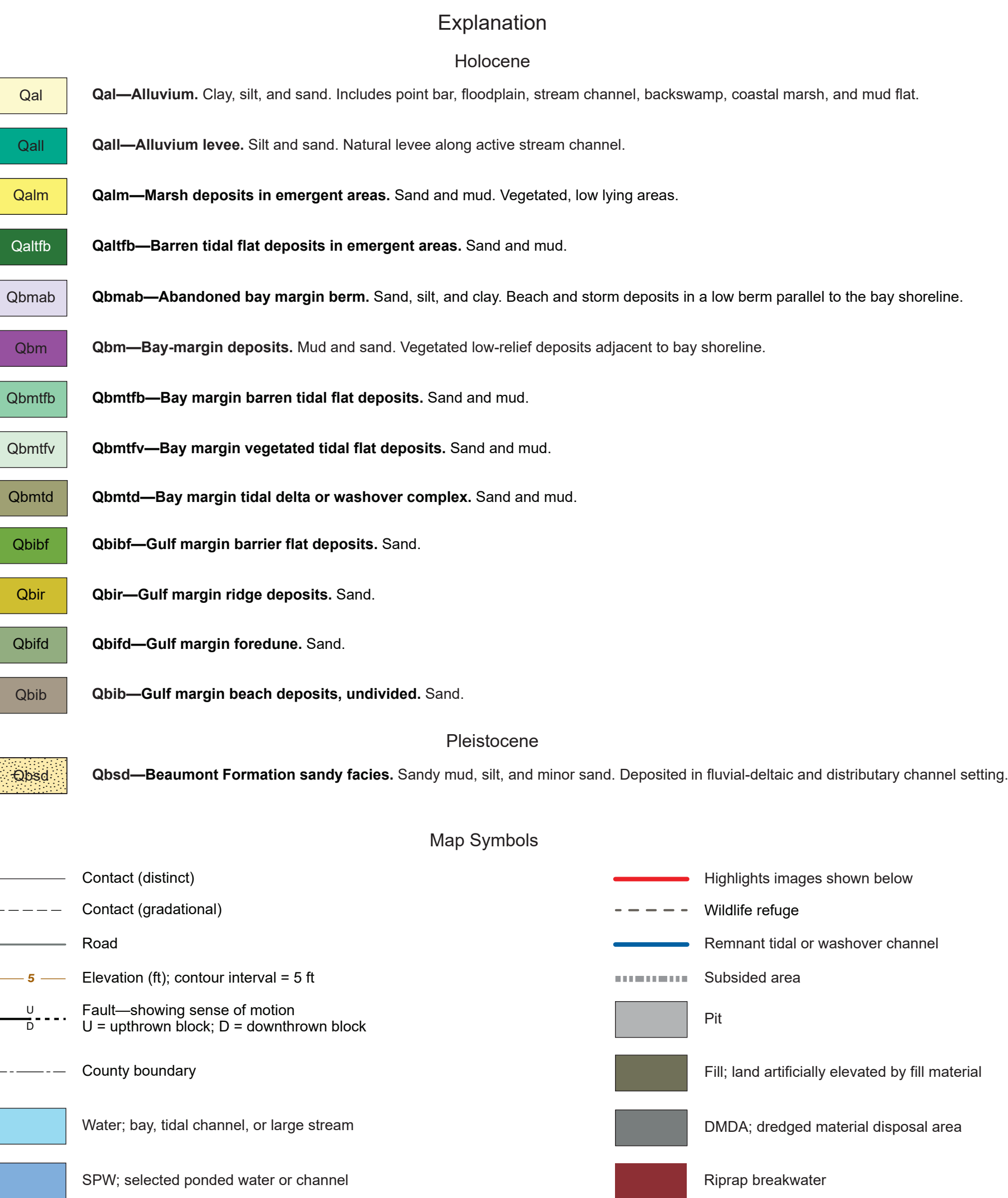


[illegible]

Tiffany L. Caudle, Jeffrey G. Paine, and John Andrews
2022



Photography used in the study was 60-cm-resolution, natural color, National Agricultural Inventory Program digital imagery photographed in 2018 and 2020. Photography was obtained from Texas Natural Resources Information System (TNRIS). Photography was supplemented by a 50-cm-cell size digital elevation model (DEM) constructed from topographic data acquired during an airborne laser survey flown by Fugro USA Ltd., Inc. in 2018 for the TNRIS, Texas Water Development Board, and U.S. Army Corps of Engineers (USACE) Gulf of Mexico District (GOMD). The DEM was provided as a 50-cm resolution grid file (LAS) on the 1980s and 1990s were also used to assist in feature interpretation. Previous regional maps that cover this area include the 1:250,000-scale Fish and others (1972), the 1:250,000-scale Distribution of Wetlands and Benthic Macroinvertebrates map (White and others, 1985).

Digital elevation contour files for generalized topography were adapted from USGS topographic data obtained from TNRIS. Digital files of Texas Department of Transportation roads were also obtained through TNRIS. Water bodies were mapped from aerial imagery and the lidar-derived DEM.

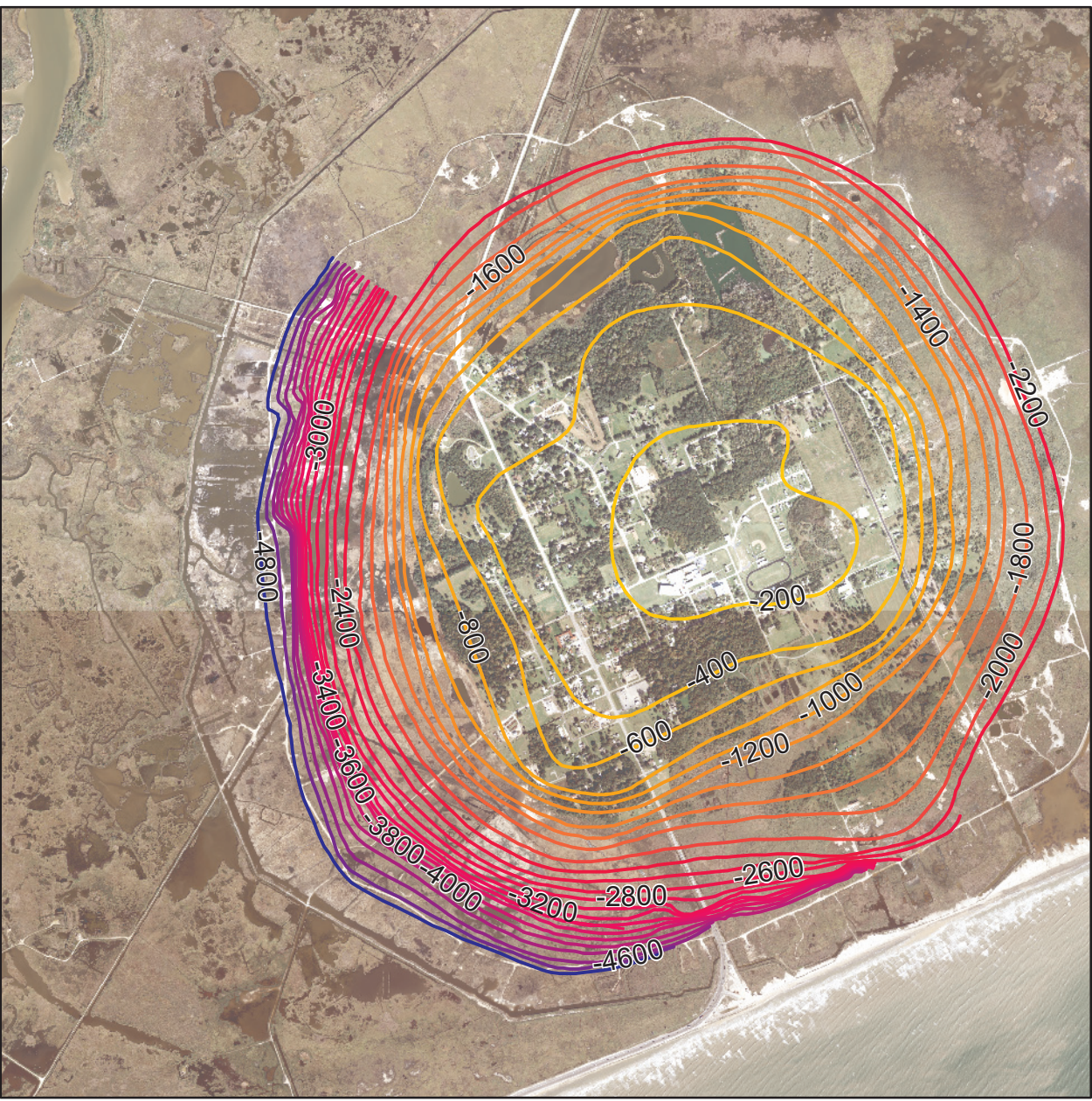
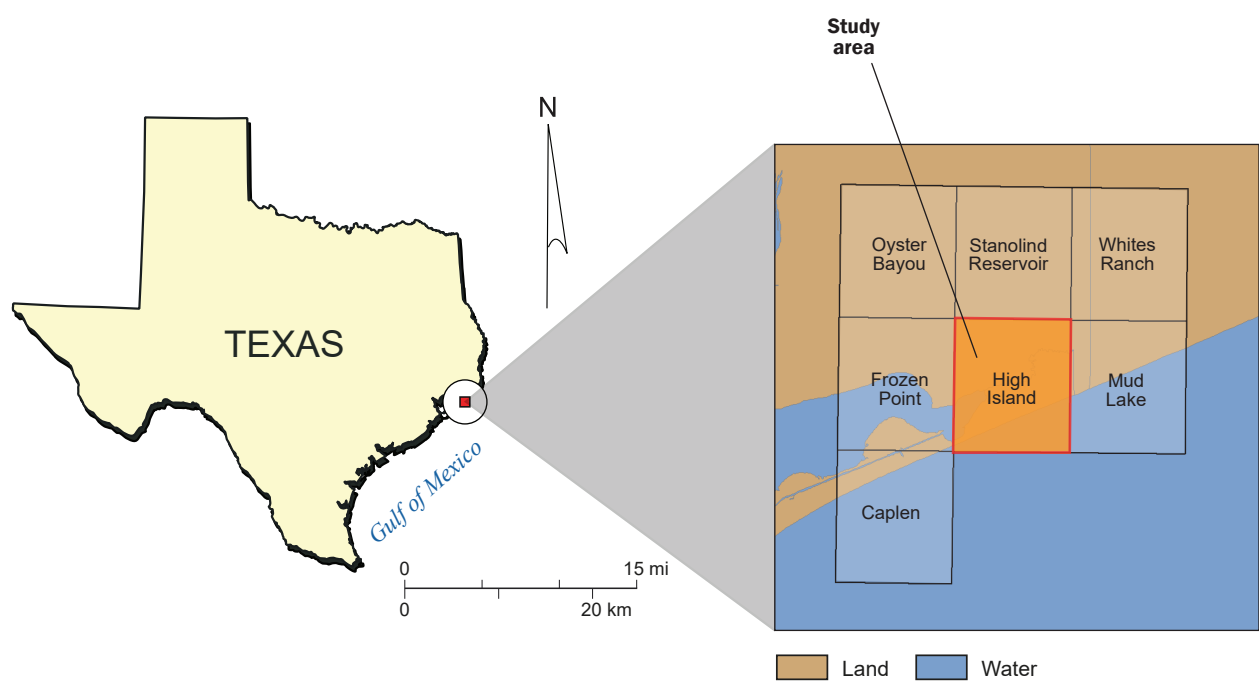
Arnold, S., Fisher, W. L., McGowen, J. H., and Barnes, V. E., 1969 (revised 1982), Houston sheet: The University of Texas at Austin, Bureau of Economic Geology Geologic Atlas of Texas, scale 1:250,000.

isher, 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 Environmental Geologic Atlas No. 5, 91 p., 9 plates, scales 1:250,000 and 1:125,000.

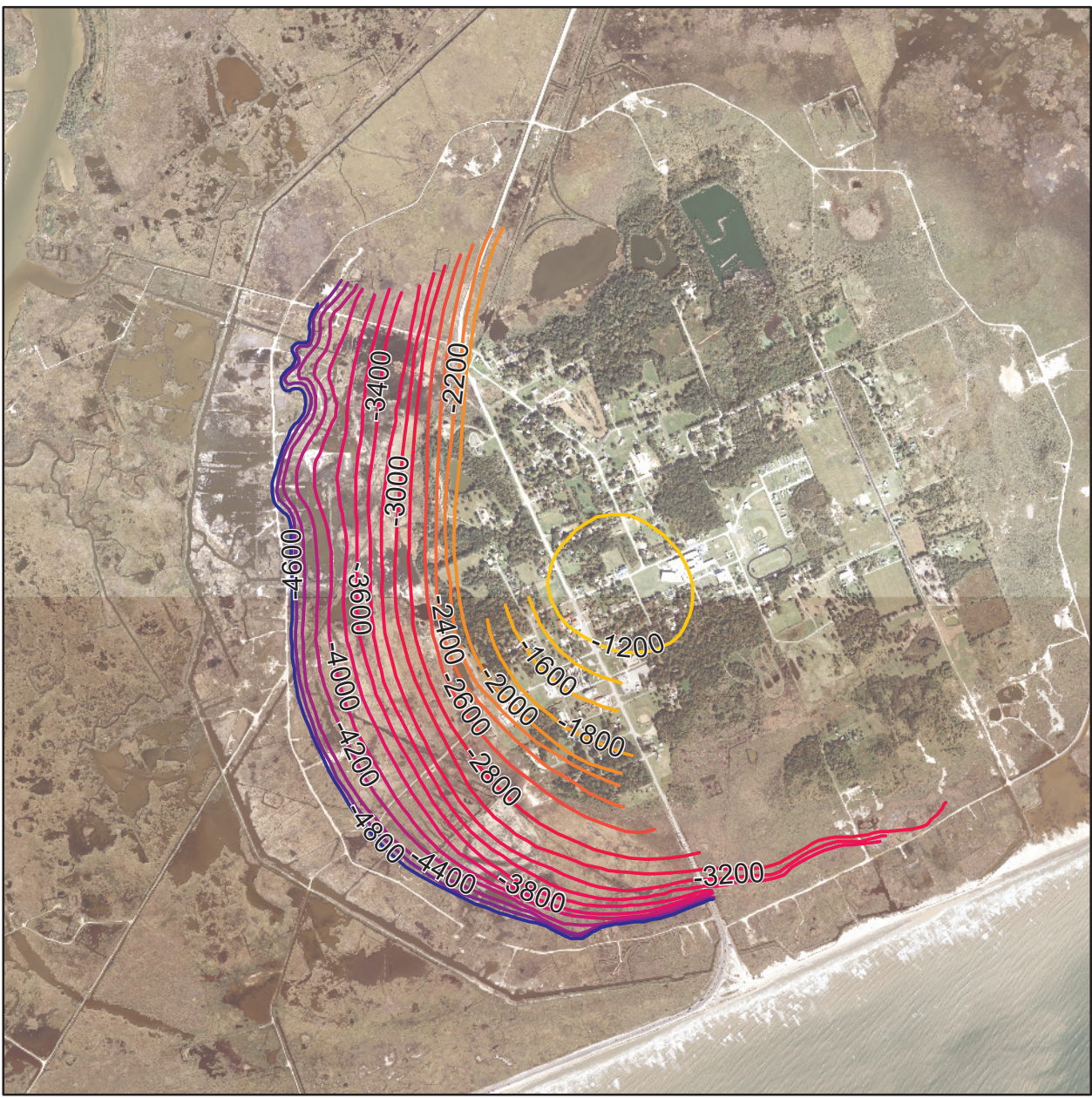
Salisbury, M. T., 1936, Geology and geophysics showing cap rock and salt overhang of High Island dome, Galveston County, Texas: Bulletin of the American Association of Petroleum Geologists, v. 20, no. 5, p. 560-611.

White, W. A., Calnan, T. R., Morton, R. A., Kibler, R. S., Littleton, T. G., McGowen, J. H., Nance, H. S., and Schmides, K. E., 1985, Distribution of wetlands and benthic macroinvertebrates, in Submerged lands of Texas, Galveston-Houston area: sediments, geochemistry, benthic macroinvertebrates, and associated wetlands: The University of Texas at Austin, Bureau of Economic Geology Submerged Lands of Texas No. 5, plate V.

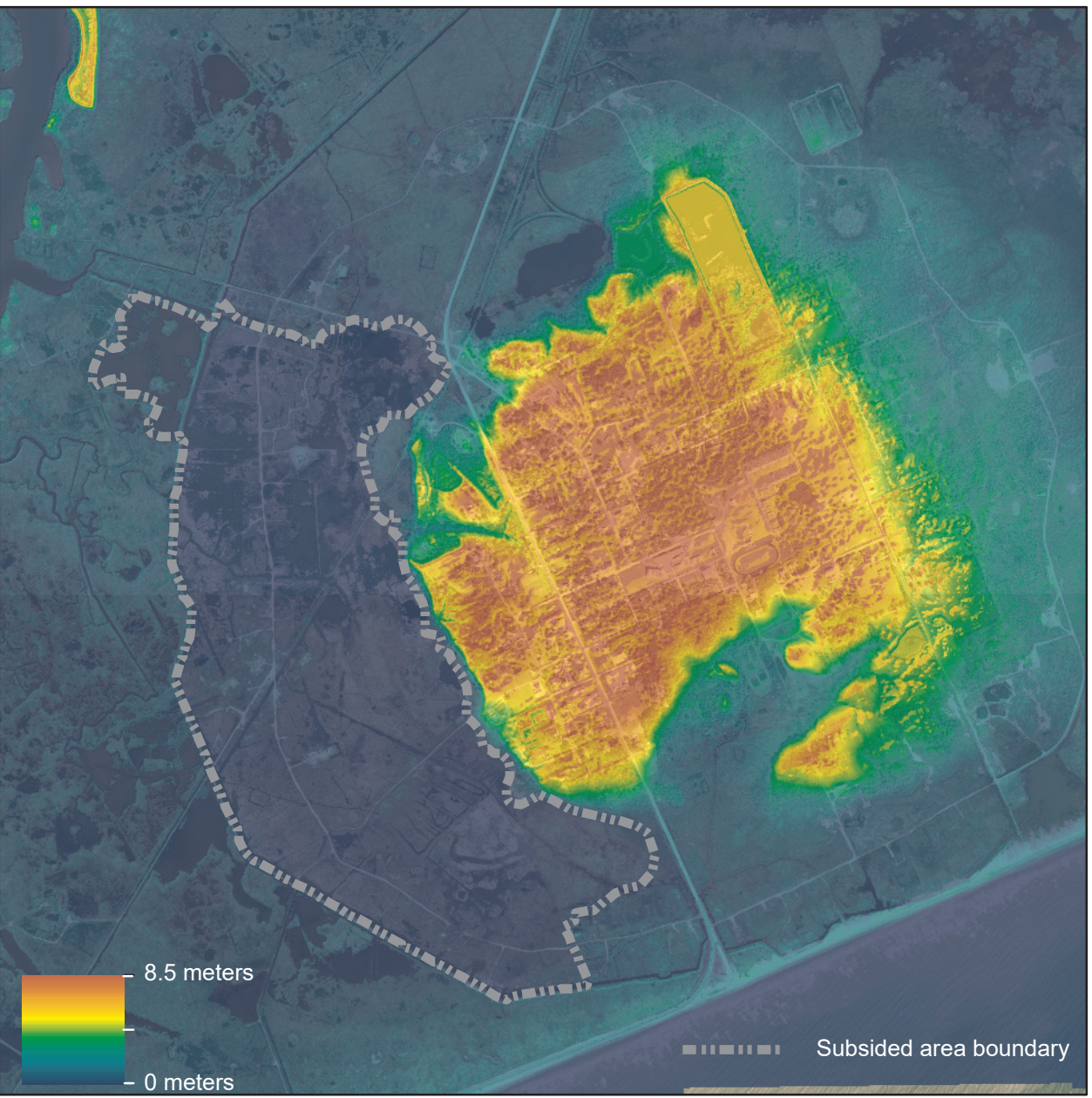
System	Series	Time (ka)	Map Units		
Quaternary	Indocene	12	Fluvial-Deltaic System Qal QalI Qalm QalItb	Barrier and Bay-Estuarine System Qbmab Qbm Qbmtb Qbmtfv Qbmid Qbifv Qbbr Qbifd Qbib	
	Pleistocene	2600	Qbsd		



Halbouty (1936) generated structure contour maps of both the top of the High Island salt dome cap rock and the top of the salt based on tabulated data from more than 50 wells drilled between 1901 and 1935 and a seismograph survey conducted in 1934. Image above is a contour map of the top of the cap rock superimposed on 2020 NAIP imagery. Contour interval is 200 feet.



Contour map of the top of the salt dome based on data available at the time of the Halbouty publication (1936). Contour interval spacing is 200 feet.



Digital elevation model constructed from 2018 lidar data of the High Island area with a mapped boundary of an area of subsidence adjacent to the domes southwestern flank.



Photo looking north toward the High Island salt dome.