

An Overview of the Water Use Permitting Process

In cooperation with FNGLA & FDACS

Palm Beach Workshop November 15, 2007

Tom Colios, Sr. Supervising Hydrogeologist

sfwmd.gov

Permitting Authority

- Florida Statutes - Chapter 373
- SFWMD Rules - Chapters 40E-2 & 40E-20
- Water Use Basis of Review

sfwmd.gov

"Three-Pronged" Test for Water Use

- Reasonable - Beneficial Use
- Not interfere with presently existing legal uses of water
- Consistent with the public interest

sfprwdl.gov

Reasonable - Beneficial

The use of water in such quantity as is necessary for economic and efficient utilization for a purpose and in the manner which is both reasonable and consistent with the public interest.

sfprwdl.gov

Exempt Uses

- Private Domestic Use
- Fire Protection
- Reclaimed Water
- Sea water

sfwmd.gov

Primary Use Classes

- Public Water Supply
- Mining/Dewatering
- Industrial/ Commercial
- Irrigation
 - Agricultural
 - Nursery
 - Landscaping / Golf Course
 - Aquaculture

sfwmd.gov

Source Classification

- Permit all Sources
 - Ground Water
 - Surface Water
- Fresh vs Saline Water
 - Saline > 250 mg/L Chlorides
- Exempt Sources
 - Seawater (>19,000 mg/L)
 - Reclaimed Water

sfprmd.gov

Permit Types

- Minor General Permit (\$350)
 - Use less than 100,000 GPD
 - 20 year permit duration
- Major General Permit (\$1,000)
 - Use between 100,000 & 500,000 GPD
 - Additional reporting requirements
 - Five year duration for new permits

sfprmd.gov

Permit Types (cont'd)

- Individual Permit (\$1,000)
 - Use greater than 500,000 GPD
 - Additional reporting requirements
 - Five year duration for new permits
 - Approved by Governing Board

sfwater.gov

Application Review and Analysis

Supply vs Demand

sfwater.gov

Irrigation Demand

Blaney-Criddle Equation

- Effective Rainfall (1-in-10 year drought)
- Soil Type
- Crop
- Irrigated Acreage (container vs in-ground)
- Irrigation System Efficiency

sfwmd.gov

Irrigation System Efficiency

- Drip 85%
- Sprinkler 75%
- Portable Gun 65%
- Seepage 50%
- Container Nursery 20%

sfwmd.gov

Standard Irrigation Systems

- Micro-Irrigation (85%) for Citrus and Nursery containers
 - Drip or micro-sprinkler
 - Required for irrigation systems that are not constructed
- Overspray Recovery System
- Other Specific Design Elements that are equivalent to Micro efficiency

sfprwdl.gov

Supply

- Impact Analysis
 - Water Resource Availability
 - Existing Legal Users
 - Existing Domestic Users
 - Saline Intrusion
 - Wetland Environments
 - Contamination Movement
 - Minimum Flows & Levels

sfprwdl.gov

No Penalty for Unpermitted Nurseries If Below is Satisfied:

- Apply for permit by 1/31/08
- Demand less than 500,000 GPD (Minor & Major GP)
- Complete application & comply with permit criteria
- Letter from FDACS stating nursery has filed "Notice of Intent to Implement BMPs"
- Mobile Irrigation Lab evaluation scheduled or completed
- Don't apply or don't follow BMPs means enforcement penalty & having to get a permit anyhow

sfwmd.gov