

**HOUSE OF REPRESENTATIVES STAFF ANALYSIS**

**BILL #:** HB 1145

Stormwater Management System Design

**SPONSOR(S):** Precourt

**TIED BILLS:**

**IDEN./SIM. BILLS:** SB 2606

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	<b>REFERENCE</b>	<b>ACTION</b>	<b>ANALYST</b>	<b>STAFF DIRECTOR</b>
1)	<u>Agriculture &amp; Natural Resources Policy Committee</u>	<u>16 Y, 0 N</u>	<u>Deslatte</u>	<u>Reese</u>
2)	<u>General Government Policy Council</u>	<u></u>	<u></u>	<u></u>
3)	<u>Natural Resources Appropriations Committee</u>	<u></u>	<u></u>	<u></u>
4)	<u>Full Appropriations Council on General Government &amp; Health Care</u>	<u></u>	<u></u>	<u></u>
5)	<u></u>	<u></u>	<u></u>	<u></u>

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**SUMMARY ANALYSIS**

The bill provides for the establishment of a study commission to develop legislative recommendations relating to stormwater management system design in the state. The commission is tasked with:

- Reviewing the Joint Professional Engineers and Landscape Architecture Committee Report conducted pursuant to s. 17, chapter 88-347, Laws of Florida, and determining the current validity of the report and the need to revise any of the conclusions or recommendations;
- Determining how a licensed and registered professional might demonstrate competency for stormwater management system design;
- Determining how the Board of Professional Engineers and the Board of Landscape Architecture might administer certification tests or continuing education requirements for stormwater management system design;
- Providing recommendations for grandfathering the rights of licensed professionals who currently practice stormwater management design so that they can continue to practice without meeting any new requirements the commission recommends to be placed on licensed professionals in the future.

The Board of Landscape Architecture, the Board of Professional Engineers, the Florida Engineering Society, the Florida Chapter of the American Society of Landscape Architects, and the Secretary of the Department of Environmental Protection shall each appoint one person to serve on the commission. Members will not be reimbursed for travel, per diem, or any other cost associated with serving on the commission.

The commission will meet a minimum of four times either in person or via teleconference. A minimum of two meetings must be public hearings with testimony.

The commission will expire on November 1, 2009. The commission will provide its findings and legislative recommendations to the President of the Senate and the Speaker of the House of Representatives by November 1, 2009.

The bill has no fiscal impact on state or local government.

The bill has an effective date of July 1, 2009.

## HOUSE PRINCIPLES

Members are encouraged to evaluate proposed legislation in light of the following guiding principles of the House of Representatives

- Balance the state budget.
- Create a legal and regulatory environment that fosters economic growth and job creation.
- Lower the tax burden on families and businesses.
- Reverse or restrain the growth of government.
- Promote public safety.
- Promote educational accountability, excellence, and choice.
- Foster respect for the family and for innocent human life.
- Protect Florida's natural beauty.

## FULL ANALYSIS

### I. SUBSTANTIVE ANALYSIS

#### A. EFFECT OF PROPOSED CHANGES:

##### Current Situation

##### **Background:**

On average, Florida receives 40 to 60 inches of rain each year from about 130 storm events. While about 80% of the storms are small, with less than 1 inch of rainfall, the state also experiences torrential downpours and hurricane rains. These cause runoff carrying sediment, fertilizers, pesticides, oil, heavy metals, bacteria, and other contaminants to enter surface waters, causing adverse effects from increased pollution and sedimentation. The implementation of erosion control measures consistent with sound agricultural and construction operations is essential to minimizing these impacts. Florida's stormwater regulatory program requires the use of best management practices (BMPs) during and after construction to minimize erosion and sedimentation and to properly manage runoff for both stormwater quantity and quality. BMPs are control practices that are used for a given set of conditions to achieve satisfactory water quality and quantity enhancement at a minimal cost. Each BMP has specific application, installation, and maintenance requirements that should be followed to control erosion and sedimentation effectively. Accepted engineering methods must be used in the design of these control measures, such as those established by the Department of Environmental Protection (DEP), Department of Transportation (DOT), U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS), International Erosion Control Association (IECA), American Society of Civil Engineers (ASCE), U.S. Army Corps of Engineers (USACOE), or other recognized organizations.<sup>1</sup>

Part IV of chapter 373, F.S., governs the management and storage of surface waters. Section 373.403(10), F.S., defines "Stormwater management system" to mean:

a system which is designed and constructed or implemented to control discharges which are necessitated by rainfall events, incorporating methods to collect, convey, store, absorb, inhibit, treat, use, or reuse water to prevent or reduce flooding, overdrainage, environmental degradation, and water pollution or otherwise affect the quantity and quality of discharges from the system.

Section 373.413, F.S., provides in part:

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<sup>1</sup> Florida Stormwater Erosion and Sedimentation Control Inspector's Manual, July 2008, <http://www.dep.state.fl.us/water/nonpoint/docs/erosion/erosion-inspectors-manual.pdf>  
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**DATE:** 3/19/2009

(1) Except for the exemptions set forth herein, the governing board or the department may require such permits and impose such reasonable conditions as are necessary to assure that the construction or alteration of any **stormwater management system**, dam, impoundment, reservoir, appurtenant work, or works will comply with the provisions of this part and applicable rules promulgated thereto and will not be harmful to the water resources of the district. The department or the governing board may delineate areas within the district wherein permits may be required.

(2) A person proposing to construct or alter a stormwater management system, dam, impoundment, reservoir, appurtenant work, or works subject to such permit shall apply to the governing board or department for a permit authorizing such construction or alteration. The application shall contain the following:

- (a) Name and address of the applicant.
- (b) Name and address of the owner or owners of the land upon which the works are to be constructed and a legal description of such land.
- (c) Location of the work.
- (d) Sketches of construction pending tentative approval.
- (e) **Name and address of the person who prepared the plans and specifications of construction.**
- (f) Name and address of the person who will construct the proposed work.
- (g) General purpose of the proposed work.
- (h) Such other information as the governing board or department may require.

Section 373.117, F.S., addresses certification by professional engineers, and provides:

- (1) If an application for a permit or license to conduct an activity regulated under this chapter requires the services of a professional engineer as regulated and defined by chapter 471, the department or governing board of a water management district may require, as a condition of granting a permit or license, that a professional engineer licensed under chapter 471 certify upon completion of the permitted or licensed activity that such activity has been completed in substantial conformance with the plans and specifications approved by the department or board.
- (2) The cost of such certification by a professional engineer shall be borne by the permittee.
- (3) No permitted or licensed activity which is required to be so certified shall be placed into use or operation until the professional engineer's certificate is filed with the department or board.

For purposes of part I of chapter 403, F.S., relating to pollution control, s. 403.0877, F.S., addresses certification by professionals regulated by the Department of Business and Professional Regulation. The section provides:

- (1) Nothing in this section shall be construed as specific authority for a water management district or the department to require certification by a professional engineer licensed under chapter 471, a professional landscape architect licensed under part II of chapter 481, a professional geologist licensed under chapter 492, or a professional surveyor and mapper licensed under chapter 472, for an activity that is not within the definition or scope of practice of the regulated profession.
- (2) If an application for a permit or license to conduct an activity regulated under this chapter, chapter 373, chapter 376, or any permitting program delegated to a water management district by a state agency, or to undertake corrective action of such activity or program ordered by the department or a water management district, requires the services of a professional as enumerated in subsection (1), the department or governing board of a water management district may require, by rule, in conjunction with such an application or any submittals required as a condition of granting a permit or license, or in conjunction with the order of corrective

action, such certification by the professional as is necessary to ensure that the proposed activity or corrective action is designed, constructed, operated, and maintained in accordance with applicable law and rules of the department or district and in conformity with proper and sound design principles, or other such certification by the professional as may be necessary to ensure compliance with applicable law or rules of the department or district. The department or governing board of a water management district may further require as a condition of granting a permit or license, or in conjunction with ordering corrective action that the professional certify upon completion of the permitted or licensed activity or corrective action that such activity or corrective action has, to the best of his or her knowledge, been completed in substantial conformance with the plans and specifications approved by the department or board.

(3) The cost of such certifications by the professional shall be borne by the permittee or the person ordered to correct the permitted activity.

(4) A permitted or licensed activity or corrective action that is required to be so certified upon completion of the activity or action may not be placed into use or operation until the professional's certificate is filed with the department or board.

Finally, s. 403.0896, F.S., addresses training and assistance for stormwater management system personnel. The section states provides for the Stormwater Management Assistance Consortium of the State University System, working in cooperation with the community colleges in the state, interested accredited private colleges and universities, the department, the water management districts, and local governments, shall develop training and assistance programs for persons responsible for designing, building, inspecting, or operating and maintaining stormwater management systems. The Consortium was created by s. 33, ch. 89-279, L.O.F.

### **Landscape Architecture:**

Part II of chapter 481, F.S., provides for the regulation of the landscape architecture profession. The section provides the following stated purpose:

The Legislature finds that the regulation of landscape architecture is necessary to assure competent landscape planning and design of public and private environments, prevention of contamination of water supplies, barrier-free public and private spaces, conservation of natural resources through proper land and water management practices, prevention of erosion, energy conservation, functional and aesthetically pleasing environmental contributions to humanity's psychological and sociological well-being, and an enhancement of the quality of life in a safe and healthy environment and to assure the highest possible quality of the practice of landscape architecture in this state.

Section 481.303(6) defines "landscape architecture" as a professional service, including, but not limited to:

- Consultation, investigation, research, planning, design, preparation of drawings, specifications, contract documents and reports, responsible construction supervision, or landscape management in connection with the planning and development of land and incidental water areas, including the use of Xeriscape as defined in s. 373.185, F.S., where, and to the extent that, the dominant purpose of such services or creative works is the preservation, conservation, enhancement, or determination of proper land uses, natural land features, ground cover and plantings, or naturalistic and aesthetic values;
- The determination of settings, grounds, and approaches for and the siting of buildings and structures, outdoor areas, or other improvements;

- The setting of grades, shaping and contouring of land and water forms, determination of drainage, and provision for storm drainage and irrigation systems where such systems are necessary.<sup>2</sup>

In response to a petition for a declaratory statement, the Florida Board of Landscape Architecture issued a final order in 1986 concluding that s. 481.303(6), F.S., read in pari material with s. 481.301, F.S., clearly provides that the planning, design and provision for stormwater and surface water drainage systems, in order to further the stated purposes, are within the definition of the practice of landscape architecture.

In 1988 the Joint Professional Engineers/Landscape Architecture Committee was established by the Legislature by ch. 88-347, L.O.F. The committee was directed to submit to the Legislature a letter of agreement delineating the conditions or circumstances under which landscape architects may submit permit applications for the design of stormwater management drainage systems. At the time, in most areas of the state, only professional engineers were allowed to file permit applications. As a result, there was confusion and inconsistency regarding the role of landscape architects in the stormwater permitting process.

The committee concluded that landscape architects be allowed to prepare and seal applications for permits for the design of stormwater or surface water management systems when they have met the licensure requirements of chapter 481, Part II, F.S., and by completion of an accredited degree program in landscape architecture and achievement of a passing grade on the Uniform National Exam. In addition, they shall have completed 12 classroom hours (1.5 Continuing Education Units) of coursework in stormwater management approved by the Board of Landscape Architecture and the Department of Environmental Regulation (DER) and have also acquired three additional years of post-licensure experience under the charge of an appropriate professional and demonstrate stormwater management design work of a grade and character satisfactory to the Board of Landscape Architecture. Landscape architects having met those requirements would be allowed to submit stormwater and surface water applications provided that:

- Failure of the water management system would not result in significant off-site harm;
- The project is a single drainage basin, or if more than one drainage basin, each basin has direct outfall with no cascading basins;
- The entity constructing the facilities will also operate and maintain them, or if the project is to be subdivided for sale, the operating entity representing the future owners (e.g., homeowners' and property owners' associations not controlled by the constructing entity) agrees to accept responsibility for operation and maintenance of the system before permit issuance
- The system design or special site conditions does not involve specialized design and formulation of unique or complex operation and maintenance procedures;
- The system design is limited to simple hydraulic, hydrologic and structural analysis;
- Landscape architecture is the predominant professional discipline associated with designing, certifying and submitting the permit application.

The above would not preclude landscape architects from submitting conceptual stormwater design plans to water management districts.

Landscape architects who want to engage in regulated stormwater management design and permitting activities which exceed the above parameters must meet the following additional requirements:

- Experience: three additional years of professional experience demonstrating stormwater management practice of a grade and character satisfactory to the Board of Landscape Architecture and consultation with DER.
- Continuing Education: completion of 12 classroom hours (1.5 C.E.U.) in advanced stormwater management; coursework must be approved by the Board of Landscape Architecture and consultation with the DER.

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<sup>2</sup> S. 481.303, F.S., 2009

- Specialized examination: Achievement of a passing grade on a special examination in advanced stormwater management which is developed by the Board of Landscape Architecture in conjunction with the Board of Professional Engineers and DER and administered by the Department of Professional Regulation to any landscape architect meeting the above requirements.

Landscape architects are included in the definition of "Appropriate Registered Professional" or "Registered Professional" in the St. Johns River Water Management District's stormwater rule, Rule 40C-42.021(1), F.A.C.:

1. "Appropriate Registered Professional" or "Registered Professional" means, for purposes of this rule, a professional registered in Florida with the necessary expertise in the fields of hydrology, drainage, flood control, erosion and sediment control, and stormwater pollution control to design and certify stormwater management systems. Examples of registered professionals may include professional engineers licensed under chapter 471, F.S., professional landscape architects licensed under chapter 481, F.S., and professional geologists licensed under chapter 492, F.S., who have the referenced skills.

The phrase appropriate registered professional or registered professional is used many times throughout chapter 40C-42. For example:

40C-42.025(10) The construction plans and supporting calculations must be signed, sealed, and dated by an appropriate registered professional as required by the relevant statutory provisions when the design of the stormwater management system requires the services of an appropriate registered professional.

40C-42.025(1) Erosion and sediment control best management practices shall be used as necessary during construction to retain sediment on-site. These management practices shall be designed and certified by an appropriate registered professional experienced in the fields of soil conservation or sediment control according to specific site conditions and shall be shown or noted on the plans of the stormwater management system. The registered professional shall furnish the contractor with information pertaining to the construction, operation and maintenance of the erosion and sediment control practice. Sediment accumulations in the system from construction activities shall be removed to prevent loss of storage volume.

The Department of Transportation recently amended its rules to define a "licensed professional" as an individual licensed by a Florida professional licensing board, authorized by law to design and certify the stormwater management system under review. This change in rule allows a landscape architect to design and certify stormwater management systems pursuant to the findings of the 1988 Joint Professional Engineers/Landscape Architecture Committee.

#### Effect of Proposed Changes

The bill provides for the establishment of a study commission to develop legislative recommendations relating to stormwater management system design in the state. The commission is tasked with:

- Reviewing the Joint Professional Engineers and Landscape Architecture Committee Report conducted pursuant to s. 17, chapter 88-347, Laws of Florida, and determine the current validity of the report and the need to revise any of the conclusions or recommendations;
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The commission will meet a minimum of four times either in person or via teleconference. A minimum of two meetings must be public hearings with testimony.

The commission will expire on November 1, 2009. The commission will provide its findings and legislative recommendations to the President of the Senate and the Speaker of the House of Representatives by November 1, 2009.

**B. SECTION DIRECTORY:**

**Section 1.** Establishing a study commission to develop recommendations relating to stormwater management system design; specifying study criteria; providing for commission membership, meetings, and expiration; requiring the commission to submit findings and legislative recommendations to the Legislature by a specified date.

**Section 2.** Provides an effective date.

**II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT**

**A. FISCAL IMPACT ON STATE GOVERNMENT:**

1. Revenues:

None

2. Expenditures:

None

**B. FISCAL IMPACT ON LOCAL GOVERNMENTS:**

1. Revenues:

None

2. Expenditures:

None

**C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:**

**D. FISCAL COMMENTS:**

**III. COMMENTS**

**A. CONSTITUTIONAL ISSUES:**

1. Applicability of Municipality/County Mandates Provision:

This bill does not appear to require counties or municipalities to take an action requiring the expenditure of funds, reduce the authority that counties or municipalities have to raise revenue in the aggregate, nor reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None

B. RULE-MAKING AUTHORITY:

None

C. DRAFTING ISSUES OR OTHER COMMENTS:

None

#### **IV. AMENDMENTS/COUNCIL OR COMMITTEE SUBSTITUTE CHANGES**