NATURAL RESOURCES PROTECTION MODEL ORDINANCE FOR COASTAL GEORGIA

Adopted Month, Day, YEAR

Acknowledgements:
The following model ordinances, local government codes, design guidelines, and technical documents were consulted during the development of this document:

1. Coastal Stormwater Supplement to the Georgia Stormwater Management Manual, Center for Watershed Protection
2. Model Coastal Riparian Buffer Ordinance for Georgia's Local Governments, UGA River Basin Center
3. Model On-site Disposal System (OSDS) Inspection Ordinance & Maintenance Ordinance, Coastal Regional Commission (formerly: Coastal Georgia Regional Development Center)
4. Part V Environmental Planning Criteria Model Ordinances, Georgia Department of Natural Resources
5. Illicit Discharge Ordinance, Atlanta Regional Commission
6. Flood Damage Prevention Ordinance, Federal Emergency Management Agency
7. Erosion & Sedimentation Model Ordinance, Georgia Environmental Protection Division
8. Chatham County, GA Wellhead Protection Ordinance
9. Darien, GA Water Resources Protection Ordinance

Coastal Georgia is experiencing significant development pressure and must address issues natural resource protection in order to ensure that the coastal region can continue to develop sustainably without creating an adverse impact on community resources, citizens, and infrastructure. A sound set of development regulations protects the public investment in the community as well as the quality of life for the existing residents.

This model Natural Resources Ordinance is intended for use by local governments, in part in totality, to mitigate the potential impact of future development on natural resources in the region. This ordinance incorporates the standards set by the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual, Flood Damage Prevention (consistent with current State model), Erosion & Sedimentation Control (2009 Model), Part V Planning Criteria, Riparian Buffer Protection, Water Conservation and Well Head Protection (consistent with the Coastal Plan for Saltwater Intrusion), Septic Maintenance and Inspection, etc.

All of these natural resources standards have been unified into one ordinance in an effort to avoid conflicts, increase understanding and compliance, simplify development review, and aide with permitting and enforcement. However, each article can be adopted independently of the other articles within the ordinance. Please note that all of the standards within this model may not be appropriate for all localities, and all local governments may not yet have the resources available to implement all aspects of this code. For this reason, local governments should carefully review all of the Articles within this ordinance and adopt only those which are appropriate for that jurisdiction.

Natural Resources Protection Ordinance
for
[Jurisdiction], Georgia

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ARTICLE I INTRODUCTION

Section 1. Background

Coastal Georgia is experiencing significant development pressure and must address issues related to wastewater, stormwater, water supply, construction standards, maintenance and natural resource protection in order to ensure that the coastal region can continue to develop sustainably without creating an adverse impact on community resources, citizens, and infrastructure. It is essential that local governments in the coastal region of Georgia establish development standards and regulations that are protective of the region's natural resources and infrastructure to ensure that future development does not adversely impact a local government and the community. A sound set of development regulations protects the public investment in the community as well as the quality of life for the existing residents.

The following ordinance includes a package of model requirements and development standards for coastal Georgia within the context of an overall Green Infrastructure approach. The ordinance is intended to be a Green Growth Guidelines companion project for coastal local governments. The ordinance ties together existing model coastal ordinances that have been developed for the Coastal and Statewide Nonpoint Source and Coastal Management Programs, including ordinances for riparian buffers, wetlands, conservation subdivisions and septic system maintenance and inspection. This ordinance has been developed with the short term and long term goals of the Coastal Comprehensive Plan as a guide.

The following ordinances were utilized either partially or in their entirety:

- Illicit Discharge Prohibition
- Post-Construction Stormwater Runoff
- Flood Damage Prevention
- Erosion & Sedimentation
- Protection of Groundwater Recharge Areas
- Wetlands Protection
- River Corridor Protection
- Water Conservation
- On-site Sewage Disposal System (OSDS) Inspection and Maintenance
- Riparian Buffer Protection
- Habitat Protection
- Wellhead Protection
- Dock Standards

Section 2. General Provisions

This is the Natural Resources Protection Ordinance. It is intended to minimize the impact of development and activities associated with that development. In addition, this ordinance is intended to serve the following functions:

A. To protect the long-term economic viability of coastal Georgia.
B. To provide a holistic view of important environmental ecosystems that should be preserved, protected, enhanced and/or restored in the coastal region.
C. To guide development to ensure that both green space preservation and land development are located where most appropriate.
D. To protect and improve water quality, air quality, and sustain viable and connected plant, fish and wildlife habitat.
E. To coordinate and target mitigation efforts and limited resources including county and regional open space preservation efforts.
F. To support coastal Georgia's livable communities and smart growth principles.

2.1. Title

This Ordinance shall be known as "The [Jurisdiction] of [Jurisdiction] Natural Resources Ordinance."

2.2. Effective Date

This Ordinance shall become effective upon its approval by the [Jurisdiction].

2.3. Purpose

The purpose of this ordinance is to establish minimum requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within this jurisdiction. This ordinance seeks to meet that purpose through regulation of activities that can improve and maintain the natural resources that lie partially or wholly within the jurisdictional boundaries of [Jurisdiction] , Georgia.

2.4. Compatibility with Other Permit and Ordinance Requirements

This ordinance is not intended to interfere with, abrogate, or annul any other ordinance, rule or regulation, statute, or other provision of law. The requirements of this ordinance should be considered minimum requirements, and where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall be considered to take precedence.

2.5. Severability

The provisions of this ordinance are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this ordinance or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this ordinance.

2.6. Responsibility for Administration

Unless otherwise stated, the [Administrator] shall administer, implement, and enforce the provisions of this ordinance. Any powers granted or duties imposed upon the [Administrator] may be delegated by the [Administrator] of [Jurisdiction] to persons or entities acting under the authority of the [Administrator].

2.7. Effects of Compliance

The standards set forth herein pursuant to this ordinance unless otherwise noted are minimum standards; therefore this ordinance does not intend nor imply that compliance by any person will ensure that there will be no adverse effect with regard to water quality and quantity.

2.8. Compatibility with Other Regulations

The requirements of this ordinance should be considered minimum requirements, and where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule, regulation, or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human health or the environment shall control.

ARTICLE II DEFINITIONS

When used in this ordinance, the following words and phrases shall have the meaning given in this section. Words not defined herein shall be construed to have a meaning given by common and ordinary use as defined by Webster's Third New International Dictionary, copyright 1970. The term "shall" is mandatory. When not inconsistent with the context, words used in the singular number include the plural and those used in the plural number include the singular. Words used in the present tense include the future. The following definitions shall apply in the interpretation and enforcement of this ordinance, unless otherwise specifically stated:

Access Path. A pervious path designed, constructed, and maintained pursuant to the "Coastal Riparian Buffer Guidance Manual" that provides for access to water-dependent uses through the buffer and takes the route that impacts the natural vegetation of the buffer to the least extent possible.

Accessory Structure. A structure used for parking, storage and other non-habitable uses, such as garages, carports, storage sheds, pole barns, hay sheds and the like.

Addition (to an existing building). Any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by an independent perimeter load-bearing wall, shall be considered "New Construction."

Address. The house number (a numeric or alphanumeric designation) that, together with the street name, describes a physical location of a specific property. Even numbered address means a house number ending with the number 0, 2, 4, 6, 8, or no house number. Odd numbered address means a house number ending with the number 1, 3, 5, 7, or 9.

Administrator. [Jurisdiction] Manager.

Altered Wetlands. Areas with hydric soils that have been denuded of natural vegetation and put to other uses, such as pasture, row crops, etc., but that otherwise retain certain wetlands functions and values.

Appeal. A request for a review of the [Jurisdiction] Manager's interpretation of any provision of this ordinance.

Applicant. A property owner or other responsible person who has submitted an application for a post-development stormwater management permit.

Aquifer. Any stratum or zone of rock beneath the surface of the earth capable of containing or producing water from a well. (Note: this is the same definition as in the Groundwater Use Act).

Area of Shallow Flooding. A designated AO or AH Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet, and/or where a clearly defined

channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity of flow may be evident.

Area of Special Flood Hazard. The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. In the absence of official designation by the Federal Emergency Management Agency, Areas of Special Flood Hazard shall be those designated by the local community and referenced in ARTICLE VSection 2.

Army Corps of Engineers or Corps. The Federal agency responsible, under Section 404 of the Clean Water Act, for administering the permit program for any proposed discharges of dredged or fill material into waters of the United States.

Article VIII Permit. A County permit issued under this article authorizing the degradation or destruction of any waters of the County.

As-built Drawings. Amended site and construction plans specifying the locations, dimensions, elevations, capacities and operational capabilities of road and drainage structures and facilities as they have been constructed.

Base Flood. The flood having a one percent chance of being equaled or exceeded in any given year.

Basement. That portion of a building having its floor sub grade (below ground level) on all sides.

Best Management Practices (BMPs). Structural devices to store or treat stormwater runoff or non-structural programs or practices both of which are designed to prevent or reduce the pollution of the waters of the State of Georgia; A collection of structural practices and vegetative measures which, when properly designed, installed and maintained, will provide effective erosion and sedimentation control. These include sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the 'Manual for Erosion and Sediment Control in Georgia' published by the Commission as of January 1 of the year in which the land-disturbing activity was permitted.

*Better Site Design Techniques. S*ite design techniques that can be used during the site planning and design process to minimize land disturbance and the creation of new impervious and disturbed pervious cover. Better site design techniques include reducing clearing and grading limits, reducing roadway lengths and widths and reducing parking lot and building footprints.

Better Site Planning Techniques. Site planning techniques that can be used during the site planning and design process to protect valuable aquatic and terrestrial resources from the direct impacts of the land development process. Better site planning techniques include protecting primary and secondary conservation areas.

Board. The Board of Natural Resources.

Buffer. An area along the course of any watercourse to be maintained in an undisturbed and natural condition. For this purposes of Article VI, this will include only the area of land immediately adjacent to the banks of state waters in its natural state of vegetation, which facilitates the protection of water quality and aquatic habitat.

Buffer Encroachment Permit. The permit issued by [local government] and required to undertake certain buffer encroaching activities as described herein.

Building. Any structure, either temporary or permanent, built for support, shelter, or enclosure for any occupancy or storage.

Certified Inspector. A licensed OSDS contractor certified by State of Georgia and registered with the county, who shall assess the function and condition of an OSDS and report findings to the property owner and the county in accordance with the routine inspection measures herein.

Certified Personnel. A person who has successfully completed the appropriate certification course approved by the Georgia Soil and Water Conservation Commission.

Certified Wetland Scientist. A wetland scientist certified as a Professional Wetland Scientist (PWS) or Wetland Professional in Training (WPIT) by the Society of Wetland Scientists.

Channel. A natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

Coastal Marshland or *Marshland*. Any marshland intertidal area, mud flat, tidal water bottom, or salt marsh within the estuarine area of the [local government] whether or not the tidewaters reach the littoral areas through natural or artificial watercourses. "Vegetated marshlands" shall include those areas upon which grow one, but not necessarily all, of the following: salt marsh grass (Spartina alterniflora), black needlerush (Juncus roemerianus), saltmeadow cordgrass (Spartina patens), big cordgrass (Spartina cynosuroides), saltgrass (Distichlis spicata), coast dropseed (Sporobolus virginicus), bigelow glasswort (Salicornia bigelovii), woody glasswort (Salicornia virginica), saltwort (Batis maritima), sea lavender (Limonium nashii), sea oxeye (Borrichia frutescens), silverling (Baccharis halimifolia), false willow (Baccharis angustifolia), and high-tide bush (Iva frutescens). The occurrence and extent of salt marsh peat at the undisturbed surface shall be deemed to be conclusive evidence of the extent of a salt marsh or a part thereof. Coastal Marshlands Protection Act, O.C.G.A. § 12-5-282.

Coastal Riparian Buffer. On any given parcel of land, a natural or enhanced vegetated area of riparian land lying adjacent to a stream, pond, impoundment, wetland, or coastal marshland.

Coastal Riparian Buffer Guidance Manual. A companion document to the Model Coastal Buffer Ordinance. Dated: January 2007. Written by Katherine Rowe, Jennifer Spangler, Emily Franzen. UGA River Basin Center. Prepared for the Georgia Department of Natural Resources Environmental Protection Division Coastal Nonpoint Source Management Program.

Commission. The Georgia Soil & Water Conservation Commission (GSWCC).

Conservation Easement. An agreement between a land owner and the [Jurisdiction] or other government agency or land trust that permanently protects open space or greenspace on the owner's land by limiting the amount and type of development that can take place but continues to leave the remainder of the fee interest in private ownership.

Construction. Any alteration of land for the purpose of achieving its development of changing use, including particularly any preparation for, building of, or erection of a structure and/or infrastructure.

Construction Activity. Activities subject to NPDES Construction Permits. These include construction projects resulting in land disturbance of one acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

County Board of Health. The County Board of Health established by the Official Code of Georgia Annotated (O.C.G.A. 31-3-1) or its designee.

CPESC. Certified Professional in Erosion and Sediment Control with current certification by Certified Profession in Erosion and Sediment Control Inc., a corporation registered in North Carolina, which is also referred to as CPESC or CPESC, Inc.

Critical Facility. Any public or private facility, which, if flooded, would create an added dimension to the disaster or would increase the hazard to life and health. Critical facilities include:

A. Structures or facilities that produce, use, or store highly volatile, flammable, explosive, toxic, or water-reactive materials;
B. Hospitals and nursing homes, and housing for the elderly, which are likely to contain occupants who may not be sufficiently mobile to avoid the loss of life or injury during flood and storm events;
C. Emergency operation centers or data storage centers which contain records or services that may become lost or inoperative during flood and storm events; and generating plants, and other principal points of utility lines.
D. Generating plants, and other principal points of utility lines.

Cut. A portion of land surface or area from which earth has been removed or will be removed by excavation; the depth below original ground surface to excavated surface. Also known as excavation.

Day. A day is defined as a calendar day.

Declared Drought Response Level. One of four levels of drought that can be declared based on the severity of drought conditions, with one being the least severe and four being the most severe.

Dedication. The deliberate appropriation of property by its owner for general public use.

Delineation. A site map that shows all waters of the County on a site. Delineations must be prepared by either qualified wetlands consultants, the Department of Natural Resources, or the Army Corps of Engineers.

Department. The Georgia Department of Natural Resources (DNR).

Design Professional. A professional licensed by the State of Georgia in the field of: engineering, architecture, landscape architecture, forestry, geology, or land surveying; or a person that is a Certified Professional in Erosion and Sediment Control (CPESC) with a current certification by Certified Professional in Erosion and Sediment Control Inc.

Design Storm. The rainfall event of such size and frequency as described in the Georgia Stormwater Management Manual or local design manual, which is used for the design of stormwater facilities.

Detention. The temporary storage of stormwater runoff in a stormwater management practice for the purpose of controlling the peak discharge.

Detention Facility. A detention basin or structure designed for the detention of stormwater runoff and gradual release of stored water at controlled rates.

Developer. Any person who acts in his own behalf or as the agent of any owner of property and engages in alteration of land or vegetation in preparation for construction activity. A person who undertakes land development activities.

Development. Any action in preparation for construction activities which result in alteration of either land or vegetation other than such minor land disturbing activities as home gardens and individual home landscaping repairs or maintenance work which result in minor soil erosion; Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, and permanent storage of materials or equipment. A land development or land development project.

Director. The Director of the Environmental Protection Division of the Department of Natural Resources, State of Georgia or an authorized representative.

Discharge. A release, either intentional or accidental, of fluid to a Municipal Separate Storm Sewer System or watercourse.

District. The Coastal Soil and Water Conservation District.

Division. The Georgia Environmental Protection Division (EPD) of the Department of Natural Resources, State of Georgia.

Drainage. A general term applied to the removal of surface or subsurface water from a given area either by gravity or by pumping, commonly applied herein to surface water.

Drainage Easement. An easement appurtenant or attached to a tract or parcel of land allowing the owner of adjacent tracts or other persons to discharge stormwater runoff onto the tract or parcel of land subject to the drainage easement.

Drainage Plan. A plan prepared using appropriate and commonly accepted engineering standards which specifies the means for alteration or development of a drainage system.

Drainage Structure. Any stormwater conveyance structure as defined below, and any piping or ditching for stormwater management purposes. A device composed of a virtually nonerodible material such as concrete, steel, plastic or other such material that conveys water from one place to another by intercepting the flow and carrying it to a release point for stormwater management, drainage control, or flood control purposes.

Drainage System. The surface and subsurface system for the removal of water from the land, including both the natural elements of streams, marshes, and ponds, whether of an intermittent or continuous nature, and the manmade element which includes culverts, ditches, channels, retention facilities and the storm sewer system.

DRASTIC. The standardized system for evaluating groundwater pollution potential using the hydrogeologic settings described in U.S. Environmental Protection Agency document EPA-600/2-87-035. (Note: the DRASTIC methodology is the most widely used technique for evaluation pollution susceptibility).

Easement. A legal right granted by a land owner to a grantee allowing the use of private land for conveyance or treatment of stormwater runoff and access to stormwater management practices.

Elevated Building. A non-basement building built to have the lowest floor of the lowest enclosed area elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns, piers, or shear walls adequately anchored so as not to impair the structural integrity of the building during a base flood event.

Erosion. The process by which land surface is worn away by the action of wind, water, ice or gravity.

Erosion, Sediment, and Pollution Control Plan. A plan required by the Erosion and Sedimentation Act, O.C.G.A. Chapter 12-7, that includes, as a minimum protections at least as stringent as the State General Permit, best management practices, and requirements in section IV.C. of this ordinance.

Estuarine Area. All tidally influenced waters, marshes, and marshlands lying within a tide-elevation range from 5.6 feet above mean tide level and below.

Evapotranspiration. The loss of water to the atmosphere by both evaporation and transpiration, which is the evaporation of water by plants.

Existing Construction. Any structure for which the "start of construction" commenced before [Date of adoption] (i.e., the effective date of the FIRST floodplain management code or ordinance adopted by the community as a basis for that community's participation in the National Flood Insurance Program (NFIP)).

Existing Grade. The vertical location of the existing ground surface prior to cutting or filling.

Existing Manufactured Home Park or Subdivision. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and final site grading or the pouring of concrete pads) is completed before [Date of adoption] (i.e., the effective date of the FIRST floodplain management regulations adopted by a community).

Expansion to an Existing Manufactured Home Park or Subdivision. The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed, including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads.

Extended Detention. The detention of stormwater runoff for an extended period, typically 24 hours or greater.

Extreme Flood Protection. Measures taken to prevent adverse impacts from large low-frequency storm events with a return frequency of 100 years or more.

Failure or *Malfunction*. The terms "failure" or "malfunction" are defined as follows:

A. the backup of sewage into a structure;

G. discharge of effluent onto the ground surface;

H. the connection of an OSDS to a storm drain:

I. liquid level in the septic tank above the outlet invert;

J. structural failure of a septic tank;

K. discharge of sewage into any stream or other body of water;

L. the liquid level in a disposal field above the outlet holes in the pipe of such field;

M. unsafe water sample;

N. substantial nonconformance with water well construction requirements;

O. substantial nonconformance with water well isolation from contamination source requirements.

Fill. A portion of land surface to which soil or other solid material has been added; the depth above the original ground.

Filling. The placement of any soil or other solid material, either organic or inorganic, on a natural ground surface or excavation.

Final Stabilization. All soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by EPD for waste disposal, 100% of the soil surface is uniformly covered in permanent vegetation with a density of 70% or greater, or equivalent permanent stabilization measures (such as the use of rip rap, gabions, permanent mulches or geotextiles) have been used. Permanent vegetation shall consist of: planted trees, shrubs, perennial vines; a crop of perennial vegetation appropriate for the time of year and region; or a crop of annual vegetation and a seeding of target crop perennials appropriate for the region. Final stabilization applies to each phase of construction.

Finished Grade. The final elevation and contour of the ground after cutting or filling and conforming to the proposed design.

Flood or Flooding. A volume of surface water that is too great to be confined within the banks or walls of a conveyance or stream channel and that overflows onto adjacent lands. A temporary rise in the level of rivers, streams, lakes, marshes and ocean, which results in inundation of areas not ordinarily covered by water; A general and temporary condition of partial or complete inundation of normally dry land areas from:

A. The overflow of inland or tidal waters; or
B. The unusual and rapid accumulation or runoff of surface waters from any source.

Flood Hazard Boundary Map (FHBM). An official map of a community, issued by the Federal Insurance Administration, where the boundaries of areas of special flood hazard have been defined as Zone A.

Flood Insurance Rate Map (FIRM). An official map of a community, issued by the Federal Insurance Administration, delineating the areas of special flood hazard and/or risk premium zones applicable to the community.

Flood Insurance Study. The official report by the Federal Insurance Administration evaluating flood hazards and containing flood profiles and water surface elevations of the base flood.

Floodplain. Any land area susceptible to being inundated by flood waters from any source.

Flood Proofing. Any combination of structural and non-structural additions, changes, or adjustments to structures, which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway. The channel of a river or other watercourse and the adjacent land areas subject to erosive velocities and damage from flood-borne debris that must be reserved in order to discharge the base flood (Intermediate Regional Flood), without ultimately increasing the water surface elevation more than one foot.

Forested Wetlands. Natural or planted forested areas having a dominant tree crown closure of hardwoods, pines, gums, cypress, or any combination of these types. These areas are usually in stream or river floodplains, isolated depressions, and drainways, and contain standing or flowing water for a portion of the year. Forested Wetlands Subcategories will include the following: hardwood floodplain forests, coniferous floodplain forests, mixed floodplain forests and non-alluvial forested wetlands.

Freeboard. A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. "Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed.

Grading. Altering ground surfaces to specified elevations, dimensions, and/or slopes; this includes stripping, cutting, filling, stockpiling and shaping or any combination thereof and shall include the land in its cut or filled condition.

Greenbelt. An area of land to be dedicated to the [Jurisdiction] of [Jurisdiction] or a land trust which shall remain undisturbed, insofar as possible, from its natural state to form a screen or buffer.

Green Infrastructure Practices. Means the combination of three complementary, but distinct, groups of natural resource protection and stormwater management practices and techniques, including better site planning and design techniques and low impact development practices, that are used to protect valuable terrestrial and aquatic resources from the direct impacts of the land development process, maintain pre-development site hydrology and reduce post-construction stormwater runoff rates, volumes and pollutant loads.

Greenspace or *Open Space*. Permanently protected areas of the site that are preserved in a natural state.

Ground Elevation. The original elevation of the ground surface prior to cutting or filling.

Hazardous Materials. Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Hazardous Waste. Any solid waste which has been defined as a hazardous waste in regulations, promulgated by the administrator of the United States Environmental Protection Agency pursuant to the federal act, which are in force and effect on February 1, 1988, codified as 40 C.F.R. Section 261.3. (Note: This is the same definition as used in the Georgia Hazardous Waste Management Act.) Any waste or material which because of its quantity, concentration or physical, chemical or infectious characteristics may:

A. Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitation reversible illness; or
B. Pose a substantial present or potential hazard to human health or to the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Highest Adjacent Grade. The highest natural elevation of the ground surface, prior to construction, adjacent to the proposed foundation of a building.

Historic Structure. Any structure that is:
A. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register:
B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district:
C. Individually listed on a state inventory of historic places and determined as eligible by states with historic preservation programs which have been approved by the Secretary of the Interior; or
D. Individually listed on a local inventory of historic places and determined as eligible by communities with historic preservation programs that have been certified either:
    a. By an approved state program as determined by the Secretary of the Interior, or
    b. Directly by the Secretary of the Interior in states without approved programs.

Hotspot. An area where the land use or activities generate or have the potential to generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater or as specified by the [Jurisdiction] of [Jurisdiction] . Hotspots may be permanent or temporary. Hotspots include, but are not limited to, fueling stations (including temporary fueling stations during construction) and golf courses.

Hydrologic Soil Group (HSG). A Natural Resource Conservation Service classification system in which soils are categorized into four runoff potential groups. The groups range from group A soils, with high permeability and little runoff produced, to group D soils, which have low permeability rates and produce much more runoff.

Illicit Discharge. Any discharge as defined in 40 CFR Part 122.26(b)(2) to a MS4 that is not entirely composed of stormwater, except those discharges authorized under a NPDES permit (other than the NPDES permit for discharges from the MS4).

Illicit Connections. Any man-made conveyance connecting a discharge directly to a MS4.

Impaired Waters. Those streams, rivers and lakes that currently do not meet their designated use classification and associated water quality standards under the Clean Water Act.

Impervious Cover. A surface composed of any material that greatly impedes or prevents the passive, natural infiltration of water into soil. Impervious surfaces include, but are not limited to,

rooftops, buildings, streets, and roads, except those designed specifically to provide active, engineered infiltration.

Impervious Surface. A manmade structure or surface which prevents the infiltration of stormwater into the ground below the structure or surface. Structures or surfaces which are constructed so as to only minimally affect the infiltration of stormwater are not considered impervious surfaces.

Impoundment. Any lake, pond, or other body of freshwater.

Industrial Activity. Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14).

Industrial Stormwater Permit. A National Pollutant Discharge Elimination System (NPDES) permit issued to an industry or group of industries that regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

Infill Development. Land development that occurs within designated areas based on local land use, watershed, and/or utility plans where the surrounding area is generally developed, and where the site or area is either vacant or has previously been used for another purpose.

Infiltration. The process of percolating stormwater runoff into the subsoil.

Infiltration Facility. Any stormwater management practice designed to provide active, engineered infiltration of retained water to the subsurface. These stormwater management practices may be above or below grade.

Inspection and Maintenance Agreement and Covenant. A written agreement and covenant providing for the long-term inspection and maintenance of stormwater management facilities and practices on a site or with respect to a land development project, which when properly recorded in the deed records constitutes a restriction on the title to a site or other land involved in a development project.

Intermediate Regional Flood. A 100-year frequency flood, as defined on the flood hazard map, which has a one-percent chance of being equaled or exceeded in any given year.

Intermittent Stream. Any stream which flows for only part of the year and does not support aquatic life whose life history requires residence in flowing water for a continuous period of at least six months.

Issuing Authority. The Georgia Environmental Protection Division is the issuing authority for the [Jurisdiction].

Jurisdictional Wetland. An area that meets the definitional requirements for wetlands as determined by the U.S. Army Corps of Engineers. An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of

vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Jurisdictional Wetland Determination. A delineation of jurisdictional wetland boundaries by the U.S. Army Corps of Engineers, as required by section 404 of the Clean Water Act, 33 U.S.C. § 1344, as amended.

Land Development. Any change in land cover, including, but not limited to, clearing, digging, grubbing, stripping, removal of vegetation, dredging, grading, excavating, filling, and paving, that alters the hydrologic response of local watersheds.

Land Development Activities. Those actions or activities that comprise, facilitate, or result in land development.

Land Development Project. A discrete land development undertaking.

Land Disturbance Permit. The permit issued by [EPD or local government] pursuant to the Georgia Erosion and Sedimentation Control Act and required for undertaking any land disturbing activity.

Land Disturbing Activity. Any activity which may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands within the state, including, but not limited to, clearing, dredging, grading, excavating, transporting, and filling of land but not including agricultural practices as described in Article VI.

Land uses existing prior to the promulgation of a River Corridor Protection Plan. Any land use or land-disturbing activity, including all human endeavors directly associated with such use or activity, which, prior to the promulgation of the River Corridor Protection Plan falls within one of the following categories:

A. is completed;
B. is under construction;
C. is fully approved by the governing authority;
D. all materials have been submitted for approval by the governing authority; or
E. is zoned for such use and expenditures in excess of $2,500.00 have been made in preparation for construction in accordance with such zoning.

Larger Common Plan of Development or Sale. A contiguous area where multiple separate and distinct construction activities are occurring under one plan of development or sale. For the purposes of this paragraph, "plan" means an announcement; piece of documentation such as a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, or computer design; or physical demarcation such as boundary signs, lot stakes, or surveyor markings, indicating that construction activities may occur on a specific plot.

Littoral Area. The tidal area between the high water and low water marks.

Local Issuing Authority. The governing authority of any county or municipality which is certified pursuant to subsection (a) O.C.G.A. 12-7-8.

Local Stormwater Design Manual. A document prepared by the local government that provides detailed information pertaining to the design, construction and maintenance of stormwater management systems for a community.

Low Impact Development. Small-scale, distributed stormwater management practices that can be used during the site design process to replicate existing hydrologic conditions, help offset the creation of new impervious cover and reduce a site's impact on the watershed.

Live Retention. That quantity of water capable of being effectively contained by a designated facility for stormwater storage for a specified period of time.

Local Design Manual. A manual containing specific guidelines and standards for stormwater management that are either watershed or [Jurisdiction] -wide specific, for the proper implementation of the requirements of this ordinance.

Local Government. The governing authority of a political subdivision.

Local Issuing Authority. The governing authority of any county or municipality which is certified pursuant to subsection (a) O.C.G.A. 12-7-8; The [Jurisdiction] of [Jurisdiction] , Georgia is not a certified issuing authority. The Georgia Environmental Protection Division is the issuing authority for the [Jurisdiction] .

Lot. A tract, portion or parcel of land separated from other tracts, portions or parcels by description on a subdivision plat of record or survey map or described by metes and bounds, and intended to be used to facilitate transfer of ownership or for building development. For the purposes of this ordinance, the term does not include any portion of a dedicated right-of-way.

Lowest Floor. The lowest floor of the lowest enclosed area, including basement. An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of other provisions of this code.

Maintenance. Service or pumping of an OSDS and involves the pumping out of the septic tank and any required service to the drainage field lines as determined by a certified service personnel.

Maintenance of Stormwater Facility. Preserving the enclosing walls or impounding embankment of the retention facility in good condition; ensuring structural soundness, functional adequacy and freedom from sediment; and rectifying any unforeseen erosion problems.

Manufactured Home. A building, transportable in one or more sections, built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable

structures placed on a site for 180 consecutive days or longer and intended to be improved property.

Mean Sea Level. The average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this ordinance, the term is synonymous with National Geodetic Vertical Datum (NGVD).

Metropolitan River Protection Act (MRPA). A state law referenced as O.C.G.A. 12-5-440 et.seq. which addresses environmental and developmental matters in certain metropolitan river corridors and their drainage basins.

Municipality. Any incorporated city, village, or township within the County.

Municipal Separate Storm Sewer System (MS4). A conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels or storm drains, owned or operated by a municipality or other public, designed or used for collecting or conveying storm water runoff and is not a combined sewer or part of a Publicly Owned Treatment Works.

National Geodetic Vertical Datum (NGVD). As corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.

National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit. A permit issued by the U.S. Environmental Protection Agency (or by the state of Georgia under authority delegated pursuant to 33 USC § 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

National Wetlands Inventory (NWI) Map. The latest version of a map compiled by the U.S. Fish and Wildlife Service, which shows, in a general manner, the open waters, streams, and wetlands in [Jurisdiction]. The map is compiled using aerial photographs and is periodically modified as new information becomes available. Because the NWI Map does not represent the actual boundaries of all open waters, streams, and wetlands within [Jurisdiction], it should not serve as a substitute for a delineation of such boundaries.

Native Vegetation. Vegetation that is naturally found in the area and is listed in the native vegetation list found in the "Coastal Riparian Buffer Guidance Manual."

Natural Ground Surface. The ground surface in its original state before any grading, excavation or filling.

Natural Vegetative Buffer or Buffer Area. A river corridor containing the flora native to that area. The natural floras for specific areas are described in Georgia Geologic Survey Bulletin 114, "The Natural Environments of Georgia." Habitats for endangered and threatened species may require human management of the river corridor in order to maintain those species.

Nephelometric Turbidity Units (NTU). Numerical units of measure based upon photometric analytical techniques for measuring the light scattered by finely divided particles of a substance in suspension. This technique is used to estimate the extent of turbidity in water in which colloidally dispersed particles are present.

New Construction. Any structure (see definition) for which the "start of construction" commenced after [Date of adoption] and includes any subsequent improvements to the structure. (* i.e., the effective date of the FIRST floodplain management ordinance adopted by the community as a basis for community participation in the (NFIP)). A land development activity on a previously undeveloped site.

New Manufactured Home Park or Subdivision. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after [Date of adoption] (i.e., the effective date of the first floodplain management regulations adopted by a community).

NOI: A Notice of Intent form provided by EPD for coverage under the State General Permit.

Nonpoint Source Pollution. A form of water pollution that does not originate from a discrete point, such as a sewage treatment plant or industrial discharge, but involves the transport of pollutants, such as sediment, fertilizers, pesticides, heavy metals, oil, grease, bacteria, organic materials, and other contaminants from land to surface water and groundwater via mechanisms such as precipitation, stormwater runoff, and leaching. Nonpoint source pollution is a by-product of land use practices, such as agricultural, silvicultural, mining, construction, subsurface disposal, and urban runoff sources.

Non-Stormwater Discharge. Any discharge to the storm drain system that is not composed entirely of stormwater.

Non-Structural Best Management Practice. Any natural resource protection or stormwater management practice or technique that uses natural processes and natural systems to intercept, convey, treat and/or manage stormwater runoff. Nonstructural stormwater management practices include, but are not limited to, protecting primary and secondary conservation areas, reducing clearing and grading limits, reducing roadway lengths and widths, reducing parking lot and building footprints, soil restoration, site reforestation/revegetation, green roofs, vegetated filter strips and rain gardens.

Nonstructural Stormwater Management Practice or *Nonstructural Practice*. Any natural or planted vegetation or other nonstructural component of the stormwater management plan that provides for or enhances stormwater quantity and/or quality control or other stormwater management benefits and includes, but is not limited to, riparian buffers, open and greenspace areas, overland flow filtration areas, natural depressions, and vegetated channels.

North American Vertical Datum (NAVD). As corrected in 1988 is a vertical control used as a reference for establishing varying elevations within the floodplain.

NOT. A Notice of Termination form provided by EPD to terminate coverage under the State General Permit.

Off-Site Facility. A stormwater management facility located outside the boundaries of the site.

On-Site Facility. A stormwater management facility located within the boundaries of the site.

On-Site Sewage Disposal System. An on-site sewage disposal system and is such a system installed on property not serviced by a county or municipal sewage treatment system. Such term shall describe, without limitation, conventional and chamber septic tank systems, privies, and non-mechanical experimental and alternative on-site sewage disposal systems which are designed to have a subsurface discharge of effluent approved by the State of Georgia.

Open Water. Areas of open water, primarily reservoirs, ponds, lakes, rivers, and estuaries. Non-forested emergent wetlands means freshwater marshes dominated by a variety of grasses, sedges, rushes, and broadleaved aquatics associated with streams, ponded areas, and tidally-influenced non-saline waters.

Operator. The party or parties that have:

A. operational control of construction project plans and specifications, including the ability to make modifications to those plans and specifications; or
B. day-to-day operational control of those activities that are necessary to ensure compliance with a storm-water pollution prevention plan for the site or other permit conditions, such as a person authorized to direct workers at a site to carry out activities required by the storm-water pollution prevention plan or to comply with other permit conditions.

Outfall. The location where storm water in a discernible, confined and discrete conveyance, leaves a facility or site or, if there is a receiving water on site, becomes a point source discharging into that receiving water.

Overbank Flood Protection. Measures taken to prevent an increase in the frequency and magnitude of out-of-bank flooding (i.e. flow events that exceed the capacity of the channel and enter the floodplain) and that are intended to protect downstream properties from flooding for the 2-year through 25-year frequency storm events.

Owner. The legal or beneficial owner of a site, including, but not limited to, a mortgagee or vendee in possession, receiver, executor, trustee, tenant, if chargeable under his lease for maintenance of the property, or other person, firm, or corporation in control of the site, including any agent of the owner or a developer.

Perennial Stream/River. Any stream which flows continuously throughout the year or supports aquatic life whose life history requires residence in flowing water for a continuous period of six months or longer.

Permit. The permit issued by the [Jurisdiction] to the applicant, which is required for undertaking any land development activity under the provisions of this ordinance.

Person. Except to the extent exempted from this ordinance, any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, state agency, municipality, or other political subdivision of the State of Georgia, any interstate body or any other legal entity.

Phase or Phased. Sub-parts or segments of construction projects where the sub-part or segment is constructed and stabilized prior to completing construction activities on the entire construction site.

Plan or Comprehensive Plan. Any plan by a county or municipality covering such county or municipality or any plan by a regional development center covering the center's region proposed or prepared pursuant to the minimum planning standards and procedures for preparation of comprehensive plans and for implementation of comprehensive plans, established by the Department of Community Affairs in accordance with O.C.G.A 50-8-1 through 50-8-12. (Note: this is the same definition as used in O.C.G.A. 50-8-2)

Pollution. The contamination or other significant alteration of any water's physical, chemical or biological properties, including, but not limited to, a change in temperature, taste, color, turbidity, or odor of such waters or the discharge of any liquid, gaseous, solid, radioactive, or other substance into any such waters as will or is likely to render such waters harmful, detrimental or injurious to the public health, safety or welfare or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.

Pollution Susceptibility. The relative vulnerability of an aquifer to being polluted from spills, discharges, leaks, impoundments, applications of chemicals, injections and other human activities in the recharge area.

Pollution Susceptibility Maps. Maps of relative vulnerability to pollution prepared by the Department of Natural Resources, using the DRASTIC methodology. Pollution susceptibility maps categorize the land areas of the State into areas having high, medium and low ground-water pollution potential.

Pollutant. Any impurity or waste material that degrades the physical, chemical, biological or radiological integrity of surface or subsurface waters.

Port Facility. Any facility for the docking, loading and unloading of ships.

Post-development. The time period or the conditions that may reasonably be expected or anticipated to exist, after completion of the land development activity on a site as the context may require.

Pre-development. The time period or the conditions that exist, on a site prior to the commencement of a land development project and at the time that plans for the land development of a site are approved by the plan approving authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first item being approved or permitted shall establish pre-development conditions.

Pretreatment. The onsite reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in stormwater prior to or in lieu of discharging or otherwise introducing such pollutants into the publicly owned drainage system.

Primary Conservation Areas. The following areas are considered Primary Conservation Areas:

a. Bodies of open water over 5,000 square feet contiguous area;
b. Riparian buffer zones in accordance with the regulations of the [Jurisdiction] and State of Georgia.
c. Slopes that are atypical of the surrounding terrain of the coastal plain that are at least 5000 square feet in contiguous area;
d. Wetlands that meet the definition used by the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act;
e. Coastal Marshlands that meet the definition of the Georgia Department of Natural Resources pursuant to the Coastal Zone Management Act 9.
f. Populations of rare, endangered or threatened species, or habitat for such species, as defined by U.S. Fish and Wildlife and Georgia Department of Natural Resources as priority 1 or 2 in the Coastal Habitat Assessment of the 11 counties being conducted by DNR, Wildlife Resources Division, Coastal Nongame Conservation Program.
g. Important, known archaeological sites and all cemeteries and burial grounds.

Project. The entire proposed land development project regardless of the size of the area of land to be disturbed.

Properly Designed: Designed in accordance with the design requirements and specifications contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted and amendments to the Manual as approved by the Commission up until the date of NOI submittal.

Property. Any tract of land, or portion thereof, or combination of tracts of land under single or common ownership, operation or control, that contains any type of structure that is, was, or will be inhabited either permanently or transiently and contains a septic tank, drains, drain field, underground tank or pipes or similar appurtenances containing sewage or other contaminants or combination thereof.

Protected River. Any perennial river or watercourse with an average annual flow of at least 400 cubic feet per second as determined by appropriate U.S. Geological Survey documents.

However, those segments of rivers covered by the Metropolitan River Protection Act or the Coastal Marshland Protection Act are specifically excluded from the definition of a protected river. In coastal areas, the seaward limit of any protected river shall be the inland limit of the jurisdiction of the Coastal Marshlands Protection Act.

Public Right-of-way. "Public Right-of-way" shall mean a strip or parcel of land occupied by or intended to be occupied by a street, crosswalk, pedestrian path, cart path, utility system, water main, sanitary sewer, storm drain, sewer main, drainage ditches and watercourses or any other valid public use. The usage of the term "right-of-way" for land platting purposes shall mean that every right-of-way hereafter established and shown on a record or final plat is to be separate and distinct from the lots or parcels adjoining such right-of-way, and not included within the dimensions or areas of such other lots or parcels. Rights-of-way intended for streets, crosswalks, water mains, sanitary sewers, storm drains or other use involving maintenance by a public agency, shall be dedicated or deeded to public use by the maker of the plat on which such right-of-way is established.

Public Utility or Utilities. A service or services provided by a public utility company or a private entity which provides such service or services, and all equipment and structures necessary to provide such services.

Quadrangle Map. The most recently published U.S. Geological Survey 7.5 minute topographic map prepared at a scale of 1:24,000.

Reach. A longitudinal segment of a stream or river measured along specified points on the stream or river.

Recharge. The replenishment of groundwater aquifers.

Recharge Area. Any portion of the earth's surface, where water infiltrates into the ground to replenish an aquifer.

Redevelopment. A change to previously existing, improved property, including but not limited to the demolition or building of structures, filling, grading, paving, or excavating, but excluding ordinary maintenance activities, remodeling of buildings on the existing footprint, resurfacing of paved areas, and exterior changes or improvements that do not materially increase or concentrate stormwater runoff or cause additional nonpoint source pollution. [1]

Regional Stormwater Management Facility or *Regional Facility*. Stormwater management facilities designed to control stormwater runoff from multiple properties, where the owners or developers of the individual properties may assist in the financing of the facility and the requirement for on-site controls is either eliminated or reduced.

Regulated Activity. Any activity which will, or which may reasonably be expected to, result in the discharge of dredged or fill material into waters of the U.S. excepting those activities exempted in section 404 of the Federal Clean Water Act.

[1] MNGWPD, Adopted Post Construction Stormwater Runoff Ordinance.

Riparian Buffer. An area of land at or near a streambank, wetland, or water body that has intrinsic water quality value due to the ecological and biological processes it performs or is otherwise sensitive to changes which may result in significant degradation of water quality.

Riparian Land. Any land along the edge of a stream, wetland, coastal marshland, pond or impoundment.

River Bank. The rising ground, bordering a river, which serves to confine the water to the natural channel during the normal course of flow.

River Corridor. All land, inclusive of islands, not regulated under the Metropolitan River Protection Act (O.C.G.A. 12-5-440 through 12-5-457), or the Coastal Marshland Protection Act (O.C.G.A. 12-5-280 through 12-5-293), in areas of a protected river and being within 100 feet horizontally on both sides of the river as measured from the river banks.

The 100 foot buffer shall be measured horizontally from the uppermost part of the river bank, usually marked by a break in slope. Although not within the measured 100 foot wide buffer, the area between the top of the bank and the edge of the river shall be treated by local governments in the same manner as the river corridor and shall be included within the River Corridor Protection Plan.

Because stream channels move due to natural processes such as meandering, river bank erosion, and jumping of channels, the river corridor may shift with time. For the purposes of these standards, the river corridor shall be considered to be fixed at its position at the beginning of each review period for local comprehensive plans. Any shift in the location of the protected river after the start of the review period will require a revision of the boundaries of the river corridor at the time of the next review by the Department of Community Affairs.

River Corridor Protection Plan. That part of the local comprehensive plan which deals with the river corridor protection requirements specified herein.

Roadway Drainage Structure. A device such as a bridge, culvert, or ditch, composed of a virtually non-erodible material such as concrete, steel, plastic, or other such material that conveys water under a roadway by intercepting the flow on one side of a traveled way consisting of one or more defined lanes, with or without shoulder areas, and carrying water to a release point on the other side.

Runoff. Stormwater runoff.

Recreational Vehicle. A vehicle, which is:

A. built on a single chassis;
B. 400 square feet or less when measured at the largest horizontal projection;
C. designed to be self-propelled or permanently towable by a light duty truck; and
D. designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Roadway Drainage Structure. Bridges, culverts and ditches associated with roadway construction, which allow stream flows to move freely under a stream crossing or to convey stormwater runoff from a roadway to a stream.

Runoff Coefficient. The ratio of runoff to rainfall.

Sanitary Landfill. A disposal site where soled wastes, including putrescible wastes, or hazardous wastes, is disposed of on land by placing earth cover thereon.

Scrub/Shrub Wetlands. Non-forested areas dominated by woody shrubs, seedlings, and saplings averaging less than 20 ft. in height; these wetlands may integrated with forested wetlands, non-forested emergent wetlands, and open water.

Secondary Conservation Areas. The following are considered Secondary Conservation Areas:

a. Important historic sites and structures;
b. Populations of rare, endangered or threatened species, or habitat for such species, as defined by the Georgia Department of Natural Resources as priority 3, 4, or 5 in Coastal Habitat Assessment of the 11 counties being conducted by DNR,Wildlife Resources Division, Coastal Nongame Conservation Program.
c. Existing healthy, native forests, woodlands, or fields in early stages of succession, with a contiguous area of at least one (1) acre;
d. Individual existing healthy trees (heritage trees) not included as the part of a larger stand of trees;
e. Other significant natural features and scenic view sheds such as coastal sand dunes or bluffs, particularly those that can be seen from public roads;
f. Prime agricultural lands of at least five (5) acres contiguous area;
g. Lands identified in a greenway network plan, where applicable;
h. Existing trails that connect the tract to neighboring areas; and
i. On-site septic disposal system drainfields provided that systems are properly maintained and inspected.

Section 404 Permit. A permit issued by the Corps for proposed discharges of dredged or fill material into waters of the United States.

Sediment. Solid material, both organic and inorganic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, ice, or gravity as a product of erosion.

Sedimentation. The process by which eroded material is transported and deposited by the action of water, wind, ice or gravity.

Sedimentation Facility. A facility specifically developed for the purpose of allowing the deposition of sediment resulting from the land development process.

Sensitive Natural Areas. Any area, as identified now or hereafter by the Department of Natural Resources, which contains one or more of the following:

A. habitat, including nesting sites, occupied by rare or endangered species;
B. rare or exemplary natural communities;
C. significant landforms, hydroforms, or geological features; or
D. other areas so designated by the Department of Natural Resources; and which is sensitive or vulnerable to physical or biological alteration.

Service Personnel. Licensed septic contractors certified by the State of Georgia and registered with the county; shall be proven capable to perform the routine maintenance measures herein, and shall be experts on the inner and outer design, operation, and performance standards of on-site sewage disposal systems.

Shear Failure. Failure of an earthen bank caused by the steepness of the slope.

Significant Recharge Areas. Those areas mapped by the Department of Natural Resources in Hydrologic Atlas 18 (1989 edition). Mapping of recharge areas is based on outcrop area, lithology, soil type and thickness, slope, density or lithologic contacts, geologic structure, the presence of karst, and potentiometric surfaces. Significant recharge areas are as follows in the various geologic provinces of Georgia:

A. In the Valley and Ridge and in the Cumberland Plateau, significant recharge areas are outcrop areas of carbonate rock where low slope (less than 8% slope) conditions prevail. Such areas commonly are characterized by karst topography (caves and sinkholes).
B. In the Piedmont and in the Blue Ridge, rocks have little primary porosity, with most groundwater being stored in the overlying soils. The significant recharge areas are those with thicker soils. Field mapping indicates that thick soils in the Piedmont and Blue Ridge are characterized by a density of two or more geologic contacts per four square miles (source: 1976 1:500,000 Geologic Map of Georgia) and slopes lower than 8%.
C. In the Coastal Plain, the significant recharge areas are the surface outcroppings of the large and extensively used drinking water aquifers (e.g., the Floridian, the Clayton, etc.) and soils having high permeability according to the 1976 1:750,000 Soils Association Map of Georgia.

Single-Family Dwelling. A dwelling structure that is designed for the use of one family.

Site. The parcel of land being developed, or the portion thereof on which the land development project is located.

Soil and Water Conservation District Approved Plan. An erosion and sedimentation control plan approved in writing by the Coastal Soil and Water Conservation District.

Stabilization. The process of establishing an enduring soil cover of vegetation and/or mulch or other ground cover and/or combination with installing temporary or permanent structures for the purpose of reducing to a minimum the erosion process and the resultant transport of sediment by wind, water, ice or gravity.

Start of Construction. The date the development permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of the structure such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation, and includes the placement of a manufactured home on a foundation. (Permanent construction does not include initial land Preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of buildings appurtenant to the permitted structure, such as garages or sheds not occupied as dwelling units or part of the main structure. (NOTE: accessory structures are NOT exempt from any ordinance requirements) For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

State General Permit. The National Pollution Discharge Elimination System (NPDES) general permit or permits for storm water runoff from construction activities as is now in effect or as may be amended or reissued in the future pursuant to the state's authority to implement the same through federal delegation under the Federal Water Pollution Control Act, as amended, 33 U.S.C. Section 1251, et seq., and subsection (f) of Code Section 12-5-30.

State Waters. Any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of Georgia which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.

Stormwater. Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Stormwater Design Manual. The Georgia Stormwater Management Manual, current edition, as published by the Atlanta Regional Commission and [Jurisdiction] of [Jurisdiction] design standards. The Georgia Stormwater Management Manual is available online at www.georgiastormwater.org .

Stormwater Hotspot. See Hotspot.

Stormwater Facility. A facility which provides for storage of stormwater runoff and controlled release of this runoff during and after a flood storm.

Stormwater Management. The collection, conveyance, storage, treatment, and disposal of stormwater runoff in a manner intended to prevent increased flood damage, streambank channel erosion, habitat degradation, and water quality degradation and to enhance and promote the public health, safety and general welfare.

Stormwater Management Facility. Any infrastructure that controls or conveys stormwater runoff.

Stormwater Management Measure. Any stormwater management facility or nonstructural stormwater practice.

Stormwater Management Plan. A document describing how existing runoff characteristics will be affected by a land development project and containing measures for complying with the provisions of this ordinance.

Stormwater Management Practice. Structural and nonstructural practices that control stormwater runoff and provide for or enhance stormwater quantity and/or quality control or other stormwater management benefits.

Stormwater Management System. The entire set of structural and nonstructural stormwater management practices that are used to capture, convey, and control the quantity and quality of the stormwater runoff.

Stormwater Pollution Prevention Plan (SWPPP). A document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, and/or receiving waters to the maximum extent practicable.

Stormwater Retrofit. A stormwater management practice designed for an existing development site that previously had either no stormwater management practice in place or a practice inadequate to meet local stormwater management criteria.

Stormwater Runoff. The flow of surface water resulting from precipitation.

Stream. Any freshwater stream, running water flowing continuously or intermittently in a channel on or below the surface of the ground, beginning at: (1) the location of a spring, seep or groundwater outflow that sustains streamflow; or (2) a point in the stream channel with a drainage area of 25 acres or more; or (3) a point in a stream channel with a drainage area of less than 25 acres, if evidence from field studies required by the [Jurisdiction] verify the existence of a stream.

Structural Erosion and Sediment Control Practices. Practices for the stabilization of erodible or sediment-producing areas by utilizing the mechanical properties of matter for the purpose of either changing the surface of the land or storing, regulating or disposing of runoff to prevent excessive sediment loss. Examples of structural erosion and sediment control practices are riprap, sediment basins, dikes, level spreaders, waterways or outlets, diversions, grade stabilization structures and sediment traps, etc. Such practices can be found in the publication *Manual for Erosion and Sediment Control in Georgia*.

Structural Stormwater Control. A structural stormwater management facility or device that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity, the quality, the period of release or the velocity of flow.

Structural Stormwater Management Practice. A structural stormwater management facility or device that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release, or the velocity of flow of such runoff.

Structure. Anything constructed or erected, the use of which requires a location on the ground, or attached to something having a location on the ground; A walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank.

Subdivision. The division of a parcel of land into two or more lots or building sites for the purposes, whether immediately or in the future, of sale, transfer of ownership, or land development, and includes divisions of land resulting from or made in connection with the layout or development of a new street or roadway or a change in an existing street or roadway.

Substantial Damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to it's before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred.

Substantial Improvement. Any combination of repairs, reconstruction, alteration, or improvements to a structure, taking place during a 5-year period, in which the cumulative cost equals or exceeds fifty (50) percent of the market value of the structure before the "start of construction" of the improvement. NOTE: The market value of the structure should be (1) the appraised value of the structure prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring. This term includes structures, which have incurred "substantial damage," regardless of the actual amount of repair work performed. The term does not, however, include either:

A. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
B. Any alteration of a "historic structure" provided that the alteration will not preclude the structure's continued designation as a "historic structure".
C. Any project that properly obtains a waiver from these requirements.

For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the structure commences, whether or not that alteration affects the external dimensions of the structure.

Substantially Improved Existing Manufactured Home Parks or Subdivisions. is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

Trout Streams. All streams or portions of streams within the watershed as designated by the Game and Fish Division of the Georgia Department of Natural Resources under the provisions of the Georgia Water Quality Control Act, O.C.G.A. 12-5-20 et. seq. Streams designated as

primary trout waters are defined as water supporting a self- sustaining population of rainbow, brown or brook trout. Streams designated as secondary trout waters are those in which there is no evidence of natural trout reproduction, but are capable of supporting trout throughout the year. First order trout waters are streams into which no other streams flow except springs.

Undisturbed Natural Buffer. A tract of land in its natural undisturbed state where no vegetation can be removed or planted without a [Jurisdiction] permit. No herbicides, pesticides, or other chemicals, either natural or manmade can be used in this buffer.

Utility. Any public or private water or sewer piping systems, water or sewer pumping stations, electric power lines, fuel pipelines, telephone lines, roads, driveways, bridges, river/lake access facilities, stormwater systems, and railroads or other utilities identified by the [Jurisdiction] of [Jurisdiction] .

Variance. A grant of relief from the requirements of this ordinance, which permits construction in a manner otherwise prohibited by this ordinance.

Vegetation. All plant growth.

Vegetative Erosion and Sediment Control Practices/Measures. Measures for the stabilization of erosive or sediment producing areas by covering the soil with:

A. Permanent seeding, sprigging or planting, producing long-term vegetative cover; or
B. Temporary seeding, producing short-term vegetative cover; or
C. Sodding, covering areas with a turf of perennial sod-forming grass.

Such measures can be found in the publication Manual for Erosion and Sediment Control in Georgia.

Violation. The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, or other certifications, or other evidence of compliance required by this ordinance is presumed to be in violation until such time as that documentation is provided.

Watercourse. A permanent or intermittent stream, channel, river, creek, ditch, canal, conduit, culvert, drain, waterway, gully, ravine, wash or other body of water, either natural or man-made, which gathers or carries surface water, including any areas adjacent thereto subject to inundation by reason of overflow or floodwater.

Waters of the [Jurisdiction]. All open waters, streams, and wetlands located in the [Jurisdiction] including "isolated wetlands".

Waters of the State. See State Waters.

Waters of the United States. Those waters open waters, streams, and wetlands that have a nexus to interstate commerce. Certain so-called "isolated waters" are an example of waters of the County that are not waters of the United States.

Watershed Management Plan. A document, usually developed cooperatively by government agencies and other stakeholders, to protect, restore, and/or otherwise manage the water resources within a particular watershed or subwatershed. The plan commonly identifies threats, sources of impairment, institutional issues, and technical and programmatic solutions or projects to protect and/or restore water resources.

Wellhead. The upper terminal of a well, including adapters, ports, seals, valves and other attachments.

Wetlands. Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. The ecological parameters for designating wetlands include hydric soils, hydrophytic vegetation, and hydrological conditions that involve a temporary or permanent source of water to cause soil saturation.

ARTICLE III ILLICIT DISCHARGE PROHIBITION

Section 1. General Provisions

1.1. Purpose

The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the [Jurisdiction] through the regulation of non-stormwater discharges to the storm drainage system to the maximum extent practicable. The objectives of this article are:

A. To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user;
B. To prohibit illicit connections and discharges to the MS4; and
C. To establish legal authority to carry out all inspection; surveillance and monitoring; and enforcement procedures as necessary to ensure compliance with this article.

1.2. Applicability

This article shall apply to all non-stormwater discharges entering the storm drain system generated on any developed or undeveloped lands unless explicitly exempted by the [Jurisdiction] under Section 2 of this Article.

Section 2. Discharge Prohibitions

2.1. Prohibition of Illegal Discharges

No person shall discharge or cause to be discharged into the MS4 or watercourses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than stormwater.

The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited except as described as follows:

A. The following discharges are exempt from discharge prohibitions established by this article: water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising ground water, ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, non-commercial washing of vehicles, natural riparian habitat or wetland flows, swimming pools (if dechlorinated - typically less than one PPM chlorine), fire fighting activities, and any other water source not containing pollutants.
B. Discharges specified in writing by the [Jurisdiction] as being necessary to protect public health and safety.
C. Dye testing is an allowable discharge, but requires a verbal notification to the [Jurisdiction] 24 hours prior to the time of the test followed by written notice within 10 days.
D. Any non-stormwater discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full

compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that approval has been granted for any discharge to the storm drain system. Proof of compliance with said permit may be required in a form acceptable to the [Jurisdiction] prior to the allowing of discharges to the MS4.

E. Any stormwater discharge regulated under an NPDES stormwater discharge permit for industrial activities provided that the discharger is in full compliance with all requirements of the permit. Proof of compliance with said permit may be required in a form acceptable to the [Jurisdiction] prior to the allowing of discharges to the MS4.
F. Any stormwater discharge regulated under an NPDES stormwater discharge permit for construction activities or other local land disturbance permit provided that the discharger is in full compliance with all requirements of the permit. Proof of compliance with said permit may be required in a form acceptable to the [Jurisdiction] prior to the allowing of discharges to the MS4.

2.2. Prohibition of Illicit Connections

The construction, use, maintenance or continued existence of illicit connections to the MS4 or watercourses is prohibited. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

Section 3. Suspension of MS4 Access

3.1. Suspension due to Illicit Discharges in Emergency Situations

The [Jurisdiction] may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge that presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or Waters of the State or United States. If the violator fails to comply with a suspension order issued in an emergency, the [Jurisdiction] may take such steps as deemed necessary to prevent or minimize damage to the MS4 or Waters of the State or United States, or to minimize danger to persons. The person shall be held responsible for the cost and damage of the illicit discharge and any other civil penalties as identified in Section 8 of this Article III.

3.2. Suspension Due to the Detection of Illicit Discharge

Any person discharging to the MS4 or watercourses in violation of this article may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The [Jurisdiction] will notify a violator of the proposed termination of its MS4 access. The violator may petition the [Jurisdiction] for a reconsideration and hearing.

A person commits a violation of this Article if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior written approval of the [Jurisdiction] .

Section 4. Monitoring of Discharges

4.1. Applicability

This section applies to all facilities that have stormwater discharges associated with industrial activity, including construction activity.

4.2. Access to Facilities

A. The [Jurisdiction] shall be permitted to enter and inspect facilities subject to regulation under this article as often as may be necessary to determine compliance with this article. If a discharger has security measures in force, which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the [Jurisdiction] .
B. Facility operators shall allow the [Jurisdiction] ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge stormwater, and the performance of any additional duties as defined by state and federal law.
C. The [Jurisdiction] shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the [Jurisdiction] to conduct monitoring and/or sampling of the facility's stormwater discharge.
D. The [Jurisdiction] has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.
E. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the [Jurisdiction] and shall not be replaced. The costs of clearing such access shall be borne by the operator.
F. Unreasonable delays in allowing the [Jurisdiction] access to a permitted facility is a violation of a stormwater discharge permit and of this article. A person who is the operator of a facility with a NPDES permit to discharge stormwater associated with industrial activity commits a violation if the person denies the [Jurisdiction] reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this article.
G. If the [Jurisdiction] has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this article, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the [Jurisdiction] of [Jurisdiction] may seek issuance of a search warrant from any court of competent jurisdiction.

Section 5. Requirement to Prevent, Control & Reduce Stormwater Pollutants

5.1. Specification of Best Management Practices

The [Jurisdiction] may adopt requirements identifying Best Management Practices for any activity, operation, or facility, which may cause or contribute to pollution or contamination of stormwater, the MS4 or watercourses, or waters of the U.S.

5.2. Pollution Prevention in New Facilities

The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 or watercourses through the use of these structural and non-structural BMPs.

5.3. Pollution Prevention in Existing Facilities

Any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the MS4 or watercourses.

5.4. Discharge Permits from Regulatory Agencies other than the [Jurisdiction]

Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliant with the provisions of this section. BMPs designated for compliance with the NPDES permit or BMPs implemented as a result of action taken in compliance of this Article shall be included in a stormwater pollution prevention plan (SWPPP) as necessary for compliance with requirements of the NPDES permit.

Section 6. Watercourse Protection

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

Section 7. Notification of Spills

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into stormwater, the MS4 or watercourses, or water of the U.S. said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the [Jurisdiction] in person, by phone, facsimile or email no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the [Jurisdiction] within three business days of the phone notice. The notification of the discharge of materials to the [Jurisdiction] shall be in addition to notification of other applicable County, Regional, State and Federal authorities. If an illicit discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

Section 8. Enforcement

8.1. Notice of Violation

Whenever the [Jurisdiction] finds that a person has violated a prohibition or failed to meet a requirement of this article, the [Jurisdiction] may order compliance by written notice of violation to the responsible party. Such notice may require without limitation:

A. The performance of monitoring, analyses, and reporting;
B. The elimination of illicit connections or discharges;
C. That violating discharges, practices, or operations shall cease and desist;
D. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
E. Payment of a fine to cover administrative and remediation costs; and
F. The implementation of source control or treatment BMPs.

If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work may be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

8.2. Appeal of Notice of Violation

Any person receiving a Notice of Violation may appeal the determination of the [Jurisdiction] to Municipal Court. The notice of appeal must be received within 10 days from the date of the Notice of Violation. Hearing on the appeal before the appropriate authority or his/her designee shall take place within 15 days from the date of receipt of the notice of appeal. The decision of the reviewing authority or their designee shall be final.

8.3. Enforcement Measures After Appeal

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within 10 days of the decision of the reviewing authority upholding the decision of the [Jurisdiction] , then representatives of the [Jurisdiction] may enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the [Jurisdiction] or designated contractor to enter upon the premises for the purposes set forth above.

8.4. Cost of Abatement of the Violation

Within 30 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of the assessment within 30 days. If the amount due is not paid within a timely manner as determined by the decision of the reviewing authority or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.

8.5. Injunctive Relief

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this article. If a person has violated or continues to violate the provisions of this article, the [Jurisdiction] may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

8.6. Compensatory Action

In lieu of enforcement proceedings, penalties, and remedies authorized by this article, the [Jurisdiction] of [Jurisdiction] may impose upon a violator alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc.

8.7. Violations Deemed a Public Nuisance

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this article is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

8.8. Criminal Prosecution

Any person that has violated or continues to violate this article shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty of [$1,000] dollars per violation per day. The [Jurisdiction] may recover all attorneys' fees, court costs and other expenses associated with enforcement of this article, including sampling and monitoring expenses.

8.9. Remedies not Exclusive

The remedies listed in this article are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

ARTICLE IV POST CONSTRUCTION STORMWATER RUNOFF

Section 1. General Provisions

1.1. Findings of Fact
It is hereby determined that:

A. The land development process alters the hydrologic response of local watersheds, increasing stormwater runoff rates, velocities, volumes, and pollutant loads, and increase flooding, channel erosion, and pollutant transport and deposition in rivers and streams;
B. The land development process alters the hydrologic response of local watersheds, increasing stormwater runoff rates, velocities, volumes, and pollutant loads, and, consequently, alter water levels and fluctuations and increase pollutant transport and deposition in wetlands;
C. The land development process alters the hydrologic response of local watersheds, increasing stormwater runoff rates, velocities, volumes, and pollutant loads, and alter salinity concentrations and fluctuations and increase productivity and pollutant transport and deposition in estuaries;
D. The land development process alters the hydrologic response of local watersheds, increasing stormwater runoff rates, velocities, volumes, and pollutant loads, and increase bacteria transport and deposition in near coastal waters, which leads to beach contamination and closure and poses a serious threat to human health;
E. The land development process alters the hydrologic response of local watersheds, increasing stormwater runoff rates and volumes, and, consequently, decreasing the amount of rainfall that is available to recharge shallow groundwater aquifers;
F. The negative impacts of land development activities on these important local aquatic resources can adversely affect the health, safety and general welfare of the public;
G. The negative impacts of land development can be controlled and minimized through the regulation of stormwater runoff rates, volumes, and pollutant loads on development and redevelopment sites;
H. Communities within the Coastal Nonpoint Source Management Area are required to comply with specific State and Federal regulations that require the adverse impacts of increased stormwater runoff rates, volumes and pollutant loads to be controlled and minimized;
I. Therefore, the [Jurisdiction] has determined that it is in the public interest to control and minimize the adverse impacts of land development activities and has established this set of stormwater management provisions to regulate post-construction stormwater runoff rates, volumes and pollutant loads on development and redevelopment sites.

1.2. Purpose and Intent
The purpose of this ordinance is to protect and maintain the integrity of local aquatic resources, and, consequently, the health, safety and welfare of the general public, by establishing local stormwater management regulations that control and minimize the adverse impacts of the land development process. This ordinance seeks to achieve these goals by:

A. Establish decision-making processes surrounding land development activities that protect the integrity of local aquatic resources;
B. Establishing post-construction stormwater management and site planning and design criteria to help reduce flooding, channel erosion and pollutant transport and deposition in local aquatic resources;
C. Establish minimum post-development stormwater management standards and design criteria that will help preserve existing hydrologic conditions and development and redevelopment sites;
D. Establishing design guidelines for green infrastructure and stormwater management practices that can be used to meet the post-construction stormwater management and site planning and design criteria;
E. Encourage the use of better site planning, better site design and low impact development practices such as the G3, the GSMM and the CSS to the maximum extent practical at development and redevelopment sites to mimic the pre-development hydrologic function of the site by encouraging natural processes that detain and filter stormwater runoff pollutants;
F. Establishing provisions for the long-term inspection and maintenance of green infrastructure and stormwater management practices to ensure that they continue to function as designed and pose no threat to public safety;
G. Establishing administrative procedures for the submittal, review, approval and disapproval of stormwater management plans and for the inspection of approved development projects;
H. Identify and protect existing natural systems from potential adverse impacts resulting from land development activities and post construction stormwater runoff; and
I. Balance development demands and natural resource protection through the implementation of low impact planning, design and development strategies.

1.3. Applicability

This ordinance shall be applicable to all land development activities, unless exempt pursuant to Section 1.4 below. The stormwater management regulations presented within shall be applied to any new development or redevelopment activity within [Jurisdiction] that meets one or more of the following criteria:

A. New development that involves the creation of [5,000 square feet or more] of impervious cover or that involves other land development activities of [1 acre or more];
B. Redevelopment that includes the creation, addition, or replacement of [5,000 square feet or more] of impervious cover or that involves other land development activities of [1 acre or more];
A. Any new development or redevelopment, regardless of size, that is defined by the [Administrator] to be a hotspot land use; or,
C. Land development activities that are smaller than the minimum applicability criteria set forth above if such activities are part of a larger common plan of development, even though multiple, separate, and distinct land development activities may take place at different times on different schedules.

1.4. Exempt Activities

The following activities are exempt from this ordinance:

A. New development or redevelopment that involves the creation, addition or replacement of [less than 5,000 square feet] of impervious cover and that involves [less than one acre] of other land disturbing activities.
B. New development or redevelopment activities on individual residential lots that are not part of a larger common plan of development and do not meet any of the applicability criteria listed above.
C. Additions or modifications to existing single-family homes and duplex residential units that do not meet any of the applicability criteria listed above.
D. Development projects that are undertaken exclusively for agricultural or silvicultural purposes within areas zoned for agricultural or silvicultural land use;
E. Maintenance and repairs of any green infrastructure or stormwater management practices deemed necessary by the [administrator];
F. Any part of a land development project that was approved by the [administrator] prior to the adoption of this ordinance; and,
G. Redevelopment activities that involve the replacement of impervious cover when the original impervious cover was wholly or partially lost due to natural disaster or other acts of God occurring after [date of adoption].
H. Redevelopment that constitutes the replacement of the original square footage of impervious cover and original acreage of other land development activity when the original development is wholly or partially lost due to natural disaster or other acts of God occurring after [Date of Adoption].

1.5. Stormwater Design Criteria

The [Jurisdiction] will utilize the information presented in the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual, and any relevant local addenda, to assist in the proper implementation of this ordinance. These references may be updated and expanded periodically, based on additional information obtained through scientific research, performance monitoring and local experience.

1.6. Development of Local Stormwater Design Criteria

The [Jurisdiction] may furnish additional policy, criteria and information including specifications and standards, for the proper implementation of the requirements of this ordinance. This information will serve to supplement and/or clarify information set forth in the Georgia Stormwater Management Manual and Coastal Stormwater Supplement.

This information may include a list of acceptable stormwater treatment practices, including the specific design criteria and operation and maintenance requirements for each stormwater practice. This information may be updated and expanded from time to time, at the discretion of the [Jurisdiction] , based on improvements in engineering, science, monitoring and local maintenance experience. Stormwater treatment practices that are designed and constructed in accordance with these design and sizing criteria will be presumed to meet the minimum water quality performance standards during the design and permitting phase of a land development project.

Section 2. Permit Procedures and Requirements

2.1. Permit Application Requirements

No owner or developer shall perform any land development activity without first meeting the requirements of this ordinance and having been issued a permit from the [Jurisdiction]. Unless specifically exempted by this ordinance, any owner or developer proposing a land development activity shall submit to the [Jurisdiction] a permit application on a form provided by the [Jurisdiction] for that purpose. Unless otherwise exempted by this ordinance, the following items shall accompany a permit application:

A. Stormwater management concept plan in accordance with Section 2.2;
B. Record of a consultation meeting held in accordance with Section 2.3;
C. Stormwater management design plan in accordance with Section 2.4;
D. Inspection and maintenance agreement and plan in accordance with Section 2.5, if applicable;
E. Permit application and plan review fees in accordance with Sections 2.6 and 2.7; and,
F. Performance bond in accordance with Section 2.8.

2.2. Stormwater Management Concept Plan

Prior to the submittal of a stormwater management design plan, inspection and maintenance agreement and plan, and permit application, the landowner or developer shall submit to the [Jurisdiction] for review and approval, a preliminary concept plan describing, in general, how stormwater runoff through and from the development will be conveyed and managed.

The stormwater management concept plan shall include the following information:

A. Project Narrative: The project narrative shall include a vicinity map, the common address of the development site and a legal description of the development site.

B. Site Fingerprint: The site fingerprint shall illustrate the results of the natural resources inventory as outlined in Section 4.1, which is used to identify and map the natural resources found on the development site, as they exist prior to the start of any land disturbing activities.

C. Existing Conditions Map: The existing conditions map shall include all of the information shown on the site fingerprint and shall illustrate:

    a. Existing and proposed topography; natural drainage features; perennial and intermittent streams
    b. Existing roads, buildings, parking areas and other impervious surfaces;
    c. Existing utilities and utility easements;
    d. Existing primary and secondary conservation areas;
    e. Existing low impact development and stormwater management practices;
    f. Existing topography [minimum one-foot contours;]

g. Existing drainage divides and patterns
h. Existing stormwater drainage infrastructure including both closed systems (e.g. inlets, man holes, pipes) and open systems (e.g. canals, ditches.)

D. Proposed Conditions Map: The proposed conditions map shall illustrate:

a. Proposed topography (minimum two-foot contours;)
b. Proposed drainage divides and patterns;
c. Proposed roads, buildings, parking areas, and other impervious surfaces;
d. Proposed utilities and utility easements;
e. Proposed limits of clearing and grading;
f. Proposed primary and secondary conservation areas;
g. Proposed low impact development and stormwater management practices;
h. Proposed stormwater drainage infrastructure including both closed systems (e.g. inlets, man holes, pipes) and open systems (e.g. canals, ditches.)

E. Post-Construction Stormwater Management System Narrative: The post-construction stormwater management system narrative shall include information about how post-construction stormwater runoff will be managed on the development site, including a list of the low impact development and stormwater management practices that will be used. It shall also include calculations showing how initial estimates of the post-construction stormwater management criteria that apply to the development project were obtained, including information about the existing and proposed conditions of each of the drainage areas found on the development site (e.g., size, soil types, land cover characteristics).

In accordance with Section 4.2, green infrastructure practices (i.e., better site planning techniques, better site design techniques, low impact development practices) shall be used to the maximum extent practical during the creation of a stormwater management concept plan. Green infrastructure practices include, but are not limited to, protecting primary and secondary conservation areas, reducing clearing and grading limits, reducing roadway lengths and widths, reducing parking lot and building footprints, soil restoration, site reforestation/revegetation, green roofs, vegetated filter strips and rain gardens.

2.3. Consultation Meeting

All applicants shall attend a consultation meeting with the [Jurisdiction] to discuss the proposed development project, the stormwater management concept plan, and opportunities to use better site planning and design techniques and low impact development practices to reduce runoff rates, velocities, volumes and pollutant loads and the site's impact on the watershed. This consultation meeting shall take place (on-site) after submittal, but prior to approval, of the stormwater management concept plan for the purposes of verifying site conditions and the feasibility of the stormwater management plan.

2.4. Stormwater Management Design Plan

Subsequent to the Consultation Meeting and approval of the stormwater management concept plan and prior to completion of formal site design, the owner or developer shall submit to the [Jurisdiction] for review and approval, a stormwater management design plan that details how

stormwater runoff through and downstream from the development will be conveyed and managed. The stormwater management design plan shall detail how the proposed development project will meet the post-construction stormwater management and site planning and design criteria that apply to the development site.

The stormwater management design plan shall include all of the information contained in the stormwater management concept plan, plus:

A. Existing Conditions Hydrologic Analysis: The existing conditions hydrologic analysis shall include:

    a. Existing conditions map (Section 2.2.C);
    b. Information about the existing conditions of each of the drainage areas found on the development site (e.g., size, soil types, land cover characteristics);
    c. Information about the existing conditions of any off-site drainage areas that contribute stormwater runoff to the development site (e.g., size, soil types, land cover characteristics);
    d. Information about the stormwater runoff rates and volumes generated, under existing conditions, in each of the drainage areas found on the development site;
    e. Information about the stormwater runoff rates and volumes generated, under existing conditions, in each of the off-site drainage areas that contribute stormwater runoff to the development site; and
    f. Documentation (e.g., model diagram) and calculations showing how the existing conditions hydrologic analysis was completed.

B. Proposed Conditions Hydrologic Analysis: The proposed conditions hydrologic analysis shall include:

    a. Proposed conditions map (Section 3.2.D);
    b. Information about the proposed conditions of each of the drainage areas found on the development site (e.g., size, soil types, land cover characteristics);
    c. Information about the proposed conditions of any off-site drainage areas that contribute stormwater runoff to the development site (e.g., size, soil types, land cover characteristics);
    d. Information about the stormwater runoff rates and volumes generated, under proposed conditions, in each of the drainage areas found on the development site;
    e. Information about the stormwater runoff rates and volumes generated, under proposed conditions, in each of the off-site drainage areas that contribute stormwater runoff to the development site; and
    f. Documentation (e.g., model diagram) and calculations showing how the proposed conditions hydrologic analysis was completed.

C. Post-Construction Stormwater Management System Plan: The post-construction stormwater management system plan shall illustrate:

    a. Proposed topography;

b. Proposed drainage divides and patterns;
c. Existing and proposed roads, buildings, parking areas and other impervious surfaces;
d. Existing and proposed primary and secondary conservation areas;
e. Plan view of existing and proposed low impact development and stormwater management practices;
f. Cross-section and profile views of existing and proposed low impact development and stormwater management practices, including information about water surface elevations, storage volumes and inlet and outlet structures (e.g., orifice sizes);
g. Plan view of existing and proposed storm drain infrastructure (e.g., inlets, manholes, storm drains);
h. Cross-section and profile views of existing and proposed storm drain infrastructure (e.g., inlets, manholes, storm drains), including information about invert and water surface elevations; and
i. Existing and proposed channel modifications (e.g., bridge or culvert installations).

D. Post-Construction Stormwater Management System Narrative: The post-construction stormwater management system narrative shall include information about how post-construction stormwater runoff will be managed on the development site, including a list of the low impact development and stormwater management practices that will be used. It shall also include documentation and calculations that demonstrate how the selected low impact development and stormwater management practices satisfy the post-construction stormwater management criteria that apply to the development site, including information about the existing and proposed conditions of each of the drainage areas found on the development site (e.g., size, soil types, land cover characteristics).

E. Certification by Plan Preparer: The stormwater management design plan shall be prepared by a certified design professional, such as a landscape architect, professional surveyor or professional engineer, who must certify that the design of the stormwater management system meets the requirements of this ordinance and the latest edition of the *Coastal Stormwater Supplement to the Georgia Stormwater Management Manual*, and any relevant local addenda.

F. Certification by Owner: The owner shall certify that all land disturbing and development activities will be completed in accordance with the approved stormwater management design plan.

A copy of the stormwater management concept plan shall be included with the submittal of the stormwater management design plan. The stormwater management design plan should be consistent with the stormwater management concept plan. If any significant changes were made to the plan of development, the [Administrator] may ask for a written statement providing rationale for any of the changes that were made.

2.5. Stormwater Management Inspection and Maintenance Agreement and Plan

A. Prior to the issuance of a permit for any new development or redevelopment activity that requires one, the applicant or owner of the development site, if different, must execute an inspection and maintenance agreement and plan that shall be binding on all subsequent owners of the site, unless the stormwater management system is dedicated to and accepted by the *(local jurisdiction)*.

B. The inspection and maintenance agreement and plan shall include the following information:

   a. Identification by name or official title the person(s) responsible for carrying out the inspection and maintenance;
   b. A statement confirming that responsibility for the operation and maintenance of the stormwater management system, unless assumed by the (local jurisdiction), shall remain with the property owner and shall pass to any successive owner;
   c. A provision stating that, if portions of the development site are sold or otherwise transferred, legally binding arrangements shall be made to pass responsibility for the operation and maintenance of the stormwater management system to the appropriate successors in title; these arrangements shall designate, for each portion of the stormwater management system, the person(s) to be permanently responsible for its inspection and maintenance;
   d. A maintenance schedule stating when and how often routine inspection and maintenance will occur to ensure proper function of the stormwater management system; and,
   e. Plans for annual inspections to ensure proper performance of the stormwater management system between scheduled maintenance activities.

C. The inspection and maintenance agreement and plan shall be approved by the [Jurisdiction] prior to approval of the stormwater management design plan and recorded with the deed upon approval of the stormwater management design plan.

D. In addition to enforcing the terms of the inspection and maintenance agreement and plan, the [Jurisdiction] may also enforce all of the provisions for ongoing inspection and maintenance contained in Section 6.0 of this ordinance.

E. The terms of the stormwater management system inspection and maintenance agreement and plan shall provide for the [Jurisdiction] to enter the property at reasonable times and in a reasonable manner for the purpose of inspection. These terms include the right to enter a property when the [Jurisdiction] has a reason to believe that a violation of an approved stormwater management system inspection and maintenance agreement and plan has occurred and when necessary for abatement of a public nuisance or correction of a violation of this ordinance or an approved stormwater management system inspection and maintenance agreement and plan.

2.6. Permit Application Procedure

A. Applications for permits shall be filed with the [Jurisdiction] on a permit application on a form provided by the [Jurisdiction] for that purpose.
B. Permit applications shall include the items set forth in Section 2.1 above (two copies of the stormwater management design plan and the stormwater management inspection and maintenance agreement and plan, shall be included with the permit application).
C. The [Jurisdiction] shall inform the applicant whether the application, stormwater management design plan, and inspection and maintenance agreement and plan are approved or disapproved.
D. If the permit application, stormwater management design plan, or inspection and maintenance agreement and plan are disapproved, the [Jurisdiction] shall notify the applicant of such fact in writing. The applicant may then revise any item not meeting the requirements of this ordinance and resubmit the same, in which event Section 2.4 above and this Section shall apply to such re-submittal.
E. Upon a finding by the [Jurisdiction] that the permit application, stormwater management design plan, and inspection and maintenance agreement and plan, if applicable, meet the requirements of this ordinance, the [Jurisdiction] may issue a permit for the land development project, provided all other legal requirements for the issuance of such permit have been met.
F. Notwithstanding the issuance of the permit, in conducting the land development project, the applicant or other responsible person shall be subject to the following requirements:

    a. The applicant shall comply with all applicable requirements of the approved stormwater management design plan and the provisions of this ordinance and shall certify that all land clearing, construction, land development, and drainage will be done according to the approved stormwater management design plan.
    b. The land development project shall be conducted only within the area specified in the approved stormwater management design plan.
    c. The [Jurisdiction] shall be allowed to conduct periodic inspections of the project in accordance with Section 5 and Section 6.
    d. No changes may be made to an approved stormwater management design plan without review and written approval by the (local jurisdiction); and,
    e. Upon completion of the project, the applicant or other responsible person shall submit a statement certifying that the project has been completed in accordance with the approved stormwater management design plan and as-built plans for the stormwater management system, as required by Section 5.3 of this ordinance.
    f. The applicant shall comply with all applicable regulatory and environmental permitting requirements pertaining to the proposed development or redevelopment project, and the applicant shall provide the necessary documentation to the [Jurisdiction] upon request.

2.7. Application Review Fees

A non-refundable permit fee shall be collected at the time the permit application is submitted to the [Jurisdiction]. Any permit fees that are collected shall be used to support the administration and management of the plan review and approval process and the inspection of all development projects subject to the requirements of this ordinance. The [Jurisdiction] shall develop a fee schedule based on the area of land disturbed by the project and may amend the fee schedule from time to time.

2.8. Performance Bonds

The [Jurisdiction] shall require, from the applicant, a surety or cash bond, irrevocable letter of credit or other means of security acceptable to the [Jurisdiction] prior to the issuance of a permit for any new development or redevelopment activity. The amount of the security shall not be less than the total estimated construction cost of the post-construction stormwater management system to be installed on the development site. The bond shall include provisions relative to forfeiture for failure to complete the work specified in the approved stormwater management design plan, compliance with the provisions of this ordinance, other applicable laws and regulations and any time limitations. The bond shall not be fully released without a final inspection of the completed work by the [Jurisdiction], submittal of as built plans, a recorded inspection and maintenance agreement and plan and certification by the applicant that the stormwater management system complies with the approved stormwater management design plan and the requirements of this ordinance. A procedure may be used to release parts of the bond held by the [Jurisdiction] after various stages of construction have been completed and accepted by the [Jurisdiction]. The procedures used for partially releasing performance bonds must be specified by the [Jurisdiction] in writing prior to the approval of a stormwater management design plan.

2.9. Compliance Through Off-Site Stormwater Management Practices

All stormwater management design plans shall include on-site green infrastructure and stormwater management practices, unless arrangements are made with the [Jurisdiction] to manage post-construction stormwater runoff in an off-site or regional stormwater management practice. The off-site or regional stormwater management practice must be located on property legally dedicated to that purpose, be designed and sized to meet the post-construction stormwater management criteria presented in Section 4.0 of this ordinance, provide a level of stormwater quality and quantity control that is equal to or greater than that which would be provided by on-site green infrastructure and stormwater management practices and have an associated inspection and maintenance agreement and plan as outlined in Section 6.1. In addition, appropriate stormwater management practices shall be installed, where necessary, to protect properties and drainage channels that are located between the development site and the location of the off-site or regional stormwater management practice.

To be eligible for compliance through an off-site stormwater management practice, the applicant must submit a stormwater management design plan to the [Jurisdiction] that shows the adequacy of the off-site or regional facility and demonstrates, to the satisfaction of the (local jurisdiction), that the off-site or regional facility will not result in the following impacts:

A. Increased threat of flood damage or endangerment to public health or safety;

B. Deterioration of existing culverts, bridges, dams, and other structures;
C. Accelerated streambank or streambed erosion or siltation;
D. Degradation of in-stream biological functions or habitat; or
E. Water quality impairment in violation of State water quality standards, and/or violation of any state or federal regulations.

Section 3. Waivers to Stormwater Management Requirements

3.1. Waivers for Providing Stormwater Management

Every applicant shall provide for stormwater management as required by this article, unless a written request is filed to waive this requirement. Requests to waive the stormwater management plan requirements shall be submitted to the [Jurisdiction] for approval.

The minimum requirements for stormwater management may be waived in whole or in part upon written request of the applicant, provided that at least one of the following conditions apply or the applicant presents sufficient engineering data and analysis to support their request for a waiver as determined by the local jurisdiction:

A. It can be demonstrated that the proposed development is not likely to impair attainment of the objectives of this article.
B. Alternative minimum requirements for on-site management of stormwater discharges have been established in a stormwater management plan that has been approved by the [Jurisdiction] and local ordinance (or some other legally enforceable document) that requires the implementation of the plan.
C. Provisions are made to manage stormwater by an off-site facility. The off-site facility is required to be in place, to be designed and adequately sized to provide a level of stormwater control that is equal to or greater than that which would be afforded by on-site practices and there is a legally obligated entity responsible for long-term operation and maintenance of the stormwater practice.
D. The [Jurisdiction] finds that meeting the minimum on-site management requirements is not feasible due to the natural or existing physical characteristics of a site.
E. Non-structural practices will be used on the site that reduce: 1) the generation of stormwater from the site; 2) the size and cost of stormwater storage; and 3) the pollutants generated at the site. These non-structural practices shall be explained in detail in the local or state design manual and the amount of credit available for using such practices shall be determined by the [Jurisdiction].

3.2. Conditions of Waiver

In instances where one of the conditions above applies, the [Jurisdiction] may grant a waiver from strict compliance with these stormwater management provisions, as long as acceptable mitigation measures are provided. However, to be eligible for a variance, the applicant must demonstrate to the satisfaction of the [Jurisdiction] that the waiver will not result in the following impacts to downstream waterways:

A. Deterioration of existing culverts, bridges, dams, and other structures;
B. Degradation of biological functions or habitat;

C. Accelerated stream bank or streambed erosion or siltation; and
D. Increased threat of flood damage to public health, life, and property.

3.3. Mitigation Requirements for Waivers

Where compliance with minimum requirements for stormwater management is waived, the applicant will satisfy the minimum requirements by meeting one of the mitigation measures selected by the [Jurisdiction] . Mitigation measures may include, but are not limited to, the following:

A. The purchase and donation of privately owned lands, or the grant of an easement to be dedicated for preservation and/or reforestation. These lands should be located adjacent to the stream corridor in order to provide permanent buffer areas to protect water quality and aquatic habitat.
B. The creation of a stormwater management facility or other drainage improvements on previously developed properties, public or private, that currently lack stormwater management facilities designed and constructed in accordance with the purposes and standards of this article.
C. Monetary contributions (Fee-in-Lieu) to fund stormwater management activities such as research and studies (e.g., regional wetland delineation studies, stream monitoring studies for water quality and macroinvertebrates, stream flow monitoring, threatened and endangered species studies, hydrologic studies, and monitoring of stormwater management practices, etc.).

3.4. Fee in Lieu of Stormwater Management Practices

Where the [Jurisdiction] waives all or part of the minimum stormwater management requirements, or where the waiver is based on the provision of adequate stormwater facilities provided downstream of the proposed development, the applicant may be required to pay a fee in an amount as determined by the [Jurisdiction] .

When an applicant obtains a waiver of the required stormwater management, the monetary contribution required shall be in accordance with a fee schedule (unless the developer and the [Jurisdiction] agree on a greater alternate contribution) established by the [Jurisdiction] of [Jurisdiction] Council. All of the monetary contributions shall be credited to an appropriate capital improvements program project, and shall be made by the developer prior to the issuance of any development permits.

3.5. Dedication of Land

In lieu of a monetary contribution, an applicant may obtain a waiver of the required stormwater management by entering into an agreement with the [Jurisdiction] for the granting of an easement or the dedication of land by the applicant, to be used for the construction of an off-site stormwater management facility. The agreement shall be entered into by the applicant and the [Jurisdiction] prior to the recording of plats or, if no record plat is required, prior to the issuance of the development permits.

Section 4. Post-Construction Stormwater Management Criteria

The following post-construction stormwater management and site planning and design criteria shall be applied to all new development and redevelopment activities that are subject to the provisions of this ordinance. The criteria have been designed to protect valuable local natural resources from the negative impacts of the land development process.

If local natural resource protection and stormwater management goals and objectives warrant greater protection than that provided by the post-construction stormwater management and site planning and design criteria outlined below, the [Jurisdiction] may impose additional requirements on new development and redevelopment activities that it has determined are necessary to protect local aquatic and terrestrial resources from the negative impacts of the land development process.

4.1. Natural Resources Inventory

Prior to the start of any land disturbing activities, including any clearing and grading activities, acceptable site reconnaissance and surveying techniques should be used to complete a thorough assessment of the natural resources, both terrestrial and aquatic, found on a development site. The natural resources inventory shall be completed in accordance with the information presented within the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual.

In addition to the requirements of the Coastal Stormwater Supplement, the natural resources inventory shall include: protected river corridors, groundwater recharge areas, riparian buffers, well head protection zones, and all regulated FEMA floodplains within the natural resources inventory. **[The local jurisdiction may elect to list the natural resources that are required to be included in the Natural Resources Inventory.]**

The preservation and/or restoration of the natural resources found on a development site, through the use of green infrastructure practices, may, at the discretion of the [Jurisdiction], be assigned quantifiable stormwater management "credits" that can be used when calculating the stormwater runoff volumes associated with the post-construction stormwater management criteria outlined in Sections 4.3 through 4.7 of this ordinance. The green infrastructure practices that qualify for these "credits," and information about how they can be used to help satisfy the post-construction stormwater management criteria outlined in Sections 4.3 through 4.7 of this ordinance, is provided in the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual.

4.2. Use of Green Infrastructure Practices

Green infrastructure practices shall be used to the maximum extent practical during the creation of a stormwater management concept plan (Section 2.2) for a proposed development project. Green infrastructure practices can be used to not only help protect local terrestrial and aquatic resources from the direct impacts of the land development process, but also to help maintain pre-development site hydrology and reduce post-construction stormwater runoff rates, volumes and pollutant loads.

4.3. Stormwater Runoff Reduction

The stormwater runoff volume generated by the runoff reduction storm event, as defined in the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual, shall be reduced on-site in order to help maintain pre-development site hydrology and help protect local aquatic resources from several indirect impacts of the land development process, including decreased groundwater recharge, decreased baseflow and degraded water quality. A stormwater management system is presumed to comply with this criteria if:

A. It includes green infrastructure practices that provide for the interception, evapotranspiration, infiltration or capture and reuse of stormwater runoff, that have been selected, designed, constructed and maintained in accordance with the information presented in the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual and any relevant local addenda.
B. It is designed to provide the amount of stormwater runoff reduction specified in the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual.
C. Stormwater runoff from any development or redevelopment site that is defined by the [Jurisdiction] in the Local Stormwater Design Manual as a stormwater hotspot is not managed through the use of structural or nonstructural stormwater management practices that provide for passive or active (engineered) infiltration of stormwater runoff, unless adequate pre-treatment is provided, as defined by the [Jurisdiction].
D. Green infrastructure, which includes better site planning and design techniques and low impact development practices as outlined in the G3 and other approved design references, shall be used to the maximum extent practical during the site planning and design process to capture and retain, reuse, or otherwise reduce the prescribed runoff reduction volume on a development or redevelopment site.

The [Administrator] may reduce the amount of stormwater runoff reduction needed to satisfy this criteria on development sites that are considered to be stormwater hotspots or that have site characteristics or constraints, such as high groundwater, impermeable soils, contaminated soils or confined groundwater aquifer recharge areas, that prevent the use of green infrastructure practices that provide for the interception, evapotranspiration, infiltration or capture and reuse of stormwater runoff. When seeking a reduction in the amount of stormwater runoff reduction that needs to be provided in order to satisfy this criteria, applicants shall:

A. Use green infrastructure practices that provide for the interception, evapotranspiration, infiltration or capture and reuse of stormwater runoff, to provide the minimum amount of stormwater runoff reduction specified in the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual or the Green Growth Guidelines and any relevant local addenda; and,
B. Provide adequate documentation to the [Jurisdiction] to show that no additional runoff reducing green infrastructure practices can be used on the development site.

In accordance with Section 4.4 of this ordinance, any of the stormwater runoff volume generated by the runoff reduction storm event that is not reduced on the development site shall be intercepted and treated in one or more stormwater management practices that provide at least an

80 percent reduction in total suspended solids loads and that reduce nitrogen and bacteria loads to the maximum extent practical.

4.4. Water Quality Protection

In order to protect local aquatic resources from water quality degradation, post-construction stormwater runoff shall be adequately treated before it is discharged from a development site. Applicants can satisfy these criteria by satisfying the stormwater runoff reduction criteria (Section 4.3). However, if any of the stormwater runoff volume generated by the runoff reduction storm event, as defined in the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual, cannot be reduced on the development site, due to site characteristics or constraints, it shall be intercepted and treated in one or more stormwater management practices that provide at least an 80 percent reduction in total suspended solids loads and that reduce nitrogen and bacteria loads to the maximum extent practical. When seeking to satisfy this criteria through the use of one or more stormwater management practices, applicants shall:

A. Intercept and treat stormwater runoff in stormwater management practices that have been selected, designed, constructed and maintained in accordance with the information presented in the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual and any relevant local addenda; and,
B. Provide adequate documentation to the [Jurisdiction] to show that total suspended solids, nitrogen and bacteria removal were considered during the selection of the stormwater management practices that will be used to intercept and treat stormwater runoff on the development site.

4.5. Aquatic Resource Protection

In order to protect local aquatic resources from several other negative impacts of the land development process, including complete loss or destruction, stream channel enlargement and increased salinity fluctuations, applicants shall provide aquatic resource protection in accordance with the with the information provided in the latest edition of the *Coastal Stormwater Supplement to the Georgia Stormwater Management Manual*.

4.6. Overbank Flood Protection

All stormwater management systems shall be designed to control the peak discharge generated by the overbank flood protection storm event, as defined in the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual, to prevent an increase in the duration, frequency and magnitude of downstream overbank flooding. A stormwater management system is presumed to comply with these criteria if it is designed to provide overbank flood protection in accordance with the information provided in the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual.

The [Administrator] may modify or waive this criteria on development sites where both the on-site and downstream stormwater conveyance systems are designed to safely convey the peak discharge generated by the overbank flood protection storm event to a receiving stream, tidal creek or other aquatic resource without causing additional downstream flooding or other environmental impacts, such as stream channel enlargement or degradation of habitat.

4.7. Extreme Flood Protection

All stormwater management systems shall be designed to control the peak discharge generated by the extreme flood protection storm event, as defined in the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual, to prevent an increase in the duration, frequency and magnitude of downstream extreme flooding and protect public health and safety. A stormwater management system is presumed to comply with this criteria if it is designed to provide extreme flood protection in accordance with the information provided in the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual.

The [Administrator] may modify or waive this criteria on development sites where both the on-site and downstream stormwater conveyance systems are designed to safely convey the peak discharge generated by the extreme flood protection storm event to a receiving stream, tidal creek or other aquatic resource without causing additional downstream flooding or other environmental impacts, such as stream channel enlargement or degradation of habitat..

4.8. Redevelopment Criteria

Land development that qualifies as redevelopment shall meet one of the following criteria:

A. Reduce Impervious Cover: Reduce existing site impervious cover by at least 20% in an effort to mimic and/or restore the natural hydrology of the site to the maximum extent practical.
B. Provide Stormwater Management: Manage the stormwater runoff from at least 20% of the site's existing impervious cover and any new impervious cover in accordance with the post-construction stormwater management criteria outlined in this ordinance using stormwater management practices designed in accordance with the standards, criteria, and information presented in the latest edition of the GSMM, the CSS and the Local Stormwater Design Manual.
C. Provide Off-Site Stormwater Management: Provide, through the use of off-site stormwater management practices, a level of stormwater quality and quantity control that is equal to or greater than that which would be provided by satisfying the post-construction stormwater management criteria outlined in this ordinance on the development site.
D. Combination of Measures: Any combination of (1) through (3) above that is acceptable to the [Jurisdiction].

4.9. Green Infrastructure and Structural Stormwater Management Practices

All green infrastructure and stormwater management practices shall be selected, designed, constructed and maintained in accordance with the information presented in the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual, Green Growth Guidelines, and any relevant local addenda. Applicants are referred to the latest edition of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual, and any relevant local addenda, for guidance on selecting green infrastructure and stormwater management practices that can be used to satisfy the post-construction stormwater management criteria outlined in Sections 4.3 through 4.7 of this ordinance.

For green infrastructure or stormwater management practices that are not included in the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual, or for which pollutant removal and runoff reduction rates have not been provided, the effectiveness of the green infrastructure or stormwater management practice must be documented through prior studies, literature reviews or other means, and receive approval from the [Jurisdiction] before being included in a stormwater management system.

4.10. Stormwater Conveyance Practices

Stormwater conveyance practices, which may include, but are not limited to, storm drain pipes, culverts, catch basins, drop inlets, junction boxes, headwalls, gutters, ditches, open channels, swales and energy dissipaters, shall be provided when necessary to convey post-construction stormwater runoff and protect private properties adjoining development sites and/or public rights-of-way. Stormwater conveyance practices that are used to convey post-construction stormwater runoff on development sites shall meet the following requirements:

A. Methods used to calculate stormwater runoff rates and volumes shall be in accordance with the information presented in the latest edition of the Georgia Stormwater Management Manual and any relevant local addenda;
B. All culverts, pipe systems and open channel flow systems shall be sized in accordance with the information presented in the latest edition of the Georgia Stormwater Management Manual and any relevant local addenda; and,
C. Planning and design of stormwater conveyance practices shall be completed in accordance with the information presented in the latest edition of the Georgia Stormwater Management Manual and any relevant local addenda.

Section 5. Construction Inspection of Stormwater Management Systems

5.1. Notice of Construction Commencement

The applicant must notify the [Jurisdiction] before the commencement of construction. In addition, the applicant must notify the [Jurisdiction] in advance of construction of critical components of the stormwater management practices shown on the approved stormwater management design plan. The [Jurisdiction] may, at its discretion, issue written authorization to proceed with critical construction steps, such as installation of permanent stormwater management practices based on stabilization of the drainage area and other factors.

5.2. Inspections During Construction

Periodic inspections of the stormwater management practices shown on the approved stormwater management design plan shall be conducted by staff or representatives of the [Jurisdiction] during construction. Construction inspections shall utilize the approved stormwater management design plan for establishing compliance with the provisions of this ordinance. All inspections shall be documented in written reports that contain the following information:

A. The date and location of the inspection;
B. The name of the inspector;

C. Whether construction is in compliance with the approved stormwater management design plan;
D. Violations of the approved stormwater management design plan; and,
E. Any other variations from the approved stormwater management plan.

If any violations are found, the applicant shall be notified in writing about the nature of the violation and the remedial measures that are required to bring the action or inaction into compliance with the approved stormwater management design plan, as described in Section 7.1. In the event that the remedial measures described in such notice have not been completed by the date set forth in the notice, any one or more of the enforcement actions outlined in Section 7.2 of this ordinance may be taken against the applicant.

5.3. Final Inspection and As Built Plans

Subsequent to the final installation and stabilization of all green infrastructure and stormwater management practices shown on the approved stormwater management design plan and before the issuance of a certificate of occupancy, the applicant is responsible for certifying that the project has been completed in accordance with the approved stormwater management design plan and submitting "as built" plans for all permanent stormwater management practices shown on the approved stormwater management design plan. The "as built" plans must show the final design specifications for all structural and nonstructural stormwater management practices and must be certified by a licensed landscape architect, professional surveyor, or professional engineer. A final inspection shall be conducted by the staff or representatives of the [Jurisdiction] to confirm the accuracy of the "as built" plans. A final inspection is required before any performance bond or other guarantee can be released. The final inspection shall not relieve anyone from duty to comply with law, design or this ordinance.

Section 6. Ongoing Inspection and Maintenance of Stormwater Management Systems

6.1. Maintenance Responsibility

The responsible party named in the recorded stormwater management inspection and maintenance agreement and plan, shall maintain in good condition and promptly repair and restore all structural and nonstructural stormwater management practices, maintenance access routes, and appurtenances, including, but not limited to grade surfaces, walls, drains, dams, structures, vegetation, erosion and sediment controls, and other protective devices. Such repairs, restoration, and maintenance shall be in accordance with the approved inspection and maintenance agreement and plan.

If the responsible party named in the recorded inspection and maintenance agreement and plan is a homeowner's association or other owner's association, such as a unit owner's association, the responsible party shall submit to the [Jurisdiction] a copy of a recorded declaration that provides:

A. That green infrastructure and stormwater management practices are part of the common elements of the development and shall be subject to the requirements of the stormwater management inspection and maintenance agreement and plan;

B. That membership in the association shall be mandatory and automatic for all homeowners or unit owners of the development and their successors;
C. That the association shall have lien authority to ensure the collection of dues from all members;
D. That the requirements of the inspection and maintenance agreement and plan shall receive the highest priority for expenditures by the association except for any other expenditures that are required by law to have a higher priority;
E. That a separate fund shall be maintained by the association for the routine maintenance, reconstruction, and repair of the stormwater management practices, and kept in an account insured by the FDIC or by another entity acceptable to the [Jurisdiction];
F. That the routine maintenance, reconstruction, and repair fund shall contain at all times the dollar amount reasonably determined from time to time by the [Jurisdiction] to be adequate to pay for the probable reconstruction and repair cost (but not routine maintenance cost) of the stormwater management system for a three-year period; and,
G. That, to the extent permitted by law, the association shall not enter into voluntary dissolution unless responsibility for the stormwater management practices is transferred to a successor.

The [Jurisdiction], in lieu of an inspection and maintenance agreement and plan, may accept dedication of any existing or future stormwater management practice or facility for maintenance, provided such practice or facility meets all of the requirements of this ordinance, is in proper working order at the time of dedication, and includes adequate and perpetual access and sufficient area for inspection and regular maintenance. Such adequate and perpetual access shall be accomplished by granting of an easement to the [Jurisdiction] or through a fee simple dedication to the [Jurisdiction].

6.2. Maintenance Inspections

Periodic inspections of the stormwater management practices shown on an approved stormwater management design plan, and subject to the terms and conditions of an approved inspection and maintenance agreement and plan, shall be conducted by staff or representatives of the [Jurisdiction] to document repair and maintenance needs and ensure compliance with the requirements of the approved inspection and maintenance agreement and plan and provisions of this ordinance. All inspections should be documented in written reports that contain the following:

A. The date and location of the inspection;
B. The name of the inspector;
C. The condition of:
    a. Vegetation and filter media,
    b. Fences and other safety devices,
    c. Spillways, valves, and other hydraulic control structures,
    d. Embankments, slopes, and safety benches,
    e. Reservoirs and permanent pools,
    f. Inlet and outlet channels and structures,
    g. Underground drainage structures;
    h. Sediment and debris accumulation in storage and forebay areas;

i. Nonstructural stormwater management practices;
j. Any other item that could affect the proper function of the stormwater management system; and

D. A description of repair, restoration, and maintenance needs.

If any repair, restoration, or maintenance needs are found, the responsible party named in the recorded stormwater management inspection and maintenance agreement and plan shall be notified in writing about the repair, restoration, or maintenance needs and the remedial measures that are required to bring the stormwater management system into compliance with the approved stormwater management inspection and maintenance agreement and plan, as described in Section 7.1. In the event that the remedial measures described in such notice have not been completed by the date set forth in the notice, any one or more of the enforcement actions outlined in Section 7.2 of this ordinance may be taken against the responsible party named in the approved stormwater management inspection and maintenance agreement and plan.

6.3. Records of Maintenance Activities

The responsible party shall make and maintain records of all inspections, maintenance, and repairs, and shall retain the records for a minimum of five years. These records shall be made available to the [Jurisdiction] during inspections and at other reasonable times upon request of the [Jurisdiction].

6.4. Failure to Maintain

If the responsible party fails or refuses to meet the terms and conditions of an approved stormwater management inspection and maintenance agreement and plan and/or the requirements of this ordinance, the [Jurisdiction], after thirty (30) days written notice (except, that in the event the violation constitutes an immediate danger to public health or safety, 24 hours notice shall be sufficient), may correct a violation by performing the work necessary to place the stormwater management practice in proper working condition. The [Jurisdiction] may assess the responsible party for the cost of the repair work, which shall be a lien on the property, and may be placed on the ad valorum tax bill for such property and collected in the ordinary manner for such taxes by the [Jurisdiction].

Section 7. Violations, Enforcement and Penalties

Any action or inaction that violates the provisions of this ordinance or the requirements of an approved stormwater management design plan, stormwater management inspection and maintenance agreement and plan, or permit may be subject to the enforcement actions outlined in this Section. Any such action or inaction that is continuous with respect to time is deemed to be a public nuisance and may be abated by injunctive or other equitable relief. The imposition of any of the penalties described below shall not prevent such equitable relief.

7.1. Notice of Violation

If the [Jurisdiction] determines that an owner, applicant, or other responsible person has failed to comply with the provisions of this ordinance, or the terms and conditions of an approved stormwater management design plan, permit, or inspection and maintenance agreement and plan, it shall issue a written notice of violation to such owner, applicant, or other responsible person.

Where a person is engaged in a land development activity covered by this ordinance without having first secured a stormwater management permit, the notice of violation shall be served on the owner or the person in charge of the land development activity being conducted on the development or redevelopment site.

The notice of violation shall contain:

A. The name and address of the owner, applicant, or other responsible person;
B. The address or other description of the site upon which the violation is occurring;
C. A statement specifying the nature of the violation;
D. A description of the remedial measures necessary to bring the action or inaction into compliance with the provisions of this ordinance, or the terms and conditions of the approved stormwater management design plan, permit, or inspection and maintenance agreement and plan, and the date for the completion of such remedial measures;
E. A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is issued; and,
F. A statement that the determination of violation may be appealed to the [Jurisdiction] by filing a written notice of appeal within thirty (30) days after the notice of violation (except, that in the event the violation constitutes an immediate danger to public health or safety, a written notice of appeal must be filed within 24 hours after the notice of violation).

7.2. Penalties

In the event that the remedial measures described in the notice of violation have not been completed by the date set forth for such completion in the notice of violation, any one or more of the following actions or penalties may be taken or assessed against the person to whom the notice of violation was issued.

Before taking any of the following actions or imposing any of the following penalties, the [Jurisdiction] shall first notify the owner, applicant, or other responsible person in writing of its intended action and shall provide a reasonable opportunity of not less than ten days (except, that in the event the violation constitutes an immediate danger to public health or safety, 24 hours notice shall be sufficient) to correct the violation. In the event the owner, applicant, or other responsible person fails to correct the violation by the date set forth in said notice, the [Jurisdiction] may take any one or more of the following actions or impose any one or more of the following penalties.

A. Stop Work Order: The [Jurisdiction] may issue a stop work order that shall be served on the owner, applicant, or other responsible person. The stop work order shall remain in effect until the owner, applicant, or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise corrected the violation or violations described therein, provided the stop work order may be withdrawn or modified to enable the applicant or other responsible person to take the remedial measures necessary to correct such violation or violations.

B. Withhold Certificate of Occupancy: The [Jurisdiction] may refuse to issue a certificate of occupancy for the building or other structure constructed or being constructed on the site until the owner, applicant, or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise corrected the violation or violations described therein.

C. Suspension, Revocation, or Modification of Permit: The [Jurisdiction] may suspend, revoke, or modify the permit authorizing the land development activity. A suspended, revoked, or modified permit may be reinstated after the owner, applicant, or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise corrected the violation or violations described therein, provided the permit may be modified as the [Jurisdiction] may deem necessary to enable the owner, applicant, or other responsible person to take the remedial measures necessary to correct such violation or violations.

D. Civil Penalties: In the event the owner, applicant, or other responsible person fails to take the remedial measures set forth in the notice of violation or otherwise fails to correct the violation or violations described therein by the date set forth in the notice of violation, the [Jurisdiction] may impose a penalty not to exceed [$1,000] (depending on the severity of the violation) for each day the violation remains unremedied after the date set forth in the notice of violation.

E. Criminal Penalties: For intentional and flagrant violations of this ordinance, the [Jurisdiction] may issue a citation to the applicant or other responsible person, requiring such person to appear in (appropriate municipal court) court to answer charges for such violation. Upon conviction, such person shall be punished by a fine not to exceed [$1,000] or imprisonment for up to [60] days or both. Each act of violation and each day upon which any violation shall occur shall constitute a separate offense.

ARTICLE V FLOOD DAMAGE PREVENTION

Section 1. Statutory Authorization, Findings of Fact, Purpose and Objectives

1.1. Statutory Authorization

Article IX, Section II of the Constitution of the State of Georgia and Section 36-1-20(a) of the Official Code of Georgia Annotated have delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, [Jurisdiction] , Georgia, does ordain as follows:

1.2. Findings of Fact

A. The flood hazard areas of [Jurisdiction] , Georgia are subject to periodic inundation which results in loss of life and property, health and safety hazards, distribution of commerce and governmental services, extraordinary public expenditures for flood relief and protection, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
B. These flood losses are caused by the occupancy in flood hazard areas of uses vulnerable to floods, which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities.

1.3. Statement of Purpose

It is the purpose of this ordinance to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

A. require that uses vulnerable to floods, including facilities, which serve such uses, be protected against flood damage at the time of initial construction;
B. restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
C. control filling, grading, dredging and other development which may increase flood damage or erosion;
D. prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands; and,
E. control the alternation of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters.

1.4. Objectives

The objectives of this ordinance are:

A. to protect human life and health;
B. to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
C. to help maintain a stable tax base by providing for the sound use and development of

flood prone areas in such a manner as to minimize flood blight areas;

D. to minimize expenditure of public money for costly flood control projects;
E. to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
F. to minimize prolonged business interruptions; and,
G. to insure that potential homebuyers are notified that property is in a flood area.

Section 2. General Provisions

2.1. Lands to Which This Ordinance Applies
This ordinance shall apply to all Areas of Special Flood Hazard within the jurisdiction of the [Jurisdiction] of [Jurisdiction] , Georgia.

2.2. Basis for Area of Special Flood Hazard
The areas of Special Flood Hazard identified by the Federal Emergency Management Agency (FEMA) in its Flood Insurance Study (FIS), dated June 3, 1988, with accompanying maps and other supporting data and any revision thereto, are adopted by reference and declared a part of this ordinance. For those land areas acquired by a municipality through annexation, the current effective FIS, supporting data and any revision thereto, for [Jurisdiction] , are hereby adopted by reference.

Areas of Special Flood Hazard may also include those areas known to have flooded historically or defined through standard engineering analysis by governmental agencies or private parties but not yet incorporated in a FIS.

The Repository for public inspection of the Flood Insurance Study (FIS), accompanying maps and other supporting data is located at [Jurisdiction] Hall.

2.3. Establishment of Development Permit
A Development Permit shall be required in conformance with the provisions of this ordinance PRIOR to the commencement of any Development activities.

2.4. Compliance
No structure or land shall hereafter be located, extended, converted or altered without full compliance with the terms of this ordinance and other applicable regulations.

2.5. Abrogation and Greater Restrictions
Where this ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

2.6. Interpretation
In the interpretation and application of this ordinance all provisions shall be: (1) considered as minimum requirements; (2) liberally construed in favor of the governing body, and; (3) deemed neither to limit nor repeal any other powers granted under state statutes.

2.7. Warning and Disclaimer of Liability

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur; flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the Areas of Special Flood Hazard or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the [Jurisdiction] of [Jurisdiction] or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made there under.

2.8. Penalties for Violation

Failure to comply with the provisions of this ordinance or with any of its requirements, including conditions and safeguards established in connection with grants of variance or special exceptions shall constitute a violation. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than $2,500 or imprisoned for not more than [60] days, or both, and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the [Jurisdiction] from taking such other lawful actions as is necessary to prevent or remedy any violation.

Section 3. Administration

3.1. Designation of Ordinance Administrator

The [Jurisdiction] of [Jurisdiction] is hereby appointed to administer and implement the provisions of this ordinance.

3.2. Duties and Responsibilities

Duties of the [Jurisdiction] of [Jurisdiction] or their designee shall include, but shall not be limited to:

A. Review all development permits to assure that the permit requirements of this ordinance have been satisfied.
B. Review proposed development for compliance with all necessary permits from governmental agencies where approval is required by Federal or State law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. Copies of all permits be provided to {Jurisdiction} and will be maintained on file.
C. Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding.
D. When Base Flood Elevation data or floodway data have not been provided in accordance with M, then the [Jurisdiction] or their designee shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source in order to administer the provisions of Section 3.2.
E. Review and record the actual elevation in relation to mean sea level (or highest adjacent grade) of the regulatory flood, including basement, of all new or substantially improved structures in accordance with Section 5.2.

F. Review and record the actual elevation, in relation to mean sea level to which any new or substantially improved structures have been flood-proofed, in accordance with Section J and 0.
G. When flood-proofing is utilized for a structure, the [Jurisdiction] or their designee shall obtain certification of design criteria from a registered professional engineer or architect in accordance with Section 4.A and 5.2.A.a or 5.4.B.
H. Obtain design certification from a registered professional engineer or architect that any new construction or substantial improvement placed in a Coastal High Hazard Area will beat the criteria of Section 5.5.E.
I. Make substantial damage determinations following a flood event or any other event that causes damage to structures in flood hazard areas.
J. Notify adjacent communities and the Georgia Department of Natural Resources prior to any alteration or relocation of a watercourse and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
K. For any altered or relocated watercourse, submit engineering data/analysis within six (6) months to FEMA to ensure accuracy of community flood maps through the Letter of Map Revision process. Assure flood carrying capacity of any altered or relocated watercourse is maintained.
L. Where interpretation is needed as to the exact location of boundaries of the Areas of Special Flood Hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the [Jurisdiction] shall make the necessary interpretation. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this Ordinance.
M. All records pertaining to the provisions of this ordinance shall be maintained by the [Jurisdiction] and shall be open for public inspection.

Section 4. Permit Procedures

Application for a Development Permit shall be made to the [Jurisdiction] of [Jurisdiction] on forms furnished by the [Jurisdiction] PRIOR to any development activities, and may include, but not be limited to the following: plans in duplicate drawn to scale showing the elevations of the area in question and the nature, location, dimensions, of existing or proposed structures, earthen fill placement, storage of materials or equipment, and drainage facilities.

Specifically, the following information is required:

A. Application Stage
    a. Elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all proposed structures;
    b. Elevation in relation to mean sea level to which any non-residential structure will be flood-proofed;
    c. Design certification from a registered professional engineer or architect that any proposed non-residential flood-proofed structure will meet the flood-proofing criteria of Section 5.2 and 5.4;

d. Design certification from a registered professional engineer or architect that any new construction or substantial improvement placed in a Coastal High Hazard Area will meet the Criteria of Section 5.5;
e. Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development; and,

B. Construction Stage
a. For all new construction and substantial improvements, the permit holder shall provide to the [Jurisdiction] an as-built certification of compliance with the regulatory floor elevation or flood-proofing level immediately after the construction of the lowest floor or flood proofing is completed. When a structure is subject to the provisions applicable to Coastal High Hazards Areas, as-built certification is required after placement of the lowest horizontal structural members. Any regulatory floor certification made relative to mean sea level shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When flood proofing is utilized for non-residential structures, the certification shall be by a registered professional engineer or architect licensed in this State.
b. Any work undertaken prior to submission of these certifications shall be at the permit holder's risk.
c. The [Jurisdiction] , or its designee shall review the above referenced certification data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being allowed to proceed. Failure to submit certification or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

Section 5. Provisions for Flood Hazard Reduction

5.1. General Standards

In ALL Areas of Special Flood Hazard the following provisions are required:

A. New construction and substantial improvements of existing structures shall be anchored to prevent flotation, collapse or lateral movement of the structure;
B. New construction and substantial improvements of existing structures shall be constructed with materials and utility equipment resistant to flood damage;
C. New construction or substantial improvements of existing structures shall be constructed by methods and practices that minimize flood damage;
D. Elevated Buildings: All New construction or substantial improvements of existing structures that include ANY fully enclosed area located below the lowest floor formed by foundation and other exterior walls shall be designed so as to be an unfinished or flood resistant enclosure. The enclosure shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. (Not Applicable in Coast High Hazard Areas).
a. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:

i. Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
ii. The bottom of all openings shall be no higher than one foot above grade; and,
iii. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions.

b. So as not to violate the "Lowest Floor" criteria of this ordinance, the unfinished or flood resistant enclosure shall only be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area; and
c. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

E. All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
F. Manufactured homes shall be anchored to prevent floatation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable State requirements for resisting wind forces;
G. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
H. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
I. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding; and,
J. Any alteration, repair, reconstruction or improvement to a structure, which is not compliant with the provisions of this ordinance, shall be undertaken only if the non-conformity is not furthered, extended or replaced.

5.2. Specific Standards

In ALL Areas of Special Flood Hazard designated as A1-30, AE, AH, A (with estimated BFE), the following provisions are required:

A. New construction and/or substantial improvements: Where base flood elevation data are available, new construction and/or substantial improvement of any structure or manufactured home shall have the lowest floor, including basement, elevated no lower than one foot above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of Section 5.1.D, "Elevated Buildings."

a. All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing and other service facilities shall be elevated at or above (1) foot above the base flood elevation.

B. Non-Residential Construction: New construction and/or the substantial improvement of any structure located in A1-30, AE, or AH zones, may be flood-proofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be water tight to one (1) foot above the base flood elevation, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and in Section 4.

C. Standards for Manufactured Homes and Recreational Vehicles: Where base flood elevation data are available:
   a. All manufactured homes placed and/or substantially improved on: (1) individual lots or parcels, (2) in new and/or substantially improved manufactured home parks or subdivisions, (3) in expansions to existing manufactured home parks or subdivisions, or (4) on a site in an existing manufactured home park or subdivision where a manufactured home has incurred "substantial damage" as the result of a flood, must have the lowest floor including basement, elevated no lower than one foot above the base flood elevation.
   b. Manufactured homes placed and/or substantially improved in an either existing manufactured home park or subdivision may be elevated so that:
      i. The lowest floor of the manufactured home is elevated no lower than one foot above the level of the base flood elevation, or
      ii. The manufactured home chassis is elevated and supported by reinforced piers (or other foundation elements of at least an equivalent strength) of no less than 36 inches in height above grade.
   c. All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement (ref. Section 5.1.F above).
   d. All recreational vehicles placed on sites must either:
      i. Be on the site for fewer than 180 consecutive days.
      ii. Be fully licensed and ready for highway use, (a recreational vehicle is ready for highway use if it is licensed, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached structures or additions), or
      iii. The recreational vehicle must meet all the requirements for "New Construction," including the anchoring and elevation requirements of Section 5.2.B, above.

D. Floodway - Located within Areas of Special Flood Hazard established in Section 2.2, are areas designated as floodway. A floodway may be an extremely hazardous area due to velocity floodwaters, debris or erosion potential. In addition, the area must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights. Therefore, the following provisions shall apply:

a. Encroachments are prohibited, including earthen fill, new construction, substantial improvements or other development within the regulatory floodway. Development may be permitted however, provided it is demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the encroachment shall not result in ANY increase in flood levels or floodway widths during a base flood discharge. A registered professional engineer must provide supporting technical data and certification thereof.
b. ONLY if Section 5.2.C.d.iii.D above is satisfied, then any new construction or substantial improvement shall comply with all other applicable flood hazard reduction provisions of Section 5.

5.3. Building Standards for Streams without Established Base Flood Elevations and/or Floodway (A-Zones)

Located within the Areas of Special Flood Hazard established in Section 2.2, where streams exist but no base flood data have been provided (A-Zones), OR where base flood data have been provided but a Floodway has not been delineated, the following provisions apply:

A. When base flood elevation data or floodway data have not been provided in accordance with Section 2.2, then the [Jurisdiction] or their designee shall obtain, review, and reasonably utilize any scientific or historic base flood elevation and floodway data available from a Federal, State, or other source, in order to administer the provisions of Section 5. ONLY if data are not available from these sources, then the following provisions (b. and c.) shall apply.
B. No encroachments, including structures or fill material, shall be located within an area equal to the width of the stream or twenty-five feet, whichever is greater, measured from the top of the stream bank, unless certification by a registered professional engineer is provided demonstrating that such encroachment shall not result in more than one (1) foot increase in flood levels during the occurrence of the base flood discharge.
C. In special flood hazard areas without base flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than three (3) feet above the highest adjacent grade at the building site. (NOTE: Require the lowest floor to be elevated one foot above the estimated base flood elevation in A-Zone areas where a Limited Detail Study has been completed). Openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of Section 5.1.D, "Elevated Buildings."
    a. All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing, and other service facilities shall be elevated no less than three (3) feet above the highest adjacent grade at the building site.

The [Jurisdiction] or their designee shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.

5.4. Standards for Areas of Shallow Flooding (AO-Zones)

Areas of Special Flood Hazard established in Section 2.2, may include designated "AO" shallow flooding areas. These areas have base flood depths of one to three feet (1'-3') above ground, with no clearly defined channel. The following provisions apply:

A. All new construction and substantial improvements of residential and nonresidential structures shall have the lowest floor, including basement, elevated to the flood depth number specified on the Flood Insurance Rate Map (FIRM), above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least three feet (3) above the highest adjacent grade. Openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of Section 5.1.D, "Elevated Buildings."The [Jurisdiction] or their designee shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.
B. New construction or the substantial improvement of a non-residential structure may be flood-proofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be water tight to the specified FIRM flood level plus one (1) foot, above highest adjacent grade, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the official as set forth above and as required in Section 4.
C. Drainage paths shall be provided to guide floodwater around and away from any proposed structure.

5.5. Coastal High Hazard Areas (V-Zones)

Located within the areas of special flood hazard established in Section 2.2, are areas designated as Coastal High Hazard Areas (V-Zones). These areas have special flood hazards associated with wave action and storm surge, therefore, the following provisions shall apply:

A. All new construction and substantial improvements of existing structures shall be located landward of the reach of mean high tide;
B. All new construction and substantial improvements of existing structures shall be elevated on piles, columns, or shear walls parallel to the flow of water so that the bottom of the lowest supporting horizontal structural member (excluding pilings or columns) is located no lower than one foot above the base flood elevation level. All space below the lowest supporting member shall remain free of obstruction. Open lattice work or decorative screening may be permitted for aesthetic purposes only and must be designed to wash away in the event of abnormal wave action and in accordance with Section 5.5.F below;
C. All new construction and substantial improvements of existing structures shall be securely anchored on pilings, columns, or shear walls;
D. All pile and column foundations and the structures attached thereto shall be anchored to resist floatation, collapse, and lateral movement due to the combined effects of wind and water loads acting simultaneously on ALL building components, both (non-structural and

structural). Water loading values shall equal or exceed those of the base flood. Wind loading values shall be in accordance with the most current edition of the Standard Building Code.

E. A registered professional engineer or architect shall certify that the design, specifications and plans for construction are in compliance with the provisions contained in Section 5.5.B, C and D herein.
F. All space below the lowest horizontal supporting member must remain free of obstruction. Open lattice work or decorative screening may be permitted for aesthetic purposes only and must be designed to wash away in the event of abnormal wave action without causing structural damage to the supporting foundation or elevated portion of the structure. The following design specifications are allowed:
    a. No solid walls shall be allowed;
    b. Materials shall consist of lattice or mesh screening only.
    c. If aesthetic lattice work or screening is utilized, any enclosed space shall not be used for human habitation, but shall be designed to be used only for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises.
G. Prior to construction, plans for any structures having lattice work or decorative screening beneath the established flood elevation must be submitted to the [ISSUING AUTHORITY] for approval;
H. Any alteration, repair, reconstruction or improvement to any structure shall not enclose the space below the lowest floor except with lattice work or decorative screening, as provided in this Section.
I. There shall be no fill used as structural support. Non-compacted fill may be used around the perimeter of a building for landscaping/aesthetic purposes provided an analysis by an engineer, architect, and/or soil scientist, which demonstrates that the following factors have been fully considered:
    a. Particle composition of fill material does not have a tendency for excessive natural compaction;
    b. Volume and distribution of fill will not cause wave defection to properties; and
    c. Slope of fill will not cause wave run-up or ramping;
P. There shall be no alteration of sand dunes or mangrove stands, which would increase potential flood damage;
Q. Prohibit the placement of manufactured homes (mobile homes), except in an existing manufactured homes park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of Section 5.5 are met.

5.6. Standards for Subdivisions

A. All subdivision and/or development proposals shall be consistent with the need to minimize flood damage;
B. All subdivision and/or development proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;

C. All subdivision and/or development proposals shall have adequate drainage provided to reduce exposure to flood hazards; and
D. For subdivisions and/or developments greater than fifty (50) lots or five (5) acres, whichever is less, base flood elevation data shall be provided for subdivision and all other proposed development, including manufactured home parks and subdivisions. Any changes or revisions to the flood data adopted herein and shown on the FIRM shall be submitted to FEMA for review as a Conditional Letter of Map Revision (CLOMR) or Conditional Letter of Map Amendment (CLOMA), whichever is applicable. Upon completion of the project, the developer is responsible for submitting the as-built data to FEMA in order to obtain the final LOMR.

5.7. Standard for Critical Facilities

A. Critical facilities shall not be located in the 100-year floodplain or the 500-year floodplain.
B. All ingress and egress from any critical facility must be protected to the 500-year flood elevation.

Section 6. Variance Procedures

6.1. The Planning and Zoning Board as established by [Jurisdiction] of [Jurisdiction] shall hear and decide requests for appeals or variance from the requirements of this ordinance.

6.2. The board shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the [Jurisdiction] or their designee in the enforcement or administration of this ordinance.

6.3. Any person aggrieved by the decision of the Planning and Zoning Board may appeal such decision to the [Jurisdiction] Manager.

6.4. Variances may be issued for the repair or rehabilitation of Historic Structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a Historic Structure and the variance is the minimum to preserve the historic character and design of the structure.

6.5. Variances may be issued for development necessary for the conduct of a functionally dependent use, provided the criteria of this Article are met, no reasonable alternative exists, and the development is protected by methods that minimize flood damage during the base flood create no additional threats to public safety.

6.6. Variances shall not be issued within any designated floodway if ANY increase in flood levels during the base flood discharge would result.

6.7. In reviewing such requests, the Planning and Zoning Board shall consider all technical evaluations, relevant factors, and all standards specified in this and other sections of this ordinance.

6.8. Conditions for Variances:

A. A variance shall be issued ONLY when there is:
   a. a finding of good and sufficient cause;
   b. a determination that failure to grant the variance would result in exceptional hardships; and
   c. a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, increased nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances
B. The provisions of this Ordinance are minimum standards for flood loss reduction; therefore any deviation from the standards must be weighed carefully. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and, in the instance of a Historic Structure, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.
C. Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation of the proposed lowest floor and stating that the cost of flood insurance will be commensurate with the increased risk to life and property resulting from the reduced lowest floor elevation.
D. The [Jurisdiction] shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

6.9. Upon consideration of the factors listed above and the purposes of this ordinance, the Planning and Zoning Board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.

Section 7. Severability

If any section, clause, sentence, or phrase of this Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Ordinance.

ARTICLE VI EROSION AND SEDIMENTATION

Section 1. Title

This ordinance will be known as "The [Jurisdiction] Soil Erosion and Sedimentation Control Ordinance.''

Section 2. Exemptions

This ordinance shall apply to any land-disturbing activity undertaken by any person on any land except for the following

2.1. Surface mining, as the same is defined in O.C.G.A. 12-4-72, "The Georgia Surface Mining Act of 1968".

2.2. Granite quarrying and land clearing for such quarrying;

2.3. Such minor land-disturbing activities as home gardens and individual home landscaping, repairs, maintenance work, fences, and other related activities which result in minor soil erosion;

2.4. The construction of single-family residences, when such construction disturbs less than one (1) acre and is not a part of a larger common plan of development or sale with a planned disturbance of equal to or greater than one (1) acre and not otherwise exempted under this paragraph; provided, however, that construction of any such residence shall conform to the minimum requirements as set forth in O.C.G.A. 12-7-6 and this paragraph. For single-family residence construction covered by the provisions of this paragraph, there shall be a buffer zone between the residence and any state waters classified as trout streams pursuant to Article 2 of Chapter 5 of the Georgia Water Quality Control Act. In any such buffer zone, no land-disturbing activity shall be constructed between the residence and the point where vegetation has been wrested by normal stream flow or wave action from the banks of the trout waters. For primary trout waters, the buffer zone shall be at least 50 horizontal feet, and no variance to a smaller buffer shall be granted. For secondary trout waters, the buffer zone shall be at least 50 horizontal feet, but the Director may grant variances to no less than 25 feet. Regardless of whether a trout stream is primary or secondary, for first order trout waters, which are streams into which no other streams flow except for springs, the buffer shall be at least 25 horizontal feet, and no variance to a smaller buffer shall be granted. The minimum requirements of subsection (b) of O.C.G.A. 12-7-6 and the buffer zones provided by this paragraph shall be enforced by the Local Issuing Authority;

2.5. Agricultural operations as defined in O.C.G.A. 1-3-3, "definitions", to include raising, harvesting or storing of products of the field or orchard; feeding, breeding or managing livestock or poultry; producing or storing feed for use in the production of livestock, including but not limited to cattle, calves, swine, hogs, goats, sheep, and rabbits or for use in the production of poultry, including but not limited to chickens, hens and turkeys; producing plants, trees, fowl, or animals; the production of aqua culture, horticultural, dairy, livestock, poultry, eggs and apiarian products; farm buildings and farm ponds;

2.6. Forestry land management practices, including harvesting; provided, however, that when such exempt forestry practices cause or result in land-disturbing or other activities otherwise prohibited in a buffer, as established in paragraphs (15) and (16) of Section IV C. of this ordinance, no other land-disturbing activities, except for normal forest management practices, shall be allowed on the entire property upon which the forestry practices were conducted for a period of three (3) years after completion of such forestry practices;

2.7. Any project carried out under the technical supervision of the Natural Resources Conservation Service (NRCS) of the United States Department of Agriculture;

2.8. Any project involving less than one (1) acre of disturbed area; provided, however, that this exemption shall not apply to any land-disturbing activity within a larger common plan of development or sale with a planned disturbance of equal to or greater than one (1) acre or within 200 feet of the bank of any state waters, and for purposes of this paragraph, "State Waters" excludes channels and drainage ways which have water in them only during and immediately after rainfall events and intermittent streams which do not have water in them year-round; provided, however, that any person responsible for a project which involves less than one (1) acre, which involves land-disturbing activity, and which is within 200 feet of any such excluded channel or drainage way, must prevent sediment from moving beyond the boundaries of the property on which such project is located and provided, further, that nothing contained herein shall prevent the Local Issuing Authority from regulating any such project which is not specifically exempted by paragraphs 1, 2, 3, 4, 5, 6, 7, 9 or 10 of this section;

2.9. Construction or maintenance projects, or both, undertaken or financed in whole or in part, or both, by the Department of Transportation, the Georgia Highway Authority, or the State Road and Tollway Authority; or any road construction or maintenance project, or both, undertaken by any county or municipality; provided, however, that construction or maintenance projects of the Department of Transportation or the State Road and Tollway Authority which disturb one or more contiguous acres of land shall be subject to provisions of O.C.G.A. 12-7-7.1; except where the Department of Transportation, the Georgia Highway Authority, or the State Road and Tollway Authority is a secondary permittee for a project located within a larger common plan of development or sale under the state general permit, in which case a copy of a notice of intent under the state general permit shall be submitted to the Local Issuing Authority, the Local Issuing Authority shall enforce compliance with the minimum requirements set forth in O.C.G.A. 12-7-6 as if a permit had been issued, and violations shall be subject to the same penalties as violations by permit holders;

2.10. Any land-disturbing activities conducted by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in O.C.G.A. 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission, or distribution of power; except where an electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable

television system as defined in O.C.G.A. 36-18-1, or any agency or instrumentality of the United states engaged in the generation, transmission, or distribution of power is a secondary permittee for a project located within a larger common plan of development or sale under the state general permit, in which case the Local Issuing Authority shall enforce compliance with the minimum requirements set forth in O.C.G.A. 12-7-6 as if a permit had been issued, and violations shall be subject to the same penalties as violations by permit holders; and

2.11. Any public water system reservoir.

Section 3. Minimum Requirements for Erosion, Sedimentation and Pollution Control Using Best Management Practices

3.1. General Provisions

Excessive soil erosion and resulting sedimentation can take place during land-disturbing activities if requirements of the ordinance and the NPDES General Permit are not met. Therefore, plans for those land-disturbing activities which are not exempted by this ordinance shall contain provisions for application of soil erosion, sedimentation and pollution control measures and practices. The provisions shall be incorporated into the erosion, sedimentation and pollution control plans. Soil erosion, sedimentation and pollution control measures and practices shall conform to the minimum requirements of Section 3, 3.2 and 3.3 of this ordinance. The application of measures and practices shall apply to all features of the site, including street and utility installations, drainage facilities and other temporary and permanent improvements. Measures shall be installed to prevent or control erosion, sedimentation and pollution during all stages of any land-disturbing activity in accordance with requirements of this ordinance and the NPDES General Permit.

3.2. Minimum Requirements/BMPs

A. Best management practices as set forth in Section 3, 3.2 and 3.3 of this ordinance shall be required for all land-disturbing activities. Proper design, installation, and maintenance of best management practices shall constitute a complete defense to any action by the Director or to any other allegation of noncompliance with paragraph (2) of this subsection or any substantially similar terms contained in a permit for the discharge of storm water issued pursuant to subsection (f) of O.C.G.A. 12-5-30, the "Georgia Water Quality Control Act". As used in this subsection the terms "proper design" and "properly designed" mean designed in accordance with the hydraulic design specifications contained in the "Manual for Erosion and Sediment Control in Georgia" specified in O.C.G.A. 12-7-6 subsection (b).
B. A discharge of storm water runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation of any land-disturbing permit issued by a local Issuing Authority or of any state general permit issued by the Division pursuant to subsection (f) of O.C.G.A. 12-5-30, the "Georgia Water Quality Control Act", for each day on which such discharge results in the turbidity of receiving waters being increased by more than twenty-five (25) nephelometric turbidity units for waters supporting warm water fisheries or by more than

ten (10) nephelometric turbidity units for waters classified as trout waters. The turbidity of the receiving waters shall be measured in accordance with guidelines to be issued by the Director. This paragraph shall not apply to any land disturbance associated with the construction of single family homes which are not part of a larger common plan of development or sale unless the planned disturbance for such construction is equal to or greater than five (5) acres.

C. Failure to properly design, install, or maintain best management practices shall constitute a violation of any land- disturbing permit issued by a Local Issuing Authority or of any state general permit issued by the Division pursuant to subsection (f) of Code Section 12-5-30, the "Georgia Water Quality Control Act", for each day on which such failure occurs.
D. The Director may require, in accordance with regulations adopted by the Board, reasonable and prudent monitoring of the turbidity level of receiving waters into which discharges from land disturbing activities occur.

3.3. The rules and regulations, ordinances, or resolutions adopted pursuant to O.C.G.A. 12-7-1 et. seq. for the purpose of governing land-disturbing activities shall require, as a minimum, protections at least as stringent as the state general permit; and best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the *Manual for Erosion and Sediment Control in Georgia* published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, as well as the following:

A. Stripping of vegetation, regrading and other development activities shall be conducted in a manner so as to minimize erosion;
B. Cut-fill operations must be kept to a minimum;
C. Development plans must conform to topography and soil type so as to create the lowest practicable erosion potential;
D. Whenever feasible, natural vegetation shall be retained, protected and supplemented;
E. The disturbed area and the duration of exposure to erosive elements shall be kept to a practicable minimum;
F. Disturbed soil shall be stabilized as quickly as practicable;
G. Temporary vegetation or mulching shall be employed to protect exposed critical areas during development;
H. Permanent vegetation and structural erosion control practices shall be installed as soon as practicable;
I. To the extent necessary, sediment in run-off water must be trapped by the use of debris basins, sediment basins, silt traps, or similar measures until the disturbed area is stabilized. As used in this paragraph, a disturbed area is stabilized when it is brought to a condition of continuous compliance with the requirements of O.C.G.A. 12-7-1 et. seq.;
J. Adequate provisions must be provided to minimize damage from surface water to the cut face of excavations or the sloping of fills;
K. Cuts and fills may not endanger adjoining property;

L. Fills may not encroach upon natural watercourses or constructed channels in a manner so as to adversely affect other property owners;

M. Grading equipment must cross flowing streams by means of bridges or culverts except when such methods are not feasible, provided, in any case, that such crossings are kept to a minimum;

N. Land-disturbing activity plans for erosion, sedimentation and pollution control shall include provisions for treatment or control of any source of sediments and adequate sedimentation control facilities to retain sediments on-site or preclude sedimentation of adjacent waters beyond the levels specified in Section 3, 3.2 (B). of this ordinance;

O. Except as provided in paragraph (P) of this subsection, there is established a 25 foot buffer along the banks of all state waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, except where the Director determines to allow a variance that is at least as protective of natural resources and the environment, where otherwise allowed by the Director pursuant to O.C.G.A. 12-2-8, where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated in the project plans and specifications, and are implemented; or along any ephemeral stream. As used in this provision, the term 'ephemeral stream' means a stream: that under normal circumstances has water flowing only during and for a short duration after precipitation events; that has the channel located above the ground-water table year round; for which ground water is not a source of water; and for which runoff from precipitation is the primary source of water flow, Unless exempted as along an ephemeral stream, the buffers of at least 25 feet established pursuant to part 6 of Article 5, Chapter 5 of Title 12, the "Georgia Water Quality Control Act", shall remain in force unless a variance is granted by the Director as provided in this paragraph. The following requirements shall apply to any such buffer:

    1. No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; and

    2. The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented: (i) Stream crossings for water lines; or (ii) Stream crossings for sewer lines.

P. There is established a 50 foot buffer as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any state waters classified as "trout streams" pursuant to Article 2 of Chapter 5 of Title 12, the "Georgia Water Quality Control Act", except where a roadway drainage structure must be constructed ; provided, however, that small springs and streams classified as trout streams which discharge an average annual flow of 25 gallons per minute or less shall have a 25 foot buffer or they may be piped, at the discretion of the landowner, pursuant to the terms of a rule providing for a general variance promulgated by the Board, so long as any such pipe stops short of the downstream landowner's property and the landowner complies with the buffer requirement for any adjacent trout streams. The Director may grant a variance from such buffer to allow land-disturbing activity, provided that adequate erosion control measures are incorporated in the project plans and specifications and are implemented. The following requirements shall apply to such buffer:

1. No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed: provided, however, that any person constructing a single–family residence, when such residence is constructed by or under contract with the owner for his or her own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; and
2. The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented: (i) Stream crossings for water lines; or (ii) Stream crossings for sewer lines.

Q. There is established a 25 foot buffer along all coastal marshlands as measured horizontally from the delineated boundary of jurisdictional marshlands. The following requirements shall apply to any such buffer:

1. No land-disturbing activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed state of vegetation until all land-disturbing activities on the construction site are completed. Once the final stabilization of the site is achieved, a buffer may be thinned or trimmed of vegetation as long as a protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; provided, however, that any person constructing a single-family residence, when such residence is constructed by or under contract with the owner for his or her

own occupancy, may thin or trim vegetation in a buffer at any time as long as protective vegetative cover remains to protect water quality and aquatic habitat and a natural canopy is left in sufficient quantity to keep shade on the stream bed; and

2. The buffer shall not apply to the following land-disturbing activities, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures are incorporated into the project plans and specifications and are implemented: (i) Stream crossings for water lines; or (ii) Stream crossings for sewer lines.

3.4. Nothing contained in O.C.G.A. 12-7-1 et. seq. shall prevent any Local Issuing Authority from adopting rules and regulations, ordinances, or resolutions which contain stream buffer requirements that exceed the minimum requirements in Section IV B. & C. of this ordinance.

3.5. The fact that land-disturbing activity for which a permit has been issued results in injury to the property of another shall neither constitute proof of nor create a presumption of a violation of the standards provided for in this ordinance or the terms of the permit.

3.6. There remains, under this ordinance, a riparian buffer 25ft inland of the marsh jurisdictional boundary, including the boundary line itself, regardless of any past, present, future installations including landscape alterations, in the buffer whether permitted or not.

Section 4. Application/Permit Process

4.1. General

The property owner, developer and designated planners and engineers shall design and review before submittal the general development plans. The Local Issuing Authority shall review the tract to be developed and the area surrounding it. They shall consult the zoning ordinance, storm water management ordinance, subdivision ordinance, flood damage prevention ordinance, this ordinance, and any other ordinances, rules, regulations or permits, which regulate the development of land within the jurisdictional boundaries of the Local Issuing Authority. However, the owner and/or operator are the only parties who may obtain a permit.

4.2. Application Requirements

A. No person shall conduct any land-disturbing activity within the jurisdictional boundaries of [Jurisdiction] without first obtaining a permit from the [Jurisdiction] to perform such activity and providing a copy of Notice of Intent submitted to EPD if applicable.

B. The application for a permit shall be submitted to the [Jurisdiction] and must include the applicant's erosion and sedimentation control plan with supporting data, as necessary. Said plans shall include, as a minimum, the data specified in Section 4.3 of this ordinance. Erosion, sedimentation and pollution control plans, together with supporting data, must demonstrate affirmatively that the land disturbing activity proposed will be

carried out in such a manner that the provisions of Section 3 of this ordinance will be met. Applications for a permit will not be accepted unless accompanied by [2] copies of the applicant's erosion, sedimentation and pollution control plans. All applications shall contain a certification stating that the plan preparer or the designee thereof visited the site prior to creation of the plan in accordance with EPD Rule 391-3-7-.10.

C. In addition to the local permitting fees, fees will also be assessed pursuant to paragraph (5) subsection (a) of O.C.G.A. 12-5-23, provided that such fees shall not exceed $80.00 per acre of land-disturbing activity, and these fees shall be calculated and paid by the primary permittee as defined in the state general permit for each acre of land-disturbing activity included in the planned development or each phase of development. All applicable fees shall be paid prior to issuance of the land disturbance permit. In a jurisdiction that is certified pursuant to subsection (a) of O.C.G.A. 12-7-8 half of such fees levied shall be submitted to the Division; except that any and all fees due from an entity which is required to give notice pursuant to paragraph (9) or (10) of O.C.G.A. 12-7-17 shall be submitted in full to the Division, regardless of the existence of a Local Issuing Authority in the jurisdiction.

D. Immediately upon receipt of an application and plan for a permit, the Local Issuing Authority shall refer the application and plan to the District for its review and approval or disapproval concerning the adequacy of the erosion, sedimentation and pollution control plan. The District shall approve or disapprove a plan within 35 days of receipt. Failure of the District to act within 35 days shall be considered an approval of the pending plan. The results of the District review shall be forwarded to the Local Issuing Authority. No permit will be issued unless the plan has been approved by the District, and any variances required by Section 3, 3.3 (O) and (P) has been obtained, all fees have been paid, and bonding, if required as per Section 4, 4.4 (F), have been obtained. Such review will not be required if the Local Issuing Authority and the District have entered into an agreement which allows the Local Issuing Authority to conduct such review and approval of the plan without referring the application and plan to the District. The Local Issuing Authority with plan review authority shall approve or disapprove a revised Plan submittal within 35 days of receipt. Failure of the Local Issuing Authority with plan review authority to act within 35 days shall be considered an approval of the revised Plan submittal.

E. If a permit applicant has had two or more violations of previous permits, this ordinance section, or the Erosion and Sedimentation Act, as amended, within three years prior to the date of filing the application under consideration, the Local Issuing Authority may deny the permit application.

F. The Local Issuing Authority may require the permit applicant to post a bond in the form of government security, cash, irrevocable letter of credit, or any combination thereof up to, but not exceeding, [$3,000.00] per acre or fraction thereof of the proposed land-disturbing activity, prior to issuing the permit. If the applicant does not comply with this section or with the conditions of the permit after issuance, the Local Issuing Authority may call the bond or any part thereof to be forfeited and may use the proceeds to hire a contractor to stabilize the site of the land-disturbing activity and bring it into compliance. These provisions shall not apply unless there is in effect an ordinance or statute specifically providing for hearing and judicial review of any determination or order of the Local Issuing Authority with respect to alleged permit violations.

4.3. Plan Requirements

A. Plans must be prepared to meet the minimum requirements as contained in Section 3 of this ordinance or through the use of more stringent, alternate design criteria which conform to sound conservation and engineering practices. The *Manual for Erosion and Sediment Control in Georgia* is hereby incorporated by reference into this ordinance. The plan for the land-disturbing activity shall consider the interrelationship of the soil types, geological and hydrological characteristics, topography, watershed, vegetation, proposed permanent structures including roadways, constructed waterways, sediment control and storm water management facilities, local ordinances and State laws. Maps, drawings and supportive computations shall bear the signature and seal of the certified design professional. Persons involved in land development design, review, permitting, construction, monitoring, or inspections or any land disturbing activity shall meet the education and training certification requirements, dependent on his or her level of involvement with the process, as developed by the Commission and in consultation with the Division and the Stakeholder Advisory Board created pursuant to O.C.G.A. 12-7-20.
B. Data Required for Site Plan shall include all the information required from the appropriate Erosion, Sedimentation and Pollution Control Plan Review Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted.

4.4. Permits

A. Permits shall be issued or denied as soon as practicable but in any event not later than forty-five (45) days after receipt by the Local Issuing Authority of a completed application, providing variances and bonding are obtained, where necessary and all applicable fees have been paid prior to permit issuance. The permit shall include conditions under which the activity may be undertaken.
B. No permit shall be issued by the Local Issuing Authority unless the erosion, sedimentation and pollution control plan has been approved by the District and the Local Issuing Authority has affirmatively determined that the plan is in compliance with this ordinance, any variances required by Section 3, 3.3 (O) and (P). are obtained, bonding requirements, if necessary, as per Section 4, 4.4 (F) are met and all ordinances and rules and regulations in effect within the jurisdictional boundaries of the Local Issuing Authority are met. If the permit is denied, the reason for denial shall be furnished to the applicant.
C. Any land-disturbing activities by a local issuing authority shall be subject to the same requirements of this ordinance, and any other ordinances relating to land development, as are applied to private persons and the division shall enforce such requirements upon the local issuing authority.
D. If the tract is to be developed in phases, then a separate permit shall be required for each phase.
E. The permit may be suspended, revoked, or modified by the Local Issuing Authority, as to all or any portion of the land affected by the plan, upon finding that the holder or his successor in the title is not in compliance with the approved erosion and sedimentation

control plan or that the holder or his successor in title is in violation of this ordinance. A holder of a permit shall notify any successor in title to him as to all or any portion of the land affected by the approved plan of the conditions contained in the permit.

F. The LIA may reject a permit application if the applicant has had two or more violations of previous permits or the Erosion and Sedimentation Act permit requirements within three years prior to the date of the application, in light of O.C.G.A. 12-7-7 (f) (1).

Section 5. Inspection and Enforcement

5.1. The [Jurisdiction] will periodically inspect the sites of land-disturbing activities for which permits have been issued to determine if the activities are being conducted in accordance with the plan and if the measures required in the plan are effective in controlling erosion and sedimentation. Also, the Local Issuing Authority shall regulate both primary and secondary permittees as such terms are defined in the state general permit. Primary permittees shall be responsible for installation and maintenance of best management practices where the primary permittee is conducting land-disturbing activities. Secondary permittees shall be responsible for installation and maintenance of best management practices where the secondary permittee is conducting land-disturbing activities. If, through inspection, it is deemed that a person engaged in land-disturbing activities as defined herein has failed to comply with the approved plan, with permit conditions, or with the provisions of this ordinance, a written notice to comply shall be served upon that person. The notice shall set forth the measures necessary to achieve compliance and shall state the time within which such measures must be completed. If the person engaged in the land-disturbing activity fails to comply within the time specified, he shall be deemed in violation of this ordinance.

5.2. The [Jurisdiction] shall have the power to conduct such investigations as it may reasonably deem necessary to carry out duties as prescribed in this ordinance, and for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigation and inspecting the sites of land-disturbing activities.

5.3. No person shall refuse entry or access to any authorized representative or agent of the Issuing Authority, the Commission, the District, or Division who requests entry for the purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper or interfere with any such representative while in the process of carrying out his official duties.

5.4. The District or the Commission or both shall semi-annually review the actions of counties and municipalities which have been certified as Local Issuing Authorities pursuant to O.C.G.A. 12-7-8 (a). The District or the Commission or both may provide technical assistance to any county or municipality for the purpose of improving the effectiveness of the county's or municipality's erosion, sedimentation and pollution control program. The District or the Commission shall notify the Division and request investigation by the Division if any deficient or ineffective local program is found.

5.5. The Division may periodically review the actions of counties and municipalities which have been certified as Local Issuing Authorities pursuant to Code Section 12-7-8 (a). Such review may include, but shall not be limited to, review of the administration and enforcement of a governing authority's ordinance and review of conformance with an agreement, if any, between the district and the governing authority. If such review indicates that the governing authority of any county or municipality certified pursuant to O.C.G.A. 12-7-8 (a) has not administered or enforced its ordinances or has not conducted the program in accordance with any agreement entered into pursuant to O.C.G.A. 12-7-7 (e), the Division shall notify the governing authority of the county or municipality in writing. The governing authority of any county or municipality so notified shall have 90 days within which to take the necessary corrective action to retain certification as a Local Issuing Authority. If the county or municipality does not take necessary corrective action within 90 days after notification by the division, the division shall revoke the certification of the county or municipality as a Local Issuing Authority.

Section 6. Penalties and Incentives

6.1. Failure to Obtain a Permit for Land-disturbing Activity

If any person commences any land-disturbing activity requiring a land-disturbing permit as prescribed in this ordinance without first obtaining said permit, the person shall be subject to revocation of his business license, work permit or other authorization for the conduct of a business and associated work activities within the jurisdictional boundaries of the Issuing Authority.

6.2. Stop-work Orders

A. For the first and second violations of the provisions of this ordinance, the Director or the Local Issuing Authority shall issue a written warning to the violator. The violator shall have five days to correct the violation. If the violation is not corrected within five days, the Director or the Local Issuing Authority shall issue a stop-work order requiring that land-disturbing activities be stopped until necessary corrective action or mitigation has occurred; provided, however, that, if the violation presents an imminent threat to public health or waters of the state or if the land-disturbing activities are conducted without obtaining the necessary permit, the Director or the Local Issuing Authority shall issue an immediate stop-work order in lieu of a warning;
B. For a third and each subsequent violation, the Director or the Local Issuing Authority shall issue an immediate stop-work order; and;
C. All stop-work orders shall be effective immediately upon issuance and shall be in effect until the necessary corrective action or mitigation has occurred.
D. When a violation in the form of taking action without a permit, failure to maintain a stream buffer, or significant amounts of sediment, as determined by the Local Issuing Authority or by the Director or his or her Designee, have been or are being discharged into state waters and where best management practices have not been properly designed, installed, and maintained, a stop work order shall be issued by the Local Issuing

Authority or by the Director or his or her Designee. All such stop work orders shall be effective immediately upon issuance and shall be in effect until the necessary corrective action or mitigation has occurred. Such stop work orders shall apply to all land-disturbing activity on the site with the exception of the installation and maintenance of temporary or permanent erosion and sediment controls.

6.3. Bond Forfeiture

If, through inspection, it is determined that a person engaged in land-disturbing activities has failed to comply with the approved plan, a written notice to comply shall be served upon that person. The notice shall set forth the measures necessary to achieve compliance with the plan and shall state the time within which such measures must be completed. If the person engaged in the land-disturbing activity fails to comply within the time specified, he shall be deemed in violation of this ordinance and, in addition to other penalties, shall be deemed to have forfeited his performance bond, if required to post one under the provisions of Section 4.2. The Issuing Authority may call the bond or any part thereof to be forfeited and may use the proceeds to hire a contractor to stabilize the site of the land-disturbing activity and bring it into compliance.

6.4. Monetary Penalties

Any person who violates any provisions of this ordinance, or any permit condition or limitation established pursuant to this ordinance, or who negligently or intentionally fails or refuses to comply with any final or emergency order of the Director issued as provided in this ordinance shall be liable for a civil penalty not to exceed $2,500.00 per day. For the purpose of enforcing the provisions of this ordinance, notwithstanding any provisions in any [Jurisdiction] charter to the contrary, municipal courts shall be authorized to impose penalty not to exceed $2,500.00 for each violation. Notwithstanding any limitation of law as to penalties which can be assessed for violations of [Jurisdiction] ordinances, any magistrate court or any other court of competent jurisdiction trying cases brought as violations of this ordinance under [Jurisdiction] ordinances approved under this ordinance shall be authorized to impose penalties for such violations not to exceed $2,500.00 for each violation. Each day during which violation or failure or refusal to comply continues shall be a separate violation.

Section 7. Education and Certification

7.1. Persons involved in land development design, review, permitting, construction, monitoring, or inspection or any land-disturbing activity shall meet the education and training certification requirements, dependent on their level of involvement with the process, as developed by the commission in consultation with the division and the stakeholder advisory board created pursuant to O.C.G.A. 12-7-20.

7.2. For each site on which land-disturbing activity occurs, each entity or person acting as either a primary, secondary, or tertiary permittee, as defined in the state general permit, shall have as a minimum one person who is in responsible charge of erosion and sedimentation control activities on behalf of said entity or person and meets the applicable education or training certification requirements developed by the Commission present on site whenever land-disturbing activities are conducted on that site. A project site shall herein be defined as any land-disturbance site or multiple

sites within a larger common plan of development or sale permitted by an owner or operator for compliance with the state general permit.

7.3. Persons or entities involved in projects not requiring a state general permit but otherwise requiring certified personnel on site may contract with certified persons to meet the requirements of this ordinance.

7.4. If a state general permittee who has operational control of land-disturbing activities for a site has met the certification requirements of paragraph (1) of subsection (b) of O.C.G.A. 12-7-19, then any person or entity involved in land-disturbing activity at that site and operating in a subcontractor capacity for such permittee shall meet those educational requirements specified in paragraph (4) of subsection (b) of O.C.G.A 12-7-19 and shall not be required to meet any educational requirements that exceed those specified in said paragraph.

Section 8. Administrative Appeal, Judicial Review

8.1. Administrative Remedies

The suspension, revocation, modification or grant with condition of a permit by the Issuing Authority upon finding that the holder is not in compliance with the approved erosion and sediment control plan; or that the holder is in violation of permit conditions; or that the holder is in violation of any ordinance; shall entitle the person submitting the plan or holding the permit to a hearing before the [Jurisdiction] Council within [thirty 30] days after receipt by the Issuing Authority of written notice of appeal.

8.2. Judicial Review

Any person, aggrieved by a decision or order of the District, after exhausting his administrative remedies, shall have the right to appeal denovo to the Court of [Jurisdiction] .

Section 9. Effectiveness, Validity and Liability

9.1. Effectiveness

This ordinance shall become effective upon adoption by the [Jurisdiction Council or Commission].

9.2. Validity

If any section, paragraph, clause, phrase, or provision of this ordinance shall be adjudged invalid or held unconstitutional, such decisions shall not affect the remaining portions of this ordinance.

9.3. Liability

A. Neither the approval of a plan under the provisions of this ordinance, nor the compliance with provisions of this ordinance shall relieve any person from the responsibility for damage to any person or property otherwise imposed by law nor impose any liability upon the District for damage to any person or property.

B. The fact that a land-disturbing activity for which a permit has been issued results in injury to the property of another shall neither constitute proof of nor create a presumption of a violation of the standards provided for in this ordinance or the terms of the permit.
C. No provision of this ordinance shall permit any persons to violate the Georgia Erosion and Sedimentation Act of 1975, the Georgia Water Quality Control Act or the rules and regulations promulgated and approved there under or pollute any Waters of the State as defined thereby.

ARTICLE VII PART V ENIVRONMENTAL PROTECTION CRITERIA

Section 1. Groundwater Recharge Area Protection

The following criteria pursuant to O.C.G.A. 12-2-8 shall apply in significant recharge areas:

1.1. New above-ground chemical or petroleum storage tanks, having a minimum volume of 660 gallons, shall have secondary containment for 110% of the volume of such tanks or 110% of the volume of the largest tank in a cluster of tanks. (Note: These figures are consistent with US EPA rules for oil pollution prevention, 40 CFR 112.1). Such tanks used for agricultural purposes are exempt, provided they comply with all Federal requirements.

1.2. New agricultural waste impoundment sites shall be lined if they are within:

A. A high pollution susceptibility area;
B. A medium pollution susceptibility area and exceed 15 acre-feet;
C. A low pollution susceptibility area and exceed 50 acre-feet.

As a minimum, the liner shall be constructed of compacted clay having a thickness of one-foot and a vertical hydraulic conductivity of less than 5 x 10-7 cm/sec or other criteria established by the U.S. Soil Conservation Service. (The average size of existing agricultural waste impoundments in Georgia is about 15 acre-feet; sheepsfoot rollers or pans with heavy rubber tires, which are normal equipment for most Georgia earth moving contractors, should be able to compact clay to the recommended vertical hydraulic conductivity.)

1.3. New homes served by septic tank/drain field systems shall be on lots having the following minimum size limitations as identified on Table MT-1 of the Department of Human Resources' Manual for On-Site Sewage Management Systems (hereinafter "DHR Table MT-1"):

A. 150% of the subdivision minimum lot size of DHR Table MT-1 if they are within a high pollution susceptibility area;
B. 125% of the subdivision minimum lot size of DHR Table MT-1 if they are within a medium pollution susceptibility area;
C. 110% of the subdivision minimum lot size of DHR Table MT-1 if they are within a low pollution susceptibility area.

1.4. New mobile home parks served by septic tank/drain field systems shall have lots or spaces having the following size limitation as identified on Table MT-2 of the Department of Human Resources' Manual for On-Site Sewage Management Systems (hereinafter "DHR Table MT-2"):

A. 150% of the subdivision minimum lot or space size of DHR Table MT-2 if they are within a high pollution susceptibility area;

B. 125% of the subdivision minimum lot or space size of DHR Table MT-2 if they are within a medium pollution susceptibility area;
C. 110% of the subdivision minimum lot or space size of DHR Table MT-2 if they are within a low pollution susceptibility area.

1.5. No construction may proceed on a building or mobile home to be served by a septic tank unless the county health department first approves the proposed septic tank installation as meeting the requirements of the DHR Manual and 1.3 and 1.4.

1.6. New facilities which handle hazardous materials, of types and in amounts determined by Department of Natural Resources, shall perform their operations on impermeable surfaces having spill and leak collection systems, as prescribed by Department of Natural Resources.

1.7. Permanent storm water infiltration basins shall not be constructed in areas having high pollution susceptibility.

1.8. Exclusive of mining settling basins, new wastewater treatment basins shall have an impermeable liner in areas having high pollution susceptibility.

Section 2. River Corridor Protection

2.1. Definition

River corridors are the strips of land that flank major rivers in Georgia. These corridors are of vital importance to Georgia in that they help preserve those qualities that make a river suitable as a habitat for wildlife, a site for recreation, and a source for clean drinking water. River corridors also allow the free movement of wildlife from area to area within the state, help control erosion and river sedimentation, and help absorb flood waters.

2.2. Applicability

Section 12-2-8 (as amended) of Article 1, Chapter 2, Title 12 of the Official Code of Georgia Annotated (O.C.G.A.) authorizes the Department of Natural Resources (DNR) to develop minimum planning standards and procedures for the protection of river corridors in the state, and requires local governments to use these minimum standards in developing and implementing local comprehensive plans. The method mandated in O.C.G.A. 12-2-8 for the protection of river corridors is the establishment of natural vegetative buffer area bordering each protected river. Standards and requirements established in the Metropolitan Rivers Protection Act and the Erosion and Sedimentation Act are not superseded by River Corridor standards.

2.3. Protection Standard

These minimum planning standards and procedures shall hereby apply within the 100 foot buffer, as applied from the centerline of any waterway, with flow of 400 cfs or greater.

2.4. Protection Criteria

A. This ordinance allows for the maintenance of a natural vegetative buffer except as otherwise provided herein.
B. The ordinance shall not prohibit the building of single-family dwellings, including the usual appurtenances, within the buffer area, subject to the following conditions:
    a. The dwelling shall be in compliance with all local zoning regulations.
    b. The dwelling shall be located on a tract of land containing at least two acres. For the purposes of these standards, the size of the tract of land shall not include any area that lies within the protected river (that is, for tracts of land that include portions of a protected river, the area between the river banks cannot be counted towards the two acre minimum size).
    c. There shall be only one such dwelling on each two-acre or larger tract of land.
    d. A septic tank or tanks serving such a dwelling may be located within the buffer area.
    e. Septic tank drainfields shall not be located within the buffer area.
C. Within a river corridor, industrial and commercial land uses existing prior to adoption of this ordinance are exempt from these criteria provided that:
    a. Industrial and commercial uses of river corridors shall not impair the drinking quality of the river water; and
    b. Industrial and commercial activity within the river corridor shall meet all state and federal environmental rules and regulations.
D. Except as expressly provided for under these criteria (dealing with single-family dwellings within the river corridor), septic tanks and septic tank drainfields are prohibited within river corridors.
E. This ordinance allows for the construction of road crossings and utility crossings of river corridors, provided that construction of such road and utility crossings shall meet all requirements of the Erosion and Sedimentation Control Act of 1975, and of any applicable local ordinances on soil erosion and sedimentation control.
F. The following uses of river corridors are acceptable, provided that such uses do not impair the long-term functions of the protected river or the river corridor:
    a. Timber production and harvesting, subject to the following conditions:
        i. Forestry activity shall be consistent with best management practices established by the Georgia Forestry Commission; and
        ii. Forestry activity shall not impair the drinking quality of the river water as defined by the federal Clean Water Act, as amended.
    b. Wildlife and fisheries management activities consistent with the purposes of O.C.G.A. 12-2-8.
    c. Waste-water treatment.
    d. Recreational usage consistent either with the maintenance of a natural vegetative buffer or with river-dependent recreation. For example, a boat ramp would be consistent with this criterion but a hard-surface tennis court would not. Parking lots are not consistent with this criterion. Paths and walkways within the river corridor are consistent with this criterion.
    e. Natural water quality treatment or purification.

f. Agricultural production and management, subject to the following conditions:
    i. Agricultural activity shall be consistent with best management practices established by the Georgia Soil and Water Conservation Commission;
    ii. Agricultural activity shall not impair the drinking quality of the river water as defined by the federal Clean Water Act, as amended; and
    iii. Agricultural activity shall be consistent with all state and federal laws, and all regulations promulgated by the Georgia Department of Agriculture.
g. Other uses permitted by the Department of Natural Resources or under Section 404 of the Clean Water Act.

G. Handling areas for the receiving and storage of hazardous waste are prohibited within river corridors. Port facilities are exempt from this criterion provided that:
    a. Port facilities shall meet all federal and state laws and regulations for the handling and transport of hazardous waste.
    b. Port facilities handling hazardous waste shall perform their operations on impermeable surfaces having spill and leak protection systems as prescribed by the Department of Natural Resources. (Note: this is the same criterion as set in the Department of Natural Resources Criteria for Water-Supply Watersheds for facilities which handle hazardous materials.)

H. Hazardous waste or solid waste landfills are prohibited within river corridors.

I. Other uses unapproved by local governments shall not be acceptable within river corridors.

J. The following uses are exempt from the requirements of this ordinance:
    a. Land uses existing prior to the promulgation of a River Corridor Protection Plan.
    b. Mining activities, if permitted by the Department of Natural Resources pursuant to the Georgia Surface Mining Act of 1968, as amended.
    c. Utilities, if such utilities cannot feasibly be located outside the buffer area (feasibility shall be decided conservatively by the [Administrator], provided that:
        i. The utilities shall be located as far from the river bank as reasonably possible;
        ii. Installation and maintenance of the utilities shall be such as to protect the integrity of the buffer area as well as is reasonably possible; and
        iii. Utilities shall not impair the drinking quality of the river water.
    d. Specific forestry and agricultural activities except as specifically referenced within this article.

G. The natural vegetative buffer shall be restored as quickly as possible following any land-disturbing activity within the river corridor.

H. Except as noted above, all construction within the buffer area shall be prohibited.

Section 3. Enforcement

3.1. Penalties

The enforcement actions and penalties associated with non-conformance with the provisions (beyond permit suspension and/or revocation) are outlined herein. The penalties described

below are not to be deemed all inclusive since the State and/or Federal agencies reserve the right to pursue action against the applicant independent of the [Jurisdiction].

A. When a building or other structure has been constructed in violation of the provisions of this Article, the applicant may be required to remove the structure.
B. When removal of vegetative cover, and/or excavation or fill has taken place in violation of this Article and/or the approved permit, the applicant may be required to restore the affected land to its original condition to the extent practicable.
C. If a representative of the County discovers a violation of this Article that also constitutes a violation of any provision of the Clean Water Act as amended, the County shall issue written notification of the violation first to the applicant and then to the U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers, and the Georgia DNR.

Section 4. Appeals.

Any party who feels aggrieved by a decision(s) set forth in this Article, may appeal the decision(s) to the [Administrator] to seek relief.

A. Jurisdiction. All final decisions of the [Administrator] concerning denial, approval, conditional approval, suspension or revocation of a development permit shall be reviewed by a court of the appropriate authority to hear such action.
B. Alternative Actions. Based on these proceedings and the decision of the court, the [Administrator] may, within the time specified by the State Court, elect to:
    a. Approve the permit application with lesser restrictions or conditions (i.e., grant a variance); or
    b. Institute other appropriate actions ordered by the court.

ARTICLE VIII Protection of Open Waters, Streams, and Wetlands

Section 1. Findings of Fact

1.1. Open waters such as ponds, lakes and rivers provide valuable commercial and recreational values for the citizens of [Jurisdiction] in the form of fishing, boating, and transportation. These waters also provide valuable habitat for fish and wildlife.

1.2. Streams serve valuable functions in collecting rain water and transporting it to open waters downstream. The organisms in both intermittent and perennial streams also provide a critical role in breaking down organic matter and freeing nutrients that can then be used throughout the food chain.

1.3. Wetlands are perhaps the most important waters addressed in this article. These waters store flood waters, collect sediment, improve water quality by filtering out pollutants, and provide habitat for fish and wildlife. [Jurisdiction] is dependent on wetlands to help protect it from floods, provide a clean drinking water supply, and help ensure a healthy environment.

1.4. Open waters, streams, and wetlands are being excavated, filled, piped, and dredged at an unsustainable rate in this county. A particularly harmful trend is emerging that residential and commercial developments have been constructed in so-called "isolated wetlands." Such practices can lead to flooding and settling problems.

1.5. While the Federal Clean Water Act Section 404 regulatory which is administered by the Army Corps of Engineers does regulate dredging and filling activities in waters of the United States, it does not cover waters that do not have any connection to interstate commerce. These "isolated waters" are not subject to regulation under the CWA.

1.6. The Federal Clean Water Act also does not regulate certain ditching and excavation activities in waters of United States as long as those activities do not involve the redeposit of dredged or fill material into waters of the United States. Such activities can have as destructive an impact on the waters of the County as the dredging and filling activities regulated by the CWA.

1.7. The [Jurisdiction] economy depends on a healthy environment. Open waters, streams and wetlands are indispensable natural resources, yet they are threatened by poor development practices. The long-term sustainability of [Jurisdiction] depends on protecting our natural resources such as these waters.

Section 2. Purpose

2.1. It is the purpose of this article to ensure that the open waters, streams, and wetlands in [Jurisdiction] are properly managed so that they can continue to serve their functions

that are so vital to the economic, environmental, and social well-being of this [Jurisdiction].

Section 3. Waters and Activities Covered

3.1. In addition to covering waters of the United States, which are also regulated by the Corps under the Clean Water Act, this article covers those waters of the County that are not considered waters of the United States, such as so-called "isolated waters."

3.2. This article also covers activities such as the draining, ditching, pumping, and excavation of all waters of the County. In certain situations, such activities are not regulated by the Army Corps of Engineer.

Section 4. Adoption of National Wetlands Inventory Map by Reference

4.1. Under this article [Jurisdiction] adopts by reference those sections of the current NWI Map that cover all portions of [Jurisdiction] (together with any explanatory material on those sections), and make these sections part of this Article as if fully set forth in the article.

Section 5. Determination of Need

5.1. An applicant for a [Jurisdiction] land disturbance permit is not required to submit an accompanying Article VIII Permit if the applicant can provide either of the following:

A. An NWI Map for the site of the land disturbance that shows that there are no open waters, stream, or wetlands on the site;

B. A delineation of all waters of the [Jurisdiction] on the site that clearly shows that such waters will not be degraded or destroyed by the land disturbance activity or any structures built as part of the proposed project;

5.2. Even though an applicant is able to show by producing an NWI Map that there are no waters of the [Jurisdiction] on the site, the applicant should consult with the Army Corps of Engineers if there are any wetlands on the site not shown on the NWI map. NWI Maps do not reveal wetlands that are less than an acre in size. The applicant may still have to seek authorization from Army Corps of Engineers to degrade or destroy any waters of the United States that are on the site and that are less than one acre in size.

5.3. For those sites involving the proposed degradation or destruction of waters protected under this article, the [Jurisdiction] cannot issue a final land disturbance permit until the [Jurisdiction] has issued an Article VIII Permit.

Section 6. Article VIII Permit Requirements

6.1. To obtain an Article VIII Permit, the applicant must first demonstrate that there are no practicable alternatives to degrading or destroying a water of the [Jurisdiction]. If the applicant succeeds in making this demonstration, it must then demonstrate ways in which the harm to the waters could be minimized to the maximum extent practicable. Finally, the applicant must then provide a mitigation plan for all harm to water of the [Jurisdiction] that could not be avoided or minimized.

6.2. All remaining harm to waters of the [Jurisdiction] must be mitigated through the purchase of mitigation credits in a wetlands mitigation bank or a stream mitigation bank that offers credits that would compensate for the wetlands or stream functions and values that will be lost through the construction of the proposed project. The site must be located in the primary or secondary service areas of any mitigation bank used.

6.3. If no mitigation credits of a suitable type are available, the applicant may purchase credits from the Georgia Land Trust Service Center's In-Lieu-Fee Program under the understanding that the resources purchased through the program will be purchased in the same watershed as the resources that will be lost as a result of the proposed project.

6.4. To calculate the number of mitigation bank or in-lieu-fee credits will be needed to compensate for the functions and values lost due to the proposed project, the applicant will use the Army Corps of Engineers Savannah District's Standard Operating Procedures for calculating such credits. Such calculations must be certified by a certified wetland scientist and verified by the [Jurisdiction].

6.5. The [Jurisdiction] can issue a conditional Article VIII Permit for those waters covered by an application for a Section 404 Permit. Such an Article VIII Permit will adopt the terms and conditions of the final Section 404 Permit once it is issued. The Article VIII Permit can also include additional waters of the [Jurisdiction] not covered by the Section 404 permit, as well as additional activities impacting waters of the [Jurisdiction] that are not covered by the Section 404 Permit.

6.6. Before the applicant begins any land disturbing activities on the site, it must provide the [Jurisdiction] with proof that the applicant has purchased the necessary mitigation credits.

Section 7. Article VIII Permit Application Procedure

7.1. 8.1 Article VIII Permit Application must include the following:

A. A complete copy of any Section 404 Permit application for any Section 404 permit that the applicant is seeking for activities on the site as well as any permit that has been issued by the Corps in response to that application.

B. A site plan drawn at a scale of 1" = 50' showing the proposed activity as well as all planned dredging, excavation and fill details. The boundaries of all waters of the United States and all waters of the [Jurisdiction] must be drawn on the site plan.

C. A narrative of all efforts to ensure that there are no practicable alternatives available to avoid the degradation and/or destruction of any waters of the [Jurisdiction]. The narrative must also include how such impacts to waters of the [Jurisdiction] have been minimized to the maximum extent practicable, and how all unavoidable harm to waters has been mitigated. This narrative does not have to include any waters covered by a Section 404 permit application.

D. A completed Corps Standard Operating Procedure form showing the number of credits required through a mitigation bank or the in-lieu-fee program. This SOP must be certified by a certified wetland specialist.

Section 8. Enforcement

8.1. The following actions and penalties may be applied to applicants that violate the provisions of this article:

A. The [Jurisdiction] may issue a stop work order for all aspects of a project that are impacting waters of the [Jurisdiction] in violation of this article;

B. The [Jurisdiction] may order waters of the [Jurisdiction] to be restored if work performed in such waters has been done without securing an Article VIII Permit or if the recipient of an Article VIII Permit has not complied with all the terms of the Article VIII Permit; and

C. The [Jurisdiction] may issue penalties of up to [$1,000] a day for any violation of this article.

8.2. Any citizen of [Jurisdiction] may commence a civil action on his or her own behalf in superior court against any person who is acting in violation of this article.

Section 9. Appeals.

A. Any party who feels aggrieved by a decision made by the [Administrator] under the article, may appeal such decision to the [appropriate Council or Commission].

B. All final decisions of the [Jurisdiction Council or Commission] concerning denial, approval, conditional approval, suspension or revocation of an Article VIII Permit shall be reviewed by [Jurisdiction] court.

ARTICLE IX Water Conservation

Section 1. General Provisions

1.1. Purpose

The purpose of this article is to provide for the health, safety, and general welfare of the citizens of the [Jurisdiction] through water conservation and water efficiency. The objectives of this article are:

A. To regulate outdoor water use in accordance with requirement of the Georgia Environmental Protection Division;
B. to mandate that water be used for lawn and landscape irrigation in a manner that prevents waste, conserves water resources for their most beneficial and vital uses, and protects the public health; and
C. To establish legal authority to carry out all inspection; surveillance and enforcement procedures as necessary to ensure compliance with this article.

1.2. Applicability

This article shall apply to all customers of the [Jurisdiction] as permitted by the Georgia Environmental Protection Division (EPD) for water withdrawal or for operation of a drinking water system.

Section 2. Outdoor Water Use Schedule

2.1. Outdoor Water Use Schedule During Non-Drought Periods

Outdoor water use during non-drought periods, other than activities exempted in Section 2.6, shall occur only as follows:

A. Odd-numbered addresses: outdoor water use is allowed on Tuesdays, Thursdays and Sundays.
B. Even-numbered addresses: outdoor water use is allowed on Mondays, Wednesdays and Saturdays.

2.2. Outdoor Water Use Schedule during Drought Response Level One

When Drought Response Level One has been declared, outdoor water use may occur on scheduled days within the hours of 12:00 midnight to 10:00 a.m. and 4:00 p.m. to 12:00 midnight.

A. Scheduled days for odd-numbered addresses are Tuesdays, Thursdays and Sundays.
B. Scheduled days for even-numbered addresses are Mondays, Wednesdays and Saturdays.
C. Use of hydrants for any purpose other than firefighting, public health, safety or flushing is prohibited.

2.3. Outdoor Water Use Schedule during Drought Response Level Two

When Drought Response Level Two has been declared, outdoor water use may occur on scheduled days within the hours of 12:00 midnight to 10:00 a.m.

A. Scheduled days for odd-numbered addresses are Tuesdays, Thursdays and Sundays.
B. Scheduled days for even-numbered addresses and golf course fairways are Mondays, Wednesdays and Saturdays.
C. The following uses are prohibited:
    a. Using hydrants for any purpose other than firefighting, public health, safety or flushing.
    b. Washing hard surfaces, such as streets, gutters, sidewalks and driveways except when necessary for public health and safety.

2.4. Outdoor Water Use Schedule during Drought Response Level Three

When Drought Response Level Three has been declared, outdoor water use may occur on the scheduled day within the hours of 12:00 midnight to 10:00 a.m.

A. The scheduled day for odd-numbered addresses is Sunday.
B. The scheduled day for even-numbered addresses and golf course fairways is Saturday.
C. The following uses are prohibited:
    a. Using hydrants for any purpose other than firefighting, public health, safety or flushing.
    b. Washing hard surfaces, such as streets, gutters, sidewalks, driveways, except when necessary for public health and safety
    c. Filling installed swimming pools except when necessary for health care or structural integrity.
    d. Washing vehicles, such as cars, boats, trailers, motorbikes, airplanes, golf carts.
    e. Washing buildings or structures except for immediate fire protection.
    f. Non-commercial fund-raisers, such as car washes.
    g. Using water for ornamental purposes, such as fountains, reflecting pools, and waterfalls except when necessary to support aquatic life.

2.5. Restriction during Drought Response Level Four

When a Drought Response Level Four had been declared, no outdoor water use is allowed, other than for activities exempted in Section 2.6, or as the EPD Director may order.

2.6. Exemptions

A. This ordinance shall not apply to the following outdoor water uses:
    a. Capture and re-use of cooling system condensate or storm water in compliance with applicable local ordinances
    b. Re-use of gray water in compliance with applicable local ordinances
    c. Use of reclaimed wastewater by a designated user from a system permitted by EPD to provide reclaimed wastewater.
    d. Irrigation of personal food gardens.
B. Newly (in place less than thirty days) installed landscapes are subject to the following:

a. Irrigation of newly installed landscapes is allowed any day of the week, but only during allowed hours for the drought response level in effect, for a period of 30 days following installation. No watering is allowed during Drought Response Level Four.
b. For new landscapes installed by certified or licensed professionals, commercial exemptions apply.

C. The following golf course outdoor water uses are exempt from the outdoor water use schedules of this rule.
a. Use of reclaimed wastewater by a designated user from a system permitted by EPD to provide reclaimed wastewater.
b. Irrigation of fairways during times of non-drought and Declared Drought Response Level One.
c. Irrigation of tees during times of non-drought and Declared Drought Response Levels One, Two and Three.
d. Irrigation of greens

D. The following commercial outdoor water uses are exempt from the outdoor water use schedules of this rule.
a. Professionally certified or licensed landscapers, golf course contractors, and sports turf landscapers: during installation and 30 days following installation only. Professional landscapers must be certified or licensed for commercial exemptions to apply.
b. Irrigation contractors: during installation and as needed for proper maintenance and adjustments only.
c. Sod producers.
d. Ornamental growers.
e. Fruit and vegetable growers.
f. Retail garden centers.
g. Hydro-seeding.
h. Power-washing.
i. Construction sites.
j. Producers of food and fiber.
k. Car washes.
l. Watering-in of pesticides and herbicides on turf.

2.7. Rain Sensing Devises for Automatic Irrigation Systems

2.8. New Automatic Irrigation Systems

Any new irrigation system installed within the [Jurisdiction] on or after [effective date of this ordinance] must be equipped with rain sensing devices approved as to type by the administrator.

2.9. Existing Automatic Irrigation Systems as of December 31, 2008

Any irrigation system installed before [effective date of this ordinance] may not be operated after [two years from effective date of this ordinance] without being equipped with rain sensing devices and freeze gauges approved as to number and type by the director.

Section 3. Variances

3.1. Conditions for Variance

The [Administrator] may, in special cases, grant variances from certain provisions of Section 2 or Section 3 to persons demonstrating extreme hardship and need. The [Administrator] may grant variances only under all of the following circumstances and conditions:

A. Granting of a variance must not cause an immediate significant reduction in the [Jurisdiction] 's water supply.
B. The extreme hardship or need requiring the variance must relate to the health, safety, or welfare of the person requesting it.
C. The health, safety, and welfare of other persons must not be adversely affected by granting the variance.

3.2. Process to Receive Variance

The applicant must sign a compliance agreement on forms provided by the administrator, and approved by the [Jurisdiction] attorney, agreeing to irrigate or water a lawn or landscape only in the amount and manner permitted by the variance.

Section 4. Enforcement

4.1. Notice of Violation

Whenever the [Jurisdiction] finds that a person has violated a prohibition or failed to meet a requirement of this article, the [Jurisdiction] may order compliance by written notice of violation to the responsible party. Such notice will include the nature of the violation, a notice to immediately cease actions in violation of this ordinance, and a schedule to address the violation, if necessary.

4.2. Appeal of Notice of Violation

Any person receiving a Notice of Violation may appeal the determination of the [Jurisdiction] to Superior Court. The notice of appeal must be received within 10 days from the date of the Notice of Violation. Hearing on the appeal before the appropriate authority or his/her designee shall take place within 15 days from the date of receipt of the notice of appeal. The decision of the reviewing authority or their designee shall be final.

4.3. Injunctive Relief

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this article. If a person has violated or continues to violate the provisions of this article, the [Jurisdiction] may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

4.4. Criminal Prosecution

Any person that has violated or continues to violate this article shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty of $100 dollars per violation per day. The [Jurisdiction] may recover all attorneys' fees, court costs and

other expenses associated with enforcement of this article, including sampling and monitoring expenses.

ARTICLE X On-Site Sewage Disposal System (OSDS) Inspection and Maintenance

Section 1. General Provisions

1.1. Purpose and Intent

A. To protect the public health, safety, and natural environment by providing a maintenance program for on-site sewage disposal systems in the [Jurisdiction] and measures to correct failing or malfunctioning systems.
B. To provide for regular OSDS inspection and maintenance service including pump-outs, and repairs.
C. To provide for the implementation, administration, and enforcement of this ordinance by the [Jurisdiction] to prescribe the powers and duties of the commission, and to provide penalties for violation of this Ordinance.
D. To provide communities with information regarding the locations and conditions of existing on-site sewage disposal systems through a county-run database.

1.2. Applicability

The provisions of this Ordinance apply to land parcels on which on-site sewage disposal systems service residential, commercial, industrial, institutional, and other facilities or structures.

Section 2. Inspection Requirements

2.1. Routine OSDS Inspection and Maintenance

The tank and field lines of all septic systems or other approved, on-site sewage disposal systems (hereinafter referred to as "OSDS") within the [Jurisdiction] shall be regularly serviced as required herein:

A. Required maintenance or servicing of OSDS within the [Jurisdiction] must include inspection and/or pumping of the septic system's tank(s) and any additional service to the drainage field lines by OSDS maintenance service personnel certified by the State of Georgia and registered with the County Health Department. The maximum service interval for required OSDS service shall not exceed five years from the date of the last certified inspection and service.
B. Maintenance service, pump-out, and repairs shall be at the expense of the property owner.
C. The County shall issue the property owner an operating permit for use after completion of the previous requirements. Operating permits are issued on five-year intervals; however, they shall expire at any sale or transfer of property or at system malfunction or failure, for which the operating permits will be reinstated upon proof of maintenance service prior to sale or proof that malfunctioning systems have been repaired.

2.2. Service Schedule

The service schedule shall begin:

A. Ninety (90) [or other approved schedule] from the date of adoption of this ordinance in accordance with the phased implementation schedule.
B. Prior to sale or transfer of property upon which an OSDS exists;
C. Date of Certificate of Occupancy issued for a new structure with an OSDS.
D. Upon alteration of an existing OSDS.

The intent is to incorporate all properties with OSDS into a master county database, for purposes of tracking inspection service/maintenance requirements and for further identification of any "at risk" systems.

2.3. Proof of Service

Upon completion of the inspection and any necessary maintenance and repair to the septic system, the service personnel shall certify that the work was completed in accordance with accepted professional standards and practices and that the system is functioning properly. The service personnel and property owner must complete, sign and date the "Proof of Maintenance and Inspection" form accompanying the "Notice for Service Due" letter or a substitute form acceptable to the [Jurisdiction].

A. Ninety (90) days before the expiration of the five year service period, a "Notice for Service Due" letter shall be mailed by the [Jurisdiction] to the property owner. A "Proof of Maintenance and Inspection" form will be included with the letter. This form shall be completed, signed, and dated by the service personnel and property owner. The property owner shall provide the form to the [Jurisdiction] upon completion of service (see below).
B. Property owners who have had maintenance performed on their systems before their regularly scheduled interval and without a "Notice for Service Due" letter from the [Jurisdiction], or who did not receive such notice and who would like to report this unscheduled service to the [Jurisdiction], can submit certification directly from the service personnel. Any certified completed service will establish the beginning of the five year service interval.
C. An assessment of the on-site sewage disposal system by the designated service personnel shall be required each time that a system is serviced. The "Proof of Maintenance and Inspection" form shall indicate the condition of the septic tank, disposal site (drainage field lines), and the quantity pumped.
D. These reports shall be freely available to the public upon demand.

Section 3. Responsibilities of Various Parties

3.1. Property Owner Responsibilities

The property owner shall be responsible for hiring certified service personnel to perform OSDS inspection, maintenance and any other additional service to the drain field lines. Owners are also responsible for submitting the "Proof of Maintenance and Inspection" form to the [Jurisdiction] certifying that service was completed and that the OSDS is functioning properly. Owners are also responsible for notifying the [Jurisdiction] of any transfer of property. Owners shall also be responsible for hiring certified service professionals to assess any possible failing OSDS and making the necessary repairs.

3.2. Service Personnel Responsibilities

Service Personnel are responsible for conducting OSDS inspection, maintenance, and any additional services to the OSDS. Service personnel are also responsible for completing and signing the "Proof of Maintenance and Inspection" form and providing to the completed form to the property owner.

3.3. [Jurisdiction] Responsibilities

The [Jurisdiction] shall enforce the provisions of this ordinance and maintain the OSDS permit database.

3.4. County Health Department Responsibilities

The County Health Department shall designate the OSDS contractors and other certified personnel for OSDS maintenance and inspection. The County Health Department shall also be responsible for approval and inspection of newly constructed OSDS.

Section 4. Malfunctioning or Failing Systems

4.1. Criteria

An on-site sewage disposal system shall be deemed to be a malfunctioning system if sewage is allowed to discharge or flow from it on said property into any storm drain, stream, water body, gutter, street, roadway, or subsurface of any property as to create a nuisance or a condition detrimental to public and environmental health. Substantial backflow from the leaching area (drainage field lines) into the tank during a tank pump-out shall also be considered an indication of a malfunctioning system as determined by registered and certified service personnel.
In addition, any and all parts of an OSDS that are found to be damaged, misaligned, or missing shall constitute a malfunctioning system.

4.2. Notification

The property owner shall notify the [Jurisdiction] upon signs of failure or malfunction of an OSDS and the [Jurisdiction] or representative thereof shall examine the system to determine the malfunction; however, if the owner fails to provide notification of a failing or malfunctioning system, and the [Jurisdiction] is notified of such an event, the [Jurisdiction] shall have the right to investigate the property to determine if a system is failing or malfunctioning. The [Jurisdiction] shall provide the property owner written notification which shall communicate the specifics of the OSDS malfunction. All property owners with an OSDS shall be responsible for correcting the malfunctioning of such systems within Ninety (90) [or other approved schedule] from receipt of the [Jurisdiction]'s notification, and shall provide the [Jurisdiction] proof that the malfunctioning system has been corrected.

4.3. Determine Best Solutions for Correction

In the event that a failing or malfunctioning system has been identified, the [Jurisdiction] or representative shall approve the solution identified for the property owner. If the failing structure is within 500 feet [or other approved distance] of the nearest public sanitary sewer service line, the failed systems shall be pumped, disconnected from the structure and sealed, and the property shall be connected to the public sewage treatment system. Otherwise, the failing system shall be brought into compliance with the OSDS performance standards of the State of Georgia.

Section 5. Violations

5.1. Fines and Punishments

The [Jurisdiction] must ensure the protection of the public health, safety, and the natural environment. Failure to adhere to the provisions set forth in this Ordinance shall constitute a violation of this Ordinance. Violations of this Ordinance may be punishable by a fine not exceeding [$1,000] per day. In addition, the [Jurisdiction] may seek to recover any and all costs relating to correcting, removing or abating the violation.

ARTICLE XI Riparian Buffer Protection

Section 1. Intent and Purpose

1.1. Purpose

The rivers, streams, wetlands, and coastal marshlands constituting the riparian lands of [Jurisdiction] are a significant natural resource and are essentially linked to [Jurisdiction] 's economy. The [Jurisdiction Commission or Council] recognizes that these lands provide numerous benefits and are vital to the health, safety, and economic welfare of its citizens. The [Jurisdiction Commission or Council] finds that buffers adjacent to these lands provide substantial benefits including:

A. Minimizing activities that degrade, destroy, or otherwise negatively impact the value and function of coastal marshlands;
B. Maintaining stream and river water quality;
C. Trapping sediment and other pollutants found in surface runoff;
D. Promoting bank stabilization and reducing erosion;
E. Protecting terrestrial coastal habitat for nesting and feeding wildlife;
F. Reducing the impact of flooding by increasing floodwater storage areas;
G. Enhancing the marshlands' scenic value and recreational opportunities;
H. Protecting property values of individual landowners; and,
I. Protecting and restoring greenspace and the natural character of the coastal region; and
J. Protecting important nursery areas for fisheries, which provide food and habitat to numerous species of fish and shellfish, including commercially important species.

1.2. Intent

It is therefore the purpose and intent of this ordinance to establish a coastal riparian buffer zone of restricted development and limited land use adjacent to coastal streams, rivers, marshes, and wetlands. The purposes of this coastal riparian buffer zone are to:

A. Protect the public health, safety, environment, and general welfare of the citizens of [Jurisdiction];
B. Minimize public and private land loss due to erosion, sedimentation, and water pollution;
C. Maintain water quality for human use and for protecting the important nursery areas for fisheries, which provide food and habitat to numerous species of fish and shellfish, including commercially important species;
D. Protect terrestrial coastal habitat for nesting and feeding wildlife;
E. Reduce the impact of flooding by increasing floodwater storage areas;
F. Protect the natural and native vegetation in the zone;
G. Protect the coastal region's visual character and unique natural resources; and,
H. Avoid land development within such buffers by establishing buffer zone requirements and by requiring authorization for any land disturbing activities.

1.3. Authority

The standards and regulations set forth in this ordinance are created under the authority of the [Jurisdiction] 's Home Rule and zoning powers defined in Article IX, Section 2 of the Georgia Constitution.

1.4. Other Relevant Permits

The requirements of this ordinance shall in no case be interpreted to preempt the need for other relevant local, state and federal permits and approvals.

Section 2. Applicability

This ordinance shall apply to all land disturbing activity on property containing a coastal riparian buffer. These requirements are in addition to, and do not replace or supersede, any other applicable buffer requirements established under state law. Approval or exemption from these requirements does not constitute approval or exemption from buffer requirements established under state law or from other applicable local, state or federal regulations.

2.1. Exemptions

The following specific activities are exempt from this Ordinance:

A. Existing development and land disturbance activities completed as of [the effective date of this ordinance] except that new development or new land disturbing activities on such properties will be subject to all applicable buffer requirements.
B. Any land disturbing activity that is scheduled for permit approval or has submitted a complete application for approval as of [the effective date of this ordinance.] The [Administrator] shall determine a completeness of any application/submittal under this Article.
C. Public sewer line easements paralleling the stream, lake, impoundment, wetland, and/or coastal marshlands, except that all easements (permanent and construction) and land disturbance should be at least 25 feet from the mean high water line in coastal marshlands and wetlands or the top of the bank for streams, lakes, and impoundments. This includes such impervious cover as is necessary for the operation and maintenance of the utility, including but not limited to manholes, vents and valve structures. This exemption shall not be construed to allow the construction of roads, bike paths, or other transportation routes in such easements, regardless of the type of paving material used.
D. Land disturbing activities by governments within a road right of way existing at the time this ordinance takes effect, or approved under the terms of this ordinance. Development activities are only allowed if they cannot reasonably be located outside the buffer.
E. Land disturbing activities within utility easements existing as of the effective date of this ordinance or approved under the terms of this ordinance when necessary for the operation and maintenance of the utility, including but not limited to manholes, vents and valve structures.
F. Emergency maintenance and repairs necessary to preserve life and/or property. However, when emergency work is performed under this section, the person performing it shall report such work to the [local government] as soon as possible and within 24 hours of the commencement of the work. Within ten (10) days thereafter, the person shall apply for a

variance and perform such work within such time period as may be determined by the [local government] to be reasonably necessary to correct any impairment such emergency work may have caused to the water conveyance capacity, stability or water quality of the protection area.

G. Forestry and silviculture activities on land that is zoned for forestry, silvicultural or agricultural uses, provided these activities are not incidental to other land disturbing activity and are conducted using applicable best management practices. If such activity results in land disturbance in the buffer that would otherwise be prohibited, no land disturbing activity other than normal forest management practices will be allowed on the entire property for three years after the end of the activities that intruded on the buffer.
H. Stream crossings for water lines or stream crossings for sewer lines, provided that they occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream; cause a width of disturbance of not more than 50 feet within the buffer; and adequate erosion control measures as defined within the Georgia Manual of Erosion & Sedimentation Control are incorporated into the project plans and specifications and are implemented.
I. Activities for the purpose of constructing public water supply intake or public wastewater outfall structures, when designed, constructed, and maintained pursuant to the "Coastal Riparian Buffer Guidance Manual."
J. Activities to restore and enhance stream bank stability, vegetation, water quality, and/or aquatic habitat, when designed, constructed, and maintained pursuant to the "Coastal Riparian Buffer Guidance Manual."
K. Any trimming or pruning of vegetation for the purpose of creating a keyhole view corridor and/or access path and conducted in accordance with the "Coastal Riparian Buffer Guidance Manual." This exemption shall not allow for the removal of trees.
L. Creation of an access path to water-dependent uses through the buffer when designed, constructed, and maintained pursuant to the "Coastal Riparian Buffer Guidance Manual."
M. Structural maintenance and repair (not replacement or enlargement) of any damaged structure that existed in the buffer as of the effective date of this ordinance, provided the repair is less than fifty (50) percent of the value of the structure, as determined by a local building inspector and is constructed and designed pursuant to the "Coastal Riparian Buffer Guidance Manual."

Section 3. Standards and Regulations

All land disturbing activity that is not exempt from this Ordinance pursuant to subsection 2.1 above shall meet the following requirements:

A. A buffer shall be maintained for a minimum of 75 feet along both banks of streams and along all impoundments, as measured from the top of the bank of the stream or impoundment. All land disturbing activity is prohibited within the 75-foot buffer unless a variance or buffer encroachment permit is granted pursuant to Section 6 below.
B. A buffer shall be maintained for a minimum of 75 feet along all coastal marshlands, measured horizontally from the estuarine area. All land disturbing activity is prohibited within the 75-foot buffer unless a variance or buffer encroachment permit is granted pursuant to Section 6 below.

C. A buffer shall be maintained for a minimum of 75 feet along all wetlands as measured from the inland edge of the wetland. All land disturbing activity is prohibited within the 75-foot buffer unless a variance or buffer encroachment permit is granted pursuant to Section 6 below.
D. No septic tanks or septic tank drain fields shall be permitted within the buffer.
E. The establishment of a manicured lawn shall not be permitted in the buffer.
F. The application of herbicides shall not be permitted in the buffer.
G. A buffer shall be maintained for [insert applicable width] feet along all high value areas. High value areas as identified by the [Jurisdiction].

Section 4. Buffer Encroachment Permit

4.1. General

A. No person shall conduct any land disturbing activity within the coastal riparian buffer without first obtaining a buffer encroachment permit from the [Jurisdiction] to perform such activity.
B. Buffer encroachment permits may be issued by the [Jurisdiction] only if the land disturbing activity constitutes one of the following activities:
    a. Construction of a porch, deck, boardwalk, or similar structure that is an accessory use to a residential dwelling, constructed and designed in accordance with the "Coastal Riparian Buffer Guidance Manual. For boardwalks that will extend into the coastal marshlands, landowners must first receive a permit or license, whichever is applicable, from the Coastal Marshlands Protection Committee before applying for a buffer encroachment permit.
    b. Any other land disturbing activity that results in a reduction in buffer width over a portion of a parcel, in exchange for an increase in buffer width elsewhere on the same parcel, provided that the average buffer width on the entire parcel is 75 feet and the buffer width at any given point on the parcel is not less than 25 feet.
    c. The following factors will be considered in determining whether to issue a permit:
        1. Whether the buffer encroachment will result in a reduction of the quality of the water exiting the parcel, or a diminishment of a uniform coastal marshland scenic vista;
        2. Whether the proposed development in the buffer will be conducted in accordance with all design guidelines, low impact development techniques, and other guidance found in the "Coastal Riparian Buffer Guidance Manual;"
        3. Whether the proposed intrusion into the buffer is the minimum intrusion necessary to accomplish the purpose of the intrusion;
        4. Whether a feasible alternative design exists that would result in no intrusion into the buffer;
        5. When the permit is sought pursuant to Section 4.2, whether the width of the buffer as related to the size and shape of the parcel results in a situation in which it is impossible for the property owner to make reasonable economic use of the portion of the parcel not in the buffer; and
        6. When the permit is sought pursuant to Section 4.2, whether the width of the buffer as related to the size and shape of the parcel results in a situation in

which it is impossible for the property owner to construct a single family dwelling on the portion of the parcel not in the buffer.

4.2. Application Requirements and Procedures

A. The application for a buffer encroachment permit shall be submitted to the [Jurisdiction] and must include the following:
   a. A site plan showing:
      1. The location of all riparian lands on or immediately adjacent to the property;
      2. Identification of any streams found on the Clean Water Act § 303(d) list that are adjacent to the property;
      3. Boundaries of the riparian buffer, as described by Section 3 of this Ordinance, on the property;
      4. Buffer zone topography with contour lines at no greater than five (5)-foot contour intervals;
      5. Delineation of forested and open areas in the buffer zone; and,
      6. Detailed plans of all proposed land development and land disturbing activity on the site;
   b. A description of any potential development impact on the buffer and how it will be avoided;
   c. Any other documentation that the [Jurisdiction] may reasonably deem necessary for review of the application and to insure that the coastal riparian buffer ordinance is addressed in the approval process; and
   d. Payment of the application fee as stipulated in the fee schedule of the [Jurisdiction]
B. The coastal riparian buffer shall be clearly delineated on all development plans and plats submitted for buffer encroachment permit approval, and buffer limits must be staked in the field in a manner approved by the [local government] before and during construction with posted signs that describe allowable activities. Buffer boundaries shall be printed on all development and construction plans, plats, and official maps.
C. All buffer areas must be recorded on the final plat of the property following plan approval.
D. Within [ten] working days of receiving an application for a permit, the [Administrator] shall review it for completeness and notify the public of the application by placing a public notice in accordance with the standard procedure of [Jurisdiction]. If the [Administrator] finds that the application is incomplete, it shall within such [ten] day period, send to the applicant a notice of the specific ways in which the application is deficient, with appropriate references to the applicable sections of this ordinance.
E. The [Administrator] shall process all buffer encroachment permit applications within [thirty] business days of the actual receipt of a completed application and a permit fee. The [Administrator] shall give notice to the applicant of its decision by hand delivery or by mailing a notice, by Certified Mail, Return Receipt Requested, to the address on the permit application on or before the [thirtieth] business day after the [Administrator]'s receipt of the completed application. If the jurisdiction fails to act within the [thirty day] period, the permit shall have been deemed to have been granted.

F. In the event the [Administrator] determines that all requirements for approval have not been met, it shall promptly notify the applicant of such fact and shall automatically deny the permit.
G. An individual whose permit application has been denied or a permittee whose permit has been revoked may appeal the decision of the [Administrator] to the [appropriate planning or zoning board] provided that they file written notice of an appeal with the [County/City Clerk] within [fifteen] business days of the [Administrator]'s decision. Such appeal shall be considered by the [appropriate planning or zoning board] at the next [appropriate planning or zoning board] meeting held after the receipt of the written notice of appeal, provided that notice of appeal is received by the [appropriate planning or zoning board] a minimum of [five] full business days before the meeting. In the event an individual whose permit has been denied or revoked is dissatisfied with the decision of the [appropriate planning or zoning board], they may petition for writ of certiorari to the [superior court] as provided by law.
H. The [Administrator] shall inspect each lot for which a permit for a new land disturbing activity or for modification of an existing land disturbing activity is issued. This inspection shall occur on or before [six months] from the date of issuance of such permit.
    a. If the land disturbing activity is not complete within [six months] from the date of issuance, the permit shall lapse and become void. No refunds will be made for permit fees paid for permits that expired due to failure to engage in the land disturbing activity. If later, an individual desires to continue land disturbing activities at the same location, a new application must be processed and another fee paid in accordance with the fee schedule applicable at such time.
    b. If the land disturbing activity is substantially complete, but not in full compliance with this ordinance the [Administrator] shall give the applicant notice of the deficiencies and shall allow an additional [thirty days] from the date of inspection for the deficiencies to be corrected. If the deficiencies are not corrected by such date, the permit shall lapse and become void.

Section 5. Inspection

The [Administrator] or their authorized representative may inspect ongoing work in the buffer to be made periodically during the course thereof and shall make a final inspection following completion of the work. The landowner shall assist the [planning department or public works department] or authorized representative in making such inspections. The [Administrator] shall have the authority to conduct such investigations as it may reasonably deem necessary to carry out its duties as prescribed in this Ordinance, and to enter at a reasonable time upon any property, public or private, for the purpose of investigating and inspecting the sites of any land disturbing activities within the buffer protection area.

No person shall refuse entry or access to any authorized representative or agent who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper or interfere with any such representative while in the process of carrying out official duties.

Section 6. Variance Procedure

The buffer encroachment permit and the variance procedure are intended to be used for two separate situations. A landowner should apply for a buffer encroachment permit when he or she desires to encroach into the buffer for the purpose of placing an accessory structure to a residential dwelling, such as a deck, in the buffer. Use of the buffer encroachment permit is also appropriate when the landowner wishes to use buffer averaging. However, if the landowner wishes to encroach for a purpose other than use of buffer averaging or placement of an accessory structure to a residential dwelling in the buffer, use of the variance procedure is the appropriate method.

6.1. Variances from the above buffer requirements may be granted in accordance with the following provisions:

A. Where a parcel was platted prior to the effective date of this ordinance, and its shape, topography, or other existing physical condition prevents land disturbing activity consistent with this ordinance, and such land disturbing activity cannot be authorized through issuance of a buffer encroachment permit, the [Jurisdiction] may grant a variance that shall allow a reduction in buffer width only to the extent necessary to provide relief from the conditions which prevented land disturbing activity on the parcel, provided adequate mitigation measures are implemented by the landowner to offset the effects of such variance.
B. Except as provided above, the [Jurisdiction] shall grant no variance from any provision of this ordinance.

6.2. Variances shall not be considered when:

A. Following adoption of this ordinance, actions of any property owner of a given property have created conditions of a hardship on that property; or
B. The owner previously applied for a buffer encroachment permit that was denied by [Jurisdiction].

6.3. At a minimum, a variance request shall include the following information:

A. A site map that includes locations of all streams, wetlands, coastal marshlands, floodplain boundaries, and other natural features, as determined by field survey;
B. A description of the shape, size, topography, slope, soils, vegetation, and other physical characteristics of the property;
C. A detailed site plan that shows the locations of all existing and proposed structures and other impervious cover, the limits of all existing and proposed land disturbance both inside and outside the buffer;
D. The exact area of the buffer to be affected shall be accurately and clearly indicated;
E. Documentation of the inability to develop the property without a variance;
F. Documentation that shows how buffer encroachment will be minimized to the greatest extent possible;

G. Documentation that shows how the buffer encroachment will not result in reduction of water quality or diminishment of a uniform coastal marshland scenic vista;
H. At least one alternative plan, which does not include a buffer encroachment, and an explanation of why such a plan is not possible;
I. A calculation of the total area and length of the proposed encroachment;
J. A stormwater management site plan, if applicable; and,
K. A proposed mitigation plan designed pursuant to the "Coastal Riparian Buffer Guidance Manual" that offsets the effects of the proposed encroachment. If no mitigation is proposed, the application must include an explanation of why none is being proposed. Acceptable mitigation might include restoration and/or enhancement and protection of a degraded area of coastal riparian buffer on an adjacent or nearby property.
L. A copy of the buffer variance approved by the Georgia Environmental Protection Division if the buffer variances is within the 25- foot buffer established along state waters under Georgia's Erosion and Sedimentation Act of 1975. If a stream buffer variance is not acceptable to the issuing authority, the issuing authority may issue a land disturbing permit without allowing encroachment into the buffer.
M. Payment of the application fee as stipulated in the adopted fee schedule of [Jurisdiction].

6.4. The following factors will be considered in determining whether to issue a variance:

A. Whether the requirements of the riparian buffer represent an extreme hardship for the landowner, such that little or no reasonable economic use of the land is available without the reduction of the width of the riparian buffer;
B. Whether actions of the landowner of a given property have created conditions of a hardship on that property;
C. The size, shape, topography, soils, vegetation and other physical characteristics of the property that may prevent land development;
D. The location and extent of the proposed buffer encroachment;
E. Whether alternative designs are possible which require less or no intrusion;
F. The long-term water-quality impacts of the proposed variance;
G. The water quality impacts of any construction that the granting of the variance would allow in the buffer;
H. Whether the issuance of a variance and the completion of the applicant's proposal will unreasonably interfere with the conservation of fish, shrimp, oysters, crabs, clams, or other marine life, wildlife, or other resources, including but not limited to water and oxygen supply; and
I. Whether the proposed development in the buffer will be conducted in accordance with all design guidelines, low impact development techniques, and other guidance found in the "Coastal Riparian Buffer Guidance Manual."

Section 7. Violations, Enforcement and Penalties

Any action, or inaction, which violates the provisions of this ordinance or the requirements of an approved site plan may be subject to the enforcement actions outlined in this Section. Any such action, or inaction, which is continuous with respect to time, is deemed to be a public nuisance

and may be abated by injunctive or other equitable relief. The imposition of any of the penalties described below shall not prevent such equitable relief.

7.1. Notice of Violation

If the [Administrator] determines that the responsible person has failed to comply with the terms and conditions of a permit, an approved stormwater management plan or the provisions of this ordinance, it shall issue a written notice of violation to such responsible person. Where a person is engaged in activity covered by this ordinance without having first secured a permit therefore, the notice of violation shall be served on the owner or the responsible person in charge of the activity being conducted on the site.

A. The name and address of the owner or the applicant or the responsible person;
B. The address or other description of the site upon which the violation is occurring;
C. A statement specifying the nature of the violation;
D. A description of the remedial measures necessary to bring the action or inaction into compliance with the permit, the stormwater management plan or this ordinance and the date for the completion of such remedial action;
E. A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is directed; and,
F. A statement that the determination of violation may be appealed to the [local government] by filing a written notice of appeal within thirty (30) days after the notice of violation (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient).

7.2. Penalties

In the event the remedial measures described in the notice of violation have not been completed by the date set forth for such completion in the notice of violation, any one or more of the following actions or penalties may be taken or assessed against the person to whom the notice of violation was directed. Before taking any of the following actions or imposing any of the following penalties, the [Administrator] shall first notify the permittee or other responsible person in writing of its intended action and shall provide a reasonable opportunity, of not less than 72 hours (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient) to cure such violation. In the event the permittee or other responsible person fails to cure such violation after such notice and cure period, the [Jurisdiction] may take any one or more of the following actions or impose any one or more of the following penalties.

A. Stop Work Order - The [Jurisdiction] may issue a stop work order which shall be served on the permittee or other responsible person. The stop work order shall remain in effect until the permittee or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violation or violations described therein, provided the stop work order may be withdrawn or modified to enable the permittee or other responsible person to take the necessary remedial measures to cure such violation or violations.
B. Withhold Certificate of Occupancy - The [Jurisdiction] may refuse to issue a certificate of occupancy for the building or other improvements constructed or being constructed on

the site until the responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein.

C. Suspension, Revocation or Modification of Permit - The [Jurisdiction] may suspend, revoke, or modify the permit authorizing the land development project. A suspended, revoked, or modified permit may be reinstated after the responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated (upon such conditions as the [local government] may deem necessary) to enable the responsible person to take the necessary remedial measures to cure such violations.

D. Civil Penalties - In the event the responsible person fails to take the remedial measures set forth in the notice of violation or otherwise fails to cure the violations described therein within 72 hours, or such lesser period as the [Jurisdiction] shall deem appropriate (except that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient) after the [Jurisdiction] has taken one or more of the actions described above, the [Jurisdiction] may impose a penalty on the responsible person not to exceed [$1,000] (depending on the severity of the violation) for each day the violation remains un-remedied after receipt of the notice of violation.

E. Criminal Penalties - For intentional and flagrant violations of this ordinance, the [Jurisdiction] may issue a citation to the responsible person, requiring such person to appear in [appropriate municipal, magistrate or recorders] court to answer charges for such violation. Upon conviction, such person shall be punished by a fine not to exceed [$1,000] or imprisonment for [60] days or both. Each act of violation and each day upon which any violation shall occur shall constitute a separate offense.

ARTICLE XII Sea Turtle Habitat Protection

Section 1. Intent

It is the intent of this section that beachfront lighting not disturb or disorient nesting or hatching sea turtles.

Section 2. Criteria

This criteria shall apply to all public and private artificial exterior lights within direct line of sight of the beach within or adjacent to the [Jurisdiction].

A. The enforcement period shall be during the sea turtles nesting and hatching season (May 1 - October 31).
B. Criteria for affected lights.
    a. Such lights shall not directly illuminate areas of the beach seaward of the primary dune or seawall/revetment and;
    b. The bulb, fluorescent tube, lamp or other source of light from such lights shall be shielded so that it is not directly visible from the beach.
    c. The use of safety and security lights shall be limited to the minimum number to achieve their functional roles and where practical shall be shielded from the beach. In those cases where safety and security lights cannot be shielded from the beach, then low pressure sodium lamps or other light sources which have been shown through experiments not to attract sea turtle hatchlings shall be used with the concurrence of the [Jurisdiction] Building Inspector.

Section 3. Enforcement

3.1. Notice of Violation

If the [Administrator] determines that the responsible person has failed to comply with the terms and conditions of a permit, an approved stormwater management plan or the provisions of this ordinance, it shall issue a written notice of violation to such responsible person. Where a person is engaged in activity covered by this ordinance without having first secured a permit therefore, the notice of violation shall be served on the owner or the responsible person in charge of the activity being conducted on the site.

3.2. Penalties

Property owners and lessees, if any, not in compliance with this section will be notified in writing by the [Jurisdiction] of the violation and the steps needed to achieve compliance. Property owners and lessees, if any, not in compliance fourteen (14) calendar days after receiving the written notice shall be subject to a fine of [$100] per day until the violation is abated.

ARTICLE XIII Wellhead Protection

Section 1. Intent and Purpose

The purpose of this ordinance is to insure the provisions of a safe and sanitary drinking water supply for the [Jurisdiction] by establishment of wellhead protection zones surrounding the wellheads for all wells or springs which are the supply sources for the [Jurisdiction] water system and by the designation and regulation of property uses and conditions which may be maintained within such zones.

Section 2. Establishment of Public Wellhead Protection Zone

There is hereby established a use district known as a Wellhead Protection Zone, identified and described as all the area within a circle the center of which is the center of any city, public, or community water supply wellhead and the radius of which is 100 feet. This Public Wellhead Protection Zone shall be applicable to any well that should be regulated by a Georgia Safe Drinking Water Permit and/or a Georgia Environmental Protection Division Water Withdrawal Permit.

2.1. Permitted Uses
The following uses shall be permitted within Public Wellhead Protection Zones:

A. Any use permitted within existing agricultural or single family residential districts, except that the minimum residential lot size for a lot portion of which lies within the Wellhead Protection Zone shall not be less than one acre; and
B. Any open land use where any building located on the property is incidental and accessory to the primary open land use.

2.2. Prohibited Uses
The following uses or conditions shall be and are hereby prohibited within Public Wellhead Protection Zones, whether or not such use or condition may otherwise be ordinarily included as a part of a use permitted under Section 2.1 of this Ordinance:

A. Surface use or storage of hazardous materials, expressly including commercial use of agricultural pesticides;
B. Septic tanks or drain fields appurtenant thereto;
C. Imperious surfaces other than roofs of buildings and street and driveways and walks serving buildings permitted under Section 2.1 of this Ordinance;
D. Sanitary landfills;
E. Hazardous waste disposal sites;
F. Storm water infiltration basins;
G. Underground storage tanks;
H. Sanitary sewer lines within 150 feet of a wellhead.

Section 3. Establishment of a Non-Public Wellhead Protection Zone

In order to protect against contamination of groundwater, a Nonpublic Wellhead Protection Zone shall be established within a circle the center of which is a nonpublic, as described in Section 2, or individual well and the radius of which is 10 feet.

3.1. Permitted Uses

The following uses shall be permitted within Non-Public Wellhead Protection Zones:

A. Any use permitted within existing agricultural or single family residential districts, except that the minimum residential lot size for a lot portion of which lies within the Wellhead Protection Zone shall not be less than one acre; and
B. Any open land use where any building located on the property is incidental and accessory to the primary open land use.

3.2. Non-Permitted Uses

The following uses shall be prohibited within Non-Public Wellhead Protection Zones:

A. The storage of any chemicals except for those used for drinking water treatment
B. Impervious surfaces other than roofs of buildings, streets, driveways and walks serving residential structures;
C. The storage of motor fuels, oils, motor vehicles, or portable equipment powered by an internal combustion engine;
D. Waste storage and disposal sites;
E. Stormwater infiltration basins;
F. Sanitary sewer lines;
G. Battery storage;
H. Application or storage of halogenated volatile liquid organic pesticides (e.g., ethylene dibromide (EBD) and dibromochloropropane (DBCP), related chemicals and their commercial formulations);
I. Furniture stripping or refinishing; and
J. Exterior vehicle cleaning and vehicle salvage.

Section 4. Exemptions

4.1. The following activities or uses are exempt from the provisions of this ordinance.

A. The use of vehicles and associated chemicals used in the maintenance of the private drinking water well
B. The use of, but not the storage of, certain regulated substances such as pesticides, herbicides and fungicides in recreational, agricultural, pest and weed control, provided that the use is in compliance with the use requirements set forth in United States Environmental Protection Agency registries and as indicated on the containers in which the substance are sold;
C. The use of, but not the storage of, cleaning agents for normal household use, packaged for personal or household use in the same form or concentration as a product packaged for household use by the general public, used in accordance with the manufacturer's instruction.

Section 5. Abandonment Requirements for Wells

5.1. Abandonment

A. A water well shall be considered as temporarily abandoned when its use has been interrupted for a period of more than one year and not more than three years. Such a well shall be sealed and the well maintained whereby it is not a source or a channel of contamination or pollution when not in service.
B. A water well shall be considered as permanently abandoned when its service has been interrupted for a period of more than three years or it meets the definition of abandoned well as defined in this part. Such a well shall be filled, sealed, and plugged.

5.2. Responsibilities

A. Whenever a well or borehole is excavated for the exploration, testing, or use as a source of water supply but is no longer used for that purpose, it shall be the owner's responsibility to have the borehole filled, sealed, and plugged within 30 days of the excavation or disuse to protect against the entrance of pollutants into the subsurface.
B. No abandoned water well or borehole shall be used for the purpose of disposing of any wastes or pollutants that may contaminate the ground water.
C. All engineering boreholes, regardless of the depth limitations defined in paragraph (3) and (8) of O.C.G.A. Section 12-5-122, which are located on property which is being used or is proposed to be used for the storage, manufacture, or processing of petroleum products, hazardous materials, hazardous wastes, industrial or municipal wastewater, brines, or any other chemical substances, must be completely filled, sealed, and plugged within 24 hours after the total depth is reached. It shall be the responsibility of the person in charge of the borehole construction to ensure proper abandonment.
D. Geologic boreholes which are in locations scheduled to be mined within two years after drilling need not be filled, sealed, and plugged. Other geologic boreholes shall be filled, sealed, and plugged within 24 hours after drilling. It shall be the responsibility of the person in charge of borehole construction to ensure proper abandonment.
E. Monitoring wells shall meet the requirements of abandonment as defined by this part unless they are declared temporarily abandoned. A monitoring well that is temporarily abandoned shall have a cap placed on it within 15 days of its temporary abandonment. It shall be the responsibility of the owner of the property on which the monitoring well is constructed to ensure proper abandonment of the well.
F. Seismic shot holes shall be filled, sealed, and plugged within 24 hours after the explosives have been detonated. It shall be the responsibility of the person in charge of the shot hole construction to ensure proper abandonment.
G. Abandoned individual, nonpublic, public, irrigation, and industrial wells shall be filled, sealed, and plugged by a licensed water well contractor.
H. Abandoned engineering boreholes, geologic boreholes, dewatering wells, monitoring wells, and seismic shot holes shall be filled, sealed, and plugged under the direction of a registered professional geologist or registered professional engineer.

Section 6. Variances

6.1. Variance

Variances from the distance requirements set forth in this Ordinance may be obtained from the Health Department. The Administrator shall assist the applicant with this administrative procedure as appropriate.

6.2. Existing Wells

Prohibited uses may be continued after the date of adoption of this ordinance only upon approval by the [Administrator] of a mitigation plan that provides an acceptable level of protection against groundwater contamination. In the event that a prohibited use poses a direct hazard to the public water supply, [Jurisdiction] may take any action permitted by law to abate the hazard.

Section 7. Violations and Penalties

Any person who violates the provisions of this Ordinance shall, upon conviction thereof, be fined not more than [$1,000], and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent [Jurisdiction] from taking such other lawful action as is necessary to prevent or remedy any violation of the Ordinance or other provision of this ordinance. Violators shall be reported by the Administrator of this Ordinance to the Director of the GEPD as required in O.C.G.A. 12-5-136.

Section 8. Warning and Disclaimer of Liability

The well owner is hereby warned that it is his/her responsibility to monitor the quality of the water from the well by periodically testing the water and maintaining the well and pump in satisfactory operating condition. This Ordinance does not create liability on the part of Chatham County or by any elected official, officer or employee thereof for any personal damages or injury that may result from reliance on the permitting or testing or inspections performed prior to issuance of the Certificate of Compliance by the [Administrator] or any administrative decision lawfully made there under.