

## ARTICLE 19

### WATERSHED

#### 19.1 Watershed Regulations

##### 19.1-1 Authority and Enactment

The Town Board of Aldermen of the Town of Landis is authorized to adopt this Article pursuant to North Carolina law, including but not limited to Article 14, Section 5 of the Constitution of North Carolina; North Carolina General Statutes §143-214.5 (Watershed Protection) and §143-214.7 and rules promulgated by the Environmental Management Commission thereunder; Session Law 2004-163; Chapter §160A, §§ 174, 185; as well as Chapter §113A, Article 4 (Sedimentation Pollution Control); Article 21, Part 6 (Floodway Regulation); Chapter §160D (Local Planning and Development Regulation).

The Legislature of the State of North Carolina has, in Chapter 160A, Article 8, Section 174, General Ordinance Authority; and in Chapter 143, Article 21, Watershed Protection Rules, delegated the responsibility or directed local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. The Landis Town Board does hereby ordain and enact into law the text contained in this Article to satisfy said statutory requirements.

##### 19.1-2 Jurisdiction

The provisions of Article 19 shall apply only within areas designated as Water Supply Watersheds by the N.C. Environmental Management Commission and shall be depicted on the Town of Landis's Official Zoning Map. Where there is a conflict between the regulations contained in Article 19, and any other portion of this Development Ordinance, the provisions of Article 19, shall apply to properties located within a designated Water Supply Watershed area.

##### 19.1-3 Definitions

For the purpose of interpreting Article 19, certain words or terms are herein defined. Except as defined herein, all other words not in either this Section or Article 3 of this Ordinance shall have their everyday dictionary definition.

(A.) Agricultural Use. The use of waters for stock watering, irrigation, and other farm purposes.

(B.) Animal Unit. A unit of measurement developed by the U.S. Environmental Protection Agency that is used to compare different types of animal operations.

- (C.) Balance of Watershed. Remaining area of a WS III watershed outside of the designated critical area.
- (D.) Best Management Practices (BMP). A structural or nonstructural management-based practice used singularly or in combination to reduce non-point source inputs to receiving waters in order to achieve water quality protection goals.
- (E.) Buffer, Vegetative. An area of natural or planted vegetation through which stormwater runoff flows in a diffuse manner so that the runoff does not become channelized and which provides for infiltration of the runoff and filtering of pollutants. The buffer is measured landward from the normal pool elevation of impounded structures and from the bank of each side of streams or rivers.
- (F.) Built-upon Area. Built-upon areas shall include that portion of a development project that is covered by impervious or partially impervious cover including building, pavement, gravel areas (e.g., roads, parking lots, paths), recreation facilities (e.g., tennis courts), etc. (Note: Wooden slatted decks and the water area of a swimming pool are considered pervious). Built upon areas shall be determined on a project-by-project basis.
- (G.) Cluster Development. The grouping of buildings in order to conserve land resources and provide for innovation in the design of the project including minimizing stormwater runoff impacts. This term includes nonresidential development as well as single-family residential subdivision and multi-family developments.
- (H.) Composting Facility. A facility in which only stumps, limbs, leaves, grass and untreated wood collected from land clearing or landscaping operations is deposited.
- (I.) Critical Area. The area adjacent to a water supply intake or reservoir where risk associated with pollution is greater than from the remaining portions of the watershed. The critical area is defined as extending either one-half mile from the normal pool elevation of the reservoir in which the intake is located or to the ridge line of the watershed (whichever comes first); or one-half mile upstream from the intake located directly in the stream or river (run-of-the-river), or the ridge line of the watershed (whichever comes first). Local governments may extend the critical area as needed. Major landmarks such as highways or property lines may be used to delineate the outer boundary of the critical area if these landmarks are immediately adjacent to the appropriate outer boundary of one-half mile.
- (J.) Development. Any land disturbing activity which adds to or changes the amount of impervious cover on a land area or which otherwise decreases the infiltration of precipitation into the soil.

- (K.) Development, Existing. Those projects that are built or those projects that at a minimum have established a vested right under North Carolina Zoning Law as of the effective date of this Ordinance based on at least one of the following criteria:
- (1) substantial expenditures of resources (time, labor, money) based on a good faith reliance upon having received a valid local government approval to proceed with the project, or
  - (2) having an outstanding valid building permit as authorized by the General Statutes (G.S. 160D-1110), or
  - (3) having an approved site specific or phased development plan as authorized by the General Statutes (G.S. 160D-108 and/or G.S.160D-108.1).
- (L.) Discharging Landfill. A facility with liners, monitoring equipment and other measures to detect and/or prevent leachate from entering the environment and in which the leachate is treated on site and discharged to a receiving stream.
- (M.) Existing Lot (Lot of Record). A lot which is part of a subdivision, a plat of which has been recorded in the Office of the Register of Deeds prior to October 1, 1993 of this Ordinance, or a lot described by metes and bounds, the description of which has been so recorded prior to October 1, 1993. (Note: This definition containing the October 1, 1993 stipulation shall be applicable only to Article VII, Section 16 of this Ordinance. Otherwise, the term "existing development" shall be employed with reference to time on and after the effective date of this Ordinance.)
- (N.) Hazardous Material. Any substance listed as such in: SARA Section 302, Extremely Hazardous Substances, CERCLA Hazardous Substances, or Section 322 of CWA (oil and hazardous substances).
- (O.) High-density Option. Any non-residential development, which contains engineered stormwater control devices approved by the Town of Landis, thereby enabling development to occur at a higher intensity (than if the low-density option were used) as prescribed by the Environmental Management Commission's adopted Water Supply Watershed Protection Rules.
- (P.) Industrial Development. Any non-residential development that requires an NPDES permit for an industrial discharge and/or requires the use or storage of any hazardous material for the purpose of manufacturing, assembling, finishing, cleaning or developing any product or commodity.
- (Q.) Landfill. A facility for the disposal of solid waste on land in a sanitary manner in accordance with Chapter 130A Article 9 of the N.C. General Statutes. For the purpose

of this article, this term does not include compost facilities.

- (R.) Low-density Option. Any development which does not contain engineered stormwater control devices (i.e., wet detention ponds) approved by the Town of Landis.
- (S.) Plat. A map or plan of a parcel of land which is to be or has been subdivided.
- (T.) Protected Area. The area adjoining and upstream of the critical area in a WS-IV water supply in which protection measures are required. The boundaries of the protected areas are defined as within five (5) miles of the normal pool elevation of the reservoir and draining to supply reservoirs or to the ridge line of the watershed (whichever comes first). Local government may extend the protected area. Major landmarks such as highways or property lines may be used to delineate the outer boundary of the protected area if these landmarks are immediately adjacent to the appropriate outer boundary of five (5) miles. In some cases the protected area will encompass the entire watershed.
- (U.) Residential Development. Buildings for residence such as attached and detached single-family dwellings, apartment complexes, condominiums, townhouses, cottages, etc. and their associated outbuildings such as garages, storage buildings, gazebos, etc. and customary home occupations.
- (V.) Residence, Single-Family. Any development where: 1) every dwelling unit is on a separate lot, and 2) where no lot contains more than one dwelling unit.
- (W.) Toxic Substance. Any substance or combination of substances (including disease causing agents), which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, has the potential to cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions or suppression in reproduction or growth) or physical deformities in such organisms or their offspring or other adverse health effects.
- (X.) Variance, Major. A variance that results in any one or more of the following:
1. A variance from the Town's water supply watershed regulations that results in the relaxation by a factor greater than five (5) percent of any buffer, density, or built-upon area requirement under the high-density option.
  2. Any variation in the design, maintenance, or operation requirements of a wet detention pond or other approved stormwater management system.
  3. Relaxation by a factor greater than ten (10) percent of any management requirement under the low-density option.

- (Y.) Variance, Minor. A variance from the Town's water supply watershed regulations that results in a relaxation by a factor of up to five (5) percent of any buffer, density or built-upon area requirement under the high-density option; or that results in the relaxation by a factor of up to ten (10) percent of any management requirement under the low-density option.
- (Z.) Water-Borne Structure. Any structure for which the use requires access to or proximity to or citing within surface waters to fulfill its basic purpose, such as boat ramps, boat houses, docks and bulkheads. Ancillary facilities such as restaurants, outlets for boat supplies, parking lots and commercial boat storage areas are not water dependent structures.
- (AA.) Watershed. The entire land area contributing surface drainage to a specific point (e.g. the water supply intake). The term includes: WS.

#### 19.1-4 Effective Date

The development provisions of this article were originally adopted on September 13, 1993 and effective on October 1, 1993. In accordance with G.S. 160D, procedural requirements herein are in accordance with the Session Law 2020-25 effective June 11, 2020. This article shall continue in effect as herein now stated upon re-enactment through adoption of the Landis Development Ordinance as set forth in Article 1 of this Ordinance.

#### 19.1-5 Exceptions to Applicability

- (A.) Nothing contained herein shall repeal, modify, or amend any Federal or State law or regulation, or any ordinance or regulation pertaining thereto except any ordinance which these regulations specifically replace; nor restrict any provisions of the Code of Ordinances of the Town of Landis; however, the adoption of this Ordinance shall and does amend any and all ordinances, resolutions, and regulations in effect within the jurisdiction of the Town of Landis (as depicted in the Town's Official Zoning Map) at the time of the adoption of this Ordinance that may be construed to impair or reduce the effectiveness of this Ordinance or to conflict with any of its provisions.
- (B.) It is not intended that these regulations interfere with any easement, covenant or other agreements between parties. However, if the provisions of these regulations impose greater restrictions or higher standards for the use of a building or land, then the provisions of these regulations shall control.
- (C.) Existing development as defined in this ordinance, is not subject to the requirements of this ordinance. Expansions to structures classified as existing development on any

lot other than a lot containing a single-family residence as the principle use, must meet the requirements of this ordinance, however, the built-upon area of existing development is not required to be included in the density calculations (i.e., maximum number of units permissible or the maximum built-upon area).

- (D.) A pre-existing lot owned by a individual prior to the effective date of these regulations, regardless of whether or not a vested right has been established, may be developed or used for single-family residential purposes without being subject to these WS regulations. However, this exemption is not applicable to multiple contiguous lots under single ownership. Combination of one or more such adjacent unimproved lots, neither one of which meet the lot requirements of the overlay zone, shall be required only if the combination will bring the lots into conformance with the underlying zoning district regulations.

#### 19.1-6 Establishment of Watershed Overlays and Areas for the High-density Option.

The purpose of this Section is to establish and describe the various water supply watershed Overlays herein created. The following Overlays shall be in place and are depicted on the Town of Landis's Official Zoning Map:

- (1) WS-III-CA (Critical Area) Overlay
- (2) WS-III-BW (Balance of Watershed) Overlay
- (3) WS-IV-CA (Critical Area) Overlay
- (4) WS-IV-PA (Protected Area) Overlay

These Overlays are established to provide for certain additional requirements and/or uses for properties located in one or more general zoning districts. Thus, in addition to the requirements of the underlying general zoning district, the provisions of the Overlay would also prevail in the areas so zoned.

In the WS-III and WS-IV watershed areas, any non-residential development may occur using the high-density option under the rules and guidelines herein described in Section 19.1-8. The use of the high-density option for any particular project shall be subject to Town Board approval and, where deemed necessary by the Town, submitted to the Division of Environmental Management's Water Quality Section for review and recommendation. See Table 19.1-6 appearing at the end of this section as summary chart for WS Overlays. These high-density option areas are designated on the Town of Landis's Official Zoning Map.

(A.) WS-III-CA Critical Area Overlay

In order to maintain a low to moderate land use intensity pattern, single-family detached residential uses are allowed at a maximum of one (1) dwelling unit per acre or on lots having a minimum of forty thousand (40,000) square feet excluding roadway rights of way. All other residential and non-residential development shall be allowed a maximum of twelve percent (12%) built-upon area on a project-by-project basis if the low-density option is used. If the high-density option is chosen and approved (see Section 19.1-8), non-residential development shall not exceed a built-upon area of thirty percent (30%) on a project-by-project basis.

No new permitted sites for land application of residuals or petroleum contaminated soils are allowed. No new landfills are allowed.

1. Allowed Uses (only if permitted in the underlying zoning district):

- a) Agriculture subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990. (NOTE; THE SOIL AND WATER CONSERVATION COMMISSION IS THE DESIGNATED MANAGEMENT AGENCY RESPONSIBLE FOR IMPLEMENTING THE PROVISIONS OF THE WATER SUPPLY WATERSHED REGULATION RELATING TO AGRICULTURAL ACTIVITIES.)
- b) Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality (15 NCAC 11.6101-.0209).
- c) Residential development (single-family, manufactured homes, manufactured home parks, two-family, multi-family, and cluster developments).
- d) Non-residential development (i.e., commercial, institutional, and industrial development) except no NPDES permits will be issued for landfills that discharge treated leachate.

2. Density and Built-upon Limits:

- a) Single-Family Residential--development shall not exceed one dwelling unit per acre on a project-by-project basis. Alternatively, lots with a minimum area of forty thousand (40,000) square feet shall be allowed. Cluster developments are also allowed in accordance with primary zoning district provisions appearing in Article 8 of this Ordinance.
- b) All Other Residential and Non-Residential--development shall not exceed twelve percent (12%) built-upon area on a project-by-project basis. For the purpose of calculating built-upon area, the total project area shall include

total acreage in the tract on which the project is to be developed.

- c) Where new development exceeds either one (1) dwelling unit per acre or twelve percent (12%) built-upon area, engineered stormwater controls shall be used to control runoff from the first inch of rainfall and development shall not exceed thirty percent (30%) built-upon area.

(B.) WS-III-BW Balance of Watershed Overlay

In order to maintain a moderate land use intensity pattern, single-family detached residential uses are allowed at a maximum of two (2) dwelling units per acre alternatively, lots having an area of at least twenty thousand (20,000) square feet are allowed. All other residential and non-residential development shall be allowed a maximum of twenty-four percent (24%) built-upon area on a project-by-project basis if the low-density option is used. If the high-density option is chosen and approved in accordance with Section 19-1.8, multi-family and non-residential development shall not exceed a built-upon area of fifty percent (50%) on a project-by-project basis. In addition, up to ten (10%) of the balance of each such WS III watershed which is located within Landis' jurisdiction may be developed for multi-family and non-residential uses with up to seventy percent (70%) built-upon area, on a project-by-project basis. Multi-family and non-residential uses which can qualify for the seventy percent (70%) built-upon area ratio shall meet both of the following criteria: 1) projects with built upon areas of 24-70 percent shall be located in MU-1, MU-2, C-29, or C-85 zoning districts only and 2) require stormwater detention ponds to control the first 1" of water runoff. The Planning, Zoning & Subdivision Administrator is authorized to approve such qualified multi-family and non-residential projects consistent with all other applicable provisions of this Ordinance. All projects must minimize built-upon surface area, direct stormwater away from surface waters and incorporate Best Management Practices (BMP's) to minimize water quality impacts.

No new landfills and residuals or petroleum contaminated soils application sites are allowed.

1. Allowed Uses (only if permitted in the primary zoning district):

- a) Agriculture subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990.
- b) Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality (15 NCAC 11.6101-.0209).
- c) Residential development (single-family, manufactured homes, manufactured home parks, two-family, multi-family, and cluster



developments).

- d) Non-residential (i.e., commercial, institutional, or industrial development) except no NPDES permits will be issued for landfills that discharge treated leachate.

2. Density and Built-upon Limits:

- a) Single-Family Residential Uses. Development shall not exceed two dwelling units per acre. Alternatively, lots with a minimum of twenty thousand (20,000) square feet excluding roadway right of way shall be allowed.

Cluster developments are also allowed in accordance with primary zoning district provisions appearing in Article 8 of this Ordinance.

- b) All Other Residential and Non-Residential Uses. Development shall not exceed twenty-four percent (24%) built-upon area on a project-by-project basis if the low-density option is used. If the high-density option is chosen and approved, multi-family residential and non-residential development shall not exceed a maximum built-upon area of fifty percent (50%) on a project-by-project basis. In addition, up to ten percent (10%) of the balance of this by-project basis. In addition, up to ten (10%) of the balance of this watershed which is located within Landis' corporate limits may be developed for multi-family and non-residential uses up to a maximum built-upon area of seventy percent (70%) on a project-by-project basis. Such projects with built-upon areas of 24-70 percent shall be located in Zoning Districts wherein such uses are listed and require stormwater detention ponds to control the first 1" of water runoff.

For the purpose of calculating the built-upon area total project area shall include total acreage in the tract on which the project is to be developed. An example of how such calculations are to be made is described on the following two pages.

(C.) WS-IV-CA Critical Area Overlay

Only new development activities that require an erosion/sedimentation control plan under North Carolina law are required to meet the provisions of these regulations when located in the WS-IV-CA Overlay watershed. In order to address a moderate land use intensity pattern, single family detached residential uses are allowed at a maximum of two dwellings per acre or on lots with a minimum of 20,000 square foot excluding roadway right-of-way. All other residential and non-residential development shall be allowed with

a maximum built-upon ratio of twenty-four percent (24%) on a project-by-project basis. If the high-density option is chosen and approved, non-residential developments shall be allowed with a maximum built-upon ratio of fifty percent (50%) on a project-by-project basis. New residual or petroleum contaminated soils application sites and landfills are specifically prohibited.

1. Allowed Uses (only if permitted in the underlying zoning district):

- a) Agriculture subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990. (NOTE: THE SOIL AND WATER CONSERVATION COMMISSION IS THE DESIGNATED MANAGEMENT AGENCY RESPONSIBLE FOR IMPLEMENTING THE PROVISIONS OF WATER SUPPLY WATERSHED REGULATION RELATING TO AGRICULTURAL ACTIVITIES).
- b) Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality (15 NCAC 11.6101-.0209).
- c) Residential Uses (Single-family, manufactured homes, manufactured home parks, two-family, multi-family and cluster developments).
- d) Non-residential development (i.e. commercial, institutional, or industrial development) excluding: (i) landfills; and (ii) sites for land application of residuals or petroleum contaminated soils.

2. Density and Maximum Built-upon Limits:

- a) Single Family Residential Uses. Development shall not exceed a maximum of two (2) dwelling units per acre or 20,000 square foot lot excluding roadway right of way. Cluster development is allowed in accordance with primary zoning district provisions appearing in Article 8 of this Ordinance.
- b) All Other Residential and Non-Residential Uses. Development shall not exceed twenty-four percent (24%) built-upon area on a project by project basis. If a high-density option is chosen and approved, multi-family and non-residential developments shall be allowed with a maximum built-upon area ratio of fifty percent (50%) on a project-by-project basis. For the purpose of calculating the built-upon area, total project area shall include total acreage in the tract on which the project is to be developed.

(D.) WS-IV-PA Protected Area Overlay.

Only new development activities that require an erosion/sedimentation control plan under North Carolina law are required to meet the provisions of this ordinance when located in a WS-IV-PA Overlay. In order to address a moderate land use intensity pattern, single family detached residential uses shall develop at a maximum of two (2) dwelling units per

acre or on lots with a minimum of 20,000 square feet excluding roadway rights of way when curb and gutter is provided or three (3) dwelling units per acre when curb and gutter is not provided. All other residential development shall be allowed on a project-by-project basis at a maximum of twenty-four percent (24%) built-upon area in areas where curb and gutter are required or thirty-six percent (36%) where curb and gutter is not provided.

If the high-density option is chosen and approved, all non-residential developments shall be allowed with a maximum built-upon area of seventy percent (70%) on a project-by-project basis.

1. Allowed Uses (only if permitted in the underlying zoning district):

- a) Agriculture subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990. (Note: The Soil and Water Conservation Commission is the Designated Management Agency responsible for implementing the provisions of Water Supply Watershed regulations relating to agricultural activities)
- b) Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality (15 NCAC 11.6101-.0209).
- c) Residential development (Single-family, two-family, manufactured homes, manufactured home parks, multi-family and cluster developments).
- d) Non-residential development (i.e., commercial, institutional, or industrial development). No new permitted sites for land application of residuals or petroleum contaminated soils or new landfill are allowed.

2. Density and Maximum Built-upon Limits:

- a) Single Family Residential Uses. Development shall not exceed a maximum of two (2) dwelling units per acre (or lots with a minimum of 20,000 square feet excluding roadway right-of-way) where curb and gutter is provided or three (3) dwelling units per acre when curb and gutter is not provided. Cluster development is allowed in accordance with primary zoning district provisions appearing in Article 8 of this Ordinance.
- b) All Other Residential and Non-Residential Uses. Development shall not exceed a maximum built-upon area of twenty-four percent (24%) in areas where curb and gutter are required, or at a maximum of thirty-six percent (36%) built-upon area in locations where curb and gutter are not required, on a project-by-project basis. If the high-density option is chosen and approved, multi-family and non-residential developments shall be allowed with a maximum built-upon area ratio of seventy percent (70%) on a project-by-project basis. For the purpose of calculating the built-upon area, total project area shall include total acreage in the tract on which the project is to be developed.

**TABLE 19.1-6 - SUMMARY CHART – WATER SUPPLY WATERSHED PROTECTION RULES AS ADOPTED BY ENVIRONMENTAL MANAGEMENT COMMISSION AS AMENDED 8/95**

Classification of Watershed Overlay	Land Use Description	Maximum Density w/o Stormwater Low Density Option per footnote "2" below	Maximum Density w/Stormwater High Density Option per footnote "3" below	Required Control w/High Density Option	Non-Residential Development
WS-III-CA	Low to moderately developed	1 DU/1 ACRE or 12% built-upon area	12-30% built-upon area	Control the 1" storm	In accordance with primary zoning district
WS-III-BW	Low to moderately developed	2 DU/1 ACRE or 24% built-upon area	24-50% built-upon area	Control the 1" storm	In accordance with primary zoning district with potential qualification for the 10%/70% rule allocation
WS-IV-CA	Moderate to highly developed	2 DU/1 ACRE or 24% built-upon area in accordance with footnote "1" below	24-50% built-upon area in accordance with footnote "1" below	Control the 1" storm	In accordance with primary zoning district
WS-IV-PA	Moderate to highly developed	2 DU/1 ACRE or 24% built-upon area in accordance with footnotes "1" & "4" below	24-70% built-upon area in accordance with footnotes "1" & "4" below	Control the 1" storm	In accordance with primary zoning district

**FOOT NOTES PER SYMBOL IN TABLE 19.1-6 ABOVE**

1. Applies only to projects requiring a Sediment/Erosion Control Plan.
2. Minimum 30' vegetative buffer required along perennial streams.
3. Minimum 100' vegetative buffer required along perennial streams.
4. Three dwelling per acre or 36% built-upon is allowed for projects with no curb and gutter.

**GENERAL NOTES:**

- a. Critical area is 1/2 mile and draining to water supplies from the normal pool elevation of reservoirs, or 1/2 mile and draining to a river intake.
- b. Protected area is within 5 miles of the normal pool elevation of reservoirs or draining to the water supply reservoirs.
- c. Local governments will assume ultimate responsibility for operation and maintenance of stormwater controls.

#### 19.1-7 Cluster Development

Clustering development shall be allowed subject to all other provisions of this Ordinance, provided that the following overall objectives are met:

1. The overall density of the project meets the associated density or stormwater control requirements under these rules. Maximum densities for single-family residential uses shall be as shown in Table 19.1-6 above.
2. Buffers must meet the minimum guidelines established in Section 19.1-9
3. Built-upon areas are designed and located to minimize stormwater runoff impact to the receiving waters, minimize concentrated stormwater flow, maximize the use of sheet flow through vegetated areas, and maximize the flow length through vegetated areas.
4. Areas of concentrated density development are to be located in upland areas and away, to the maximum extent practicable, from surface waters and drainageways.
5. The remainder of the tract not developed shall remain in a vegetated or natural state.
6. The area in the vegetated or natural state may be conveyed to a property owners association; a local government for preservation as a park or greenway; a conservation organization; or be placed in a permanent conservation or farmland preservation easement. A maintenance agreement shall be filed with the property deed.
7. Cluster developments shall transport stormwater runoff by vegetated conveyances to the maximum extent practicable.

#### 19.1-8 High-density Option

(A.) General Requirements. In any designated WS-III or WS-IV Watershed Area, any non-residential development may occur using the high-density option under the rules and guidelines herein described. The use of the high-density option for any particular project shall be subject to Town Board approval and where deemed necessary by the Town, the application be submitted to the Water Quality Section of the Division of Environmental Management for review and recommendation.

(B.) High-density Option Development Standards. The Town Board may approve a project using the high-density option consistent with the following standards:

1. If area proposed to be developed lies in a designated WS-III Critical Area Watershed, engineered stormwater controls shall be used to

control runoff from the first inch of rainfall for development which contains a built-upon area of twelve to thirty percent (12 - 30%) on a project-by-project basis.

2. If the area proposed to be developed lies in a designated WS-III Balance of Watershed Area, engineered stormwater controls shall be used to control runoff from the first inch of rainfall for development which contains a built-upon area of twenty-four to fifty percent (24-50%) on a project-by-project basis.
3. If the area proposed to be developed lies in a designated WS-IV Critical Area watershed, engineered stormwater controls shall be used to control runoff from the first inch of rainfall for development which contains a built-upon area of twenty-four to fifty percent (24-50%) on a project-by-project basis.
4. If the area proposed to be developed lies in a designated WS-IV Protected Area watershed, engineered stormwater controls shall be used to control runoff from the first inch of rainfall for development which contains a built-upon area of twenty-four to seventy percent (24-70%) on a project-by-project basis.

(C.) Application. An application for authorization to use the high-density option shall be signed by the applicant and the consulting engineer and shall be accompanied by the following:

1. Two reproducible copies (must meet the requirements for recordation of the Rowan County Register of Deeds) of the development plan within the drainage basin containing all applicable and required information.
2. Two reproducible copies (must meet the requirements for recordation of the Rowan County Register of Deeds) of the plans and required specifications of the stormwater control structure(s).
3. When required by law, written verification that a soil erosion and sedimentation control plan has been approved by the appropriate State or County agency.
4. A separate fee shall be required for submittal of any high-density option application. Said fee shall be in accordance with a fee schedule adopted by the Town Board. No application for high-density option approval

will be considered complete unless accompanied with the requisite fee.

(D.) Inspection Fees. Inspections of all stormwater control structures will be conducted: 1) after work on the stormwater control structure is complete, 2) annually once the stormwater control structure(s) has been approved by the Town, and 3) any time after improvements, modifications, or changes to said structures have been made by the owning entity. A fee in accordance with a fee schedule approved by the Town Board shall be required to be paid by the owning entity prior to each inspection being conducted.

(E.) Operation and Maintenance Plan

1. Any stormwater control structure approved by the Town Board shall be predicated on the developer and the Town entering into a binding Operation and Maintenance Plan. Said Plan shall require the owning entity of the structure(s) to maintain (including any required fencing), repair, and, if necessary, reconstruct said structure(s) in accordance with the Operation and Maintenance Plan provided by the developer to the Town. Said Plan must be approved by the Town Board prior to, or in conjunction with, the approval of the high-density option for said project and shall be recorded with the Register of Deeds for Rowan County.
2. A separate plan must be provided by the developer for each stormwater control structure, containing, at a minimum, what operation and maintenance actions are needed and will be undertaken, what specific quantitative criteria will be used for determining when those actions are to be taken, and who is responsible for such actions. The Plan shall clearly indicate what steps will be taken for restoring a stormwater control structure to design specifications if a failure occurs. Proof of liability insurance must be furnished and maintained continuously.
3. Amendments to the Plan and/or specifications of the stormwater control structure(s) may only be approved by the Town Board. Proposed changes shall be prepared by a North Carolina registered professional engineer or landscape architect, (to the extent that the General Statutes allow) and submitted to the Town Board for approval.
4. If the Town Board finds that the Plan, once approved, is inadequate for any reason, the Planning, Zoning & Subdivision Administrator shall notify the owning entity of any changes mandated by the Town and a time-frame in which changes to the Plan shall be made.

(F.) Posting of Performance Guarantee. All new stormwater control structures approved employing the high-density option shall be conditioned on the posting of adequate financial assurance for the purpose of constructing, maintaining, repairing, or reconstructing said devices.

1. If the Town Board approves the use of the high-density option for a particular project, it may do so only after the applicant has posted a performance guarantee, in an amount not less than 1.25 times the cost of constructing the necessary stormwater control structure(s). Such performance guarantee shall be paid to the Town. All construction costs shall be verified by the Town and the Town may assess the applicant for actual costs incurred by the Town and associated with such verification. The total cost of the stormwater control structure(s) shall include the value of all materials such as piping and other structures; seeding and soil stabilization; design and engineering; and grading, excavation, fill, etc. The costs shall not be prorated as part of a larger project, but rather shall be priced as an individual project.
2. Once the stormwater control structure(s) has been constructed, inspected and approved by the Town Board, the Town Board may authorize the release of up to seventy-five percent (75%) of the performance guarantee in accordance with the provisions of Article 2, Section 2.15 of this Ordinance.
3. Prior to said release, however, the applicant shall be required to provide a performance guarantee with the Town in an amount equal to fifteen percent (15%) of the total construction cost in accordance with Section 19.1-8(F)(1) or one hundred percent (100%) of the cost of maintaining said structure(s) over a twenty (20) year period, whichever is greater. The estimated cost of maintaining the stormwater control structure(s) shall be consistent with the approved Operation and Maintenance Plan provided by the applicant as outlined in Section 19.1-8(E).

(G.) Default

1. Upon default of the applicant to complete the stormwater control structure(s) as spelled out in the performance guarantee, the Town Board may obtain and use all or any portion of the funds necessary to complete the improvements based on actual construction costs. The Town Board shall return any funds not spent in completing the



improvements to the owning entity.

2. Upon default of the owning entity to maintain, repair and, if necessary, reconstruct the stormwater control structure or failure to maintain liability insurance in accordance with the approved Operations and Maintenance Plan, the Town Board shall obtain and use any portion of the performance guarantee outlined in Section 19.1-8(F)(3) to make necessary improvements based on an engineering estimate provided by the Town.

(H.) Vegetation and Grounds Management

1. Landscaping and grounds management shall be the responsibility of the owning entity of said structure(s). However, vegetation shall not be established or allowed to mature to the extent that the integrity of the structure(s) is in any way threatened or diminished, or to the extent of interfering with any easement or access to the structure.
2. Except for routine landscaping and grounds maintenance, the owning entity shall notify the Planning, Zoning & Subdivision Administrator prior to any repairs or reconstruction of the structure. All improvements shall be consistent with the approved Plan and specifications for that structure. After notification by the owning entity, the Town shall inspect the completed improvements and inform the owning entity of any required additions, changes, or modifications needed to complete said improvements. A fee, in accordance with a fee schedule adopted by the Town Board shall be charged to the owning entity for any inspections (and re-inspections). A time period for making such changes shall also be stipulated by the Town.

(I.) Inspections

1. Inspections of Newly Constructed Stormwater Structures. All new stormwater control structures shall be inspected by the Town after the owning entity notifies the Planning, Zoning & Subdivision Administrator that all construction has been completed. At this inspection the owning entity shall provide:
  - a. The signed deed, related easements and survey plat for the structure in a manner suitable for filing with the Register of Deeds if ownership of the stormwater control structure(s) is to be transferred to another entity. This requirement may be waived for any repair work when such deed has previously been filed.

- b. A certification by an engineer or landscape architect (to the extent allowable by the General Statutes) stating that the stormwater control structure is complete and consistent with the approved Plan and all specifications previously stipulated by the Town.
- c. The Planning, Zoning & Subdivision Administrator shall forthwith present the materials submitted by the owning entity along with the Town's inspection report to the Town Board for their review and approval. If the Town Board approves the inspection report and accepts the certification, deed and easements, the Planning, Zoning & Subdivision Administrator shall forthwith file said deed and easements with the Register of Deeds. Release of up to seventy-five percent (75%) of the performance guarantee called for in Section 19.1-8(F)(1) shall be made in a manner as prescribed in Sections 19.1-8(F)(2) and 19.1-8(F)(3).
- d. If deficiencies are found as a result of the inspection, the Town Board shall direct the developer to make necessary improvements. Re-inspections will be made thereafter. No release of any funds shall be made by the Town until all deficiencies are properly addressed to the Town's satisfaction.
- e. No sooner than one (1) year after approval of the storm water control structure(s) by the Town, the owning entity may petition the Town Board to release the remaining value of the performance guarantee call for in Section 19.1-8(F)(2). Upon receipt of said petition, the Town shall forthwith inspect the stormwater control structure(s) to determine whether the structure(s) is performing as designed and intended. Once the inspection is made, the Planning, Zoning & Subdivision Administrator shall forthwith present the inspection report and recommendations to the Town Board.
- f. An occupancy permit shall not be issued for any building within the permitted development until the Town Board has approved the stormwater control structure(s) in a manner as herein prescribed.

(J.) Annual Inspection of Stormwater Structures

- a. All stormwater control structures shall be inspected by the Town on an annual basis to determine whether the structures are performing as designed and intended. Records of inspection shall be maintained on forms approved or supplied by the North Carolina Division of

Environmental Management. Annual inspections shall begin within one (1) year after the approval of the stormwater control structure(s) by the Town Board. A fee in accordance with a fee schedule adopted by the Town Board, shall be charged to the owning entity for any inspections (and re-inspections). A copy of each inspection report shall be filed with the Planning, Zoning & Subdivision Administrator.

- b. In the event the Town's report indicates the need for corrective action or improvements, the Planning, Zoning & Subdivision Administrator shall notify the owning entity of the needed improvements and the date by which such improvements are to be completed. All improvements shall be consistent with the adopted Operation and Maintenance Plan and specifications. Once such improvements are made, the owning entity shall forthwith contact the Planning, Zoning & Subdivision Administrator and ask that an inspection be made.

(K.) Stormwater Control Structure Specifications.

1. All stormwater control structures shall be designed by either a North Carolina registered professional engineer or a landscape architect (to the extent that the General Statutes allow).
2. All stormwater control structures shall use wet detention ponds as the primary treatment system. Wet detention ponds shall be designed for specific pollutant removal according to modeling techniques approved by the North Carolina Division of Environmental Management. Specific requirements for these systems shall be in accordance with the following criteria:
  - a. Wet detention ponds shall be designed to remove a minimum of eighty-five percent (85%) of total suspended solids in the permanent pool and storage runoff from a one-inch water runoff from the site above the permanent pool;
  - b. The designed runoff storage volume shall be above the permanent pool;
  - c. The discharge rate from these systems following the one-inch rainfall design storm shall be such that the runoff does not draw down to the permanent pool level in less than two (2) days and that the pond is drawn down to the permanent pool level within at least

five (5) days;

- d. The mean permanent pool depth shall be a minimum of three (3) feet;
  - e. The inlet structure shall be designed to minimize turbulence using baffles or other appropriate design features;
  - f. Vegetative filters shall be constructed for the overflow and discharge of all stormwater wet detention ponds and shall be at least thirty (30) feet in length. The slope and width of the vegetative filter shall be determined so as to provide a non-erosive velocity of flow through the filter for a ten-year, twenty-four hour storm with a ten-year, one-hour intensity with a slope of five percent (5%) or less. Vegetation in the filter shall be natural vegetative, grasses or artificially planted wetland vegetation appropriate for the site characteristics.
3. In addition to the required vegetative filters, all land areas outside of the pond shall be provided with a ground cover sufficient to restrain erosion within thirty (30) days after any land disturbance. Upon completion of the stormwater control structure, a permanent ground cover shall be established and maintained as part of the Operation and Maintenance Plan described in Section 19.1-8(E) of this Ordinance.
  4. A description of the area containing the stormwater control structure(s) shall be prepared and filed, consistent with Section 19.1-8(I)(1) as a separate deed, with the Register of Deeds along with any easements necessary for general access to the stormwater control structure(s) should ownership (and maintenance) of the stormwater control structure(s) be transferred to another person, firm, or entity. The deeded area shall include the detention pond, vegetative filters, all pipes and water control structures, berms, dikes, etc., and sufficient area to perform inspections, maintenance, repairs and reconstruction.
  5. The pervious portions of any stormwater control structure(s) approved by the Town Board shall not be included when computing built-upon areas.

(L.) Town Board Approval Process on High-density Application. The Town Board shall either approve an application for the high-density option, approve the application with fair and reasonable conditions, or disapprove such an application based upon the applicable criteria contained in Article 7 of this Ordinance.

1. If the Town Board approves the application, such approval shall be predicated on: 1) the developer and the Town entering into a binding Operation and Maintenance Plan as indicated in Section 19.1-8(E), and 2) the posting of a performance guarantee as provided in Section 19.1-8(F). Such approval shall be indicated on the application and on both copies of the plans submitted with the application.

If the Town Board approves the application, a copy of the application and one (1) copy of the plans shall be returned to the applicant.

2. If the Town Board disapproves the application, the reasons for such action shall be sent by first class mail by the Planning, Zoning & Subdivision Administrator to the applicant within ten (10) working days of the disapproval. The applicant may make revisions or changes and submit a revised plan. If the re-submitted plan is submitted to the Planning, Zoning & Subdivision Administrator within sixty (60) days of the date of denial, the application fee will be waived.

#### 19.1-9 Buffer Areas Required

- (A.) Vegetative Buffers. Should any new development take place on or after the effective date of these regulations on a lot containing or bordering a perennial stream [as indicated on the most up-to-date version of a U.S.G.S. 1:24,000 (7.5 minute) map or as otherwise determined by local government studies] and which is subject to the regulations of this article, a vegetative buffer shall be placed or maintained immediately perpendicular and parallel to said stream. Said buffer shall be a minimum of thirty (30) feet in width if the low-density option is used or one hundred (100) feet in width if the high-density option is used. Desirable artificial streambank or shoreline stabilization is permitted.
- (B.) Development in Buffer. No new development is allowed in the vegetative buffer area except for water-borne structures (e.g., piers, docks, etc.) other structures such as flag poles, signs and security lights, which is result in only diminimus increases in impervious area and public projects such as road crossings and greenways, where no practical alternative exists. These activities should minimize built-upon surface area, direct runoff away from the surface waters and maximize the utilization of stormwater Best Management Practices.

19.1-10        Nonconforming Situations

Nonconforming situations which existed on or after the effective date of these regulations shall comply with the provision contained in Article 22 of this Ordinance, with the following exceptions:

- (A.) Nonconforming Lots. A lot of record which existed on the effective date of these regulations which is used for single-family purposes shall not be subject to the rules and regulations pertaining to the WS Overlay in which it is located, except as provided in Article 22 of this Ordinance.
  
- (B.) Nonconforming Structures. If, on or after the effective date of these regulations, a lot contained one or more structures where aggregate built-upon area calculations exceeded the maximum allowed for the particular WS Overlay in which said lot is located, and such structure is damaged in excess of sixty (60) percent of its assessed value at the time of damage, reconstruction of said structures may occur provided that the structure is rebuilt in accordance with all applicable regulations in both the Watershed Overlay, the general zoning district in which it is located, and meets the requirements of Article 22 of this Ordinance.

19.1-11        Existing Development

Any existing development as defined in this ordinance, may be continued and maintained subject to the provisions provided herein. Expansions to structures classified as existing development on any lot other than a lot containing a single-family residence as a principle use, must meet the requirements of this ordinance, however, the built-upon area of the existing development is not required to be included in the density calculations.

19.1-12        Public Health Regulations

No activity, situation, structure or land use shall be allowed within a WS Overlay which poses a threat to water quality and the public health, safety and welfare. Such conditions may arise from inadequate on-site sewage systems which utilize ground absorption; inadequate sedimentation and erosion control measures; the improper storage or disposal of junk, trash or other refuse within a buffer area; the absence or improper implementation of a spill containment plan for toxic and hazardous materials; the improper management of stormwater runoff; or any other situation found to pose a threat to water quality.

The Planning, Zoning & Subdivision Administrator shall monitor land use activities within all WS Overlays to identify situations that may pose a threat to water quality. The Planning, Zoning & Subdivision Administrator shall report all findings to the proper agency to handle

the threat and/or the Town Board. The Planning, Zoning & Subdivision Administrator may consult with any public agency or official and request recommendations. Where the Town Board finds a threat to water quality and the public health, safety and welfare, the Board shall institute any appropriate action or proceeding to restrain, correct or abate the condition and/or violation as herein authorized.

19.1-13            Amendments to Regulations Pertaining to a WS District.

Under no circumstances shall the Town Board adopt any amendment, addition, or deletion that would cause these regulations to violate the watershed protection rules as adopted by the N.C. Environmental Management Commission. Any amendment to the boundaries of any particular Water Supply Watershed District shall be referred to the N.C. Division of Environmental Management, N.C. Division of Environmental Health, and the N.C. Division of Community Assistance for their review prior to adoption. Otherwise, amendments to the regulations contained in Article 19 shall follow procedures prescribed in Article 5 of this Ordinance.

19.1-14            Variances

Variances from the provisions of this Article may be considered subject to the provisions of Article 6 of this Ordinance subject to the additional requirements of this section. A copy of the evidentiary hearing notice plus a description of the minor variance requested, shall be sent by first class mail to the Clerk of all municipal and county governments having jurisdiction within the same watershed and to any major consumer of water whose point of intake lies within the same watershed recognizing any such jurisdictions and/or parties to have standing in accordance with G.S. 160D-1402(c).

(A.) Minor Variances. Minor variances (per definition) to the regulations contained herein (unless specifically prohibited) under guidelines provided in Article 6 of this Ordinance may be approved by the Board of Adjustment. Upon approval of the minor variance, the Planning, Zoning & Subdivision Administrator is authorized to proceed with applicable permit application processing in accordance with this Ordinance and the stipulations of the approved variance.

(B.) Major Variances. Major variances (per definition) to the regulations contained herein (unless specifically prohibited) under guidelines provided in Article 6 of this Ordinance may be approved by the Board of Adjustment. However, prior to issuance of any development approval under Article 7 of this Ordinance, the Planning, Zoning & Subdivision Administrator shall prepare a preliminary record for submittal and review by the Environmental Management Commission for its review. If the

Environmental Management Commission concludes from the preliminary record that the variance qualifies as a major variance, the Commission shall make a final decision on the request and mail it to the Planning, Zoning & Subdivision Administrator. Upon receipt of the final decision, the Planning, Zoning & Subdivision Administrator shall forward the Environmental Management Commission's decision to the applicant by first class mail within ten (10) working days of receipt of the decision from the Environmental Management Commission. The approval, with any additional conditions or safeguards, shall become part of any zoning permit issued by the Planning, Zoning & Subdivision Administrator.

Planning, Zoning & Subdivision Administrator shall prepare a preliminary record of the evidentiary hearing which shall include the following:

- a. The variance application;
- b. Evidence that proper notification of the evidentiary hearing has been made;
- c. A certified copy of the minutes of the evidentiary hearing including copies of evidence presented including written comments submitted from other local government jurisdictions or major water consumers having standing;
- d. Findings and exceptions; and
- e. The Board of Adjustment's decision.

#### 19.1-15      Enforcement

These regulations shall be enforced by the Planning, Zoning & Subdivision Administrator in accordance with Article 23 of this Ordinance. In addition to other duties, the Planning, Zoning & Subdivision Administrator shall keep records regarding any expansions approved to structures classified as existing development, so that the maximum coverage of all new expansions do not exceed that allowed in this Ordinance.

The Planning, Zoning & Subdivision Administrator shall maintain a file on all applications for minor and major variances. A copy of information pertinent to any minor variance application request including minutes of the hearing, findings made by the Board of Adjustment, actions taken by the Board of Adjustment, names and addresses of all persons giving evidence at the evidentiary hearing shall be submitted annually during the last week of December to the Division of Environmental Management, Supervisor of the Classification and Standards Group.



## **19.2 Additional Standards for Special Situations**

### **19.2-1 Pet Waste.**

#### **(A.) Pets At Large Prohibited**

It shall be unlawful for the owner of any pet to allow the animal to be off the premises of his owner in the Town of Landis.

#### **(B.) Restrictions on Pet Waste**

It shall be unlawful for the owner or custodian of any pet to take it off the owner's own property limits without the means to properly remove and dispose of the pet's feces from any public or private property.

It is the responsibility of a pet's owner or custodian to clean up the pet's feces from any public or private property outside of the pet's owner's own property limits. Such property includes, but is not limited to, parks, rights-of-way, paths, and public access areas.

"Means to properly remove and dispose of feces" shall consist of having on or near one's person a device such as a plastic bag, or other suitable plastic or paper container, that can be used to clean up and contain pet waste until it can be disposed of in an appropriate container. Such a device must be produced and shown, upon request, to anyone authorized to enforce these ordinances.

This provision shall not apply to handicapped persons assisted by trained guide or assistance pets.

"Public nuisance" is defined to include "a pet which deposits feces on public property or on private property without the consent of the owner or person in lawful possession of the private property, and the person owning, possessing, harboring or having the care, charge, control or custody of the pet fails to remove the feces so deposited. Provided, however, this definition shall not apply to any pet assisting a handicapped person.

### **19.2-2 Onsite Wastewater Septic Systems.**

#### **(A.) Standards for Operation and Maintenance**

Onsite systems for domestic wastewater covered by this Ordinance shall be operated and maintained so as to avoid adverse effects on surface water and groundwater, including eutrophication of surface water and microbial or nitrate contamination of groundwater. Septic tank residuals shall be pumped whenever necessary to assure the proper operation of the system to meet these standards, and the septage shall be reused or disposed of in a manner that does not present significant risks to human health, surface water or groundwater.