

Lower Saucon Township

180-95. Environmental protection standards.

A. General.

(1) The intent of this section is to set forth standards that will permit the development or use of the land while protecting the environment in areas that:

- (a) Are generally considered environmentally sensitive;
- (b) Are subject to flooding and/or chronic wetness;
- (c) Are underlain with carbonate geology;
- (d) Have steep slopes;
- (e) Possess woodlands and/or possess rock outcrops or cliffs;
- (f) Affect riparian corridors;
- (g) Affect public water supplies.

(2) Specifically, the intent is to provide the standards to accomplish the environmental goal and objectives as stated in 9 180-3 of this chapter.

B. Floodplain and Wetland Areas (FP).

(1) Purpose. Areas within the Township are subject to flooding and/or wetlands conditions. Certain types of development and/or land use in these areas would be subject to a high risk of property damage and to the high risk of personal injury or loss of life. Certain types of development and/or land use in these areas would further create a high potential for stream or groundwater pollution. It is the intent of this regulation to minimize the risk of property damage and the risk of personal injury or loss of life and to minimize the risk of stream or groundwater pollution by means of limiting the type and location of certain development or land use allowed in certain flooding or wetland areas.

(2) District identification.

(a) The district shall be any area meeting one or more of the following criteria:

- [1] Shown as a Floodplain and Wetland Area on the Township Zoning Map, as the floodplain district (preliminary determination).
- [2] Shown as a Floodplain Area, for any level of flooding, on the Township Flood Hazard Boundary Maps, as published by the Federal Emergency Management Agency (FEMA) and dated April 6, 2001, with any amendments thereto as approved by that agency.
- [3] Any pond or lake and land immediately adjacent thereto for a distance of 50 feet.
- [4] Any wetlands so identified by federal regulations.
- [5] The area within 50 feet of the center line of any seasonal or annual watercourse, as shown on the United States Geological Survey (USGS) one-to-twenty-four-thousand scale, seven-and-one-half-minute topographic maps for the Township.

(b) A preliminary determination of this district and its boundaries can be made by inspection of the Zoning Map and scaling dimensions from the Zoning Map. A final determination of this district location and boundaries can be made only upon site inspection and evaluation by an engineer for the delineation of floodplains and by an engineer, soil scientist or geologist for wetland delineation,

(c) No final determination of the location and boundary of this district shall be made for a particular property on the basis of the Zoning Map. The final determination of the district location and boundary shall be established during the site plan review and approval process for a particular property. This district is a secondary district or overlay district, as it can exist in all or portions of the primary land use districts established by Article III of this chapter.

(3) Specific Floodplain and Wetland Area regulations. The following specific requirements shall apply to all uses in the Floodplain and Wetlands Area, and these requirements shall be in addition to all requirements imposed by other sections of this chapter.

(a) If at any time the applicant or Zoning Officer finds that the Zoning Map or other referenced maps or

field conditions cause a property or a portion of a property to be identified as being in a Floodplain and Wetland Area, the applicant for any building, structure or land use shall meet the criteria of these floodplain and wetland regulations.

(b) Site plan review, as described in g 180-102 of this chapter, shall be required for all proposed buildings, structures or uses of the property, whether or not such buildings, structures or uses are proposed in the district limits. The site plan required for single-family detached dwellings and/or associated accessory uses shall be subject to Zoning Officer review and approval but exempt from Planning Commission and Township Council review and approval.

(c) Such site plan review provisions shall not be required, however, if the applicant is not proposing any building, structure or land use in or within 200 feet of an actual Floodplain and Wetland Area. If the applicant believes he is not subject to the site plan requirements, he shall present to the Zoning Officer a certification provided by a professional engineer, as follows:

I, "(Engineer's Name)," hereby certify that I personally have:

A. Inspected the project site and immediately surrounding lands; and have

B. Reviewed the project or land use plans for "(Project Name)," dated "(Date)," for the applicant, Mr./Mrs./Miss "(Applicant's Name)"; and have

C. Reviewed the Lower Saucon Township Zoning Ordinance, Floodplain Ordinance 11 and Sub-division and Land Development Ordinance 12 and applicable federal and state regulations.

Based upon these reviews, I hereby certify that the proposed project, referenced above, is not located in any Floodplain and Wetlands Area, nor is it within 200 feet of any Floodplain and Wetlands Area.

Seal:

Signature-----

Date-----

(d) No proposed building, structure or land use shall be permitted in an identified Floodplain and Wetland Area unless all federal and or state required approvals have been issued to the applicant for such building, structure or land use.

(e) No proposed building, structure or land use shall be permitted in a floodplain or wetland unless the project is found by the Township to be in compliance with Chapter 90, Floodplain Management, and amendments thereto.

(f) For the purpose of this chapter, filling, grading, excavation and woodland removal shall require a zoning permit and shall be subject to all the regulations of this chapter.

(g) No building intended for human or animal habitation shall be located in a floodway portion of a floodplain. nor shall such a building be located in such a way that the ground adjacent to the building is less than 1 1/2 feet above the one-hundred-year-flood level.

(h) No on-lot sewage system drainfield shall be located in or within 50 feet of a Floodplain and Wetlands Area.

(i) The site plan shall show the elevation and limits of all identified Floodplains and Wetlands Areas with supporting calculation and hydrogeologic studies to indicate how the limits of the Floodplain and Wetlands Areas were identified. The site plan shall also show all existing and proposed grades, limits of disturbance and all soil erosion control and stabilization details proposed.

(j) The site plan and supporting data shall be prepared by an engineer or geologist skilled in the field and/or soil scientist, as appropriate, for identification of wetlands.

(k) The applicant shall direct development away from the Floodplain and Wetland Areas and shall, wherever possible, leave those areas in their natural condition.

(1) If, during site plan review, it is determined that all or a portion of a property is located in a Floodplain and Wetland Area, the minimum lot size for building or land use required for the primary zoning district in which the property is located, or as required for support of on-lot sewage or water facilities as required by ~ 180-94, shall be increased, and/or the allowed density of development and coverage shall decrease as follows:

[1] Floodplain and Wetland Areas shall not be counted as part of the minimum required lot area or as part of the usable land area for the calculation of allowed density or coverage unless one acre or more of land is identified as floodplain and/or wetlands. If more than one acre of floodplain or wetlands is identified on a property, the floodplain and wetlands portions of the property which are in excess of one acre in size shall be counted as being equivalent to a fifty-percent benefit when calculating required land areas for the purposes of calculating minimum lot sizes of densities

or coverage. Existing nonconforming single-family detached building lots shall be exempt from the special restrictions on coverage imposed by this section.

EXAMPLE In an R20 Zone, the typical minimum lot size is 20,000 square feet, with public sewer and public water. A. If a lot is 35,000 square feet in size and 15,000 square feet is in a floodplain, the lot is a qualifying lot. B. If a lot is 40,000 square feet and it is all in the floodplain, the lot does not meet minimum lot size and may be subject to existing nonconformity. C. If a lot is two acres in size, 87,120 square feet and if it all is in the floodplain, it would qualify as one building lot, but other regulations would apply for possible use of the lot. 87,120 square feet total - 43,560 square feet exclusion 43,560 square feet net But, it is usable only at a fifty-percent rate for lot size and/or density purposes. Therefore, the equivalent usable lot is: $43,560 \times 50\% = 21,780$ square feet This is greater than the 20,000 square feet required minimum lot size, so the lot is a qualifying lot.

(4) Nonassumption of liability.

(a) In Floodplain and Wetland Areas, alteration, development or use of land may be hazardous with respect to health, safety and welfare and/or property damage. The public is hereby notified that the Township, Township employees and Township consultants undertake no responsibility for loss of property or life or personal injury due to floods or wetland conditions, even if all regulations and ordinances of the Township are followed.

(b) It is also noted that local conditions can cause flooding and inundation of land and buildings with stormwater and can cause groundwater and spring-related problems outside of any area designated as a floodplain and/or wetland. The applicant and property owner should always make independent investigations of these matters prior to using his land or constructing any building or structure.

C. Carbonate Geology Areas (CG).

(I) Purpose. Areas within the Township are underlain by carbonate bedrock, such as limestone and dolomite. Such areas may have conduit drainage developed beneath them by dissolution of the rock, a process called "karstification." Because of this, such areas are susceptible to surface collapse and subsidence caused by physical and chemical erosion of soil and bedrock. These areas are especially susceptible to contamination of groundwater through the movement of solid and liquid wastes, contaminated surface water, septic tank effluent or other hazardous substances in fractures, solution openings and fissures within the rock, which may lead to groundwater supplies. It is the intent of this regulation to minimize the harmful aspects of development within the carbonate rock areas through site planning and other risk-reduction measures.

(2) District identification.

(a) The district shall be any area identified upon the Township Zoning Map as a Carbonate Geology Area.¹³ The designated carbonate areas were derived from Open File Report 8702, entitled "Sinkholes and Karst Related Features of Northampton County, Pennsylvania" by William E. Kochanov, Commonwealth of Pennsylvania, Department of Environmental Protection, Bureau of Topographic and Geologic Survey. This district is an overlay district, as it can exist in all or portions of the primary land use districts established by Article III of this chapter.

(b) The delineation of geologic contacts is frequently made by inference based upon interpretation of topographic features or other field data in the absence of outcrops. Therefore, these requirements shall apply to any development within 500 feet of the boundaries shown for the Carbonate Geology Areas.

(c) Upon receipt of proof and certification, satisfactory to the Zoning Officer from a licensed professional geologist that the area proposed for development is not underlain by carbonate geology, this carbonate geology section of the Code does not apply. However, if it is determined that carbonate rocks do underlie an area shown as noncarbonate on the Zoning Map, these requirements must be applied.

(3) Specific Carbonate Geologic Area regulations. The following specific requirements shall apply to all uses in the Carbonate Geologic Areas, and these requirements shall be in addition to all requirements imposed by any other section of this chapter.

(a) No on-lot sewer system drainfield, no underground propane tanks and no stormwater control basin shall be placed in or over sinkholes, closed depressions, lineaments, fracture traces, caverns, ghost lakes or disappearing streams.

(b) On-lot sewer system drainfields, underground propane tanks and stormwater control basins shall be located no closer than 100 feet to the rim of sinkholes, closed depressions and disappearing streams and no closer than 50 feet to lineaments, fracture traces or surface or subsurface pinnacles.

(c) Outflow from a storm water control basin and stormwater flow generated as a result of development shall not empty into or be directed to any of the following carbonate features: sinkholes, closed depressions, lineaments, fracture traces, caverns, ghost lakes and disappearing streams.

(d) No habitable dwelling or principal nonresidential building or structure or nonresidential accessory building or structure shall be located any closer than 100 feet to the rim of sinkholes or closed depressions or 100 feet to ghost lakes, lineaments, fracture traces or disappearing streams unless a detailed surface and subsurface investigation has been performed and procedures provided to mitigate any threat of the feature(s) on groundwater quality and stability of surface and subsurface structures to the satisfaction of the Township. The investigation must be performed by a licensed professional geologist.

(e) All underground water, sewer, stormwater lines and stormwater control basins shall be lined with an impervious liner. Mortar joint and metal-banded storm sewer piping is prohibited.

(f) No toxic and hazardous substances shall be located closer than 100 feet to the rim of a sinkhole or 100 feet to ghost lakes, lineaments, fracture traces, disappearing streams, closed depressions, caverns, surface or subsurface pinnacles.

(g) All provisions of ~]80-96G regarding storage of toxic and hazardous wastes must be complied with.

(h) Underground storage tanks shall not be permitted in this district, except for septic tanks for on-lot sewage disposal systems, propane tanks, and water storage tanks with less than 2,000 gallons' capacity.

(i) Wherever possible, public sewers should be provided for all buildings and/or land uses requiring sewage facilities. If public sewers are not available, the applicant must provide a primary on-lot sewage system drainfield and an area for a secondary or replacement drainfield meeting the requirements chapter and any other applicable state or local regulations.

of this

(j) Additional information.

[1] In addition to the standard requirements for site plan submission, the following additional information is required on the site plan:

[a] Depressions.

[b] Fissures, lineaments, faults or fracture traces.

[c] Ghost lakes. [d] Outcrops of bedrock.

[e] Seasonal high water tables.

[f] Sinkholes and previously filled sinkholes.

[g] Soil mottling, on aerial photographs, as an indication of shallow weathered pinnacles.

[h] Springs.

[i] Surface drainage entering the ground.

[j] Caverns.

[k] Disappearing lakes.

[l] Disappearing streams.

[m] Surface or subsurface pinnacles.

[n] Calcareous fens.

[2] Such information must be provided by a licensed professional geologist.

[3] Such information must be based upon field surveys and published data which shall be supported by an explanation of its source, including the qualifications of the individuals directly responsible for preparing such information.

(k) The applicant shall furnish a map indicating existing and proposed grading and drainage conditions, the locations of all proposed primary and secondary private and public sewage disposal systems and the locations of existing private and public water supplies on adjoining properties (if any).

(l) Landfills shall not be permitted in this district.

(m) Disposal of domestic, agricultural or industrial waste shall not be permitted in sinkholes or closed depressions.

(4) Nonassumption of liability.

(a) In Carbonate Geology Areas, alteration, development or use of land may be hazardous with respect to foundation safety of structures, the creation of unstable land as a result of changes in drainage and the contamination of groundwater and surface water. Within the limitations of the information available at the time of review on individual applications, the Township shall attempt to make reasonable judgments as to the applicant's rights and responsibilities in this Carbonate Geology Area. All applicants and property owners are hereby notified that the Township, Township employees and Township consultants undertake no responsibility of property or life or personal injury due to carbonate geology conditions, even if applicants or property owners strictly observe all Township ordinances.

(b) It is also noted that local conditions can cause sinkholes and subsidence of ground in areas outside Carbonate Geology Areas and/or in areas of carbonate geology not designated as a sinkhole or hazardous area during site plan presentation or review. The applicant and property owner should always make independent investigations of these matters prior to using this land or construction of a building or structure.

(5) Appearance of geologic hazards after site plan approval. In certain cases, a specific geologic hazard, such as sinkholes, caves, etc., will not be identified during the site plan preparation or review but will be encountered and uncovered after site plan approval or during or after construction. In those cases, the applicant and/or landowner shall follow the procedures outlined below:

(a) Repair and maintain repair of the hazard in such a way as to prevent or minimize damage to building, structure, utility, driveway, parking area, roadway and other site improvements in such a way as to minimize pollution of the groundwater.

(b) Repair and maintain repair of ground cover and landscaping.
any damage to improvements and restore

(c) Report occurrence of hazard and method of repair to the Zoning Officer within 14 days of the occurrence. It is recognized that repairs may have to be undertaken on an emergency basis, so in that event, repairs may begin without a zoning permit as long as repairs and restorations are made in compliance with prior approved site plans or zoning permits.

(d) In those cases where the hazard cannot be repaired in such a way as to maintain the integrity of the original approved site plan, the applicant and/or property owner shall apply for a site plan amendment using the procedures for site plan submissions (see 9 180-102). During review and approval of such a site plan amendment, the Planning Commission and Zoning Officer shall recognize that the newly identified geologic hazard may have produced nonconformities to this chapter which may not reasonably be brought into conformity. The Planning Commission and Zoning Officer may allow the continuation of these nonconformities even if such nonconforming features have not been actually constructed. However, the applicant and/or landowner shall try to reduce or eliminate nonconforming features during the preparation of the site plan amendment.

(e) In all cases, however, if a sinkhole appears after site plan approval but before final inspection and approval of an on-lot sewer disposal system and such sinkhole is within 100 feet of the drainfield, the drainfield shall be relocated to meet Department of Environmental Protection requirements. The Township Sewage Enforcement Officer shall make all determinations on this matter as it is regulated by state regulations and other Township ordinances.

D. Steep slope, woodlands, rock outcrops or cliffs.

(I) Applicability of special regulations. In any district in the Township, the minimum lot area requirements and/or maximum density or coverage required shall be modified for any properties containing steep slopes, woodland or rock outcrops or cliffs as specified in this chapter. Properties subject to this regulation are all properties whose condition at the time of adoption of this chapter falls into anyone or more of the following categories:

(a) If all or a portion of the property 5,000 square feet or larger has a slope of 15% or more (a fifteen-percent slope is a 1.5-foot drop in 10 feet).

- (b) If the property contains woodland, as defined by this chapter.
- (c) If all or a portion of the property 5,000 square feet or larger has a rock outcrop or a cliff or quarry face.

(2) Site plan requirements.

(a) The applicant for any zoning permit for a property with the above-listed characteristics of steep slope, woodlands, rock outcrops or cliffs shall be required to submit a site plan in accordance with g 180-102 of this chapter. The site plan required for single-family detached dwellings and/or associated accessory uses shall be subject to Zoning Officer review and approval but exempt from Planning Commission and Township Council review and approval.

(3) Special requirements on minimum lot sizes, lot width and maximum development density and cover. The lot area and allowed density and lot widths and allowed cover requirements for properties containing the special natural features specified in this section for 5,000 square feet or more of the property shall be regulated by the district regulations for the property in question, with the following additional restrictions:

(a) Slope.

[1] In the alternative to the above requirements, the following scale of slope and lot requirements is hereby imposed for the overall average property slope:

Average Property Slope (percent)	Lot Size and Width Factor ¹	Development Density and Cover Factor ²	Minimum Lot Size in RA District (acres) ³
0 to 15.0	1.0	1.00	2.0
15.1 to 17.0	1.5	0.67	2.0
17.1 to 20.0	2.0	0.50	2.0
20.1 to 22.0	2.5	0.40	2.5
22.1 to 25.0	3.0	0.33	3.0
Above 25.0	3.5	0.28	3.5

NOTES:

1 A factor multiplied times the primary district and secondary district lot size and width requirement to obtain the adjusted minimum lot size and lot width, with the exception that if the factor, when multiplied times lot width, would cause a minimum lot width to exceed 300 feet. then 300 feet shall be allowed as the minimum lot width.

2 A factor multiplied times the primary district and secondary district density and lot coverage requirement to obtain the adjusted maximum allowed development density and lot coverage.

3 Notwithstanding the other requirements of this section, these minimum lot size requirements are applicable in the RA District.

[2] The average property slope for the purposes of this regulation shall be the slope calculated by summing the length of all two-foot contour lines for the existing ground conditions and multiplying that sum by two feet. That product shall then be divided by the lot area to find the average property slope:

$$\frac{2 \times \text{sum of length of contours}}{\text{lot area}} = \text{average lot slope}$$

[3] In addition to the above requirements, earthmoving activities are specifically prohibited in areas of twenty-five-percent slopes or steeper unless such disturbance is specifically approved by the Township Council as part of the site plan review. To obtain approval, the applicant must demonstrate that they require such disturbance for the reasonable use of their lot area such that the disturbance has been held to an absolute minimum.

(b) Rock outcrops; cliffs and quarry face. Rock outcrop, cliff and quarry face areas on the property shall be subtracted from the lot area to determine available lot area for the purpose of determining lot size, density and cover requirements. No on-lot sewage system drainfield shall be proposed within 50 feet of such features.

(c) Removing woodlands and moving earth or changing contours are all activities that require zoning permits. The removing of woodland and moving of earth to avoid requirements of this chapter is hereby prohibited.

(4) Special restrictions and defined by this chapter:
regulations applying to lots containing woodlands as

(a) Woodlands shall be preserved as undisturbed woodlands, except for removal of dead or diseased trees, and except as allowed for thinning of major trees and except as permitted and regulated by other sections of this chapter.

(b) Removing or destroying trees; replacement.

[1] Any person, partnership or corporation who or which removes or destroys woodlands or major trees above the allowed percentage as stated above shall be subject to the penalties for violation as outlined in this chapter and is responsible for replacement of said woodlands or trees in accordance with the minimum standards for shade trees as specified herein. This replacement shall be done on a tree-for-tree basis if the number of major trees removed in violation of this chapter can be identified. If the number of major trees cannot be identified, then the trees shall be replaced at a rate of one tree per 1,000 square feet of area of tree removal that has occurred in violation of this chapter, as determined by the Zoning Officer.

[2] These replacement trees shall be deciduous trees, native to the Northampton County area, nursery stock, well branched and free of disease. The trees shall be balled and burlapped and not less than two inches to two and one-half inches in caliper measured six inches above the ball. The trees shall be at least 10 feet tall after planting and trimming.

[3] Branching shall start not less than six feet from the top of the ball.

[4] The following trees shall be permitted as required replacement trees:

Red oak
Hickory
Tulip poplar
Sugar maple
Beech
Sweet gum

[5] Other species may be permitted upon approval of the Township Manager if the species is of equivalent quality and is naturally occurring locally.

[6] These replacement trees may be placed on the property at any location selected by the property owners as long as such location does not cause a violation of an ordinance of the Township or laws of the state.

(c) These replacement trees cannot be used as credits to meet other planting requirements for street/shade trees or buffer plantings.

(5) Special restrictions chapter: applying to lots containing steep slopes, as defined by this

(a) If the overall average property slope exceeds 8.0% but is less than 15.0%, then no more than 40% of such property shall be developed and/or regraded or stripped of vegetation,

(b) If the overall average property slope is equal to or greater than 15% but is less than 25% in slope, then no more than 30% of such property shall be developed and/or regraded or stripped of vegetation. In addition, if the overall average property slope is equal to or greater than 25 %, then no more than 15% of the property shall be developed and/or regraded and/or stripped of vegetation.

(6) Exception to the minimum lot width requirements on steep slopes in the RA and R40 Districts.

(a) For properties containing steep slopes, as defined in this chapter, in the RA and R40 Districts, the minimum lot widths required utilizing the lot width factors specified in Subsection D(3) shall not apply when the following criteria are met:

[I] The developer shall submit two sketch plans to the Planning Commission for review, along with the submission of a subdivision plan application in accordance with Chapter 145, Subdivision and Land Development. One plan shall show a proposed lot layout which meets the minimum lot width requirements as dictated by the lot width factor table contained in Subsection D(3) (hereafter referred to as "Sketch A"); the second plan shall show a proposed lot layout which meets the minimum lot width requirements specified in this subsection as listed below (hereafter referred to as "Sketch B").

[2] The number of lots proposed by Sketch B shall not exceed the number of lots proposed by Sketch A.

[3] The percentage of cover and the amount of new public roads proposed by Sketch B shall not exceed the amounts proposed by Sketch A.

[4] The number of proposed driveways to existing Township roads by Sketch B shall not exceed the number of driveways proposed on Sketch A.

[5] The amount of woodland preservation proposed by Sketch B shall be equal to or greater than the amount proposed by Sketch A.

(b) If the Township finds that these criteria are met, then the following minimum lot widths are required in the RA and R40 Districts:

Average Property Slope (percent)	Minimum Lot Width (feet)	
	RA	R40
0 to 15.0	200	200
15.1 to 17.0	250	250
17.1 to 20.0	300	300
20.1 to 22.0	150	175
22.1 to 25.0	200	225
Above 25.0	250	275

E. Protection of major trees.

(1) Limitation on cutting or removing major trees. In any district in the Township, it shall be unlawful in any calendar year for a person to cut down or remove more than three major trees from a lot except as described below:

(a) Permitted major tree cutting. It shall be lawful to cut down or remove more than three major trees if:

[1] The major trees are significantly diseased, infected or damaged.

[2] The major trees are in such position or condition that they constitute a danger to persons, structures, neighboring property, the property on which they are located or to the public.

[3] The major trees are located within an area that needs to be regraded and/or paved for a proposed street, curbing or sidewalk or are within five feet of the existing or proposed cartway or shoulder of an uncurbed street.

[4] The major trees meet the standards described herein for cutting of trees prior to construction

[5] The major trees to be cut are part of an operation that would qualify as “thinning of major trees.”

[6] The major trees to be cut are part of an approved site plan meeting the requirements of forestry, as described in 9 180-127.2, in districts allowing forestry.

(b) Damaged and diseased major trees. In nonemergency cases, unless otherwise stipulated by the Zoning Officer, site evaluations to determine or identify significantly diseased, infected or damaged major trees shall be made during a particular major tree’s growth period of the year; evaluations shall not be made while the major trees are in their dormant state. Major trees so evaluated and marked during growth periods may subsequently be cut during dormant periods with the approval of the Zoning Officer.

(c) Cutting major trees prior to construction. When a zoning permit is issued for a building, structure or use, it shall be lawful to cut down any major trees which exist in the area to be occupied by such building, structure or use, within 25 feet of any building or structure, within 15 feet of any driveway, parking areas, water system or sewage disposal system, stormwater detention facility and/or within the area needed for the minimum grading for these improvements. It is noted, however, that the ability to cut down any major trees, as granted by this section, shall not supersede the woodland protection requirements of 180-951.D(4).

(2) Killing and damaging major trees.

(a) During the construction or installation of any building or structure, driveways, parking areas, water systems or sewage disposal systems, or in the process of landscaping or grading the lot, the fill generated by such construction, installation, landscaping or grading shall not be placed or stored in a manner which, as determined by the Zoning Officer, will potentially kill or seriously damage major trees on the tract of land.

(b) It shall be unlawful to purposefully kill a major tree by artificial means, including but not limited to girdling, smothering or the application of poisonous chemicals.

(3) Emergency major tree removal. In emergency situations where major trees are in such position or condition that they constitute a danger to persons, structures, neighboring property, the property on which they are located or to the public, the property owner may cut down or remove major trees in excess of three major trees, but shall apply for the appropriate permit within three business days after the major tree cutting or removal.

(4) Replacement of trees.

(a) Any person, partnership or corporation who or which cuts, removes or destroys woodlands or major trees in violation of this chapter shall be subject to the penalties for violation as outlined in this chapter and is responsible for replacement of said trees in accordance with the minimum standards for shade trees as specified herein. This replacement shall be done on a tree-for-tree basis if the number of major trees removed in violation of the chapter can be identified. If the number of major trees cannot be identified, then the trees shall be replaced at a rate of one tree per 1,000 square feet of area of tree removal that has occurred in violation of the chapter, as determined by the Zoning Officer.

(b) These replacement trees shall be deciduous trees, native to the Northampton County area, nursery stock, well branched and free of disease. The trees shall be balled and burlapped and not less than two inches to two and one-half inches in caliper measured six inches above the ball. The trees shall be at least 10 feet tall after planting and trimming. Branching shall start not less than six feet from the top of the ball.

(c) The following trees shall be permitted as required replacement trees:

Red oak Hickory Tulip poplar Sugar maple Beech Sweet gum

(d) Other species may be permitted upon approval of the Township Manager if the species is of equivalent quality and is naturally occurring locally.

F. Riparian Corridor Buffers.

(I) Purpose. The purpose of this subsection is to protect the public health, safety and welfare through the preservation of the municipality's surface water resources. Certain types of development and/or land use adjacent to these surface waters creates a high potential for stream or groundwater pollution. It is the intent of this regulation to minimize the risk of stream or groundwater pollution by means of limiting the type and location of certain development or land use allowed along watercourses by establishing Riparian Corridor Buffers.

(2) Applicability.

(a) The requirements of this subsection shall apply to the following watercourses, water bodies and wetlands and the land adjacent to them:

[1] All naturally occurring watercourses that normally contain flowing water during all times of the year, including streams that may dry up during periods of extended drought. These shall include, but not be limited to:

[a] Perennial streams identified in the most recent Soil Survey of Northampton County.

(Note: Shown as solid lines of Soil Survey Maps.)

[b] Perennial streams identified on United States Geological Survey Maps (USGS).

(Note: Shown as solid blue lines on older USGS maps, and thick solid blue lines on newer maps.)

[2] All intermittent watercourses otherwise identified in the most recent Soil Survey of Northampton County. (Note: Soil Survey shows intermittent streams as dots and dashes.)

[3] Wetlands, including vernal pools, and ponds greater than 100 square feet in area.

(b) The width and applicable regulations of the Riparian Corridor Buffer Areas shall be as follows, consist-

tent with the standards for Zone 1 and Zone 2 in Subsection F(2)(d) below:

[1] For watercourses identified in Subsection F(2)(a)[I] above, both Zone 1 and Zone 2 shall apply.

[2] For watercourses, wetlands, and ponds identified in Subsection F(2)(a)[2] and [3] above, only Zone 1 shall apply.

(c) The measurement of the Riparian Corridor Buffer Areas shall be as follows:

[1] For watercourses identified in Subsection F(2)(a)[I] above: a minimum of 75 feet from each defined edge of the watercourse at bank full flow or shall equal the extent of the one-hundred-year floodplain, whichever is greater.

[2] For watercourses identified in Subsection F(2)(a)[2] above: a minimum of 25 feet from the center line of the watercourse.

[3] For wetlands and ponds identified in Subsection F(2)(a)[3] above: a minimum of 75 feet from the edge of the wetland or pond for all wetlands or ponds located in areas designated by the Department of Environmental Protection as "special protection waters"; a minimum of 25 feet from the edge of all other wetlands or ponds. For wetlands at the edge of a pond, the measurement shall be made from the wetland edge.

(d) The district will consist of two distinct zones designated as:

[1] Zone One: This zone will occupy a margin of land with a minimum width of 25 feet measured horizontally on a line perpendicular to the edge or center line of the watercourse, as appropriate, and/or the edge of the wetland or pond.

[a] Where slopes in excess of 25% are located within 25 feet of a municipally designated watercourse, Zone One shall extend the entire distance of this sloped area. If the distance of this sloped area is greater than 75 feet, there will be no requirement for the establishment of Zone Two. If the distance is less than 75 feet, the width of Zone Two will be adjusted so that the total corridor width (Zone One and Zone Two) will be 75 feet maximum.

[2] Zone Two: This zone will begin at the outer edge of Zone One and occupy a minimum width of 50 feet in addition to Zone One.

[a] Where the one-hundred-year floodplain extends greater than 75 feet from the waterway, Zone One shall remain a minimum of 25 feet wide, and Zone Two shall extend from the outer edge of Zone One to the outer edge of the one-hundred-year floodplain.

(e) Width determination. The applicant shall identify the watercourses, wetlands, and/or ponds on and abutting the applicant's site, and the width of the riparian corridor, and for identifying these areas on any plan that is submitted as a subdivision plan, land development plan, site plan or lot grading plan, or other improvements that require plan submissions or permits.

(3) Uses permitted in the Riparian Corridor Buffer Area. The following uses are permitted either by right or as a conditional use in the Riparian Corridor Buffer Area:

(a) Zone One.

[1] Uses permitted by right. Open space uses that are primarily passive in character shall be permitted to extend into the area defined as Zone One, including:

[a] Wildlife sanctuaries, nature preserves, forest preserves, fishing areas, and passive areas of public and private parklands, reforestation.

[b] Streambank stabilization.

[2] Uses permitted by conditional use.

[a] Corridor crossings by farm vehicles and livestock, recreational trails, roads, railroads, centralized sewer and/or water lines, and public utility transmission lines.

(b) Zone Two.

[1] Uses permitted by right. The following uses, which are primarily passive in character, shall be permitted by right to extend into the area defined as Zone Two:

[a] Open space uses, including wildlife sanctuaries, nature preserves, forest preserves,

passive areas of public and private parklands, and recreational trails conducted in compliance with methods prescribed by Chapter 102 of Title 25 of the Pennsylvania Administrative Code.

[b] No more than one half (1/2) the depth of any minimum required front yards, side yards, and/or rear yards on private lots. The result of this requirement is that 1/2 of the minimum required yard depth shall act as a setback from the Zone 2 boundary, and the other 1/2 may extend into Zone 2 to complete the minimum required yard area. However, no part of the minimum required yard area may extend more than 25 feet into Zone 2 under any circumstances, and the portion within Zone 2 shall be subject to the regulations of Zone 2.

[c] Agricultural uses existing at the time of adoption of this chapter, so long as they are conducted in compliance with methods prescribed by Chapter 102 of Title 25 of the Pennsylvania Administrative Code.

[2] Uses permitted by conditional use.

[a] New agricultural uses in compliance with methods prescribed by Chapter 102.4(b) of Title 25 of the Pennsylvania Administrative Code.

[b] Corridor crossings by farm vehicles and livestock, roads, railroads, centralized sewer and/or water lines, and public utility transmission lines.

[c] Centralized sewer and/or water lines and public utility transmission lines running along the corridor. These lines shall be located as far from Zone One as practical.

[d] Forestry operations, as regulated by S 180.127.2 of this chapter.

[e] Passive use areas such as camps, campgrounds, picnic areas; active recreation areas such as ballfields, playgrounds, and courts; provided these uses are designed in a manner that will not permit concentrated flow.

(4) Uses specifically prohibited in the Riparian Corridor Buffer Area. Any use or activity not authorized within S 180.95F(3) herein shall be prohibited within the Riparian Corridor Buffer Area, and the following activities and facilities are specifically prohibited:

(a) Clear-cutting of trees and other vegetation.

(b) Cutting of trees and/or the clearing of other vegetation within Zone One, except where such clearing is necessary to prepare land for a use permitted under S 180.95F(3)(a).

(c) Cutting of trees and/or the clearing of other vegetation within Zone Two, except where such clearing is necessary to prepare land for a use permitted by S 180.95F(3)(b) herein and as where permitted as forestry in accordance with S 180.127.2.

(d) Removal or disturbance of vegetation in a manner that is inconsistent with erosion control and corridor protection.

(e) Storage of any hazardous or noxious materials.

(f) Use of fertilizers, pesticides, herbicides, and/or other chemicals in excess of prescribed industry standards or the recommendations of the Northampton County Conservation District.

(g) Roads or driveways except where permitted as corridor crossings in compliance with the applicable sections of this chapter.

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

(i) Parking lots.

Any type of permanent structure, including fences, except structures needed for a use permitted in 9 180.95F(3).

(k) On-lot sewage disposal, absorption or sprayfield areas.

(1) Sod farming.

(5) Any person will be required to restore and stabilize any unauthorized activity in the Riparian Corridor Buffer to the satisfaction of the Township.

G. Watershed Protection (WP).

(1) Purpose. The purpose of this subsection is to protect the public health, safety and welfare through the preservation of the municipality's major water resources to ensure a future supply of safe and healthful drinking water for the municipality, local residents and employees, and the general public.

(2)Applicability. This subsection shall only apply to those areas of the Township which are located within a Watershed Protection Area as delineated on the Zoning Map.” This subsection regulates the following land uses, physical facilities and activities which have the potential to contaminate ground water:

- (a) Light industry.
- (b) Agricultural operations.
- (c) Sewage disposal.
- (d) Manufacturing.
- (e) Injection wells.
- (f) Storage tanks: underground and aboveground.
- (g) Disposal facilities: solid waste, dump sites.
- (h) Sewage sludge land application.
- (i) Subdivisions.
- (j) Land development.

(3) Watershed Protection requirements.

(a) General requirements. No land use, physical facilities or activity specified in Subsection G(2) shall occur within a Watershed Protection Area, except in strict conformance with the provisions of this subsection.

(b) Watershed Protection Areas.

[1] Mapping of Watershed Protection Area.

[a] In order to implement the provisions of this subsection, Watershed Protection Areas surrounding protected public water supplies are hereby established. The boundaries of the Watershed Protection Areas are shown on the Township Zoning Map.”

[b] Should any person challenge the boundary of Watershed Protection Areas, it shall be the responsibility of that person to retain a recognized professional with competence in the field to determine more accurately the precise boundary of the disputed area. The final boundary to be used will be determined by the Zoning Officer with assistance from the Municipal Engineer and/or a professional hydrogeologist, as appropriate.

[2] Prohibitions within Watershed Protection Areas.

[a] Except as provided for in Subsection G(4), the following land uses, physical facilities and activities are prohibited:

[i] Facilities which generate, store, treat or dispose of hazardous material which are required to maintain a Pollution Incident Prevention (PIP); Spill Prevention Control and Countermeasure (SPCC); Preparedness, Prevention and Contingency (PPC); Spill Prevention Response (SPR) or SARA Title III Off-Site Plan.

[ii] Herbicide, pesticide and fertilizer products dealers and distributors.

[iii] Large volume subsurface sewage disposal systems.

[iv] Large volume spray irrigation sewage disposal systems.

[v] Underground injection wells.

[vi] Aboveground storage tanks.

[vii] Underground storage tanks, except those in accord with the requirements of this chapter.

[viii] Waste disposal facilities.

[ix] Land application of sewage sludge.

[x] Facilities which dispose of hazardous material through land surface or subsurface means, including, but not limited to, Class IV injection wells and waste disposal facilities.

(4) General regulations.

(a) Continuation of existing land uses, physical facilities and activities. Any land use, physical facility or activity prohibited within Subsection G(3) lawfully in existence within Watershed Protection Areas prior to the effective date of this subsection may continue to exist on the parcel upon which it is located so long as it remains in compliance with applicable federal, state and local regulations, including the requirements included within Subsection G(6).

(b) Existing sewage disposal problems. Notwithstanding the provisions of Subsection G(3), large volume

subsurface sewage disposal systems or large volume spray irrigation sewage disposal systems may be used if necessary to solve sewage disposal problems associated with existing development.

(c) Public water supply projects. Notwithstanding the provisions of Subsection G(3), public water supply projects which require the use of chemicals for disinfection or treatment or the aboveground storage and use of fuel will be allowed in all Watershed Protection Areas, subject to their approval, construction and operation in accordance with DEP regulations.

(d) Demonstration of exemption. Notwithstanding the provisions of Subsection G(3), operations and facilities will be allowed in all Watershed Protection Areas if a description sufficient to meet the requirements of Subsection G(5)(h) et seq. demonstrates to the satisfaction of the Township Council that no potential for contamination will exist due to the nature of the facility and operation.

(5) Special Watershed Protection provisions.

(a) General requirements. No land use, physical facility or activity specified in Subsection G(2) shall occur within Watershed Protection Areas except in strict conformance with the requirements of this subsection.

(b) Watershed Protection Area requirements. The following land uses, physical facilities and activities, located within Watershed Protection Areas which are specifically allowed in Subsection G(3) and (4) of this subsection, shall meet the following conditions:

[1] Large volume subsurface sewage disposal systems and large volume spray irrigation sewage disposal systems.

[a] A current permit from the Department of Environmental Protection must be filed with the municipality.

[b] DEP required water quality monitoring reports must be filed with the municipality.

[2] Aboveground storage tanks and underground storage tanks.

[a] A current registration from the Department of Environmental Protection must be filed with the municipality.

[b] Shall comply with all DEP regulations which are enacted in response to the Storage Tank and Spill Prevention Act of 1989.

[3] Agricultural operations.

[a] The conservation plan prepared according to Chapter 102 of DEP regulations must include a pesticide management plan and a nutrient management plan.

[b] Within areas of carbonate bedrock as delineated on the Township Zoning Map,17 the conservation plan prepared according to Chapter 102 of DEP regulations must include the identification of sinkholes and a mitigation plan.

[4] Sewage disposal facilities.

[a] Sewage disposal facilities must be operated and maintained to prevent discharge of untreated or partially treated sewage to surface or ground waters.

[b] On-lot sewage disposal systems must be inspected by the Sewage Enforcement Officer (SEO), and any necessary repairs or maintenance must be performed prior to the expansion or conversion of the land use served.

[c] On-lot sewage disposal systems must be inspected by the Sewage Enforcement Officer, and any necessary repairs or maintenance must be performed prior to transfer of property ownership.

[5] Stormwater detention facilities.

[a] The facility shall be designed and constructed with an impermeable liner.

[6] Inspections.

[a] Municipal inspections.

[i] The Township or its designee shall be authorized to inspect the following facilities located within Watershed Protection Areas for purposes of determining compliance with this chapter and any federal or state permit or regulation requirements upon direction by the governing body:

[A] Large volume subsurface and spray irrigation sewage disposal systems.

[B] Underground and aboveground storage tanks.

[C] Agricultural operations.

[D] Sewage disposal facilities.

[E] Stormwater detention facilities.

[ii] The schedule of inspections shall be determined by the municipality for each type of facility. Inspectors shall be responsible for reporting any violations to the municipality. The municipality may inform DEP or EPA, as appropriate, of any possible violations of their regulations for the purpose of follow-up actions by those agencies.

[b] Inspections by the County Conservation District. The County Conservation District shall be authorized to perform monthly inspection of the following activities located within Watershed Protection Areas:

[i] Agricultural operations covered by a conservation plan under Chapter 102 of DEP regulations.

[ii] Earthmoving activities covered by an erosion and sedimentation plan under Chapter 102 of DEP regulations.

[c] Right of entry. Upon presentation of the proper credentials and execution of release/waiver of claims, duly authorized representatives of the municipality may enter at reasonable times upon any property within a Watershed Protection Area to investigate or ascertain whether the requirements of this chapter are being met. ~ 180-96. Neighborhood protection. No building, structure or land use anywhere within the Township shall be used or occupied in any manner that creates any dangerous, injurious, noxious or otherwise objectionable condition; fire, explosive or other hazard; noise or vibration; smoke, dust, odor or other form of air pollution; heat, electromagnetic or other radiation or other condition in such manner or in such amount as to affect adversely the reasonable use or value of the surrounding area of adjoining premises or be dangerous to public health or safety.