

Florida's WMDs: Current Stormwater Criteria

The Proposed Statewide Stormwater Rule: How We Got There

At a Meeting of the



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At the Science Applications International Corporation Facilities, Orlando FL

Presentation by
Michael Bateman, P.E.

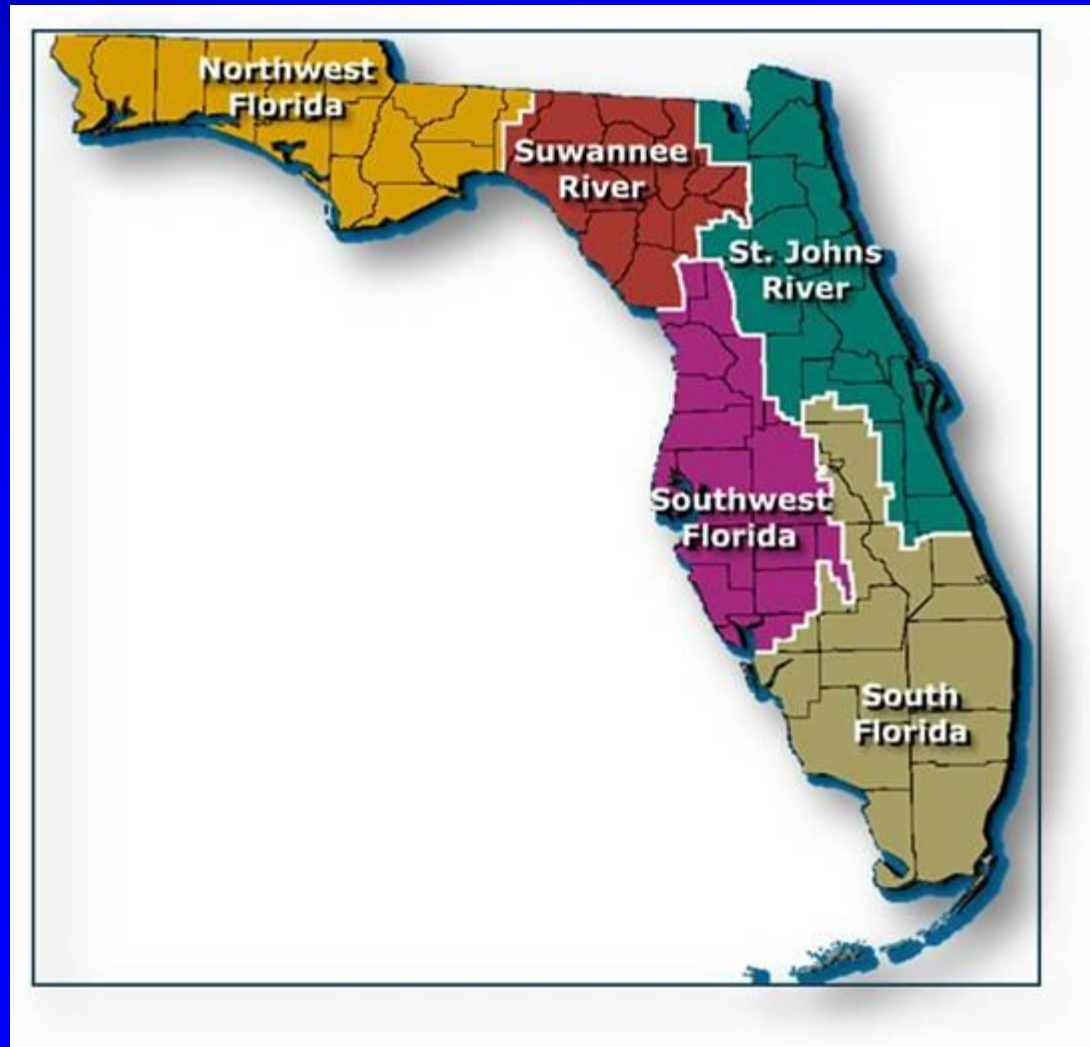
Northwest Florida Water Management
District



Florida's Water Management Districts: Current Criteria Chaos!



Florida's Water Management Districts



Guiding Principles for Stormwater Criteria

- **Chapter 373.414 – Not Harmful to the Water Resource**
- **Conditions for Issuance, No Adverse Impacts:**
 - **Flooding**
 - **Storage or Conveyance**
 - **Water Quality**
 - **Habitat for Fish and Wildlife**
- **THAT IS WHERE THE SIMILARITIES END**

A Little History

- **MSSW and “Stormwater” Regulation**
- **Gradually, the WMDs were Delegated Stormwater Regulation**
- **However, Over Time, WMD Stormwater Rules “Drifted”**

A Little History, cont.

- **Also, There was “Dredge and Fill” Regulation**
- **In 1995: Combined MSSW, Stormwater, and Dredge and Fill into Environmental Resource Permit “ERP”**
- **“Unified” the Environmental Criteria**
- **Stormwater Criteria Not Addressed – Even though “Drifted”**
- **HOLD THAT THOUGHT**

But Then...There's the Panhandle

- **ERP effective "statewide"**
- **EXEPT for the NW District. The District that time forgot.**
- **Stuck in 1982 Regulatory Purgatory, Old 62-25 and Dredge and Fill Permits**
- **until...**







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2006 Florida Legislature – Addressed Stormwater in the Northwest Florida WMD

- House Bill 7163
- Bring **ERP** to Northwest FL
- With One Slight “Catch”



Northwest ERP Implementation Parameters

“...based on the least restrictive stormwater quality and quantity measures and criteria adopted in the rules of the other Water Management Districts.”

See Section 373.4145(1)(a)



“Recommendations & Approach for Applying Least Restrictive Measures and Criteria”

- Report Prepared by Michael Bateman & Associates, July 2006**
- Evaluation of ALL other Existing WMD Rules Related to Stormwater Quality**
- Pick the “Worst” Criteria for use in Northwest**
- Highlighted Great Differences among District Stormwater Rules**

Dry Retention Criteria

DISTRICT	RETENTION VOLUME
SRWMD	1" for open watersheds; 2" for stream-to-sink watersheds
SJRWMD	Offline: Greater of 0.5" runoff or 1.25" runoff from impervious area; Online: greater of 1" of runoff or 1.75" runoff from the impervious area; Online: percolation of runoff from the 3-year/ 1 hour storm; Online: greater of runoff from 1" rainfall or 1.25" runoff from impervious area for <40% impervious and on HSG A soils
SWFWMD	Runoff from 1" of rainfall; if project < than 100 acres, may use 0.5" of runoff. Note: same for off-line and on-line
SFWMD	Greater of 0.5" of runoff or 1.25" times impervious area

Wet Detention Criteria

DISTRICT	DETENTION VOLUMES
SRWMD	None specifically stated for wet detention systems
SJRWMD	Greater of 1" runoff or 2.5" runoff from impervious area; 14 day minimum wet season residence time; maximum depth 12 feet; length to width ratio > 2:1; littoral zone 30% pond area (40C-42.026(4))
SWFWMD	1" of runoff; littoral zone 35% of pond area (BOR 5.2.a)
SFWMD	Greater of 1" of runoff or 2.5" of runoff from impervious area (BOR 5.2.1(a)); littoral zone 20% of pond area; 25-50% of pond area be greater than 12 feet deep; minimum 0.5 acre in size, 100 ft minimum width (BOR 7.4)



Selected Worst Criteria

Sediment and Erosion Control	SRWMD
Retention Systems	SWFWMD
Exfiltration Systems	SWFWMD
Wet Detention Systems	SWFWMD
Swales	SRWMD & SJRWMD
Wetland Treatment Systems	SWFWMD

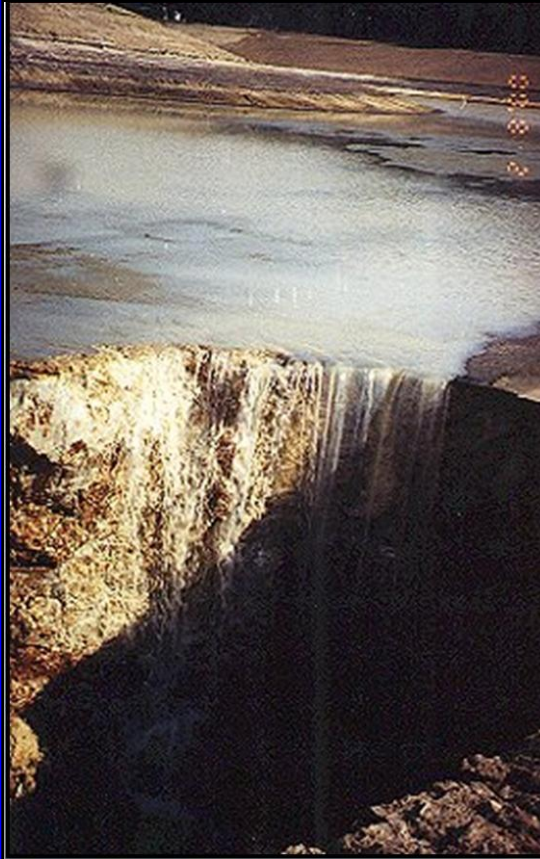
Result of Defining the WORST Rules

- **Provided a Side-by-Side Comparison of all District Rules**
- **Showed that Some Criteria were Really Bad**
- **Highlighted the Inconsistency found around the state**
- **Inconsistency NOT science-based**

Other Inconsistent Issues

- **Stormwater Retrofits**
- **Redevelopment of Urban Areas**
- **Protection of Groundwater in Karst Geology**

Karst Topography



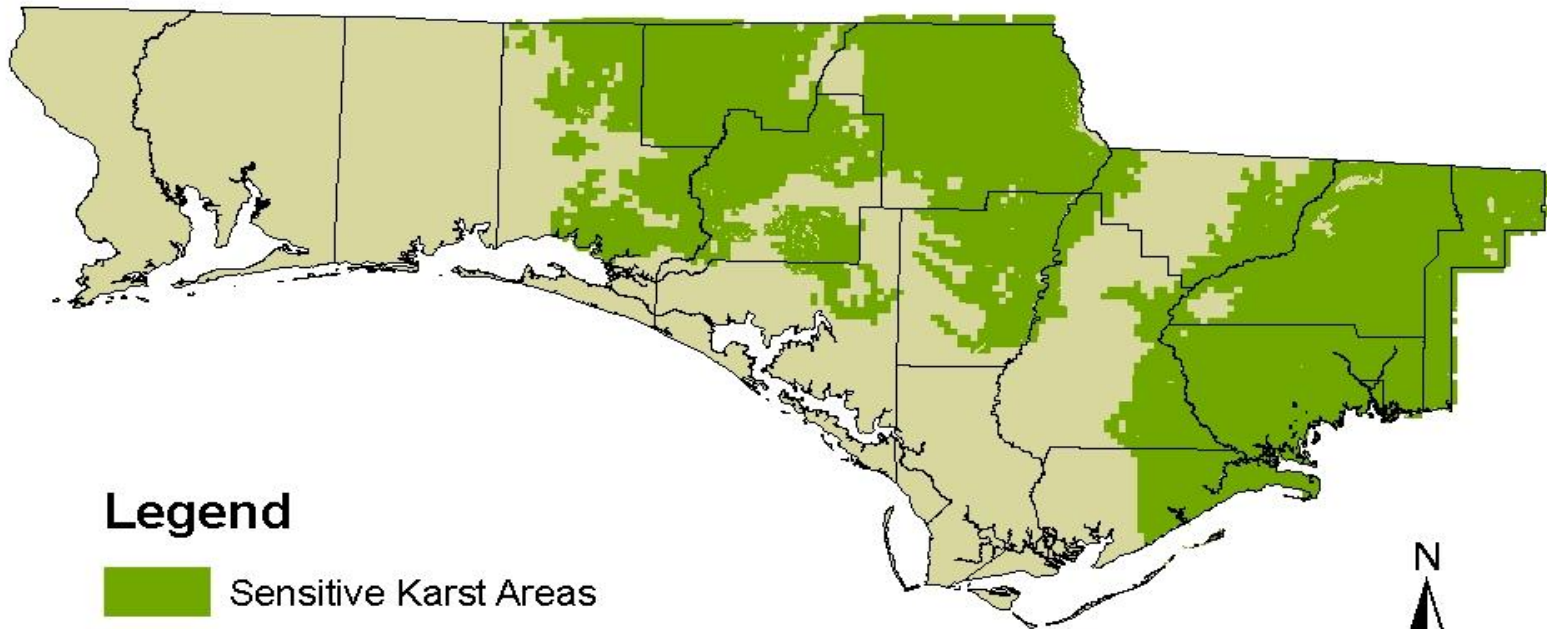
Sinkholes &
Solution Pipes





Dangerous Karst Topography



Sensitive Karst Areas - Northwest Florida



Legend

-  Sensitive Karst Areas
-  Non-Karst Areas



0 20 40 80 Miles

Statewide Rule to Provide Much Needed Consistency

- **Establish Science-Based “Baseline” Treatment Level**
- **Special Basins Can Require Higher Standards**
- **Provides Consistency for Developers/Consultants that work Statewide.**
- **Levels the Playing Field Regarding Stormwater Treatment**

