ORDINANCE NO. 11- _____

AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF LEON COUNTY, FLORIDA, AMENDING ARTICLE IV OF CHAPTER 10 OF THE CODE OF LAWS OF LEON COUNTY, FLORIDA, RELATING TO THE LAND DEVELOPMENT CODE, BY ADDING A NEW SECTION 10-4.106, ENVIRONMENTAL MANAGEMENT FOR THE INCORPORATED AREA OF LEON COUNTY AND AMENDING SECTION 10-4.301, WATER QUALITY TREATMENT STANDARDS.

PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEON COUNTY, FLORIDA, that:

SECTION 1: Article IV, entitled "Environmental Management" of Chapter 10 of the Code of Laws of Leon County, Florida, is hereby amended by adding a new section, 10-4.106 "Interim Minimum Environmental Regulations for the Incorporated Area of Leon County" which section shall read as follows:

Sec. 10-4.106. Interim Minimum Environmental Regulations for the Incorporated Area of Leon County

(1) *Adoption of Interim Minimum Environmental Regulations.* Pursuant to Article I, Section 1.6 of the Home Rule Charter of Leon County, Florida, the County shall establish minimum environmental standards, procedures, requirements and regulations for the protection of the environment to be effective within the unincorporated and incorporated areas of the County. Until such time as Countywide minimum environmental standards can be adopted, interim regulations for the incorporated area of Leon County are hereby adopted, as follows:

(a) Effective August 1, 2011, the water quality treatment standards in Section 10-4.301(4) and (5) in Article IV of Chapter 10 of the Code of Laws of Leon County, Florida shall apply within the incorporated area of Leon County.

(b) Leon County hereby adopts by reference Chapter 5, Environmental Management, of the Tallahassee, Florida, Land Development Code, as it may be amended from time to time, for purposes of environmental management within the incorporated area of Leon County.

(2) *Enforcement.* This ordinance shall have no effect on the enforcement authority of the City of Tallahassee's Growth Management Department, who shall continue to enforce regulations and render decisions on all applications for development within the City limits.

(2) *Expiration of Interim Minimum Environmental Regulations.* This Section shall be in effect until April 1, 2012, unless such date is extended by ordinance adopted by the Board of County Commissioners. The Board of County Commissioners will consider an ordinance amending the expiration date of this Section at the request of staff or representatives of the City or County. If minimum environmental standards are not adopted by that date, the following articles of the Leon County Land Development Code shall apply County-wide: Article IV, Environmental Management; Article VIII, Floodplain Management; Article X, Aquifer/Wellhead Protection; Article XIV, Fertilizer Use.

SECTION 2: Section 10-4.301 of the Code of Laws of Leon County, Florida, is hereby amended as follows:

10-4.301 Water Quality Treatment Standards

(1) *Minimum Standards.* Water quality treatment shall be provided as a part of all development activity which requires a stormwater application under this article. Treated stormwater shall meet the applicable water quality standards set forth in F.A.C. chs. 62-4, 62-302, 62-520, 62-522, 62-550 and 62-346, and in this division. Design and performance standards set forth in such F.A.C. chapters are hereby adopted and incorporated in this article by reference. However, design and performance standards more stringent than those specified therein may be required whenever discharge from a site does not meet state water quality standards, and may also be required for specific watersheds identified by ~~for which~~ the Board of County Commissioners as needing further protection. ~~has adopted, or shall adopt, conservation measures.~~

(2) *Watershed conservation measures.*

(a) *Conservation measures designated.* The Board of County Commissioners hereby adopts the following conservation measures to be applied throughout the unincorporated area of the county ~~in the Lake Jackson, Bradford Brook Chain of Lakes, Fred George, Lake McBride, Lake Lafayette, and Lake Iamonia watersheds~~ for the protection of water quality, fish, wildlife, and the aquatic ecosystem. ~~of those drainage basins. The Board of County Commissioners may adopt additional conservation measures to provide such protection for other receiving water bodies and associated surface water drainage basins in the county.~~

(b) *Stormwater treatment.* The following are minimum acceptable methods for stormwater treatment, provided that the discharges meet state water quality criterion. More stringent treatment methods may be required by the county administrator or designee if discharges fail to meet state water quality standards.. The drainage area for determining treatment volumes shall include all areas draining to the facility (on-site and off-site).

(i) Wet detention. Wet detention treatment volume shall be, at a minimum, the runoff from the first three inches of rainfall, or as an option for sites with drainage areas less than 100 acres, the first 1 1/2 inches of runoff. The top one-half of the treatment volume must be discharged in 60 hours. Subsequently, the bottom one-half of the treatment volume must be discharged in 60 hours or more.

(ii) Off-line retention. Off-line retention treatment volume shall be provided equal to 50 percent of the runoff from the first 3.0 inches of rainfall, or as an option for sites with drainage areas less than 100 acres, the first 3/4 inch of runoff. The full treatment volume shall again be available within 72 hours following a storm event, with appropriate on-site soils tests submitted to verify the infiltration rate.

(iii) On-line retention. For on-line retention or detention with underdrained filtration, treatment volume shall be equal to 75 percent of the runoff from the first 3.0 inches of rainfall, or as an option for sites with drainage areas less than 100 acres, the first 1.125 inches of runoff. For the filtration option, only bottom underdrain systems planted with grass that are capable of recovering the treatment volume within 36 hours shall be allowed, unless an alternative system is shown by the applicant, to the satisfaction of the director, to exceed the capabilities of such a bottom underdrain system.

(iv) Swales. Swale treatment volume shall be percolation of 80 percent of runoff from a three-year, one-hour (2.6 inches) storm event. Calculations demonstrating percolation of this volume within the swale within 72 hours shall be submitted with the permit application.

(c) *Special site constraints.* If site constraints require another method of water quality treatment, such other method may be approved by the county administrator or designee if such method provides a level of treatment equivalent to off-line retention as specified in subsection (b)(2), and is specifically authorized by the State Department of Environmental Protection.

(d) *Best management practices.* The following best management practices, at a minimum, shall be required in conjunction with all new development and redevelopment, and shall be adhered to by all property owners~~, located within the Lake Jackson, Bradford Brook Chain-of-Lakes, Fred George, Lake McBride, Lake Lafayette and Lake Iamonia special development zones~~. All site and development plans submitted for approval shall specifically include the requirement of compliance with these best management practices. The best management practices shall be specifically set forth within, and made a part of, the restrictive covenants for all subdivisions approved by the local government and such restrictive covenants shall be recorded with the plat. All environmental management permits issued for development activities ~~within the Lake~~

~~Jackson, Bradford Brook Chain of Lakes, Fred George, Lake McBride, Lake Lafayette or Lake Iamonia special development zone~~ shall include the requirement of compliance with these best management practices as a condition of such permit:

(i) Buffering, which may include vegetated berms along the lower contours of lots, so as to provide or improve wildlife habitat and to improve water quality. Berms or buffers shall be vegetated with natural indigenous vegetation suitable for soil and hydrology of the site.

(ii) Restricted use of pesticides, herbicides, and fertilizers to those materials which have rapid decomposition characteristics, are labeled for aquatic use, and are used at the lowest possible label rates. Fertilizer constituents should have at least 50 percent slow release characteristics, be applied at the lowest labeled rate per application, be a non-phosphorous or low phosphorous analysis, and be formulated for good slope retention characteristics.

(iii) Preservation or revegetation of natural wetlands, floodways and watercourses.

(iv) Use of native, low-fertilization, and low-maintenance vegetation.

(v) Regular maintenance and upgrading, as necessary, of septic tanks and approved discharges from washing machines and garbage disposals.

(vi) Soil conservation service approved conservation practices, including erosion and sediment control and water quality practices for all agricultural operations.

(3) Closed basins and standards.

(a) Closed basins meeting the following criteria shall be regulated in accordance with this subsection:

(i) Any closed basin which has been identified and mapped as a regulated closed basin by the Board of County Commissioners; or

(ii) Any closed basin for which it can be shown by hydrologic analysis that cumulative increases in runoff volume from potential development patterns will cause a significant adverse impact on the frequency, duration, or extent of flooding.

(b) *Volume control required.* Runoff volumes within regulated closed basins in excess of the pre-development runoff volume shall be retained for all storm events up to a 100-year, 24-hour duration storm, except that if multiple development sites are located within the closed basin, the excess volume may be discharged from individual sites to an approved

regional detention or retention facility located within the closed basin as may be allowed under other subsections of this section and pursuant to section 10-4.305. One-half the required pond volume shall be recovered within seven days, and the full volume shall be recovered within 30 days.

(c) Residential subdivisions that create no more than three lots shall be exempt from the provisions in subsection (b) above if the following five criteria are met:

1. There are no structures at the bottom of the closed basin that could flood.
2. There are no existing flooding problems or adverse impact to downstream properties.
3. The new lots are at least one acre in size and have less than 20% impervious area.
4. The new lots have adequate stormwater conveyance to the bottom of the closed basin. If not, downstream drainage easements will be required.
5. The new lots meet state stormwater standards or receive an exemption.

(4) *Additional stormwater retention standards for the Lake Jackson Basin protection area.* Non-single-family residential uses which are approved for development (as specified in the comprehensive plan) subsequent to March 15, 1992, shall retain post-development stormwater on-site for all storm events up to and including the 50-year 24-hour duration storm. One-half the required pond volume shall be recovered within seven days, and the full volume shall be recovered within 30 days.

(5) *Stormwater treatment standards within the Bradfordville Study Area.* Stormwater runoff from new development in the Bradfordville Study Area shall meet the standards set forth in this section in addition to other standards within Article IV.

(a) Stormwater runoff shall be treated to one of the following standards below:

(i) Systems utilizing on-line dry retention only. A volume of runoff calculated as four inches times the total impervious area that will be situated on the site shall be retained on the site or in an approved master stormwater facility. This calculation can exclude the wetted area of the pond/stormwater facility. This volume of runoff shall be collected from the entire developed portion of the site and directed to on-line dry retention storage. Retention can occur in cisterns, ponds, shallow swales, landscaped areas, or natural areas.

(ii) Systems utilizing a combination of off-line dry retention and detention:

a. Off-line retention shall be provided with a treatment volume calculated as two and one-half inches times the total impervious area on the site.

b. Detention portion of system--In addition to the dry retention volume, one of the following detention options shall also be provided:

1. Dry detention systems will provide a treatment volume calculated as two inches times the total impervious area on the site, or

2. Wet detention system with a permanent pool volume equivalent to two and nine-tenths inches times the impervious area onsite.

c. The calculation of the above volumes can exclude the wetted area of the stormwater facility.

d. Runoff from the entire developed portion of the site shall be directed in sequence to each of the above facilities.

(b) Drawdown requirements:

(i) For on-line dry retention (Subsection (a)(1) above), the entire treatment volume must recover within 72 hours.

(ii) For off-line dry retention (Subsection (a)(2)a. above), the entire treatment volume must recover within 24 hours.

(iii) For dry detention systems (Subsection (a)(2)b.1.above), the treatment volume must recover within 72 hours. Dry detention systems will not include underdrains but will utilize an orifice or V-notch weir for drawdown. The bottom of the drawdown device will be a minimum of six inches above the pond bottom.

(iv) For wet detention systems (Subsection (a)(2)b.2. above), the bottom of the weir crest will be a minimum of 12 inches above the normal water level (seasonal high groundwater table elevation).

(v) Regardless of the method of volume recovery, the entire retention volume must recover within the time frame established above unless an approved continuous analysis, using Tallahassee Airport rainfall data from January 1, 1959 to December 31, 1998, demonstrates that the total volume retained within the stormwater system over the 40-year period is greater than or equal to that

retained by a dry retention system as set forth in subsection (1) based on the above described recovery times. For systems requiring a combination of retention and detention, this analysis shall only be used for the retention portion of the system. The detention portion of this combination system will still be required in full pursuant to Subsection (a)(2)b.

(c) For calculating the treatment volume required for pervious pavements and graveled areas, initially such surfaces shall be assumed to be 100 percent impervious, then deductions in the required treatment volume for such areas can be taken that is equivalent to:

(i) The porosity of the pavement material times the thickness of the paving material times a safety factor of five-tenths.

(ii) If, and only if, the soils immediately underlying the pavement for a depth of 18 inches have a permeability of three inches per hour or greater, as demonstrated by onsite percolation tests, then a further deduction can be taken equivalent to the porosity of the soil strata times four inches times a safety factor of five-tenths.

The above deductions will be allowed provided that the applicant specifically commits, in his Stormwater Operating Permit, to regularly sweep/vacuum the area covered with pervious pavement and to verify the pavement's percolation capacity when the operating permit is renewed.

(d) Groundwater table:

(i) Where volume recovery is to be by percolation, groundwater mounding calculations to demonstrate recovery of the retention volume pursuant to the requirements set forth in subsection (b) above shall be required unless the applicant conclusively demonstrates by other engineering methods that pond recovery will not be adversely affected by an elevated groundwater table. If the bottoms of all retention areas intended to percolate stormwater are shown by soil borings to be less than three feet above the historical wet-season high water table, a mounding analysis shall be required.

(ii) For dry detention systems, the bottom elevation of the detention basin shall be a minimum of one foot above the historical seasonal high groundwater table.

(e) Where volume recovery is to be by irrigation, the rate of land application shall not exceed one and one-half inches per week unless the applicant can conclusively demonstrate that the on-site soil conditions and vegetation

warrant a higher application rate. Under no circumstances shall irrigation water be allowed to discharge from the irrigation-site.

(f) The requirements in this section shall not preclude the applicant from voluntarily choosing to design and construct the on-line dry retention facility as an off-line facility.

(g) Facility design standards.

(i) Facility configuration: All on-line facilities shall have a flow-path-length to flow-path-width ratio of 2:1 or greater. The inlets and outlets shall be on opposite ends of the facility. If this is not possible, the effective flow length shall be increased by adding diversion barriers within the facility as necessary to provide this minimum flow length.

(ii) Retention ponds/areas shall have 4H:1V maximum side slopes on a sufficient length of the perimeter to allow adequate maintenance access to the bottom of the facility. If any of the side slopes are steeper than this, a security fence shall be placed completely around the perimeter of the facility and located exterior to the maintenance access ways. The fence shall not be required if the pond depth is less than 18 inches.

(iii) Wet detention ponds shall have 6H:1V maximum side slopes to two feet below the normal water level, then a maximum side slope of 2H:1V to the bottom.

(iv) Retention facilities shall have flat bottoms in order to maximize the surface area for percolation.

(v) Maintenance access requirements:

a. For every facility, the owner or developer shall provide, at a minimum, a 15 feet wide clear and stable access to the facility from the nearest "public" right-of-way or road. Such access shall be evidenced by a recorded reservation or grant of an easement, which shall run with the land, to the benefit of the county.

b. For retention facilities with an overall depth greater than 18 inches, provide, at a minimum, a 15 feet wide clear, level and stable access around a sufficient portion of the perimeter of the facility, which is inside of any fences and external to the top-of-bank of the facility, to allow adequate maintenance from dry land. For retention facilities with an overall depth of 18 inches or less, provided the facility has

side slopes of four horizontal to one vertical (or less) on at least one side of the facility, the applicant can provide the above access on the sloped side of the facility only. Any access required by the provisions of this subsection shall be evidenced by a recorded reservation or grant of an easement, which shall run with the land, to the benefit of the county.

c. The minimum inside radiuses of all access ways shall be 20 feet.

d. Adequate access for both personnel and mechanized equipment shall be provided to all inlet and outlet structures.

e. If Leon County is proposed to be the maintenance entity for any stormwater management facility permitted under this section, either by dedication, or by reservation of an easement, or by any other process, the applicant shall submit the engineering design for the facility directly to the Leon County Department of Public Works for its review and approval as to the adequacy of maintenance access to the facilities. An environmental permit shall not be issued until the applicant demonstrates, in writing, the approval of the department of public works.

(vi) Skimmer/trash rack requirements:

a. Trash/leaf traps with easy maintenance access shall be provided at key inlets and all outlets from a facility unless the applicant can conclusively demonstrate that it is not possible.

b. All outlet structures shall have an oil skimmer that extends above and below any outlet structure opening.

(vii) Energy dissipation requirements:

a. Energy dissipation devices sufficient to prevent erosion and resuspension of loose sediments shall be placed on all inlets to retention facilities.

b. Energy dissipation devices sufficient to prevent downstream channel erosion shall be placed at the outlets of all retention facilities.

(viii) Stabilization of stormwater treatment facilities: All berms and side

slopes shall be stabilized with pinned sod. Pond bottoms can be seeded and mulched. Restabilization by the contractor or owner shall be necessary until such time that the sod is fully rooted and otherwise well established.

(ix) Rate control as required in Subsection 10-4.302 can be provided within any of the above water quality treatment facilities provided that the water quality treatment as required within this section is fully satisfied prior to any overflow/discharge from the facility.

(6) *Retention for all post-development runoff.* No newly concentrated or increased concentration of stormwater flow, including discharge from detention and retention facilities, shall be discharged off-site before or after treatment as required by subsection (2), unless such discharge is into an adequate conveyance, watercourse, wetland or waterbody of sufficient capacity at the time of discharge to sustain the effects of, and to convey such discharges, without detriment to the continued natural function of the resource and in accordance with the requirements of this division. Design of stormwater management systems should not allow changes in rate or course in a manner substantially different from pre-development conditions. If there is no adequate conveyance, floodplain or easement available, full retention of the stormwater for all events up to and including the 100-year, 24-hour duration storm is required.

(7) *Treatment for direct discharge to active karst features.* Runoff to be discharged to active karst features shall be treated to comply with F.A.C. 62-520.420 prior to discharge.

SECTION 3. Conflicts. All ordinances or parts of ordinances in conflict with the provisions of this Ordinance are hereby repealed to the extent of such conflict, as of the effective date of this Ordinance, except to the extent of any conflicts with the Tallahassee-Leon County Comprehensive Plan, as amended, which provisions shall prevail over any parts of this Ordinance which are inconsistent, either in whole or in part, with the Comprehensive Plan.

SECTION 4. Severability. If any section, subsection, sentence, clause, phrase or portion of this article is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portions of this Ordinance.

SECTION 5. Effective date. This ordinance shall be effective according to law.

DULY PASSED AND ADOPTED BY the Board of County Commissioners of Leon County, Florida, this ____ day of _____, 2011.

LEON COUNTY, FLORIDA

BY: _____
JOHN DAILEY, CHAIRMAN
BOARD OF COUNTY COMMISSIONERS

ATTEST:
BOB INZER, CLERK OF THE COURT
LEON COUNTY, FLORIDA

BY: _____

APPROVED AS TO FORM:
LEON COUNTY ATTORNEY'S OFFICE

BY: _____
HERBERT W.A. THIELE, ESQ.
COUNTY ATTORNEY