



Peninsular Florida Landscape Conservation Cooperative

Priority Resources
Marine/Estuarine



Draft Priority Resources

“Sub” Resources

- Salt Marsh
- Mangrove
- Coral
- Seagrass

Selected Classification systems

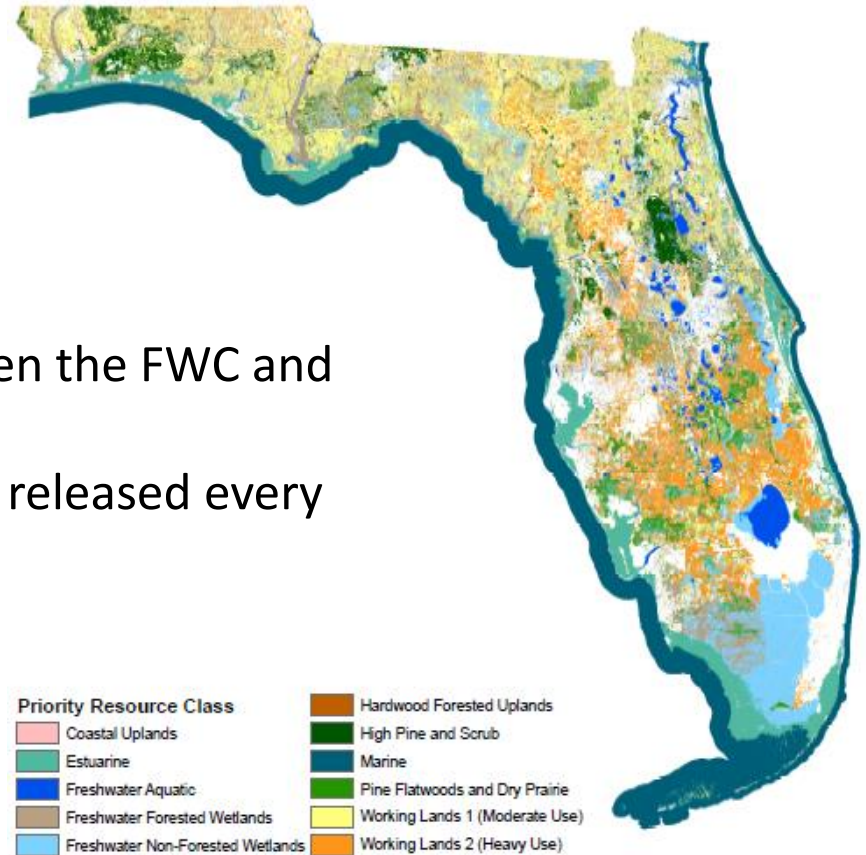
- Cooperative Land Cover Map (CLC)
- Coastal & Marine Ecological Classification Standard (CMECS)

Extent

- 200m bathymetric line

Cooperative Land Cover V. 3.0+

- 10m Raster
- Vector
- Statewide Update in 2014
- Moving forward - Partnership between the FWC and FNAI to maintain/update
- Continuously updated: New versions released every 6 – 12 months





Marine/Estuarine Classification - CLC



CLC Estuarine Classifications

Estuarine (5000)

Subtidal (5100)

Intertidal (5200)

Exposed Limestone (5210 - 5212)

Tidal Flat (5220 - 5222)

Oyster Bar (5230)

Salt Marsh (5240)

Mangrove (5250 - 5252)

CLC Marine Classification

Extends only to state waters

No distinct classifications

Includes only:

Marine (6000)

Surf Zone (6100)

Salt Marsh – CLC Classification

5240 – Salt Marsh

5241 – Salt Flat

5242 – Cordgrass

5243 – Needlerush

Salt Marsh:

- Estuarine wetland on muck/sand/or limestone substrate
- Inundated with saltwater by daily tides
- Statewide
- Occasional or rare fire
- Treeless, dense herb layer with few shrubs
- Saltmarsh cordgrass, needlerush, saltgrass, saltwort, perennial glasswort, seaside oxeye (FNAI)

Salt Flat:

- Salt marsh with much exposed bare soil on slightly higher areas within marsh
- High salinity and dry conditions
- Sparse and stunted cover of succulents and/or shoregrass

CMECS Classification System

Estuarine System:

- Tidally influenced waters
- Open-surface connection to the sea
- Regularly diluted by freshwater runoff from land
- Have some degree of land enclosure

Subsystem: Estuarine Coastal

Zones: Estuarine Coastal Subtidal, Estuarine Coastal Intertidal, Estuarine Coastal Supratidal

Subsystem: Estuarine Open Water

Zone: Estuarine Open Water Subtidal

Subsystem: *Estuarine Tidal Riverine Coastal*

Zones: Estuarine Tidal Riverine Coastal Subtidal, Estuarine Tidal Riverine Coastal Intertidal

Subsystem: Estuarine Tidal Riverine Open Water

Zone: Estuarine Tidal Riverine Open Water Subtidal

CMECS Classification System

Marine System

- 35 ppt
- All non-estuarine waters
- Coastal indentations/bays with little freshwater input
- River plumes that discharge into marine waters (e.g., Mississippi River plume, Chesapeake Bay plume)

Subsystem: Marine Nearshore (→ 30m depth contour)

Zones: Marine Nearshore Subtidal, Marine Nearshore Intertidal,
Marine Nearshore Supratidal

Subsystem: Marine Offshore (30m → continental shelf break, 100-200m)

Zone: Marine Offshore Subtidal

Subsystem: Marine Oceanic (continental shelf break → deep ocean)

Zone: Marine Oceanic Subtidal

Aquatic Setting

Biogeographic Setting

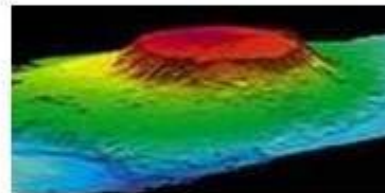
Components

**Water Column
Component
(WC)**



Structure and features of water column

**Geoform
Component
(GC)**



Geomorphic and structural character of coast or seafloor

**Substrate
Component
(SC)**



Character and composition of surface and near-surface substrates

**Biotic
Component
(BC)**



Assemblages of benthic and suspended/floating organisms

Salt Marsh – Biotic Component

Biotic Setting: Benthic/Attached Biota

Biotic Class: Emergent Wetland

Biotic Subclass: Emergent Tidal Marsh

Biotic Groups: Brackish Marsh, High Salt Marsh, Low and Intermediate Salt Marsh

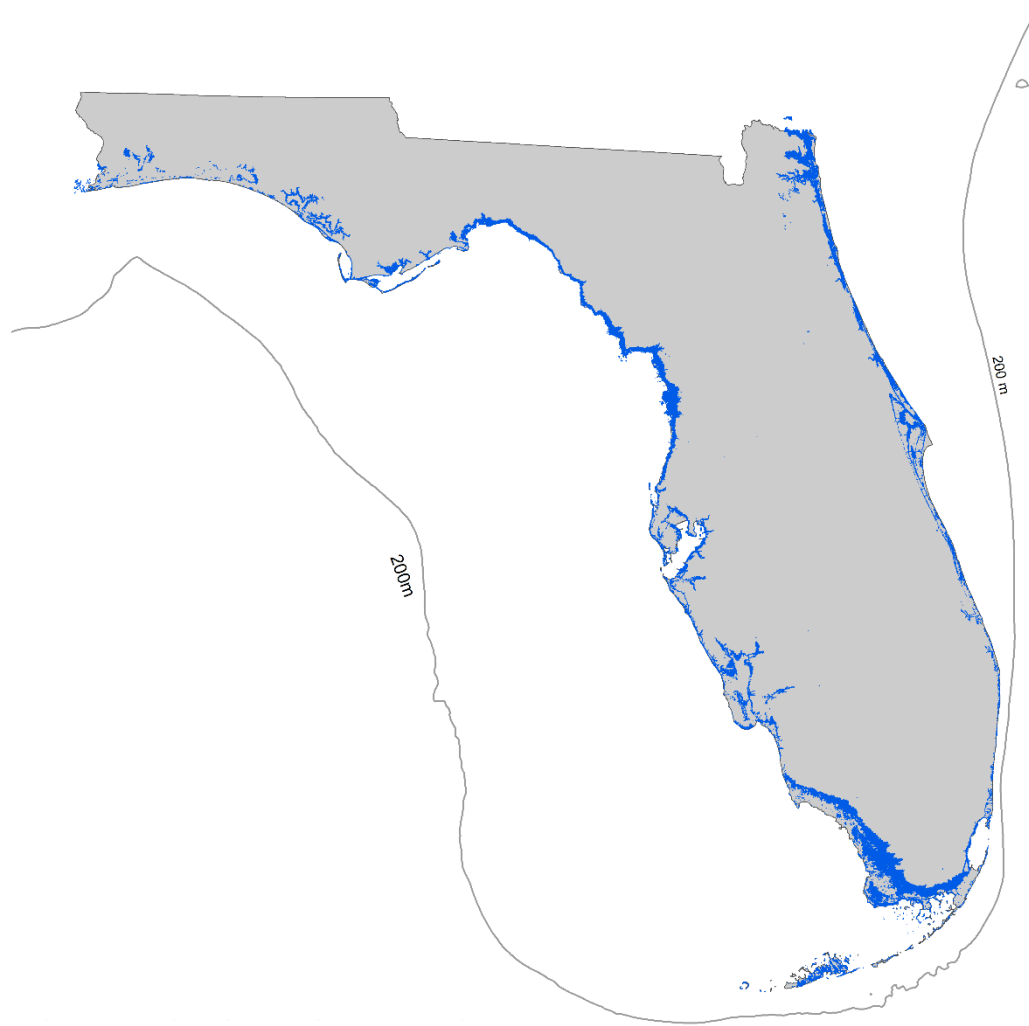


Biotic Setting	Biotic Class	Biotic Subclass	Biotic Group	Biotic Community
Benthic/Attached Biota	Emergent Wetland	Emergent Tidal Marsh	Brackish Marsh	<i>Amaranthus cannabinus</i> Tidal Herbaceous Vegetation
				<i>Calamagrostis nutkaensis</i> - <i>Argentina egedii</i> - <i>Juncus balticus</i> Herbaceous Vegetation
				<i>Carex hyalinolepis</i> Tidal Herbaceous Vegetation
				<i>Paspalum vaginatum</i> - <i>Spartina patens</i> Oligohaline Herbaceous Vegetation
				<i>Phragmites australis</i> Tidal Herbaceous Vegetation
				<i>Sagittaria subulata</i> - <i>Limosella australis</i> Tidal Herbaceous Vegetation
				<i>Schoenoplectus americanus</i> - (<i>Spartina patens</i>) - <i>Typha</i> spp. Herbaceous Vegetation
				<i>Schoenoplectus pungens</i> Tidal Herbaceous Vegetation
				<i>Schoenoplectus robustus</i> - <i>Spartina alterniflora</i> Herbaceous Vegetation
				<i>Spartina alterniflora</i> - <i>Lilaeopsis chinensis</i> Herbaceous Vegetation
				<i>Spartina alterniflora</i> - <i>Polygonum punctatum</i> - <i>Amaranthus cannabinus</i> Herbaceous Vegetation
				<i>Spartina cynosuroides</i> Herbaceous Vegetation
				<i>Spartina patens</i> - <i>Typha</i> spp. Chenier Plain Oligohaline Herbaceous Vegetation
				<i>Spartina patens</i> - <i>Vigna luteola</i> Mississippi River Deltaic Plain Herbaceous Vegetation
				<i>Typha angustifolia</i> - <i>Hibiscus moscheutos</i> Herbaceous Vegetation
				<i>Typha domingensis</i> Tidal Herbaceous Vegetation

Biotic Setting	Biotic Class	Biotic Subclass	Biotic Group	Biotic Community
Benthic/Attached Biota	Emergent Wetland	Emergent Tidal Marsh	High Salt Marsh	<i>Argentina egedii</i> - <i>Juncus balticus</i> Herbaceous Vegetation
				<i>Argentina egedii</i> - <i>Symphotrichum subspicatum</i> Herbaceous Vegetation
				<i>Carex lyngbyei</i> - <i>Argentina egedii</i> Herbaceous Vegetation
				<i>Deschampsia caespitosa</i> - <i>Argentina egedii</i> Herbaceous Vegetation
				<i>Deschampsia caespitosa</i> - <i>Sidalcea hendersonii</i> Herbaceous Vegetation
				<i>Eleocharis rostellata</i> - <i>Spartina patens</i> Herbaceous Vegetation
				<i>Festuca rubra</i> - (<i>Argentina egedii</i>) Herbaceous Vegetation
				<i>Juncus roemerianus</i> Herbaceous Vegetation
				<i>Panicum virgatum</i> - (<i>Cladium mariscus</i> ssp. <i>jamaicense</i> , <i>Juncus roemerianus</i>) Herbaceous Vegetation
				<i>Panicum virgatum</i> - <i>Spartina patens</i> Herbaceous Vegetation
				<i>Schoenoplectus americanus</i> - <i>Spartina patens</i> Herbaceous Vegetation
				<i>Schoenoplectus pungens</i> - <i>Eleocharis parvula</i> Herbaceous Vegetation
				<i>Spartina bakeri</i> - <i>Kosteletzkya virginica</i> Herbaceous Vegetation
				<i>Spartina bakeri</i> Herbaceous Vegetation
				<i>Spartina patens</i> - <i>Agrostis stolonifera</i> Herbaceous Vegetation
				<i>Spartina patens</i> - <i>Distichlis spicata</i> - (<i>Juncus roemerianus</i>) Herbaceous Vegetation
				<i>Spartina patens</i> - <i>Festuca rubra</i> - (<i>Spartina pectinata</i>) Herbaceous Vegetation

Biotic Setting	Biotic Class	Biotic Subclass	Biotic Group	Biotic Community
Benthic/Attached Biota	Emergent Wetland	Emergent Tidal Marsh	Low/Intermediate Salt Marsh	<i>Acrostichum aureum</i> - (<i>Acrostichum danaeifolium</i>) Tidal Herbaceous Vegetation
				<i>Carex lyngbyei</i> - (<i>Distichlis spicata</i> , <i>Triglochin maritima</i>) Herbaceous Vegetation
				<i>Carex lyngbyei</i> Herbaceous Vegetation
				<i>Deschampsia caespitosa</i> - (<i>Carex lyngbyei</i> , <i>Distichlis spicata</i>) Herbaceous Vegetation
				<i>Distichlis spicata</i> - (<i>Salicornia virginica</i>) Herbaceous Vegetation
				<i>Distichlis spicata</i> - <i>Ambrosia chamissonis</i> Herbaceous Vegetation
				<i>Salicornia (bigelovii, virginica)</i> Tidal Herbaceous Vegetation [Provisional]
				<i>Salicornia virginica</i> - <i>Brassica nigra</i> Herbaceous Vegetation
				<i>Salicornia virginica</i> - <i>Distichlis spicata</i> - <i>Jaumea carnosa</i> Tidal Herbaceous Vegetation
				<i>Salicornia virginica</i> - <i>Distichlis spicata</i> - <i>Triglochin maritima</i> - (<i>Jaumea carnosa</i>) Herbaceous Vegetation
				<i>Salicornia virginica</i> - <i>Frankenia salina</i> - <i>Suaeda californica</i> Herbaceous Vegetation
				<i>Salicornia virginica</i> / Algae Herbaceous Vegetation
				<i>Salicornia virginica</i> Herbaceous Vegetation
				<i>Sesuvium portulacastrum</i> Tidal Herbaceous Vegetation [Placeholder]
				<i>Spartina alterniflora</i> - <i>Distichlis spicata</i> - <i>Spartina patens</i> Mesohaline Tidal Herbaceous Vegetation
				<i>Spartina alterniflora</i> - <i>Juncus roemerianus</i> - <i>Distichlis spicata</i> Louisianian Zone Salt Tidal Herbaceous Vegetation
				<i>Spartina alterniflora</i> - <i>Distichlis spicata</i> Tidal Herbaceous Vegetation
				<i>Spartina alterniflora</i> / (<i>Ascophyllum nodosum</i>) Acadian/Virginian Zone Herbaceous Vegetation
				<i>Spartina alterniflora</i> Carolinian Zone Herbaceous Vegetation
				<i>Spartina patens</i> - <i>Distichlis spicata</i> - (<i>Juncus gerardii</i>) Herbaceous Vegetation
				<i>Spartina patens</i> - <i>Schoenoplectus (americanus, pungens)</i> - (<i>Distichlis spicata</i>) Herbaceous Vegetation
				<i>Spartina foliosa</i> Herbaceous Vegetation
				<i>Triglochin maritima</i> - (<i>Salicornia virginica</i>) Herbaceous Vegetation

Salt Marshes



0 25 50 100
Miles



Sources:

- FWRI – Saltmarsh Habitat
- CLC – V 3.2
- Charlotte Harbor NEP
- NWI – E2EM1

Potential Indicators – Salt Marsh

- Water quality
- Spatial coverage (acreage)
- Change of acreage over time
- Species composition
- Frequency occurrence of each species
- Specialist birds