

<b>PROJECT NAME:</b>	Riparian Area Protection through State Regulations, Local Plans and Ordinance	<b>PRIORITY:</b>	<b>3b</b>
<b>TYPE:</b>	Quality, Quantity, Erosion Control, Public Safety		

**1. ISSUES AND CONCERNS:**

*Surface Water and Riparian Areas of the Raritan River Basin: A Technical Report for the Raritan Basin Watershed Management Project* defines a riparian area as “...wildlife passage corridor, wetlands and wetland transition areas, flood prone areas, hydric (riparian) soils, all of which overlap significantly...” Riparian areas are important landscape features because they remove pollutants from stormwater runoff, infiltrate stormwater, reduce erosion, control sedimentation, stabilize stream banks, maintain base flows, provide habitat, furnish scenic value and recreational opportunities, and serve to maintain and restore the physical, chemical and biological integrity of the stream.

Federal, state and local regulations impose restrictions on the uses and activities permitted in riparian areas for proposed developments. Federal wetlands regulations limit dredge and fill activities in the Creek and adjacent wetlands. New residential construction is limited through the both federal and state floodplain regulations. The state has soil erosion and sediment control regulations, but single-family homes, the most likely development in the watershed, are typically exempt. The 2007 proposed Flood Hazard Area rules will also require a 300 –foot buffer around the stream. In the 2007 Water Quality Management Planning Rules, the NJDEP proposed that compliance with the riparian zone standard be demonstrated by ordinance adoption by the municipalities within a wastewater management planning area. The ordinance would prevent, with few exceptions, new disturbance for projects or activities. A more detailed summary of the pertinent federal and state regulations is found in Attachment A.

Given the overlap in jurisdiction one could assume that riparian areas in the State of New Jersey are adequately protected. However, most regulations use fixed buffer widths to approximate the protection needs of riparian areas and do not regulate activities in riparian buffers that have already been developed. Stronger local regulations may be appropriate in the Mulhockaway Creek watershed to restore the stream’s designated uses. Examples of activities that could be regulated include, but are not limited to, removal or clear-cutting of trees and vegetation; storage of hazardous or noxious materials; use of fertilizers or pesticides; motor vehicle traffic (e.g. all terrain vehicles), permanent structures (e.g. sheds, gazebos); and, residential grounds and lawns.

**2. EXISTING CONDITION BASED ON A REGULATORY REVIEW:**

Approximately 22 percent of the historic riparian area in the watershed (600 of 2,700 acres) has been converted to either agricultural or urban land uses based on NJDEP’s 2002 land use data. The Mulhockaway Creek’s status as a Category One stream, a special protection waterbody, requires 300-foot buffers. However, the buffer area can be reduced to 150-foot in previously disturbed areas. Development projects that are not regulated include those that are not subject to subdivision or site plan approval, earth disturbance activities of less than one acre and new impervious surface less than 0.25 acre.

Regulatory practices in the Mulhockaway Creek watershed are reviewed below to assess the degree to which riparian corridors are threatened.

**Union Township:** The policies of the Township Master Plan, Conservation Plan Element (April 2000) seek to preserve ecological resources “by encouraging land development which preserves natural amenities and does not aggravate problems affecting the Township and water quality of the Spruce Run Reservoir.” (p. B7-1). The plan does not specifically identify riparian areas as an ecological resource. The Township’s Natural Resource Inventory (October 17, 2003) lists floodplains and wetlands but does not inventory riparian areas per se. The Township Code provides, “All applications for subdivision and site plan approval, or building permits (Underscore added) shall include maps delineating

the natural and historic resources...” (Section 30-6.2 p. 3197) “Resources” include floodplains, floodplain soils, wetlands, shorelines, and floodplain woodlands (Palustrine Association). Section 30-6.3b (p.3199) prohibits disturbance in floodplains, floodplain soils, and wetlands and limits disturbance to 30 percent on shorelines and 5 percent in floodplain woodlands. Section 30-6.4a.3 (p.3203) requires a soil erosion and sedimentation control plan where 5,000 sq. ft. of land will be disturbed. This includes disturbances on existing single-family lots and is, therefore, more stringent than Soil Conservation District standards.

**Bethlehem Township:** The Township Master Plan (June, 1984) does not list riparian areas as critical. The Environmental Resource Inventory (August 2005) records streams and wetlands but, like Union Township, does not inventory riparian areas per se. Critical areas associated with riparian areas, including wetlands and floodplains (FEMA identified 100-year floodplain), are only regulated for development that is subject to subdivision or site plan approval. Section 102-38A5 of the Township Code (p. 10291) states: “In addition to all other applicable township requirements, development on sites containing critical areas shall provide for the following: (a) No principal or accessory building shall be located in whole or in part, within a critical area...”

**3. PROPOSED SOLUTIONS:**

Clearly both Bethlehem Township and Union Township have adopted plans and implemented ordinances, which seek to protect the natural resources that make their respective communities unique. Both municipalities recognize the Mulhockaway Creek as an important feature, which warrants protection. However, riparian areas per se are not recognized as a critical environmental feature in either municipality. The State recognizes the Mulhockaway as a Category One stream and offers, through Stormwater, Wetlands, and Flood Hazard Area Regulations, protection from most new encroachments within 300 feet. In light of the extensive research conducted by the Department of Environmental Protection in proposing amendments to the Water Quality Management Planning Rules, a new emphasis is being placed on the value of riparian areas. Accordingly, it is recommended that each community amend its Master Plan and Environmental Resource Inventory to include a discussion of the value of riparian protection (see: [http://www.nj.gov/dep/njlood/docs/web\\_rule\\_8\\_31\\_06.pdf](http://www.nj.gov/dep/njlood/docs/web_rule_8_31_06.pdf), p.6 and 99) and using the definitions offered by the DEP, identify all riparian areas in each township. Further, Land Use Regulations in each community should be amended to prohibit encroachment into riparian areas, consistent with the proposed state rules. This additional level of protection would apply to land alterations and construction activity not otherwise regulated by the state. Examples of riparian protection ordinances are included in Attachment B.

**4. ANTICIPATED BENEFITS:**

Through the process required to adopt a riparian area protection ordinance, the community can be educated about the importance of riparian buffers, what activities are permissible with them, and what activities are prohibited. The ordinance itself serves as a policy statement with which the Townships can justify planning and zoning decisions as well as provide a mechanism for enforcement of protection measures.

**5. MAJOR IMPLEMENTATION ISSUES:**

A riparian area protection ordinance will restrict activities on existing property (e.g. single family lots), which are otherwise not subject to state approval or local Planning Board action. Restricted activities might be construed as a “taking”, so the municipal attorney should be consulted about the language and proposed restrictions within the ordinance. An added level of review and administration from municipal zoning and building officials may be required for new developments.

COMPONENT	DESCRIPTION	ESTIMATED COSTS
Master Plan Amendments	Plan amendment preparation, legal review, advertising	\$12,000
Environmental Resource Inventory Amendments	Inventory amendment preparation, legal review, advertising	\$5,000
Ordinance Amendments	Ordinance preparation, legal review, advertising	\$12,000
	<b>TOTAL COST:</b>	\$29,000
	Potential Funding Source for project implementation (cost sharing may be required).	ANJEC, DEP, DCA, Municipal

## Attachment A

### Federal Regulations:

- 1.) Federal Wetlands. Under the provisions of the Clean Water Act, section 404, the Army Corps of Engineers has jurisdiction over dredge and fill activities in navigable watercourses and adjacent wetlands. However, on March 2, 1994, the NJ Department of Environmental Protection assumed responsibility for administering the Federal wetlands program in delegable waters, as defined at N.J.A.C. [7:7A-1.4](#). The Mulhockaway is a delegable waterway.
- 2.) Floodplain. The federal Emergency Management Agency (FEMA) offers National Flood Insurance to communities that adopt minimum floodplain management regulations. New residential construction must be elevated above the base flood elevation (100-year floodplain). Non-residential structures must be elevated or flood proofed to the 100-year floodplain. New Jersey's floodplain regulations meet or exceed FEMA requirements and residents in flood plains of both Bethlehem and Union Townships are eligible for flood insurance. FEMA regulations do not prohibit non-structural activities (clearing vegetation, parking lots, etc.) in floodplains.

### State Regulations:

- 1.) Soil Erosion and Sedimentation Control. County Soil Conservation Districts review projects for compliance with N.J.S.A. 4:24-39 The Soil Erosion and Sedimentation Control Act. "Project" means any disturbance of more than 5,000 square feet of the surface area of land (1) for the accommodation of construction for which the State Uniform Construction Code would require a construction permit, except that the construction of a single-family dwelling unit shall not be deemed a "project" under this act unless such unit is part of a proposed subdivision, site plan, conditional use, zoning variance, planned development or construction permit application involving two or more such single-family dwelling units, (2) for the demolition of one or more structures, (3) for the construction of a parking lot, (4) for the construction of a public facility, (5) for the operation of any mining or quarrying activity, or (6) for the clearing or grading of any land for other than agricultural or horticultural purposes. (Underscore added). **Note: The most likely future development in the watershed is single family homes.**
- 2.) Special Water Resources Protection. The Mulhockaway is a Category one (C-1) stream. (Waterways can be designated C-1 because of exceptional ecological significance, exceptional water supply significance, exceptional recreational significance, exceptional shellfish resource, or exceptional fisheries resource.) The C-1 designation provides additional protections to waterbodies that help prevent water quality degradation and discourage development where it would impair or destroy natural resources and environmental quality. Accordingly, the Stormwater Management Rules (N.J.A.C. 7:8) apply a three hundred foot (measured from top-of-bank) no disturbance buffer to "major developments." The buffer area can be reduced to one hundred and fifty feet in previously disturbed areas. Development projects that are not subject to subdivision or site plan approval, earth disturbance activities of less than one acre and new impervious surface less than 0.25 acre, are not regulated. (See: N.J.A.C. 7:8. also see Administrative Order No. 2007-1 @ <http://www.nj.gov/dep/watershedmgt/DOCS/FunctionalValueAnalysis1-2-07.pdf>)
- 3.) Floodprone areas. New Jersey regulates construction in floodplains under the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., and its implementing rules at N.J.A.C. 7:13. While a recent proposal (See 5 below) will significantly increase the size of stream buffers, the current Section 7:13-1.3 (a) states, "All development within the larger of the following areas shall require a permit under this chapter unless specifically exempted as provided in this chapter: 1.) The flood plain, as defined at [7:13-1.2](#); 2.) Twenty-five feet back from the top of the channel bank; or 3.) Fifty feet back from the top of the channel bank along waters
  - i. Containing deposits of acid-producing soils as defined in 7:13-5.10;
  - ii. Classified as Category One, FW-1 trout-associated, or, FW-2 trout-associated;
  - iii. Which are a critical part of the habitat supporting a threatened or endangered species of plant or a current population of any species of threatened or endangered animal on a permanent or temporary basis, for any purpose such as resting, breeding or feeding, during any portion of its life-cycle; or

- iv. Located within documented, historic habitat for threatened or endangered species of animals, which habitat remains suitable for breeding, resting or feeding by those species of animal during any portion of its life-cycle.”

4.) Proposed Flood Hazard Area Control Rules. “Given the many important ecological functions that a healthy riparian zone provides, adequately preserving such areas is essential to protecting New Jersey’s natural resources and water supply. The Department has determined that the width of the area protected under the existing rules does not ensure that these many benefits will be provided. The proposed rules, therefore, expand the size of this regulated area. Under existing N.J.A.C. 7:13-1.3(a) 2 and 3, this regulated area extends either 25 feet or 50 feet from the top of the bank of a stream channel, depending on the type of stream and the resources present. The proposed rules expand this regulated area to 300 feet along Category One waters and all upstream tributaries within the same HUC-14 watershed; 150 feet along all upstream tributaries to trout production waters, trout maintenance waters and tributaries within one mile upstream, waters flowing through areas that support certain threatened or endangered species and tributaries within one mile upstream, and waters that flow through areas that contain acid producing soils; and 50 feet along all other waters. It is noted that the existing Stormwater Management rules at N.J.A.C. 7:8-5.5(h) establish a 300-foot Special Water Resource Protection Area along Category One waters and certain tributaries only when a major development, as defined at N.J.A.C. 7:8-1.2, is proposed. The 300-foot riparian zone proposed under this chapter, however, will apply to any activity that requires approval under this chapter, which includes a larger set of activities than that which is regulated under the Stormwater Management rules.”(See: [http://www.nj.gov/dep/njflood/docs/web\\_rule\\_8\\_31\\_06.pdf](http://www.nj.gov/dep/njflood/docs/web_rule_8_31_06.pdf)).

5.) Wetlands protection (including transition areas) is the exclusive jurisdiction of the State of New Jersey. Local jurisdiction is preempted by N.J.S.A.13:9 B-30.

*“Exclusive regulation by this act; exception. It is the intent of the Legislature that the program established by this act for the regulation of freshwater wetlands constitute the only program for this regulation in the State except to the extent that these areas are regulated consistent with the provisions of section 6 of this act. To this end no municipality, county, or political subdivision thereof, shall enact, subsequent to the effective date of this act, any law, ordinance, or rules or regulations regulating freshwater wetlands, and further, this act, on and subsequent to its effective date, shall supersede any law or ordinance regulating freshwater wetlands enacted prior to the effective date of this act. Between the enactment and effective date of this act, no municipality, county, or political subdivision thereof shall enact any law, ordinance, or rule and regulation requiring a transition area adjacent to a freshwater wetland; provided however, that any such law, ordinance, or rule and regulation adopted prior to the enactment of this act shall be valid until the effective date of this act (underscore added).”*

6.) Proposed Water Quality Management Planning Rules. Section 7:15-5.25(g) 2i requires 300-foot riparian areas adjacent to category-one streams. At N.J.A.C. 7:15-5.25(g) 3, the Department [of Environmental Protection] proposes that compliance with the riparian zone standard be demonstrated by providing evidence of an ordinance adopted by the municipalities within a wastewater management planning area which prevent, with few exceptions, new disturbance for projects or activities. Exceptions include redevelopment within the limits of existing impervious surfaces and new development necessary to 1) protect public health, safety or welfare, such as to clean up a contaminated site; 2) to provide an environmental benefit, such as a stream bank stabilization project; or 3) to prevent extraordinary hardship. This could be in terms of aspects peculiar to the property, so as to allow pedestrian access to a stream in a homeowner’s back yard or to build ancillary structures such as deck or pool where there is no alternative outside the riparian zone. Or, it could be in terms of economic hardship, provided the hardship was not created by the property owner but would not permit a minimum economically viable use of the property based upon reasonable investment. This would allow construction of a single family home on a property that is wholly contained within the riparian zone where the lot was in existence on the effective date of the rules. The stated exceptions recognize that some encroachments into riparian zones are unavoidable or, in the case of redevelopment, encroachment already exists. Redevelopment offers an opportunity to mitigate the effects of existing disturbance through site designs that re-establish a portion of the riparian zone as part of the redevelopment concept.

(See: <http://www.nj.gov/dep/rules/proposals/052107a.pdf>)

## Attachement B: Examples of Riparian Protection Ordinances

The following ordinances were reproduced from:

<http://archive.publicnoticeads.com/NJ/search/searchnotices.asp>

Original copies may be requested through the Municipal Clerk of each municipality. As with any municipal ordinance, the municipal attorney should be consulted to determine appropriate language.

### BOROUGH OF FAIR HAVEN

#### ORDINANCE NO. 9-26-05 C

AN ORDINANCE OF THE COUNCIL OF THE BOROUGH OF FAIR HAVEN IN THE COUNTY OF MONMOUTH AMENDING AND SUPPLEMENTING THE FAIR HAVEN BOROUGH CODE, TITLE 16 LAND DEVELOPMENT CODE, CHAPTER 16.28 GENERAL ZONING PROVISIONS, ADDING SECTION 16.28.310 RIPARIAN BUFFERS, PERTAINING TO THE PRESERVATION AND MAINTENANCE OF RIPARIAN CORRIDOR BUFFERS. BE IT ORDAINED by the Council of the Borough of Fair Haven, in the County of Monmouth, in the State of New Jersey, as follows:

I.

The purpose of this Ordinance is to set forth procedures and regulations for the preservation and protection of riparian corridor buffers, adequate for the protection of water quality, wildlife corridors, and opportunities for recreational purposes, as well as to aid in meeting the goals of the Borough's Stormwater Management Plan.

II

NOTE: The S. of Chapter 16.28 that is to be amended or supplemented is Section 16.28.310 Riparian Buffers. All additions are shown in bold italics with underlines. The deletions are shown as strikeovers in bold italics. Sections of Chapter 16.28.310 that will remain unchanged are shown in normal type.

Section 16.28.310 Riparian Buffers is amended and supplemented as follows:

16.28.310 Riparian Buffers.

#### A. Purpose

(1) Riparian Buffer protection has significant state, regional and municipal support in New Jersey. The State Development and Redevelopment Plan (SDRP, adopted June 1992) calls for the protection and preservation of large, continuous tracts and corridors of open space land which contain important biological resources/networks. Additionally, the SDRP calls for the maintenance of riparian corridor buffers adequate for the protection of water quality, wildlife corridors and opportunities for recreational activities.

(2) State support for stream corridor protection is strengthened by regulatory programs such as the Surface Water Quality Standards NJAC 7:9B Special Resource Protection Areas, State Freshwater Wetlands Protection Regulations and state Flood Hazard Area Regulations, and by Stream Encroachment Permits, which govern all development activities within freshwater wetlands areas, surface waters and flood hazard of the state. These regulations are complemented by water quality management initiatives, such as area-wide quality management plans, including wastewater management plans, and New Jersey Pollution Discharge Elimination System Regulations, which primarily control pollutant input to streams through point sources.

(3) Riparian Corridor protection is an essential aspect of the intent and purposes stated under New Jersey Municipal Land Use Law, which is the legal foundation for the municipal planning and zoning process. Riparian buffer protection is critical to meeting the goals and objectives of the Borough's Stormwater Management Plan and the provisions of the Borough's Municipal Stormwater Discharge Permit. B. Definitions. As used in this S. , the following terms shall have the meanings indicated:

ACTIVITY - Any land disturbance, including any development for which an application for development is

necessary.

**IMPERVIOUS SURFACE** - Any paved, hardened or structural surface, which does not allow for complete on-site infiltration of precipitation. Such surfaces include but are not limited to buildings, driveways, streets, parking lots, swimming pools, dams, tennis courts, concrete pavers, brick pavers and any other structures that meet the above definition.

**LAND-DISTRURBING ACTIVITY** - Any grading, scraping, excavating or filling of land, clearing of vegetation, and any construction or additions to the footprint of a structure.

**ONE-HUNDRED-YEAR FLOOD LINE** - The line formed by following the outside boundaries of the area inundated by a one-hundred year flood. A one-hundred-year flood is estimated to have one-percent chance or one chance in 100 of being equaled or exceeded in any one year. The one-hundred-year floodline shall be determined by reference to the most recent flood insurance rate maps promulgated by the Federal Emergency Management Agency or such other documentation that may be determined valid by the Borough Engineer.

**RIPARIAN CORRIDOR** - The land area that acts as a transition between the aquatic and upland ecosystems.

**RIPARIAN BUFFER** - The area of land within a minimum width of 300 feet located adjacent to the mass of water line of the Navesink River and a minimum of 25 feet up to 50 feet for streams in acid producing soils on either side to permanent or intermittent streams, lakes, and ponds, measured as a line extending perpendicularly from the one-hundred-year floodplain delineation. If there is no one-hundred-year flood line delineated, the distance shall be measured outward from the top of the bank of the stream channel. If slopes greater than 10% abut the outer boundary of the stream corridor, the area of such slopes shall also be included as in the stream corridor.

**STREAM (OR RIVER)** - Any perennial stream or river (or portion thereof) that is portrayed as a solid line on a United States Department of Agriculture Soil Survey Map of the most recent edition; and any intermittent stream or river (or portion thereof) that is portrayed as a dashed line on a United States Department of Agriculture Soil Survey Map of the most recent edition; and any lake or impoundment that does not lie entirely within a single parcel of land. For the purpose of this S. , this buffer does not apply to man-made stormwater management facilities, fountains and/or ornamental ponds.

**TOP OF BANK** - The upper ridgeline of the confining channel as defined by the Rosgen stream classification method.C. Applicability

- (1) For all activities, a riparian buffer shall be provided along all streams or water (as defined),
- (2) Where a riparian buffer easement has been recorded on a residential parcel, the property owner has the right to the development, redevelopment, or alteration of a single-family home, but no disturbance or construction is permitted in the recorded buffer.
- (3) Where a riparian buffer easement has not been recorded on a residential parcel, the existing property owner has the right to the development, redevelopment, or alteration of a single-family home and appurtenances where the proposed improvements in the riparian buffer are less than a disturbance of 10,000 square feet or creation of less than 3,500 square feet of additional impervious surface and the riparian buffer restrictions would present an unfair hardship to the applicant.D. Activities and Uses.

- (1) Activities permitted in riparian buffers. Riparian buffer shall remain in their natural state, with no clearing or cutting of trees and brush (except for removal of dead vegetation and pruning for reasons of public safety), no altering of watercourses, regrading or construction except for the following activities:(a) Wildlife sanctuaries, woodland preserves and arboretums, but excluding enclosed structures;(b) Game farms, fish hatcheries and fishing reserves, operated for the protection and propagation of wildlife, but excluding enclosed structures;(c) Unpaved hiking, bicycle and bridle trails, and public viewing areas;(d) Fishing areas;
- (e) Public parks, roadways or projects;
- (f) Stream cleaning and stream rehabilitation work undertaken to improve hydraulics or protect public health;(g) Culverts as needed, provided that they cross the buffer as directly as practical;(h) Utility transmission lines

installed during periods of low stream flow in accordance with soil erosion and sediment control practice and approved by the Freehold Soil Conservation District in a manner which will not impede flows or cause ponding of water;(i) Structures comprising part of an identified regional flood detention project.(2) Riparian buffer encroachment. For all activities, encroachment within the buffer area shall only be allowed where previous development or disturbance has resulted in the placement of impervious surfaces, such as roadways, parking lots, swimming pools, or buildings. The encroachment shall only be allowed to continue where the applicant demonstrates that the functional value and overall condition of the buffer will be maintained to the maximum extent practicable. The appropriate land use board may require compensating areas for the encroachments. (3) Prohibited activities. All uses shall be prohibited within a recorded riparian buffer except as permitted in SubS. D(1) and (2) above.(a) Use of fertilizers, pesticides, or other chemicals by other than a government agency;(b) Vehicular traffic or excessive pedestrian traffic;(c) Removal or disturbance of vegetation inconsistent with erosion control and buffering objectives;(d) Any solid or hazardous waste facilities, including but not limited to, sanitary landfills, transfer stations, and wastewater lagoons;(e) Junkyards, commercial and/or industrial storage facilities and open storage of vehicles and materials;(f) Mining; (g) Timber harvesting.E. Provisions governing activities.

(1) Submission requirements for all new development applications. An applicant for an activity adjacent to or within a riparian buffer shall submit to the municipality a map of the project delineating the following (at a scale of not greater than one inch - 100 feet) using the best available information:(a) One-hundred-year flood line; (b) State wetland boundary lines and wetland buffer boundary lines;(c) The riparian corridor buffer boundary and installed monument locations;(d) Any slopes greater than 10% within the site;(e) The location of all improvements and land disturbance, existing or proposed, to be located within any of the above boundaries;(f) All plat detail requirements as would otherwise be required for a site plan submission.(2) Submission requirements for applications with existing development. An applicant for an activity in a riparian buffer which exceeds the limits stated in SubS. C(3) above, shall submit to the municipality a map of the project site delineating the following (at a scale of not greater than one inch - 100 feet) using the best available information.(g) One-hundred-year flood line; (h) State wetland boundary lines and wetland buffer boundary lines;(i) The riparian corridor buffer boundary and installed monument locations; (j) Any slopes greater than 10% within the site;(k) The location of all improvements and land disturbance, existing or proposed, to be located within any of the above boundaries.(3) Regulations for any activities. Any application for development of activities within the riparian buffer is subject to the following regulations:(a) The applicant for any activity in a buffer shall rehabilitate any degraded areas within the buffer, in a manner acceptable to the Board or Borough Engineer, as the case may be.(b) The applicant shall also be required to accomplish to the satisfaction of the Borough Engineer all of the following:(1) Rehabilitate or cure the effect of the disturbance caused during construction;(2) Maintain the integrity of the surrounding habitat;(3) Maintain the existing ability of the buffer to function appropriately.(c) The applicant provides whatever additional measure are necessary to assure that areas designated as riparian buffers will be preserved and to prevent additional encroachments likely to occur as a result of the approval granted.(d) The Board, in the case of an application for development, and the Borough Engineer, in all other cases, may require conservation easements or deed restriction assuring there will be no further intrusion on the buffer than that permitted by the activity approved.F. Buffer width.

(1) The buffer width as defined shall be 300 feet located adjacent to the MHWL of the Navesink River or 25 feet (50 feet in acid soils) on either side to streams or waters (as defined) measured as a line extending perpendicularly from the one-hundred-year flood line or top of bank. (see definition)  
(2) All setback requirements for structures, parking areas, etc., shall be measured from the existing or proposed buffer limit, whichever is more restrictive.

(3) A deed of conservation easement shall be prepared and recorded. The easement shall be monumented in accordance with this chapter.G. Buffer vegetation.

(1) Objectives. Vegetation in the buffer shall consist of plants able to withstand periodic inundation of water after storms, as well as occasional drought during the summer months. Plant selection should favor native species that have multiple values, such as those suited for fruit, nesting, aesthetics, and tolerance to locally used herbicides. Tree and shrub species which may be alternate hosts to undesirable pests shall be avoided. Species diversity should be considered to avoid loss of function due to species specific pests. All new plantings shall be consistent with existing, healthy plant material.(a) Approved plants should:(4) Stabilize the ground from erosion;

(5) Produce shade to reduce pool and ripple warming whenever possible;(6) Enhance pollutant uptake;(7) Have very low maintenance since they may be difficult or impossible to access;(8) Provide food or cover for wildlife;(9) Be located to reduce pedestrian access to the deeper pools.(2) NJDEP lists frequently used plant species in a riparian buffer, which include:Asters (Aster)

Goldenrods (Solidago)

Beebalm (Monarda Didyma)

Bergamont (Mondarda Fistulosa)

Lobelias (Lobelia)

Coneflower (Rudbeckia)

Violets (Viola)

Lilies (Lilium)

Primrose (Oenothera)

Milkwort (Polygala)

Flatsedge (Cyperus)

Hollies (Ilex)

Lovegrass (Eragrostis)

Spirea (Spirea)

Serviceberry (Amelanchicr Arborea)

Nannyberry (Viburnum Lentago)

Sweet Pepperbush (Clethra Alnifolia)

Sweetbay Magnolia (Magnolia)

Hawthorns (Crategus)

Redbud (Cercus Canadensis)

Dogwoods (Cornus)

White Ash (Fraxinus Pennsyvanica)

Birch (Betula)

Sweetgum (Liquidambar Styraciflua)

American Beech (Fagus Grandifolia)

American Homwood

Red Maple (Acer Rubrum)The National Resource Conservation Service, USDA, publishes a listing of ""Native Plant Guide for Planting Along Streams and Ponds", which is made part of this chapter.

(3) Approval of the use of other plant material and the final design of plant material to be contained within the designated buffer area lies with the Borough Engineer, with reference to ""Native Plant Guide for Planting Along Streams and Ponds", prepared by the National Resource Conservation Service, USDA, and made part of this chapter.

The foregoing ordinance was introduced on first reading by the Governing Body of the Borough of Fair Haven at a meeting held on September 26, 2005 and will come up for final consideration and passage at a meeting of said governing body to be held on October 24, 2005 at 7:00 PM at the Municipal Building, 748 River Road, Fair Haven, New Jersey at which time and place all persons desiring to be heard thereon will be given the opportunity.

Julie L. Keizer, Borough Clerk

## **CITY OF BORDENTOWN**

### **NOTICE OF PENDING ORDINANCE**

The Ordinance published herewith was introduced and passed upon first reading at a meeting of the Board of Commissioners of the City of Bordentown, in the County of Burlington, New Jersey, held on September 10, 2007. It will be further considered for final passage after a public hearing thereon, at a meeting of said Board of Commissioners to be held at City Hall, in said City of Bordentown, on September 24, 2007 at 8:00 PM and during the week prior to and up to and including the date of such meeting, copies of said ordinance will be made available at the Clerk's Office in said City Hall to the members of the general public who shall request the same. Patricia D. Ryan, CMC

City Clerk

Municipal Finance Officer

CITY OF BORDENTOWN

ORDINANCE 2007-19

AN ORDINANCE AMENDING CHAPTER 237 OF THE CODE OF THE CITY OF BORDENTOWN ENTITLED, "STORMWATER MANAGEMENT" BY ADDING PART IV, "RIPARIAN BUFFER CONSERVATION ZONE"

I Intent and Purpose

II Statutory Authority

III Definitions

IV Establishment of Riparian Buffer Conservation Zones

V Uses Permitted in Riparian Buffer Conservation Zones

VI Performance Standards for Riparian Buffer

Conservation Zones

VII Nonconforming Structures and Uses in Riparian Buffer Conservation Zones

VIII Uses Prohibited in Riparian Buffer Conservation Zones

IX Activities Permitted in Riparian Buffer Conservation Zones in the Case of No Reasonable or Prudent Alternative or Extreme Hardship

X Riparian Buffer Conservation Zone Management Plan

XI Boundary Interpretation, Appeals Procedures, Inspections, Conflicts, Severability

XII Enforcement

XIII Effective Date

[The requirements set forth in this Ordinance are consistent with those found in the State of New Jersey's Stormwater Management Rule (N.J.A. C. 7:8).]

I. INTENT AND PURPOSE

The governing body of City of Bordentown 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 City of Bordentown, 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 Buffer Conservation Zones, and to provide for land use regulation therein in order to protect the streams, lakes, and other surface water bodies of City of Bordentown; to protect the water quality of watercourses, reservoirs, lakes, and other significant water resources within City of Bordentown; to protect the riparian and aquatic ecosystems of City of Bordentown; to provide for the environmentally sound use of the land resources of City of Bordentown, and to complement existing state, regional, county, and municipal stream corridor protection and management regulations and initiatives. 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 City of Bordentown;

- 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 sheet 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 (fallen leaves and twigs) and large woody debris (fallen trees and limbs) that provide food and habitat for small bottom dwelling 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, groundwater recharge zones, floodways, floodplains, springs, streams, wetlands, woodlands, and prime wildlife habitats.

## II. STATUTORY AUTHORITY

The municipality of the City of Bordentown 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. City of Bordentown 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 et seq.
- B. Water Quality Planning Act, N.J.S.A. 58:1 1A-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

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 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 Buffer Conservation Zone.

Category One (C1) Waters shall have the meaning ascribed to this term by the Surface Water Quality Standards at N.J.A.C. 7:9B-1.15, which have been identified for protection from degradation 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 means those waters not designated as Outstanding Natural Resource Waters or Category One in the Surface Water Quality Standards at N.J.A.C. 7:9B-1.15 for purposes of implementing the antidegradation policies set forth at N.J.A.C. 7:9B-1.5(d).

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 surface water drainage channels with definite bed and banks in which there is not a permanent flow of water. Streams shown as a dashed line on either the USGS topographic quadrangle maps or the USDA County Soil Survey Maps of the most recent edition that includes hydrography are included as intermittent streams.

Lake, pond, or reservoir means any impoundment, whether naturally occurring or created in whole or in part by the building of structures for the retention of surface water, excluding sedimentation control and stormwater retention/detention basins and ponds designed for treatment of wastewater.

Perennial stream means a stream that flows continuously throughout the year in most years. These streams usually appear as a blue line on USGS topographic quadrangle maps or on USDA County Soil Survey Maps.

Riparian Buffer Conservation Zone (RBCZ) means an area of land or water within or adjacent to a Surface Water Body within the municipality and designated on the Riparian Buffer Conservation Zone Map promulgated by City of Bordentown in accordance with Section IV of this Ordinance.

Riparian Buffer Conservation Zone Management Plan means a plan approved by the Engineer of City of Bordentown. 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 RBCZ. The plan shall identify existing conditions, all proposed activities, and all proposed management techniques, including any measures necessary to offset disturbances to any affected RBCZ.

Surface Water Body means any perennial stream, intermittent stream, lake, pond, or reservoir, as defined herein. In addition, any state open waters identified in a letter of interpretation issued by the New Jersey Department of Environmental Protection Land Use Regulation Program shall also be considered surface water bodies.

#### IV. ESTABLISHMENT OF RIPARIAN BUFFER CONSERVATION ZONES

A. Riparian Buffer Conservation Zones (RBCZs) shall be delineated as follows:

1. In the case of Category One (C1) waters, the RBCZ shall equal the Special Water Resource Protection Area, and shall be measured as defined at N.J.A.C. 7:8-5.5(h). Special Water Resource Protection Areas are established along all waters designated as C1 at N.J.A.C. 7:9B and perennial or intermittent streams that drain into or upstream of the C1 waters as shown on the USGS quadrangle map or in the County Soil Surveys within

the associated HUC 14 drainage.

2. For areas adjacent to surface water bodies designated Category Two Waters for Trout Production (FW2-TP) the RBCZ shall be measured from the defined edge of the intermittent or perennial stream, or centerline if the bank is not defined, and from the defined edge of a lake, pond or reservoir at bank-full flow or level, and shall extend 150 feet horizontally outward from the perpendicular. Where steep slopes (in excess of 10 percent) are located within the designated widths, the RBCZ shall be extended to include the entire distance of this sloped area.

For areas adjacent to other surface water bodies, the RBCZ shall be measured from the top of bank of an intermittent or perennial stream, or centerline if bank is not defined, and from the defined edge of a lake, pond or reservoir at bank-full flow or level, and shall extend 75 feet horizontally outward from the perpendicular. Where steep slopes (in excess of 15 percent) are located within the designated widths, the RBCZ shall be extended to include the entire distance of this sloped area to a maximum of 300 feet.

3. For areas adjacent to surface water bodies for which the Floodway has been delineated, the RBCZ shall cover the entire Floodway area, or the area described in Section IV.A. 1. or IV.A.2., whichever area has the greatest extent. Floodway delineations shall be based upon the State's adopted floodway delineations. However, 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.

B. An RBCZ 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 RBCZ 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

Subdivision/land development approval

C. A map of the RBCZs of the entire municipality of City of Bordentown, 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 1 of 1. Maps of the municipality on which these designations have been overlain shall be on file and maintained by the offices of the Clerk of City of Bordentown. This map conforms to all applicable laws, rules and regulations applicable to the creation, modification and promulgation of zoning maps.

D. It shall be the duty of the Engineer of City of Bordentown, every second year after the adoption of this Ordinance, to propose modifications to the map delineating Riparian Buffer Conservation 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 RBCZ map, to record all modifications to the RBCZ 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. Floodway delineations shall be based upon the State's adopted floodway delineations. However requests for alterations to the adopted delineations can be provided to the Department for consideration if site-specific information is available.

E. The applicant or designated representative shall be responsible for the initial determination of the presence of an RBCZ on a site, and for identifying the area on any plan submitted to the City of Bordentown 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.

F. The municipal Master Plan provides the legal basis for zoning and land use regulation at the local level. The technical foundation for local RBCZs in this municipality should be incorporated into the Master Plan. A technical report on the need for Riparian Buffer Conservation Zones in City of Bordentown may be adopted as part of the Master Plan (N.J.S.A 40:55D-28b(1 1)). The technical report should include the following information: a statement setting forth the rationale and need to protect RBCZs; reference to the methods used to designate and delineate RBCZs.

## V. USES PERMITTED IN RIPARIAN BUFFER CONSERVATION ZONES

A. For Category One (C1) RBCZs, permitted uses are governed by N.J.A.C. 7:8-5.5(h), unless otherwise exempt. If exempt from NJAC 7:8-5.5(h), the uses shall be governed by this ordinance as if the RBCZ was not a Category One (C1) RBCZ.

B. Any other RBCZ 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 RBCZs. No new construction, development, use, activity, encroachment, or structure shall take place in an RBCZ, except as specifically authorized in this Section. The following uses shall be permitted within an RBCZ:

1. Open space uses that are primarily passive in character shall be permitted by right to extend into an RBCZ, provided near stream vegetation is preserved. These uses do not require approval by the Zoning Enforcement Officer or compliance with an approved RBCZ 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 are acquired, and provided that any disturbance is offset by buffer improvements in compliance with an approved RBCZ 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 RBCZ Management Plan, or wetlands mitigation projects that have been approved by the Department of Environmental Protection, subject to approval by the Zoning Enforcement Officer and subject to compliance with an approved RBCZ Management Plan.

## VI. PERFORMANCE STANDARDS FOR RIPARIAN BUFFER CONSERVATION ZONES

A. All encroachments proposed into Category One (C1) RBCZs shall comply with the requirements at N.J.A.C. 7:8-5.5(h) and shall be subject to review and approval by the New Jersey Department of Environmental Protection, unless exempt. If exempt, the encroachment shall be subject to the provisions of VI. B below.

B. For all other RBCZs, 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 RBCZ to accommodate primary structures, any normal accessory uses appurtenant thereto, as well as all planned lawn areas.

2. Portions of lots within the RBCZ must be permanently restricted by deed or conservation easement held by City of Bordentown, its agent, or another public or private land conservation organization which has the ability to provide adequate protection to prevent adverse impacts within the RBCZ. 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 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 this chapter. 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 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 an RBCZ shall as a condition of any major subdivision or major site plan approval, provide for the vegetation or revegetation of any portions of the RBCZ 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 Buffer Conservation 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 RBCZ, provided that a deed restriction and/or conservation easement is applied which prohibits clearing or construction in the RBCZ.

5. All stormwater shall be discharged outside of but may flow through an RBCZ 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 an RBCZ cannot comply with the Standard For Off-Site Stability cited in Section VI.5, then the stabilization measures in accordance with the requirements of the above standards may be placed within the RBCZ, provided that:

- a. Stabilization measures shall not be placed closer than 50 feet from the top of the bank at bank-full flow or level of affected surface water bodies.
- b. The encroachment shall only be allowed where the applicant demonstrates that the functional value and overall conditions of the RBCZ will be maintained to the maximum extent practicable;
- c. A conceptual project design meeting shall be held with the appropriate municipal staff and Soil Conservation District staff to identify necessary stabilization measures; and
- d. All encroachments proposed under this section shall be subject to review and approval by the Administrative Authority.

## VII. NONCONFORMING STRUCTURES AND USES IN RIPARIAN BUFFER CONSERVATION ZONES

Nonconforming structures and uses of land within the RBCZ 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 a Category One (C1) RBCZ shall comply with the standards in N.J.A.C. 7:8-5.5(h).
- C. For all other RBCZs:

1. Encroachment within the RBCZ shall only be allowed where previous development or disturbance has occurred. Existing impervious cover shall not be increased within the RBCZ as a result of encroachments where previous development or disturbances have occurred.

2. 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 RBCZ, as 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 BUFFER CONSERVATION ZONES

A. Any use within a Category One (C1) RBCZ shall comply with the standards in N.J.A.C. 7:8-5.5(h).

B. For other RBCZs, any use or activity not specifically authorized in Section V or Section VII shall be prohibited within the RBCZ. 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 areas. The expansion and replacement of existing subsurface sewage disposal areas for existing uses is permitted.

9. Residential grounds or lawns, except as otherwise permitted pursuant to this Ordinance.

### IX. ACTIVITIES PERMITTED IN STREAM BUFFER CONSERVATION ZONES IN THE CASE OF NO REASONABLE OR PRUDENT ALTERNATIVE OR EXTREME HARDSHIP

A. For Category One (C1) RBCZs, requests for exemptions that fall under the purview of the Stormwater Management Rules must be authorized by the New Jersey Department of Environmental Protection, as per

N.J.A.C 7:8-5.5(h)1.ii.

B. For other RBCZs, 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 RBCZ for uses permitted by the underlying zoning and there is no other reasonable or prudent alternative to placement in the RBCZ, including obtaining variances from setback or other requirements that would allow conformance with the RBCZ 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 ordinance and that this inability to yield a reasonable economic return results from unique economic 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 RBCZ 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, and that the exception granted is the minimum relief necessary to relieve the hardship.

C. If the above demonstrations are made, then the encroachment of impervious surfaces (structures or pavement) otherwise permitted by the underlying zoning is permitted to the extent of 750 square feet total. Said encroachment is not permitted closer than 100 feet from the top of the bank at bank-full flow or level of Category Two Waters for Trout Production (FW2-TP), or closer than 50 feet from the top of the bank at bank-full flow or level of other surface water bodies.

D. If such an exception is granted, the applicant shall rehabilitate an environmentally degraded RBCZ area within or adjacent to the same site, and at least equivalent in size to the RBCZ reduction permitted, or, if not

possible, rehabilitate or expand an RBCZ 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 an RBCZ Management Plan, as described in Section X below.

## X. RIPARIAN BUFFER CONSERVATION ZONE MANAGEMENT PLAN

A. Within any RBCZ, 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 Buffer Conservation Zone Management Plan.

B. The landowner, applicant, or developer shall submit to [municipal contact], or its appointed representative, a Riparian Buffer Conservation 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 RBCZ. The Riparian Buffer Conservation 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;
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-14 (Hydrologic Unit Code) designations;
8. Slopes in each subdrainage area segmented into sections of slopes less than or equal to fifteen (15) percent; above fifteen percent but less than twenty (20) percent; and greater than twenty (20) percent.

The proposed plan shall describe all proposed uses/activities, and fully evaluate the effects of all proposed uses/activities in an RBCZ, and all proposed management techniques, including proposed vegetation and any other measures necessary to offset disturbances to the RBCZ. A discussion of activities proposed as well as management techniques proposed to offset disturbances and/or enhance the site to improve the RBCZ's ability to function effectively as an RBCZ shall also be included with the RBCZ Management Plan submittal to City of Bordentown.

C. The Plan shall be reviewed and must be approved by the Engineer of City of Bordentown, in consultation with the Environmental Commission, as part of the subdivision and land development process.

D. The Riparian Buffer Conservation Zone Management Plan must include management provisions in narrative and/or graphic form specifying:

1. The manner in which the area within the RBCZ 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 RBCZ, as applicable.

3. The professional and personnel resources that are expected to be necessary, in order to maintain and manage the RBCZ.

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 Municipal Engineer, in consultation with the Environmental Commission. Dominant vegetation in the Riparian Buffer Conservation Zone Management Plan shall consist of plant species that are suited to the stream buffer environment. The Engineer of City of Bordentown 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 Buffer Conservation Zone Management Plan is not required where the RBCZ is not being disturbed and conservation easements/deed restrictions are applied to ensure there will be no future clearing or disturbance of the RBCZ.

F. Performance of the Riparian Buffer Conservation Zone Management Plan shall be guaranteed a minimum of two years by a surety, such as a bond, cash or letter of credit, which shall be provided to the City of Bordentown prior to the City of Bordentown issuing any permits or approving any uses relating to the applicable use or activity.

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

A. When a landowner or applicant disputes the boundaries of an RBCZ, or the defined bank-full flow or level, the landowner or applicant shall submit evidence to City of Bordentown that describes the RBCZ, presents the landowner or applicant's proposed RBCZ delineation, and presents all justification for the proposed boundary change. For Category One (C1) RBCZs, the landowner or applicant must first obtain approval from the New Jersey Department of Environmental Protection. A decision from the Department must be included with the evidence submitted for municipal review.

B. Within 45 days of a complete submission of Section XI.A above, the Engineer of City of Bordentown, or appointed representative, shall evaluate all material submitted and shall make a written determination, a copy of which shall be submitted to City of Bordentown 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 City of Bordentown under the provisions of this ordinance. The party contesting the location of the RBCZ boundary shall have the burden of proof in case of any such appeal.

D. Any party aggrieved by any determination or decision of the City of Bordentown under this Ordinance may appeal to the Planning Board of City of Bordentown. 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 RBCZ shall be inspected by City of Bordentown 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 RBCZ may also be inspected periodically by representatives from City of Bordentown 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.

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.

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 City of Bordentown, 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 City of Bordentown, 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.

## XIII. EFFECTIVE DATE

This ordinance shall be in full force and effect immediately after final passage and publication according to law.  
\*\*\*\*\*

**TOWNSHIP OF READINGTON**

TO WHOM IT MAY CONCERN:  
 YOU ARE HEREBY NOTIFIED THAT AN ORDINANCE  
 ENTITLED:

AN ORDINANCE SUPPLEMENTING AND  
 AMENDING Volume II CHAPTER 148 ENTITLED  
 “LAND Development” of the CODE OF  
 THE TOWNSHIP OF Readington, 2000, AS  
 HERETOFORE SUPPLEMENTED AND  
 AMENDED, IS HEREBY SUPPLEMENTED AND  
 AMENDED

ORDINANCE #32-2006

BE IT ORDAINED, by the Township Committee  
 of the Township of Readington, County of  
 Hunterdon and State of New Jersey, as follows:

1. Section 148-9 entitled “Definitions” of Article  
 II entitled “Definition of Terms” is hereby supplemented  
 and amended to create a new definition  
 for Off-Line Ponds, clarify the definition of Stream  
 Channel and replace the definition of Stream Corridor,  
 as follows (deletions are indicated thus; additions  
 are indicated thus):

§ 148-9. Definitions.

**OFF-LINE PONDS**—Water bodies that are  
 isolated and do not discharge to a stream.

**STREAM CHANNEL** — The bed and banks  
 which confine and conduct continuously or intermittently  
 flowing water. This includes permanent  
 or intermittent watercourses shown on U.S.G.S.  
 quadrangle maps, or the Hunterdon County Soil  
 Survey, the Readington Township Environmental  
 Resources Inventory and features that have not  
 yet been mapped, but that are identified by the  
 Township as a stream channel or portion thereof  
 during the review of an application for development.

This definition excludes those water bodies  
 that are classified as off-line ponds. [Amended  
 11-4-2002 by Ord. No. 49-2002]

**STREAM CORRIDOR** — A stream corridor  
 shall include:

1. The stream channel.
2. The area within the one-hundred-year flood  
 line, if delineated.
3. The area extending outward from the  
 stream channel in any direction as measured

from either (a) the one-hundred-year flood line or (b) from the top of the stream bank (if the 100-year flood line is not delineated) according to the following classifications:

- A) 100 feet for non-trout waters
- B) 150 feet for trout maintenance waters
- C) 300 feet for Category One waters

4. Areas abutting the outer boundary of the composite area of the stream corridor delineated pursuant to 1 through 3 above that have of slopes of 15% or greater.

**STREAM CORRIDOR** — The stream channel (the bed and banks of a stream which confine and conduct continuously or intermittently flowing water), the area within the one-hundred-year flood line and a minimum of 100 feet from the one-hundred-year flood line, extending outward from the stream channel on both sides of the stream. If there is no one-hundred-year flood line delineated, the distance shall be measured outward from the top of the bank of the stream channel.

If slopes of 15% or greater abut the outer boundary of the stream corridor, the area of such slopes shall be included within the stream corridor.

[Amended 11-4-2002 by Ord. No. 49-2002]

2. Section 148-50 entitled “Critical Areas” of Article V entitled “Conditional Uses, Exceptions, Modifications and Critical Areas” is hereby supplemented and amended to remove the definition of Stream Corridor, as follows (deletions are indicated thus; additions are indicated thus):

§ 148-50. Critical areas.

B. Stream corridors. [Amended 2-20-2001 by Ord. No. 3-2001iEN; 11-4-2002 by Ord. No. 49-2002]

(1) The purpose of this section is to protect property from flooding; to reduce land development impacts on stream water quality and flows; to maintain quality of streams and improve the currently impaired streams in the Township; to protect significant ecological components of stream corridors such as wetlands, floodplains, woodlands, steep slopes, wildlife, plant and riparian habitats within the stream corridors of the Township: to complement existing state, regional, county and municipal stream corridor protection

and management regulations and initiatives; to protect existing natural drainage features; to protect other's rights within the same watershed from adverse effects of improper stream corridor development; and, to provide recreation and wildlife migration corridors.

(2) Stream corridors shall mean the stream channel (the bed and banks of a stream which confine and conduct continuously or intermittently flowing water), the area within the one-hundred-year flood line and a minimum of 100 feet from the one-hundred-year flood line, extending outward from the stream channel, on both sides of the stream. If there is no one-hundred-year flood line delineated, the distance shall be measured outward from the top of the bank of the stream channel. If slopes of 15% or greater abut the outer boundary of the stream corridor, the area of such slopes shall be included within the stream corridor. Stream channels shall mean permanent or intermittent watercourses shown on U.S.G.S. quadrangle maps or the Hunterdon County Soil Survey.

(32) Stream corridors shall remain in their natural state, with no clearing or cutting of trees and brush (except for removal of dead vegetation and pruning for reasons of public safety), altering of watercourses, regrading or construction. Only the following uses shall be permitted within stream corridors, subject to the aforementioned parameters:

- (a) Agriculture according to the best management practices of the Natural Resource Conservation Service or the Soil Conservation District, but excluding enclosed structures.
- (b) Pasture and controlled grazing of animals as part of an agricultural operation in accordance with conservation practices approved by the Natural Resource Conservation Service or the Soil Conservation District.
- (c) Wildlife sanctuary, woodland preserve, and arboretum, except if subject to damage by flooding.
- (d) Hunting and fishing reserves, operated for the protection and propagation of wildlife, but excluding

enclosed structures.

(e) Passive recreational uses.

(f) Stream corridor restoration that utilizes plantings of native and indigenous species.

(g) Dams, culverts and bridges that have received approval from the appropriate municipal, county and state agencies having such authority;

(h) Roads that cross the stream corridor as directly as feasible.

(43) Any use not specifically permitted in the stream corridor is prohibited.

(54) Any development or use requiring approval under Subsection B(32) above shall require either site plan review or subdivision review pursuant to Article X of this chapter. The procedures and standards of review prescribed in Article X shall be applicable and shall be in addition to the requirements for submission listed in Subsection B(65) below. Nothing in this section shall relieve an applicant from complying with other requirements that are applicable to the development.

(65) The following information shall be supplied for any development within a stream corridor. Such information shall be in addition to information required by Article X:

(a) Delineation of stream corridors as defined in Subsection B(2) above section 148-9.

(b) Detailed hydrologic engineering studies indicating the effects on drainage, streams and adjacent properties as well as the property in question, including the necessary data to determine whether the boundaries of the stream corridor would be affected if the application were granted.

(c) A plan indicating the disposition of any fill materials proposed to be deposited by the grading or regrading of land.

(d) The designation of how suitable techniques, including erosion and soil stabilization measures, sediment traps and nutrient control by vegetation filters or other mechanisms, will be incorporated to protect the stream.

(e) A demonstration that the use or activity cannot be located outside the stream corridor.

(76) An approved application for development or use on a lot which contains a stream corridor or portion of a stream corridor shall provide a

conservation easement for the continued protection of the stream corridor. Conservation easements shall be established either by deed or by plat filed with the County Recording Officer in compliance with the Map Filing Law.

(87) Appropriate monuments shall be set by the licensed land surveyor. Such markers shall be set at each conservation easement corner not previously marked by a monument. All boundary markers shall be described on the survey provided to show their relation to the property or corner, or, if appropriate, to the boundary lines.

(98) In addition to monumentation, a suitable form of continuous, visible delineation (such as a fence) shall be installed so that it is coterminous with the boundaries of the conservation easement. The location and detailing for this element shall be included on the plans. This element shall be designed to be visually compatible with the character of the stream corridor and the local context and shall be subject to review and approval by the approving authority.

(109) Signs shall be provided along the boundary of the conservation easement in order to clearly identify the limits and nature of the easement, in accordance with § 148-116A(19) and Schedule C of the Land Development Ordinance. Signs shall be affixed at appropriate intervals and locations as directed by the approving authority. The location of signs shall be provided on the plans.

3. Severability. If any paragraph, section, subsection, sentence, clause, phrase or portion of this Article is for any reason held invalid or unconstitutional by any Court or administrative agency of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining paragraphs or sections hereof.

4. Inconsistency. All ordinances or parts of ordinances inconsistent with this Ordinance are hereby repealed to the extent of such inconsistency.

5. Effective Date. This ordinance shall take effect immediately upon final passage and publication thereof according to law.

A TRUE COPY OF WHICH ORDINANCE IS PRINTED ABOVE WAS INTRODUCED AT THE MEETING OF THE TOWNSHIP COMMITTEE ON AUGUST 7, 2006 AND THAT IT IS THE INTENTION OF THE TOWNSHIP COMMITTEE OF THE TOWNSHIP OF READINGTON TO CONSIDER PASSAGE OF SAID ORDINANCE AT THE REGULAR MEETING OF THE TOWNSHIP COMMITTEE TO BE HELD AT THE MUNICIPAL BUILDING, 509 ROUTE 523, WHITEHOUSE STATION, NEW JERSEY, ON SEPTEMBER 5, 2006 AT 8:00 P.M. AT WHICH TIME AND PLACE, OR AT ANY TIME OR PLACE TO WHICH THE MEETING SHALL BE FROM TIME TO TIME ADJOURNED AN OPPORTUNITY WILL BE GIVEN TO ALL PERSONS WHO MAY BE INTERESTED THEREIN TO BE HEARD CONCERNING SAID ORDINANCE.  
VITA MEKOVETZ, RMC/CMC  
MUNICIPAL CLERK/  
ADMINISTRATOR  
DATE: August 8, 2006

Washington Township

NOTICE OF ORDINANCE ADOPTION

The following Ordinance was adopted at a meeting of the Washington Township Committee upon public hearing and final reading held on December 19, 2005:

RO-43-05 - AN ORDINANCE OF THE TOWNSHIP OF WASHINGTON, COUNTY OF MORRIS, AND STATE OF NEW JERSEY TO AMEND THE CODE OF THE TOWNSHIP OF WASHINGTON TO PROVIDE REGULATIONS FOR STREAM CORRIDOR AND OPEN WATER BUFFERS

DATED: DECEMBER 19, 2005

ATTEST: Kenneth W. Short,

Dianne S. Gallets, Mayor

Township Clerk

P.F.\$9.69 12/29/T1

**Washington Township**

ORDINANCE #RO-43-05

## PUBLIC NOTICE

PUBLIC NOTICE IS HEREBY GIVEN that the following Ordinance was passed on the first reading at a meeting of the Township Committee of the Township of Washington, Morris County, New Jersey held on November 21, 2005 and that said Ordinance will be further considered for final passage by the Township Committee at the Municipal Building located at 43 Schooley's Mountain Road, Long Valley, New Jersey on December 19, 2005 at 7:30 P.M. at which time and place all persons who may be interested will be given an opportunity to be heard concerning same.

BY ORDER OF THE TOWNSHIP COMMITTEE OF THE TOWNSHIP OF WASHINGTON

DATED: November 21, 2005 Dianne S. Gallets, Township Clerk

RO-43-05

**AN ORDINANCE OF THE TOWNSHIP OF WASHINGTON, COUNTY OF MORRIS, AND STATE OF NEW JERSEY TO AMEND THE CODE OF THE TOWNSHIP OF WASHINGTON TO PROVIDE REGULATIONS FOR STREAM CORRIDOR AND OPEN WATER BUFFERS**

BE IT ORDAINED, by the Township Committee of the Township of Washington, in the County of Morris, and State of New Jersey, as follows:

SECTION 1. Chapter 111, Land Use Procedures, Article VI, Definitions, Section 111-46, Terms defined, of the Code of the Township of Washington, Morris County, New Jersey is hereby amended and supplemented to add the following definitions in the proper alphabetical order, to read as follows:

"CATEGORY ONE WATERS or C1 - Those waters designated in N.J.A.C. 7:9B-1.15

**INTERMITTENT STREAM** - Surface water drainage channels with definite bed and banks in which there is not a permanent flow of water. Most intermittent streams are shown on Soil Conservation Service county soil surveys and/or as watercourses shown on U.S.G.S. quadrangle maps. These are portrayed as a dashed line on a USDA Soil Survey Map of the most recent edition, or as state open water identified in a letter of interpretation issued by the NJDEP Land Use Regulation Program, whichever is more inclusive.

**STREAM CHANNEL** - The bed and banks of a stream that confine and conduct continuously or intermittently flowing water. Stream channels shall include 1) all watercourses shown on U.S.G.S. quadrangle maps and/or the Morris County Soil Survey, 2) watercourses identified as State Open Waters by the NJDEP (e.g., during the course of a wetlands delineation LOI or Stream Encroachment permit process), or 3) any flow path with a definable bed and banks regardless of the size of the contributory drainage.

**STATE OPEN WATERS** - Those waters of the United States within the boundary of the State or subject to its jurisdiction that are not wetlands.

**STREAM CORRIDOR** - The stream channel and all the lands within the 100-year flood line on either side of that portion of the designated stream or tributary. In cases where slopes greater than 20% abut the 100-year flood line, the area of such slopes shall be included in the stream corridor.

**100-YEAR FLOOD LINE** - The area adjacent to the stream that is inundated by the 100-year storm event as calculated per NJDEP accepted methods unless a Federal Emergency Management Act (FEMA) flood line (i.e., limits of the 100-Year Flood Hazard Area) or NJDEP flood line has previously been calculated, in which case the FEMA flood line, NJDEP flood line, or the more recently calculated of these two will be the standard.

**STREAM CORRIDOR AND OPEN WATER BUFFER** - For all Category 1 streams a width of 300 feet on each side of all stream corridors and open waters, measured perpendicular to the edge of the stream corridor or open water, provided that if the width of the stream corridor on a side of the designated stream, tributary or open water exceeds 300 feet, no additional buffer area shall be required on that side of the designated stream, tributary or open water. For all other streams a width of 100 feet on each side of all stream corridors and open waters, measured perpendicular to the edge of the stream corridor or open water, provided that if the width of the stream corridor on a side of the designated stream, tributary or open water exceeds 100 feet, no additional buffer area shall be required on that side of the designated stream, tributary or open water. For streams located within the preservation area as defined in the Highlands Water Protection and Preservation Act buffers as required under the act will apply."

SECTION 2. Chapter 111, Land Use Procedures, Article VI, Definitions, Section 111-46, Terms defined, "Improvable Lot Area" of the Code of the Township of Washington, Morris County, New Jersey is hereby amended to read as follows:

"**IMPROVABLE LOT AREA** - A contiguous area located on a residential lot within the minimum required setbacks that is free of areas of existing conservation easements, bodies of water, area of floodplains, wetlands, stream corridor and open water buffers; areas of slopes 20% and greater based on 10' contour intervals, NJDEP-required wetland transition areas; and Highlands Special Resource Protection Areas, except that the improvable lot area may contain a total of 1,000 sq. ft. of area of slopes 20% and greater."

SECTION 3. Chapter 159, Site Plan Review, Article VII, Design Details, Section 159-44, Environmental considerations, is hereby amended to read as follows:

"159-44. Environmental considerations. The site plan shall be designed in accordance with applicable township ordinance sections designed to protect the environment. These include but are not limited to stormwater management, flood plain, soil erosion and sedimentation control requirements and stream corridor and open water buffers. Drainage and conservation easement requirements set forth in Chapter 175, Subdivision of Land, Section 175-47, and environmental protection requirements set forth in Section 175-48, shall be followed."

SECTION 4. Chapter 175, Subdivision of Land, Article VII, Design Standards, Section 175-47, Public use and service areas; utility placement, Paragraph B, Drainage and conservation easement, item (1) is hereby amended in its entirety to read as follows:

"(1) **STREAM CORRIDOR AND OPEN WATER BUFFERS**

(a) Purpose. The purposes of this section are the following:

- (i) Maintain the quality of streams and open waters and improve the quality of currently impaired streams and open waters in the township.
- (ii) Protect significant ecological components of stream corridors and open waters such as riparian areas, floodplains, wetlands, woodlands, steep slopes, and plant and associated wildlife communities within the stream

corridors and open waters of the township; and minimize flood-related damage to properties in the township.

(iii) Complement the existing state, regional, county and municipal stream corridor and open water protection and management regulations and initiatives.

(b) Applicability. The development of all land containing a stream corridor and/or state open waters shall be subject to the regulations set forth in this Section 175-47.B. (1). These provisions are intended to regulate the type of activities, siting of structures, and engineering of all proposed development on parcels located within a stream corridor and open water buffer as defined in Chapter 111, Land Use Procedures. These provisions apply to land disturbances resulting from or related to any activity or use requiring a zoning variance, subdivision and/or site plan approval

(c) Exceptions.

(i) The full stream corridor and open water buffer area requirement may be waived by the Zoning Board of Adjustment in connection with variance applications for improvements to existing developed lots which do not exceed 2500 square feet of additional impervious coverage for those portions of such lots that include or border a C1 or other stream or state open water having a demonstrated drainage area of less than 50 acres or where there is existing clearing adjacent to the C1 or other stream or state open water, provided that not more than 50 linear feet of mowed lawn is permitted along the water's edge. The remainder of any existing developed lot that includes or borders a C1 or other stream or state open waters must have a minimum of 25 feet of naturalized area (non-mowed) as measured from the top of the bank of the C1 or other stream or state open waters. Specifications for naturalizing such reduced buffer areas as native meadow or restored forest are available from the Township Planning Department. A conservation easement for this area shall be dedicated to the Township, in form satisfactory to the Township Attorney, pursuant to §217-36.

(ii) Maintenance of the berm of a dam is exempted from the requirements of (i) above.

(iii) If a 50-foot long (parallel to the C1 or other stream or state open water) section of lawn is maintained adjacent to a C1 or other stream or state open water, residents are encouraged to substitute fine fescues (i.e., red fescue, chewings fescue, hard fescue) within the 25-foot zone, as measured from the edge of the bank of the water, in which fertilizers and pesticides are prohibited pursuant to Chapter 85, in place of turf grasses such as Kentucky bluegrass and perennial ryegrass. Fine fescues are low growing and can be left non-mowed, or need to be mowed only 2-3 times per year.

(d) Permitted Activities. All land which is in a stream corridor and open water buffer 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; no altering of watercourses; no dumping of trash, soil, dirt, fill, vegetative or other debris; or re-grading or construction, except for the following activities.

(i) Open space uses that are primarily passive in character shall be permitted to extend into the stream corridor and open water buffer, provided near stream vegetation is preserved, including:

[a] Wildlife sanctuaries, nature preserves, forest preserves, fishing areas, with bank stabilization measures implemented, game farms, fish hatcheries and fishing reserves, operated for the protection and propagation of wildlife, but excluding enclosed structures.

[b] Passive areas of public and private parklands including unpaved hiking, bicycle and bridle trails outside of the stream channel, provided that said trails have been stabilized with pervious materials.

(ii) Stream bank stabilization or riparian reforestation, which conform to the guidelines of the restoration plan

described in §175-47.B.(1)(h) or wetlands mitigation projects that have been approved by the Department of Environmental Protection, are permitted to extend into the stream corridor and open water buffer.

(iii) Stream corridor and open water buffer crossings by recreational trails, roads, railroads, sewer and/or water lines, and public utility transmission lines, are permitted, provided that any disturbance is offset by buffer improvements in compliance with the restoration plan, as required by §175-47B.(1)(h) and any applicable State permits are acquired.

(iv) Agricultural land uses, including but not limited to cropland, pasture, fencing, nursery operations, silviculture and greenhouses, in existence as of the effective date of this section are permitted. With the exception of fencing to exclude livestock from the stream corridor or open water, or placement of livestock watering troughs to keep livestock out of the stream channels or open waters, no new agricultural structures shall be permitted in the stream corridor buffer after the effective date of this section, unless specifically permitted under the provisions of any state law which pre-empts the provisions of this ordinance. Necessary livestock crossings are permitted, with design approval.

(e) The following activities associated with development applications after the effective date of this ordinance are permitted within the stream corridor and open water buffer only if no other reasonable or prudent alternative is available:

(i) Private or public water supply wells that have a sanitary seal, flood proofed water treatment facilities or pumping facilities.

(ii) Dredging or grading work incidental to permitted structures or uses, including stream cleaning and stream rehabilitation, lake dredging, and other work undertaken to improve hydraulics or to protect public health permitted and approved by the New Jersey Department of Environmental Protection (NJDEP).

(iii) NJDEP-approved culverts, bridges, and roads provided that they cross the stream corridor as directly as practical.

(iv) NJDEP-approved sanitary or storm sewers and outfalls.

(v) Health Department approved septic systems.

(vi) Utility transmission lines installed during periods of low stream flow in accordance with soil erosion and sediment control practices and approved by the Morris County Soil Conservation District and permitted through the NJDEP.

(f) Prohibited Activities. Any activity not specifically authorized within Paragraphs (d) and (e) of this Section 175-47.B.(1) shall be prohibited within the stream corridor and open water buffer. In no circumstances shall the following be permitted as exceptions to such provisions:

(i) Any solid or hazardous waste facilities, including but not limited to sanitary landfills, transfer stations or wastewater lagoons.

(ii) Junkyards, commercial and industrial storage facilities and open storage of vehicles or materials.

(g) Requirements For Activities in Stream Corridor and Open Water Buffers.

(i) All new major and minor subdivisions and site plans shall be designed to provide sufficient areas outside of the stream corridor and open water buffer to accommodate principal structures, any customary accessory uses appurtenant thereto, as well as all planned lawn areas.

(ii) The applicant for any activity permitted in a stream corridor and open water buffer shall rehabilitate any degraded areas within the stream corridor and open water buffer in a manner acceptable to the Planning Board/Zoning Board unless the applicant demonstrates that it is not economically feasible to do so. The applicant shall also:

[a] Rehabilitate and cure the effects of disturbance caused during construction through the use of best management practices (BMP's) recommended by the NJDEP;

[b] Maintain the integrity of the surrounding plant community;

[c] Maintain the existing ability of the stream corridor and open water buffer to protect the water quality of the stream. The applicant shall provide whatever additional measures are necessary to assure that the stream corridor and open water buffer will be rehabilitated or preserved and to prevent additional encroachments in the stream corridor and open water buffer likely to occur as a result of the approval granted. Conservation easements dedicated to the Township of Washington, in form satisfactory to the Township Attorney, shall be provided assuring that there will be no further intrusion on the stream corridor and open water buffer than that permitted by the activity approved.

(h) Submission requirements and restoration plans.

(i) At the time of application to the Planning or Zoning Board for development, the landowner, applicant, or developer shall submit a map of the project site delineating the following conditions (at a scale of 1 inch equals 100 feet):

[a] Topographic information at a 2' contour

[b] Any slopes equal to or greater than 15% within the site

[c] Streams, wetlands, and the 100-year floodplain;

[d] Wetland boundary line(s);

[e] Stream corridor and open water buffer boundary line(s)

[f] The location of all existing and proposed activities, including improvements and land disturbance to be located within any of the above boundaries;

[g] The applicant shall also provide, at a scale not smaller than one inch equals 30 feet, a stream corridor and open water buffer restoration plan that specifies best management practices and construction methods to be used to restore all land disturbed (see paragraph (g)) within the stream corridor and open water buffer. The restoration plan is subject to the approval of the Township Environmental Consultant. All plantings included in the Plan shall consist of all native trees, shrubs, grasses and wild flowers. The Township can provide suggested specifications.

(ii) A map and restoration plan pursuant to this subsection is not required where the stream corridor and open water buffer is not being disturbed and conservation easements/deed restrictions are dedicated to the Township to ensure that there will be no future clearing or disturbance of the stream corridor and open water buffer."

SECTION 5. Chapter 217, Zoning, Article V, Supplementary Lot, Height and Yard Regulations, Section 217-36, Setbacks from watercourses and other bodies of water, is hereby amended to read as follows:

"§217-36. Setbacks from stream corridors and state open waters.

A. Notwithstanding any other provisions of this chapter, no development shall be permitted adjacent to a C1 or other stream or state open waters, except in conformance with Chapter 92, Floodplain Management. In addition, except in connection with subdivisions and site plans as provided in Chapter 175, Subdivision of Land, §175-47.B. and Chapter 159, Site Plan Review, §159-44, or in connection with variance applications, an easement of not less than 25 feet along each side or edge of a C1 or other stream or state open waters shall be dedicated to the Township, in form satisfactory to the Township Attorney, which shall carry the following limitations:

(1) No trees or shrubs shall be removed or destroyed on lands in the easement, except in accordance with approved forest management practices.

(2) No topsoil, sand, gravel or minerals shall be excavated or removed, except as may be required to build a pond, and then only after the Township Planning Board approves the design and structure of the pond, it being the intent to preserve the natural function of the floodplain.

(3) No buildings or structures of any description shall be erected.

(4) No fill of any kind shall be permitted, except as may be required to build a road, and then only after the Planning Board approves the design of such road.

(5) No fertilizers or pesticides, except for Rodeo, shall be applied.

B. With regard to existing lawn areas, residents are encouraged to substitute fine fescues (i.e., red fescue, chewings fescue, hard fescue) within the 25-foot zone, as measured from the edge of the bank of the water, in which fertilizers and pesticides are prohibited pursuant to Chapter 85, in place of turf grasses such as Kentucky bluegrass and perennial ryegrass. Fine fescues are low growing and can be left non-mowed, or need to be mowed only 2 or 3 times per year. Residents are encouraged to maintain wooded buffers along streams and open waters within their properties wherever possible."

SECTION 6. All ordinances of the Township of Washington, which are inconsistent with the provisions of this Ordinance, are hereby repealed to the extent of such inconsistency.

SECTION 7. This Ordinance may be renumbered for codification purposes.

SECTION 8. If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be unconstitutional or invalid, such decision shall not affect the remaining portions of this Ordinance.

SECTION 9. The Township Clerk is hereby directed to give notice at least ten days prior to hearing on the adoption of this Ordinance to the County Planning Board and to all other persons entitled thereto pursuant to N.J.S. 40:55D-15 and N.J.S. 40:55D-63 (if required). Upon the adoption of this Ordinance after public hearing thereon, the Township Clerk is further directed to publish notice of the passage thereof and to file a copy of the Ordinance as finally adopted with the Morris County Planning Board as required by N.J.S. 40:55D-16. The Clerk shall also forthwith transmit a copy of this Ordinance after final passage to the Township Tax Assessor as required by N.J.S. 40:49-2.1.

SECTION 10. This Ordinance shall take effect immediately upon final passage, approval, and publication as required by law.

November 21, 2005\* TOWNSHIP OF WASHINGTON , COUNTY OF MORRIS , STATE OF NEW JERSEY

ATTEST: By: Kenneth W. Short, Mayor

Dianne S. Gallets, Township Clerk