

Overview of Chapter 373, Florida Statutes (Continued), Part IV, Introduction to Water Quality

Governing Board Workshop

August 13, 2008

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The Clean Water Act's National Pollutant Discharge Elimination System regulations require discharge effluent limits that achieve "water quality standards." 40 C.F.R. §122.44(d)

Rule 62-650.300 states that Florida Department of Environmental Protection cannot permit discharges to waters of the state “which can reasonably be expected to cause or contribute...to a violation of any “water quality standards.”

Chapter 373 provides that Environmental Resource Permit applicants must demonstrate compliance with “water quality standards” (373.414)

Lakes



Rivers



Canals



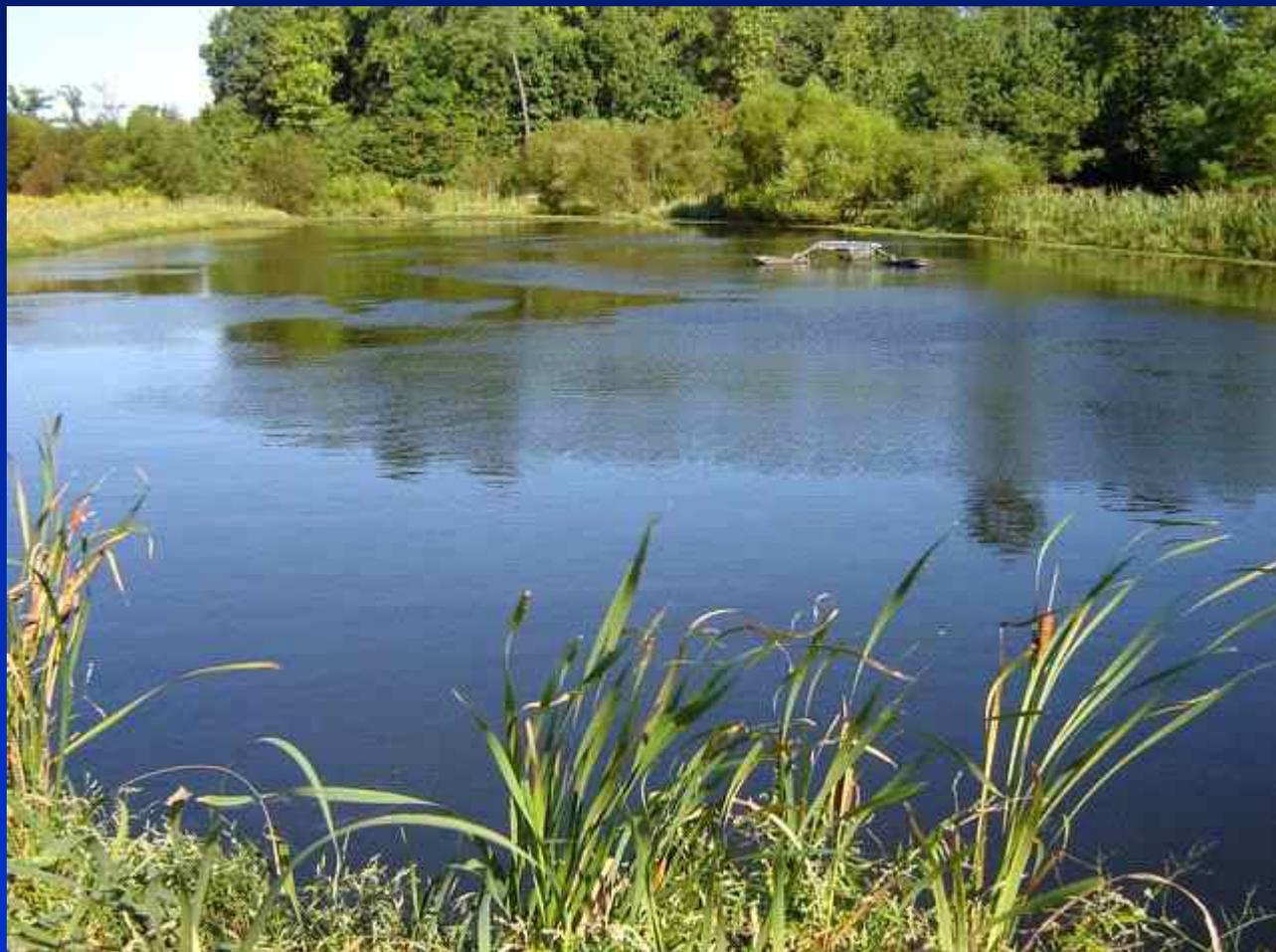
Canals



Water Conservation Areas



Ponds and Wetlands



Stormwater Management Systems



Stormwater Management Systems



Stormwater Management Systems



BUT WHAT IS A WATER QUALITY STANDARD?

A water quality standard has four parts:

- 1. “designated use”**
- 2. criterion**
- 3. anti-degradation provision**
- 4. moderating provisions**

“DESIGNATED USES”

States are required to designate *the use* which a given body of water should have and that should be protected.

In essence, a state describes the intended goal or purpose of a water body, i.e., its “use.”

The Clean Water Act identifies several possible designated uses:

- Public water supply
- Protection and propagation of fish, shellfish, and wildlife
- Recreation
- Agriculture
- Industry

“FISHABLE/SWIMMABLE”

The Clean Water Act doesn't use this term. It states that uses shall generally, wherever attainable, provide water quality for the protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water.

- **Navigation**
- **Coral reef preservation**
- **Marinas**
- **Groundwater recharge**
- **Aquifer protection**
- **Hydroelectric power**

FLORIDA'S DESIGNATED USES

In Florida, we have only five types of uses:

- CLASS I** Potable Water Supply
- CLASS II** Shellfish Propagation or Harvesting
- CLASS III** Recreation, Propagation and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife
- CLASS IV** Agricultural Water Supplies
- CLASS V** Navigation, Utility and Industrial Use

Lake Okeechobee (Class I)



Florida Bay (Class II)



Marshes (Class III)



Water Conservation Areas (Class III)



Canals (Class III)



EAA Canals (Class IV)



OTHER STATES' DESIGNATED USES

Many states have adopted other **subcategories** of designated uses, including:

“Primary contact recreation” (Delaware)

“Secondary contact recreation and esthetic enjoyment” (Washington, D.C.)

“Livestock and wildlife watering” (Missouri)

“Boating and canoeing” (Missouri)

“Storm- and flood-water storage and attenuation” (Missouri)

“Hydrologic cycle maintenance” (Missouri)

“Nongame fish and other aquatic life” (Utah)





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THE SECOND COMPONENT: THE CRITERION

Federal law provides that states “must adopt those *water quality criteria* that protect the designated use. Such criteria must be based on sound scientific rationale” 40 C.F.R. 131.11.

Stated differently, criteria represent the water quality necessary to support a particular use and are expressed as constituent concentrations, levels or narrative statements.

When most people think of water quality criteria, they think of the table set forth in Rule 62-302.530, F.A.C., which sets forth specific numeric and narrative criteria for a long list of chemicals.

62-302.530 TABLE

Parameter	Units	Class I	Class II	Class III: Fresh	Class III: Marine	Class IV	Class V
(5)(a) Arsenic (total)	Micrograms/L	≤ 10	≤ 50	≤ 50	≤ 50	≤ 50	≤ 50
(9) Benzene	Micrograms/L	≤ 1.8	≤ 71.28 annual avg.	≤ 71.28 annual avg.	≤ 71.28 annual avg.		
(50)(m) Lindane (g-benzene hexachloride)	Micrograms/L	< 0.019 annual avg.; 0.08 max	< 0.063 annual avg.; 0.16 max	< 0.063 annual avg.; 0.08 max	< 0.063. annual avg.; 0.16 max		

“Unless otherwise stated, all criteria express the maximum ***not to be exceeded at any time***. In some cases, there are separate or additional limits, which apply independently of the maximum not to be exceeded at any time.” 62-302.530, F.A.C.

A WATER QUALITY STANDARD ALSO INCLUDES A STATE'S ANTI- DEGRADATION LAW

Pursuant to the Clean Water Act's "antidegradation policy," a state's water quality standards must "be sufficient to maintain *existing* beneficial uses of navigable waters, preventing their further degradation."

THE FOURTH COMPONENT: RELIEF MECHANISMS

A water quality standard also includes the moderating provisions contained in Chapter 62-4 and 62-302, F.A.C.

- Site Specific Alternative Criteria (due to natural background or man-induced conditions) (62-302.800)**
- Mixing Zones (62-4.244)**

CHANGES IN USE AND VARIANCES

The Clean Water Act also authorizes “changes in use” if a State demonstrates that attaining the designated use in a waterbody is not feasible because:

CHANGES IN USE AND VARIANCES *cont'd*

- Intermittent or short-lasting flow conditions or water levels prevent attainment;
- Human caused conditions or sources of pollution prevent attainment of the use and cannot be remedied or would cause more environmental damage than leaving pollution in place;



CHANGES IN USE AND VARIANCES, cont'd

- Dams, diversions or other types of hydrologic modifications preclude attainment of the use and it is not feasible to restore the waterbody to its original condition or operate such modifications in a way to achieve the use; or
- Pollution control measures would result in substantial and widespread economic and social impact.



