Florida’s WMDs: Current Stormwater Criteria
The Proposed Statewide Stormwater Rule: How We Got There

At a Meeting of the

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Proudly Serving the Environmental Engineering Profession since 1955

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Northwest Florida Water Management District
Florida’s Water Management Districts: Current Criteria *Chaos!*

- South Florida
- Southwest
- St. Johns
- Suwannee
- Northwest
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...
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”

• 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

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

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>DETENTION VOLUMES</th>
</tr>
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<tbody>
<tr>
<td>SRWMD</td>
<td>None specifically stated for wet detention systems</td>
</tr>
<tr>
<td>SJRWMD</td>
<td>Greater of 1&quot; runoff or 2.5&quot; runoff from impervious area; 14 day minimum wet season residence time; maximum depth 12 feet; length to width ratio &gt; 2:1; littoral zone 30% pond area (40C-42.026(4))</td>
</tr>
<tr>
<td>SWFWMD</td>
<td>1&quot; of runoff; littoral zone 35% of pond area (BOR 5.2.a)</td>
</tr>
<tr>
<td>SFWMD</td>
<td>Greater of 1&quot; of runoff or 2.5&quot; 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)</td>
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## Selected *Worst* Criteria

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<tbody>
<tr>
<td>Sediment and Erosion Control</td>
<td>SRWMD</td>
</tr>
<tr>
<td>Retention Systems</td>
<td>SWFWMD</td>
</tr>
<tr>
<td>Exfiltration Systems</td>
<td>SWFWMD</td>
</tr>
<tr>
<td>Wet Detention Systems</td>
<td>SWFWMD</td>
</tr>
<tr>
<td>Swales</td>
<td>SRWMD &amp; SJRWMD</td>
</tr>
<tr>
<td>Wetland Treatment Systems</td>
<td>SWFWMD</td>
</tr>
</tbody>
</table>
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
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