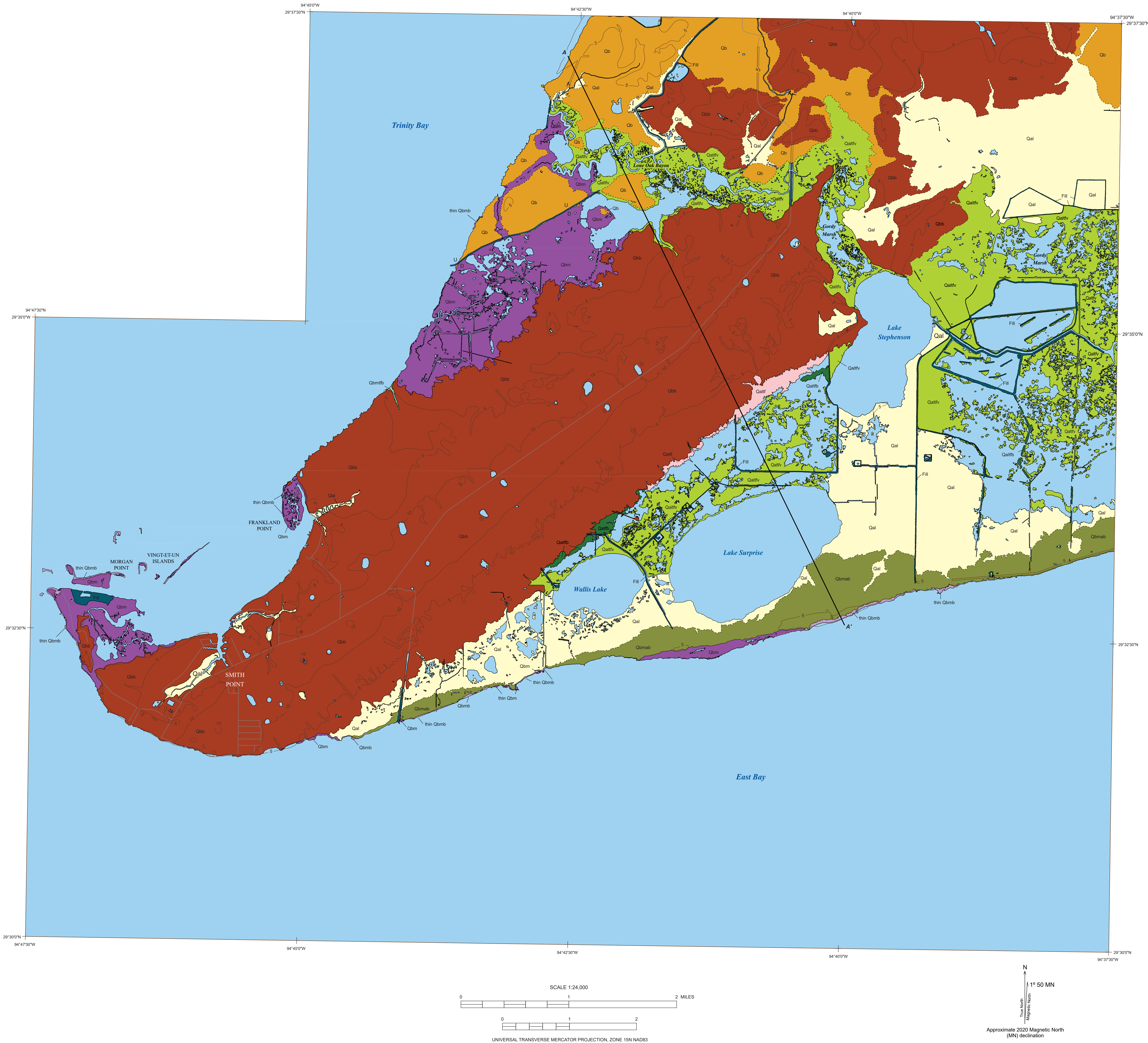
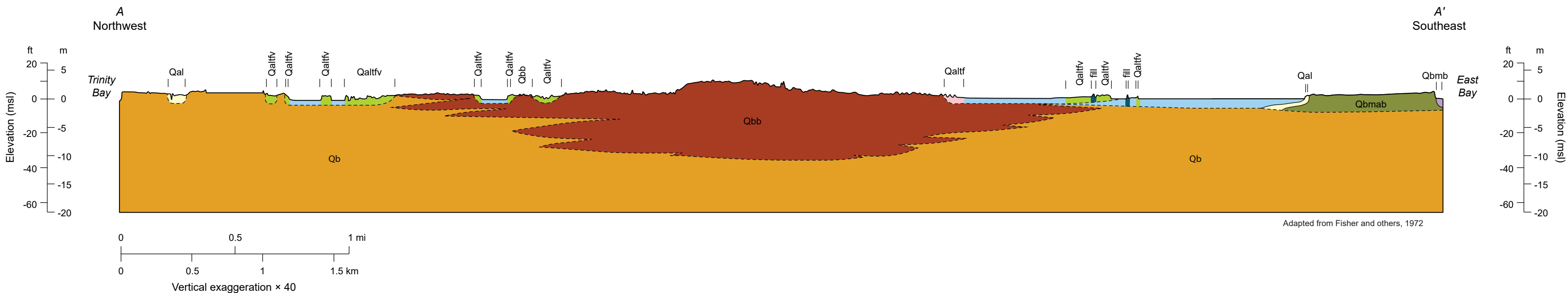




**GEOLOGIC MAP OF THE LAKE STEPHENSON AND PART OF THE SMITH POINT QUADRANGLES:
TEXAS GULF OF MEXICO COAST**

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- Explanation**
- MODERN TO HOLOCENE**
- Qal**—Alluvium. Clay, silt, and sand. Includes natural levees, floodplain stream channel, backswamp, coastal marsh, and mud-flat.
 - Qalif**—Tidal flat deposits in emergent areas. Sand and mud. Vegetated and barren undivided.
 - Qalib**—Barren tidal flat deposits in emergent areas. Sand and mud.
 - Qaliv**—Vegetated tidal flat deposits in emergent areas. Sand and mud.
 - Qbm**—Bay margin deposits. Mud and sand. Vegetated low-relief deposits adjacent to bay shoreline.
 - Qmb**—Bay margin beach deposits. Sand, mud and shell.
 - Qmba**—Abandoned bay-margin berm. Sand, silt, and clay. Beach and storm deposits in a low berm parallel to the bay shoreline.
 - Qbmfb**—Bay margin barren tidal flat deposits. Sand and mud.

- PLEISTOCENE**
- Qb**—Beaumont Formation. Clay, silt, and sand. Deposited in fluvial-deltaic, interdistributary, distributary, and estuarine setting. Includes stream-channel, point-bar, natural-levee, crevasse-splay, back-swamp, coastal marsh, mud-flat, and lagoon deposits.
 - Qbb**—Beaumont Formation-Ingleside barrier island deposits. Sand, silt, and lesser clay. Surface slightly higher than that of surrounding deposits, characterized by numerous pimple mounds and rounded depressions. Includes beach, foredune, and barrier-strandplain-chier vegetated flat deposits.

- Map Symbols**
- Contact (distinct)
 - Contact (gradational)
 - Fault
 - Elevation (ft); contour interval 5 ft
 - Road
 - Cross-section line
 - Water; bay
 - spw—Selected ponded water
 - sch—Selected channel
 - Fill (land artificially elevated by fill material)

Acknowledgments

Photography used in the study was 1-m resolution, natural color, National Agricultural Inventory Program digital imagery photographed in 2016 and 60-cm resolution, natural color, National Agricultural Inventory Program digital imagery photographed in 2018. 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 lidar survey flown by Fugro USA Land, Inc. in 2018 for the Texas Natural Resources Information System (TNRIS), Texas Water Development Board (TWDB), and Houston-Galveston Area Council (HGAC) as part of the Texas Strategic Mapping (StratMap) program. Previous regional maps that cover this area include the 1:250,000-scale Geologic Atlas of Texas, Houston Sheet (Aronow and others, 1968; revised 1982), the 1:125,000-scale Environmental Geologic Atlas, Galveston-Houston Sheet (Fisher and others, 1972), and the 1:125,000-scale map of Distribution of Wetlands and Benthic Macroinvertebrates (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 photographs and the lidar-derived DEM.

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System	Series	Time (Ma)	Map and Cross Section Units							
Quaternary	Holocene	0.012	Barrier Bay-Estuarine and Fluvial Systems							
			Qmba	Qal	Qalif	Qalib	Qaliv	Qbm	Qmb	Qbmfb
	Pleistocene	2.6	Qbb	Qb						

