

# Natural Communities of Louisiana



## Vegetated Pioneer Emerging Delta

**Rarity Rank:** S2S3/G3G4

	1	2	3	4	5
State					
Global					
	imperiled		rare	secure	

**Synonyms:** Delta Flats, Emergent Islands

**Ecological Systems:** CES203.470

Mississippi Delta Fresh and Oligohaline Tidal Marsh



### General Description:

- A dynamic community forming primarily within the actively building delta region at the mouth of the Atchafalaya and Mississippi Rivers
- Soils are formed from course to fine-grained alluvial deposits
- Hydrologic regime ranges from intermittently exposed to intermittently flooded
- Zonation of plant species occurs on the newly accreted land
- Naturally deposited island soils contain a greater percentage of sand and are therefore better drained than marsh soils
- The pioneer ridge vegetation is similar to the sand bars and delta of the Mississippi River while the pioneer marsh vegetation is similar to that of fresh marsh areas
- The pioneer community is successional in nature and changes rapidly with time
- The new delta community's ecological functions are similar in nature to marsh and mudflat systems, serving as nursery grounds for fish and aquatic invertebrate species
- Supports high numbers of wintering waterfowl

### Plant Community Associates

**Common species dominate on higher elevations include:**

*Echinochloa walteri* (coast cockspur grass)

**Common species dominating lower elevation tidally influenced zones include:**

*Sagittaria latifolia* (broadleaf bulltongue)

*Sagittaria platyphylla* (delta arrowhead)

*Leptochloa uninervia* (Mexican sprangletop)

*Cyperus difformis* (variable flatsedge)

*Eleocharis parvula* (dwarf spikerush)

**Common species dominating intermediate zones include:**

*Sagittaria platyphylla* (delta arrowhead)

*Cyperus difformis* (variable flatsedge)

*Bacopa monnieri* (coastal water hyssop)

*Eleocharis parvula* (dwarf spikerush)

*Leptochloa fusca* ssp. *uninervia* (Mexican sprangletop)

**Other common species include:**

*Salix* spp. (willow)

*Typha latifolia* (common cattail)

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## **Other common species continued:**

*Scirpus validus* (softstem bulrush)

*Juncus effusus* (soft rush)

*Scirpus americanus* (threesquare bulrush)

## **Federally-listed plant & animal species:**

*Pelecanus occidentalis* (brown pelican)

*Haliaeetus leucocephalus* (bald eagle)

Endangered, PS:E; G4; S2

Bald & Golden Eagle Protection Act;  
G4; S2N, S3B

*Trichechus manatus* (manatee)

Endangered; G2; SZN

*Chelonia mydas* (green sea turtle)

Threatened/Endangered; G3; SZN

*Eretmochelys imbricata* (hawksbill sea turtle)

Endangered; G3; SZN

*Lepidochelys kempii* (Kemp's Ridley sea turtle)

Endangered; G1; SZN

*Dermochelys coriacea* (leatherback sea turtle)

Endangered; G2; SZN

*Caretta caretta* (loggerhead sea turtle)

Threatened; G3; S1

## **Range:**

There are two areas of the Louisiana coast supporting this habitat: the actively forming Atchafalaya Delta and the current mouth of the Mississippi River.

## **LA River Basins:**

Mississippi, Atchafalaya

## **Threats:**

- Channelization and dredging
- Frequent and prolonged fluctuations in river water levels

## **Beneficial Management Practices:**

- Allow natural alluvial deposition processes to continue delta formation
- Identify and protect sensitive areas from disturbances such as boats or other motorized vehicles and recreational use
- Develop better strategies for the placement of dredge materials as a restoration method

