Open-File Map Series 117, Plate 1
*See Open-File Report 114 for accompanying text

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Florida Department of Environmental Protection
Florida Geological Survey

Guy H. Means
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OPEN-FILE MAP SERIES 117, Plate 1

GEOLOGIC MAP OF THE USGS NAPLES 30 X 60 MINUTE QUADRANGLE, SOUTHWESTERN FLORIDA

2024

BY
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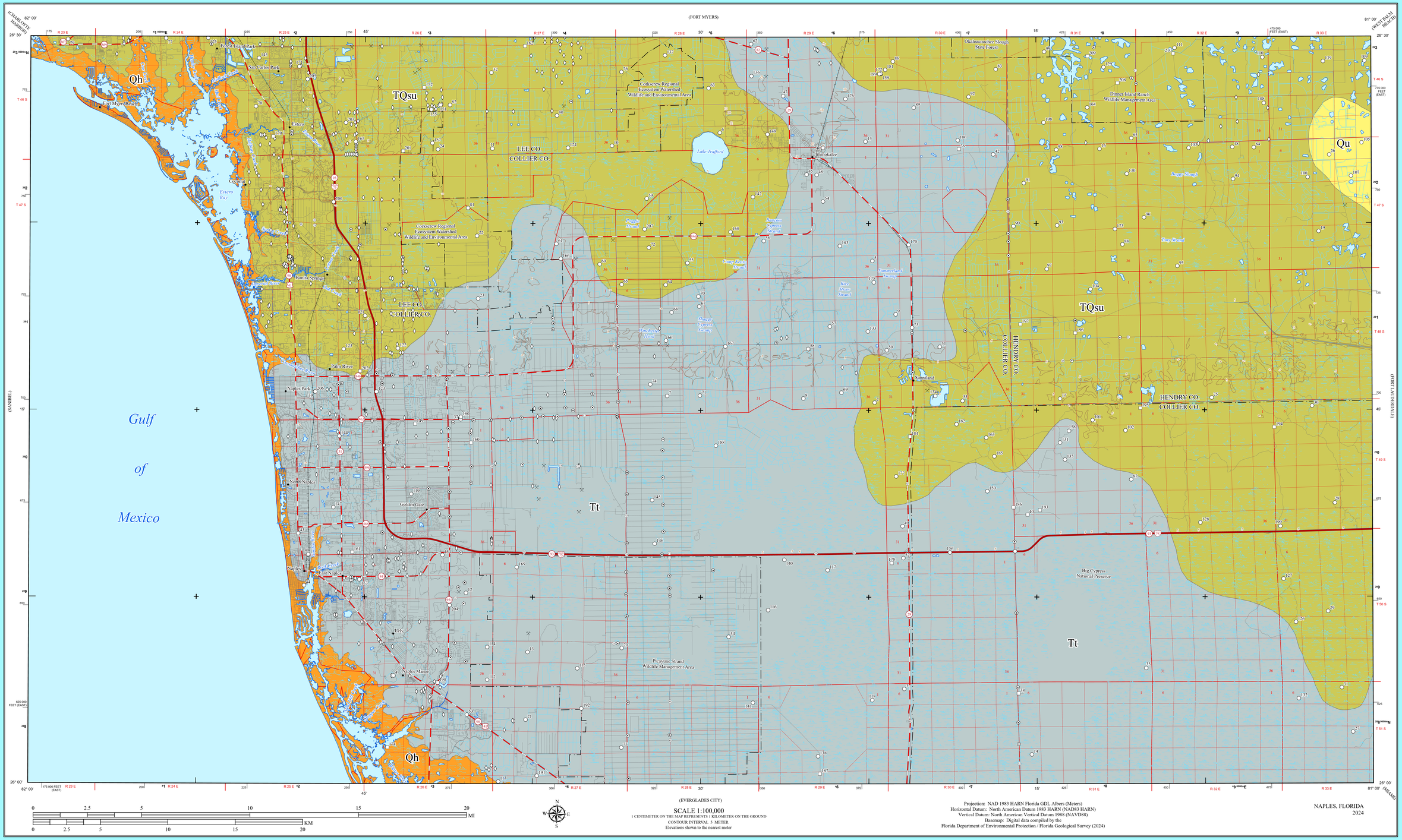


Holocene sediments

Qh While not a formally recognized lithostratigraphic unit, Holocene sediments (Qh) are mapped in order to facilitate a better understanding of Florida's geology. Holocene sediments may include quartz sands, marls, organics, and minor carbonate sands and mud. They may also include fresh-water gastropods and modern shells. Within the study area, these occur in the Lower Caloosahatchee River floodplain.

Quaternary undifferentiated sediments

Qu While not a formally recognized lithostratigraphic unit, Quaternary undifferentiated sediments (Qu) are mapped in order to facilitate a better understanding of Florida's geology. Quaternary undifferentiated sediments consist of white to gray to orange, fine- to coarse-grained, clean to clayey, unfossiliferous quartz sands, sandy clays, and clays with variable admixtures of organics. These occur in the north-central area of the map.

Tertiary/Quaternary undifferentiated shelly sediments

TQsu Tertiary/Quaternary undifferentiated shelly sediments (TQsu) typically consist of fine-to-medium quartz sand with variable amounts of calcilutite, silt, marine and fresh-water mollusk shells, and clay. Shells, which may vary from whole to fragments, are normally highly weathered and abraded and may occasionally become the dominant lithology. Other accessory minerals may include calcite, aragonite, mica, heavy minerals, and phosphate sand and gravel. A basal phosphate lag is often present. Colors range from light gray to light-olive gray. In the study area, TQsu is predominantly in the form of unconsolidated sands with varying percentages of shell fragments.

Tamiami Formation

Tt The Pliocene Tamiami Formation (Tt) consists of a complex mixture of limestone, fossil shell beds, quartz sand, and clay. The lithology of the top of the Tamiami Formation, which can be highly variable over short distances, may include limestone, sandstone, quartz sand, marl, clay, or fossil shell beds. These facies are highly variable in thickness and change rapidly over short distances, making them difficult to delineate on geological maps, especially when using cuttings.

LEGEND

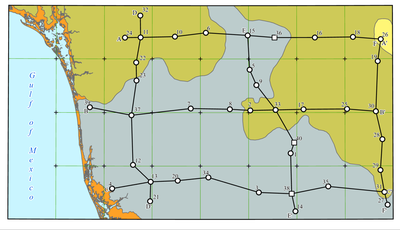
- Primary highway (75)
- Secondary highway (90) (951)
- Light duty road, principal street
- Railroad
- County boundary
- State lands and parks
- Contours (5m) Intermediate
- Core (1**)
- Cuttings (38**)
- M-Series sample
- Outcrop/exposure
- Consultant borehole
- Borrow pit
- Quarry / sand mine
- City/town
- USGS 1:24,000 Quadrangle tick mark
- ** Boreholes numbered 1 - 40 are used in cross sections on OFMS 117, Plate 2
- Waterbody
- Wetland
- River, stream or canal
- Cross section line
- U.S. Public Lands Survey Township/ Range
- 36 U.S. Public Lands Survey Section

Basemap Coordinate Explanation
10,000-meter grid, zone 17: Universal Transverse Mercator
25,000-foot grid ticks based on Florida coordinate system, east and west zones
25 3 25 000m N
775 = 775 000 FEET (EAST)

Refer to Open-File Report 114, Appendix A for borehole information

Refer to OFMS 117, Plate 2 for Cross Sections

CROSS-SECTION REFERENCE MAP (see Plate 2 and OFR114)



ADJOINING MAPS

1	2	3
4		5
	6	7

1. Charlotte Harbor
2. Fort Myers (OFMS 116)
3. West Palm Beach (OFMS 114)
4. Sanibel
5. Fort Lauderdale (to be mapped in 2025)
6. Everglades City
7. Miami



For more information or to order maps contact:
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https://floridadep.gov/fgs/research/content/statemap

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