

Chapter

5

Environmental Protection

5.1 Watershed Overlay Districts

5.2 High Quality Waters

5.3 Flood Damage Protection

5.4 Tree Protection

5.1 WATERSHED OVERLAY DISTRICTS

A. Applicability

The requirements of this provision shall apply to all development and redevelopment within the Watershed Overlay Districts. Except for single family residential development, no building or built-upon area shall be erected, moved, enlarged, or structurally altered, nor shall any building permit be issued nor shall any change in the use of any building or land be made until approved by the Zoning Administrator.

B. Exceptions

Existing development, as defined in Subsection G, is not subject to the requirement of this Ordinance. Expansion to structures classified as existing development 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.

C. Buffer Area Required

1. No new development is allowed in the buffer except for water dependent structures, other structures such as flag poles, signs and security lights, 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 storm water Best Management Practices.
2. A minimum thirty-foot (30') vegetative buffer for development activities is required along all perennial waters indicated on the recent versions of U.S.G.S. 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. With a high-density option in WSII-

BW(O) (Section 5.1.N.2.a), a minimum one hundred-foot (100') vegetative buffer is required.

D. Zoning Administrator

1. The Zoning Administrator shall keep records of all amendments to these overlay provisions and shall provide copies of all amendments upon adoption to the Division of Water Quality.
2. The Zoning Administrator shall keep a record of all minor and major watershed variances to these overlay provisions. The record of all minor watershed variances shall be submitted to the Division of Water Quality on or before January 1st of each year and shall provide a description of each project receiving a variance and the reasons for granting the variance.
3. The Zoning Administrator is responsible for ensuring that Stormwater Control Measures are inspected at least once a year and shall keep a record of SCM inspections.
4. The Zoning Administrator shall review the completed application and shall either approve or disapprove each application. The Zoning Enforcement Officer shall take final action within forty-five (45) days of submission of the application.
 - a. If the Zoning Administrator approves the application, such approval shall be indicated on both copies of the plat by the following certificate and signed by the Zoning Administrator:

Certificate of Approval for Recording

I certify that the plat shown hereon complies with the Watershed Overlay Requirements and is approved by the Board of Adjustment for recording in the Register of Deeds office.

Date: _____ **Zoning Administrator:** _____

NOTICE: This property is located within a Water Supply Watershed Protection Overlay District- development restrictions may apply.

E. Major Watershed Variances

1. Major watershed variances shall follow the variance procedure outlined in Section 9.7.B., with exception of the following actions.
2. The Board of Adjustment shall keep records of the proceedings, prepare a report containing findings of fact, conclusions of law and recommended decision and forward such record to the Environmental Management Commission (EMC) (which must approve all major watershed variances) A denial of a major watershed variance by the Board of Adjustment need not go to the EMC for review. One copy of any

report forwarded to the EMC shall be kept on file by the clerk.

3. The preliminary record shall be sent to the Environmental Management Commission for its review as follows:
 - a. If the Commission concludes from the preliminary record that the variance qualifies as a major variance and that (1) the property owner can secure no reasonable return from or make any practical use of the property unless the proposed variance is granted, and (2) the variance, if granted, will not result in a serious threat to the water supply, then the Commission shall approve the variance with conditions and stipulations. The Commission shall prepare a Commission decision and send it to the Board of Adjustment. If the Commission approves the variance as proposed, the Board shall prepare a final decision granting the proposed variance. If the Commission approves the variance with conditions and stipulations, the Board shall prepare a final decision, including such conditions and stipulations granting the proposed variance.
 - b. If the Commission concludes from the preliminary record that the variance qualifies as a major watershed variance and that (1) the property owner can secure a reasonable return from or make a practical use of the property without the variance or (2) the variance, if granted, will result in a serious threat to the water supply, then the commission shall deny approval of the variance as proposed. The Commission shall prepare a Commission decision and send it to the Board of Adjustment. The Board shall prepare a final decision denying the variance as proposed.

F. Bona Fide Farms

Notwithstanding the provisions of Section 1.5.B, the provisions herein where specified shall apply to bona fide farms. Normally uses permitted in all districts as "a matter of right" include "bona fide farms", but some normally permitted uses need to be managed as "Special Uses" and require a "Special Use Permit" because of their inherent nature, extent, and external effects. They require special care in the control of their location and methods of operation. They are subject to review in relation to general and specific requirements, rather than being a "use permitted by right."

G. Definitions

AGRICULTURAL USE. The use of waters for stock watering, irrigation, and other farm purposes.

ANIMAL UNIT. A unit of measurement developed by the U.S. Environmental Protection Agency that is used to compare different types of animal operations.

BEST MANAGEMENT PRACTICES (BMP). A structural or nonstructural management-based practice used singularly or in combination to reduce nonpoint source inputs to receiving waters in order to achieve water quality protection goals.

BUFFER. An area of natural or planted vegetation through which storm water runoff flows in a diffused 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.

BUILT-UPON AREA (BUA). Built-upon areas shall include that portion of development project that is covered by impervious or partially impervious cover including buildings, pavement, gravel road, recreation facilities (e.g., tennis courts), etc. (Note: Wooden slatted decks and the water area of a swimming pool are considered pervious.)

COMPOSTING FACILITY. A facility in which only stumps, limbs, leaves, grass, and untreated wood collected from land clearing or landscaping operations is deposited.

CRITICAL AREA. The area adjacent to a water supply intake where risk associated with pollution is greater than from the remaining portions of the watershed. The critical area is defined as the land area in Elkin's jurisdiction within one-half (.5) mile on each side of Big Elkin Creek for a creek upstream distance of one and one-half (1.5) miles (straight line distance) from the Elkin Reservoir intake, or the ridgeline of the watershed, whichever is less. 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 (.5) mile. See Section 5.1.L for reference to the map upon which the critical areas are depicted.

DEVELOPMENT. Any land disturbing activity which 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.

DISCHARGING LANDFILL. A landfill which discharges treated leachate and which requires a National Pollution Discharge Elimination System (NPDES) permit.

DWELLING UNIT. A building, or portion thereof, providing complete and permanent living facilities for one family.

EXISTING DEVELOPMENT. These projects that are built or those projects that at a minimum have met one of the following criteria under North Carolina zoning law as of the effective date of this Ordinance based on:

1. Substantial expenditures of resources (time, labor, money) based on a good faith reliance upon having received valid local government approval to proceed with the project, or
2. Having an outstanding valid building permit as authorized by the General Statutes (N.C.G.S. § 160D-108), or
3. Having an approved site-specific vesting plan as authorized by the General Statutes (N.C.G.S. § 160D-108).

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 the adoption of this Ordinance, or a lot described by metes and bounds, the description of which has been so recorded prior to the adoption of this Ordinance.

HAZARDOUS MATERIAL. Any substance listed as such in SARA section 302, Extremely Hazardous Substances, CERCLA Hazardous Substances, Section 311 of CWA (oil and hazardous substances).

INDUSTRIAL DEVELOPMENT. Any non-residential development that requires an NPDES permit for an industrial discharge and/or requires the use of storage of any hazardous material for the purpose of manufacturing, assembling, finishing, cleaning, or developing any product or commodity.

LANDFILL. A facility for the disposal of solid waste on land in a sanitary manner in accordance with N.C.G.S. § 130A, Article 9. For the purpose of this Ordinance this term does not include composting facilities.

MAJOR WATERSHED VARIANCE. A variance from the minimum statewide water supply watershed protection rules that results in the relaxation, by a factor greater than ten percent (10%), of any standard under the low-density option.

MINOR WATERSHED VARIANCE. A variance from the minimum statewide protection rules that results in a relaxation, by a factor of up to ten percent (10%), of any management requirement under the low-density option.

NONCONFORMING LOT OF RECORD. A lot described by plat or deed that was recorded prior to the effective date of this Ordinance (or its amendments) that does not meet the minimum lot size or other development requirements of this Ordinance.

NON-RESIDENTIAL DEVELOPMENT. All development other than residential development, agriculture, and silviculture.

PLAT. A map or plan of a parcel of land which is to be or has been subdivided.

PROTECTED AREA. The area adjoining and upstream of the critical area of WS-II (which includes WS-II Balance of the Watershed) and the area adjoining and upstream of the critical area of WS-IV. 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 (10) miles upstream; and draining to the intake located directly in the stream or river or to the ridgeline of the watershed. See Section 5.1.L for reference to the map upon which the protected areas are depicted.

RESIDENTIAL DEVELOPMENT. Buildings for residence such as attached and detached single-family dwellings, apartment complexes, condominiums, town houses, cottages, etc., and their associated outbuildings such as garages, storage buildings, gazebos, etc. and customary home occupations.

SPECIAL USE. Any "new" use which has the potential to adversely impact the water quality of the water supply of Elkin, either through (1) storm water runoff which discharges pollutants from point sources to the Big Elkin Creek or its tributaries proximate to the Elkin Reservoir, or by (2) air pollution in significant quantities to lead to pollution of the waters of Big Elkin Creek or the Elkin Reservoir. This "new" use requires a "Special Use Permit".

TOXIC SUBSTANCES. 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 off spring or other adverse health effects.

WATER DEPENDENT 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, dock and bulkheads. Ancillary facilities such as restaurants, outlets for boat supplies, parking lots and commercial boat storage areas are not water dependent structures.

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

H. Permitted Uses

Uses permitted in the Watershed Overlay Districts are designated by the base zoning districts detailed in Chapter 2, as well as:

1. Agriculture, subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990 and provided that all agricultural activities will be encouraged to participate in the Agricultural Cost Share Program for Nonpoint Source Pollution Control.
2. Poultry agriculture, when in compliance with this Section 5.1 and subject to the "Operating Guidelines and Standards for Poultry Production Operations in North Carolina" effective August 2016.
3. Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality (02 NCAC 60C .0101-.0209).

I. Prohibited Uses

The following uses are prohibited in the Watershed Overlay Districts:

1. Processing of mineral products;
2. Lumber mills and saw mills;
3. Processing of animal and vegetable products;
4. The storage of toxic and hazardous materials unless a spill containment plan is implemented;
5. Landfills and discharging landfills;

6. Sites for land application of sludge/residuals or petroleum contaminated soils;
7. Discharges of sewage, domestic wastewater, industrial wastes, non-process industrial wastes, or other wastes except as permitted by the Division of Environmental Health, N.C. Department of Environment, Health and Natural Resources or successor authority;
8. Any use determined by the Town of Elkin to be detrimental to the quality of water in the water supply watershed by posing a threat of runoff, leaching or other types of pollution.

J. Density Calculations

For purposes of Watershed Overlay District density calculations, total project acreage shall not include area within the designated right-of-way of any public or private street within the project, nor shall it include any area within the project donated or dedicated to the public except for stormwater control structures approved under the high-density option presented in WSII-BW(O) (Section 5.1.N.2.a).

K. Use District Names

For the purposes of this Section, four (4) overlay districts are hereby created:

1. WSII-CA(O) Watershed II – Critical Area (Overlay)
2. WSII-BW(O) Watershed II – Balance of Watershed (Overlay)
3. WSII-CA(O) Watershed IV – Critical Area (Overlay)
4. WSII-PA(O) Watershed IV – Protected Area (Overlay)

L. Interpretation of Boundaries

The watershed districts are depicted on the map entitled “Town of Elkin Watershed Overlay District Map” which is adopted by reference and declared to be a part of this Ordinance. Where conflict exists as to whether a tract is inside or outside a watershed area, it shall be the responsibility of the petitioner to present topographical data supporting his/her case.

M. WSII-CA(O) Watershed II Critical Area (Overlay)

The WS II CA(O) is established as an overlay district to impose higher standards in the critical area because the risk of water quality degradation from pollution is greater than in the balance of the watershed, which lies beyond the extraterritorial boundary of the Town. The regulations of this district are intended to promote higher developmental standards and not limit unnecessarily developmental options. To maintain a predominantly undeveloped land use intensity pattern, residential and non-residential uses shall be allowed at a maximum of one dwelling unit per two (2) acres and six percent (6%) built-upon area, respectively.

1. Requirements

a. Agricultural activities conducted after January 1, 1993, shall maintain a minimum ten-foot (10') vegetative buffer, or equivalent control as determined by the Soil and Water Conservation Commission, along all perennial waters indicated on the most recent versions of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps or as determined by local government studies. Animal operations greater than one hundred (100) animal units shall employ Best Management Practices (BMP's) by July 1, 1994 recommended by the Soil and Water Conservation Commission.

b. Development of any nature will require:

(1) Five copies of the site plan on 18" x 24" sheets.

- (a) Site plan scale of 1" = 100';
- (b) Property lines with total acreage;
- (c) North arrow;
- (d) Location map;
- (e) Proposed buildings and other impervious improvements;
- (f) Total impervious area;
- (g) Easements - location, purpose, and width;
- (h) Location of perennial streams;
- (i) Septic tank drainage field;
- (j) Sedimentation and erosion controls; and
- (k) Front, side, and rear yard setbacks.

2. Dimensional Requirements

| WS-IIICA(O) Watershed II Critical Area (Overlay) Dimensional Standards | |
|---|---------|
| Minimum Lot Area per Dwelling Unit | 2 acres |
| Non-Residential Maximum Built-Upon Area | 6% |

N. WSII-BW(O) Watershed II Balance of Watershed (Overlay)

The WSII-BW(O) is established as an overlay district to impose lower standards in the balance of the watershed area because the risk of water quality degradation from pollution is less than in the critical area of the watershed. The regulations of this district will allow residential uses at a maximum of one (1) dwelling unit per acre and non-residential development at twelve percent (12%) built-upon area. Projects must minimize built-upon surface area, direct stormwater away from surface waters and

incorporate Best Management Practices to minimize water quality impacts. Non-discharging landfills and sludge application sites are allowed.

1. Requirements

a. Development of any nature will require:

(1) Five copies of the site plan on 18" x 24" sheets.

(a) Site plan scale of 1" = 100';

(b) Property lines with total acreage;

(c) North arrow;

(d) Location map;

(e) Proposed buildings and other impervious improvements;

2. Dimensional Requirements

| WSII-BW(O) Watershed II Balance of Watershed (Overlay) Dimensional Standards | |
|---|--------|
| Minimum Lot Area per Dwelling Unit | 1 acre |
| Non-Residential Maximum Built-Upon Area | 12% |

O. WSIV-CA(O) Watershed IV Critical Area (Overlay)

The WSIV-CA(O) is designed to impose higher standards in the critical area than in the balance of the watershed because the risk of water quality degradation from pollution is greater in the critical area than in the protected area. Only new development activities that require an erosion/sedimentation control plan under state law or approved local program are required to meet the provisions of this Ordinance when located in the WS-IV watershed. In order to address a moderate to high land use intensity pattern, residential and non-residential uses are allowed at a maximum of two (2) dwelling units per acre and twenty-four percent (24%) built-upon area, respectively.

1. Requirements

a. Agricultural activities conducted after January 1, 1993, shall maintain a minimum 10 feet vegetative buffer, or equivalent control as determined by the Soil and Water Conservation Commission, along all perennial waters indicated on the most recent versions of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps or as determined by local government studies. Animal operations greater than 100 animal units shall employ Best Management Practices (BMP's) by July 1, 1994 recommended by the Soil and Water Conservation Commission.

b. Non-residential development shall not exceed twenty-four percent (24%) built-upon area on a project-by-project basis.

- c. The Department of Transportation must use BMP's as described in their document "Water Supply Watershed Best Management Practices."
- d. Development of any nature will require:
 - (1) Five copies of the site plan on 18" x 24" sheets.
 - (a) Site plan scale of 1" = 100';
 - (b) Property lines with total acreage;
 - (c) North arrow;
 - (d) Location map;
 - (e) Proposed buildings and other impervious improvements;
 - (f) Total impervious area;
 - (g) Easements - location, purpose, and width;
 - (h) Location of perennial streams;
 - (i) Septic tank drainage field;
 - (j) Sedimentation and erosion controls; and
 - (k) Front, side, and rear yard setbacks.

2. Dimensional Requirements

| WS-CA(O) Watershed II Critical Area (Overlay) Dimensional Standards | |
|--|-----------|
| Minimum Lot Area per Dwelling Unit | 0.5 acres |
| Non-Residential Maximum Built-Upon Area | 24% |

P. WSIV-PA(O) Watershed IV Protected Area (Overlay)

The WSIV-PA(O) is intended to allow development with fewer restrictions because the risk of water quality degradation is less in the protected area than in the critical area. Only new development activities that require an erosion/sedimentation control plan under State law or approved local government program are required to meet the provisions of this Ordinance when located in a WS-IV watershed. In order to address a moderate to land use intensity pattern, residential and non-residential uses shall develop at a maximum of two (2) dwelling units per acre and twenty-four percent (24%) built-upon area, respectively. A maximum of three (3) dwelling units per acre or thirty-six percent (36%) built-upon area is allowed for projects without a curb and gutter street system.

1. Requirements

- a. The Department of Transportation must use BMP's as described in their document, "Water Supply Watershed Best Management Practices."
- b. Development of any nature will require:
 - (1) Five copies of the site plan on 18" x 24" sheets.
 - (a) Site plan scale of 1" = 100';
 - (b) Property lines with total acreage;
 - (c) North arrow;
 - (d) Location map;
 - (e) Proposed buildings and other impervious improvements;

2. Dimensional Requirements

| WS-IVPA(O) Watershed IV Protected Area (Overlay) Dimensional Standards | |
|---|------------|
| With Curb and Gutter | |
| Minimum Lot Area per Dwelling Unit | 0.5 acres |
| Non-Residential Maximum Built-Upon Area | 24% |
| Without Curb and Gutter | |
| Minimum Lot Area per Dwelling Unit | 0.33 acres |
| Non-Residential Maximum Built-Upon Area | 36% |

Q. Development Plan

Any submitted development plan, in addition to the requirements of Chapter 9, shall also depict the BUA calculations.

R. Shopping Centers

Shopping Centers shall not exceed a total BUA of thirty percent (30%) of the site.

S. Remedies Available

In case any building is erected, constructed, reconstructed, altered, repaired, converted, or maintained, or any building or land is used in violation of the Ordinance, the Zoning Administrator or any other appropriate town authority, or any person who would be damaged by such violation, in addition to other remedies, may institute an action for injunction, or mandamus, or other appropriate action or proceeding to prevent such violation. In addition, the North Carolina Environment Management Commission may assess civil penalties in accordance with N.C.G.S. § 143.215(6)(a), whenever

watershed violations occur. Each day that the violation continues shall constitute a separate offense.

T. Record of Amendments

The Zoning Administrator shall keep records of all amendments to this Ordinance and when such amendments apply to the watershed overlay district Watershed Protection Overlay District, copies of such upon adoption, shall be sent to the N.C. Environmental Management Commission and the N.C. Department of Environmental Quality.

U. 10/70 Option

1. Outside of the critical areas of WS-II and WS-IV, development may exceed the built-upon area on a project-by-project basis in that up to ten percent (10%) of the land area watershed may be developed for new projects and expansions of existing development of up to seventy percent (70%) built-upon area. 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.
2. The Zoning Administrator shall keep records of the Town's utilization of the provisions that a maximum ten percent (10%) of the watershed area may be developed to a maximum of seventy percent (70%) built-upon area. Records shall include the total acres of non-critical watershed area, total acres eligible to be developed under this option, total acres approved for this development option, and individual records for each project with the following information: location, acres, site plan, use, stormwater management plan as applicable and inventory of hazardous materials as applicable.

V. Minor and Major Variances

1. A minor watershed variance shall not be granted by the Board of Adjustment unless and until the provisions of Section 9.7.B have been met.
2. A major watershed variance shall not be granted by the Board of Adjustment unless and until the provisions of Section 9.7.B and Section 5.1.E have been met.
3. When considering minor or major watershed variances, the Town of Elkin shall notify and allow a reasonable comment period for all other local governments having jurisdiction in the designated watershed where the watershed variance is being considered. Local governments receiving such notification shall submit comments to the Zoning Administrator prior to a Board of Adjustment decision. Such comments shall become a part of the public record.
4. The Board of Adjustment shall refuse to hear an appeal or an application for a minor or major watershed variance previously denied if it finds there have been no substantial changes in conditions or circumstances bearing on the appeal or application.
5. A map or plot shall accompany any written application and shall remain as a permanent part of the variance application. The map of plot shall be drawn to scale and show the following information:

- a. Size of lots;
- b. Size and Location of the building or buildings on the lot;
- c. Size and location of any proposed building or additions to an existing building on the lot;
- d. Location, or proposed location, of any outdoor sign on the lot;
- e. Location and number of parking space, and/or proposed parking spaces on the lot;
- f. Surface water drainage;
- g. Table of built upon area (BUA) calculations.

W. Conflict with Other Chapters

Where this Chapter of the Ordinance imposes a greater restriction upon the lot size/density, the provisions of this Chapter shall govern.

X. Appeals

Appeals shall be executed as necessary following the procedures of Chapter 9.

X. Repeal and Re-Enactment of Existing Ordinance

This Ordinance in part carries forward by re-enactment, some of the Watershed Ordinance of the Town of Elkin, North Carolina (adopted by the Town Board of Commissioners on October 1, 1993 as amended, April 1997 and September 17, 2017, and it is not the intention to repeal but rather to re-enact and continue in force such existing provisions so that all rights and liabilities that have accrued thereunder are preserved and may be enforced. All provisions of the Watershed Ordinance which are not re-enacted herein are hereby repealed.

5.2 HIGH QUALITY WATERS

A. Applicability

The Town of Elkin has defined "High Quality Water Zones" as areas that are classified as such in Title 15A of the North Carolina Administrative Code subchapter 02B[15A NCAC 2B.0101(e)(5)]. This designation in the Code includes all water supply watersheds which are either classified WS-I or WS-II.

B. Requirements

1. Limit on Uncovered Areas

Uncovered areas of land disturbance in High Quality Water (HQW) zones shall be limited at any time to a maximum of twenty (20) acres within the boundaries of the tract. Only the portion of the land disturbing activity within the HQW zone shall be governed by this section. Larger areas may be uncovered within the boundaries of the tract with the written approval of the Zoning Administrator.

2. Maximum Peak Rate of Runoff Protection

Erosion and sedimentation control measures, structures and devices within the HQW zones shall be planned, designed and constructed to provide protection from the runoff of the twenty-five (25) year storm which produces the maximum peak rate of runoff as calculated according to the procedures in the United States Department of Agriculture Soil Conservation Service's "National Engineering Field Manual for Conservation Practices" or according to procedures adopted by any other agency of the State or the United States or any generally recognized organization or association.

3. Settling Efficiency

Sediment basins within HQW zones shall be designed and constructed so that the basin will have a settling efficiency of at least seventy percent (70%) for the forty- (40-) micron size soil particle transported into the basin by the runoff of the two- (2-) year storm that produces a maximum peak runoff calculated according to the procedures in the United States Department of Agriculture and Soil Conservation Services "National Engineering Field Manual for Conservation Practices" or according to procedures adopted by any other agency of the State or the United States.

4. Grade

Newly constructed open channels in HQW zones shall be planned, designed and constructed with side slopes no steeper than two feet horizontal to one-foot (1') vertical if a vegetative cover is used for stabilization unless soil conditions permit steeper side slopes or where the side slopes are stabilized by using mechanical devices, structural devices or other ditch liners sufficient to restrain accelerated erosion. The angle for side slopes shall be sufficient to restrain accelerated erosion.

5.3 FLOOD DAMAGE PROTECTION

Land within the Town of Elkin jurisdiction shall comply with the provisions of Chapter 151, Flood Damage Protection, of the Town of Elkin Code of Ordinances.

5.4 TREE PROTECTION

A. Applicability

1. Expansions and Changes of Use

These regulations shall apply to all newly developed properties as well as changes

of use, expansions which increase the gross heated square footage of an existing building by more than twenty-five percent (25%), and expansions of roadways and vehicle parking/loading areas by more than twenty-five percent (25%).

2. Modification of Standards

Where necessary to accommodate creativity in site design, or where topographic or physical site conditions are not feasible, the Zoning Administrator may modify these requirements, provided that the type and amount of landscaping or other features are equivalent in effectiveness.

B. Exemptions

1. Lots Less than Two (2) Acres

Any lot less than two (2) acres shall be exempt from the tree protection provisions of this chapter. Subdivision of property to circumvent these requirements is not permitted.

2. Timbering and Silviculture

- a.** Normal forestry activity on forestland that is taxed on the basis of its present-use value as forestland under N.C.G.S. § 105, Article 12 or that is conducted in accordance with a forest management plan that is prepared or approved by a forester registered in accordance with N.C.G.S. § 189 be exempt from the tree protection provisions of this Chapter.
- b.** Prior to any harvesting activity, a harvesting plan shall be submitted to the Zoning Administrator for approval. At a minimum, the plan shall include the area to be harvested, any protected trees as required by this Ordinance, and site buffer requirements.
- c.** If a forest landowner harvests timber they must maintain any buffers that might be required under current zoning. Timbering and silviculture may not be used to circumvent the requirements of Chapters 5 and 6 for development. Forest landowners shall keep a record of when the tract was harvested since that date may come into question should a development plan be submitted to the Town in the future.
- d.** In cases where the harvest results in the removal of all or substantially all of the trees that fall within required buffers, or fails to account for protected trees under Town regulations governing development of the tract of land, the Zoning Administrator may deny a building permit or refuse to approve a site or subdivision plan for either a period of up to three (3) years if it was not a willful violation of the Town's regulations, or up to five (5) years if it was a willful violation of the Town's regulations.

C. Protection

Existing vegetation shall be preserved in accordance with the table below.

**Figure 5.1
TREE SAVE PRIORITIES**

| Priority | Tree Save Area | Protection Measures |
|-----------------|--|--|
| Tier 1 | Floodways Required Stream Buffers Required Buffer Yard Slope Areas Greater than 25% Wetlands | All Vegetation and Soil to Remain Undisturbed In some cases, limited disturbance may occur within the areas to be protected provided all necessary approvals are obtained. Such activities include, but are not limited to the following: 1.Mitigation of development activities. 2.Restoration of previously disturbed areas. 3.Utility installations and emergency public safety activities. 4.Construction of a trail or pedestrian walkway that will provide public access. 5.Required Street or Driveway connections. |
| Tier 2 | 100 Year Floodplains Front Setback Areas Street Tree Planting Strip Residential Landscaping Areas Required Open Space Slope Areas of 15-25% | All Trees Greater than 12” DBH to Remain Undisturbed, or Replacement trees shall be planted at a rate of 1 tree per 12” DBH and should be incorporated into open space amenities wherever possible.** |
| Tier 3 | All Other Locations | All Trees Greater than 24” DBH to Remain Undisturbed, or Replacement trees shall be planted at a rate of 1 tree per 12” DBH and should be incorporated into open space amenities wherever possible.** |

**Required street trees, parking lot landscaping, residential landscaping and buffer yard plantings may not be counted towards replacement requirements.

D. Installation, Maintenance, and Replacement

Provisions for vegetation installation, maintenance and replacement shall be found in Chapter 6.