

## ARTICLE 19

### WATERSHED AND STORMWATER PROTECTION

### STORMWATER PROTECTION

#### 19.1 PURPOSE

The purpose of this article is to establish minimum criteria to control and minimize quantitative impacts of stormwater runoff from development within the town.

Further, prudent site planning should include special consideration for the purposes of preserving natural drainageways, maximizing infiltration, and slowing stormwater runoff from individual sites in route to streams and rivers by use of effective runoff management, structural and nonstructural best management practices, drainage structures and stormwater facilities.

#### 19.2 DEFINITIONS

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

*Applicant* means an owner or developer of a site who executes the need for a stormwater review.

*Best management practices (BMPs)* mean a wide range of practices that have been demonstrated to effectively manage the quality and/or quantity of stormwater runoff and which are compatible with the planned land use. BMPs can be structural (detention ponds, wetlands etc.) or nonstructural (reduced road pavement width, cluster development etc.).

*Development* means any of the following actions taken by a public or private individual or entity:

- (A.) The division of a lot, tract or parcel of land into two or more lots, plots, sites, tracts, parcels or other divisions by plat or deed; or
- (B.) Any land change, including, without limitation, clearing, tree removal, grubbing, stripping, dredging, grading, excavating, transporting and filling of land.

*Drainage structures* includes swales, channels, storm sewers, curb inlets, yard inlets, culverts and other structures designed to convey stormwater.

*Existing development* means an individual nonresidential site with site plan approval by the planning department or a nonresidential or residential subdivision with preliminary subdivision approval from the planning board.

*Impervious surface* means a surface composed of any material that impedes or prevents natural infiltration of water into the soil. Gravel areas shall be considered impervious.

*Land disturbance* means the removal of topsoil, grubbing, stump removal and/or grading.

*Natural drainageway* means an incised channel with a defined channel bed and banks that are part of the natural topography. Construction channels such as drainage ditches shall not be considered natural drainageways that has been relocated, widened or otherwise improved.

*New development* means any activity that disturbs more than one acre of land or creates more than 17,000 square feet of impervious surfaces for a single-family or duplex residential development, recreational facility or multifamily, institutional, commercial, or industrial development. The term "new development" shall not include mining, agricultural or forestry activities.

*Riparian buffer* means an area of trees, shrubs or other forest vegetation that is adjacent to surface waters.

*Stormwater* means flow resulting from and occurring after any form of precipitation.

### **19.3 INTERPRETATION**

(A.) In interpreting and applying this article, the requirements are intended to be minimum requirements, which are imposed and are to be conformed to, and are in addition to, and not in lieu of, all other legal requirements.

(B.) This article shall not be deemed to interfere with or otherwise affect in any manner whatsoever any ordinance, rules, regulations, permits, or easements, covenants, or other agreements between parties; provided, however, that where this article imposes greater restrictions and controls with respect to stormwater management, the provisions of this article shall prevail.

### **19.4 APPLICABILITY**

Section 19.5 shall apply to all development, as previously defined, unless specifically stated otherwise herein. Sections 19.6 through 19.13 shall apply to all new development, as previously defined, unless specifically stated otherwise herein.

### **19.5 ON-SITE DRAINAGE**

(A.) Drainage devices in public town rights-of-way or easements, (i.e., ditches, culverts, storm drainage systems, etc.) shall be designed to convey the ten-year storm without causing any negative impacts either locally, upstream or downstream. Culverts or systems that convey at least ten acres of stormwater runoff directly across a town street shall be designed to convey a 25-year storm without causing any negative impacts.

- (B.) Private drainage devices on site (including most commercial drainage) or devices located in private easements, (drainage outfalls between lots in a subdivision) shall also be designed to convey the ten-year storm.
- (C.) When other agency drainage criteria are required, then the applicable/relevant agency design criteria may be utilized such as NCDOT, NC Division of Land Resources, etc.
- (D.) Drainage devices on site shall consider all upstream/off-site drainage areas and utilize a built-out basin according to the latest town zoning map or land use plan.
- (E.) Off-site basins that are greater than 50 acres and are zoned agricultural or are rural in nature or extend to rural areas beyond the town's jurisdiction may assume that a reasonable portion of the basin be built out; but in no case may such large, rural areas be designed below a 30 percent built-out scenario.
- (F.) Rational methodology is typically the hydrologic method of choice, although some situations may warrant other methodologies.
- (G.) Rational method rainfall intensities shall utilize the IDF equation for the county:

$$I = \frac{g}{(h + T)}$$

(Ref: Latest county stormwater manual for "g" and "h" values.)

**19.6 IMPERVIOUS AREA LIMITATIONS**

- (A.) Any development, residential or commercial/industrial, that exceeds 15 percent new/additional impervious area shall be required to attenuate, or detain, the additional runoff so that it does not exceed the pre-development runoff for both a two-year/24-hour storm event and a ten-year/24-hour storm event (see additional design criteria for detention ponds below).
- (B.) New/additional impervious area shall be any impervious area added to a site after the effective date of the ordinance from which this article is derived, regardless of whether the new/additional impervious is added at one time or incrementally over time.
- (C.) Existing impervious areas that show up on 2005 County GIS aerials are considered exempt and may be subtracted from the total site area for a "net" site area for stormwater.
- (D.) Existing impervious areas that were installed after the 2005 aerial maps were flown, but prior to the effective date of the ordinance from which this article is derived, are also exempt, but the burden of proving when these areas were installed shall be on the owner/developer.
- (E.) Impervious area calculations must be submitted with all plans. Impervious lot restrictions must be stated on all plats for subdivisions. When plats are required for

commercial site plans, impervious area restrictions must also be stated on the required plat.

- (F.) For the purposes of these regulations, proposed single-family development that creates a subdivision of three lots or less or creates a private access drive for three home sites or less are exempt from the maximum impervious area limitation; and a duplex home site on a single lot is also exempt from the maximum impervious area limitation. However, a downstream analysis as described in the Section 19.10 must be performed and any negative impacts must be mitigated.
- (G.) Any residential development that proposes a public street shall be subject to the maximum impervious area limitation.

## 19.7 DESIGN CRITERIA FOR DETENTION PONDS

- (A.) As stated in Section 19.6 when detention ponds are required, they shall be designed to attenuate runoff so that it does not exceed pre-development runoff for both a two-year/24-hour storm event and a ten-year/24-hour storm event (post development  $Q < \text{pre-development } Q$ ).
- (B.) Additional design criteria for detention ponds shall be as follows:
- (1.) SCS 24-hour rainfall amounts shall be specific to the county. (Ref: Latest county stormwater manual for 24-hour rainfall data.)
  - (2.) When upstream/off-site areas draining to a proposed detention pond are less than or equal to 5.0 acres, then detention pond designs shall consider proposed conditions on site and only existing conditions where upstream/off-site basins drain to the pond.
    - a) It is encouraged to plan the site layout and location of detention ponds so that excessive drainage from upstream/off-site areas does not affect the design.
    - b) Pond sizes with excessive off-site drainage will be much larger than the on-site drainage alone would require. Planning for regional detention ponds that purposely detain additional off-site areas for the areas for future development will be considered on a case-by-case basis.
  - (3.) When upstream/off-site areas exceeding 5.0 acres drain to a proposed detention pond, then the pond shall be checked separately for a future built-out scenario of 15 percent impervious for the upstream/off-site basin. In these cases, the future built-out runoff shall not exceed predevelopment runoff by more than ten percent for the given design storms (Future-development  $Q < \text{pre-development } Q + \text{ten percent}$ ).
  - (4.) In certain circumstances where storm routing for the proposed design criteria (post-development  $Q < \text{pre-development } Q$ ) conflicts directly with the future build-out design-criteria (future-development  $Q < \text{predevelopment } Q + \text{ten}$

- percent), and creates a design burden, then the future built-out criteria alone will suffice for routing.
- (5.) Detention ponds will be checked for the 100-year storm event and routing calculations included with the other routing calculations. Significant downstream impacts to existing property or structures may require additional mitigations.
  - (6.) All detention ponds shall have an emergency spillway designed to pass a 100-year/24-hour storm event with 1.0 feet of freeboard.
    - a) In special cases where the 100-year/24-hour storm spillway design creates a design burden and downstream impacts are not significant, then a 25-year/24-hour storm with 1.0 feet of freeboard may suffice for the spillway design.
    - b) In no case shall the spillway be designed for less than one 25-year/24-hour storm.
  - (7.) All detention ponds shall be shown with a proposed private drainage easement and minimum 15 feet wide, private access easement from the public right-of-way to the proposed facility. (See Section 19.8 for additional information for easement.)
  - (8.) All detention ponds are private and shall be privately maintained and inspected annually.
  - (9.) Maintenance and inspection agreements shall be executed and notarized by the responsible party and recorded with the county register of deeds.

## **19.8 EASEMENTS**

- (A.) Drainage easements are required for any development that creates public or private drainage facilities.
- (B.) Except for streets and drainage facilities within public, town rights-of-way, the responsibility for maintenance of drainage easements and any structures located within the easements is the landowner, developer, property owner's association or other person or association as noted in the stormwater application.
- (C.) The town is not responsible for maintenance of any drainage easements outside of town rights-of-way or stormwater structures located within an easement.
- (D.) It is the responsibility of the developer to clearly indicate who is responsible for maintenance of proposed drainage facilities.
- (E.) Drainage easements shall be provided for the following facilities outside of the town or NCDOT right-of-way:
  - (1.) All culverts.
  - (2.) All new or existing open channels or watercourses on or near the perimeter of the site or development.
  - (3.) All new or existing storm drainage pipes and points of concentrated flow.

(4.) All attenuation facilities, including berms, primary and emergency spillways, etc.

(5.) Other locations deemed appropriate by the town engineer.

(F.) Minimum easement widths shall be as follows: (on the next page)

Drainage Structure	Drainage Structure Size	Minimum Easement Width
Culverts	0 to 72" diameter	20 feet
	>72" diameter	The diameter or width plus 20 feet
	Multiple culverts	The total width (measured from the outside of the end culverts plus the width specified for the pipe diameters defined above)
	Culverts in deep fill (top of pipe to surface > 5 feet)	Use the above widths plus 1.5 times the depth of fill
Existing Open Channels	Open channels: <10 acres contributing drainage area	20 feet
	10 to <25 acres	30 feet
	25 to <100 acres	50 feet
	>100 acres	The floodway width or 50 feet, whichever is greater
BMP & Stormwater Ponds (access)	Varies	15 feet wide from public ROW to facility, including inflow and outflow points (e.g., pond forebay and outlet structure)
Stormwater Pond (Wet and dry detention facilities)	Varies	20 feet around the high-water surface elevation in the pond 100year storm event)
BMP's and Level Spreaders	Varies	Sufficient length and width must be provided and surround each BMP with an additional 5" along the edge of one side of the BMP for access and maintenance
Proposed Open Channels	Varies	20 feet width for all swales accepting roadway or parking lot runoff. 10 feet width for swales accepting only residential lot runoff

- (G.) All drainage easements and any other site easements shall be presented to the town on a plat based on field surveys following construction to ensure that drainage structures, channels and watercourses are approximately centered, or otherwise properly located within the easement.
- (H.) All drainage easements shall be designed to tie into existing easements, road rights-of-way, existing natural watercourses, or other appropriate locations.

- (I.) The plat shall be provided to the town for signing and then recorded at the county register of deeds.
- (J.) For subdivisions, such easements shall be adequately shown on the subdivision plat, prior to the town signing the plat.
- (K.) For site plans requiring an easement plat, the town may issue a zoning compliance upon site plan approval; but a "flag" will be placed on the project with the county inspections department so that a certificate of occupancy cannot be issued until the required plat is signed by the town and recorded.

## **19.9 EXCEEDING 15 PERCENT IMPERVIOUS AREA WITHOUT ATTENUATION**

If 15 percent impervious area is exceeded for the total site, then attenuation may still not be required if any one of the following can be demonstrated and the project engineer states in writing either on the plans, in the calculations or both specifically the results of the applicable section below:

- (A.) When total site runoff, or runoff for any given subbasin leaving the site, for the ten-year storm does not exceed the pre-development runoff plus ten percent, then attenuation is not required.
  - (1.) Note that total site runoff and runoff in each subbasin must be analyzed and all applicable subbasins shall be checked to verify the ten-year/ten percent additional runoff criteria; therefore, attenuation could be required in a given subbasin on site but not in another.
  - (2.) Drainage area delineation maps must be submitted with drainage calculations showing all subbasins on site.
  - (3.) Subbasins shall be delineated at all points where runoff leaves the site.
  - (4.) Subbasins leaving commercial sites that drain less than 0.5 acres do not have to attenuate and subbasins leaving residential sites that drain less than 1.0 acre do not have to attenuate; but it must still be shown that there would be no negative impacts to adjacent/developed properties within these small subbasins.
  - (5.) Subbasins that release areas of sheet flow runoff from the site shall be included in the total site runoff and such areas of sheet flow runoff shall not negatively impact any adjacent, developed properties.
  - (6.) Where it can be demonstrated that all downstream runoff from a site converges at a distance less than 500 feet downstream, then only the total site runoff has to be analyzed, and analysis of the individual subbasins is not required.
  - (7.) It should be noted that use of questionably high C-values or CN-values for the pre-development condition in order to make the ten-year/ten percent criteria "work" shall be scrutinized.
- (B.) Sites or subbasins of a site that have a stream running through, or directly adjacent to, the property and drains a basin area greater than 50 acres (at the point the



stream leaves the site) do not have to attenuate if the total site area or subbasin area is less than five percent of the total drainage area. Other subbasins on site must still demonstrate that attenuation is not required by the other criteria herein.

- (C.) If it can be demonstrated through other engineering analyses that downstream impacts are negligible, then attenuation is not required.

### **19.10 DOWNSTREAM ANALYSIS**

- (A.) A pre-development versus post-development runoff analysis for the ten-year storm is required at all points where runoff leaves the site and/or may impact adjacent property. This is especially true for sites where there is no attenuation, while sites that typically require attenuation inherently mitigate such downstream effects.
- (B.) A cursory analysis is required downstream from the site at the first public drainage culvert downstream.
  - (1.) Inlet control calculations are sufficient and undersized culverts in existing or proposed conditions may require notification to NCDOT if located in NCDOT rights-of-way.
  - (2.) If the downstream culvert is a town-maintained culvert and the proposed runoff causes it to be undersized for the required design-year storm, then a more detailed analysis may be required, showing inlet and outlet control and depending on the local impact, the culvert may be required to be replaced.
  - (3.) Town-maintained culverts that can be shown to be undersized for existing conditions shall be duly noted within the design calculations.

### **19.11 ALTERNATIVE DESIGNS**

- (A.) A pre-development versus post-development runoff analysis for the ten-year storm is required at all points where runoff leaves the site and/or may impact adjacent property. This is especially true for sites where there is no attenuation, while sites that typically require attenuation inherently mitigate such downstream effects.
- (B.) Where the owner/developer requests a waiver from any of the above criteria, then it shall be demonstrated through engineering analysis that downstream impacts for both water quality and quantity have been mitigated.

### **19.12 VARIANCE**

Where the owner/developer requests a waiver from any of the above criteria, then it shall be demonstrated through engineering analysis that downstream impacts for both water quality and quantity have been mitigated.

### **19.13 FEES**

A list of fees associated with this article shall be found on the fee schedule of the town.

**WATERSHED  
PROTECTION**

**DIVISION 1.  
GENERALLY**

**19.14 AUTHORITY AND ENACTMENT**

- 2 The state legislature has, in G.S. 160A-174 and in G.S. 143-211 (watershed protection rules), delegated the responsibility or directed local governmental units to adopt regulations that promote the public health, safety and general welfare of its citizenry. The town council ordains and enacts into law the ordinance from which this article is derived as the watershed protection regulations of the town.

**19.15 RELATION TO OTHER REGULATIONS**

These watershed regulations supplement the regulations applicable to the base zoning district. If the watershed regulations conflict with the base district requirements, the requirements of the watershed regulations shall govern.

**19.16 JURISDICTION AND APPLICABILITY**

The provisions of this article shall apply within areas designated as a public water supply watershed by the state environmental management commission and located in the territorial jurisdiction of this chapter.

**19.17 EXCEPTIONS TO APPLICABILITY**

- (A.) *Conflicts with existing laws.* Nothing in this chapter shall repeal or amend any federal or state law or regulation, or any regulation pertaining thereto except any ordinance which these regulations specifically replace; nor shall any provision of this chapter amend or restrict any provisions of this chapter or the town's Code of Ordinances; however, the adoption of the ordinance from which this chapter is derived does amend any ordinance, resolution and regulation in effect in the town at the time of the adoption of the ordinance from which this article is derived that impairs or reduces its effectiveness or conflicts with any of its provisions.
- (B.) *Conflicts with agreements between private parties.* It is not intended that these regulations interfere with any easement, covenants 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.) *Applicability to existing developments.*
  - (1.) Existing developments as defined in this chapter are not subject to the requirements of this article. Expansions to structures classified as existing development must meet the requirements of this chapter. The

built-upon area of the existing development is not required to be included in the density calculations.

- (2.) If a nonconforming lot of record is not contiguous to any other lot owned by the same party, then that lot of record shall not be subject to the development restrictions of this article if it is developed for single-family residential purposes. Any lot created as part of a family subdivision after the effective date of the ordinance from which this article is derived shall be exempted if it is developed for one single-family detached residence and if it is exempt from the town's subdivision regulation. Any lot created as part of any other type of subdivision that is exempted from the subdivision regulations set forth in Article 16 is subject to the land use requirements (including impervious surface requirements) of this article, except that such a lot must meet the minimum buffer requirements to the maximum extent practicable.

### **19.18 REPEAL OF EXISTING WATERSHED REGULATIONS**

- (A.) This article in part carries forward by reenactment some of the watershed regulations of the town previously adopted by the town council, and it is not intended to repeal but rather to re-enact and continue in force such existing provisions so that all rights and liabilities that have accrued are preserved and may be enforced.
- (B.) All provisions of the watershed regulations that are not reenacted herein are hereby repealed.
- (C.) All suits at law or in equity and all prosecutions resulting from the violation of any ordinance provisions heretofore in effect, which are now pending in any court of this state or of the United States, shall not be abated or abandoned by reason of the adoption of this chapter, but shall be prosecuted to their finality the same as if this chapter had not been adopted; and any and all violations of the existing watershed protection regulations, prosecutions for which have not yet been instituted, may be hereafter filed and prosecuted; and nothing in this chapter shall be so construed as to abandon, abate or dismiss any litigation or prosecution now pending or that may have been instituted or prosecuted.

### **19.19 REMEDIES**

In addition to the remedies available to the town for violations of this chapter, the state environmental management commission may assess civil penalties in accordance with G.S. 143-215.6(a) for violations of these watershed regulations.

### **19.20 DEFINITIONS**

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section when used in the context of these watershed regulations, except where the context clearly indicates a different meaning:

*Agricultural use* means the use of waters for stock watering, irrigation and other farm purposes.

*Best management practices (BMP)* mean 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.

*Buffer area* means 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.

*Building* means any structure having a roof supported by columns or by walls, and intended for shelter, housing or enclosure of persons, animals or property. The connection of two buildings by means of an open porch, breezeway, passageway, carport or other such open structure, with or without a roof, shall not be considered to make them one building.

*Built-upon area* means that portion of a development project that is covered by impervious or partially impervious cover, including buildings, 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.)

*Cluster development* means 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 "cluster development" includes nonresidential development as well as single-family residential and multifamily developments. For the purpose of this article, planned unit developments and mixed-use developments are considered as cluster development.

*Critical area* means 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.

*Customary home occupation* means any use conducted entirely within a dwelling and carried on by the occupants thereof and is incidental and secondary to the use of the dwelling for residential purposes and does not change the character thereof; provided further that no mechanical equipment is installed or used except as is normally used for domestic or professional purposes, and that not over 25 percent of the total floor space of any structure is used for the occupation. No home occupation shall be conducted in any accessory building except for the storage and service of a vehicle that is driven off site, such as a service repair truck, delivery truck, etc.

*Development* means any land disturbing activity that adds to or changes the amount of impervious or partially impervious cover on a land area, or which otherwise decreases the infiltration of precipitation into the soil.

*Family subdivision* means a division of a tract of land:

- (A.) To convey the resulting parcels, except parcels kept by the grantor, to a relative or relatives as a gift or for nominal consideration, but only if no more than one parcel is conveyed by the grantor from the tract to any one relative; or
- (B.) To divide land from a common ancestor among tenants in common, all of whom inherited by intestacy or by will.

*Impervious surface* means any material that reduces or prevents the infiltration of stormwater into the ground, including, but not limited to, buildings, pavement, gravel roads, recreation facilities (e.g., tennis courts), compacted soils, sand, lime rock, clay, etc. (Note: Wooden slatted decks and the water area of a swimming pool are considered pervious.)

*Industrial development* means any nonresidential development that requires an NPDES permit for an industrial discharge or requires the use or storage of any hazardous material for the purpose of manufacturing, assembling, finishing, cleaning or developing any product or commodity.

*Major variance* means a variance from the minimum statewide watershed protection rules that results in any one or more of the following:

- (A.) The relaxation, by a factor greater than ten percent, of any management requirement under the low-density option.
- (B.) The relaxation, by a factor greater than five percent, of any buffer, density or built-upon area requirement under the high-density option.
- (C.) Any variation in the design, maintenance or operation requirements of a wet detention pond or other approved stormwater management system.

*Minor variance* means a variance from the minimum statewide watershed protection rules that result in a relaxation, by a factor of up to:

- (A.) Five percent of any buffer, density or built-upon area requirement under the high-density option; or
- (B.) Ten percent of any management requirement under the low-density option.

*Nonconforming lot of record* means a lot described by a plat or a deed that was recorded before the effective date of local watershed protection regulations (or their amendments) that does not meet the minimum lot size or other development requirements of the statewide watershed protection rules.

*Nonresidential development* means all development other than residential development, agriculture and silviculture.

*Protected area* means the area that adjoins and is upstream of the critical area of WSIV watersheds. The boundaries of the protected area are defined as within five miles of and draining to the normal pool elevation of the reservoir or to the ridgeline of the watershed; or within ten miles upstream and draining to the intake located directly in the stream or river or to the ridgeline of the watershed.

*Residential development* means 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.

*Residuals* means any solid or semi-solid waste generated from a wastewater treatment plant, water treatment plant or air pollution control facility permitted under the authority of the environmental management commission.

*Single-family residential* means any development where:

- (A.) No building contains more than one dwelling unit;
- (B.) Each dwelling unit is on a separate lot; and
- (C.) No lot contains more than one dwelling unit.

*Toxic substance* means 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.

*Water-dependent structure* means 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, boathouses, docks and bulkheads. Ancillary facilities such as restaurants, outlets for boat supplies, parking lots and commercial boat storage areas are not water-dependent structures.

*Watershed* means the entire land area contributing surface drainage to a specific point (i.e., the water supply intake).

## **19.21 WATERSHED MAP**

The watershed map attached to the ordinance from which this section is derived is added as the official watershed map along with the USGS quad map for the town.

### **DIVISION 2. SUBDIVISION REGULATIONS**

## **19.22 GENERAL PROVISIONS**

- (A.) No subdivision plat of land within the public water supply watershed shall be filed or recorded by the register of deeds until it has been approved in accordance with the provisions of this article and the subdivisions regulations set forth in Article 16. Likewise, the clerk of superior court shall not order or direct the recording of a plat if the recording of such plat would be in conflict with this article.
- (B.) The approval of a plat does not constitute or effect the acceptance by the town or the public of the dedication of any street or other ground, easement, right-of-way, public utility line, or other public facility shown on the plat and shall not be construed to do so.
- (C.) All subdivision plats shall conform to the mapping requirements of G.S. 47-30.
- (D.) All subdivisions of land within the jurisdiction of the town after the effective date of the ordinance from which this chapter is derived shall require a plat to be prepared, approved and recorded pursuant to this article and the subdivision regulations set forth in Article 16.

## **19.23 SUBDIVISION APPLICATION AND REVIEW PROCEDURES**

- (A.) All subdivision applications shall be reviewed by the zoning enforcement officer to determine whether or not the property is located within the designated public water supply watershed. Subdivisions that are not within the designated watershed area are not subject to the provisions of this article and may be recorded provided the zoning enforcement officer initials the vicinity map. Subdivisions within a WS-IV watershed are subject to the provisions of this article when state law requires an erosion and sedimentation control plan. Subdivisions within the designated watershed area shall comply with the provisions of this article and all other applicable state and local requirements.
- (B.) Subdivision applications shall be filed, processed and reviewed in accordance with the subdivision regulations set forth in Article 16. The application shall include two additional copies of the plat and supporting documentation that the zoning enforcement officer or the planning board considers are necessary.
- (C.) The zoning enforcement officer or the planning board may provide public agencies an opportunity to review and make recommendations on the application. However, failure of the agencies to submit their comments and recommendations shall not delay action within the prescribed time limit. Said public agencies may include, but are not limited to, the following:
  - (1.) The district highway engineer with regard to proposed streets and highways.
  - (2.) The director of the health department with regard to proposed private water systems or sewer systems normally approved by the health department.

- (3.) The state division of water quality with regard to proposed sewer systems normally approved by the division, engineered stormwater controls or stormwater management in general.
  - (4.) Any other agency or official designated by the zoning enforcement officer or planning board.
- (D.) If the application is approved, such approval shall be indicated on both copies of the plat by the following certificate, which shall be signed by the zoning enforcement officer:

<i>Certificate of Approval for Recording</i>	
<i>"I certify that the plat shown hereon complies with the watershed protection regulations and is approved by the town council for recording in the register of deeds office."</i>	
Date	Zoning Enforcement Officer
Notice: This property is located within a public water supply watershed; development restrictions may apply.	

- (E.) If the application is disapproved or approved with conditions, the reasons for such action shall be stated in writing and submitted to the applicant and entered in the minutes. The applicant may submit a revised plan, which shall constitute a separate request for the purpose of review.
- (F.) All subdivision plats shall comply with the requirements for recording of the county register of deeds.
- (G.) The plat shall be recorded within 30 days of approval. The applicant shall provide the zoning enforcement officer with evidence that the plat has been recorded with the register of deeds within five working days of recording.

**19.24 SUBDIVISION STANDARDS AND REQUIRED IMPROVEMENTS**

- (A.) All lots shall provide adequate building space in accordance with the development standards contained in the development regulations to come. Lots that are smaller than the minimum required for residential lots may be developed using built-upon area criteria described in the development regulations to come.
- (B.) 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.) Applications shall be accompanied by a description of the proposed method of providing stormwater drainage. The applicant shall provide a drainage system that



diverts stormwater runoff away from surface waters and incorporates best management practices to minimize water quality impacts.

- (D.) If a sedimentation and erosion control plan is required, a written statement specifying that a sedimentation and erosion control plan has been submitted to and approved by the appropriate approving authority shall accompany the application.
- (E.) Where possible, roads shall be located outside of critical areas and watershed buffer areas. Roads constructed within these areas shall be designed and constructed to minimize their impact on water quality.

### **19.25 CONSTRUCTION PROCEDURES**

- (A.) No construction or installation of improvements shall commence in a proposed subdivision until a subdivision preliminary plat has been approved.
- (B.) No building or other permits shall be issued for erection of a structure on any lot not of record at the time of adoption of the ordinance from which this chapter is derived until all requirements of this article have been met. The applicant, before commencing any work within the subdivision, shall make arrangements with the zoning enforcement officer to provide for adequate inspection.

### **19.26 PENALTIES FOR TRANSFERRING LOTS IN UNAPPROVED SUBDIVISIONS**

Any person who subdivides land in violation of this chapter or transfers or sells land by reference to, exhibition of, or any other use of a plat showing a subdivision of the land before the plat has been properly approved under this chapter and recorded in the office of the register of deeds shall be guilty of a misdemeanor. The description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring land shall not exempt the transaction from this penalty. The town may bring an action for injunction for any illegal subdivision, transfer, conveyance or sale of land, and the court shall, upon appropriate findings, issue an injunction and order requiring the offending party to comply with this chapter.

### **DIVISION 3. DEVELOPMENT REGULATIONS**

### **19.27 DEVELOPMENT ACTIVITIES SUBJECT TO DIVISION**

New development activities that require an erosion and sedimentation control plan under state law are required to meet the provisions of this division when located in a watershed overlay district.

### **19.28 WS-IV-PA WATERSHED REGULATIONS**

- (A.) *Uses allowed.* The following uses may be permitted in a WS-IV-PA watershed area as permitted under the base zoning district:

- (1.) Agriculture uses, subject to the provisions of the Food Security Act of 1985 and the Food, Agricultural, Conservation and Trade Act of 1990.
  - (2.) Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality (15A NCAC 11.0101—11.0209).
  - (3.) Residential development.
  - (4.) Nonresidential development.
- (B.) *Density and built-upon requirements.* In order to accommodate a moderate to high land use intensity, development shall comply with the following density requirements:
- (1.) Single-family residential development shall not exceed a density of two dwelling units per acre, as defined on a project-by-project basis. For projects with a curb and gutter system, no residential lot shall be less than one-half acre or 20,000 square feet excluding street right-of-way. For projects without a curb and gutter system, no residential lot shall be less than one-third of an acre unless approved under a cluster development.
  - (2.) All other residential and nonresidential development shall not exceed 24 percent built-upon area on a project-by-project basis. For projects without a curb and gutter street system, development shall not exceed 36 percent built-upon area on a project-by-project basis. For the purpose of calculating built-upon area, total project area shall include acreage in the tract on which the project is to be developed.
  - (3.) Off-street parking shall be designed to minimize built-upon area.
  - (4.) For the purpose of calculating built-upon area, total project area shall include total acreage in the tract on which the project is to be developed.
- (C.) *New and expansion development.* In addition to the development allowed under subsections (a) and (b) of this section, new development and expansions to existing-development may occupy up to ten percent of the protected area with up to 70 percent built-upon area on a project-by-project basis, when approved as a special intensity allocation (SIA). The watershed administrator is authorized to approve SIAs consistent with the provisions of this chapter. The watershed administrator may refer the SIA to the town council for their consideration and approval on a project-by-project basis. Projects must, to the maximum extent practicable, minimize built-upon surface area, direct stormwater away from surface waters and incorporate best management practices to minimize water quality impacts. For the purpose of calculating built-upon area, total project area shall include total acreage in the tract on which the project is to be developed.

## 19.29 WS-IV-CA REGULATIONS

- (A.) *Allowed uses.*

- (1.) Agriculture subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990 and the rules and regulations of the soil and water conservation commission.
- (2.) Silviculture, subject to the provisions of the forest practices guidelines related to water quality (15A NCAC 11.0101—11.0209).
- (3.) Residential.
- (4.) Nonresidential development, excluding landfills and sites for land application of residuals or petroleum contaminated soils.

(B.) *Density and built-upon limits.*

- (1.) Single-family residential development shall not exceed two dwelling units per acre on a project-by-project basis. No residential lot shall be less than one-half acre or 20,000 square feet, excluding roadway right-of-way, except within an approved cluster development.
- (2.) All other residential and nonresidential development shall not exceed 24 percent built-upon area 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.

### 19.30 CLUSTER DEVELOPMENT

Cluster development may be permitted in watershed districts subject to the provisions of this section:

- (A.) *Lot sizes.* Minimum lot sizes are not applicable to single-family cluster development projects; however, the total number of lots shall not exceed the number of lots allowed for single-family detached developments in the applicable zoning district. Density or built-upon area for the project shall not exceed that allowed for the critical area or balance of watershed, whichever applies.
- (B.) *Built-upon areas.* All built-upon area shall be designed and located to minimize stormwater runoff impact to the receiving waters and minimize concentrated stormwater flow.
- (C.) *Dedicated open space.* The remainder of the tract shall remain in a vegetated or natural state. The title to the open space area shall be conveyed to an incorporated home owners association for management; to a local government upon mutual agreement for preservation as a park or open space; or to a conservation organization for preservation in a permanent easement. Where a property association is not incorporated, a maintenance agreement shall be filed with the property deeds.

### 19.31 BUFFER AREAS REQUIRED

- (A.) *Buffer width.* In the WS-IV watershed district, a minimum 50-foot vegetative buffer is required for development activities along all perennial waters indicated on the most recent versions of USGS 1:24,000 (7.5-minute) scale topographic maps or as

determined by local government studies. Desirable artificial stream bank or shoreline stabilization is permitted. A minimum 100-foot vegetative buffer is required for SIA development activities.

- (B.) *Development restrictions.* No new development is allowed in the buffer area except for water-dependent structures and other structures such as flag poles, signs, and security lights that result in only diminutive 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 and direct runoff away from the surface waters and maximize the utilization of stormwater best management practices.

### **19.32 APPLICATION OF REGULATIONS**

- (A.) *Applicability.* No building or land shall hereafter be used and no development shall take place except in conformity with the regulations herein specified for the watershed area in which it is located.
- (B.) *Calculation of area.* No area required for the purpose of complying with the provisions of this chapter shall be included in the area required for another building.
- (C.) *Prohibited uses.* If a use or class of use is not specifically indicated as being allowed in a watershed area, such use or class of use is prohibited.

### **19.33 EXISTING USES OF LAND**

- (A.) *Uses prior to ordinance.* This category consists of uses existing at the time of adoption of the ordinance from which this chapter is derived but is not permitted hereafter in the watershed area in which they are located. These uses may be continued except as follows:
  - (1.) A change in the use of land shall be only to a use that is permissible in the applicable zoning district.
  - (2.) Once the use has been changed, it may not be reverted to a prohibited use.
  - (3.) When the use ceases for a period of one year, it shall not be reestablished.
- (B.) *Reconstruction of buildings or built-upon areas.* An existing building or built-upon area not in conformance with the restrictions of this chapter that has been damaged or removed may be repaired or reconstructed (except that there are no restrictions on single-family residential development) provided:
  - (1.) Repair or reconstruction is initiated within 12 months and completed within two years of such damage.
  - (2.) The total amount of space devoted to built upon area may not be increased unless stormwater control that equals or exceeds the previous development is provided.

**DIVISION 4.  
PUBLIC  
HEALTH  
REGULATIONS**

**19.34 GENERAL RESTRICTION WITHIN WATERSHED**

No activity, situation, structure or land use shall be allowed within the watershed that poses a threat to water quality or the public health, safety and welfare. Such threats may arise from:

- (A.) Inadequate on-site sewage systems that utilize ground absorption.
- (B.) Inadequate sedimentation and erosion control measures.
- (C.) The improper storage or disposal of junk, trash or other refuse within a buffer area.
- (D.) The improper management of stormwater runoff; or any other situation found to pose a threat to water quality.

**19.35 ABATEMENT**

- (A.) The zoning enforcement officer shall monitor land use activities within the watershed areas to identify situations that may pose a threat to water quality.
- (B.) The zoning enforcement officer shall report all findings to the board of adjustment. The zoning enforcement officer may consult with any public agency or official and request recommendations.
- (C.) Where the board of adjustment 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 or violation.

**19.36 ADMINISTRATION, ENFORCEMENT, AND APPEALS**

- (A.) *Administration and enforcement of watershed regulations.*
  - (1.) The zoning enforcement officer shall keep records of development within the watershed within the town's zoning jurisdiction. Records for each watershed shall include the total acres of non-critical watershed area, total acres approved for this development option, and individual records for each project with the following information: location, number of developed acres, type of land use and stormwater management plan (if applicable).

- (2.) The zoning enforcement officer may enter any building, structure or premises, as provided by law, to perform any duty imposed upon him by this article.
- (B.) *Variances and appeals.* Requests and review of variances and appeals to these watershed rules shall comply with the procedures for such prescribed under division 4 of article VI of this chapter, administration and amendments, in addition to the following:
- (1.) The town shall notify and allow a reasonable comment period for all other local governments having jurisdiction in the designated watershed where the variance is being considered.
  - (2.) The zoning enforcement officer shall give written notification of all variances and appeals to local governments with jurisdiction in the watershed and the entity using the water supply for consumption. The notice shall include a description of the variance being requested. Local governments receiving notice of the variance request may submit comments to the zoning enforcement officer before a decision is made. The comments shall become a part of the record of proceedings of the board of adjustment.
  - (3.) The board of adjustment shall refuse to rehear an appeal or an application for a variance that has been denied if the board finds that there have been no substantial changes in conditions or circumstances bearing on the appeal or application.
  - (4.) Major variances shall be approved by the division of water quality before becoming effective.

### **19.37 AMENDMENTS TO WATERSHED REGULATIONS**

Amendments to these watershed regulation provisions shall comply with the provisions of this article. The zoning enforcement officer shall provide copies of all amendments to these watershed regulations upon adoption to the water quality section of the division of water quality.