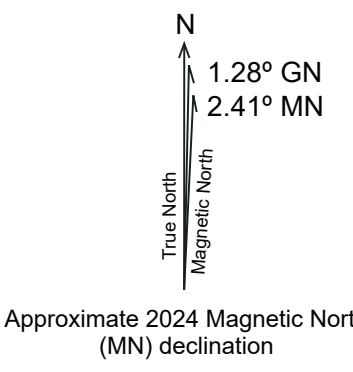
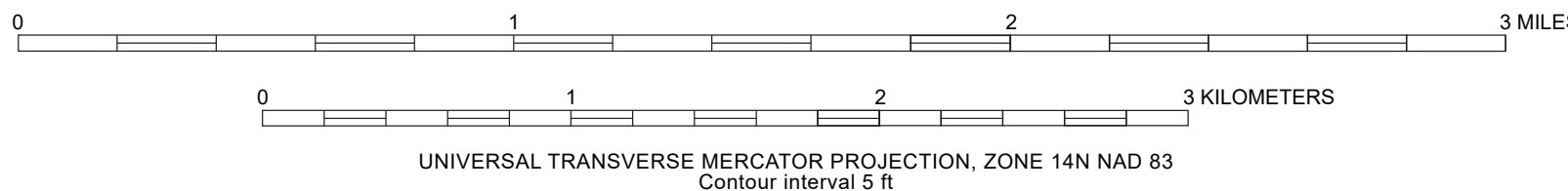
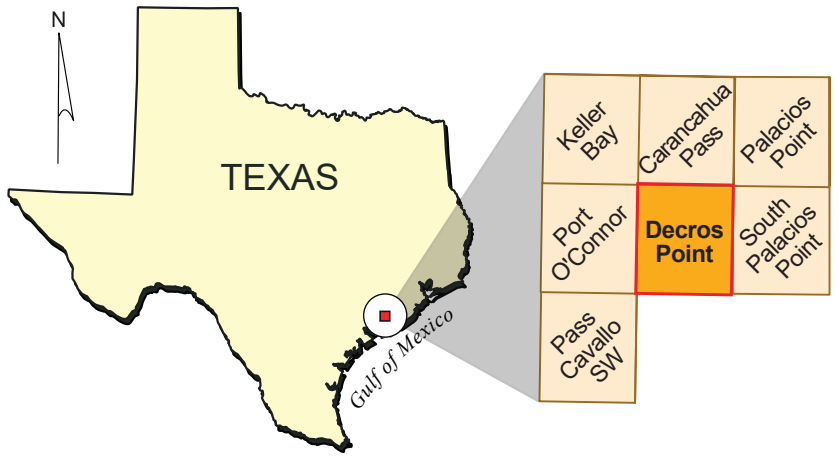




GEOLOGIC MAP OF THE DECROS POINT QUADRANGLE TEXAS GULF OF MEXICO COAST

Jennifer N. Morris and Jeffrey G. Paine
2024

Bay- or Estuarine-Margin Deposits

- | | |
|---------------|---|
| Qbmn | Qbmn—Bay-margin marsh deposits. Unconsolidated mud and sand deposited in low-relief marsh areas adjacent to bay margins. May include tidal channel silt, silt, or brackish-water material. |
| Qbmb | Qbmb—Bay-margin beach or berm deposits. Unconsolidated sand, shell, and mud deposited along bay shoreline from wave action. Beach is unvegetated; berm may be sparsely vegetated. |
| Qbmbsa | Qbmbsa—Bay-margin beach or berm deposits; abandoned. Unconsolidated sand, shell, and mud deposited in low berm along former bay shoreline from wave action. Commonly vegetated. |
| Qbms | Qbms—Bay-margin spit deposits. Unconsolidated sand, shell, and mud deposited across bay and valley mouths from erosion of adjacent shoreline and lateral sediment migration. |
| Qbmws | Qbmws—Bay-margin washover deposits. Unconsolidated sand and shell deposited adjacent to bay shoreline by high water level and wave activity during tropical cyclone passage. Commonly unvegetated. |
| Qbmtld | Qbmtld—Bay-margin tidal delta deposits. Unconsolidated sand and mud deposited at tidal inlet. May include storm washover deposits. Common salt- or brackish-water marsh vegetation. |

Gulf-Margin Deposits

- | | |
|---------------|---|
| Qgmb | Qgmb—Gulf-margin beach deposits. Unconsolidated sand deposited in forebeach or backbeach environment. Forebeach is unvegetated. Backbeach may have sparse vegetation. |
| Qgmd | Qgmd—Gulf-margin dune deposits. Unconsolidated sand deposited by wind adjacent to the beach. Includes foredunes and former foredunes. May be active or stabilized by vegetation. |
| Qgmr | Qgmr—Gulf-margin ridge deposits. Unconsolidated sand deposited in generally coast-parallel topographic high landward of the dune system. May be barrier-island progradation. Common coastal prairie vegetation. |
| Qgms | Qgms—Gulf-margin swale deposits. Unconsolidated sand and mud deposited in generally coast-parallel topographic troughs. Common fresh- to brackish-water marsh vegetation. |
| Qgmsu | Qgmsu—Gulf-margin ridge and swale deposits, undivided. Barrier island, peninsula, or strandplain ridge and swale deposits, undivided. Common coastal prairie vegetation on ridges and fresh- or brackish-water marsh vegetation in swales. |
| Qgmswc | Qgmswc—Gulf-margin washover channel deposits. Unconsolidated sand, shell, and mud deposited in washover channels active during high water level associated with tropical cyclone passage. May be barren or vegetated. |
| Qgmsw | Qgmsw—Gulf-margin washover deposits. Unconsolidated sand and shell deposited in sheets, fans, or bars landward of the beach by high water level associated with tropical cyclone passage. |
| Qgmbf | Qgmbf—Gulf-margin barrier flat deposits. Unconsolidated sand deposited in low-relief barrier-island environment landward of the beach and dune system. May include undifferentiated washover deposits. |

Map Symbols (lines, symbols, and patterns)

- | | |
|--|---|
| Contact (distinct) | Water, bay, large lake, or stream connected to bay. |
| Stream (active or intermittent), drainage ditch, canal, or tidal channel | SPW: selected ponded water. |
| Elevation (ft): contour interval 5 ft | D/C: Dredged canal or pond. |
| Beach ridge or swale | Fill, land artificially elevated by fill material. |
| Waterline | Pit: Excavation area, may be enclosed by levees. May contain standing water. |
| Map boundary | DMDA: Dredged material deposited area. |
| Artificial runway or taxiway | DMR: Dredged Material reserved. Unconsolidated sand and mud redistributed from adjacent DMDA. |

System	Series	Age (ka)	Map Units					
Quaternary	Holocene	0	Bay and Estuarine System			Marine System		
								
								
		12						

Acknowledgments

Aerial imagery used in this study included 0.6- and 1.0-m pixel, natural color, National Agriculture Imagery Program digital imagery photographed in 2020 and 2021. 0.6-m pixel 2020 imagery was obtained from the Texas National Resources Information System (TNRIS), and 0.6-m pixel 2022 imagery was obtained from the US National Resources Conservation Service. Imagery was supplemented by 1-m cell size digital elevation models (DEMs) constructed from data acquired during an airborne lidar survey flown by the US Geological Survey (USGS) in 2018. Shorelines and geologic units were mapped from aerial imagery and lidar-derived DEM. Elevation contours were obtained as a shapefile from the USGS. Roads were obtained as a shapefile from the Texas Department of Transportation. Place names were obtained from the Geographic Names Information System maintained by the USGS.

Selected previous regional maps that cover this area include the 1:250,000-scale Geologic Atlas of Texas, Beeville-Bay City Sheet (Aronow and others, 1967; revised 1987); the 1:125,000-scale Environmental Geologic Atlas of Texas, Port Lavaca Area (McGowen and others, 1976b); and the 1:125,000-scale map Distribution of Wetlands and Benthic Macroinvertebrates from the Submerged Lands of Texas, Port Lavaca area (White and others, 1989).

Geologic mapping and map production were supported partly by the USGS National Cooperative Geologic Mapping Program, through STAMP awards 322A-C00495, G21AC10838, and G20AC00313 (Jeffrey G. Paine, Principal Investigator), and partly by the Bureau of Economic Geology STARR funding. Geologic mapping and geologic hazards. Under the direction of Jason Suarez, graphics, layout and design by Jana S. Robinson. Editing by Sarah Murphy. Views and conclusions contained in this map should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Government. The authors disclaim any responsibility or liability for interpretations from this map or digital data or decisions based thereon.

References

Aronow, S., Brown, T. E., Brewton, J. L., Eargle, D. H., and Barnes, V. E., 1975 (revised 1987), Geologic atlas of Texas, Beeville-Bay City sheet: The University of Texas at Austin, Bureau of Economic Geology, scale 1:250,000.

McGowen, J. H., Proctor, C. V., Jr., Brown, L. F., Jr., Evans, T. J., Fisher, W. L., and Groat, C. G., 1976b, Environmental geologic atlas of the Texas coastal zone—Port Lavaca. The University of Texas at Austin, Bureau of Economic Geology, scales 1:125,000 and 1:250,000, 107 p.

White, W. A., Calnan, T. R., Morton, R. A., Kimble, R. S., Littleton, T. G., McGowen, J. H., and Nance, H. S., 1989, Submerged lands of Texas, Port Lavaca area: sediment geochemistry, benthic macroinvertebrates, and associated wetlands: The University of Texas at Austin, Bureau of Economic Geology, SL0007, citations scale 1:125,000, 1