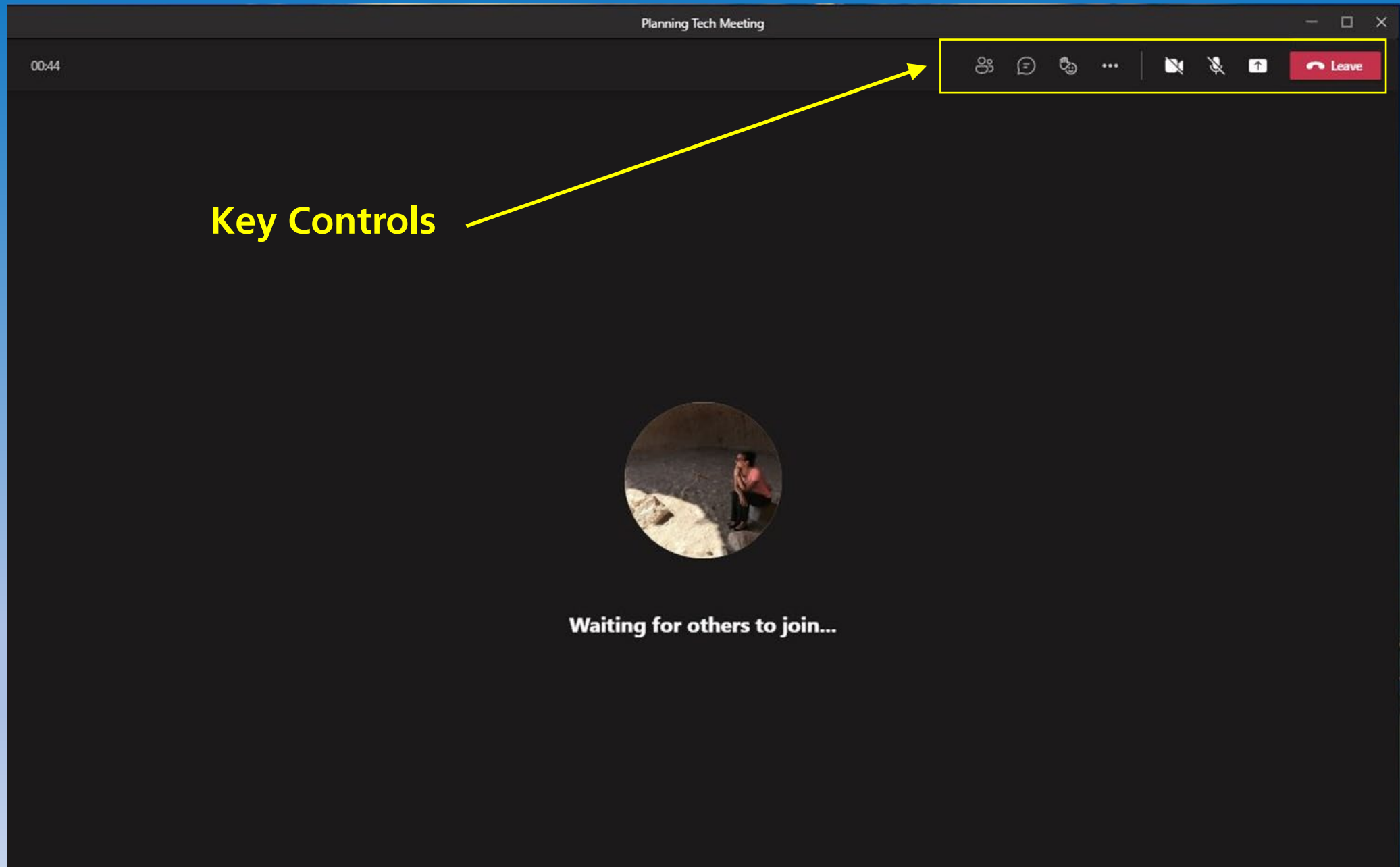


# Ocracoke Light Station Preservation Project

Cape Hatteras National Seashore  
Ocracoke Island, North Carolina  
May 10, 2021

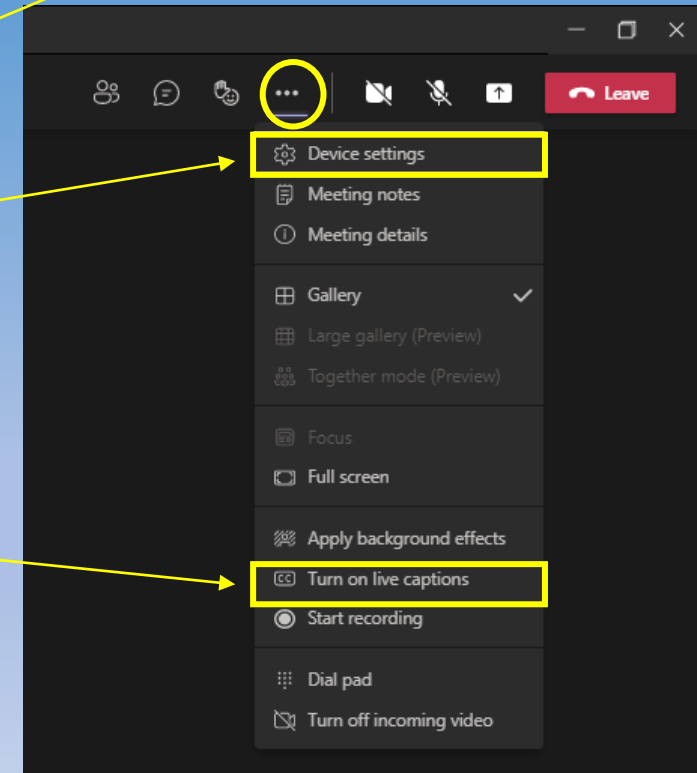
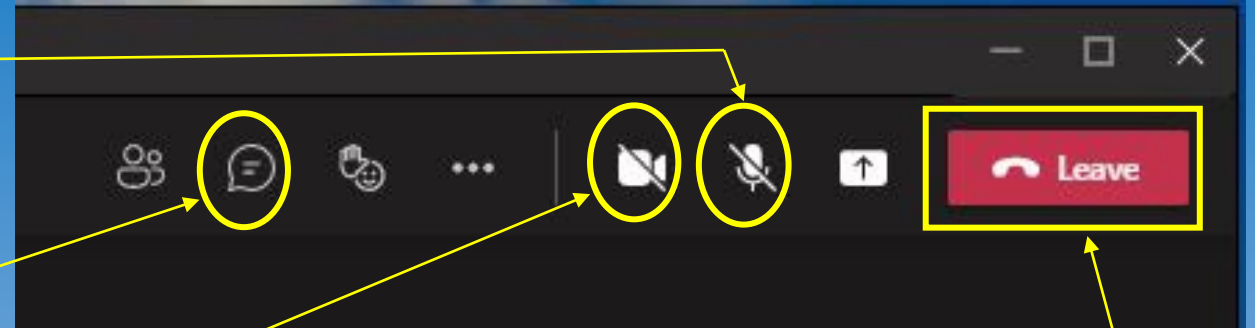


# Orientation to Microsoft Teams



# Orientation to Microsoft Teams

- Please mute your microphones on computers and phones
- Please wait to submit your comments or questions until after the presentation
- Please turn off video cameras to improve your connection and bandwidth
- Volume
- Captions



Leave meeting

# NPS Staff

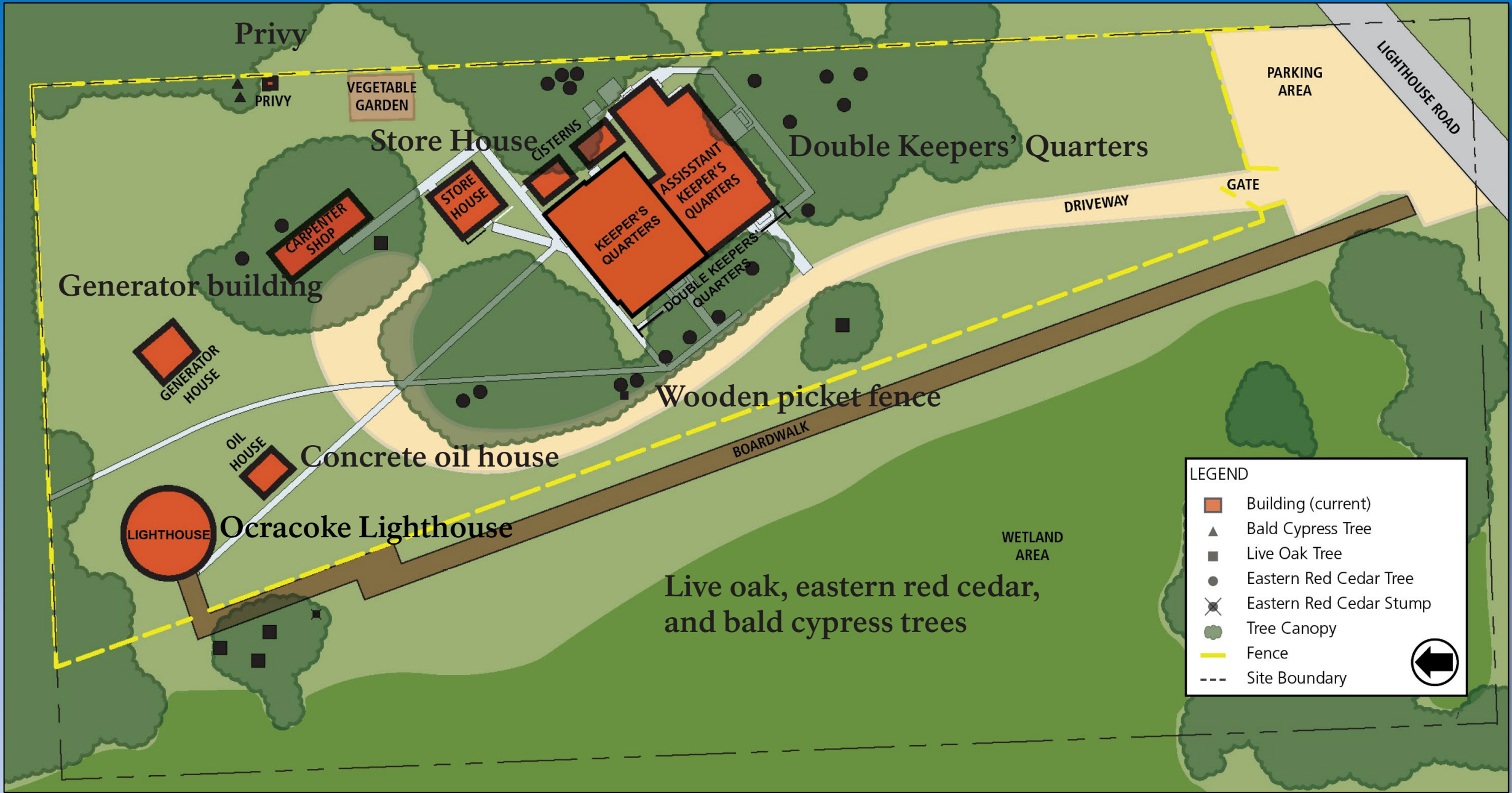
- **David Hallac**- Superintendent, Cape Hatteras NS
- **Mark Dowdle**- Deputy Superintendent, Cape Hatteras NS
- **Sabrina Henry**- Environmental Protection Specialist, Cape Hatteras NS
- **Meaghan Johnson**- Deputy Chief of Resource Management and Science, Cape Hatteras NS
- **Jami Lanier**- Cultural Resources Manager/Historian, Cape Hatteras NS
- **Amy Thompson**- Ocracoke Supervisory Biological Technician, Cape Hatteras NS
- **Scott Babinowich**- Chief of Interpretation, Education and Visitor Services, Cape Hatteras NS
- **John Kowlok**- Chief of Facility Maintenance, Cape Hatteras NS
- **Todd Fappiano**- Operations Supervisor, Cape Hatteras NS
- **Nelson Pendleton**- Engineer, Cape Hatteras NS
- **Ed Fuller**- Ocracoke District Ranger, Cape Hatteras NS
- **Jami Hammond**- Regional Environmental Coordinator, South Atlantic Gulf Region
- **Darrell Stone**- Contracting Officer Representative, Storm Team South Atlantic Gulf Region
- **Pam Baughman** – Section 106 Coordinator, Storm Team South Atlantic Gulf Region
- **Anne Finney**-Historian, Storm Team South Atlantic Gulf Region
- **Stephen Lacey**- Archeologist, Storm Team South Atlantic Gulf Region
- **Byron Tsang**- Wetland Ecologist, Storm Team South Atlantic Gulf Region
- **Linda York**-Coastal Geologist, Storm Team South Atlantic Gulf Region
- **Whitney Howeth**- Wildlife Specialist, Storm Team South Atlantic Gulf Region
- **Paul Alimia**- NEPA Specialist, Storm Team South Atlantic Gulf Region



- 1823 Oldest functioning lighthouse in North Carolina
- Second oldest lighthouse still in service in the U.S.
- **Project objective:** How to manage the complex of buildings and exterior of the lighthouse in the face of sea level rise and storms?







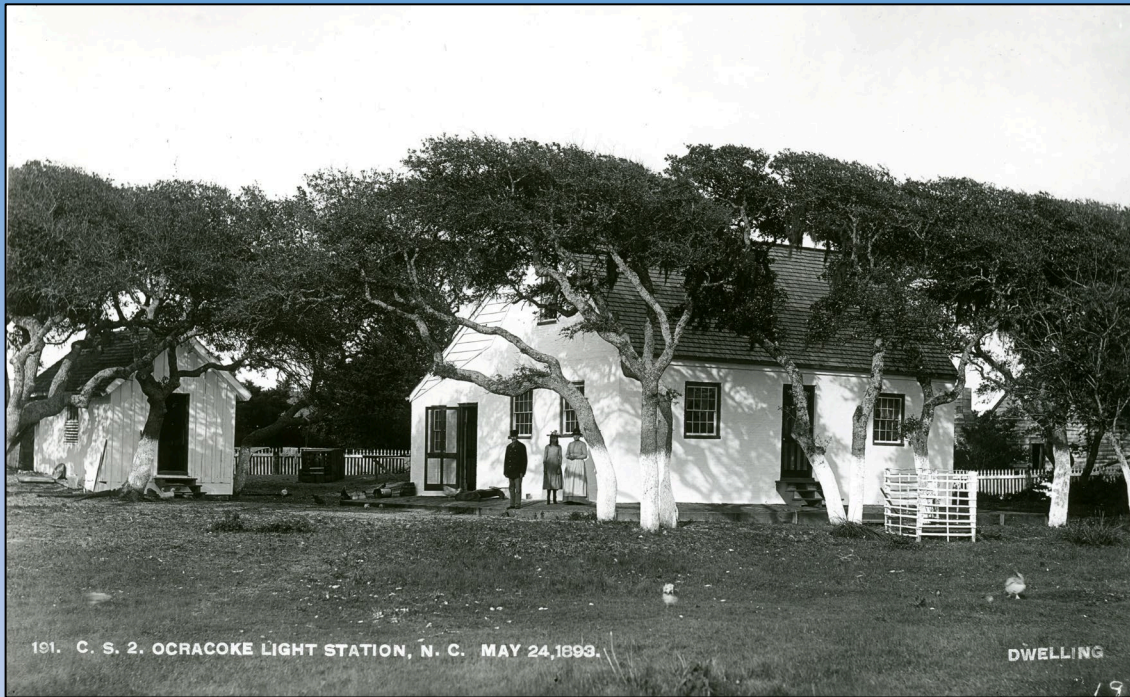
**LEGEND**

- Building (current)
- Bald Cypress Tree
- Live Oak Tree
- Eastern Red Cedar Tree
- Eastern Red Cedar Stump
- Tree Canopy
- Fence
- Site Boundary



# Keeper's Quarters

- Originally a 5-room, 1 ½-story brick dwelling with an upper living level
- Numerous repairs beginning in 1855
- In 1929, expanded to create a double dwelling



**Keeper's Quarters, 1893**



**Double Keeper's Quarters, current**



# Then and Now



**Ocracoke Light Station 1893**

(Earliest known photographs of Ocracoke Light Station date to 1893)



**Ocracoke Light Station 2016**



# Management at sea level

- Hurricanes Mathew, Florence, and Dorian.
- Severely flooded from Hurricane Dorian in 2019













# Period of Interpretation (1823-1846)



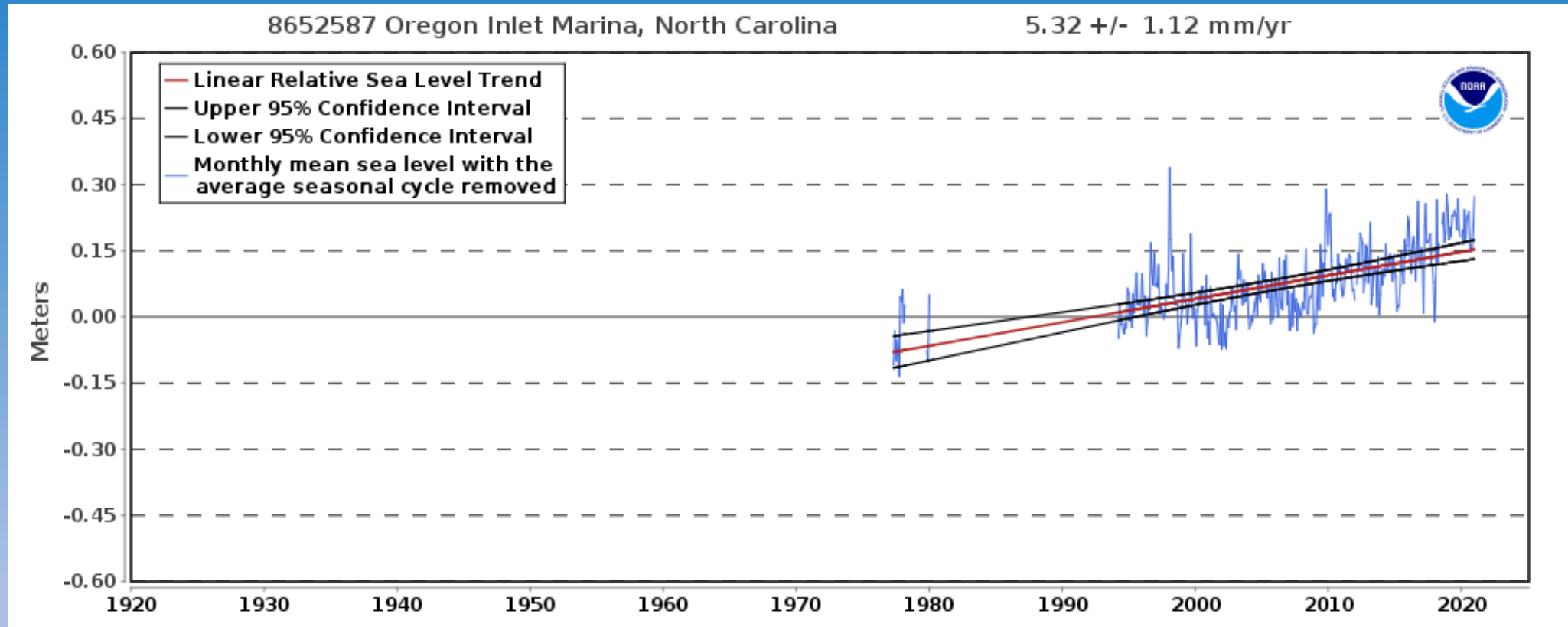




Test removal of  
shotcrete

2/3/21

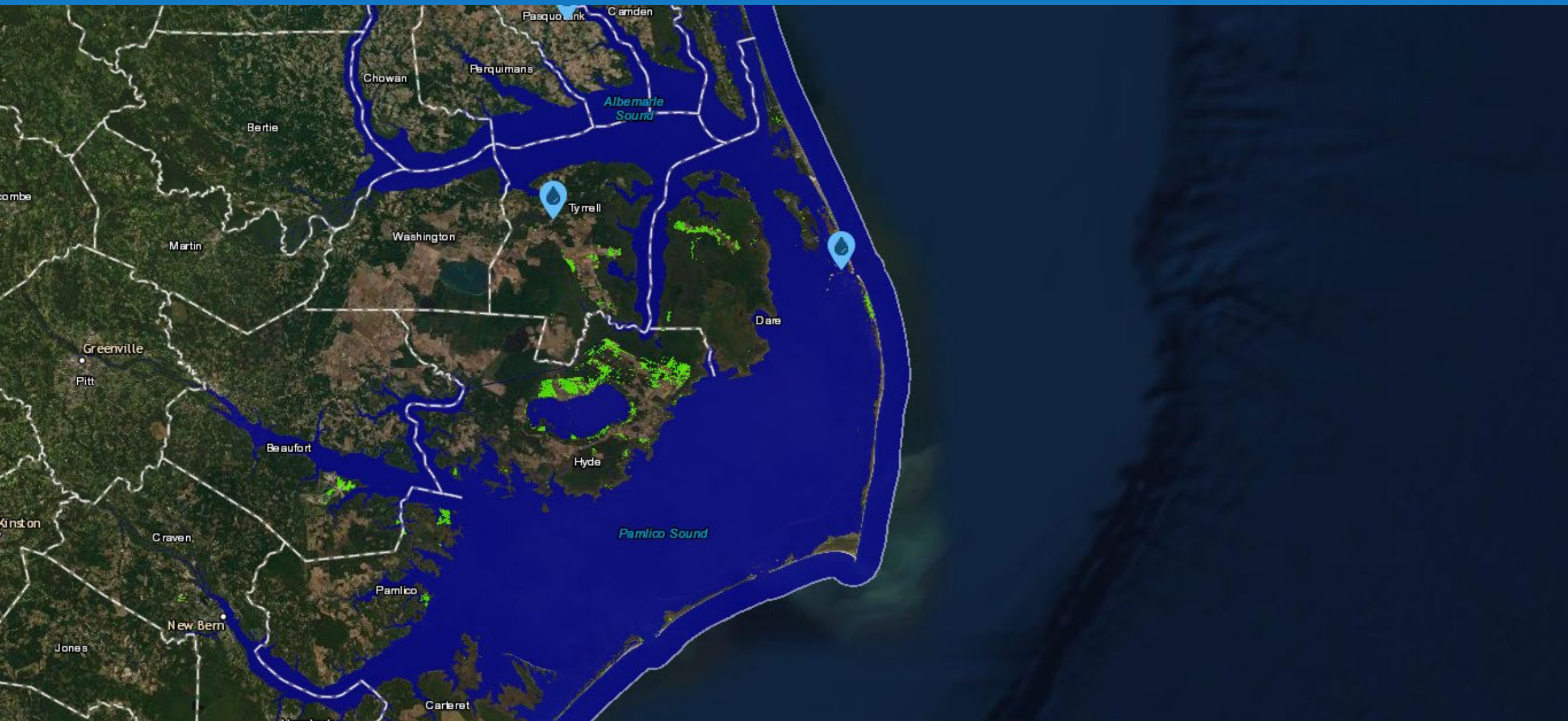
# Current rate of sea level rise = 5.32 +/- mm/yr



“The relative sea level trend is 5.32 millimeters/year with a 95% confidence interval of +/- 1.12 mm/yr based on monthly mean sea level data from 1977 to 2020 which is equivalent to a change of 1.75 feet in 100 years. ”

Graphic and text from NOAA found here: [https://tidesandcurrents.noaa.gov/sltrends/sltrends\\_station.shtml?id=8652587](https://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?id=8652587)





**Data from:** NOAA Sea Level Riser Viewer – available at: <https://coast.noaa.gov/slr/#/layer/slr>



**Data from:** NOAA Sea Level Riser Viewer – available at: <https://coast.noaa.gov/slr/#/layer/slr>

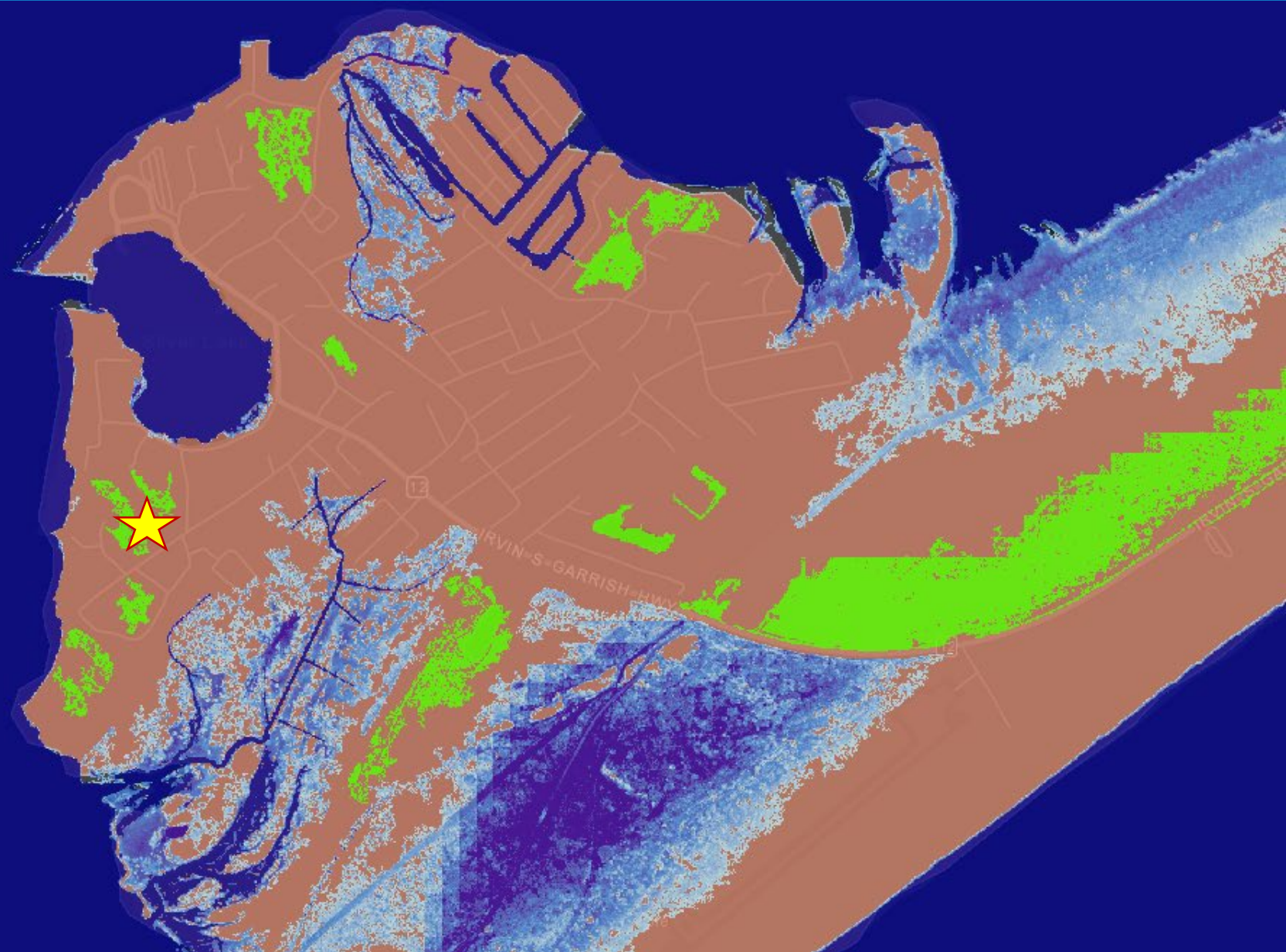


# CURRENT



**Data from:** NOAA Sea Level Riser Viewer – available at: <https://coast.noaa.gov/slr/#/layer/slr>

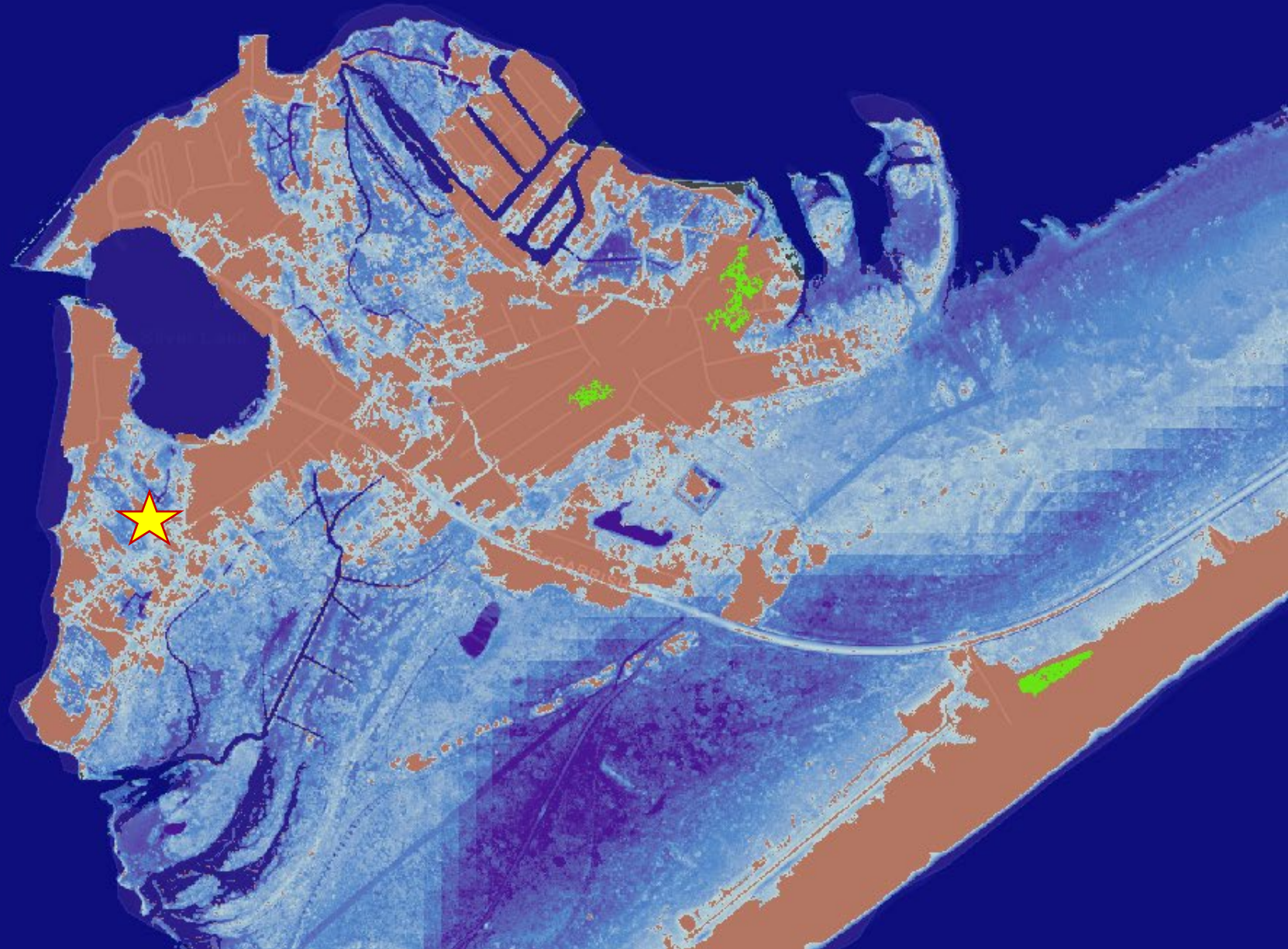
1 FT.



Data from: NOAA Sea Level Riser Viewer – available at: <https://coast.noaa.gov/slr/#/layer/slr>



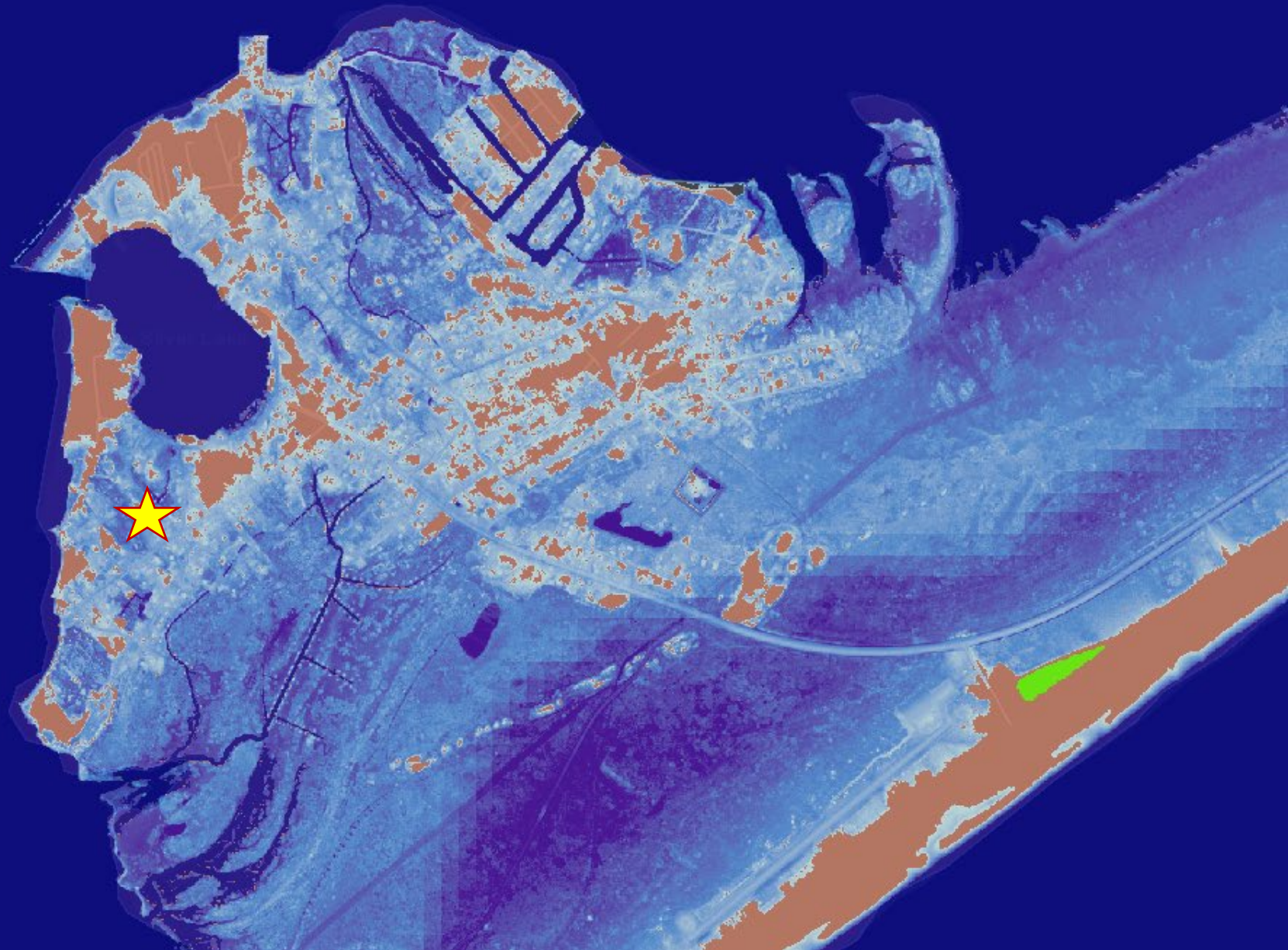
2 FT.



**Data from:** NOAA Sea Level Riser Viewer – available at: <https://coast.noaa.gov/slr/#/layer/slr>

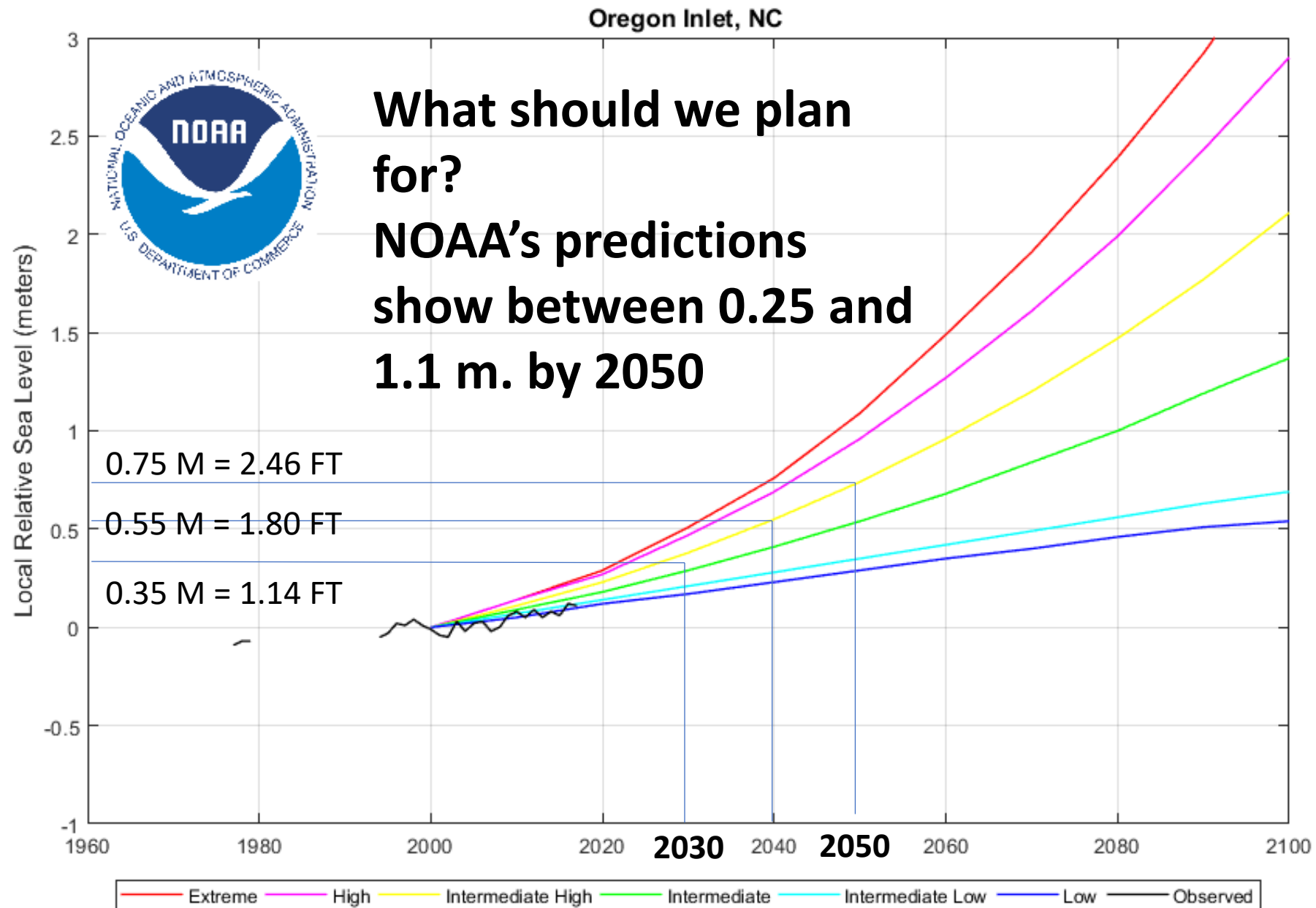


3 FT.



**Data from:** NOAA Sea Level Riser Viewer – available at: <https://coast.noaa.gov/slr/#/layer/slr>





Data from: [https://tidesandcurrents.noaa.gov/sltrends/sltrends\\_station.shtml?id=8652587#tab50yr](https://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?id=8652587#tab50yr)



# Next Steps

- Collect feedback
- Initiate NEPA and Section 106 (NHPA)
- Prepare a plan
- Obtain funding
- Implement



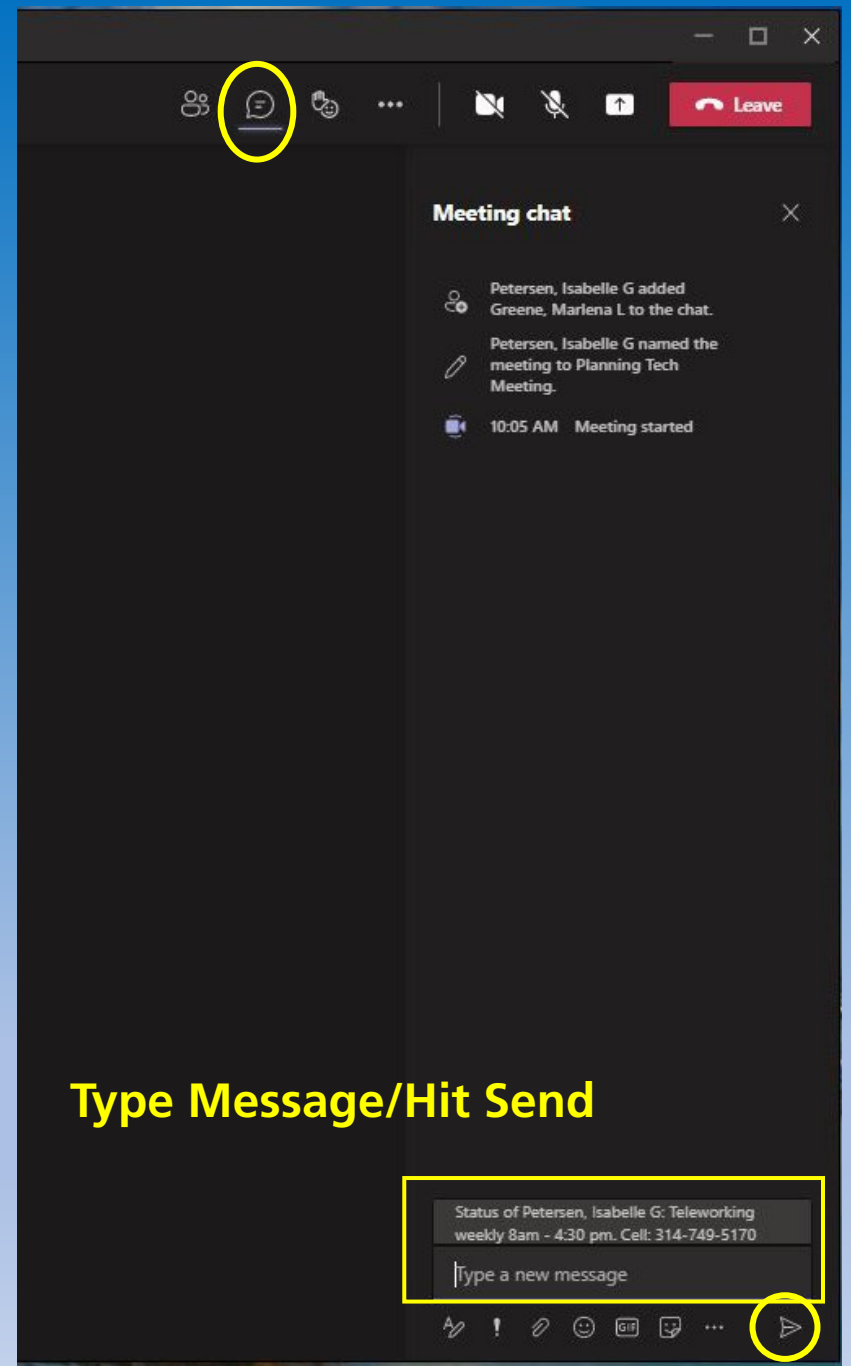
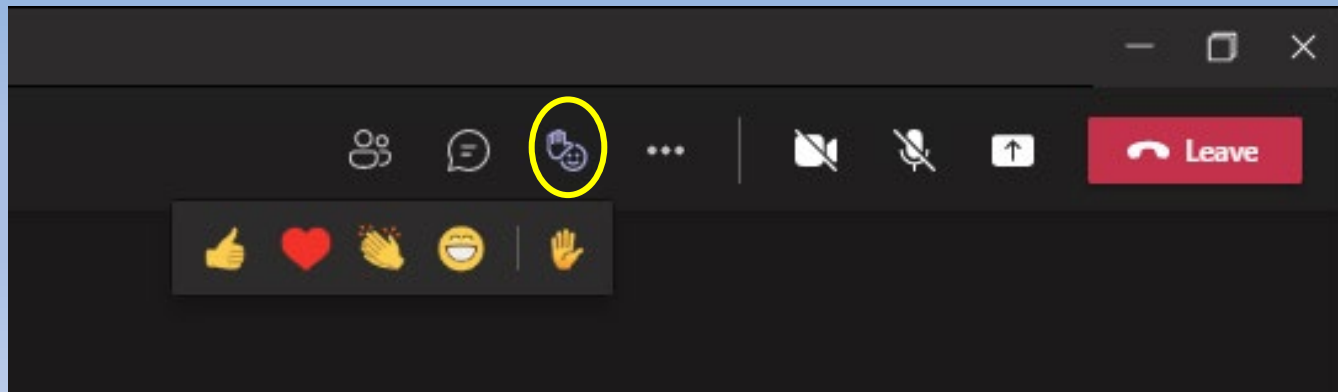
How should we preserve this important light station?

- Repair as is
- Elevate and repair
- Elevate, restore to original keeper's quarters
- Relocate



# We're Listening

- Please use the "Raise Your Hand" function to help us manage the conversation and to make a verbal comment
- Turn on video cameras if you want.
- Please use the "Chat" function to share something for consideration
- Called in using phone #? -Use\*6 to unmute phone



Submit comments electronically at:  
<https://parkplanning.nps.gov/CAHA>

Comments should be clear, concise, and relevant to the issues associated with management of the Ocracoke Light Station.

Commenting is not a form of “voting.”

Comments must be received by **May 28, 2021**.

