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THE UNIVERSITY OF TEXAS AT AUSTIN  
In cooperation with the STATEMAP component of the  
National Cooperative Geologic Mapping Program,  
administered by the U.S. Geological Survey

Open-file map

### Barrier-Island Systems, Galveston Island

(Wetland classification of coastal geologic environments)  
(Wetland classification terminology in *italics*)

#### MODERN TO HOLOCENE

##### Estuarine Environment

- E2EM1N—Low marsh; *intertidal, emergent, persistent, regularly flooded.*
- E2EM1P—High marsh; *intertidal, emergent, persistent, irregularly flooded.*
- E2USM—Irregularly exposed flat; *intertidal, unconsolidated shore, irregularly exposed.*
- E2USN—Low flat; *intertidal, unconsolidated shore, regularly flooded.*
- E2USP—High flat; *intertidal, unconsolidated shore, irregularly flooded.*
- E1AB1—Algal area; *subtidal, aquatic bed, algal.*
- E1UB—Water; *subtidal, unconsolidated bottom.*

##### Palustrine Environment

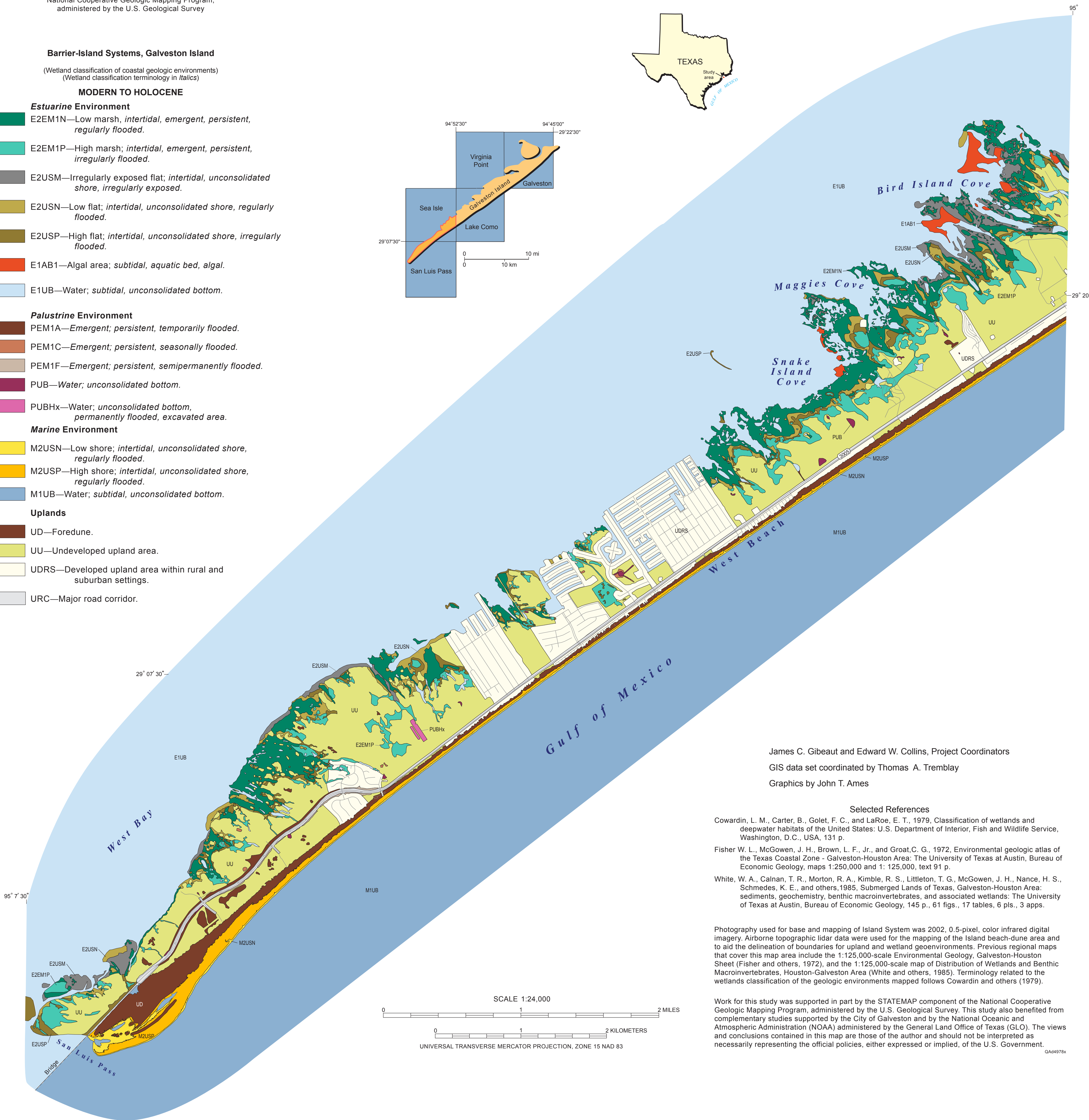
- PEM1A—*Emergent, persistent, temporarily flooded.*
- PEM1C—*Emergent, persistent, seasonally flooded.*
- PEM1F—*Emergent, persistent, semipermanently flooded.*
- PUB—Water; *unconsolidated bottom.*
- PUBHx—Water; *unconsolidated bottom, permanently flooded, excavated area.*

##### Marine Environment

- M2USN—Low shore; *intertidal, unconsolidated shore, regularly flooded.*
- M2USP—High shore; *intertidal, unconsolidated shore, regularly flooded.*
- M1UB—Water; *subtidal, unconsolidated bottom.*

##### Uplands

- UD—Foredune.
- UU—Undeveloped upland area.
- UDRS—Developed upland area within rural and suburban settings.
- URC—Major road corridor.



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GIS data set coordinated by Thomas A. Tremblay  
Graphics by John T. Ames

#### Selected References

- Cowardin, L. M., Carter, B., Golet, F. C., and LaRoe, E. T., 1979, Classification of wetlands and deepwater habitats of the United States: U.S. Department of Interior, Fish and Wildlife Service, Washington, D.C., USA, 131 p.
- Fisher W. L., McGowen, J. H., Brown, L. F., Jr., and Groat, C. G., 1972, Environmental geologic atlas of the Texas Coastal Zone - Galveston-Houston Area: The University of Texas at Austin, Bureau of Economic Geology, maps 1:250,000 and 1: 125,000, text 91 p.
- White, W. A., Calnan, T. R., Morton, R. A., Kimble, R. S., Littleton, T. G., McGowen, J. H., Nance, H. S., Schmedes, K. E., and others, 1985, Submerged Lands of Texas, Galveston-Houston Area: sediments, geochemistry, benthic macroinvertebrates, and associated wetlands: The University of Texas at Austin, Bureau of Economic Geology, 145 p., 61 figs., 17 tables, 6 pls., 3 apps.

Photography used for base and mapping of Island System was 2002, 0.5-pixel, color infrared digital imagery. Airborne topographic lidar data were used for the mapping of the Island beach-dune area and to aid the delineation of boundaries for upland and wetland geoenvironments. Previous regional maps that cover this map area include the 1:125,000-scale Environmental Geology, Galveston-Houston Sheet (Fisher and others, 1972), and the 1:125,000-scale map of Distribution of Wetlands and Benthic Macroinvertebrates, Houston-Galveston Area (White and others, 1985). Terminology related to the wetlands classification of the geologic environments mapped follows Cowardin and others (1979).

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## GEOENVIRONMENTAL MAP OF SOUTHWEST GALVESTON ISLAND, SAN LUIS PASS, AND SEA ISLE QUADRANGLES, TEXAS GULF OF MEXICO COAST

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