



EXPLANATION

PLEISTOCENE SYSTEMS

FLUVIAL-DELTAIC SYSTEM

- Manderbelt sand, sparsely tree-covered, little grain preserved
- Floodplain, overbank mud, including mud-filled abandoned channels and mud-veneer manderbelts
- Floodplain, mud veneer over manderbelt sand, little grain preserved, grass-covered
- Distributary and fluvial sands and silts, including levee and crevasse splay deposits
- Interdistributary mud with sand veneer, including bay and floodbasin facies
- Interdistributary mud, including bay, floodbasin, and locally abandoned channel facies
- Upland oak mottes on distributary and fluvial sand
- Circular to irregular depressions on distributary-fluvial sands, may be mud, sand, or water-filled (Pleistocene-Modern)
- Lakes and ponds along coast, and heart-shaped lakes on inland manderbelt sands, mud and sandy mud-filled (Pleistocene-Modern)
- Beach ridge and berm, along margin of inland lakes, abandoned, sand and shell, grass-covered (Pleistocene-Modern)
- Swale between beach ridges along margin of inland lakes, grass-covered, mud-filled (Pleistocene-Modern)
- Marine deltaic sand, delta front and reworked delta facies, may be veneered by thin marsh or lacustrine mud
- Mud veneer distributed locally over marine deltaic sand, delta front and reworked delta facies (Holocene)
- Abandoned channel and course, mud-filled (Pleistocene-Modern)
- Abandoned channel and course, fresh-water marsh-covered, mud-filled (Pleistocene-Modern)
- Tidal creek, fresh-water marsh-covered, mud-filled (Modern)
- Tidal creek, grass-covered, mud-filled (Pleistocene-Modern)
- Beach sand, thin veneer at edge of marine deltaic sand (Holocene)

BARRIER-STRANDPLAIN SYSTEM

- Barrier-strandplain sand, tree-covered
- Barrier-strandplain sand, grass-covered
- Live-oak covered beach ridge, relict, barrier-strandplain, sand and shell
- Well-stabilized dune sand, dense live-oak mottes (Modern)
- Swales between beach ridges, including minor drainage courses developed in low, grass-covered, mud-filled (Pleistocene-Modern)
- Swales between beach ridges, including minor drainage courses developed in low, fresh-water marsh-covered, mud-filled (Modern)
- Sheet sand, locally mud-veneer, along backside of Pleistocene strandplain, wind or sheet-wind derived, sparsely grass-covered, overlies partly-filled lagoon, embayment or linear depression

MODERN-HOLOCENE SYSTEMS

FLUVIAL-DELTAIC SYSTEM

- Small active headward-eroding streams, tree-covered, alluvium, sand, silt, and mud, alluvium absent locally
- Point bar sand, tree-covered, along active streams
- Point bar sand, bare or sparsely grass-covered, along active streams
- Levees and locally crevasse splay deposits, silt, mud, and sand, sparsely grass-covered
- Levees and locally crevasse splay deposits, silt, mud, and sand, tree-cover
- Levee deposits, silt, mud, and sand, fresh-water marsh-covered
- Manderbelt sand without prominent grain, tree-covered, locally overbank muds, inactive, within an entrenched valley (Holocene)
- Manderbelt sand and silt, sparsely grass and shrub-covered, inactive, within an entrenched valley (Holocene)
- Floodbasin, overbank mud, grass-covered, inactive, within an entrenched valley
- Interdistributary silt and mud, includes locally bay, lacustrine, and crevasse splay facies
- Abandoned channel and course, mud-filled
- Abandoned channel and course, swamp-covered, mud-filled
- Abandoned channel and course, fresh-water marsh-covered, mud-filled
- Marsh, salt-water, mud and locally sand substrate
- Marsh, fresh to brackish-water, mud and locally sand substrate
- Marsh, fresh-water, mud and locally sand substrate
- Swamp, mud and locally sand substrate
- Tidal creek, fresh to brackish-water marsh-covered, mud-filled
- Tidal creek, mud-filled
- Delta plain mud and sand, grass-covered

- Delta plain mud and sand, sparsely grass-covered
- Prodelta mud and silt
- Delta-front sand (abandoned and active)

BARRIER-STRANDPLAIN AND OFFSHORE SYSTEMS

- Shelf mud and sand with shell, mottled
- Shoreface, sand and muddy sand, burrowed
- Beach, sand and shell
- Fore-island dune ridge, sand
- Beach ridge and barrier flat, sand and shell, grass-covered (fore-island dunes discontinuous and beach ridges rare north-east of Port Lavaca)
- Stabilized blowout dune complex, sand, grass-covered, hummocky, ramp-like
- Marsh, salt-water, mud and locally sand substrate
- Washover channel, sand-filled, normally inactive
- Washover distributary channel, sand, active
- Washover fan, sand, subaerial, vegetated
- Washover distal fan, sand, subaerial, barren, active (St. Joseph Island), normally inactive northeast of Vinson Slough
- Fore-island blowout dunes and back-island dunes on washover fan surface, sand, active
- Tidal channel, sand, active
- Tidal channel, mud and sand-filled, inactive
- Flood-tidal delta, sand, subaqueous, proximal to major channel, and small bay-margin tidal deltas, both flood and ebb, mostly sand
- Ebb-tidal delta, sand, subaqueous, proximal to channel
- Ebb-tidal delta, mud and sand, subaqueous, distal to channel
- Intertidal shoal and bars on tidal flats, sand

MARSH-SWAMP SYSTEM

- Marsh, salt-water, mud and locally sand substrate
- Marsh, fresh to brackish-water, mud and locally sand substrate
- Marsh, fresh-water, mud and locally sand substrate
- Swamp, mud and locally sand substrate

BAY-ESTUARY LAGOON AND LAKE SYSTEMS

- Bay-margin sand and shell berms, beaches, and active spits, accretionary, subaerial, relict depositional grain, locally vegetated
- Beach ridge and berm, abandoned, grass-covered, sand and shell
- Wind-tidal flat, sand and mud, barren to sparsely vegetated, subaerial, burrowed
- Grassflat, muddy sand with shell
- Bay-margin sand, muddy sand and shell, bare to sparsely marine grass-covered, subaqueous
- Bay and bay-margin sandy mud, mottled, some shell
- Bay sand with mixed shell, probably thin veneer over Pleistocene ridge or mound
- Delta front sand (abandoned and active)
- Prodelta mud and silt
- Bay mud, mottled, some mixed shell
- Intertidal mud with oyster shell
- Oyster reef
- Oyster reef flank, sand or mud, abundant shell
- Bay sand and muddy sand, locally with oyster shell
- Intertidal mud with oyster shell

- Lakes and ponds along coast and on inland manderbelt sands, mud and sandy mud-filled (Pleistocene-Modern)
- Beach ridge and berm along margin of inland lake, abandoned, sand and shell, grass-covered (Pleistocene-Modern)
- Swale between beach ridges, along margin of inland lakes, grass-covered, mud-filled (Pleistocene-Modern)

OTHER MAP UNITS

- Point bar (fluvial) accretion
- Beach ridge (barrier-strandplain) accretion
- Spoil heap or mound, subaerial
- Reworked spoil, subaerial
- Spoil, subaqueous
- Made land

* Facies or environments present within more than one system.

Sources of data, date of topographic mapping and aerial photography utilized in mapping, and other pertinent information given in text.

Mapping and cartography by Bureau of Economic Geology
Geology mapped on aerial mosaics, Edger Tobin Aerial Surveys
Base adapted from U.S.G.S. topographic maps
Sources of data and credit for contributions to maps given in text

SCALE 1:125,000
0 2 4 6 8 10 12 14 16
Statute Miles
0 2 4 6 8 10 12 14 16
Kilometers
0 2 4 6 8 10 12 14 16
Nautical Miles

CONTOUR INTERVAL 5 FEET
BATHYMETRIC CONTOURS IN FEET

1971 MAGNETIC DECLINATION FOR THE CENTER OF THIS SHEET IS APPROXIMATELY 9°15' EASTERLY

ENVIRONMENTAL GEOLOGY, PORT LAVACA SHEET

