Section 412. Natural Resource Protection Standards.

A. All residential and nonresidential development shall be preceded by the identification of any environmental or natural feature described in Sections 413 through 416 and shall meet the specified standards of environmental protection.

B. Site alterations, regrading, filling and clearing or planting vegetation prior to approval of the subdivision plats and/or site plans for development shall be a violation of this Ordinance. Reference in this section to "open space" is intended to mean the term as it is defined by Article II and described in Section 417.

Section 413. Stream Buffer.

413.01. Purpose. The purpose of this Section is to establish minimal acceptable requirements for the design of buffers to ensure that the stream and adjacent land will fulfill their natural functions; to reduce land development impacts on stream water quality and flows; and to provide for the environmentally sound use of Auburn's land resources.

413.02. Definitions. For the purpose of this section, the following words or phrases shall be defined as specified below.

A. *Perennial stream:* See Article II, Definitions—Stream, Perennial

B. *Intermittent stream*: A stream that flows at least six months out of a year but does not flow during part or all of the summer and may carry water during or after a rainstorm.

C. *Ephemeral stream:* A stream channel or reach of stream channel that carries surface water runoff for short durations as a result of precipitation events. The channel bottom is always above the groundwater table.

D. *Best Management Practices (BMPs):* Conservation practices or management measures that control soil loss and reduce water quality degradation caused by nutrients, animal wastes, toxics, sediment, and runoff.

413.03. Streams Determination. Perennial and intermittent streams are identified through site inspection by the Water Resource Management Department and/or US Geological Survey (USGS) maps. Perennial streams are those which are normally depicted on a USGS map with a solid blue line. Intermittent streams are normally depicted on a USGS map with a dotted blue line. Perennial and intermittent streams not identified on the USGS map as described herein may be added to a development site plan by the Water Resource Management Department based on the determination by a qualified professional that the stream satisfies the USGS definition for said streams. Ephemeral streams are streams assessed and determined by the Water Resource Management Department through stream delineation done on the development site as reported by a qualified professional.

413.04. Buffer description, width, and permitted uses. Stream buffers shall be required on each side of all perennial and intermittent streams as defined in Section 413.02 and further described in Section 413.03. Stream buffers width shall vary based on the size of the upstream drainage basin. Table 4.31 specifies the buffer required based on the drainage area for a particular stream above the most downstream point on the development being considered. The USGS 7.5 minute 1":2000' quadrangle maps, in conjunction with the Soil Survey Maps of Lee County and the City of Auburn Geographic Information System (GIS), will serve as tools to delineate the size of drainage basins and specify the corresponding buffer width.

The stream buffer is comprised of three zones: S*treamside Zone, Managed Use Zone, and Upland Zone*. Buffer zones' function, vegetation and permitted uses vary by zone as described in the Table 4.32.

TABLE 4.31
Stream Buffer Width Based on Drainage Area

Drainage Area (Watershed) Designation	Streamside Zone	Managed Use Zone	Upland Zone	Total Buffer Width on each side of Stream
< 100 acres	25 feet	None	10 feet	35 feet
≥ 100 acres	25 feet	None	20 feet	45 feet
≥ 300 acres	25 feet	20 feet	10 feet	55 feet
≥ 640 acres	25 feet	50 feet	25 feet	100 feet

If an ephemeral stream remains after construction has been completed, and all or a portion of that stream falls within the stream buffer of an intermittent or perennial stream, then that ephemeral stream shall be revegetated on both sides of the stream in accordance with the targeted vegetation of the corresponding buffer zone. Appropriate stream bank stabilization measures shall be designed if warranted by excessive velocities in the ephemeral stream. If the ephemeral stream remains after construction and falls outside of an intermittent/perennial stream buffer, then that ephemeral stream shall be grassed and/or revegetated in accordance with the surrounding vegetation at a width of 25 feet on each side of the ephemeral stream. Ephemeral stream channels and banks shall be stabilized as appropriate for the predicted stream velocities. These measures are performed in order to preserve and protect water quality.

TABLE 4.32
Stream Buffer Description and Permitted Uses

Characteristics	Streamside	Managed Use Zone	Upland Zone
Function	Protects the physical and ecological integrity of the stream ecosystem	Protects key components of the stream and provides distance between upland development and the streamside zone	Prevents encroachment and filter runoff from residential and commercial development
Vegetative Target	Undisturbed natural vegetation	Mature vegetation and native trees; exotic vegetation and underbrush may be removed and maintained	Lawns, gardens, shrubs, and pervious landscaping features
Uses	Very restricted- Permitted uses limited to: flood control structures, utility easements*, natural footpaths, crossings and approaches for paved roadways, and pedestrian paths and bikeways.	Restricted- Permitted uses limited to: all uses allowed in the Streamside Zone as well as storm water best management practices (BMPs), biking and hiking paths (with natural or pervious surfaces), greenway trails, and limited tree clearing approved by the Water Resource Management Department.	Restricted- Permitted uses limited to: all uses allowed in the Streamside and Managed Use Zones, as well as, grading for lawns, gardens, and gazebos and accessory structures. No septic systems, principal structures or impervious surfaces are allowed.

**As deemed necessary and approved by the Water Resource Management Department*

413.05. Applicability. The buffer requirements shall apply to all perennial and intermittent streams defined in Section 413.02. Buffer widths for streams are measured horizontally on a line perpendicular to the surface water, landward from the top of the bank on each side of the stream. The top of bank is the landward edge of the stream channel during high water or bank full conditions at the point where the water leaves the stream channel and begins to overflow onto the floodplain.

All properties shall be subject to the buffer width requirements except those properties that are an existing lot of record and/or included on an approved preliminary subdivision plat and the lot or lots cannot meet the requirements described in this Section. *(Effective date 5/02/06 pursuant to Ordinance Number 2389)*

413.06. Minimize Intrusion. Any uses allowed in Table 4.32 shall be designed and constructed to minimize the amount of intrusion into the stream buffer and to minimize clearing, grading, erosion, and water quality degradation.

413.07. Land in the Stream Buffer. Land in stream buffers shall not be used for principal structures. All new platted lots shall be designed to provide sufficient land outside of the stream buffer to accommodate primary structures. Stream buffers should be delineated before streets and lots are laid out to minimize buffer intrusion and to assure adequate buildable area on each platted lot.

Land within the stream buffer can serve to meet the minimum lot size requirements.

413.08. Setback Requirements. For all lots within a development requiring a stream buffer, setbacks can be 100% within the stream buffer.

413.09. Buffer Impact. When the application of the buffer zones would result in the loss of buildable area on a lot (See Section 203 for definition of "lot") that was recorded prior to the amendment of this ordinance, modifying the width of the buffer zones may be allowed, through an administrative process, as determined by the Water Resource Management Department.

Modification and mitigation of the stream buffer width are also available to landowners or developers of newly platted lots or subdivisions where there are exceptional situations or physical conditions on the parcel that pose practical difficulty to its development and restrict the application of the regulations of this ordinance. There must be proof of such circumstances by the landowner.

The landowner or his designated representative proposing any of the impacts shall prepare and submit for approval a written request and a site plan showing the extent of the proposed impact and must specify a proposed mitigation technique. Mitigation techniques are included in Section 413.10.

The Water Resource Management Department and other appropriate city staff members shall review and render a decision on any buffer encroachment and mitigation technique with regard to the stream buffer requirements. Amendment to the stream buffer width may be allowed in accordance with the following criteria:

A. The proposed encroachment and mitigation is in accordance with the purpose and intent of this section of the ordinance.

B. The proposed lot and structure conforms to all other zoning and development regulations.

C. Encroachments into the buffer areas shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utility.

D. The landowner or his designated representative submitted an acceptable written statement justifying the need for the buffer impact.

E. The landowner or his designated representative submitted an acceptable mitigation plan in accordance with cited mitigation techniques.

F. Attention has been given to maintaining natural vegetation and eliminating run-off.

In no case shall the reduced portion of the buffer area be less than the width of the Streamside Zone (25 feet).

413.10. Stream Buffer Mitigation Techniques. The following techniques are available to landowners for mitigation of buffer impact.

A. *Installation of Structural BMPs.* The installation of an on-site structural BMP (i.e. bioretention, extended detention/retention, rain gardens, stormwater wetlands, etc.) will allow for stream buffer impacts on the specific site. The structural BMP shall be designed to achieve pollutant (nutrients, herbicides, pesticides, sediment and other illicit discharges) removal to the maximum extent practicable. The BMP shall remain outside the Streamside Zone. A detailed BMP design plan must be submitted to the Water Resource Management Department for approval along with a long-term maintenance plan.

B. *Controlled Impervious Surface*. The landowner may commit to and provide a specific site development plan that limits the overall site impervious surface ratio equal to or less than 25%.

C. *Open Space Development*. The landowner may submit a specific site development plan which preserves an undisturbed, vegetative area on-site or near the development site as open space equal to 200% of the buffer encroachment area. The open space preserved must promote water quality protection.

D. *Stream Restoration*: The landowner may restore and preserve the buffer area on any stream of equivalent or greater drainage area the condition of which is determined to be qualified for restoration by the Water Resource Management Department on a 1:1 basis in linear feet of stream. This restoration shall include stream bank improvements and Streamside and Managed Use Zone re-vegetation.

E. *Stream Preservation:* The landowner may purchase, fee simple, other stream segments within the city limits at equivalent or greater drainage area on a 1:1 linear foot basis and convey fee simple and absolute title of the land to the City.

F. *Wetland Restoration*: On a 2:1 acreage basis for disturbed stream and buffer area (2 acres of wetland for each acre of disturbed area), the landowner may provide a combination of the preservation and/or restoration of wetlands with protective easements, and the implementation of structural or non-structural BMPs to achieve pollutant removal to the maximum extent practicable.

G. *Greenways*: The landowner may allocate and donate open space within the city limits through fee simple to the City of Auburn for preservation and use as common open space.

H. *Wider Buffer Widths:* A developer may add additional widths to buffer areas where encroachment occurs in other areas on a development site and may obtain an acre for acre credit based on the stream buffer zone impacted. A 2:1 credit could be obtained by determination of the Water Resource Management Department in the event additional streamside buffer is set aside for encroachment of the managed use and upland stream buffer zones.

I. *Other Mitigation Techniques:* Other creative mitigation techniques and plans may be considered by the Water Resource Management Department.

413.11. Vegetation Preservation. The buffer shall provide for the preservation and enhancement of natural vegetation or planting. No live vegetation may be removed from the Streamside and Managed Use Zones for preparation of land for uses permitted in Table 4.32 unless approved by the Water Resource Management Department. The Water Resource Management Department may grant approval of the removal of exotic vegetation (i.e. privet, kudzu, etc.) provided that a vegetation restoration plan is submitted and approved prior to the disturbance of the vegetation. The purpose of such plan is to ensure that native vegetation is restored to the Streamside Zone.

Where a developer or lot owner removes live vegetation from the buffer strip, in violation of this section, the Water Resource Management Department shall require native vegetation of reasonable diameter in size to be planted so as

to create a buffer area which is in compliance with this section. A vegetation restoration plan must be submitted and approved by the Water Resource Management Department prior to restoration.

413.12. Vegetation Restoration Plan. A vegetation restoration plan shall include the following information:

A. Scaled map of lot showing buffer delineation (copy of the survey is acceptable).

B. Square footage of the actual area disturbed or proposed disturbed area.

C. Proposed vegetation to be removed from the buffer.

D. Proposed location, number, and species of plants to be planted in the disturbed area (See list of plant species).

E. Type of ground cover to be placed in the disturbed area (i.e. mulch, pine straw, etc.).

F. Proposed planting schedule and deadline for completion of restoration activities.

413.13. Buffer Delineation. The following buffer delineations are required:

A. Stream boundaries including each buffer zone must be clearly delineated on all grading plans, subdivision plats, site plans and any other development plans.

B. The outside boundaries of the *Managed Use Zone* of the stream buffer must be clearly marked on-site by flagging or fencing prior to land disturbing activities.

C. The outside boundary of the *Managed Use Zone* must be permanently marked at highway stream crossings.

D. Stream and buffer boundaries including the delineation of each buffer zone must be specified on all surveys and recorded plats and noted on individual deeds.

E. Stream buffer requirements must be referenced in homeowners association documents.

413.14. Approved Permits. Where a landowner or his representative obtain permits from Alabama Department of Environmental Management (ADEM) or the U. S. Army Corp of Engineers for proposed impact to the stream or stream buffers then these approved mitigation impacts and plans would supersede the applicable requirements of these sections of the ordinance. The regulations that these permits do not affect shall be applicable to the proposed development site.

Section 414. Reclamation of Undeveloped Land. In the event that construction of a development has not begun in accordance with the provisions of this Ordinance, or has not been completed within one year of initiation, said development shall be reviewed by the Planning Commission at its next regular meeting following the expiration of the one-year period. At this meeting, the Planning Commission shall determine whether or not reasonable progress toward completion of the development is being made. Evidence of reasonable progress toward completion may include, but shall not be limited to, installation of streets, utility lines and stormwater management facilities; laying structural foundations; and completion of any stage of a development approved under a staging plan pursuant to Section 802.09(A). However, the clearing and grubbing of land, in the absence of other improvements, shall not by itself constitute evidence of reasonable progress.

Upon a determination that reasonable progress is not being made, the Planning Commission may require the owner of the development site to restore the land to the same condition that existed prior to the initiation of the development. If such restoration is not feasible, the City Engineer and the Planning Director shall determine and prescribe an acceptable condition or degree of reclamation; at the very least, the site shall be sodded or planted in grass, and appropriate measures shall be taken to prevent or eliminate soil erosion. In all cases, restoration activities shall be consistent with appropriate Best Management Practices as recommended by the Alabama Forestry Commission, the