

USACE Jacksonville District MITIGATION BANK CREDIT CLASSIFICATION CATEGORIES

Based on USACE Jacksonville District "A Guide to Selected Florida
Wetland Plants and Communities" (1988)

Description:

There are 22 Wetland Communities described in the Guide. Each one is included under a Credit Classification Category listed in this document. There are 9 Credit Classification Categories.

Purpose and Need:

This document's purpose is to provide classification categories for Federally released mitigation bank credits. It will allow for more efficient documentation and tracking of mitigation bank credits, while also creating a unified and streamlined approach to classifying compensatory mitigation community types to be used in Department of the Army (DA) permits and mitigation banking instruments (MBIs).

Instructions for Use:

The categories will be used (1) to classify mitigation bank credits as they are tracked in RIBITS; (2) in Permit Special Conditions to specify the type of credits needed for compensatory mitigation when purchasing from a mitigation bank; and (3) in credit release schedules associated with MBIs.

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MITIGATION BANK CREDIT CLASSIFICATION CATEGORIES**

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Reference Table:

Community Type	Pg*	CCN**	Classification Category	FLUCCS
Seagrass Meadows	23	1	Marine	911
Salt Flats	25	2	Estuarine Intertidal Emergent	642/651/ 652/
Low Salt Marshes	27			
High Salt Marshes	29			
Salt Shrubs	31	3	Estuarine Intertidal Forested	612
Mangrove Swamps	33			
Rivers	35	4	Riverine	510/645
Lakes	37	5	Lacustrine	520/521/ 522/523/ 645
Ponds	39	6	Palustrine Open Water	523/524/ 645
Wet Prairies	41	7	Palustrine Emergent	640/641/ 643/644/ 646
Savannahs	43			
Shallow Marshes	45			
Deep Marshes	47			
Shrub Swamps	49	8	Palustrine Scrub/shrub	618/631
Evergreen Shrub Swamps	51			
Bottomland Forests	53	9	Palustrine Forested	610/611/ 613/614/ 615/616/ 617/619/ 620/621/ 622/623/ 624/625/ 626/627/ 630
Shallow Swamps	55			
Deep Swamps	57			
Cypress Swamps	59			
Bay Swamps	61			
Low Pine Flatwoods	63			
Needle-leaved Evergreen Swamps	65			

*Page Number from Guide

**Classification Category Number

Category Explanations:

1) Marine

Description: Deepwater habitats and wetlands that are continuously flooded by saltwater or irregularly exposed at unusually low tides with vegetation dominated by seagrasses.

Vegetation: Manatee grass, Cuban shoal grass, *Halophila*, Johnson's seagrass, marine naiad, widgeon grass, turtle grass

Community Types: Seagrass meadows

*Covers both (1)subtidal and (2)intertidal

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2) Estuarine Intertidal, Emergent (E2EM)

Salt Flats:

Description: Non-vegetated or sparsely vegetated intertidal areas that have 30 percent or less vegetative cover and are occasionally flooded by tidal brackish or saline water.

Vegetation: Saltwort, glasswort, sea blite, salt grass, cordgrass (*Spartina*)

Low Salt Marshes:

Description: Characterized by herbaceous vegetation, principally grasses, sedges, and rushes, growing along the Atlantic and Gulf Coasts of Florida in areas that are regularly flooded by the tides.

Vegetation: Key grass, smooth cordgrass (*Spartina*), saltmarsh aster, black needlerush (*Juncus*), sea lavender

High Salt Marshes:

Description: Characterized by herbaceous vegetation, mostly grasses, sedges, and rushes, irregularly flooded by tidal action.

Vegetation: Saltmarsh aster, sea oxeye daisy, salt grass (*Distichlis*), hurricanegrass, black needlerush (*Juncus*), knotgrass, saltmeadow cordgrass (*Spartina*)

3) Estuarine Intertidal, Forested (E2FO)

Salt Shrubs:

Description: Characterized by woody vegetation in coastal areas that are irregularly flooded by tidal action.

Vegetation: Saltbush (*Baccharis*), buttonwood, marsh elder, black mangrove, sea grape, yaupon holly, white mangrove, Brazilian pepper

Mangrove Swamps:

Description: Characterized by woody halophytes that have morphological and physiological adaptations for survival to periodic or continual inundation by salt or brackish water.

Vegetation: Black mangrove, white mangrove, red mangrove, leatherfern, buttonwood, cabbage palm, Brazilian pepper

4) Riverine (R) (System level = 1 credit type)

Description: Include all flowing water environments contained within natural or artificial channels where inundation is continuous or nearly so throughout the year.

Vegetation: *Hydrilla*, *Sagittaria*, tape grass (*Vallisneria*), bushy pondweed, pondweed, widgeon grass, turtle grass, bladderworts

Community Types: Rivers

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5) Lacustrine (L) (System level = 1 credit type)

Description: Characterized by water bodies greater than 20 acres or deeper than 2 meters that are subject to slow exchange and seasonal stratification.

Vegetation: Hornwort, water hyacinth, *Hydrilla*, spatterdock, water lily, water lettuce, fanwort, duckweed, floating hearts

Community Types: Lakes

6) Palustrine Open Water: (Ponds)

Description: Freshwater wetland communities characterized by floating and/or submerged aquatic vegetation occurring in small, shallow depressions.

Vegetation: Mosquito fern, hornwort, water hyacinth, duckweed, parrot's feather, spatterdock, water lily, alligator weed, marine naiad, water lettuce

7) Palustrine Emergent (PEM)

Wet Prairies:

Description: Characterized by herbaceous plant species that occur on sites where the soil is usually saturated or covered with only a few inches of surface water for brief periods during the growing season.

Vegetation: False foxglove, white-top sedge, hat pins, soft rush (*Juncus*), bog buttons, hairgrass (*Muhlenbergia*), sand cordgrass (*Spartina*), corkwood, yellow-eyed grass, broomsedge (*Andropogon*), wiregrass, sawgrass, dogfennel, batchelor's button

Savannahs:

Description: Characterized by a rich assemblage of herbaceous plant species that occur where the soil is usually saturated to the surface for extended periods during the growing season; also called bogs.

Vegetation: Wiregrass, cutthroat grass (*Panicum*), *Calopogon*, rush featherling, trumpet leaf, pitcherplant, blue maidencane, toothache grass, white-top sedge, sundew, redroot, bog buttons, yellow-eyed grass

Shallow Marsh:

Description: Characterized by herbaceous plant species that occur on sites where surface water is present for extended periods during the growing season, but is absent by the end of the growing season in most years.

Vegetation: Golden canna, sawgrass, maidencane (*Panicum*), smartweed, pickerelweed, arrowhead (*Sagittaria*), spikerush (*Eleocharis*), torpedograss, alligator flag, southern cattail

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Deep Marsh:

Description: Characterized by herbaceous species that occur in areas where the soil is covered by water throughout the growing season of most years.

Vegetation: Spikerush (*Eleocharis*), green arum, pickerelweed, arrowhead (*Sagittaria*), alligator flag, southern cattail, water hemlock, sawgrass, elephant ear, red *Ludwigia*, spatterdock, waterlily, maidencane, arrowhead

8) Palustrine Scrub/shrub (PSS)

Shrub Swamps:

Description: Characterized by woody shrubs that occur in areas where the soil is usually saturated, often with standing water throughout the growing season in most years.

Vegetation: Buttonbush, sweet pepperbush, pop ash, dahoon holly, willow, bald cypress, red maple, alder, pond apple, sawgrass, royal fern

Evergreen Shrub Swamp:

Description: Characterized by woody shrubs or low trees where the soil is saturated to the surface or where standing water persists throughout most of the growing season in most years; occur mostly along stream or river courses on poorly drained substrates in northern Florida (titi swamps), in shallow depressions in pine flatwoods, and in the Everglades in south Florida.

Vegetation: Buckwheat tree, titi, sandweed (*Hypericum*), *Melaleuca*, wax myrtle, elderberry, pond apple, sweet pepperbush, loblolly bay, myrtle-leaved holly, pond pine, sweet bay (*Magnolia*)

9) Palustrine Forested (PFO)

Bottomland Forests:

Description: Alluvial forest of deciduous trees forms an open, park-like zone that represents the ecotone between the seasonally inundated river swamp and the more xeric upland forests.

Vegetation: Sweetgum, laurel oak, water oak, box elder, red maple, river birch, Southern Magnolia, sweet bay, loblolly pine, sycamore, cabbage palm, American elm

Shallow Swamp:

Description: Characterize many river floodplains in Florida that are seasonally inundated or saturated for 2 months or more during the growing season.

Vegetation: Red maple, laurel oak, overcup oak, cabbage palm, lizard's tail, American elm, leatherleaf fern, river birch, ironwood, sawgrass, Southern Magnolia, sweet bay, wax myrtle, live oak

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Deep Swamp:

Description: Found bordering rivers and lake basins where the forest floor is saturated or submerged for most of the growing season.

Vegetation: Red maple, water hickory, pop ash, water tupelo, overcup oak, water oak, black willow, swamp tupelo, slash pine, loblolly pine, cabbage palm, bald cypress

Cypress Swamp:

Description: Usually located along rivers, lake margins, deep marshes, savannahs, or in depressions throughout other habitats such as low pine flatwoods or wet prairies.

Vegetation: Bald cypress, water tupelo, swamp tupelo, Carolina ash

Bay Swamp:

Description: Dominated by broad-leaved evergreen trees that grow in peat-forming flatwoods depressions, shallow drainage ways and flatwoods ponds, stream bottoms, spring heads or cypress swamps.

Vegetation: Loblolly bay, sweetbay, swamp bay, red maple, Atlantic white cedar, titi, dahoon holly, slash pine, pond pine, laurel oak, bald cypress

Low Pine Flatwoods:

Description: Dominated by needle-leaved evergreens that occur in shallow depressions or flats in pinelands that often border small creeks or wet prairies.

Vegetation: Wiregrass, slash pine, pond pine, sweet bay, loblolly bay, titi, *Lyonia*, swamp tupelo

Needle-leaved Evergreen Swamps:

Description: Dominated by needle-leaved evergreens that occupy low depressions or ponds in the flatwoods of north Florida and are always at a slightly lower elevation than the bordering slash or longleaf pinelands.

Vegetation: Pond pine, Southern red cedar, slash pine, Atlantic white cedar, titi, gallberry, cabbage palm, *Lyonia*, saw palmetto