

# Challenges and Intergovernmental Success of the 2013-2014 Beach Nourishment Projects On Anna Maria Island



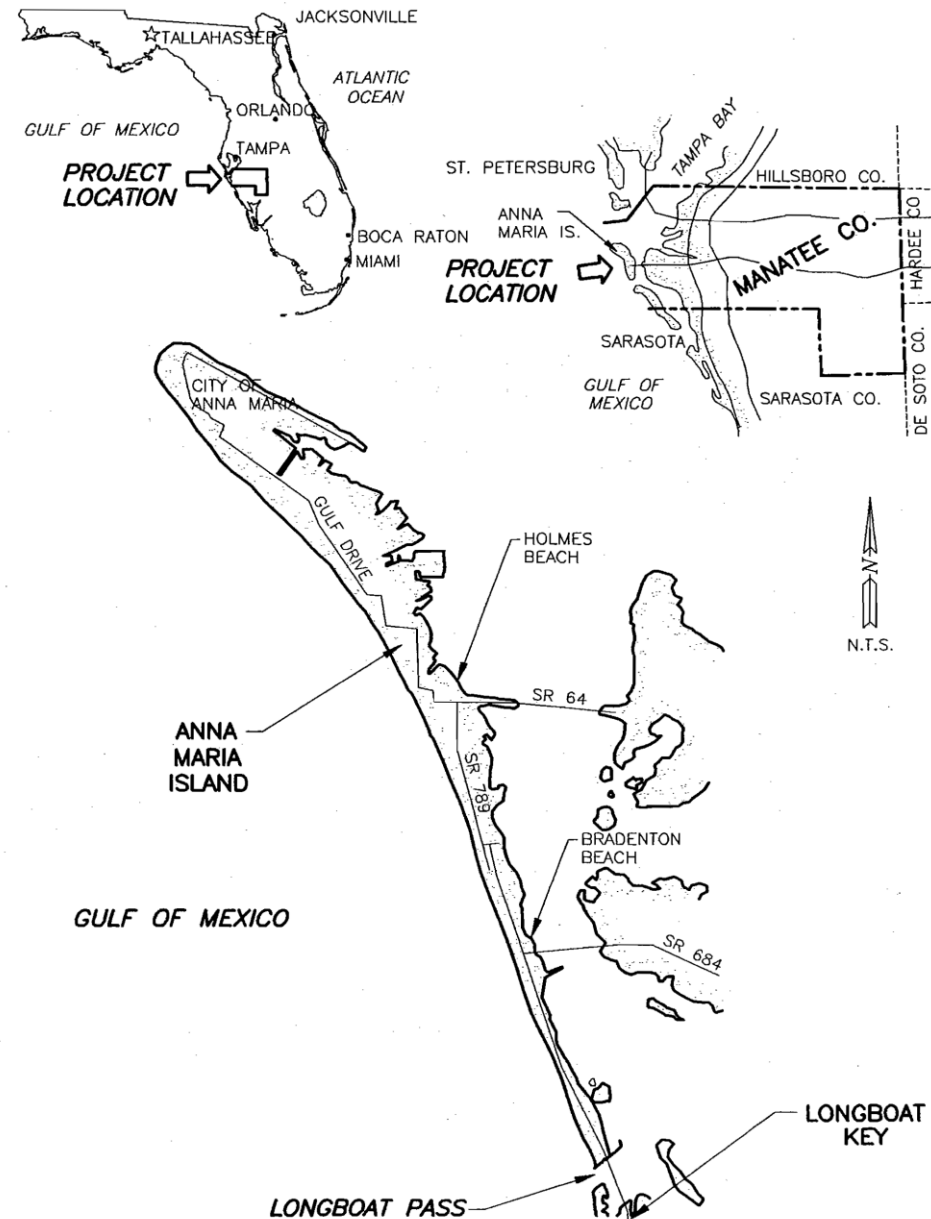
Charlie Hunsicker, Director, Manatee County, FL

Thomas P. Pierro, PE, D.CE, Director, CB&I

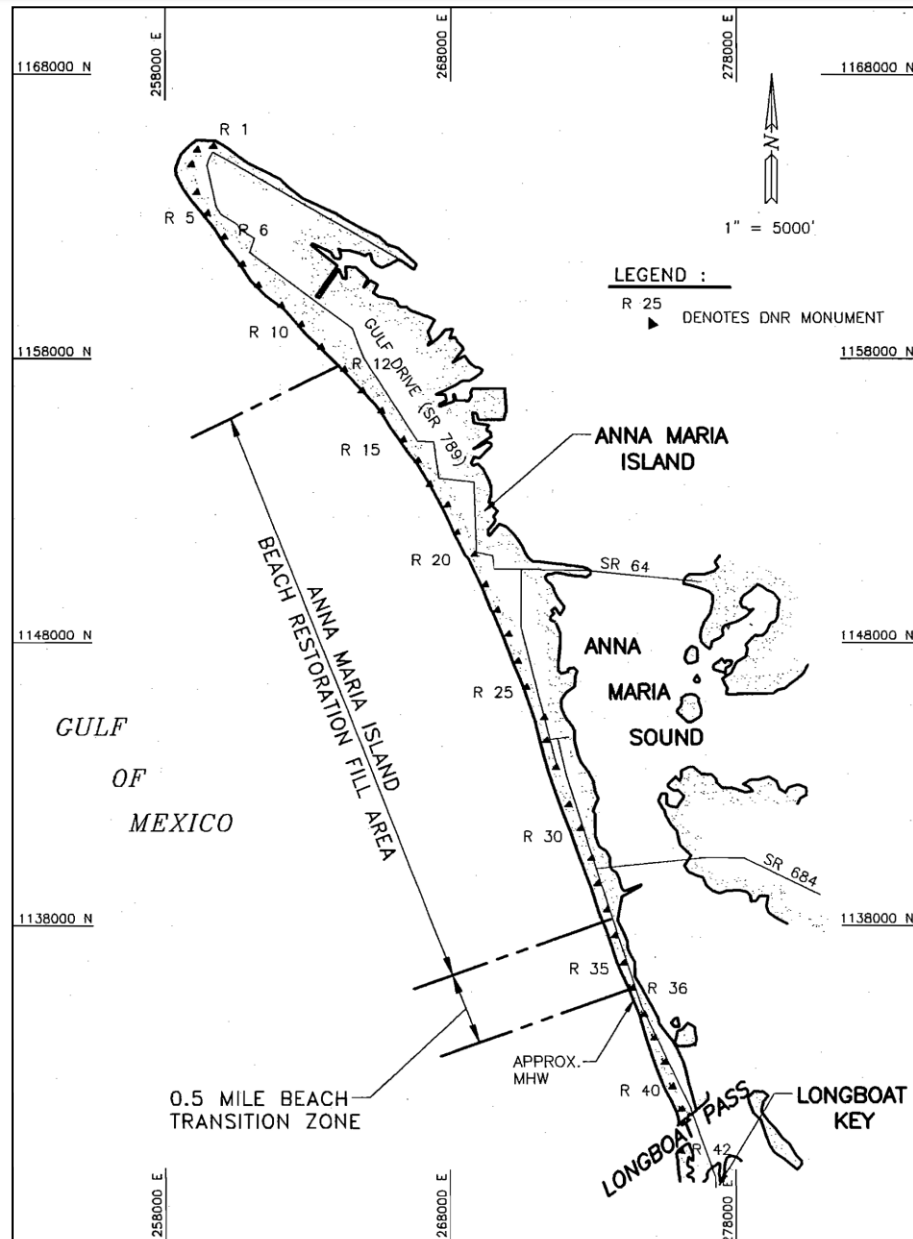
Michelle Pfeiffer, P.E., Senior Project Engineer, CB&I



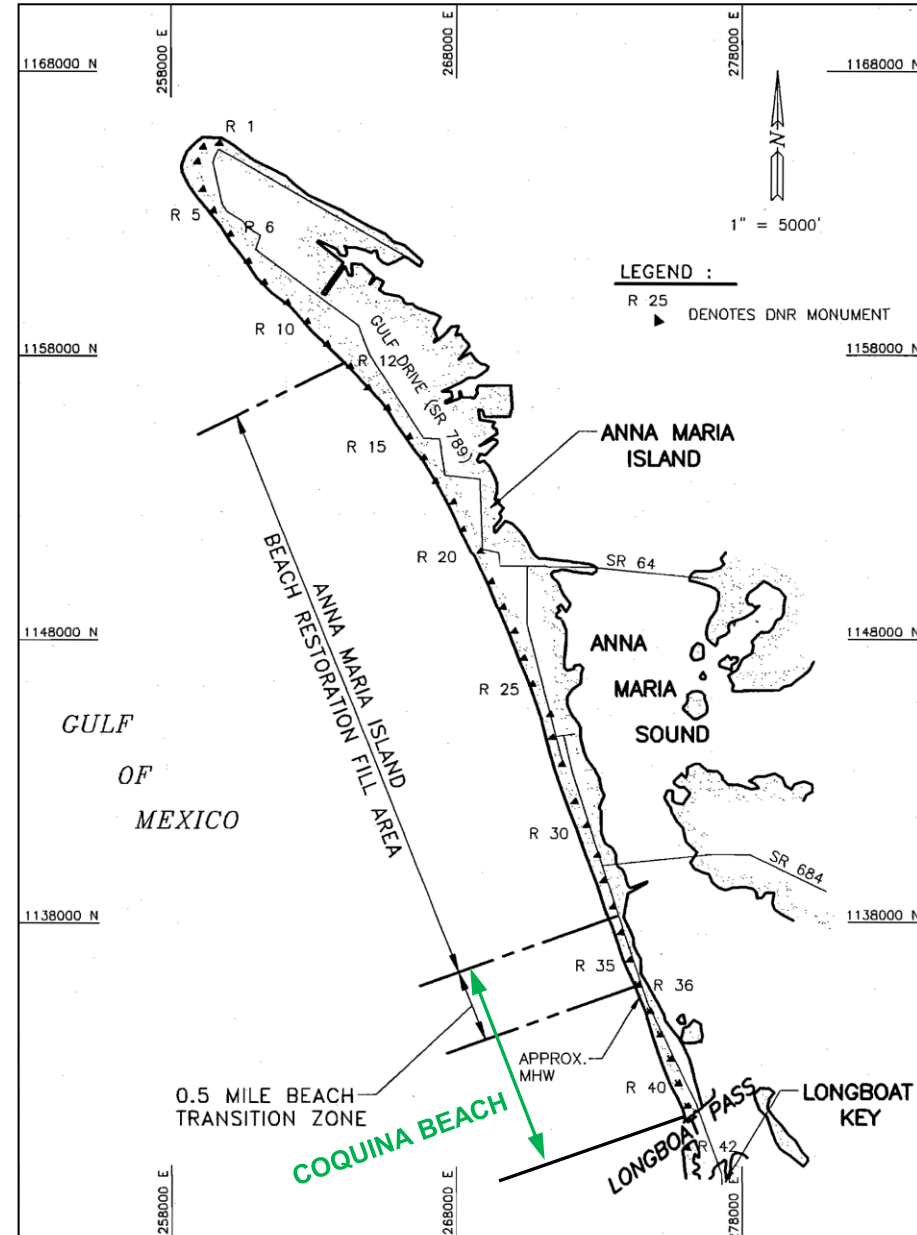
- Anna Maria Island is a 7.4 mile Gulf of Mexico barrier island located in Manatee County, south of Tampa Bay.
- Since 1992, beach nourishment has been the primary means of erosion control along the island.
- Projects constructed in 1992-1993, 2002, 2005-2006, 2011 and 2013-2014.
- 5.7 million cubic yards of sand



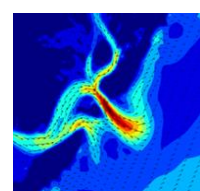
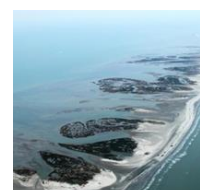
- Authorized by Public Law 98-298; Flood Control Act of 1965.
- The Chief of Engineers final approval December 1975.
- Entire gulf shoreline is authorized.
- 1991 GDM defined the project as the central 3.2 miles of the island.
- Length extended to 4.2 miles in 1992 LCA with 0.5 mile transition.
- First project 1992-1993



- Coquina Beach is the southern mile of Anna Maria Island, north of Longboat Pass.
- 2011 project was the first engineered nourishment.
- Tropical Storm Debby impacts eligible for FEMA funding.
- Permits modified to address storm damage and extend project life.
- Transition to blend with federally authorized project area.



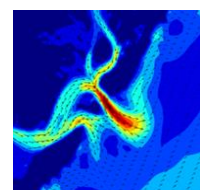
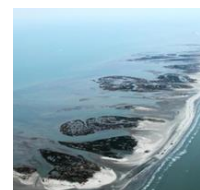
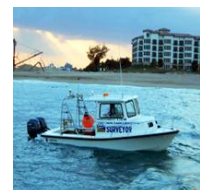
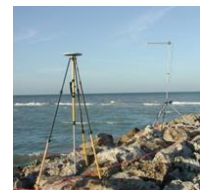
- Two projects were constructed in the winter of 2013-2014.
- The Anna Maria Island Shore Protection Project was constructed in the Federally-authorized Central Project by the U.S. Army Corps of Engineers (USACE), Jacksonville District.
- The Coquina Beach Nourishment Project was constructed by Manatee County immediately following the Central Project utilizing the same contractor and dredging equipment.
- Both projects repaired damages from Tropical Storm Debby (July 2012) and re-filled the beach templates to their full capacity.
- Overlapping taper sections to improve performance.





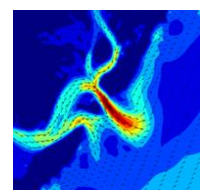
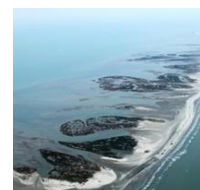
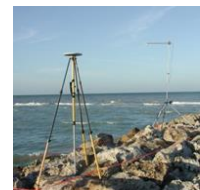
## 1. Timing:

- In 2012, the County was preparing the Anna Maria Island Renourishment for construction in 2014-15 under Section 206.
- Combining with Coquina Beach Renourishment.
- Tropical Storm Debby July 2012.
- Storm damage assessments August 2012 – March 2013.
- USACE Bid Solicitation August 2013.
- USACE deadline to award project Sept. 2013.



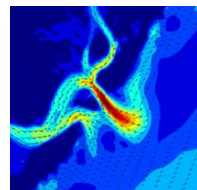
## 2. Funding:

- Flood Control and Coastal Emergency (FCCE) and Construction General (CG) funding required a Project Implementation Report (PIR) for the federally authorized project area.
- FEMA Project Worksheet to establish funding for Coquina Beach.
- County had to forward fund the nonfederal share (County and State) for Central Project and 100% of Coquina Beach totaling \$10.4M.
- New access and easement standards put eligibility into question.
- Costs uncertainties related to other Hurricane Sandy work and contractor availability.



### 3. Permitting:

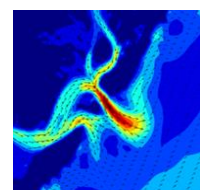
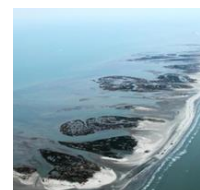
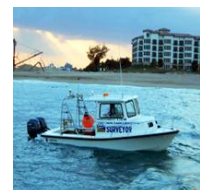
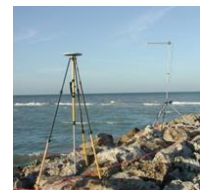
- Corps needed a new State Water Quality Certificate for Central project.
- County needed permit modifications for Coquina Beach.
- New borrow areas developed from County geotechnical investigation.
- FDEP had to expedite permit reviews for both projects, back to back.





#### 4. Contract Coordination:

- Great Lakes Dredge and Dock Company (GLDD) already contracted with USACE for Gasparilla and Anna Maria.
- Gasparilla constructed first, allowing time for County to get approvals for Coquina Beach.
- Contractor mobilized on Anna Maria Island under active USACE contract.
- Contractor and County worked together on project constraints, logistics and contract terms to make the project feasible.
- County had to formally amend their purchasing procedures to negotiate directly with the USACE Contractor.



**AN ORDINANCE OF MANATEE COUNTY, FLORIDA,  
RELATING TO PROCUREMENT; AMENDING SECTION  
2-26-40 OF THE MANATEE COUNTY CODE TO PROVIDE  
FOR WAIVER OF COMPETITIVE SOLICITATION IN  
CERTAIN CIRCUMSTANCES; PROVIDING FOR  
CODIFICATION AND SEVERABILITY; AND PROVIDING  
AN EFFECTIVE DATE.**

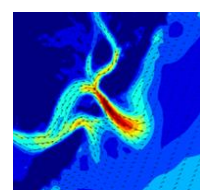
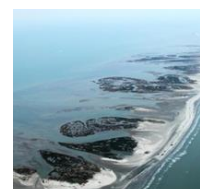
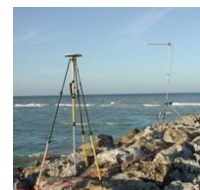
- Section 2-26-40(c):
  - Waiver of competitive selection by County Administrator.
  - Non-speculative costs of competitive purchasing exceed potential savings.
  - The service provider has a unique advantage.
  - Procurement actions up to \$250,000
- Amended to allow the County Commission, upon request of the County Administrator, to grant a waiver for procurement actions exceeding \$250,000.
- 10 day public notice prior to entering into contract negotiations.

## Both projects got constructed!

- Single mobilization and demobilization
- Over \$3 million saved on construction
- Reduced local impact from construction activity

## Key Factors to Success:

- Willingness to cooperate
- USACE regionalization and coordination
- Planning together for improvements and cost savings



## ANNA MARIA ISLAND SHORE PROTECTION PROJECT

- December 21, 2013 – March 5, 2014
- 888,000 CY over approximately 4.5 miles
- \$11,320,000\*
  - 72% Federal, 14% State, 14% County

\*Total construction costs not finalized.



2014/04/14



## COQUINA BEACH NOURISHMENT

- March 1, 2014 – March 15, 2014
- 260,000 CY over approximately 1.5 miles
- \$5,310,000
  - 14% FEMA, 43% State, 43% County



2014/04/14

- Manatee County Beach Renourishment [Video](#)

An aerial photograph of a coastal area, showing a sandy beach, a body of water, and some buildings. A semi-transparent dark blue rectangle is overlaid on the image, containing the text "Beach Renourishment" and "Taking Care of our Sandy Shores".

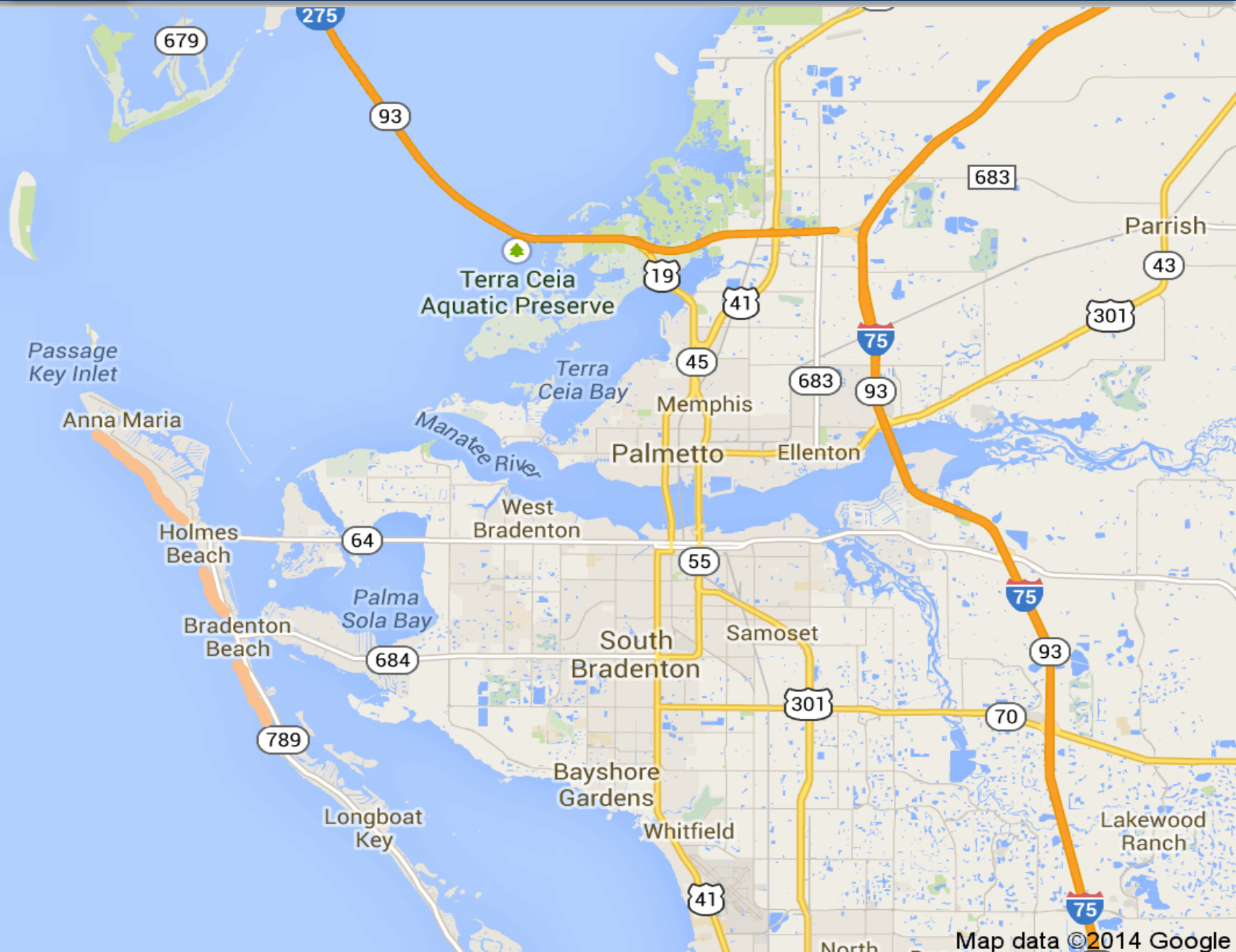
## Beach Renourishment

Taking Care of our Sandy Shores



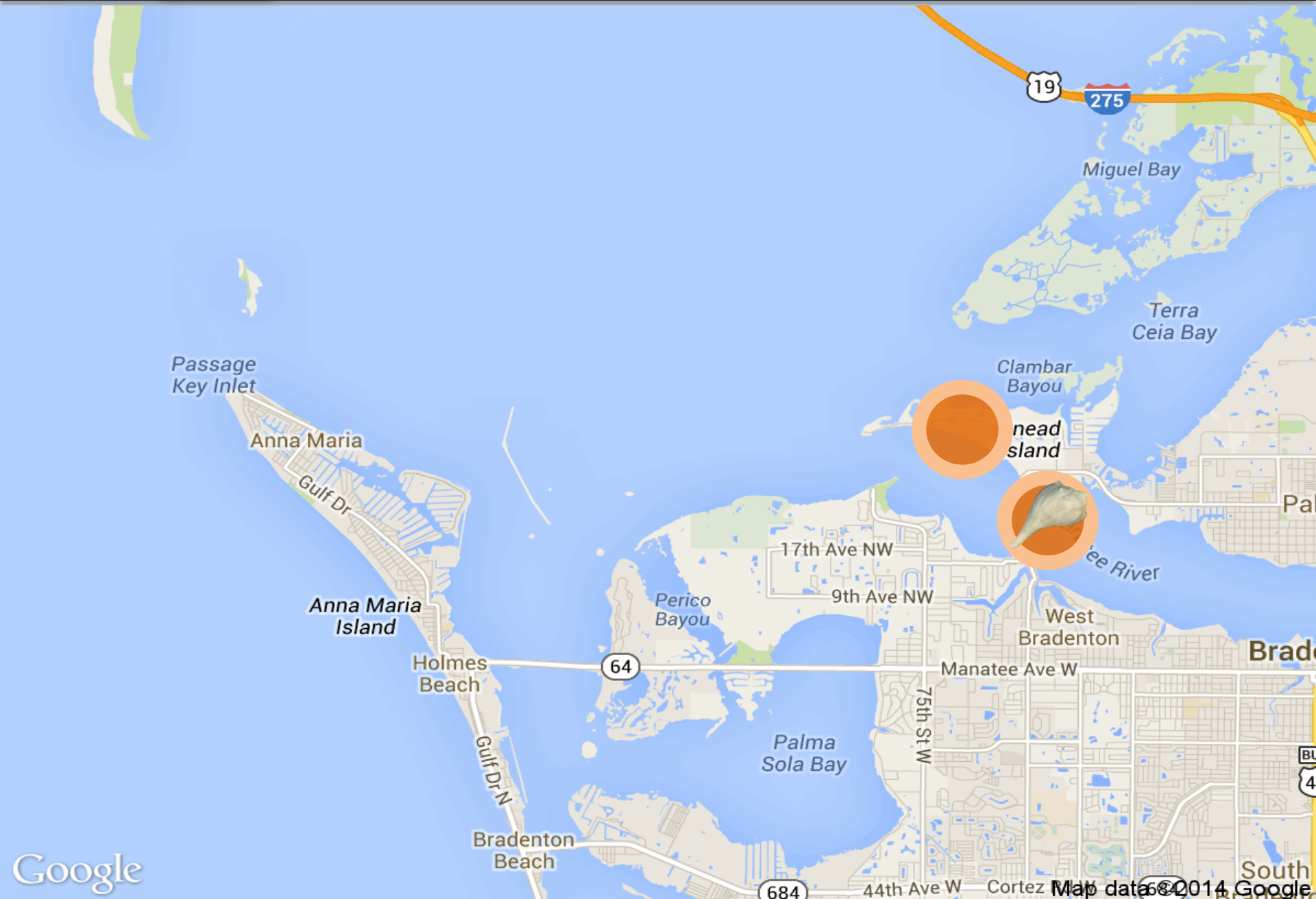


# Tale of a 2,000 Year Journey





# Tale of a 2,000 Year Journey





# Glimpse into Prehistory

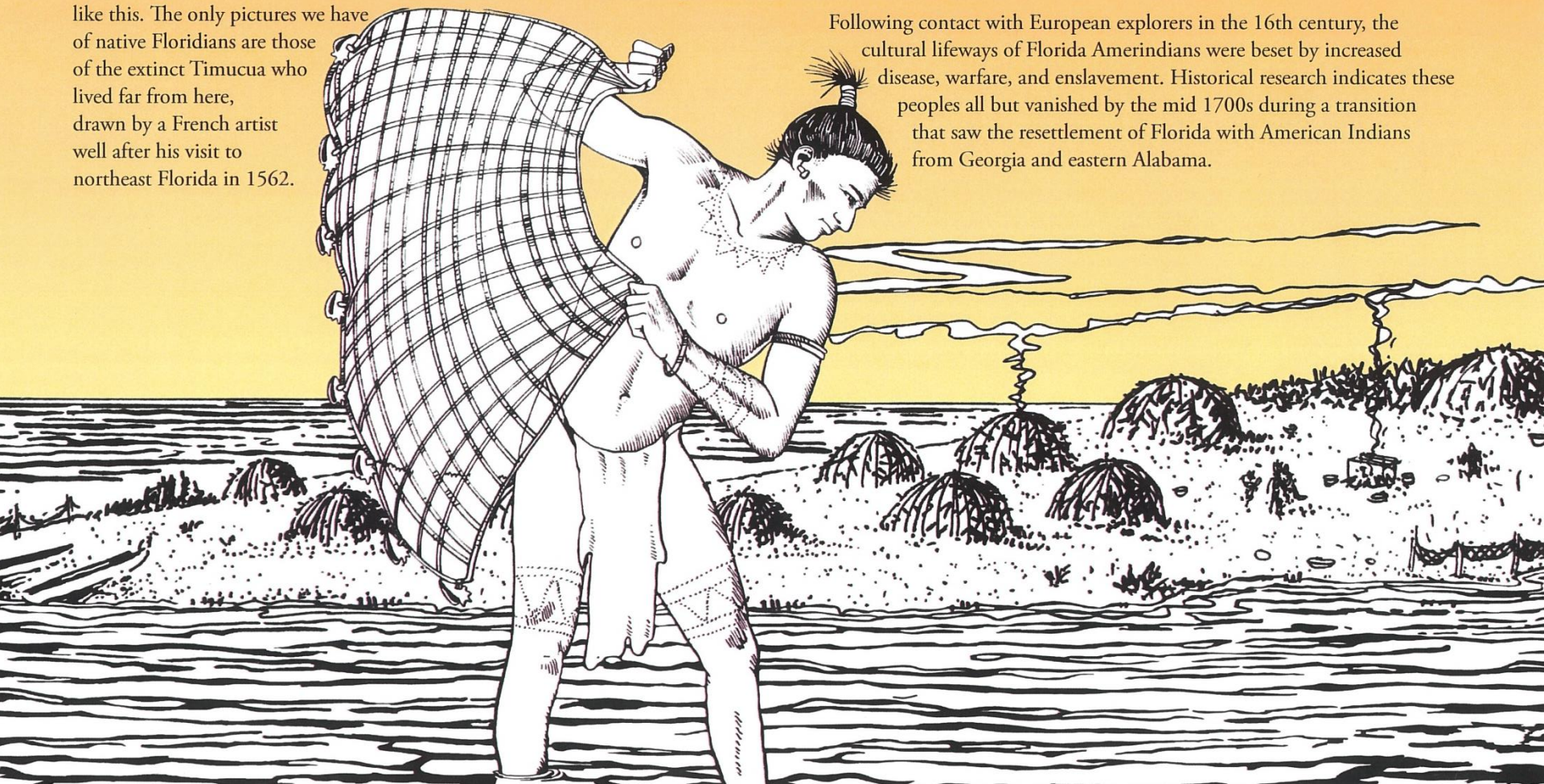
Through expert archaeological investigations, we are revealing more about the lives of past inhabitants at the temple mound complex. This careful work is slow, and remains of a prehistoric shelter found here provide new clues to early inhabitants.

We have only sketches from Spanish and French explorers of the life-styles which must have flourished for hundreds of years in complex villages like this. The only pictures we have of native Floridians are those of the extinct Timucua who lived far from here, drawn by a French artist well after his visit to northeast Florida in 1562.

As early as 800 AD, perhaps even earlier, native people settled along the river shoreline of Snead Island.

We know from the remains of animal bone and shell fragments that they lived very well by harvesting fish and shellfish from the surrounding waters; hunting deer, turtles, and other animals; and collecting plants in the interior hammocks.

Following contact with European explorers in the 16th century, the cultural lifeways of Florida Amerindians were beset by increased disease, warfare, and enslavement. Historical research indicates these peoples all but vanished by the mid 1700s during a transition that saw the resettlement of Florida with American Indians from Georgia and eastern Alabama.





## Mysteries of the Mounds

The areas before and around you were home to Amerindians from the time of 800 AD to 1500 AD, and perhaps even earlier.

Discarding their food remains of shell and bone, as well as broken pottery and tools, the Amerindians created mounds, called shell middens, near their palm-thatched huts. Using this village debris as fill, they built the large central temple mound. The temple mound served as the foundation for the houses of their leaders and as a stage for religious ceremonies watched from the plaza below by the assembled villagers.

For reasons unknown to us, the ritual buildings would be regularly burned or torn down. The people would cover the mound with another layer of shell midden, then top it with a cap of earth and erect new buildings. And so the temple mound grew in size and elevation.

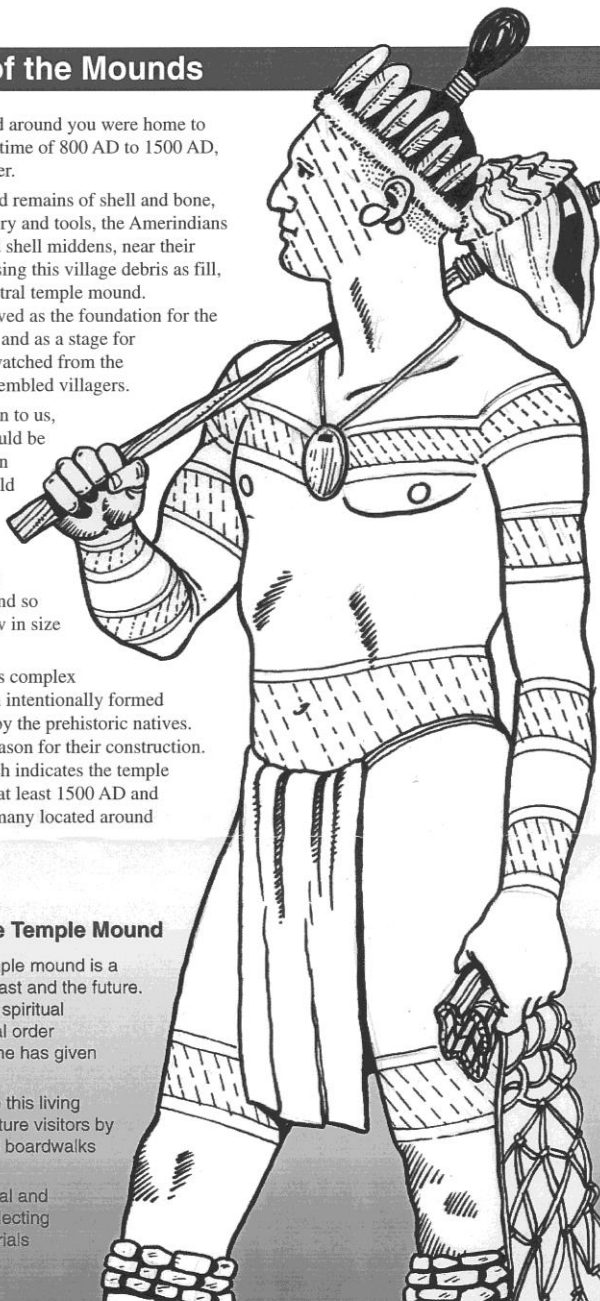
Other mounds in this complex also seem to have been intentionally formed into particular shapes by the prehistoric natives. We do not know the reason for their construction. Archaeological research indicates the temple mound was used until at least 1500 AD and was the largest of the many located around Tampa Bay.

## Guardians Of The Temple Mound

Each visitor to the temple mound is a guardian of both the past and the future. Try to identify with the spiritual importance and natural order that the passage of time has given to this special place.

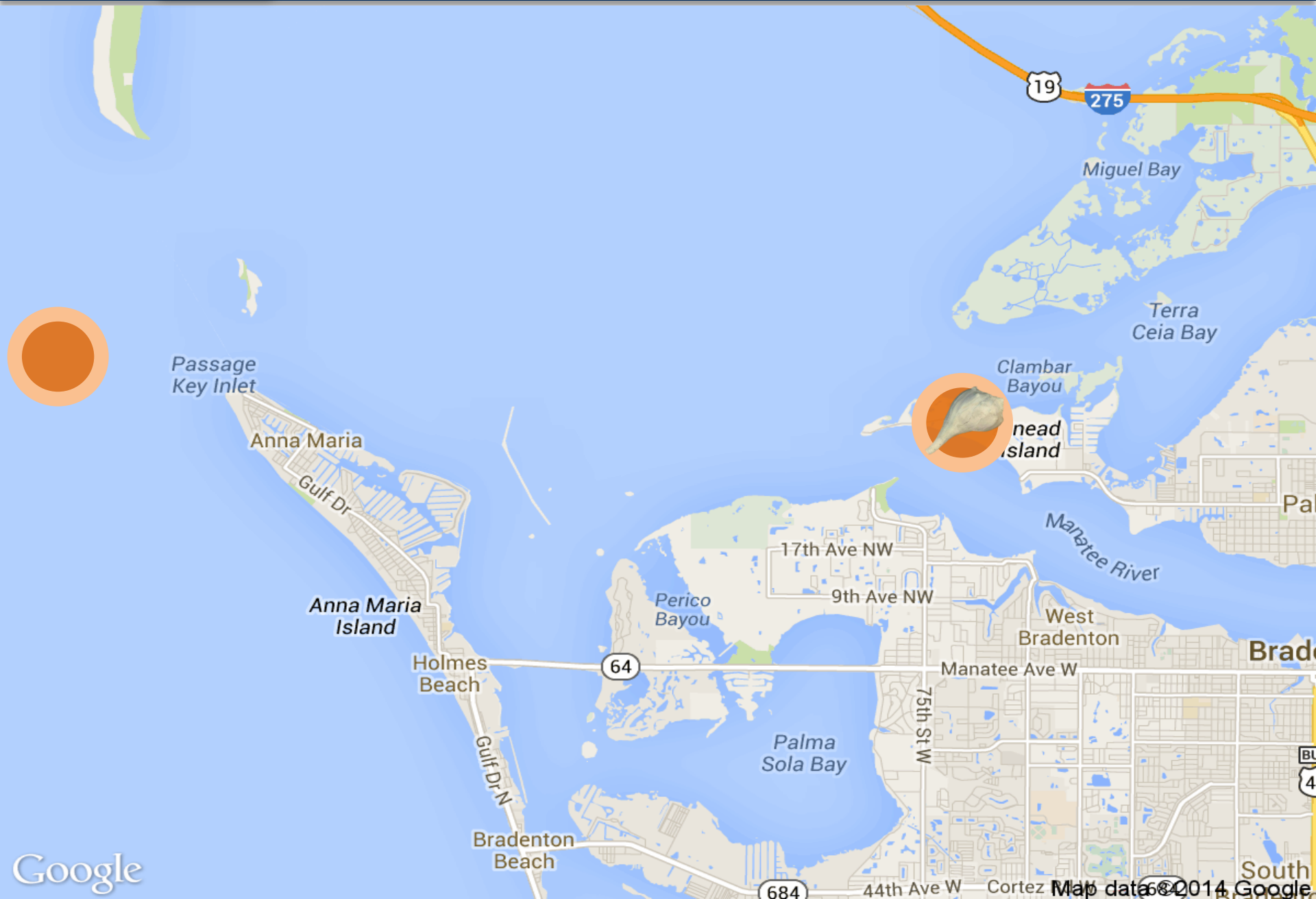
You can help preserve this living record of history for future visitors by staying on the marked boardwalks and footpaths.

Remember that Federal and State law prohibits collecting or removing any materials from the park.





# Tale of a 2,000 Year Journey



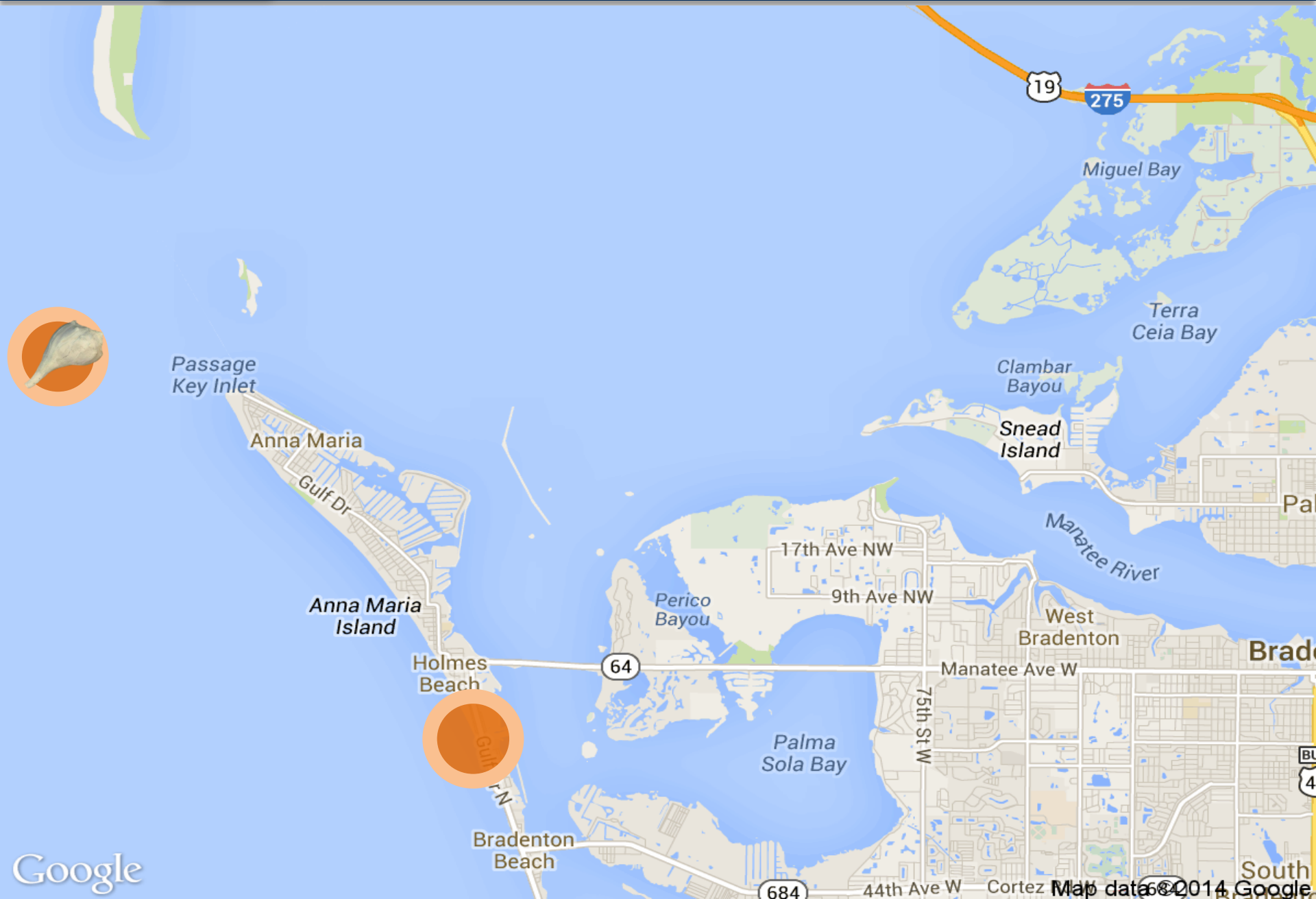








# Tale of a 2,000 Year Journey









# Tale of a 2,000 Year Journey



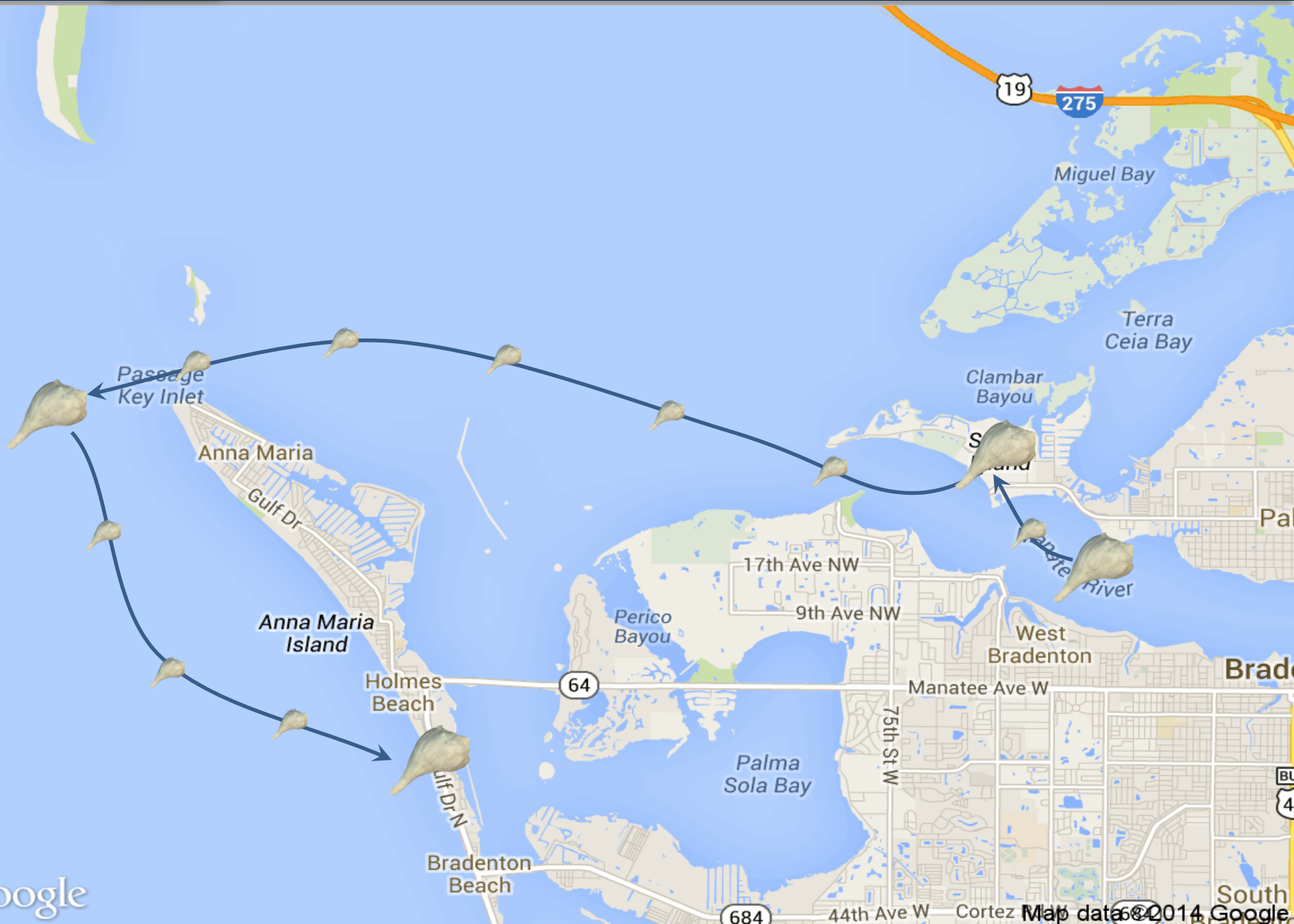






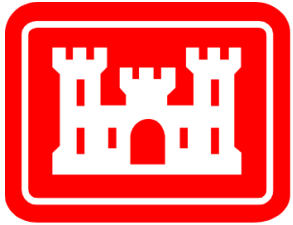


# Tale of a 2,000 Year Journey









## US Army Corps of Engineers®

- U.S. Army Corps of Engineers
  - Colonel Alan M. Dodd
  - David Hobbie
  - Jackie Keiser
  - Sirisha Rayaprolu
  - Jim Lagrone



- Florida Department of Environmental Protection
  - Danielle Irwin
  - Alex Reed
  - Marty Seeling
  - Bob Brantly
  - Chiu Cheng



- Great Lakes Dredge and Dock Company
  - Russ Zimmerman
  - Ben Leonard, Project Managers and Field Crews



Thank You





## CB&I CONTACT

Thomas P. Pierro, P.E., D.CE

(561) 391-8102 office

(561) 361-3150 direct

(561) 756-2535 cell

[Thomas.Pierro@cbi.com](mailto:Thomas.Pierro@cbi.com)