28th Annual
Environmental Permitting Summer School at Marco Island

Florida

Wetland Jurisdiction

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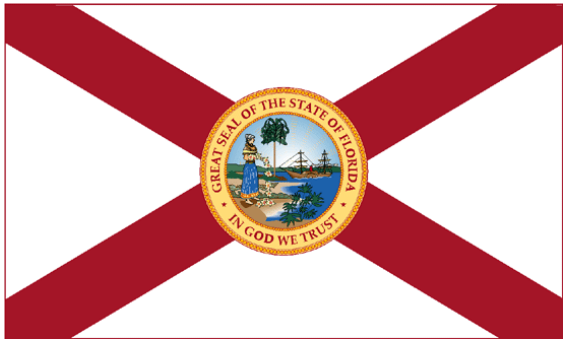
Presented by Ed Murawski



Florida Wetland Delineation Rule

Chapter 62-340, Florida Administrative Code (FAC)

Delineation of the Landward Extent of Wetlands and Surface Waters

Presentation Overview

1. History
2. Intent of the Rule
3. Delineation Concepts
4. Applying the Methodology

HISTORY

Florida State law Chapter 373.421, Florida Statutes required the adoption of a unified State wide methodology for the delineation of wetlands and other surface waters under the State jurisdiction.

WHY?

1. Multiple State and local government agencies.

2. Multiple delineation methods

Chapter 62-340, FAC adopted July 1, 1994 and in the Northwest Florida District as of November 2010

INTENT OF THE RULE

Unified Statewide Methodology to identify and establish or delineate the landward extent of wetlands and surface waters under the jurisdiction of the Department, Water Management Districts and local governments.

The methodology was developed to be used consistently across the State.

This rule does not govern the use of wetlands.

INTENT OF THE RULE

The focus is on the three parameters indicative of regular and periodic inundation or saturation.

1. Vegetation
2. Hydric Soils
3. Hydrological Indicators

INTENT OF THE RULE

First attempt to identify wetlands based upon the definition of wetlands.

INTENT OF THE RULE

Wetland Definition
Ch. 62-340.200(19)

"Wetlands," as defined in subsection 373.019(17), F.S., means those areas that are inundated or saturated by surface water or ground water at a frequency and a duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils. Soils present in wetlands generally are classified as hydric or alluvial, or possess characteristics that are associated with reducing soil conditions. The prevalent vegetation in wetlands generally consists of facultative or obligate hydrophytic macrophytes that are typically adapted to areas having soil conditions described above. These species, due to morphological, physiological, or reproductive adaptations, have the ability to grow, reproduce or persist in aquatic environments or anaerobic soil conditions.

Florida wetlands generally include swamps, marshes, bayheads, bogs, cypress domes and strands, sloughs, wet prairies, riverine swamps and marshes, hydric seepage slopes, tidal marshes, mangrove swamps and other similar areas. Florida wetlands generally do not include longleaf or slash pine flatwoods with an understory dominated by saw palmetto.

INTENT OF THE RULE

Wetland Definition

"Wetlands," as defined in subsection 373.019(17), F.S., **means those areas that are inundated or saturated by surface water or ground water at a frequency and a duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils.** Soils present in wetlands generally are classified as hydric or alluvial, or possess characteristics that are associated with reducing soil conditions. The prevalent vegetation in wetlands generally consists of facultative or obligate hydrophytic macrophytes that are typically adapted to areas having soil conditions described above. These species, due to morphological, physiological, or reproductive adaptations, have the ability to grow, reproduce or persist in aquatic environments or anaerobic soil conditions.

Wetland Definition

Florida wetlands generally include:

Swamps
Marshes
Bayheads
Bogs
Cypress Domes and Strands
Sloughs
Wet Prairies
Riverine Swamps and Marshes
Hydric Seepage Slopes
Tidal Marshes
Mangrove Swamps

And
Other similar areas

INTENT OF THE RULE

Wetland Definition

Florida wetlands generally DO NOT include longleaf or slash pine flatwoods with an understory dominated by saw palmetto.

Delineation Concepts

1. Reasonable Scientific Judgment
2. Ecotone
3. Vegetative Stratum

Delineation Concepts

1. Reasonable Scientific Judgment

Reasonable scientific judgment is the ability to collect and analyze information using technical knowledge and personal experience to make decisions.

Delineation Concepts

2. Ecotone

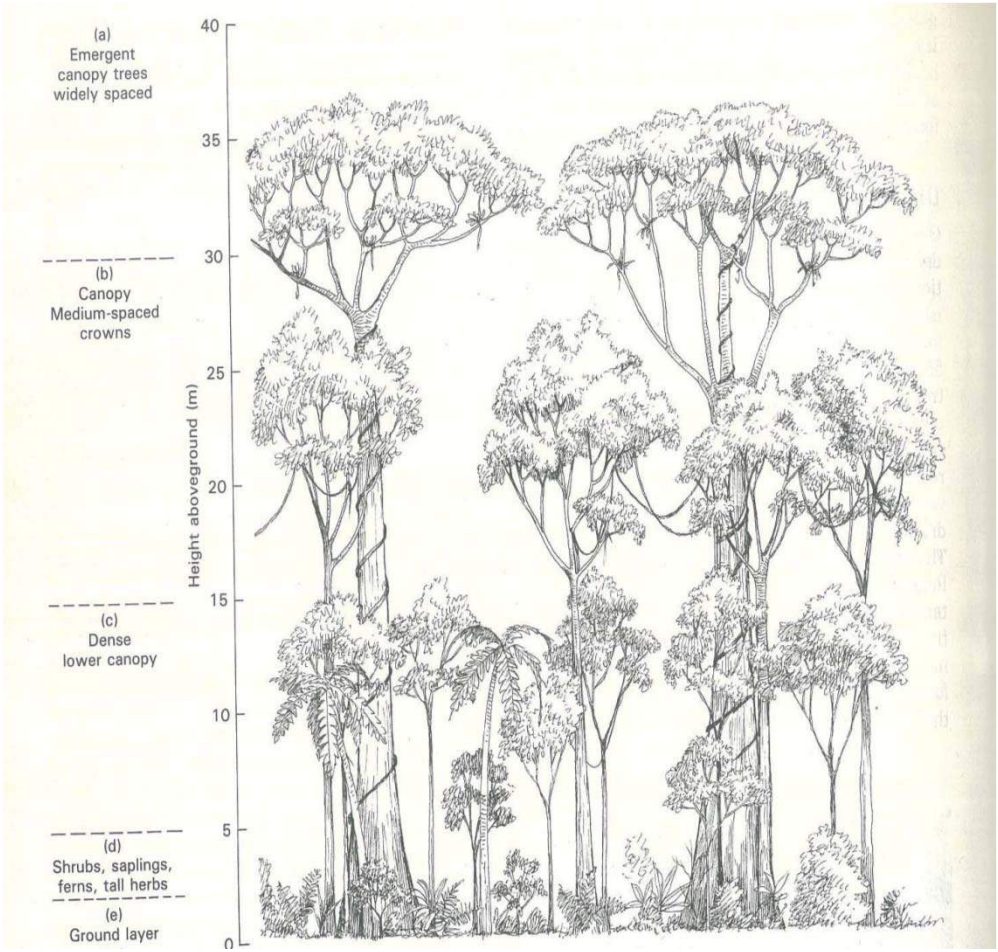
An ecotone is an area where two or more vegetative communities grade into each other.

Delineation Concepts

2. Ecotone

Delineation Concepts

3. Vegetative Stratum



Delineation Concepts

3. Vegetative Stratum

a. Canopy – the plant stratum composed of woody plants with a trunk four inches or greater at Diameter Breast Height (DBH).

b. Subcanopy - the plant stratum composed of woody plants, below the canopy, with a trunk between one and four inches at DBH.

c. Ground cover – all plants not found in the canopy or subcanopy.

Delineation Concepts

3. Vegetative Stratum

Select the appropriate vegetative stratum. (Ch. 62-340.400, FAC).

The upper most stratum is used to determine the dominant vegetative cover.

A lower stratum may be used when the uppermost stratum is less than 10% of total aerial cover.

Note – the stratum most indicative of the hydrologic condition must be used.

Delineation Concepts

3. Vegetative Stratum

Delineation Concepts

3. Vegetative Stratum

Mechanics of the Methodology

Technical Procedures or *Tests*

A-Test **“Vegetation Test”**

B-Test **“Vegetation Test”**

C-Test **“The Soil Test”**

D-Test **“Hydrologic Indicators Test”**

Mechanics of the Methodology

Technical Procedures or *Tests*

A-Test **"Vegetation Test"**

OBL Vegetation Cover > UPL Vegetation Cover

and

Hydric Soil Indicators, riverwash, rock outcrop-soil complex or substrates in artificial wetlands

or

At least one hydrologic indicator

EQUALS A WETLAND

NOTE: Do not include FAC vegetation, vines or aquatic vegetation in the determination!

Mechanics of the Methodology

Technical Procedures or *Tests*

B-Test "Vegetation Test"

OBL & FACW Vegetation ≥ to 80% of Cover

and UPL Vegetation ≤ to 20% of Cover

and

Hydric Soil Indicators, riverwash, rock outcrop-soil complex or substrates in artificial wetlands

or

At least one hydrologic indicator

EQUALS A WETLAND

NOTE: Do not include FAC vegetation, vines or aquatic vegetation in the determination!

Mechanics of the Methodology

Technical Procedures or *Tests*

C-Test "The Soil Test"

The rule identifies certain soil types as sufficient evidence to determine a wetland.

Argiaquolls, Hydraquents, Humaquepts, Sulfaquents, Umbraqualfs, Umbraquults, and Histosols (except Folists).

These soil types are formed in very poorly drained conditions and are always found in wetlands unless drained.

Mechanics of the Methodology

Technical Procedures or *Tests*

C-Test "The Soil Test"

In addition to the previously identified soil types.

Saline sands (salt flats-tidal flats)

Frequently flooded map units

Depressional map units

Note: These soil types require field verification.

Note: The "C" Test cannot be used in pine flatwoods, improved pasture, and/or drained soils.

Mechanics of the Methodology

Technical Procedures or *Tests*

D-Test **“Hydrologic Indicators Test”**

Hydric soils and/or Riverwash

AND

Hydrologic Indicators

EQUALS A WETLAND

Mechanics of the Methodology

Technical Procedures or *Tests*

D-Test **"Hydrologic Indicators Test"**

Sometimes all that is required to make a wetland determination is Soils!

Certain hydric soil types are known to have a seasonal high water table at or above the surface.

These include:
- Muck
- Sulfidic Odor
- Mucky Mineral
- Gleyed Matrix

These hydric soil indicators alone are used to classify an area as a wetland.

These areas do not extend beyond the seasonal high water elevation.

Mechanics of the Methodology

Technical Procedures or *Tests*

Altered Sites Test

If the vegetation or soils of an upland or wetland area have been altered by natural or man-induced factors such that the boundary between wetlands and uplands cannot be delineated reliably by use of the methodology in Ch. 62-340, F.A.C., then the most reliable available information shall be used with reasonable scientific judgment to determine where the methodology in subsection 62-340.300(2), F.A.C., would have delineated the boundary between wetlands and uplands.

Reliable available information may include, but is not limited to, aerial photographs, remaining vegetation, authoritative site-specific documents, or topographical consistencies.

Mechanics of the Methodology

Technical Procedures or *Tests*

Altered Sites Test

Mechanics of the Methodology

Wetland Hydrology (CH 62-340.550, FAC)

A wetland delineation may be refuted by either reliable hydrologic records or site specific hydrologic data that indicate the site does not inundate for seven consecutive days or saturate for twenty consecutive days during conditions which represent long term hydrologic conditions.

Data must be demonstrate the long term condition or new studies must be approved by appropriate regulatory agency.

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Surface Waters

Surface Waters

Section 62-340.600, Florida Administrative Code

"For the purposes of section 373.421, Florida Statutes, surface waters are waters on the surface of the earth, contained in bounds created naturally or artificially, including the Atlantic Ocean, the Gulf of Mexico, bays, bayou, sounds, estuaries, lagoons, lakes, ponds, impoundments, rivers, streams, springs, creeks, branches, sloughs, tributaries, and other watercourses"

These will include man made ditches and canals. Typical stormwater swales are not considered surface waters.

Surface Waters

The landward extent of a surface water shall be more landward of the following (62-340.600, FAC).

1. The limits of wetlands per 62-340.300, FAC.
2. The mean high water line elevation for tidal water bodies.
3. The ordinary high water line for non-tidal natural water bodies.
4. The top of bank for artificial water bodies with side slopes of 1 foot vertical to 4 feet horizontal, excluding spoil banks.
5. The seasonal high water line for artificial water body created by diking or impoundment above the ground.

Surface Waters

Surface Waters