

wires, shall be contained within an appropriate conduit suitable for same.

D. No portion of the small wind energy system blade shall extend within 20 feet of the ground.

10. *Notification.*

A. No small wind energy system shall be installed until evidence has been given that the utility company has been informed of the customer's intent to install an inter connected customer-owned generator. Off-grid systems shall be exempt from this requirement.

B. When application is made for approval of a small wind energy system, notice shall be mailed to the owners of all properties adjacent and within 200 feet of the lot on which the system is to be constructed.

11. *Met Towers.*

A. A met tower shall be permitted under the same standards, permit requirements, and procedures as a small wind energy system.

12. *Removal.*

A. A small wind energy system that is out-of-service for a continuous 12-month period will be deemed to have been abandoned. Non-function or lack of operation may be proven by reports from the interconnected utility. The owner/operator shall make available to the zoning administrator all reports to and from the purchaser of energy from the small wind energy system if requested.

B. If the small wind energy system is determined to be abandoned, the owner of the small wind energy system shall remove the wind generator from the tower at the owner's sole expense within 3 months of notice of abandonment. The owner is solely responsible for removal of the system and all costs, financial or otherwise, of system removal.

13. *Violations.*

A. It is unlawful for any person to construct, install, or operate a small wind energy system that is not in compliance with this Section or any condition contained in a building permit issued pursuant to this Section. Small wind energy systems installed prior to adoption of this Section are exempt.

(Ord. 224, 3/15/1981, §212; as added by Ord. 917, 1/19/2009, §4)

§27-213. Riparian Buffer Overlay Zoning District Requirements.

1. *Legislative Intent.*

A. Under the Authority of Article I, §27, of the Pennsylvania Constitution, Act 247, the Municipalities Planning Code, as amended, other Commonwealth and Federal statutes, and in recognition of the fact that natural features contribute to the welfare of residents, the following riparian buffer regulations are enacted to provide reasonable controls governing the restoration, conservation, disturbance, and management of existing riparian corridors by establishing a designated Riparian Buffer Overlay Zoning District.

B. Ferguson Township adoption of these regulations does not grant public access to private property. Any grant of public access remains the prerogative of each individual property owner.

C. The Riparian Buffer Overlay Zoning District ordinance, upon adoption, shall apply to all subdivisions, land developments or redevelopment of existing properties or any other improvements that require subdivision or land development plan submission if they are within or touch the Riparian Buffer Overlay Zoning District within Ferguson Township.

D. Any required riparian buffer preservation and maintenance shall remain the sole responsibility of each individual property owner.

E. Activities within the Riparian Overlay Zoning District that require a zoning and building permit, are not required to provide riparian buffer replacement or restoration. Such work is only recommended. Where there is no disturbance within the buffer, no mitigation is required.

F. In addition, the specific purposes and intent of this Section are to:

(1) Conserve the natural features important to land or water resources (e.g., headwater areas, groundwater recharge zones, floodways, floodplains, springs, streams, wetlands, woodlands, prime wildlife habitats).

(2) Work with floodplain, steep slope, and other municipal ordinances that regulate environmentally sensitive areas to minimize hazards to life, property, and important riparian features.

(3) Conserve natural, scenic and recreation areas within and adjacent to riparian areas for the Centre Region's benefit.

(4) Reduce the amount of nutrients, sediment, organic matter, pesticides, and other harmful substances that reach watercourses, wetlands, subsurface, and surface water bodies by using scientifically-proven processes including filtration, deposition, absorption, adsorption, plant uptake, and denitrification, and by stabilizing. Further, to minimize concentrated flows through the use of level spreaders and/or similar stormwater management devices used to disburse concentrated flow uniformly over the ground as sheet flow.

(5) Improve and maintain the safety, reliability, and adequacy of the Centre Region's water supply for domestic, agricultural, commercial, industrial, and recreational uses along with sustaining diverse populations of aquatic plants and animals.

(6) Regulate the land use, siting, and engineering of development to be consistent with the intent and objectives of this Section and accepted conservation practices, as well assure that the impacts of such development remain within the carrying capacity of existing natural resources.

(7) Assist in the implementation of pertinent state laws concerning erosion and sediment control practices, specifically erosion control, of the Pennsylvania Clean Streams Law, Act 394, P.L. 1987, Chapter 102 of the Administrative Code (as amended October 10, 1980, Act 157 P.L.), Title 25, and any subsequent amendments thereto, as administered by the Pennsylvania Department of Environmental Protection and the Centre County Conservation District.

2. *Definition, Establishment, Width Determination, Applicability, Interpretation and Other Applicable Definitions.*

A. *Definition.*

(1) The Riparian Buffer Overlay is a zoning district consisting of: Areas surrounding swales, creeks, streams, water bodies, intermittent watercourses and delineated wetlands as well as those encountered during subdivision and land development. These areas intercept surface water runoff, subsurface flow, and deep groundwater flows from upland sources and remove or “buffer” the impact of nutrients, sediment, organic matter, pesticides, or other pollutants prior to entry into surface waters.

B. *Establishment.*

(1) The establishment of a Riparian Buffer Overlay Zoning District applies to the following areas which are identified on the Official Zoning Map:

(a) Lands adjacent to streams within Ferguson Township.

(b) Lands adjacent to intermittent water courses within Ferguson Township.

(c) Lands adjacent to State or Federally designated water bodies and wetlands or those encountered during the process of subdivision and land development within Ferguson Township.

C. *Width Determination.*

(1) The Riparian Buffer Overlay Zoning District shall extend a minimum total width of 100 feet from each edge of any perennial watercourse or surface water body, or shall equal the extent of the 100-year floodplain, whichever is greater. Where the edge of waterway of an intermittent watercourse cannot be determined, the width of the Buffer Overlay Zoning District shall be measured beginning from the centerline of the channel. The district may consist of two distinct zones designated as:

(a) *Zone One.* This zone will begin at the edge of the waterway (including wetlands and intermittent watercourses) and occupy a margin of land with a minimum width of 35 feet measured horizontally on a line perpendicular to the edge of the waterway. Where a defined bed and bank exist, the edge shall be established based on bank full flow. The width of Zone One may be required to extend beyond the minimum 35 feet depending upon existing topography, woodlands, and other natural conditions. This determination will be made by the Township Zoning Officer and/or Township Engineer.

1) Where slopes of 15% or greater are located within the 35-foot Zone One, this zone shall extend the entire distance of the steep sloped area. If the distance of this sloped area is greater than 100 feet, there will be no requirement for the establishment of additional buffer area designated as Zone Two. If the distance is less than 100 feet, but greater than 35 feet, the 65-foot wide Zone Two will begin at the end of Zone One.

(b) *Zone Two.* This zone will begin at the outer edge of Zone One and occupy a minimum width of 65 feet in addition to Zone One (unless otherwise noted.)

1) Where the floodplain extends greater than 100 feet from the waterway, Zone One shall remain a minimum of 35 feet wide, and

Zone Two shall extend from the outer edge of Zone One to the outer edge of the defined 100-year floodplain.

2) As per §27-801.I of this Chapter, an additional 50-foot buffer shall be provided between the edge of a FEMA defined floodplain and any proposed use on the site. The land within this 50 feet shall remain in its natural condition.

(2) The Overlay Zoning District shall also include a minimum buffer width of 50 feet around the entire perimeter of the outer edge of wetlands and water bodies greater than 5,000 square feet in area and not located along a stream.

D. *Applicability.* The provisions of this Section shall apply as follows:

(1) The developer/applicant shall be responsible for identifying the location of the riparian buffer overlay zoning district boundary on any plan that is submitted to Ferguson Township for the following:

(a) Subdivision, land development or redevelopment. (See subsection .5.A(1).)

(b) Approval for improvements that require a zoning and building permit. (See subsection .5.A(2).) Although mitigation may not be required for such activity, the boundary must still be delineated.

1) In the Overlay District, such permit shall only be required when construction or erection of any structure(s) within or touching the Riparian Buffer Overlay Zones of Ferguson Township is located on the ground or attached to something on the ground and is greater than 144 square feet in size.

(2) This initial delineation of the overlay district boundary shall be subject to review and approval by the Ferguson Township Zoning Officer and/or Engineer.

(3) These requirements shall NOT apply to any existing (as of 05/18/09) primary or accessory buildings or to any of the following: agricultural uses, transportation facilities, fences, lawns, gardens, utility lines, decks and piers, or to interior renovations, septic and sewage supply facilities and their related appurtenances (well houses, utility pump and lift stations, manholes, etc.).

E. *Interpretation of Ordinance Provisions.* In interpreting the language of the Riparian Buffer Overlay District and the extent of underlying zoning district regulation upon use of property, where doubt exists between regulations the stricter regulation shall govern. Any challenges to municipal interpretation of the applicability of the Riparian Buffer Overlay Zoning District shall be appealed in accordance with the requirements outlined in subsection .8.C, "Boundary Interpretation and Appeals Procedure," and Article IX, "Zoning Hearing Board and Other Administrative Proceedings," of the Municipalities Planning Code (MPC), Act 247, as amended.

F. *Other Applicable Definitions.* Words and/or phrases used in this Section shall have the meanings given to them in this paragraph unless the context clearly indicates otherwise. Words and/or phrases not identified below but defined elsewhere in the Ferguson Township Code of Ordinances, shall have the meanings

as provided in that Chapter. Words or phrases not otherwise defined shall have the meaning provided in the Nevada Division of Water Planning *Water Words Dictionary*.

Average riparian buffer width - the total area of the riparian buffer in Zone One along the length of the stream or body of water divided by the total linear length of the stream for the case where buffer averaging is permitted.

Average total riparian buffer width - the total area of the riparian buffer (Zones One and Two) along the length of a stream or body of water divided by the total linear length of the stream for the case where buffer averaging is permitted.

Channel - the bed of a single or braided watercourse that commonly is barren of vegetation and is formed of modern alluvium. Channels may be enclosed by banks or splayed across and slightly mounded above a fan surface and include bars and dumps of cobbles and stones.

Channel bank - the sloping land bordering a channel. The bank has steeper slope than the bottom of the channel and is usually steeper than the land surrounding the channel.

Channel capacity - the maximum rate of flow that may occur in a stream without causing overbank flooding; the maximum flow which can pass through a channel without overflowing the banks.

Chesapeake Bay Tributary Strategy (CBTS) - Pennsylvania's Chesapeake Bay Tributary Strategy is a catalog of measures that, if applied to the State's Susquehanna and Potomac Watersheds, will generate appreciable sediment and nutrient reductions in order to provide cleaner water resources in the State and downstream at the Chesapeake Bay.

Conditional use - a use permitted in a particular zoning district pursuant to approval being granted by the governing body.

Herbicides - chemicals developed to control or eradicate plants.

Insecticides - chemicals developed to control or eradicate insects.

Intermittent stream - a body of water flowing in a channel or bed composed primarily of substrates associated with flowing water, which, during periods of the year, is below the local water table and obtains its flow from both surface runoff and groundwater discharges. Most intermittent streams are shown as thin blue lines on the most recent Streams Within the Centre Region, U.S.G.S. National Hydrologic Dataset (NHD) mapping as noted on attached Appendix A.

Level spreader - a device used to disperse concentrated stormwater flow uniformly over the ground surface as sheet flow.

MPC - the acronym for the Pennsylvania Municipalities Planning Code, Act 247, as amended.

Minimum average riparian buffer width - the minimum value permitted in this Section for the average buffer width in Zone One is 35 feet.

Minimum average total riparian buffer width - the minimum value permitted in this Section for the average total buffer width is 100 feet.

Naturalized stormwater basin - stormwater control facilities that are planted with native vegetation rather than maintained as hardscape or lawn.

Nutrient - a substance that provides food or nourishment, such as usable proteins, vitamins, minerals or carbohydrates. Fertilizers, particularly phosphorus and nitrogen, are the most common nutrients that contribute to eutrophication.

Nutrient loading - a quantity of nutrients, such as phosphorus and nitrogen, entering an ecosystem in a given period of time.

Naturalized stormwater basin - stormwater control facilities that are planted with native vegetation rather than maintained as hardscape or lawn.

Perennial stream - a body of water flowing in a channel or bed composed primarily of substrates associated with flowing waters and capable, in the absence of pollution or other manmade disturbances, of supporting a benthic macro-invertebrate community which is composed of two or more recognizable taxonomic groups of organisms which are large enough to be seen by the unaided eye and can be retained by a United States Standard No. 30 Sieve (28 meshes per inch, 0.595mm openings) and live at least part of their life cycles within or upon available substrates in a body of water or water transport system.

Redevelopment - the reconstruction, reuse or change in use of any developed property including, but not limited to, the following: the demolition and clearance of any existing structures, any increase in the intensity of use of already developed land, such as an increase in the number of dwelling units in a structure or change to a commercial or industrial use from a less intensive use.

Riparian area - (a) Areas adjacent to a stream that are saturated by ground water or intermittently inundated by surface water at a frequency and duration sufficient to support the prevalence of vegetation typically adapted for life in saturated soil. (b) The transition area between the aquatic ecosystem and the nearby, upland terrestrial ecosystem. These areas are identified by soil characteristics and/or plant communities and include the wet areas in and near streams, ponds, lakes, springs and other surface waters.

Riparian buffer - area of varying width adjacent to a water body where management practices that might affect water quality, fish, or other aquatic resources are modified. It is an area which acts as an effective filter and adsorptive zone for sediment; maintains shade; protects aquatic and terrestrial riparian habitats; protects channel and streambanks; and promotes floodplain stability. The buffer may be wider than just the riparian area.

Riparian Buffer Overlay Zoning District - areas surrounding surface water bodies including, but not limited to, swales, creeks, streams, water bodies, intermittent watercourses and delineated wetlands as well as those encountered during subdivision and land development. These areas intercept surface water runoff, subsurface flow, and deep groundwater flows from upland sources and remove or “buffer” the impact of nutrients, sediment, organic matter, pesticides, or other pollutants prior to entry into surface waters.

Riparian buffer width averaging - a technique for delineating the width of

a buffer such that the buffer boundary can be narrower at some points along the stream and wider at others so that its average width meets the minimum criteria.

Stream - a watercourse. Most streams are shown on the U.S.D.A Soil Conservation Service "Soils Survey of Centre County" mapping or as watercourses shown on a U.S.G.S., 7.5 minute quadrangle map as solid blue lines or as State open waters identified in a letter of interpretation issued by the Pennsylvania DEP. Streams are also shown as blue lines on the most recent Streams Within the Centre Region, U.S.G.S. National Hydrologic Dataset (NHD) mapping as noted in attached Appendix A.

Stream crossing - a bridge, ford or structure installed across a stream or watercourse for temporary and/or permanent use as a means of ingress and egress, livestock, or construction and/or agricultural vehicles.

Surface waters - perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps, and estuaries, excluding water at facilities approved for wastewater treatment such as wastewater treatment impoundments, cooling water ponds, and constructed wetlands used as part of a wastewater treatment process.

Swale - a natural low-lying stretch of land or minor man-made conveyance channel which gathers or carries surface water runoff.

Total riparian buffer width - the sum of the widths of Zone One and Zone Two riparian buffers for the standard case where buffer averaging is not permitted.

Total maximum daily load (TMDL) - a tool for establishing the allowable loadings of a given pollutant in a surface water resource to meet predetermined water quality standards.

Township Engineer - a professional engineer licensed as such in the Commonwealth of Pennsylvania, duly appointed as the engineer for Ferguson Township.

Uses, conditional - zoning uses requiring conditional use zoning approval from the governing body.

Uses, permitted - zoning uses permitted by right.

Water body - a natural or artificial lake, pond, reservoir, swamp, marsh, or wetland.

Watercourse - a channel or conveyance of surface water having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

3. *Uses Permitted in the Riparian Buffer Overlay District.* The following uses are permitted, either by right or as a conditional use, in the Riparian Buffer Overlay Zoning District. NOTE: within any riparian buffer, no construction, development, use, activity or encroachment shall be permitted unless the activity has been first authorized by the Township Zoning Officer.

A. *Zone One.*

(1) *Uses Permitted by Right.* The following uses where permitted in the underlying zoning district and not subject to the provisions of §27-801, shall

be permitted to extend into the area defined as Zone One:

(a) Agricultural activities.

(b) Forestry uses with a Centre County Conservation District approved erosion and sedimentation control plan and in accordance with the best management practices for forestry found in the Pennsylvania Department of Environmental Protection's Chapter 93–Water Quality Standards.

(c) Removal of trees where such removal is necessary as a means to eliminate dead, diseased or hazardous stands of trees that jeopardize public safety provided that such removal is in compliance with the recommendations of subsection .5 and Appendix C, "Riparian Buffer Management" and in accordance with the best management practices for forestry found in the Pennsylvania Department of Environmental Protection's Chapter 93–Water Quality Standards.

(d) *Required Yards.* The required setback area may incorporate a portion of the zoning overlay however, at least one-half of each required front, side or rear yards on any private lots, shall be entirely outside of the Riparian Buffer Overlay District.

(e) Wildlife sanctuaries, nature preserves, forest preserves, fishing areas, passive areas of public and private parklands and native planting and reforestation in compliance with the recommendations of subsection .5 and Appendix C, "Riparian Buffer Management."

(f) Stream bank stabilization and/or recommended native tree reforestation, in compliance with the recommendations of subsection .5 and Appendix C, "Riparian Buffer Management."

(g) Stream crossings for farm vehicles and/or livestock if part of a Federal, State and/or privately funded Centre County Conservation District and/or local nonprofit riparian buffer improvement project. (See criteria in subsection .6.A(1).)

(h) Placement of research and monitoring devices such as staff gauges, water recording, water quality testing, cross vanes, weirs and related demonstration facilities.

(2) *Uses Permitted by Conditional Use.* The following uses, when permitted in the underlying zoning district and not subject to the provisions of §27-801 shall be permitted to occupy land within Zone One after receipt of conditional use approval:

(a) New stream crossings for roads, railroads, centralized sewer and/or water lines and public utility transmission lines and /or their related appurtenances (i.e., towers, well houses, pump and lift stations) provided that they are:

1) Designed and installed in accordance with the stream crossing standards of subsection .6.A(1).

2) All disturbance must be mitigated at a ratio of 1:1 for each square foot of disturbance and must follow the recommendations for improvements identified in subsection .5 and Appendix C, "Riparian

Buffer Management” When feasible, these lines shall be located as far from Zone One as practical.

B. *Zone Two.*

(1) *Uses Permitted by Right.* The following uses where permitted in the underlying zoning and not subject to the provisions of §27-801, shall be permitted to extend into the area defined as Zone Two:

(a) Agricultural activities.

(b) Forestry uses with a Centre County Conservation District approved erosion and sedimentation control plan and in accordance with the best management practices for forestry found in the Pennsylvania Department of Environmental Protection’s Chapter 93–Water Quality Standards.

(c) Removal of trees where such removal is necessary as a means to eliminate dead, diseased or hazardous stands of trees that jeopardize public safety provided that such removal is in compliance with the recommendations of subsection .5 and Appendix C, “Riparian Buffer Management” and in accordance with the best management practices for forestry found in the Pennsylvania Department of Environmental Protection’s Chapter 93–Water Quality Standards.

(d) *Required Yards.* The required setback area may incorporate a portion of the zoning overlay however, at least one-half of each required front, side or rear yards on any private lots, shall be entirely outside of the Riparian Buffer Overlay District.

(e) Wildlife sanctuaries, nature preserves, forest preserves, fishing areas, passive areas of public and private parklands and native planting and reforestation in compliance with the recommendations of subsection .5 and Appendix C, “Riparian Buffer Management.”

(f) Stream bank stabilization and/or recommended native tree reforestation, in compliance with the recommendations of subsection .5 and Appendix C, “Riparian Buffer Management.”

(g) Stream crossings for farm vehicles and/or livestock if part of a Federal, State and/or privately funded Centre County Conservation District and/or local nonprofit riparian buffer improvement project. (See criteria in subsection .6.A(1).)

(h) Placement of research and monitoring devices such as staff gauges, water recording, water quality testing, cross vanes, weirs and related demonstration facilities.

(2) *Uses Permitted by Conditional Use.* The following uses, when permitted in the underlying zoning district and not subject to the provisions of §27-801, shall be permitted to occupy land within Zone Two after receipt of conditional use approval.

(a) Passive use areas such as camps, campgrounds and picnic areas. Active recreation areas such ball fields, playgrounds and courts. These uses shall be designed in a manner that will not create concentrated stormwater flow; subject to any other conditions as imposed by the Board

of Supervisors. The use of level spreaders or similar devices may be required.

(b) Naturalized stormwater basins in compliance with the recommendations for improvements identified in subsection .5 and Appendix C, "Riparian Buffer Management." The entire basin shall be located a minimum of 50 feet from the edge of any identified watercourse or water body; subject to any other conditions imposed by the Board of Supervisors.

(c) Level spreaders or other similar stormwater structures used to disperse concentrated stormwater runoff uniformly over the ground surface as sheet flow. These devices shall be located a minimum of 50 feet from the edge of any identified watercourse or water body; subject to any other conditions imposed by the Board of Supervisors.

4. *Uses Specifically Prohibited in the Riparian Buffer Overlay Zoning District.* Any use or activity not authorized within subsection .3 shall be prohibited within the Riparian Buffer Overlay Zoning District. By way of example only, the following activities and facilities are specifically prohibited:

A. Removal or disturbance of vegetation in a manner that is inconsistent with erosion and sedimentation control and riparian buffer protection.

B. Storage of any hazardous or noxious materials, except those used during emergencies for the treatment and /or maintenance of sewer and water treatment facilities (i.e., generator sets and alternative drive units.)

C. Use of fertilizers, pesticides, herbicides, and/or other chemicals in excess of federally prescribed industry standards and/or the recommendations of the Centre County Conservation District.

D. Roads or driveways, except where permitted as stream crossings in compliance with subsection .3.A(1) or .3.A(2).

E. Motor or wheeled vehicle traffic in any area not designed to adequately accommodate the type and volume.

F. Parking lots.

5. *Management of the Riparian Buffer Overlay Zoning District.*

A. *Riparian Buffer Management.* No development activities shall be permitted within the Riparian Buffer Overlay Zoning District unless specifically permitted by subsection .3. All such activities are subject to the following:

(1) *Subdivision and Land Development.* Within the Riparian Buffer Overlay Zoning District, subdivision, land development or redevelopment shall only be permitted when the impacts of such actions are mitigated at a 1:1 square foot replacement ratio. The applicant shall prepare and submit a plan in accordance with the provisions of Appendix C and Chapter 22 of the Code of Ordinances, that identifies the existing conditions (vegetation, floodplain, wetlands, soils, slopes, etc.), all proposed activities including any measures necessary to offset disturbances to land within the Riparian Buffer Overlay Zoning District and, if applicable, any proposed management techniques following the guidelines for restoration improvements identified in this Section, Appendix C, "Riparian Buffer Management."

(a) Any earth disturbance within the Riparian Buffer Overlay Zoning District shall follow the guidelines for improvements identified in Appendix C, "Riparian Buffer Management," and shall be graphically represented along with any required buffers on formal subdivision or land development plan submissions. Where there is no disturbance within the buffer, no mitigation is required. However, the location of the Riparian Buffer Overlay Zoning District boundary must still be delineated on the plan.

(b) Lots where the Buffer Overlay Zoning District consumes 50% or more of the lot shall be exempted from the Riparian Buffer Overlay Zoning District requirements if the following criteria are met:

1) As of 5/18/2009, the lot is developed and such development is already located within the area of Zones One and/or Two.

2) As of 5/18/2009 the lot is 2 acres or less in size.

(c) For lots that are exempted per subsection .5.A(1)(b) above:

1) Any redevelopment of the lot shall be required to comply with the regulations associated with the disturbance of any Nolin soils located on the site as well as all applicable floodplain regulations.

2) Where the boundaries of Zone One fall completely within an area designated as either floodplain or Nolin soils, the overlay zoning requirements shall remain in effect for this area of the parcel.

3) The above criteria shall not adversely impact any nonconforming rights associated with use of the parcel according to the provisions of subsection .7.

(2) *Zoning and Building Permits.* For any activities that require a zoning and/or building permit and include improvements within the Riparian Buffer Overlay Zoning District, riparian buffer replacement or restoration is recommended only. If provided, the buffer should be at a 1:1 square foot replacement ratio for all disturbances; following the guidelines for restoration improvements identified in this Section, Appendix C, "Riparian Buffer Management."

(a) Projects for which mitigation is only recommended and for which a buffer is provided, shall identify the existing conditions (vegetation, floodplain, wetlands, soils, slopes, etc.), all proposed activities and if applicable, any proposed management techniques, including any measures necessary to offset disturbances to land within the Riparian Buffer Overlay Zoning District.

B. *Vegetation Selection.*

(1) To function properly, dominant native vegetation in the riparian buffer should be selected from the list of native plants most suited to riparian areas (Appendix D, "Selective Native Riparian Buffer Plantings List," Morris Arboretum of the University of Pennsylvania). Plants not included on this list may also be permitted by the Township Zoning Officer and/or Township Engineer. The Township may also require that the suitability of planting species be verified by local qualified experts at the U.S. Fish and Wildlife

Service, the Natural Resource Conservation Service, the Centre County Conservation District, the Penn State Cooperative Extension and/or Clearwater Conservancy, or other State and Federal forest agencies.

(2) As part of riparian buffer restoration it is strongly recommended that any/all noxious species existing within the buffer area and/or within the site be removed. Property owners and developers should ensure that invasive species are contained so as to not adversely impact any native species planted and protected as part of the required riparian buffer restoration. Please refer to Appendices D, E and F of this Section.

(3) For maximum effect, the riparian buffer should be composed of three layers of vegetation or more.

(a) Canopy and understory trees to form a tree canopy particularly in Zone One.

(b) Shrubs to support a dense, healthy and diverse understory.

(c) Grasses, sedges, flowering perennials and other groundcover.

(4) *General Recommendations for Riparian Buffer Plantings.* Canopy and understory trees should be 1½ to 2½ calipers in diameter at breast height, 8–10 feet tall at planting. Canopy trees should be planted a minimum of 20–25 feet on center in staggered rows, and understory trees should be planted a minimum of 15 feet on center, also in staggered rows. Shrubs should be planted in between canopy and understory trees at a minimum distance of between 3 and 5 feet apart. Grasses, sedges, flowering perennials and groundcovers should be planted 1–3 feet apart.

6. *Stream Crossing Standards.*

A. *Criteria.*

(1) All stream crossings permitted under subsections .3.A(1) and .3.A(2), shall comply with and incorporate as required, the following minimum standards:

(a) Any stream crossings requiring any activity in, under and/or over any body of water shall first consult the Department of Environmental Protection's North Central Regional Office, Watershed Management Permitting and Technical Services Section at (570) 327-3636.

(b) The width of any right-of-way shall not be greater than the minimum right-of-way width required by Township ordinances unless additional right-of-way is offered for dedication.

(c) Stream crossings shall be designed to cross in a manner that minimizes disturbance.

(d) Stream crossings shall be separated by a minimum of 1,000 feet of stream length.

(e) Bridges, with the appropriate Federal and/or State permits, shall be used in place of culverts when crossings would require a 72-inch or greater diameter pipe. When culverts are installed they shall be designed to retain the natural stream channel bottom to ensure the passage of water during low flow or dry weather periods.

7. *Nonconforming Structures and Uses in the Riparian Buffer Overlay Zoning District.* All existing, nonconforming structures and uses will continue to be permitted in accordance with the Ferguson Township existing nonconforming provisions so noted in Chapter 27, Part 9, “Nonconformities.”

8. *Boundary Interpretation and Appeals Procedure.*

A. When a landowner or applicant disputes the Zone One or Zone Two boundaries of the Riparian Buffer Overlay Zoning District, or the defined edge of a watercourse, surface water body, or wetland, the landowner or applicant shall submit evidence to the Township that describes the existing boundary per the provisions of this Section, presents the landowner or applicant’s proposed boundary, and presents all justification for the proposed boundary change.

B. The Township Zoning Officer and/or Township Engineer shall evaluate all material submitted and shall make a written determination of the acceptability of the proposed boundary change within 45 days.

C. Any party aggrieved by any such determination or other decision or determination under this Section may appeal to the Zoning Hearing Board under the provisions of Chapter 27, Part 11, “Zoning Hearing Board.” The party contesting the location of the district boundary shall have the burden of proof in the case of any such appeal.

9. *Inspection of Riparian Buffer Overlay Zoning District.*

A. Lands within or adjacent to an identified Riparian Buffer Overlay Zoning District will be inspected by the Township Zoning Officer and/or Township Engineer when:

- (1) A subdivision or land development plan is submitted.
- (2) A zoning and/or building permit is requested.

B. The Riparian Buffer Overlay Zoning District may also be inspected periodically by the Township Zoning Officer and/or Township Engineer to determine compliance with required riparian buffer restoration in accordance with recommendations for improvements identified in subsection .5 and Appendix C, “Riparian Buffer Management” or when excessive or potentially problematic erosion, sedimentation, hazardous trees or an unauthorized activity or structure is brought to the attention of Ferguson Township officials.

(Ord. 224, 3/15/1981, §213; as added by Ord. 924, 5/18/2009, §1; and as amended by Ord. 954, 6/6/2011, §2)

[Editor’s Note: §27-214, “Airport Overlay District Requirements,” begins on p. 27-48.49]