

**RIPARIAN ZONE  
MODEL ORDINANCE**

**(This Model Ordinance is modified from the original version prepared by the Passaic River Coalition by the New Jersey Department of Environmental Protection, Division of Watershed Management)**

**July 7, 2008**

- I. Intent and Purpose**
- II. Statutory Authority**
- III. Definitions**
- IV. Establishment of Riparian Zones**
- V. Uses Permitted in Riparian Zones**
- VI. Performance Standards for Riparian Zones**
- VII. Nonconforming Structures and Uses in Riparian Zones**
- VIII. Uses Prohibited in Riparian Zones**
- IX. Activities Permitted in Riparian Zones in the Case of No Reasonable or Prudent Alternative or Extreme Hardship**
- X. Riparian Zone Management Plan**
- XI. Boundary Interpretation, Appeals Procedures, Inspections, Conflicts, Severability**
- XII. Enforcement**
- XIII. Effective Date**

*[The requirements set forth in this Model Ordinance are consistent with those found in the State of New Jersey's Stormwater Management rules, N.J.A.C. 7:8, the Flood Hazard Area Control Act rules, N.J.A.C. 7:13 and the Water Quality Management Planning rules, N.J.A.C. 7:15.]*

**I. INTENT AND PURPOSE**

The governing body of *[municipality]* finds that riparian lands adjacent to streams, lakes, or other surface water bodies that are adequately vegetated provide an important environmental protection and water resource management benefit. It is necessary to protect and maintain the beneficial character of riparian areas by implementing specifications for the establishment, protection, and maintenance of vegetation along the surface water bodies within the jurisdiction of *[municipality]*, consistent with the interest of landowners in making reasonable economic use of parcels of land that include such designated areas. The purpose of this Ordinance is to designate riparian zones, and to provide for land use regulation therein in order to protect the streams, lakes, and other surface water bodies of *[municipality]*; to protect the water quality of watercourses, reservoirs, lakes, and other significant water resources within *[municipality]*; to protect the riparian and aquatic ecosystems of *[municipality]*; to provide for the environmentally sound use of the land resources of *[municipality]*, and to complement existing state, regional, county, and municipal stream corridor protection and management regulations and initiatives.

## RIPARIAN ZONE MODEL ORDINANCE

The specific purposes and intent of this Ordinance are to:

- A. Restore and maintain the chemical, physical, and biological integrity of the water resources of *[municipality]*;
- B. Prevent excessive nutrients, sediment, and organic matter, as well as biocides and other pollutants, from reaching surface waters by optimizing opportunities for filtration, deposition, absorption, adsorption, plant uptake, biodegradation, and denitrification, which occur when stormwater runoff is conveyed through vegetated buffers as stable, distributed flow prior to reaching receiving waters;
- C. Provide for shading of the aquatic environment so as to moderate temperatures, retain more dissolved oxygen, and support a healthy assemblage of aquatic flora and fauna;
- D. Provide for the availability of natural organic matter (leaves and twigs) and large woody debris (trees and limbs) that provide food and habitat for aquatic organisms (insects, amphibians, crustaceans, and small fish), which are essential to maintain the food chain;
- E. Increase stream bank stability and maintain natural fluvial geomorphology of the stream system, thereby reducing stream bank erosion and sedimentation and protecting habitat for aquatic organisms;
- F. Maintain base flows in streams and moisture in wetlands;
- G. Control downstream flooding; and
- H. Conserve the natural features important to land and water resources, e.g., headwater areas, ground water recharge zones, floodways, floodplains, springs, streams, wetlands, woodlands, and prime wildlife habitats.

## II. STATUTORY AUTHORITY

The municipality of *[municipality]* is empowered to regulate land uses under the provisions of the New Jersey Municipal Land Use Law, N.J.S.A. 40:55D-1 *et seq.*, which authorizes each municipality to plan and regulate land use in order to protect public health, safety and welfare by protecting and maintaining native vegetation in riparian areas. *[Municipality]* is also empowered to adopt and implement this Ordinance under provisions provided by the following legislative authorities of the State of New Jersey:

- A. Water Pollution Control Act, N.J.S.A. 58:10A-1 *et seq.*
- B. Water Quality Planning Act, N.J.S.A. 58:11A-1 *et seq.*
- C. Spill Compensation and Control Act, N.J.S.A. 58:10-23 *et seq.*
- D. Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 *et seq.*
- E. Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 *et seq.*

## III. DEFINITIONS

**Acid producing soils** means soils that contain geologic deposits of iron sulfide minerals (pyrite and marcasite) which, when exposed to oxygen from the air or from surface waters, oxidize to produce sulfuric acid. Acid producing soils, upon excavation, generally have a pH of 4.0 or lower. After exposure to oxygen, these soils generally have a pH of 3.0 or lower. Information regarding the location of acid producing soils in New Jersey can be obtained from local Soil Conservation District offices.

**Administrative authority** means the Planning Board or Board of Adjustment or Construction Office with all of the powers delegated, assigned, or assumed by them according to statute or ordinance.

**Applicant** means a person, corporation, government body or other legal entity applying to the Planning Board, Board of Adjustment or the Construction Office proposing to engage in an activity that is regulated by the provisions of this ordinance, and that would be located in whole or in part within a regulated Riparian Zone.

**Category One waters or C1 waters** shall have the meaning ascribed to this term by the Surface Water Quality Standards, N.J.A.C. 7:9B, for purposes of implementing the antidegradation policies set forth in those standards, for protection from measurable changes in water quality characteristics because of their clarity, color, scenic setting, and other characteristics of aesthetic value, exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, or exceptional fisheries resources.

**Category Two waters or C2 waters** means those waters not designated as Outstanding Natural Resource waters or Category One waters in the Surface Water Quality Standards, N.J.A.C. 7:9B, for purposes of implementing the antidegradation policies set forth in those standards.

**Floodway** shall have the meaning ascribed to this term by the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., and regulations promulgated there under published at N.J.A.C. 7:13 et seq., and any supplementary or successor legislation and regulations from time to time enacted or promulgated.

**Intermittent Stream** means a surface water body with definite bed and banks in which there is not a permanent flow of water and shown on the New Jersey Department of Environmental Protection Geographic Information System (GIS) hydrography coverages or, in the case of a Special Water Resource Protection Area (SWRPA) pursuant to the Stormwater Management rules at N.J.A.C. 7:8-5.5(h), C1 waters as shown on the USGS quadrangle map or in the County Soil Surveys.

**Lake, pond, or reservoir** means any surface water body shown on the New Jersey Department of Environmental Protection Geographic Information System (GIS) hydrography coverages or, in the case of a Special Water Resource Protection Area (SWRPA) pursuant to the Stormwater Management rules at N.J.A.C. 7:8-5.5(h), C1 waters as shown on the USGS quadrangle map or in the County Soil Surveys; that is an impoundment, whether naturally occurring or created in whole or in part by the building of structures for the retention of surface water. This excludes sedimentation control and stormwater retention/detention basins and ponds designed for treatment of wastewater.

**Perennial stream** means a surface water body that flows continuously throughout the year in most years and shown on the New Jersey Department of Environmental Protection Geographic Information System (GIS) hydrography coverages or, in the case of a Special Water Resource Protection Area (SWRPA) pursuant to the Stormwater Management rules at N.J.A.C. 7:8-5.5(h), C1 waters as shown on the USGS quadrangle map or in the County Soil Surveys.

**Riparian zone** means the land and vegetation within and directly adjacent to all surface water bodies including, but not limited to lakes, ponds, reservoirs, perennial and intermittent streams, up to and including their point of origin, such as seeps and springs, as shown on the New Jersey Department of Environmental Protection's GIS hydrography coverages or, in the case of a Special Water Resource Protection Area (SWRPA) pursuant to the Stormwater Management rules at N.J.A.C. 7:8-5.5(h), C1 waters as shown on the USGS quadrangle map

or in the County Soil Surveys. There is no riparian zone along the Atlantic Ocean nor along any manmade lagoon or oceanfront barrier island, spit or peninsula.

**Riparian Zone Management Plan** means a plan approved by the Engineer of *[municipality]*. The plan shall be prepared by a landscape architect, professional engineer or other qualified professional, and shall evaluate the effects of any proposed activity/uses on any riparian zone. The plan shall identify existing conditions, all proposed activities, and all proposed management techniques, including any measures necessary to offset disturbances to any affected riparian zone.

**Special Water Resource Protection Area or SWRPA** means a 300 foot area provided on each side of a surface water body designated as a C1 water or tributary to a C1 water that is a perennial stream, intermittent stream, lake, pond, or reservoir, as defined herein and shown on the USGS quadrangle map or in the County Soil Surveys within the associated HUC 14 drainage, pursuant to the Stormwater Management rules at N.J.A.C. 7:8-5.5(h).

**Surface water body(ies)** means any perennial stream, intermittent stream, lake, pond, or reservoir, as defined herein. In addition, any regulated water under the Flood Hazard Area Control Act rules at N.J.A.C. 7:13-2.2, or State open waters identified in a Letter of Interpretation issued under the Freshwater Wetlands Protection Act Rules at N.J.A.C. 7:7A-3 by the New Jersey Department of Environmental Protection Division of Land Use Regulation shall also be considered surface water bodies.

**Threatened or endangered species** means a species identified pursuant to the Endangered and Nongame Species Conservation Act, N.J.S.A. 23:2A-1 et seq., the Endangered Species Act of 1973, 16 U.S.C. §§1531 et seq. or the Endangered Plant Species List, N.J.A.C. 7:5C-5.1, and any subsequent amendments thereto.

**Trout maintenance water** means a section of water designated as trout maintenance in the New Jersey Department of Environmental Protection's Surface Water Quality Standards at N.J.A.C. 7:9B.

**Trout production water** means a section of water identified as trout production in the New Jersey Department of Environmental Protection's Surface Water Quality Standards at N.J.A.C. 7:9B.

#### IV. ESTABLISHMENT OF RIPARIAN ZONES

A. Riparian zones adjacent to all surface water bodies shall be protected from avoidable disturbance and shall be delineated as follows:

1. The riparian zone shall be 300 feet wide along both sides of any Category One water (C1 water), and all upstream tributaries situated within the same HUC 14 watershed. This includes Special Water Resource Protection Area's or SWRPA's as defined herein and shown on the USGS quadrangle map or in the County Soil Surveys within the associated HUC 14 drainage, pursuant to the Stormwater Management rules at N.J.A.C. 7:8-5.5(h).
2. The riparian zone shall be 150 feet wide along both sides of the following waters not designated as C1 waters:
  - a. Any trout production water and all upstream waters (including tributaries);
  - b. Any trout maintenance water and all upstream waters (including tributaries) within one linear mile as measured along the length of the surface water body;

RIPARIAN ZONE MODEL ORDINANCE

- c. Any segment of a water flowing through an area that contains documented habitat for a threatened or endangered species of plant or animal, which is critically dependent on the surface water body for survival, and all upstream waters (including tributaries) within one linear mile as measured along the length of the surface water body; and
  - d. Any segment of a surface water body flowing through an area that contains acid producing soils.
3. For all other surface water bodies, a riparian zone of 50 feet wide shall be maintained along both sides of the water.
- B. The portion of the riparian zone that lies outside of a surface water body is measured landward from the top of bank. If a discernible bank is not present along a surface water body, the portion of the riparian zone outside the surface water body is measured landward as follows:
1. Along a linear fluvial or tidal water, such as a stream or swale, the riparian zone is measured landward of the feature's centerline;
  2. Along a non-linear fluvial water, such as a lake or pond, the riparian zone is measured landward of the normal water surface limit;
  3. Along a non-linear tidal water, such as a bay or inlet, the riparian zone is measured landward of the mean high water line; and
  4. Along an amorphously-shaped feature such as a wetland complex, through which water flows but which lacks a definable channel, the riparian zone is measured landward of the feature's centerline.

Where slopes (in excess of 15 percent) are located within the designated widths, the riparian zone shall be extended to include the entire distance of this sloped area to a maximum of 300 feet.

*[Municipalities have the ability to include a series of options, as long as the minimum requirements are met. If an existing municipal ordinance includes more stringent buffer requirements, or if the municipality wished to propose more stringent requirements, then the more stringent requirements should be applied.]*

For areas adjacent to surface water bodies for which the floodway has been delineated per the Flood Hazard Area Control Act rules at N.J.A.C. 7:13-3 or the State's adopted floodway delineations, the riparian zone shall cover the entire floodway area, or the area described in Section IV.A.1. or IV.A.2. above, whichever area has the greatest extent. Requests for alterations to the adopted delineations can be provided to the New Jersey Department of Environmental Protection for consideration if site specific information is available.

- C. A riparian zone is an overlay to the existing zoning districts. The provisions of the underlying district shall remain in full force except where the provisions of the riparian zone differ from the provisions of the underlying district, in which case the provision that is more restrictive shall apply. These provisions apply to land disturbances resulting from or related to any activity or use requiring application for any of the following permits or approvals:
- Building permit
  - Zoning variance
  - Special exception
  - Conditional use

## RIPARIAN ZONE MODEL ORDINANCE

- Subdivision/land development approval
- D. A map of the riparian zones of the entire municipality of *[municipality]*, including all land and water areas within its boundaries, which designates surface water bodies, is included as part of this Ordinance, and is appended as Figure *[municipality to insert Figure # here]*. Maps of the municipality on which these designations have been overlain shall be on file and maintained by the offices of the Clerk of *[municipality]*. This map conforms to all applicable laws, rules and regulations applicable to the creation, modification and promulgation of zoning maps.
- E. It shall be the duty of the Engineer of *[municipality]*, every second year after the adoption of this Ordinance, to propose modifications to the map delineating riparian zones required by any naturally occurring or permitted change in the location of a defining feature of a surface water body occurring after the initial adoption of the riparian zone map, to record all modifications to the riparian zone map required by decisions or appeals under Section XI., and by changes made by the New Jersey Department of Environmental Protection in surface water classifications or floodway delineations.
- F. The applicant or designated representative shall be responsible for the initial determination of the presence of a riparian zone on a site, and for identifying the area on any plan submitted to the *[municipality]* in conjunction with an application for a construction permit, subdivision, land development, or other improvement that requires plan submissions or permits. This initial determination shall be subject to review and approval by the municipal engineer, governing body, or its appointed representative, and, where required, by the New Jersey Department of Environmental Protection.
- G. The municipal Master Plan provides the legal basis for zoning and land use regulation at the local level. The technical foundation for local riparian zones in this municipality should be incorporated into the Master Plan. A technical report on the need for riparian zones in *[municipality]* may be adopted as part of the Master Plan, N.J.S.A 40:55D-28b(11). The technical report should include the following information: a statement setting forth the rationale and need to protect riparian zones; and reference to the methods used to designate and delineate riparian zones.
- H. Exemptions
- Instead of the riparian zone protection requirements above, the applicant must demonstrate compliance with one of the following:
1. The proposed project or activity is not in the riparian zone established at section IV.A. above;
  2. The proposed disturbance in a riparian zone is for a linear development with no feasible alternative route. If the riparian zone is associated with Category One waters, the linear development must also meet the requirements for Special Water Resource Protection Areas under the Stormwater Management rules at N.J.A.C. 7:8-5.5(h);
  3. The proposed disturbance in a riparian zone is in accordance with a stream corridor restoration or stream bank stabilization plan or project approved by the New Jersey Department of Environmental Protection;
  4. The proposed disturbance of a riparian zone is necessary to provide for public pedestrian access or water dependent recreation that meets the requirements of the Freshwater Wetlands Protection Act rules, N.J.A.C. 7:7A, the Flood Hazard Area Control Act rules, N.J.A.C. 7:13, or the Coastal Zone Management rules, N.J.A.C. 7:7E;

## RIPARIAN ZONE MODEL ORDINANCE

5. The proposed disturbance of a riparian zone is required for the remediation of hazardous substances performed with New Jersey Department of Environmental Protection or Federal oversight pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11a et seq. or the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§9601 et seq.;
6. The proposed disturbance is for redevelopment that does not exceed the limits of existing impervious surfaces;
7. The proposed disturbance would prevent extraordinary hardship on the property owner peculiar to the property; or prevent extraordinary hardship, provided the hardship was not created by the property owner, that would not permit a minimum economically viable use of the property based upon reasonable investment; and/or
8. Demonstrate through site plans depicting proposed development and topography that new disturbance is not located in areas with a 20 percent or greater slope, except as allowed under H.6. and H.7. above.

### **V. USES PERMITTED IN RIPARIAN ZONES**

- A. For riparian zones in Category One waters (C1 waters), permitted uses are governed by the Stormwater Management rules at N.J.A.C. 7:8-5.5(h) and the Flood Hazard Area Control Act rules, N.J.A.C. 7:13, unless otherwise exempt.
- B. Any other riparian zone area shall remain in a natural condition or, if in a disturbed condition, including agricultural activities, at the time of adoption of this ordinance may be restored to a natural condition. There shall be no clearing or cutting of trees and brush, except for removal of dead vegetation and pruning for reasons of public safety or for the replacement of invasive species with indigenous species. There shall be no altering of watercourses, dumping of trash, soil, dirt, fill, vegetative or other debris, regrading or construction. The following uses are permitted either by right or after review and approval by the municipality in riparian zones. No new construction, development, use, activity, encroachment, or structure shall take place in a riparian zone, except as specifically authorized in this Section. The following uses shall be permitted within a riparian zone:
  1. Open space uses that are primarily passive in character shall be permitted by right to extend into a riparian zone, provided near stream vegetation is preserved. These uses do not require approval by the Zoning Enforcement Officer or compliance with an approved Riparian Zone Management Plan. Such uses include wildlife sanctuaries, nature preserves, forest preserves, fishing areas, game farms, fish hatcheries and fishing reserves, operated for the protection and propagation of wildlife, but excluding structures. Such uses also include passive recreation areas of public and private parklands, including unpaved hiking, bicycle and bridle trails, provided that said trail have been stabilized with pervious materials.
  2. Fences, for which a permit has been issued by the Construction Code Office, to the extent required by applicable law, rule or regulation.
  3. Crossings by farm vehicles and livestock, recreational trails, roads, railroads, storm water lines, sanitary sewer lines, water lines and public utility transmission lines, provided that the land disturbance is the minimum required to accomplish the permitted use, subject to approval by the Zoning Enforcement Officer, provided that any applicable State permits

## RIPARIAN ZONE MODEL ORDINANCE

are acquired, and provided that any disturbance is offset by buffer improvements in compliance with an approved Riparian Zone Management Plan and that the area of the crossing is stabilized against significant erosion due to its use as a crossing.

4. Stream bank stabilization or riparian reforestation, which conform to the guidelines of an approved Riparian Zone Management Plan, or wetlands mitigation projects that have been approved by the New Jersey Department of Environmental Protection, subject to approval by the Zoning Enforcement Officer and subject to compliance with an approved Riparian Zone Management Plan.

### VI. PERFORMANCE STANDARDS FOR RIPARIAN ZONES

- A. All encroachments proposed into riparian zones in C1 waters shall comply with the requirements of the Stormwater Management rule at N.J.A.C. 7:8-5.5(h) and the Flood Hazard Area Control Act rules, N.J.A.C. 7:13, and shall be subject to review and approval by the New Jersey Department of Environmental Protection, unless exempt.
- B. For all other riparian zones, the following conditions shall apply:
  1. All new major and minor subdivisions and site plans shall be designed to provide sufficient areas outside of the riparian zone to accommodate primary structures, any normal accessory uses appurtenant thereto, as well as all planned lawn areas.
  2. Portions of lots within the riparian zone must be permanently restricted by deed or conservation easement held by *[municipality]*, its agent, or another public or private land conservation organization which has the ability to provide adequate protection to prevent adverse impacts within the riparian zone. A complete copy of the recorded conservation restriction that clearly identifies the deed book and pages where it has been recorded in the office of the clerk of the applicable county or the registrar of deeds and mortgages of the applicable county must be submitted to the municipality. The applicant shall not commence with the project or activity prior to making this submittal and receiving actual approval of the plan modification and receipt of any applicable permits from the New Jersey Department of Environmental Protection. The recorded conservation restriction shall be in the form approved by the municipality and shall run with the land and be binding upon the property owner and the successors in interest in the property or in any part thereof. The conservation restriction may include language reserving the right to make *de minimus* changes to accommodate necessary regulatory approvals upon the written consent of the municipality, provided such changes are otherwise consistent with the purpose and intent of the conservation restriction. The recorded conservation restriction shall, at a minimum, include:
    - a. A written narrative of the authorized regulated activity, date of issuance, and date of expiration, and the conservation restriction that, in addition, includes all of the prohibitions set forth at N.J.S.A. 13:8B-2b(1) through (7);
    - b. Survey plans for the property as a whole and, where applicable, for any additional properties subject to the conservation restrictions. Such survey plans shall be submitted on the surveyor's letterhead, signed and sealed by the surveyor, and shall include metes and bounds descriptions of the property, the site, and the areas subject to the conservation restriction in New Jersey State Plane Coordinates, North American Datum 1983, and shall depict the boundaries of the site and all areas subject to the conservation restriction as marked with flags or stakes onsite. All such



## RIPARIAN ZONE MODEL ORDINANCE

survey plans shall be submitted on paper and in digital CAD or GIS file on a media and format defined by the municipality. The flags or stakes shall be numbered and identified on the survey plan; and

- c. A copy or copies of deeds for the property as a whole that indicate the deed book and pages where it has been recorded in the office of the clerk of the applicable county or the registrar of deeds and mortgages of the applicable county.
3. Any lands proposed for development which include all or a portion of a riparian zone shall as a condition of any major subdivision or major site plan approval, provide for the vegetation or revegetation of any portions of the riparian zone which are not vegetated at the time of the application or which were disturbed by prior land uses, including for agricultural use. Said vegetation plan shall utilize native and non-invasive tree and plant species to the maximum extent practicable in accordance with an approved Riparian Zone Management Plan, described in Section X.
4. For building lots which exist as of the date of adoption of this ordinance, but for which a building permit or a preliminary site plan approval has not been obtained or is no longer valid, the required minimum front, side, and rear setbacks may extend into the riparian zone, provided that a deed restriction and/or conservation easement is applied which prohibits clearing or construction in the riparian zone.
5. All stormwater shall be discharged outside of but may flow through a riparian zone and shall comply with the Standard For Off-Site Stability in the “Standards for Soil Erosion and Sediment Control in New Jersey”, established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 *et seq.* (see N.J.A.C. 2:90-1.3.)
6. If stormwater discharged outside of and flowing through a riparian zone cannot comply with the Standard for Off-Site Stability cited in Section VI.5, then the proposed stabilization measures must meet the requirements of the Flood Hazard Area Control Act rules at N.J.A.C. 7:13-10.2 *et seq.*, and have an approved flood hazard area permit.

## VII. NONCONFORMING STRUCTURES AND USES IN RIPARIAN ZONES

Nonconforming structures and uses of land within the riparian zone are subject to the following requirements:

- A. Legally existing but nonconforming structures or uses may be continued.
- B. Any proposed enlargement or expansion of the building footprint within the riparian zone of a C1 water shall comply with the standards in the Stormwater Management rules at N.J.A.C. 7:8-5.5(h) and the Flood Hazard Area Control Act rules, N.J.A.C. 7:13.
- C. For all other riparian zones:
  1. Encroachment within the riparian zone shall only be allowed where previous development or disturbance has occurred and shall be in conformance with the Stormwater Management rules, N.J.A.C. 7:8, and the Flood Hazard Area Control Act rules, N.J.A.C. 7:13.
  2. Existing impervious cover shall not be increased within the riparian zone as a result of encroachments where previous development or disturbances have occurred.
  3. Discontinued nonconforming uses may be resumed any time within one year from such discontinuance but not thereafter when showing clear indications of abandonment. No change or resumption shall be permitted that is more detrimental to the riparian zone, as

## RIPARIAN ZONE MODEL ORDINANCE

measured against the intent and purpose under Section I., than the existing or former nonconforming use. This one-year time frame shall not apply to agricultural uses that are following prescribed Best Management Practices for crop rotation. However, resumption of agricultural uses must be strictly confined to the extent of disturbance existing at the time of adoption of this ordinance.

### **VIII. USES PROHIBITED IN RIPARIAN ZONES**

- A. Any use within a riparian zone of a C1 water shall comply with the standards in the Stormwater Management rules at N.J.A.C. 7:8-5.5(h) and the Flood Hazard Area Control Act rules, N.J.A.C. 7:13.
- B. For other riparian zones, any use or activity not specifically authorized in Section V. or Section VII. shall be prohibited within the riparian zone. By way of example, the following activities and facilities are prohibited:
  - 1. Removal or clear-cutting of trees and other vegetation or soil disturbance such as grading, except for selective vegetation removal for the purpose of stream or riparian area stabilization or restoration projects that require vegetation removal or grading prior to implementation.
  - 2. Storage of any hazardous or noxious materials.
  - 3. Use of fertilizers, pesticides, herbicides, and/or other chemicals in excess of prescribed industry standards or the recommendations of the Soil Conservation District.
  - 4. Roads or driveways, except where permitted in compliance with Section V.
  - 5. Motor or wheeled vehicle traffic in any area, except as permitted by this Ordinance.
  - 6. Parking lots.
  - 7. Any type of permanent structure, except structures needed for a use permitted by Section V.
  - 8. New subsurface sewage disposal system areas. The expansion and replacement of existing subsurface sewage disposal system areas for existing uses is permitted.
  - 9. Residential grounds or lawns, except as otherwise permitted pursuant to this Ordinance.

### **IX. ACTIVITIES PERMITTED IN RIPARIAN ZONES IN THE CASE OF NO REASONABLE OR PRUDENT ALTERNATIVE OR EXTREME HARDSHIP**

- A. For riparian zones in C1 waters, requests for exemptions must be authorized by the New Jersey Department of Environmental Protection, as per the Stormwater Management rules at N.J.A.C. 7:8-5.5(h) and the Flood Hazard Area Control Act rules, N.J.A.C. 7:13.
- B. For other riparian zones, hardship variances may be granted by the Zoning Board of Adjustment in cases of a preexisting lot (existing at the time of adoption of this ordinance) when there is insufficient room outside the riparian zone for uses permitted by the underlying zoning and there is no other reasonable or prudent alternative to placement in the riparian zone, including obtaining variances from setback or other requirements that would allow conformance with the riparian zone requirements, and provided the following demonstrations are made:
  - 1. An applicant shall be deemed to have established the existence of an extreme economic hardship, if the subject property is not capable of yielding a reasonable economic return if its present use is continued or if it is developed in accordance with provisions of this

## RIPARIAN ZONE MODEL ORDINANCE

ordinance and that this inability to yield a reasonable economic return results from unique circumstances peculiar to the subject property which:

- a. Do not apply to or affect other property in the immediate vicinity;
  - b. Relate to or arise out of the characteristics of the subject property because of the particular physical surroundings, shape or topographical conditions of the property involved, rather than the personal situations of the applicant; and are not the result of any action or inaction by the applicant or the owner or his predecessors in title.
  - c. The necessity of acquiring additional land to locate development outside the riparian zone shall not be considered an economic hardship unless the applicant can demonstrate that there is no adjacent land that is reasonably available or could be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity.
2. An applicant shall be deemed to have established compelling public need if the applicant demonstrates, based on specific facts that one of the following applies:
    - a. The proposed project will serve an essential public health or safety need;
    - b. The proposed use is required to serve an existing public health or safety need; or
    - c. There is no alternative available to meet the established public health or safety need.
  3. A variance can only be granted if it is shown that the activity is in conformance with all applicable local, state, and federal regulations, including but not limited to the Stormwater Management rules, N.J.A.C. 7:8, and the Flood Hazard Area Control Act rules, N.J.A.C. 7:13, and that the exception granted is the minimum relief necessary to relieve the hardship.
- C. If such an exception is granted, the applicant shall rehabilitate an environmentally degraded riparian zone area within or adjacent to the same site, and at least equivalent in size to the riparian zone reduction permitted, or, if not possible, rehabilitate or expand a riparian zone area at least equivalent in size within a nearby site and, if available, within the same watershed. Rehabilitation shall include reforestation, stream bank stabilization and removal of debris, in accordance with a Riparian Zone Management Plan, as described in Section X below.

*[The municipality may require a financial contribution be made to an Open Space or Municipal Stormwater Management Plan mitigation plan fund in exchange for this requirement.]*

### **X. RIPARIAN ZONE MANAGEMENT PLAN**

- A. Within any riparian zone, no construction, development, use, activity, or encroachment shall be permitted unless the effects of such development are accompanied by preparation, approval, and implementation of a Riparian Zone Management Plan.
- B. The landowner, applicant, or developer shall submit to *[municipal contact]*, or its appointed representative, a Riparian Zone Management Plan prepared by an environmental professional, professional engineer or other qualified professional which fully evaluates the effects of any proposed uses on the riparian zone. The Riparian Zone Management Plan shall identify the existing conditions including:
  1. Existing vegetation;
  2. Field delineated surface water bodies;
  3. Field delineated wetlands;
  4. The 100-year floodplain;

RIPARIAN ZONE MODEL ORDINANCE

5. Flood Hazard Areas, including floodway and flood fringe areas, as delineated by the New Jersey Department of Environmental Protection;
6. Soil classifications as found on Soil Surveys;
7. Existing subdrainage areas of site with HUC (Hydrologic Unit Code) 14 designations;
8. Slopes in each subdrainage area segmented into sections of slopes less than 15 %; above 15 % but less than 20%; and steep slopes greater than 20%.

The proposed plan shall describe all proposed uses/activities, and fully evaluate the effects of all proposed uses/activities in a riparian zone, and all proposed management techniques, including proposed vegetation and any other measures necessary to offset disturbances to the riparian zone. A discussion of activities proposed as well as management techniques proposed to offset disturbances and/or enhance the site to improve the riparian zone's ability to function effectively as a riparian zone shall also be included with the Riparian Zone Management Plan submittal to *[municipality]*.

- C. The Plan shall be reviewed and must be approved by the Engineer of *[municipality]*, in consultation with the Environmental Commission, as part of the subdivision and land development process.
- D. The Riparian Zone Management Plan must include management provisions in narrative and/or graphic form specifying:
  1. The manner in which the area within the riparian zone will be owned and by whom it will be managed and maintained.
  2. The conservation and/or land management techniques and practices that will be used to conserve and protect the riparian zone, as applicable.
  3. The professional and personnel resources that are expected to be necessary, in order to maintain and manage the riparian zone.
  4. A revegetation plan, if applicable, that includes: three (3) layers of vegetation, including herbaceous plants that serve as ground cover, understory shrubs, and trees that when fully mature, will form an overhead canopy. Vegetation selected must be native, non-invasive species, and consistent with the soil, slope and moisture conditions of the site. The revegetation plan shall be prepared by a qualified environmental professional, landscape architect, or professional engineer, and shall be subject to the approval of the Engineer of *[municipality]*, in consultation with the Environmental Commission. Dominant vegetation in the Riparian Zone Management Plan shall consist of plant species that are suited to the riparian zone environment. The Engineer of *[municipality]* may require species suitability to be verified by qualified experts from the Soil Conservation District, Natural Resources Conservation Service, New Jersey Department of Environmental Protection, US Fish and Wildlife Service and/or State or Federal forest agencies.
- E. A Riparian Zone Management Plan is not required where the riparian zone is not being disturbed and conservation easements/deed restrictions are applied to ensure there will be no future clearing or disturbance of the riparian zone.
- F. Performance of the Riparian Zone Management Plan shall be guaranteed for *[municipality to insert length of time. Minimum of two years suggested.]* by a surety, such as a bond, cash or letter of credit, which shall be provided to the *[municipality]* prior to the *[municipality]* issuing any permits or approving any uses relating to the applicable use or activity.

**XI. BOUNDARY INTERPRETATION, APPEALS PROCEDURES, INSPECTIONS, CONFLICTS, SEVERABILITY**

RIPARIAN ZONE MODEL ORDINANCE

- A. When a landowner or applicant disputes the boundaries of a riparian zone, or the defined bank-full flow or level, the landowner or applicant shall submit evidence to *[municipal contact]* that describes the riparian zone, presents the landowner or applicant's proposed riparian zone delineation, and presents all justification for the proposed boundary change, including but not limited to, a verification issued under the Flood Hazard Area Control Act rules at N.J.A.C. 7:13-6, or an approval from the New Jersey Department of Environmental Protection to encroach within the Special Water Resource Protection Area (SWRPA) of a C1 water pursuant to the Stormwater Management rules at N.J.A.C. 7:8-5.5(h)1ii.
- B. Within 45 days of a complete submission of Section XI.A above, the Engineer of *[municipality]*, or appointed representative, shall evaluate all material submitted and shall make a written determination, a copy of which shall be submitted to *[municipal contact]* and the landowner or applicant. Failure to act within the 45-day period shall not be interpreted to be an approval of the proposed boundary change.
- C. Any party aggrieved by any such determination or other decision or determination under Section XI.B. may appeal to the *[municipal contact]* under the provisions of this ordinance. The party contesting the location of the riparian zone boundary shall have the burden of proof in case of any such appeal.
- D. Any party aggrieved by any determination or decision of the *[municipal contact]* under this Ordinance may appeal to the *[governing body]* of *[municipality]*. The party contesting the determination or decision shall have the burden of proof in case of any such appeal.
- E. Inspections:
1. Lands within or adjacent to an identified riparian zone shall be inspected by *[municipal representative]* when:
    - a. A subdivision or land development plan is submitted;
    - b. A building permit is requested;
    - c. A change or resumption of a nonconforming use is proposed;
    - d. A discontinued nonconforming use is resumed more than a year later, as described in Section VII.
  2. The riparian zone may also be inspected periodically by representatives from *[municipality]* if excessive or potentially problematic erosion is present, other problems are discovered, or at any time when the presence of an unauthorized activity or structure is brought to the attention of municipal officials or when the downstream surface waters are indicating reduction in quality.

*[Inspections are meant to be conducted on an as-needed basis, should the township feel that a problem exists. All inspections should be in accordance with local, state and federal requirements for property owner notification and permission.]*

*[The township is not expected to conduct monitoring, but rather, is being given the ability to react to changes in water quality that are brought to light by either the Department or another reputable data collector.]*
- F. Conflicts: All other ordinances, parts of ordinances, or other local requirements that are inconsistent or in conflict with this ordinance are hereby superseded to the extent of any inconsistency or conflict, and the provisions of this ordinance apply.
- G. Severability:
1. Interpretation: This Ordinance shall be so construed as not to conflict with any provision of New Jersey or Federal law.

RIPARIAN ZONE MODEL ORDINANCE

2. Notwithstanding that any provision of this Ordinance is held to be invalid or unconstitutional by a court of competent jurisdiction, all remaining provisions of the Ordinance shall continue to be of full force and effect.
3. The provisions of this Ordinance shall be cumulative with, and not in substitution for, all other applicable zoning, planning and land use regulations.

**XII. ENFORCEMENT**

A prompt investigation shall be made by the appropriate personnel of *[municipality]*, of any person or entity believed to be in violation hereof. If, upon inspection, a condition which is in violation of this Ordinance is discovered, a civil action in the Special Part of the Superior Court, or in the Superior Court, if the primary relief sought is injunctive or if penalties may exceed the jurisdictional limit of the Special Civil Part, by the filing and serving of appropriate process. Nothing in this Ordinance shall be construed to preclude the right of *[municipality]*, pursuant to N.J.S.A 26:3A2-25, to initiate legal proceedings hereunder in Municipal Court. The violation of any section or subsection of this Ordinance shall constitute a separate and distinct offense independent of the violation of any other section or subsection, or of any order issued pursuant to this Ordinance. Each day a violation continues shall be considered a separate offense.

*[The municipality should include a discussion of compliance and enforcement actions taken in the event of non-compliance.]*

**XIII. EFFECTIVE DATE**

This Ordinance shall take effect upon final adoption and publication in accordance with the law on *[date]*.