

# Proposed “Statewide” Stormwater Rule



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# **Florida's Statewide Stormwater Rule Initiative - Background**

- **Original statewide rule: Ch. 17-25, F.A.C. (1982) - focused on BMPs addressing total suspended solids as a stand-in for other pollutants**
- **Impaired waters data indicate nutrients are the primary source of water quality problems**
- **Need to update stormwater BMPs to address nutrients**

## **Broad Objectives**

- **Update statewide ERP stormwater baseline criteria, focusing on nutrients, while allowing for adoption of basin specific criteria**
- **Reduce number of water bodies impaired by nutrients (45% of current verified impairments are by nutrients)**
- **Meet the goal of Ch. 62-40, F.A.C. to maintain, during and after construction, the pre-development stormwater characteristics of a site**

# **TMDL Connection**

- **Nutrient load from new development “taken care of”**
- **Facilitates development of Basin Management Action Plan (“BMAP”)**

# Performance Standards

- **Post-development nutrient loads not to exceed pre-development nutrient loads**
- **Pre-development is defined as undeveloped or native landscape**
- **Nutrients = total phosphorus (TP) and total nitrogen (TN)**

## Draft Rule Concepts

- Abandon the “one-size-fits-all” concept
- Each project gets evaluation to provide a site specific removal efficiency
- Provide applicants with a BMP menu for achieving specific removal efficiencies
- Different BMP combinations are likely necessary in different parts of the state
- Assumes treatment of nutrients ensures that other pollutants are treated sufficiently

# Treatment Volumes

- Retention and detention design volumes are derived from Harper 2007 report
- Volumes will vary around the state based on local rainfall records
- Volumes will also vary according to pre and post-development conditions

# Treatment Trains

- Encourage a series of treatment steps as a treatment train
- Provide criteria for establishing credit for each train “car”
- Provide flexibility to allow selection of appropriate string of “cars”
- Emphasis on source control and low impact development (LID) techniques

# **Low Impact Design Encouraged**

- **Pervious concrete**
- **Florida Friendly Landscaping**
- **Preservation of natural on-site vegetation and low soil compaction practices**
- **Green Roof/Cistern Systems**

# Stormwater Recycling

- **Design criteria provided for stormwater recycling**
- **Not to be confused with reuse of reclaimed wastewater**
- **Provides high pollutant removals, groundwater recharge and volume conservation**

# Criteria for Retrofitting

- **Special criteria for pure retrofit projects**
- **Pure retrofit defined as installation of new stormwater controls for existing developed land**
- **Redevelopment of existing developed land is not considered under the retrofitting criteria**

# **Interagency Work Groups**

- **Technical issues to be addressed by experts from WMDs and DEP with input from a Technical Advisory Committee**
  - **Urban redevelopment**
  - **Size thresholds**
  - **Altered hydrology**
  - **Low impact design**
  - **Karst protection**
  - **Wet detention**

# Work Group - Urban Redevelopment

- How to avoid discouraging urban redevelopment by making criteria too difficult to achieve
- Define “redevelopment”
- Consider different (lesser) treatment criteria

## **Work Group - Size Thresholds**

- **Determine feasibility of statewide thresholds for general and individual permits**
- **Determine lower size threshold and address very small sites that may not be able to attain the new treatment standards**

## **Work Group - Altered Hydrology**

- **How deal with altered hydrology for existing condition (ex. excessively drained conditions)?**
- **How to deal with legacy pollutants or existing “hot spots”?**

## **Work Group - Low Impact Design**

- **What types of “LID” should be included for treatment credit?**
- **How much treatment credit should be provided for various LID practices?**

# **Work Group - Karst Protection**

- **How to delineate karst areas?**
- **What design criteria should apply in karst areas?**
- **Should all karst areas be treated the same?**

## **Work Group - Wetland Treatment**

- **What kind of wetlands should be used for treatment?**
- **How should wetlands be used?**
- **Establish treatment credits**

## **Work Group - Wet Detention**

- **Review of wet pond criteria in view of 25 years working experience**
- **Determine maximum pond depths**
- **Review physical pond parameters**

## **Additional Research Underway**

- **Determine natural area stormwater nutrient concentrations**
- **Evaluate Florida Friendly Landscapes for nutrient discharge reduction**
- **Review literature on Florida wetlands hydrology and nutrient characteristics; particularly isolated wetlands**
- **Effectiveness of green roof systems**
- **Investigate stratification in deeper wet detention systems**

# Technical Advisory Group

- Audubon
- 1000 Friends of Florida
- SW Florida Conservancy
- FL Homebuilders
- FL Engineering Society
- FL Chamber
- League of Cities
- Assoc. of Counties
- FLERA
- FL Stormwater Assoc.
- Dept Agriculture
- Private and public sector stormwater experts

## **Current Schedule**

- **Ongoing: DEP/WMD team developing draft language**
- **March 08 – October 08: TAC meetings**
- **October 08 – February 09: rule workshops**
- **July 09: DEP secretarial rule adoption**

## **For Further Information**

- **Contact - Jim Stoutamire at 850/245-8490 or [jim.stoutamire@dep.state.fl.us](mailto:jim.stoutamire@dep.state.fl.us)**
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