TEXAS COAST SALT AND BRACKISH TIDAL MARSH

Nature Serve ID: CES203.473

Geology: Recent alluvial and eolian deposits along the coast.

Landform: Nearly level very gentle slopes, and flats influenced by tides.

Soils: Coastal sands and various Salt Marsh Ecological Sites.

Description: These marshes occupy relatively low-lying, coastal situations on level landforms influenced by tidal fluctuations. Some sites are only influenced by storm tides, or tides resulting from extreme wind events. The composition of these marshes is primarily influenced by the frequency and duration of tidal inundation. Salinity on some marshes, particularly in the south, is maintained by salt spray from prevailing southeasterly winds. Low marshes are regularly flooded and representative examples are dominated by *Spartina alterniflora* (smooth cordgrass), *Juncus roemerianus* (blackrush), or *Avicennia germinans* (black mangrove). Significant areas of *Avicennia germinans* (black mangrove) become more frequent towards the south, while extensive areas of *Spartina alterniflora* (smooth cordgrass) become rare south of Corpus Christi Bay. Areas of decreased frequency and/or duration of tidal inundation are often referred to as high, or irregularly flooded, marsh. These marshes may be dominated by species such as *Spartina patens* (marshhay cordgrass), *Distichlis spicata* (saltgrass), *Schoenoplectus robustus* (sturdy bulrush), *Schoenoplectus americanus* (three-square bulrush), *Sporobolus virginicus* (seashore dropseed), *Monanthochloe littoralis* (shoregrass), and *Spartina spartinae* (Gulf cordgrass). Shrubs, subshrubs, and forbs, such as *Batis maritima* (saltwort), *Borrichia frutescens* (sea ox-eye daisy), *Sesuvium portulacastrum* (shoreline seapurslane), *Salicornia* spp. (glassworts), *Suaeda linearis* (annual seepweed), *Limonium* spp. (sea-lavenders), and *Lycium carolinianum* (Carolina wolfberry) are commonly encountered in these marshes. Some irregularly flooded sites may become shrub-dominated with species such as *Iva frutescens* (shrubby sumpweed) or *Baccharis halimifolia* (eastern baccharis). In the south, extensive areas are dominated by *Borrichia frutescens* (sea ox-eye daisy) and these often occur at very slightly lower elevations and higher salinities than nearby *Spartina spartinae* (Gulf cordgrass) salty prairie. These *Borrichia* flats may be very infrequently flooded, perhaps only under extreme storm tide conditions. Other species that may be encountered in these situations include *Maytenus phyllanthoides* (gutta-percha), *Prosopis reptans* (tornillo), *Monanthochloe littoralis* (shoregrass), *Distichlis spicata* (saltgrass), and *Batis maritima* (saltwort). The aspect dominant on these sites is clearly *Borrichia frutescens* (sea ox-eye daisy).

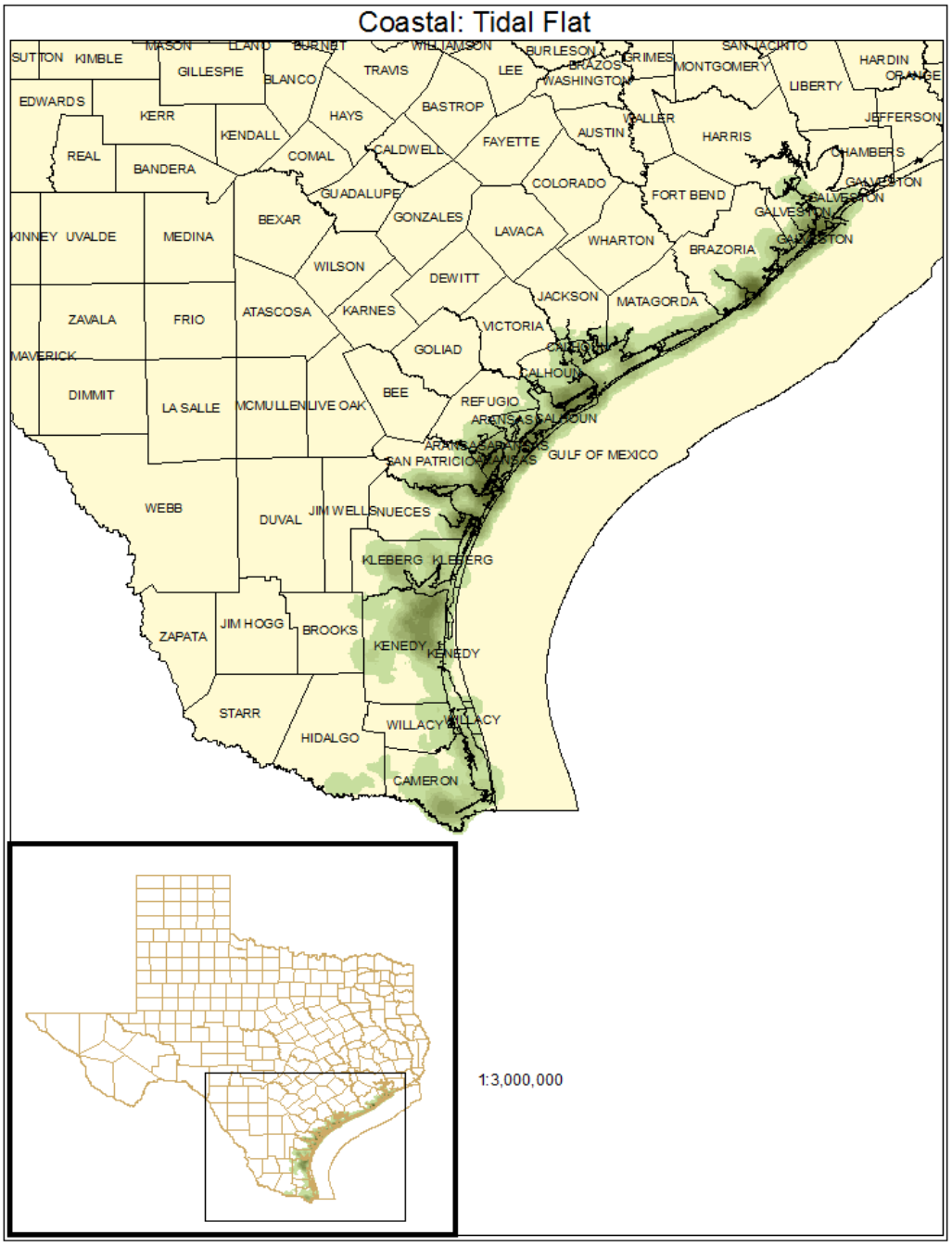
ECOLOGICAL MAPPING SYSTEMS:

COASTAL: TIDAL FLAT

Mapping System ID: 5600

EMS Description: Unvegetated or very sparsely vegetated flats affected by tidal fluctuations.

Distribution Map:



Example:

Public Land Occurrence:

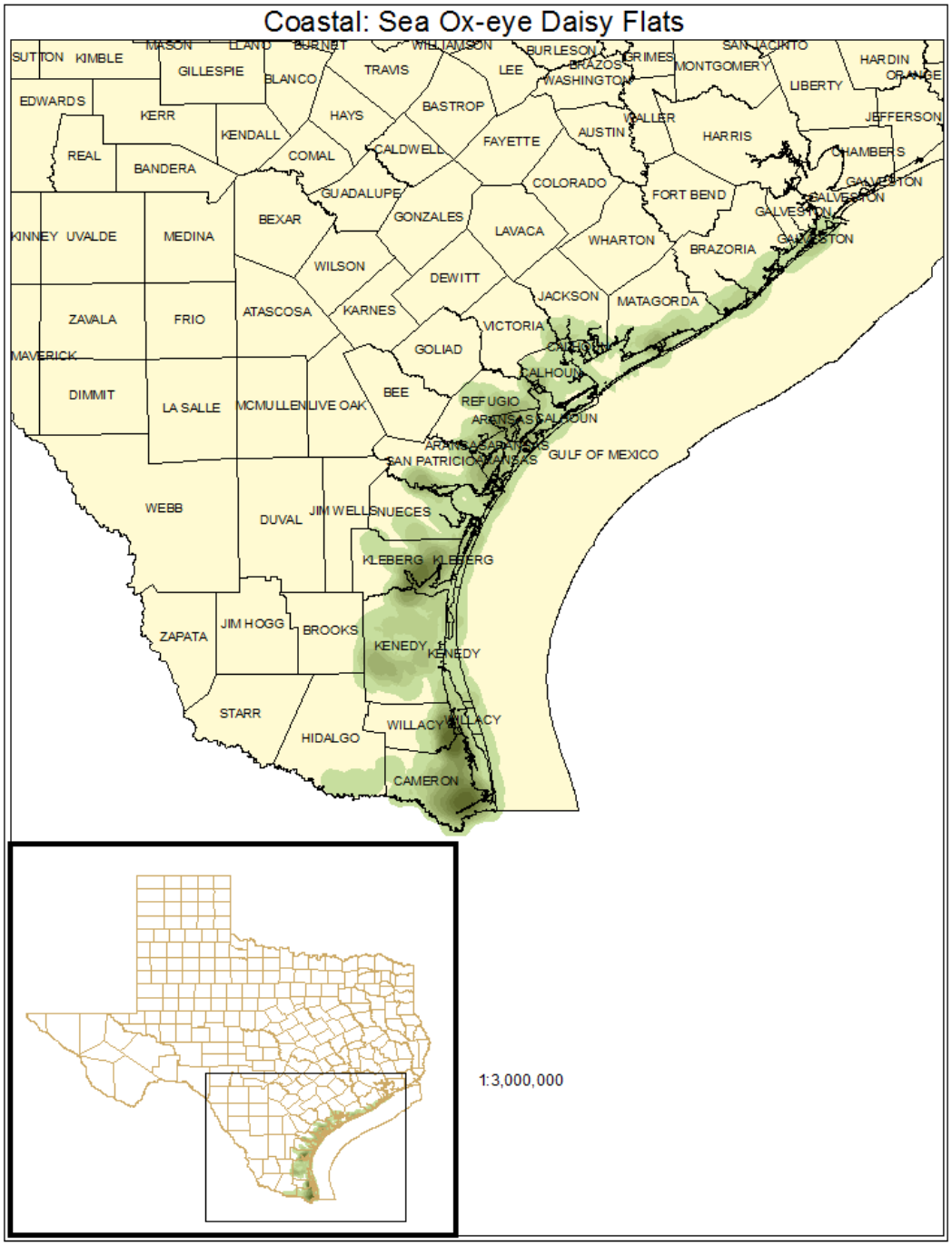
Aransas National Wildlife Refuge: US Fish and Wildlife Service
Brazoria National Wildlife Refuge: US Fish and Wildlife Service
Mustang Island State Park: Texas Parks & Wildlife Department
Padre Island National Seashore: US National Park Service
San Bernard National Wildlife Refuge: US Fish and Wildlife Service

COASTAL: SEA OX-EYE DAISY FLATS

Mapping System ID: 5605

EMS Description: *Borrichia frutescens* (sea ox-eye daisy) is the clear aspect dominant of these irregularly flooded sites. These flats become very extensive from Corpus Christi Bay, southward.

Distribution Map:



Example:

Public Land Occurrence:

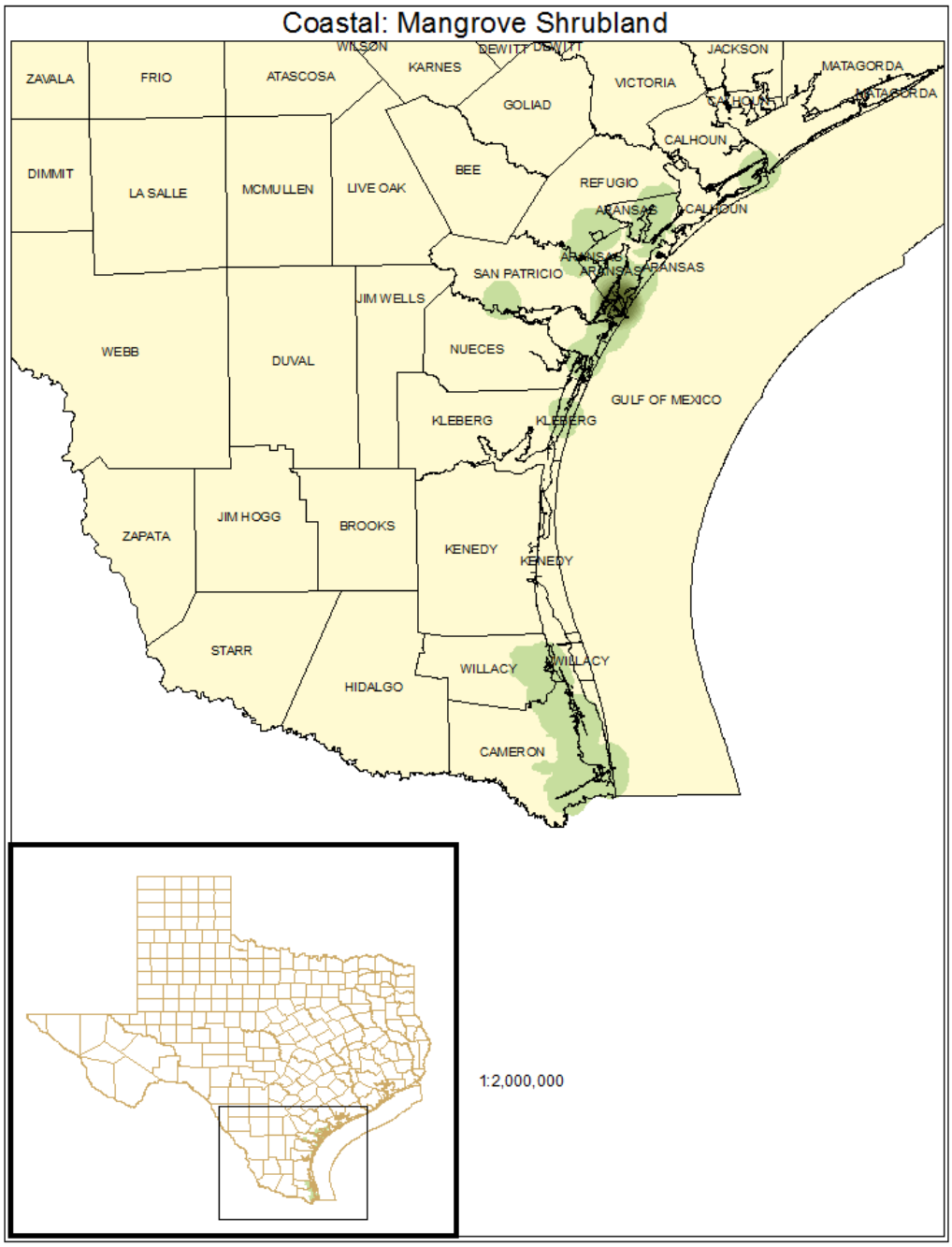
Aransas National Wildlife Refuge: US Fish and Wildlife Service
Galveston Island State Park: Texas Parks & Wildlife Department
Laguna Atascosa National Wildlife Refuge: US Fish and Wildlife Service
Lower Rio Grande Valley National Wildlife Refuge-Boca Chica: US Fish and Wildlife Service
Lower Rio Grande Valley National Wildlife Refuge-Loma Preserve: US Fish and Wildlife Service
Lower Rio Grande Valley National Wildlife Refuge-Vista del Mar: US Fish and Wildlife Service
Mustang Island State Park: Texas Parks & Wildlife Department
Padre Island National Seashore: US National Park Service
Palo Alto Battlefield National Historic Site: US National Park Service

COASTAL: MANGROVE SHRUBLAND

Mapping System ID: 5606

EMS Description: Shrublands dominated by *Avicennia germinans* (black mangrove). These tidal shrublands become increasingly well-developed towards the south. Fairly well-developed mangrove shrublands can be found in Redfish Bay near Aransas Pass.

Distribution Map:



Example:

Public Land Occurrence:

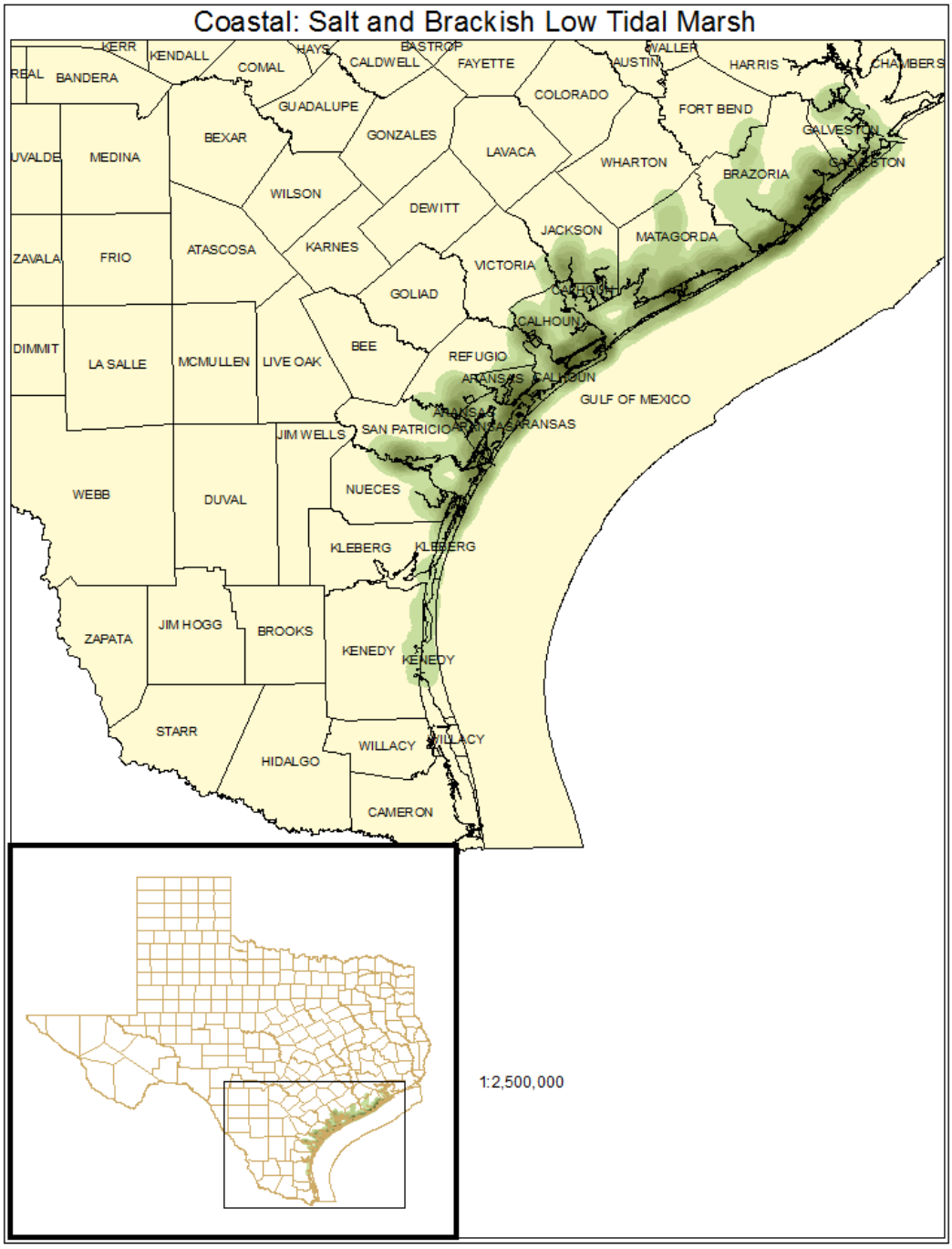
Aransas National Wildlife Refuge: US Fish and Wildlife Service
Laguna Atascosa National Wildlife Refuge: US Fish and Wildlife Service
Padre Island National Seashore: US National Park Service

COASTAL: SALT AND BRACKISH LOW TIDAL MARSH

Mapping System ID: 5607

EMS Description: Marshes frequently inundated by tides and often dominated by *Spartina alterniflora* (smooth cordgrass).

Distribution Map:



Example:

Public Land Occurrence:

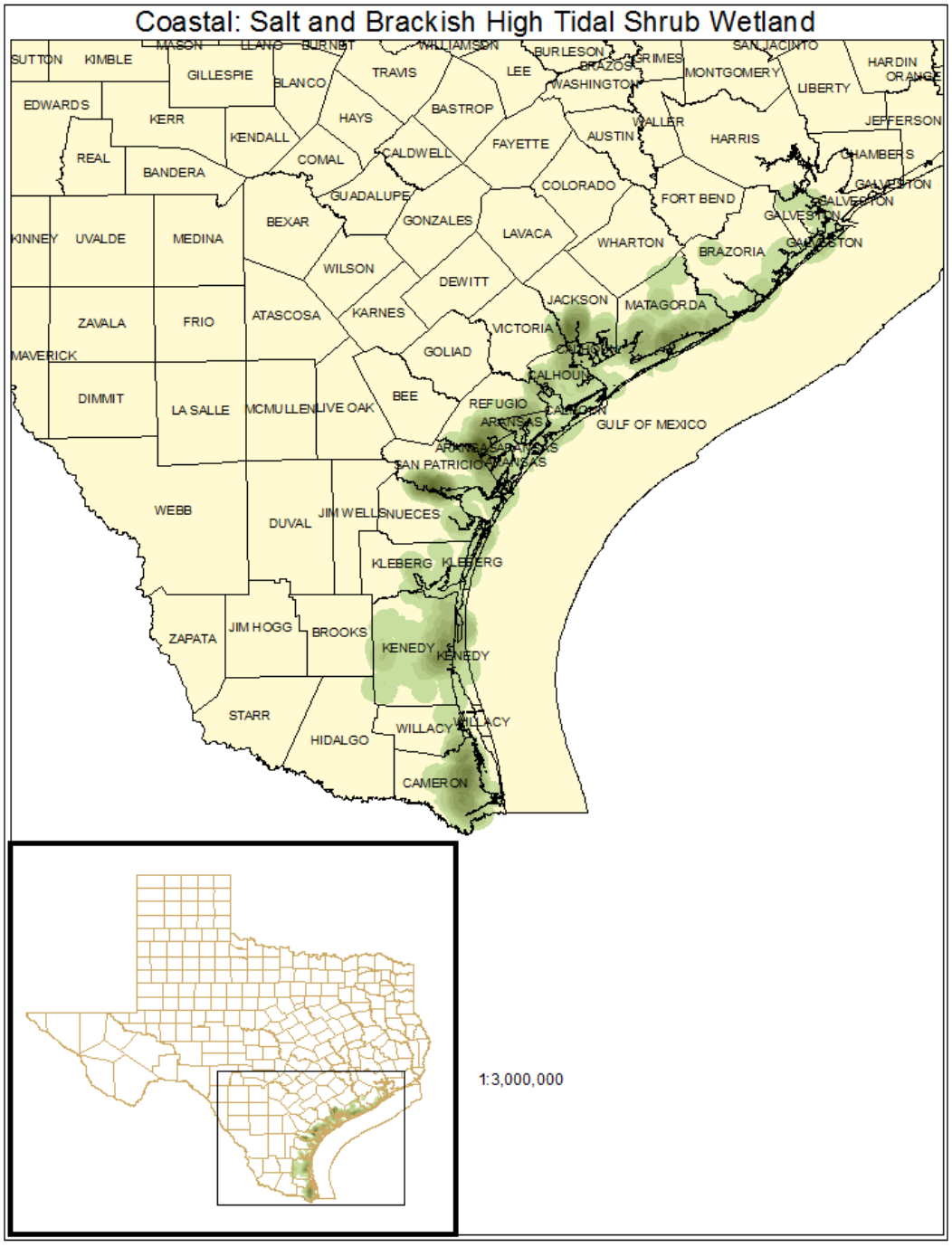
Aransas National Wildlife Refuge: US Fish and Wildlife Service
Big Boggy National Wildlife Refuge: US Fish and Wildlife Service
Brazoria National Wildlife Refuge: US Fish and Wildlife Service
Galveston Island State Park: Texas Parks & Wildlife Department
Matagorda Bay Nature Park: Texas Parks & Wildlife Department
Mustang Island State Park: Texas Parks & Wildlife Department
San Bernard National Wildlife Refuge: US Fish and Wildlife Service

COASTAL: SALT AND BRACKISH HIGH TIDAL SHRUB WETLAND

Mapping System ID: 5616

EMS Description: These sites may be dominated by species such as *Iva frutescens* (shrubby sumpweed) or *Baccharis halimifolia* (eastern baccharis).

Distribution Map:



Example:

Public Land Occurrence:

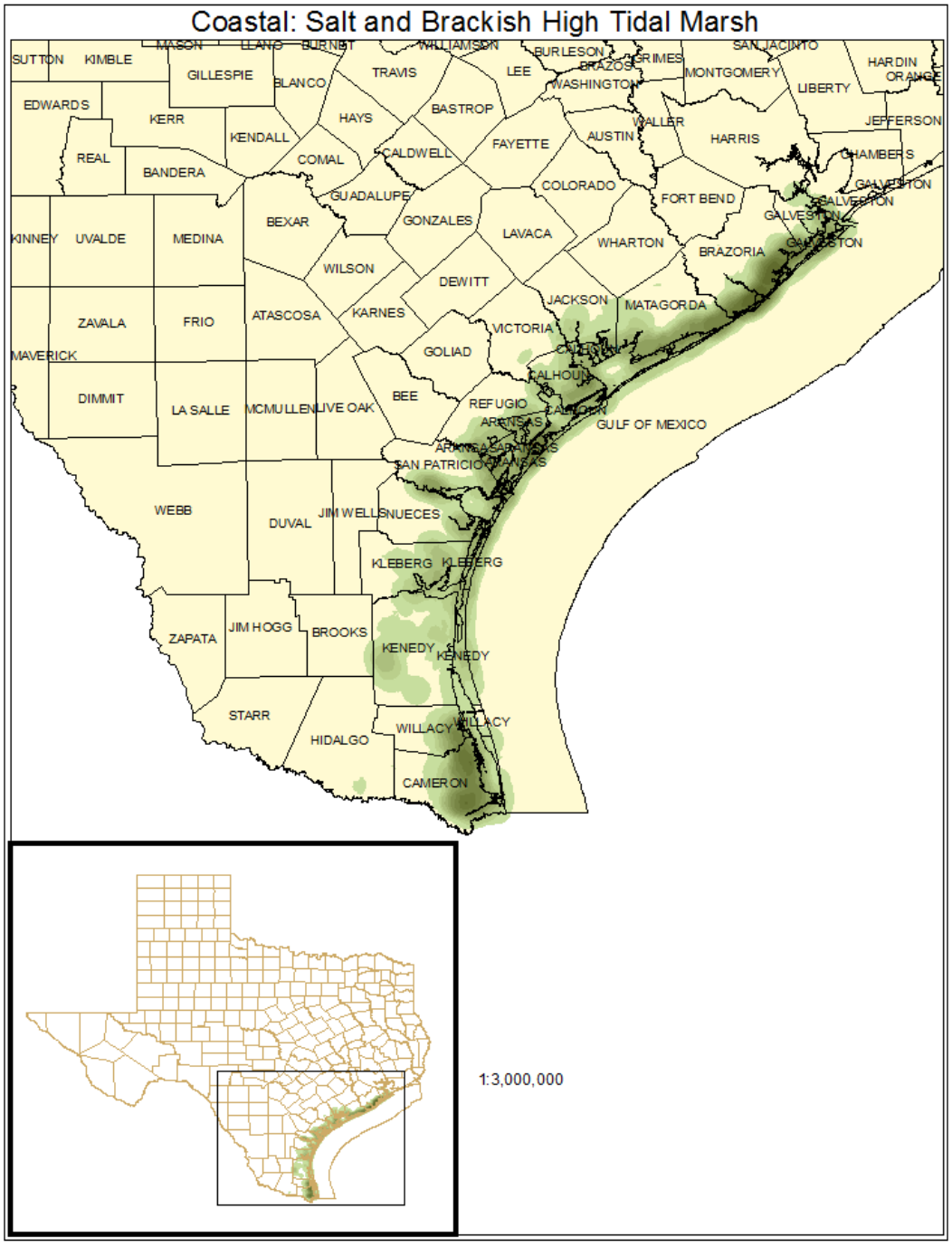
Aransas National Wildlife Refuge: US Fish and Wildlife Service
Big Boggy National Wildlife Refuge: US Fish and Wildlife Service
Laguna Atascosa National Wildlife Refuge: US Fish and Wildlife Service
Lower Rio Grande Valley National Wildlife Refuge: US Fish and Wildlife Service
Padre Island National Seashore: US National Park Service

COASTAL: SALT AND BRACKISH HIGH TIDAL MARSH

Mapping System ID: 5617

EMS Description: Irregularly flooded marsh dominated by graminoids such as *Spartina patens* (marshhay cordgrass), *Distichlis spicata* (saltgrass), and *Schoenoplectus* spp. (bulrushes).

Distribution Map:



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