner 150 feet of a 300-foot riparian zone, the Department must consider compliance with not only N.J.A.C. 7:13-11.2(d)3 but with the other provisions of N.J.A.C. 7:13-11.2(d) and with 11.2(b) and (c). N.J.A.C. 7:13-11.2(b) establishes the requirements for any activity that involves the clearing, cutting, or removal of vegetation in a riparian zone. First, the applicant must demonstrate that the basic purpose of the activity or project cannot be accomplished onsite without disturbance of riparian zone vegetation. If there is no onsite

alternative that does not involve riparian zone vegetation disturbance, the applicant must minimize the clearing, cutting, and removal of vegetation. In most cases, all existing onsite impervious surface located within 25 feet of the top of bank must be removed and the area replanted with vegetation. Finally, all additional requirements within N.J.A.C. 7:13-11.2 and throughout the chapter must be met. N.J.A.C. 7:13-11.2(c) provides that activities must be located more than 25 feet of any top of bank unless specific circumstances apply. These requirements serve to protect the regulated water and promote a healthy riparian ecosystem.

N.J.A.C. 7:13-11.2(d) establishes additional requirements for regulated activities in the inner 150 feet of a 300-foot riparian zone. First, the regulated activity can have no practicable alternative that would have less adverse impacts on regulated areas and would not significantly compromise other environmental resources. Second, the activity must result in the minimum feasible alteration or impairment of the riparian or aquatic ecosystem. Third, the activity must be in the public interest. The Department will determine if an activity is in the public interest by weighing all of the factors listed in N.J.A.C. 7:13-11.2(d)3i through vi. This determination includes, at N.J.A.C. 7:13-11.2(d)iii, the practicability of using reasonable alternative locations and methods to accomplish the purpose of the proposed regulated activity. The Department weighs the factors listed to determine if an activity is in the public interest and makes its determination independently from similar determinations made by municipal or county government entities or developers.

In addition, multi-residence developments, such as those referenced by the commenters, fall within the "any regulated activity not listed in this table above" category in Table 11.2.

Therefore, those activities can only disturb up to 6,000 square feet of riparian zone vegetation,

presuming the requirements at N.J.A.C. 7:13-11.2(b), (c), and (d) are met. The maximum portion of total disturbance that can be located outside of an actively disturbed area is 3,000 square feet, which must be more than 150 feet from any top of bank. Consequently, no disturbance would be permitted within the inner 150 feet of a 300-foot riparian zone, unless located within an actively disturbed area and, as summarized above, determined to comply with N.J.A.C. 7:13-11.2(d). Additional requirements apply to multi-residence buildings under N.J.A.C. 7:13-12.5 to ensure protection of public health, safety, and welfare, and the environment.

Finally, with regard to the commenter's suggested amendments to N.J.A.C. 7:13-11.2(e), which would effectively limit development within 150 feet of a 300-foot riparian zone to expansions of existing structures and would allow new development only where it is "intended to prevent damage to property from flooding, prevent harm from flooding, increase public recreational access, or facilitate access to an otherwise developable portion of a pre-existing lot," the cumulative effect of multiple provisions under N.J.A.C. 7:13-11.2 result in a similar regulatory rubric. Disturbance to riparian zone vegetation under N.J.A.C. 7:13-11.2(g) through (x) is limited to the construction of infrastructure projects (roads, utilities, stormwater discharges, trails, footbridges), projects that help reduce flooding and/or provide environmental benefits (bank stabilization, public access, repairing septic systems, site remediation, solid waste facility closures, flood control projects, stream cleaning, removing fill/structures), and minimal disturbances associated with a single-family home or duplex. The added requirements at N.J.A.C. 7:13-11.2(b), (c), and (d), as discussed above, effectively prevent disturbance to riparian zone vegetation unless such impacts are unavoidable and minimized. Given the above, the Department has not incorporated the commenter's suggested language.

56. COMMENT: Proposed N.J.A.C. 7:13-11.2(d)3v further weakens stream protections for Category One waters and their tributaries because agricultural land is considered "disturbed." Construction in a riparian zone is limited to actively disturbed areas, but farmland does not receive additional protections from construction over a developed site. Thus, farmland and a parking lot are considered equally disturbed even though farmland has fundamentally different abilities to absorb rain and runoff than impervious cover. The Department could, therefore, determine that there is little ecological function and value in agricultural land. The definition of "disturbed" should be changed, so that farmland is not considered disturbed when it is proposed for development. (7)

RESPONSE: Although agricultural lands and parking lots are both considered actively disturbed areas, the FHACA Rules do not treat them in the same manner. Under the FHACA Rules, any expanse of land covered by impervious surface, such as a parking lot, is considered an actively disturbed area. Redevelopment activities on land that is covered by impervious surface does not require clearing, cutting, and/or removal of riparian zone vegetation, and therefore would not impair riparian zone functionality and, thus, is not subject to the limitations set forth in Table 11.2 pursuant to N.J.A.C. 7:13-11.2(f)1.

The rules consider any area that is actively farmed, which is defined at existing N.J.A.C. 7:13-1.2 to mean land that is "currently and continually in use for cultivation, grazing or other agricultural purposes, provided such activities are recognized as agricultural by the USDA ...," as actively disturbed area, since actively farmed areas are subject to periodic alteration of vegetative coverage. By considering agricultural lands actively disturbed, ongoing farming activities can

continue under the rules. However, for the purposes of determining the total area of disturbance to vegetation for a given project, agricultural lands are subject to the limits set forth in Table 11.2. Further, N.J.A.C. 7:13-11.2(e)1 provides that areas containing vegetation some or all of the year, such as agricultural areas that are periodically plowed and cultivated, are considered vegetated for the purposes of the FHACA Rules. For example, agricultural fields that are in active production may not have vegetation present during certain periods of the year due to seasonal plowing and harvesting. N.J.A.C. 7:13-11.2(e)1 makes it clear that constructing a building or other structure on the temporarily bare soil counts toward the total disturbance being proposed under Table 11.2 and is subject to the mitigation requirements set forth at N.J.A.C. 7:13-13. Accordingly, under N.J.A.C. 7:13-11.2(d)v, the functions and values provided by a non-vegetated parking lot are not considered equal to those of vegetated agricultural land.

57. COMMENT: N.J.A.C. 7:13-11.2(d)3 unreasonably requires the applicant to demonstrate that a proposed regulated activity is in the public interest without specific review criteria, such as smart growth goals, economic development, affordable housing, site condition and location, the condition of surrounding riparian zones, and overall planning goals and principles. Further, N.J.A.C. 7:13-11.2(d)3ii is inherently biased. It states that the public interest will be weighed against the interest of the private property owner without providing specific review criteria for assessing this standard. Yet, the notice of proposal Summary states that if a project serves primarily a private need, the Department is less likely to determine that the activity is in the public interest. (4 and 6)

RESPONSE: Due to the unique functions and values provided by Category One waters and their attendant riparian zones, which provide a public water quality benefit, it is appropriate that individual permit activities within the inner 150 feet of a 300-foot riparian zone meet the requirements at adopted N.J.A.C. 7:13-11.2(d)3. During the review of activities under this paragraph, the Department will consider a wide array of issues, including the goals and other interests suggested by the commenters; each of these would fall under the six considerations specified at N.J.A.C. 7:13-11.2(d)3, including the extent of the public and private need for the proposed regulated activity and the beneficial or detrimental effects the proposed activity may have on the uses for which the property is suited. The Department's intention is not to prevent all private development under this provision, but in light of the significance of the waters the 300-foot riparian zone, particularly the inner portion of the riparian zone, to ensure that impacts to this area are only allowed where there is no practicable alternative with lesser impacts, that any impacts are minimized, and that the activity is in the public interest, as determined by weighing the factors identified in the rules.

58. COMMENT: Regarding proposed N.J.A.C. 7:13-11.2(d)3iii, the notice of proposal Summary states that if a proposed activity can "feasibly be accomplished in a way that does not involve the clearing, cutting, and/or removal of vegetation within 150 feet of the top of bank of a water with a 300-foot riparian zone, proceeding with the activity in the inner 150 feet of the riparian zone is clearly not in the in the public interest" (48 N.J.R. 1017). This statement and the corresponding rule do not go far enough. In order to protect water quality, the same should apply to the outer 150 feet of the 300-foot riparian zone. (13)

RESPONSE: Through adopted N.J.A.C. 7:13-11.2(b), which requires that all potential impacts to riparian zone vegetation must be avoided where possible, minimized, and situated in portions of the riparian zone where the values and functions have been diminished by previous development, combined with the added protections to 300-foot riparian zones set forth in N.J.A.C. 7:13-11.2(g) through (y), the FHACA Rules establish stringent individual permit standards for any proposed activity within a 300-foot riparian zone. The added protections set forth at N.J.A.C. 7:13-11.2(d) for activities in the inner 150 feet of a 300-foot riparian zone mirror the prior SWRPA standards, which similarly required a more stringent demonstration from the applicant seeking to conduct regulated activities situated closer to Category One waters. The Department believes this is appropriate since the potential for water quality impairment increases with an activity's proximity to a regulated water.

59. COMMENT: N.J.A.C. 7:13-11.2(d)3iii provides no objective criteria for assessing the practicality of using a reasonable alternative location that will be in the public interest. Likewise, N.J.A.C. 7:13-11.2(d)3iv provides no objective criteria for assessing the extent and permanence of the beneficial or detrimental effects. Finally, N.J.A.C. 7:13-11.2(d)3v and vi implement the old functional value analysis and state that any negative impacts would not be considered as in the public interest, but there are no objective criteria provided for assessing this standard either. (4 and 6)

RESPONSE: The purpose of N.J.A.C. 7:13-11.2(d)3 is to ensure that applicants proposing regulated activities within the inner 150 feet of a 300-foot riparian zone evaluate all potential benefits or adverse impacts that may occur as a result of such disturbance. N.J.A.C. 7:13-

11.2(d)3iii is intended to ensure that applicants examine the practicability of all potential alternatives that might avoid or minimize disturbance to this ecologically sensitive area without hindering the purpose of the activity. The objective of N.J.A.C. 7:13-11.2(d)3iv is to evaluate all types of benefits or detrimental impacts that development within the inner 150 feet of a 300-foot riparian zone may have. N.J.A.C. 7:13-11.2(d)3v and vi are intended to guide prospective applicants regarding the type of information that would be needed for the Department to evaluate as part of the review of an individual permit application for a project within the inner 150 feet of a 300-foot riparian zone. Since this analysis is site-specific and each proposed project may have a diverse array of beneficial effects and adverse impacts, it is appropriate for the applicant to identify these issues for the Department's review and concurrence rather than for the Department to provide a list of criteria. For example, an assessment under N.J.A.C. 7:13-11.2(d)3v of the functions and values of a riparian zone that includes threatened or endangered species habitat would include a range of analyses that may not be applicable to another site that does not include such habitat but may have its own unique considerations, such as forested areas, not applicable to the first site. Similarly, a regulated activity consisting of a nature trail with a seating area could be dramatically different than a regulated activity consisting of a commercial parking lot in analyzing reasonable alternative locations and methods under N.J.A.C. 7:13-11.2(d)3iii, the beneficial and detrimental effects of the regulated activity under N.J.A.C. 7:13-11.2(d)iv, and the probable individual and cumulative impacts of the proposed activity on public health, safety, and welfare and the environment under N.J.A.C. 7:13-11.2(d)vi. The Department believes the factors identified in N.J.A.C. 7:13-11.2(d)3 provide a proper representation of the information that will

go into the Department's determination as to whether the applicant has satisfied the public interest portion of the required three-part demonstration under N.J.A.C. 7:13-11.2(d).

60. COMMENT: In the notice of proposal Summary, regarding N.J.A.C. 7:13-11.2(d)3v and vi, the Department notes that "any activity that could potentially result in negative impacts to any of these functions and values would therefore not be in the public interest." In regards to Category One waters, not only is it against the public interest to permit impacts but it is against State and Federal law. Category One waters have been designated as antidegradation or non-degradation waters, allowing for no measurable changes to water quality. (See N.J.A.C. 7:9B-1.5(d)(2)iii).

RESPONSE: The summary of proposed N.J.A.C. 7:13-11.2(d)3v and vi explains that the Department will consider the functions and values provided by the riparian zone proposed to be impacted and the probable individual and cumulative impacts of the regulated activity on public health, safety, and welfare and the environment. Any regulated activity has the potential to impact the riparian zone since it may involve the clearing, cutting, or removal of vegetation. However, activities approved to be located in the inner 150 feet of a 300-foot riparian zone can only have a minimal impact that cannot affect water quality or the ecological, water supply, recreational, or fisheries resources of the adjacent Category One water. Where a proposed activity or project would have negative impacts to the exceptional ecological, water supply, recreational, and/or fisheries resources of a Category One water, which benefit all New Jersey residents, the Department would find that the proposed project is not in the public interest. As

explained in the Response to Comments 6 and 7, the adopted FHACA Rules provide water quality benefits and protections that meet Federal regulations.

### N.J.A.C. 7:13-11.2(e)

61. COMMENT: Please clarify how the presence of backyard trees within a lawn would be evaluated in considering the allowed disturbance in a riparian zone. (4)

RESPONSE: Adopted N.J.A.C. 7:13-11.2(e)1 describes how the Department calculates the total area of riparian zone disturbance related to a project. If trees are removed, N.J.A.C. 7:13-11.2(e)ii includes the area under the canopy of the trees being cleared, cut, and/or removed. If a project were to disturb a lawn under a tree without disturbing the tree itself, the disturbed lawn would count towards the total area of riparian zone disturbance, pursuant to N.J.A.C. 7:13-11.2(e)1iii.

62. COMMENT: For a project that is not a major development and is located in a 50-foot or 150-foot riparian zone, does N.J.A.C. 7:13-11.2(e) require mitigation for all riparian zone disturbance or only the amount of disturbance in excess of the limits in Table 11.2? (6)

RESPONSE: As indicated in N.J.A.C. 7:13-11.2(e), various regulated activities trigger the need to provide mitigation, with mitigation requirements specified in N.J.A.C. 7:13-13.4.

Specifically, N.J.A.C. 7:13-13.4(b) sets forth mitigation standards for activities within a 300-foot riparian zone, and N.J.A.C. 7:13-13.4(c) sets forth mitigation requirements for activities within a 50- or 150-foot riparian zone.

With reference to regulated activities conducted in a 50-foot or 150-foot riparian zone, the extent of mitigation required depends upon the regulated activity to be conducted. Under N.J.A.C. 7:13-13.4(c)1, activities to be conducted within a 50- or 150-foot riparian zone associated with the investigation, cleanup, or removal of hazardous substances under N.J.A.C. 7:13-11.2(r) or a solid waste landfill closure and post-closure plan or disruption approval under N.J.A.C. 7:13-11.2(s) require mitigation for all impacts. Under N.J.A.C. 7:13-13.4(c)2, for activities subject to N.J.A.C. 7:13-11.2(y) conducted in a 50- or 150-foot riparian zone that disturb greater than 2,000 square feet of riparian zone vegetation, mitigation is required for the total area of disturbance. Under N.J.A.C. 7:13-13.4(c)3, which covers all other activities within a 50- or 150-foot riparian zone, mitigation is required only for the area of disturbance in excess of the limits set forth in Table 11.2.

All of these mitigation requirements are unaffected by whether or not a project is a major development under the SWM rules. However, it should be noted that projects that do not constitute a major development are more likely to qualify for authorization under a permit-by-rule, general permit-by-certification, or general permit, which do not require riparian zone mitigation. All regulated activities associated with a major development require an individual permit, pursuant to N.J.A.C. 7:13-6.7(c), and, therefore, may require mitigation.

63. COMMENT: The proposed rules are more stringent with regard to mitigation requirements than the rules adopted on June 20, 2016, which allow for some riparian zone disturbance without mitigation in a 300-foot riparian zone. However, N.J.A.C. 7:13-11.2(e) appears to require mitigation for all riparian zone disturbance (not just those in excess of the limits listed in Table

11.2) in a 300-foot riparian zone, even in areas that are already highly disturbed, such as maintained lawns or mowed fields. Mitigation should not be required in these circumstances. (4) RESPONSE: N.J.A.C. 7:13-11.2(e) refers to the mitigation requirements at adopted new N.J.A.C. 7:13-13.4, which does require mitigation for all disturbance within 300-foot riparian zones with limited exceptions. As discussed in the Department's June 20, 2016 notice of proposal at 48 N.J.R. 1019, requiring mitigation for individual permit impacts in a 300-foot riparian zone is appropriate since 300-foot riparian zones adjacent to Category One waters are intended to protect, among other things, the quality of these waters. With their exceptional ecological, water supply, recreational, and/or fisheries resources, mitigation is necessary to offset all ecological impacts to Category One waters.

#### N.J.A.C. 7:13-11.2(f)

- 64. COMMENT: The proposed rules fail to address concerns raised on the June 1, 2015 notice of proposal with respect to the overly generous expansion of exception areas. (15)
- 65. COMMENT: Regarding the exemptions at N.J.A.C. 7:13-11.2(f), the Department should provide the analysis, studies, or calculations that it undertook or relied on in determining that these activities will not have an impact on water quality. (13)

RESPONSE TO COMMENTS 64 AND 65: The list of regulated activities not subject to the limits set forth in Table 11.2, codified at N.J.A.C. 7:13-11.2(f), was proposed as part of the 2015 rulemaking adopted on June 20, 2016. The notice of proposal Summary explained the rationale behind the Department's determination that the activities included in the proposed list would result in minimal impacts. For example, it was explained that proposed N.J.A.C. 7:13-11.2(f)4

(adopted N.J.A.C. 7:13-11.2(f)3) provides that temporary disturbance to vegetation within an actively disturbed area is not subject to the requirements of Table 11.2 since this activity does not impair riparian zone functionality, provided all disturbed areas are adequately stabilized and replanted with vegetation (see 47 N.J.R. 1056 – 1057 for summary related to all exceptions proposed as part of that rulemaking). The Department received extensive comment on the proposed subsection. As a result of comments received, the Department decided not to adopt a proposed exception that would have provided that 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, and responded to all other comments regarding the exceptions that were adopted (see 48 N.J.R. 1158 – 1160 for all comments and responses specific to N.J.A.C. 7:13-11.2(f) and the Response to Comments 581 – 589 specifically with reference to the one-quarter acre disturbed area exception not adopted). The only amendment adopted at this time is limited to an amendment to N.J.A.C. 7:13-11.2(f)6. In order to ensure that inappropriate disturbance of riparian vegetation does not occur as a result of a regulated activity along an existing public roadway, this paragraph has been strengthened to restrict the amount of disturbance that may be exempt under this paragraph to less than one acre.

66. COMMENT: By exempting otherwise regulated activities from compliance with these rules at N.J.A.C. 7:13-11.2(f), the Department may be violating permits previously issued to develop these projects. If a previous permit allowed the temporary disturbance of areas adjacent to a roadway but then required their restoration, the fact that they were previously disturbed should not exempt the proposed activity from regulation. (13)

RESPONSE: N.J.A.C. 7:13-11.2(f) does not exempt regulated activities from the FHACA Rules but rather sets forth certain types of impacts to riparian zone vegetation that, due to their nature, will not adversely impact riparian zone functionality, so are not subject to the riparian zone vegetation disturbance limits contained in Table 11.2. The change adopted at N.J.A.C. 7:13-11.2(f) under this rulemaking simply limits the overall disturbance to vegetation that may occur under N.J.A.C. 7:13-11.2(f)6. Permits issued are subject to the requirements in place at the time of issuance; the adoption of this amendment and the Department's June 20, 2016 rulemaking, which established N.J.A.C. 7:13-11.2(f), does not affect permits issued under the prior rules and the holder of any permit issued thereunder must comply with the terms of that permit, including restoration of temporary disturbances, notwithstanding this notice of adoption.

67. COMMENT: At N.J.A.C. 7:13-11.2(f)6, the Department is proposing to exempt any regulated activity along a public roadway from the limits in Table 11.2, provided that it does not disturb more than one acre of riparian zone vegetation. The applicant could also apply for and receive permission for additional disturbances that are in excess of the limits in Table 11.2. What analysis, calculations, or studies did the Department undertake or rely on in order to determine the impacts of one acre of disturbance on water quality or on the functionality of the riparian zone? (13)

RESPONSE: As noted in the notice of proposal Summary at 48 N.J.R. 1017, the exemption at N.J.A.C. 7:13-11.2(f)6, which was adopted on June 20, 2016, is now limited to one acre of disturbance to ensure inappropriate disturbance of riparian zone vegetation does not occur. Riparian zone disturbance under this paragraph is exempt from the limits of Table 11.2 because

it is necessary for continued safe use of public roadways and is limited to actively disturbed areas, the disturbance of which results in less potential adverse impacts to water quality than disturbance to non-actively disturbed areas. The Department's experience and consultation with the New Jersey Department of Transportation (NJDOT) indicate that one acre is a reasonable cap to allow these necessary activities with minimal impacts to occur without adversely impacting riparian zone functionality. Further, since any project disturbing greater than one acre of vegetation would constitute a major development under N.J.A.C. 7:8-1.2 and, therefore, be subject to review for compliance with the Department's Stormwater Management rules, including the water quality provisions at N.J.A.C. 7:8-5.5, it is appropriate to limit the exemption at N.J.A.C. 7:13-11.2(f)6 to no more than one acre. It should additionally be noted that all riparian zone disturbance under N.J.A.C. 7:13-11.2(f)6 is subject to the avoidance and minimization requirements at N.J.A.C. 7:13-11.2(b), as well as the specific requirements for roadways at N.J.A.C. 7:13-11.2(g) and (h), thereby ensuring that riparian zone functionality is preserved wherever practicable. Finally, any disturbance to riparian zone vegetation in excess of one acre or to non-actively disturbed areas is subject to Table 11.2 and, where appropriate, the mitigation requirements at N.J.A.C. 7:13-13.4.

#### **Table 11.2**

68. COMMENT: What studies, analysis, or calculations did the Department undertake or rely on in developing the allowances found in Table 11.2? Did the Department run calculations to determine what impacts the removal of vegetation in the riparian zone had on water quality?

What were those calculations? Did the Department's review consider the status of water quality in determining the allowances in Table 11.2? (13)

RESPONSE: With the exception of the adopted new allowances in Table 11.2 for individual permit activities under N.J.A.C. 7:13-11.2(y), which are addressed in the Responses to Comments 73 through 77 below, the Department did not propose or adopt changes to Table 11.2, which have been continued from the June 20, 2016 notice of adoption. Table 11.2 provides the maximum amount of disturbance allowed for a given regulated activity, with any disturbance beyond that amount requiring additional scrutiny, but does not relieve an applicant from compliance with all other provisions of the rules. As noted in the Response to Comments 601 through 613 in that rulemaking (see 48 N.J.R. 1161-62), based on nine years of experience relating to the amount of disturbance reasonably required to undertake unavoidable impacts, the Department believes that the maximum allowable areas of riparian zone disturbance set forth in Table 11.2 are appropriate and will not lead to adverse impacts to water quality when considered in conjunction with the additional protections provided by the rules. These additional protections include those codified at N.J.A.C. 7:13-11.2(b), (c), and (d), the increased protections afforded to 300-foot riparian zones adjacent to Category One waters and the more stringent mitigation requirements at N.J.A.C. 7:13-13.4 and 13.9 provided by the amendments adopted at this time.

69. COMMENT: The increases to the disturbances allowed in Table 11.2 in the adopted rules and concurrent notice of proposal are inconsistent with the United States Army Corps of Engineers and USEPA rules that require avoidance first, minimization second, and mitigation last. (12)

RESPONSE: As noted in the Response to Comment 68 above, the Department did not propose in the amendments being adopted at this time any changes to Table 11.2, except for the adopted new allowances in Table 11.2 for individual permit activities under N.J.A.C. 7:13-11.2(v). With reference to protections to ensure impacts are limited, pursuant to the requirements at adopted N.J.A.C. 7:13-11.2(b)1 and 2, applicants are required to first demonstrate that the basic purpose of the regulated activity cannot be accomplished onsite without clearing, cutting, and/or removing riparian zone vegetation and then to ensure that any unavoidable disturbance is minimized through a variety of methods, including situating the regulated activity or project as far from any regulated water as feasible and limiting construction to actively disturbed areas. Only after the applicant has demonstrated that riparian zone disturbance is necessary and has been minimized, may riparian zone impacts be approved under an individual permit. The rules then require mitigation in appropriate cases to further ensure that the functions and benefits provided by riparian zones are protected. In the case of impacts to a 300-foot riparian zone, in accordance with N.J.A.C. 7:13-13.4(b), mitigation fully compensating for any ecological loss is required for the total area of disturbed vegetation with very limited exceptions. For 50-foot and 150-foot riparian zones, mitigation is required as explained in the Response to Comment 62. This approach is consistent with that used by the Army Corps of Engineers.

# N.J.A.C. 7:13-11.2(m) and (n)

70. COMMENT: Adding new residential construction projects to the list of regulated activities with an allowed limit of disturbance to riparian zone vegetation without a requirement for justification, mitigation, or a hardship exemption request will promote more development and

more disturbances within riparian buffers, causing more flooding and flood damage and placing health and safety at risk. (15)

RESPONSE: The only disturbance allowance provided for residential construction under Table 11.2 is the construction of one house on a lot that was created prior to the Department's November 5, 2007 notice of adoption of riparian zones. No amendment to this provision was proposed or adopted in this rulemaking. Further, all development within riparian zones subject to individual permit standards must meet the stringent avoidance and minimization requirements set forth at N.J.A.C. 7:13-11.2(b), which will ensure that such construction will not impair riparian zone functionality. Finally, the standards for buildings at N.J.A.C. 7:13-12.5 will ensure that such construction does not exacerbate flooding or jeopardize public safety.

### N.J.A.C. 7:13-11.2(q)

71. COMMENT: Adding new septic system construction to the list of regulated activities with an allowed limit of disturbance to riparian zone vegetation without a requirement for justification, mitigation, or a hardship exemption request will promote more development and more disturbances within riparian buffers, causing more flooding and flood damage and placing health and safety at risk. (15)

72. COMMENT: The proposed rules continue to allow a septic system to be placed 50 feet from a Category One stream. (18)

RESPONSE TO COMMENTS 71 AND 72: Pursuant to N.J.A.C. 7:13-11.2(b), all impacts to riparian zone vegetation under an individual permit must be avoided where possible, and, where impacts cannot be avoided, they must be minimized through methods including situating the

activity as far as possible from any regulated water and situating the activity in areas where riparian zone functionality is diminished by previous development. Where an individual subsurface sewage disposal system is within an existing lawn and no trees are cut, the lawn can be restored to its previous condition upon completion of the project without any impact to riparian zone functionality occurring as a result. Where trees or other woody vegetation must be cleared to accommodate an individual subsurface sewage disposal system, mitigation for all impacts is required for projects within a 300-foot riparian zone pursuant to N.J.A.C. 7:13-13.4(b) and for any impacts in excess of Table 11.2 for projects located within a 50- or 150-foot riparian zone, pursuant to N.J.A.C. 7:13-13.4(c).

Further, N.J.A.C. 7:13-11.2(q) establishes additional standards for 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. Under this subsection, the FHACA Rules subject both new and reconstructed/repaired systems to requirements designed to ensure that riparian zone vegetation and the benefits it provides are protected, including protecting 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, in accordance with N.J.A.C. 7:13-11.2(q)3ii, 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, facilitating the repair of a failing system is in the best interest of the environment and public health, safety, and welfare. However, existing systems being reconstructed or repaired may only disturb riparian zone vegetation within 50 feet of the top of bank 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) 4iv).

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. Degradation of water quality is not expected if septic systems are constructed and operated in accordance with N.J.A.C. 7:9A.

## N.J.A.C. 7:13-11.2(y)

73. COMMENT: The proposal at N.J.A.C. 7:13-11.2(y) continues to allow a quarter acre of disturbance to riparian zone vegetation for any regulated activity that is not listed in Table 11.2, even though no scientific study or quantitative analysis is provided to demonstrate that such a level of disturbance will not have a negative impact on water quality. (12)

74. COMMENT: At N.J.A.C. 7:13-11.2(y), the Department is proposing to allow one quarter acre of disturbance for activities not specifically itemized in Table 11.2. Up to 1,000 square feet of that one quarter acre can be in undisturbed areas in a 50-foot riparian zone, and up to 3,000 square feet can be in undisturbed areas in a 150-foot or 300-foot riparian zone. What

calculations, analysis, or studies did the Department undertake to develop the square footages allowed under this rule and to determine that these allowances would not have an impact to water quality? This is especially important to waters that do not currently meet water quality standards. Under Federal regulations, the Department cannot issue permits for activities that will, either individually or in combination with others, continue to or further degrade waters that do not meet standards (40 CFR 131). (13)

RESPONSE TO COMMENTS 73 AND 74: The adopted rules at N.J.A.C. 7:13-11.2(y) provide differing standards applicable to regulated activities not otherwise listed in Table 11.2 with the amount of disturbance allowed limited based upon the riparian zone impacted and the location of the proposed impact. The maximum one-quarter acre allowance referenced by the commenters is only applicable to a 50- or 150-foot riparian zone; in a 300-foot riparian zone, the maximum area of disturbance is limited to 6,000 square feet. These limits are based on nine years of experience relating to the amount of disturbance reasonably required to undertake unavoidable impacts. The Department believes these limits are appropriate and will not lead to adverse impacts to water quality 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 and given the additional protections provided throughout the chapter.

In all three riparian zones, further limitations are included in the adopted rules to protect the functions and values provided by the riparian zones. With reference to 50- and 150-foot riparian zones, as indicated by the commenter, the vast majority of the maximum one-quarter acre of disturbance must occur in actively disturbed areas with only 1,000 square feet in a 50-

foot riparian zone and 3,000 square feet in a 150-foot riparian zone are allowed to occur within riparian zone area not considered to be actively disturbed (0.023 of an acre and 0.069 of an acre, respectively). Further, in accordance with N.J.A.C. 7:13-13.4(c)2, where the regulated activity within a 50- or 150-foot riparian zone results in an impact to riparian zone vegetation of greater than 2,000 square feet, mitigation must be provided for all impacts.

With reference to a 300-foot riparian zone, while a maximum area of 6,000 square feet of riparian zone disturbance is allowed, only 3,000 square feet of that maximum area of disturbance may be located within area that is not considered to be actively disturbed. Further, recognizing the importance of the inner portion of a 300-foot riparian zone, no disturbance of riparian zone that is not actively disturbed may occur within 150 feet of the top of bank of the water protected by the 300-foot riparian zone. Where there are no actively disturbed areas within 150 feet of the top of bank, no disturbance will be allowed to occur in this area.

In addition to limiting the total amount of disturbance that may occur in areas not already actively disturbed and, in the case of a 300-foot riparian zone, precluding disturbance of area not already actively disturbed within 150 feet of the water, the rules require mitigation in appropriate circumstances to further protect the functions and values provided by the riparian zone, both for water quality and as habitat. Particularly, for 50- and 150-foot riparian zones, in accordance with N.J.A.C. 7:13-13.4(c)2, if the regulated activity results in the clearing, cutting, and/or removal of greater than 2,000 square feet of riparian zone vegetation, mitigation is required for the total area of vegetation impacted. With respect to 300-foot riparian zones, in accordance with N.J.A.C. 7:13-13.4(b), any impact allowed under N.J.A.C. 7:13-11.2(y) would result in mitigation being required for the total area of riparian zone vegetation impacted. As required for all mitigation

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7:13-11.2(y) must fully compensate for any ecological loss occurring as a result of the riparian zone impacts for which mitigation is required.

In addition to the above requirements applicable specifically to N.J.A.C. 7:13-11.2(y), regulated activities under N.J.A.C. 7:13-11.2(y) must meet additional standards designed to protect riparian zones that are applicable to all individual permits, including the avoidance and minimization requirements at N.J.A.C. 7:13-11.2(b). As such, N.J.A.C. 7:13-11.2(y) only authorizes activities that unavoidably impact riparian zone vegetation and encourages applicants to situate these activities within impaired riparian zones. Given these limitations and the requirements for mitigation, the Department believes the adopted rules, including N.J.A.C. 7:13-11.2(y), appropriately takes into account the interests of property owners in reasonable use of their property while ensuring protection of the environment. Further, as explained in the Response to Comment 25, the FHACA Rules' riparian zones are a BMP for protecting water quality. As with all BMPs, the FHACA riparian zone does not require measurement of water quality before and after the imposition of the vegetated buffer or zone to determine its effectiveness. If a vegetated area is maintained in accordance with Department standards, which require avoiding disturbance, minimizing disturbance, and mitigating in appropriate circumstances when disturbance is unavoidable, all applicable water quality requirements of the Federal Clean Water Act, 33 U.S.C. §§ 1251 to 1387, specifically 33 U.S.C. § 1342(p), and the State Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., which require the reduction of pollutants in stormwater discharges to the maximum extent practicable, will be met.

75. COMMENT: The June 20, 2016 notice of adoption may have eliminated the one-quarter acre of disturbance allowed for activities not otherwise covered in Table 11.2, but this notice of proposal at N.J.A.C. 7:13-11.2(y) now allows 7,000 square feet of disturbance within a 300-foot riparian zone. Since the disturbance limit is not cumulative, eventually a quarter-acre of vegetation, or even more, will be disturbed. (18)

RESPONSE: Adopted N.J.A.C. 7:13-11.2(y) limits riparian zone disturbance under this category to 6,000 square feet within a 300-foot riparian zone, no more than half of which can be located within 150 feet of top of bank and then only if the riparian zone is an actively disturbed area. The adopted standard is, therefore, more stringent and protective than the prior standard. Further, each activity that is authorized within a riparian zone under an individual permit must meet the avoidance and minimization requirements at N.J.A.C. 7:13-11.2(b). Therefore, the Department will authorize riparian zone disturbance only where such disturbance is unavoidable. In addition, each discreet riparian zone impact is evaluated separately and, therefore, must be justified independently from other disturbances. While it is possible that the total cumulative impact to riparian zone vegetation under individual permits may exceed a quarter acre, such disturbance would occur only where the applicant demonstrates compliance with the stringent standards at N.J.A.C. 7:13-11.2(b) and provides mitigation, where required.

76. COMMENT: The removal of the originally proposed one-quarter-acre disturbance threshold in the 300-foot riparian zone is disappointing. As proposed, there is minimal allowance for disturbance of the inner 150 feet in a 300-foot riparian zone, even in actively disturbed or highly developed areas. More objective criteria and other factors, such as smart growth goals, economic

development, affordable housing, site condition and location, and condition of surrounding riparian zones should be considered in the proposed amendments to Table 11.2. (4)

RESPONSE: As discussed in the Department's Response to Comment 674 in the June 20, 2016 notice of adoption of the FHACA Rules (see 48 N.J.R. 1172), the previously proposed increase in riparian zone disturbance was determined to be excessive and to have the potential to adversely impact riparian zone functionality and therefore was not adopted as proposed on June 1, 2015. The Department recognizes, however, that disturbance to actively disturbed areas within a 50-foot or a 150-foot riparian zone may, in some cases, be appropriate (see 48 N.J.R. 1017-18). With respect to disturbance within a 300-foot riparian zone, to protect the important functions of Category One waters, the Department did not propose to increase the area of disturbance under N.J.A.C. 7:13-11.2(y) and instead limited under this adoption the area of disturbance and the type of vegetation that may be disturbed within the inner 150 feet of a 300-foot riparian zone. This amendment was necessary to ensure that riparian zone functionality is not adversely impacted.

Finally, the Department does recognize that there may be circumstances where impacts to the riparian zone may be necessary to account for things such as redevelopment. In such cases, the rules funnel any necessary activity to actively disturbed areas and require mitigation to be provided in appropriate circumstances. However, as indicated in the notice of proposal and in other responses, the Department believes that any such impacts to 300-foot riparian zones to Category One waters must be necessarily limited, with mitigation required to fully compensate for any impact that is allowed. The Department believes the adopted rules appropriately take into account the interests if property owners in reasonable use of their property while ensuring

protection of the significant water quality, ecological, recreational, and aesthetic benefits enjoyed by the public as a result of stringent protections for riparian zone vegetation.

77. COMMENT: At proposed N.J.A.C. 7:13-11.2(y), there is no requirement that prohibits disturbance within 25 feet or 75 feet from the top of bank in a 150-foot riparian zone. In a 300foot riparian zone, up to 3,000 square feet of disturbance is allowed within 150 feet of the top of bank. The Department should not allow disturbances within the riparian zone unless absolutely necessary to avoid regulating the property into inutility. Also, at proposed N.J.A.C. 7:13-11.2(y)2, formerly (y)3, subparagraph iii has been deleted. Applicants should be required to locate all disturbance as far away from the top of bank as possible and ideally outside the riparian zone. Therefore, this subparagraph should remain in the rules. (13) RESPONSE: N.J.A.C. 7:13-11.2(y) prior to this adoption contained two requirements referenced by the commenter. At N.J.A.C. 7:13-11.2(y)2, construction of a building within 25 feet of the top of bank or edge of water. At N.J.A.C. 7:13-11.2(y)3iii, the rules required that all disturbance within the riparian zone be located as far from the regulated water as possible. The reference at prior N.J.A.C. 7:13-11.2(y)2 limiting construction within 25 feet of any top of bank was deleted because it was redundant with the provisions at N.J.A.C. 7:13-11.2(c), which set forth the circumstances under which the Department may issue an individual permit for a regulated activity that results in the clearing, cutting, and/or removal of riparian zone vegetation within 25 feet of top of bank (see particularly N.J.A.C. 7:13-11.2(c)4iii). Further, since N.J.A.C. 7:13-11.2(b)2i requires activities to be situated "as far from any regulated water as feasible," there is no need to continue the requirement previously specified at N.J.A.C. 7:13-11.2(y)3iii.

With reference to the commenter's recommendation that activities should be prohibited within 75 feet of the top of bank in a 150-foot riparian zone, the Department has determined that the adopted provisions adequately protect riparian zone functionality without the need for such a prohibition. First, in order for an activity to qualify under N.J.A.C. 7:13-11.2(y), the avoidance and minimization requirements of N.J.A.C. 7:13-11.2(b) must be met, including, as previously noted, that the activity be situated as far from any regulated water as feasible. Further, under N.J.A.C. 7:13-11.2(y)3, where clearing, cutting, and/or removal of riparian zone vegetation is located outside of an actively disturbed area, the applicant must demonstrate that there is no other feasible use of the site that would reduce or eliminate 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. Finally, pursuant to N.J.A.C. 7:13-4.1(c)2, a 150-foot riparian zone exists where certain trout resources or threatened and endangered species are present. N.J.A.C. 7:13-11.5 and 11.6 set forth additional, specific standards for activities that could potentially adversely impact fishery resources or threatened and endangered species, respectively. Given these added protections, as well as the requirements under N.J.A.C. 7:13-11.2(b) and (y), only those projects that unavoidably disturb riparian zone vegetation and which do not adversely impact fishery resources or threatened and endangered species can be permitted. Therefore, no specific prohibition on activities within 75 feet of the top of bank in a 150-foot riparian zone is necessary.

With reference to disturbance within a 300-foot riparian zone, while it is true that up to 3,000 square feet of disturbance may be allowed within the inner 150 feet, such disturbance is only allowed in areas that are considered to be actively disturbed under the FHACA Rules and,

even then, only if the criteria of N.J.A.C. 7:13-11.2(b) have been satisfied (see the Response to Comments 73 and 74 above).

Finally, regarding the commenter's assertion that the Department should not allow disturbances within the riparian zone unless absolutely necessary to avoid regulating the property into inutility, the stringent requirements of the FHACA Rules appropriately ensure that riparian zones, and the functions and values that they provide, are adequately protected without the need for a takings demonstration by the applicant. These requirements include the provisions at N.J.A.C. 7:13-11.2(b), which requires that all potential impacts to riparian zone vegetation must be avoided where possible, minimized, and situated in portions of the riparian zone where the values and functions have been diminished by previous development and also requires that existing impervious surfaces within 25 feet of top of bank be removed and the area be restored to a natural condition using native, non-invasive vegetation. Riparian zones are further protected by the top of bank requirements at N.J.A.C. 7:13-11.2(c) and the strict standards at new N.J.A.C. 7:13-11.2(d), which ensures that disturbances in the inner 150-foot portion of the 300-foot riparian zone will only occur in those limited situations where conducting regulated activities within the inner half is both necessary and unavoidable. Finally, the new mitigation hierarchy at N.J.A.C. 7:13-13.9 requires any applicable mitigation be performed onsite where feasible since providing mitigation on the same site as a proposed activity is the most effective means to ensure that any impairment to riparian zone functionality caused by the regulated activity is fully offset in a manner that preserves riparian zone benefits.

# Subchapter 12. Activity-Specific Requirements for Individual Permits

# N.J.A.C. 7:13-12.5 Requirements for a Building

78. COMMENT: Clarification is needed as to whether proposed N.J.A.C. 7:13-12.5(i)3 allows the construction of multi-family projects in the V zone. Such construction should be allowed if consistent with FEMA and UCC standards. (4)

RESPONSE: N.J.A.C. 7:13-12.5(i)3 sets forth the lowest floor elevation of a multi-residence building. The lowest floor must be set at least one foot above the flood hazard area design flood elevation and no lower than the elevation required under the UCC, unless all standards set forth at N.J.A.C. 7:13-12.5(i)3i through vii are met. N.J.A.C. 7:13-12.5(i)3vi prohibits any portion of a building that does not meet this lowest floor elevation requirement from being located within a V zone. Accordingly, any proposed application for a multi-residence building in a V zone that includes a lowest floor that is not at least one foot above the flood hazard area design flood elevation or at the elevation required under the UCC (whichever standard results in the higher first floor elevation), would be denied. This standard is consistent with the UCC as a lowest floor designed at an elevation below the required elevation would be considered to be an enclosure below the flood elevation, which is prohibited under the UCC. In addition to satisfying the lowest floor elevation requirement, any multi-residence building proposed to be constructed in a V zone would be required to satisfy all other applicable requirements of the rules, including N.J.A.C. 7:13-12.5(o).

# **Subchapter 13. Riparian Zone Mitigation**

**General Comments** 

79. COMMENT: The Department in the June 20, 2016 FHACA Rule adoption acknowledges staffing and budgetary shortages and claims that the adopted and concurrently proposed amendments will streamline operations and increase staff efficiency. However, the Department fails to respond to concerns that it lacks the personnel and resources to design, implement, and enforce a new and complex riparian zone mitigation program that will adequately protect the vital functions provided by riparian buffers. (15)

RESPONSE: As explained in the Response to Comments 54 through 56 in the June 20, 2016 notice of adoption (see 48 N.J.R. 1073), 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 constraints, but the rule is also designed to create a more efficient and predictable regulatory system that will increase staff productivity, as well as provide clarity for applicants. Increasing efficiency and handling of minor projects with minimal impacts allows the Department to better concentrate available resources on those activities, such as review and monitoring of riparian zone mitigation proposals, which have the potential to have a greater impact on public health, safety, and the environment. The riparian zone mitigation program under the FHACA Rules was designed for consistency with the Department's successful wetland mitigation program. This consistency allows the Department's staff to be more efficient in their review of riparian zone impacts. While consideration of what resources are available and how to best utilize those resources is always a concern, the FHACA Rules adopted June 20, 2016 and those amendments adopted herein do not affect the Department's ability to successfully implement its riparian zone mitigation program.

80. COMMENT: The Department, in the June 20, 2016 FHACA Rule adoption, fails to respond to concerns questioning whether the allowed riparian zone disturbances will be effectively replaced through mitigation. The standards on which mitigation projects will be based and by which successful mitigation will be judged, stating that, "Riparian Area mitigation generally involves the revegetation of an area devoid of plants ... 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." Successful replacement of the functional values of a disturbed riparian buffer involves more than the mere amateur distribution of seeds or saplings. At the very least, an understanding of native and invasive plants, soil composition, depth of soil to bedrock, the quality and components of the surrounding landscape, and local climatic and hydrological conditions must be factored into a successful mitigation project. The Department's cavalier approach to mitigation does not inspire confidence. (15)

RESPONSE: The Department has not replaced regulatory protections for riparian zones with mitigation. The rules maintain the requirement that riparian zone impacts be avoided, with disturbance only occurring where it is unavoidable and any unavoidable disturbance is minimized. Only when a disturbance is unavoidable and minimized is mitigation considered. In accordance with N.J.A.C. 7:13-13.2(a), where mitigation is required, it must fully compensate for any ecological loss occurring as a result of the regulated activity and in accordance with new N.J.A.C. 7:13-13.9(b), must be performed on the same site as the regulated activity, where feasible.

The rules include specific guidance as to what must be included for Department review as part of a riparian zone mitigation proposal, the type of monitoring that will be conducted to ensure the success of a mitigation project, and standards as to what will be considered to constitute a successful project.

Adopted N.J.A.C. 7:13-13.7 sets forth the information necessary to assess the mitigation proposal, with requirements dependent upon the form of mitigation proposed. The information required for the form of mitigation proposed is summarized in the appropriate mitigation proposal checklist. N.J.A.C. 7:13-13.7(f) specifies information required to be submitted to the Department as part of a request for approval of a mitigation proposal including analysis of existing conditions, schedules both for sequencing of proposed mitigation activities and post-construction monitoring, maintenance, and reporting, and contingency measures should there be any indication that mitigation is not performing as planned. Each of the items identified at N.J.A.C. 7:13-13.7(f) is necessary to ensure compliance with the FHACA Rules and is intended to eliminate or reduce the probability of failure of the mitigation area after construction. The Department has found that if a mitigation site is well-planned and constructed properly, the likelihood of success significantly increases.

With respect to plantings, N.J.A.C. 7:13-13.7(f)2 requires information sufficient to explain and illustrate the existing and proposed conditions at the mitigation site, including visual materials such as maps, site plans, planting plans, surveys, topography diagrams, delineations, and/or photographs. The planting plan for the mitigation site must include the proposed vegetative community, including the species, quantity of each species, spacing of all plantings, stock type (bare root, potted, seed), and the source of the plant material. The Department also

requires a narrative description of the planting plan, which must identify the proper time to plant and indicate any appropriate substitutions. Further, a preventative maintenance plan detailing how invasive or noxious vegetation will be controlled and how predation of the mitigation plantings will be prevented is required. This plan explains the measure that will be taken if a problem with invasive or noxious plants or predation presents itself during the construction or monitoring period.

The standards by which a riparian zone mitigation project will be determined to be successful are set forth at N.J.A.C. 7:13-13.12, Monitoring and reporting for riparian zone creation, restoration, and enhancement. Specifically, a riparian zone mitigation project will be deemed successful where it is demonstrated that: the goals of the approved riparian zone mitigation proposal have been achieved; the percent coverage of the planted vegetation as detailed in the approved mitigation plan has been achieved; the mitigation provided meets all applicable requirements of N.J.A.C. 7:13-13; and the permittee has executed and recorded (or caused to be executed and recorded if the mitigation has occurred on public property) the conservation restriction for the mitigation area, which meets the requirements of N.J.A.C. 7:13-14.

81. COMMENT: With the potential for riparian zone mitigation, the proposed regulations weaken stream protections for Category One waters, despite the new standards proposed at N.J.A.C. 7:13-11.2(d). Mitigation may enable the loss of more sensitive downstream riparian zones with no net gain in protected, mitigated uplands. For example, a developer owns two lots within a 300-foot riparian zone: the 76-acre development site (Site A) and an adjacent 68-acre lot that will not be developed (Site B). Approximately 43 acres of Site A is riparian zone; 26 acres

associated with the Musconetcong River, a Category One water, and 17 acres associated with an intermittent stream which is a tributary to the River. Site B is located within the Highlands Preservation Zone and contains the upland portion of the intermittent stream which flows through Site A. Under the rules, impacts to the riparian zone of Site A could be offset by mitigation of the upland riparian zone and through channel restoration on Site B. Should all 43 acres of riparian zone on Site A be impacted, the impacts could be offset at a loss to preservation (protection) ratio of 1:2.5 acres and loss, to enhancement ratio of 1:1.5 acres, which exceeds the requirements at N.J.A.C. 7.13-13.9(b). If only the riparian zone of the intermittent stream is disturbed, the mitigation ratio could be as high as four acres enhanced to one acre lost. However, because Site B is located within the Highlands Preservation Zone, it is already subject to significant limits on development, so there may be no real "net gain" of protected land through mitigation of the riparian zone impacts on Site A. (7)

RESPONSE: Mitigation is important in assuring that the functions and values of the riparian zone are appropriately protected. The June 20, 2016 amendments expanded the options available to applicants mitigating for impacts to riparian zones. These expanded options provide additional opportunities for individuals to restore and enhance degraded riparian zones and promote the creation of new riparian zones through daylighting streams. Regardless of the mitigation option chosen, the Department will continue to ensure that the mitigation provided for riparian zone impacts fully compensates for all riparian zone vegetation impacts, as required at N.J.A.C. 7:13-13.2(a).

The adopted 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. Specifically, N.J.A.C. 7:13-11.2(b) requires that the Department 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). Further, in accordance with N.J.A.C. 7:13-13.2(a), any mitigation must fully compensate for any ecological loss occurring as a result of the regulated activity and in accordance with new N.J.A.C. 7:13-13.9(b), must be performed on the same site as the regulated activity, where feasible. Accordingly, mitigation approved in accordance with N.J.A.C. 7:13-13 will not result in the loss of more sensitive downstream riparian zones with no net gain in preserved uplands.

In determining if a mitigation option is appropriate, the Department must evaluate all the information identified at N.J.A.C. 7:13-13.7, basic requirements for a mitigation proposal.

Generally, based on the information provided by the commenter in his example, the mitigation proposed would meet the requirements of N.J.A.C. 7:13-13 and be approved. Even though the mitigation site is located within the Highlands Preservation Area, development is not prohibited, provided it meets all applicable rules and regulations. For any approved mitigation site, the

placement of a conservation restriction on the property ensures that the ecological functions and values of that site are maintained in perpetuity. In addition, the restoration of the stream and enhancement of the remaining riparian zone would provide significant ecological uplift for that portion of the stream. It should be noted that under the commenter's scenario, the Department would have required the restoration of two acres of riparian zone vegetation for every one acre of disturbance (2:1) and the enhancement of three acres of riparian zone vegetation for each acre of riparian zone vegetation lost (3:1) for the remainder of the site, unless the applicant could demonstrate in accordance with N.J.A.C. 7:13-13.11(b)1 and (c)1 that a smaller area of riparian zone will result in replacement riparian zones of equal ecological functions and values to those lost or disturbed. In addition, the Department would have required preservation of an upland area in an amount that was significantly larger than the area that would be required for any other mitigation option. As stated above, while the Department would have approved the site based on the limited information provided, as well as the ratios proposed by the commenter, the proposed mitigation site may not have been sufficient to provide mitigation for all impacts. Furthermore, mitigation to compensate for disturbance to vegetation within a 300-foot riparian zone that is associated with a "major development" as defined in the Department's Stormwater Management Rules at N.J.A.C. 7:8-1.2 must be provided along either the same regulated water as the disturbance or an upstream tributary to that regulated water.

# N.J.A.C. 7:13-13.4 Amount of Mitigation Required

82. COMMENT: Given the importance of the riparian zone in protecting water quality and in reducing stormwater flows, proposed N.J.A.C. 7:13-13.4(b) should be amended to require

mitigation for any riparian zone disturbance within a 300-foot riparian zone. Similarly, proposed N.J.A.C. 7:13-13.4(c)2 should be amended to require mitigation for any riparian zone disturbance within a 50-foot or 150-foot riparian zone; only requiring mitigation when more than 2,000 square feet of riparian zone vegetation is cleared is contrary to the requirement for the restoration and protection of water quality. Under both subsections mitigation should be provided onsite to the maximum extent practicable. If not practicable, then the mitigation site should be located on the same water and as close to the impact as possible in order to address the impacts of the permitted activity. (13)

RESPONSE: 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 minimal impact to riparian zone functionality. 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 have more than a minimal impact on riparian zone functionality. The amount of mitigation required is dependent upon the area of the riparian zone vegetation cleared, cut, and/or removed, the width of the riparian zone, and the type of regulated activity. These three factors influence the degree to which riparian zone functions and values are impacted by a regulated activity. The amount of mitigation required to compensate for activities impacting a riparian zone is commensurate with the anticipated potential impact of the activity on riparian zone functionality.

Through this adoption, the Department has significantly strengthened the mitigation requirements for 300-foot riparian zones. Prior to this adoption, mitigation for the total area of riparian zone vegetation cleared, cut, and/or removed within a 300-foot riparian zone was limited

to the construction, expansion, or restoration of public roadways, private roadways, and railroads and the construction or reconstruction of a stormwater discharge. Under this adoption, mitigation for the total area of disturbed riparian zone vegetation in any 300-foot riparian zone is required for all regulated activities authorized under an individual permit with four exceptions. Excepted from this requirement are the construction or other activities related to utility lines, construction associated with a single-family home or duplex, and construction of a trail or boardwalk, provided the riparian zone disturbance associated with these activities does not exceed the limits set forth in Table 11.2. However, if the riparian zone disturbance associated with these activities exceeds the limits of Table 11.2, mitigation is required for the total area of vegetation cleared, cut, and/or removed. The Department has excepted the above activities because they are exempt from the groundwater recharge, stormwater runoff quantity, and stormwater runoff quality requirements of the SWM rules at N.J.A.C. 7:8-5.2(d) or, in the case of single-family home construction, were not subject to the previous Special Water Resource Protection Area restrictions set forth at prior N.J.A.C. 7:8-5.5(h), provided the conditions of prior N.J.A.C. 7:8-5.5(h)5 were met. The adopted amendments will help protect the important water resources surrounded by the 300-foot riparian zone. Further, requiring mitigation for the total area of riparian zone disturbance in 300-foot riparian zones will restore the ecological functions of any potentially disturbed riparian zone vegetation.

Under this adoption at N.J.A.C. 7:13-13.4(c)2, for an activity located within a 50- or 150-foot riparian zone that results in the clearing, cutting, and/or removal or riparian zone vegetation of greater than 2,000 square feet under N.J.A.C. 7:13-11.2(y), mitigation must be provided for the total area of vegetation cleared, cut, and/or removed. The Department has determined that

the impacts to an area of riparian zone vegetation of 2,000 square feet or less would have a minimal impact on the riparian zone functionality when located within a 50- or 150-foot riparian zone. However, where the activity under N.J.A.C. 7:13-11.2(y) is located within a 300-foot riparian zone, mitigation is required for the total area of riparian zone vegetation cleared, cut, and/or removed. This ensures that robust mitigation is required for all but the smallest activities undertaken under N.J.A.C. 7:13-11.2(y).

As explained in the Response to Comment 84, the Department, under this adoption, has established a mitigation hierarchy with mitigation for riparian zone impacts being required onsite if feasible. This will ensure that any impairment to riparian zone functionality caused by the regulated activity is fully offset in a manner that preserves riparian zone benefits both locally and within the watershed. Only where onsite mitigation that fully compensates for the disturbance is not feasible will offsite mitigation be authorized in the same watershed management area or through the purchase of credits from a mitigation bank. It has been the Department's experience that limiting the location of the riparian zone mitigation to the same water body is not always possible due to the potential for a lack of suitable sites along that waterway. Further, in determining the feasibility of onsite or offsite mitigation, the Department considers the following factors regarding the proposed mitigation area: size, location, habitat value, and interaction with nearby resources. (See N.J.A.C. 7:13-13.9(b)1).

# N.J.A.C. 7:13-13.5 Property Suitable for Mitigation

83. COMMENT: The proposed rules fail to address concerns raised on the June 1, 2015 notice of proposal with respect to allowing disturbances on private lands to be mitigated on public lands.

(15)

RESPONSE: In accordance with N.J.A.C. 7:13-13.4(a), mitigation may be carried out on private or public property. In accordance with N.J.A.C. 7:13-13.4(c), the Department shall approve mitigation on public property only if the public entity agrees to record a conservation restriction on the area of the mitigation project in perpetuity or, where the land was acquired using Green Acres funding or is encumbered with Green Acres restrictions, provided the use of the area for mitigation purposes is approved by the Green Acres Program. Mitigation conducted on public land by a private developer may provide significant public benefits in the form of improved water quality, increased wildlife habitat, and the reduction in erosion of stream banks.

Therefore, due to these probable public benefits, allowing mitigation for impacts on a private property to occur on public lands is appropriate.

## N.J.A.C. 7:13-13.9 Riparian Zone Mitigation Hierarchy

84. COMMENT: The proposed rules fail to address the following concern raised on the June 1, 2015 notice of proposal with respect to mitigation. The mitigation requirements do not protect a disturbed waterway because they allow mitigation to occur anywhere within the watershed, in locations that could be too distant and ecologically disconnected from the disturbance. This will reduce water quality in the most sensitive streams. (10 and 15)

RESPONSE: As explained in the notice of proposal Summary at 48 N.J.R. 1020, providing mitigation on the same site as the regulated activity (disturbance) provides the most direct

avenue to ensure that any impairment to riparian zone functionality caused by the regulated activity is fully offset in a manner that preserves riparian zone benefits both locally and within the watershed. Therefore, the amendments adopted herein establish a mitigation hierarchy that allows offsite mitigation to occur only where onsite mitigation is not feasible, similar to the FWPA Rules at N.J.A.C. 7:7A-15.6 and CZM Rules at N.J.A.C. 7:7-17.14.

Under the adopted rules, only where onsite mitigation that fully compensates for the disturbance is not feasible will offsite mitigation be authorized in the same watershed management area or through the purchase of credits from a mitigation bank. It has been the Department's experience that limiting the location of the riparian zone mitigation to the same waterway is not always possible due, in many cases, to the lack of suitable sites along that waterway. Consequently, when onsite mitigation is not feasible, the Department's next preference is that mitigation take place offsite in 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), which will help to ensure that the riparian zone mitigation fully compensates for any lost riparian functions. In most cases mitigation will be performed within the same watershed management area. However, there may be a situation in which mitigation is not feasible within the same watershed management area and where this occurs, mitigation may occur within an adjacent watershed management area provided the mitigation fully compensates for the ecological functions and values of the riparian zone impacted.

The determination as to whether mitigation under N.J.A.C. 7:13-13.9(b) is feasible necessarily involves analysis of the potential mitigation areas and determination as to whether mitigation that will fully compensate for any ecological loss, as required by N.J.A.C. 7:13-

13.2(a), is practicable. In determining the feasibility of onsite or offsite mitigation, the Department considers the following factors regarding the proposed mitigation area: size, location, habitat value, and interaction with nearby resources. (See N.J.A.C. 7:13-13.9(b)1.)

With reference to mitigation requirements applicable to the State's most sensitive streams, the Department assumes the commenter is referencing waters designated as Category One waters under the Surface Water Quality Standards, which receive a 300-foot riparian zone in accordance with N.J.A.C. 7:13-4.1(c)1. As indicated in the Response to Comments 136 through 148 of the June 20, 2016 notice of adoption, 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 (see 48 N.J.R. 1086). For development classified as "major development" under the Stormwater Management rules, this requirement is included in the rules as amended by this notice of adoption at N.J.A.C. 7:13-13.9(d).

85. COMMENT: The factors used in determining the feasibility of onsite or offsite mitigation at N.J.A.C. 7:13-13.9(b) should be modified to include a consideration of whether onsite mitigation could accommodate a continuous linear restoration of riparian habitat along a surface water, thereby improving water quality. For example, the restoration of actively disturbed riparian areas, the enhancement of undisturbed areas, and the conservation of the inner 75-foot portion of the 150-foot riparian zone and the inner 150-foot portion of the 300-foot riparian zone should be considered under this factor. (1)

RESPONSE: When determining the feasibility of onsite or offsite mitigation, the Department considers four factors: size, location, habitat value, and interaction with nearby resources, as set forth at N.J.A.C. 7:13-13.9(b). Only where onsite mitigation that fully compensates for the disturbance is not feasible will offsite mitigation be authorized in the same watershed management area or through the purchase of credits from a mitigation bank. The determination as to whether mitigation under N.J.A.C. 7:13-13.9(b) is feasible necessarily involves analysis of the potential mitigation areas and determination as to whether the proposed mitigation will fully compensate for any ecological loss, as required by N.J.A.C. 7:13-13.2(a). The factors set forth at N.J.A.C. 7:13-13.9(b) do consider the examples provided by the commenter. Specifically, in reviewing a proposed mitigation site, the Department would evaluate the interaction of the proposed mitigation site with nearby resources to determine if the proposed mitigation site would provide connectivity to a riparian zone or would enhance the vegetative community of the site. For example, an actively disturbed riparian zone will have minimal habitat value, which would make it a potentially desirable mitigation site. If that same actively disturbed riparian zone is located between two forested riparian zone areas, then this particular location would be an ideal

mitigation location as it would connect two highly functioning riparian zone areas, providing significant enhancement of the stream ecosystem and associated riparian zone.

86. COMMENT: At N.J.A.C. 7:13-13.9(b)3, the purchase of credits from a mitigation bank is inadequate to compensate for the loss of riparian zone functions to the water impacted by the regulated activity. Mitigation credits should be obtained in the impacted locale so as to counter the impacts to that riparian zone. The existing mitigation banks as they exist today will do little to improve water quality on an affected waterway because they cover too large of a geographic area. As the Department correctly notes at 48 N.J.R. 1015, "activities within the inner portion of a riparian zone may be more likely to have an adverse impact on the surface water through destabilization of the channel, erosion, and sedimentation, heat pollution of the water through the removal of shade trees, and loss of habitat if proper measures are not taken to avoid impacts. Vegetation immediately adjacent to the regulated water also buffers the land areas from negative impacts of flooding." (13)

RESPONSE: As set forth at N.J.A.C. 7:13-13.9(b), only where it is determined that onsite mitigation is not feasible will offsite mitigation in the same watershed management area as the impacts or through the purchase of credits from a mitigation bank with a service area that includes the area of impacts be considered. (See N.J.A.C. 7:13-13.9(b)). In the rule hierarchy, mitigation performed offsite in the same watershed management area as the impact is valued the same as the purchase of credits from a mitigation bank with a service area that includes the area of impact. A benefit of providing mitigation through the purchase of credits from a mitigation bank is that typically the bank site is already constructed, and, therefore, the length of time

between the riparian zone disturbance and the provision of mitigation is significantly reduced, thereby providing mitigation for the loss of the riparian zone functions and values in a timely manner and with more predictable results.

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 occurring as a result of the regulated activity. 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. 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. 7:13-13.9(b)). The Department may allow mitigation in a different watershed management area, provided it is as close as possible to the watershed management area where the disturbance is to occur, if the mitigator demonstrates that it is not feasible to mitigate in the same watershed management area as the disturbance and provided the mitigation fully compensates for the disturbance. (See N.J.A.C. 7:13-13.9(c)).

87. COMMENT: The proposed 300-foot riparian zone requirements are more restrictive than the prior rules and the SWRPA analysis previously required under the SWM rules. It appears that a new section, N.J.A.C. 7:13-13.8(d), was added on adoption of the June 1, 2015 notice of proposal. This subsection appears to be proposed and unchanged at N.J.A.C. 7:13-13.9(d) in the

concurrent notice of proposal. Please clarify whether this subsection supersedes the mitigation hierarchy set forth at N.J.A.C. 7:13-13.9 and thus severely limits options for disturbance to a 300-foot riparian zone, even in actively disturbed areas, and/or disturbance that conforms to Table 11.2. (4)

RESPONSE: The Department changed N.J.A.C. 7:13-13.8 on adoption to add new subsection (d) to ensure that mitigation associated with a major development within a 300-foot riparian zone complies with N.J.A.C. 7:13-13.2(a). N.J.A.C. 7:13-13.8(d), which requires that mitigation to compensate for disturbance to vegetation within a 300-foot riparian zone associated with a "major development" be provided along either the same regulated water as the disturbance or an upstream tributary to that regulated water, was added by the Department in response to public comment to clarify what is required to ensure that the functionality of a 300-foot riparian zone is fully maintained consistent with N.J.A.C. 7:13-13.2(a).

Under this rulemaking, N.J.A.C. 7:13-13.8 is recodified at N.J.A.C. 7:13-13.9 with amendments that establish a mitigation hierarchy. Specifically, N.J.A.C. 7:13-13.9(b) and (c) establish a mitigation hierarchy with mitigation for riparian zone impacts being required onsite if feasible. This will ensure that any impairment to riparian zone functionality caused by the regulated activity is fully offset in a manner that preserves riparian zone benefits both locally and within the watershed. Consistent with this hierarchy, mitigation to compensate for disturbance to vegetation within a 300-foot riparian zone associated with a major development must first be provided onsite, and if that is not feasible, then it must be provided along either the same regulated water as the disturbance or an upstream tributary to that regulated water. This requirement ensures that the mitigation site is providing equal functions and values as the

riparian zone impacted. Accordingly, the Department is modifying N.J.A.C. 7:13-13.9 on adoption to incorporate the requirements previously codified at N.J.A.C. 7:13-13.9(d) into the mitigation hierarchy at N.J.A.C. 7:13-13.9(b)1 to eliminate any potential misconception as to how the requirements applicable to 300-foot riparian zones are considered within the hierarchy.

Further, as explained in the Response to Comment 82, the amount of mitigation required for disturbance within a 300-foot riparian zone has increased. Specifically, mitigation for the total area of disturbed riparian zone vegetation in any 300-foot buffer is required for all regulated activities authorized under an individual permit with limited exceptions that were previously exempt from the prior SWRPA requirements or minor construction associated with a single-family home. The increase in the amount of mitigation required for disturbances within a 300-foot riparian zone will help protect the important water resources surrounded by the 300-foot riparian zone, including water quality. Further, requiring mitigation for the total area of riparian zone disturbance in 300-foot riparian zones will restore the ecological functions of any potentially disturbed riparian zone vegetation.

## **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 rules 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 FHACA 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. FEMA delineates flood hazard areas in the State for the purposes of the 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 adopted amendments do not derive authority from any Federal law or under any State statute that incorporates or refers to Federal laws, standards, or requirements. However, the amendments do serve to align the requirements of the FHACA Rules with NFIP standards, in V zones and coastal A zones. These amendments harmonize State flood hazard area rules with national standards to facilitate compliance for NFIP-participating communities.

**Full text** of the adoption follows (additions to the proposal indicated in boldface with asterisks \*thus\*; deletions from the proposal indicated in brackets with asterisks \*[thus]\*):

#### CHAPTER 13

#### FLOOD HAZARD AREA CONTROL ACT RULES

## SUBCHAPTER 13. RIPARIAN ZONE MITIGATION

7:13-13.9 Riparian zone mitigation hierarchy

- (a) (No change.)
- (b) Mitigation for a riparian zone vegetation disturbance shall be performed through creation, enhancement, restoration, or preservation of riparian zones onsite \*[or, if that]\* \*. If onsite mitigation\* is not feasible, then \*mitigation shall be provided offsite in accordance with the following:
- 1. For disturbance to vegetation within a 300-foot riparian zone that is associated with a "major development," as defined in the Department's Stormwater Management rules at N.J.A.C. 7:8-1.2, mitigation shall be provided along either the same regulated water as the disturbance or an upstream tributary to that regulated water; and
- 2. For all other disturbance to riparian zone vegetation, mitigation shall be provided offsite in the same watershed management area as the impacts or through the purchase of credits from a mitigation bank with a service area that includes the area of impacts. In determining the feasibility of onsite or offsite mitigation or credit purchase, the Department shall consider the following factors regarding the proposed mitigation area:

Recodify proposed 1. -4. as \*i. -iv.\* (No change in text from proposal.)

- (c) If offsite mitigation for riparian zone vegetation disturbance within the same watershed management area at (b)\*2\* above is not feasible, mitigation may occur in another watershed management area, provided the mitigation is as close as possible to the watershed management area where the disturbance is to occur, as approved by the Department, and provided the mitigation fully compensates for the disturbance in accordance with N.J.A.C. 7:13-13.2.
- \*[(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.]\*

SUBCHAPTER 20. APPLICATION FEES

7:13-20.1 Application fees

- (a) (d) (No change.)
- (e) The fees for applications under this chapter are set forth in Table 20.1 below:

**Table 20.1** 

### 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)\*[1]\*\*3\*

Fee

Modification of previously reviewed stormwater	Thirty percent of the original
calculations	stormwater fee

<sup>\*[1]\*\*3\*</sup> The additional application fee for stormwater review set forth in this table shall not exceed \$20,000.