Breach Inlet Conditions June 2023

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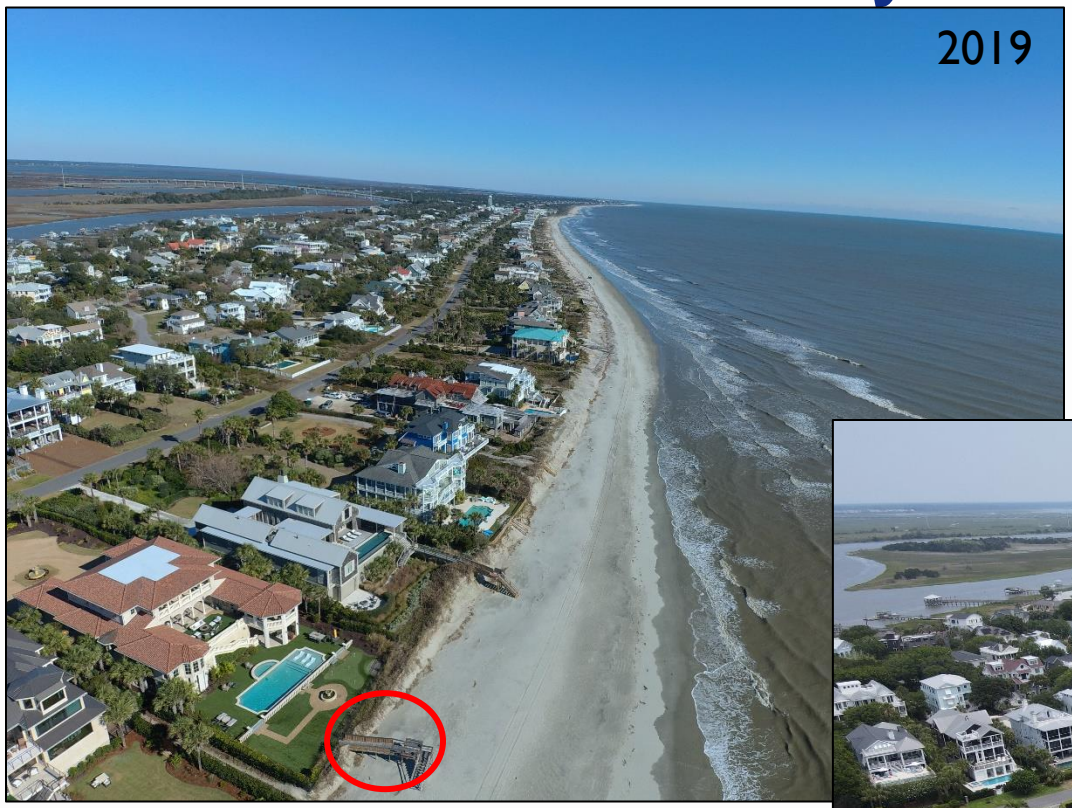
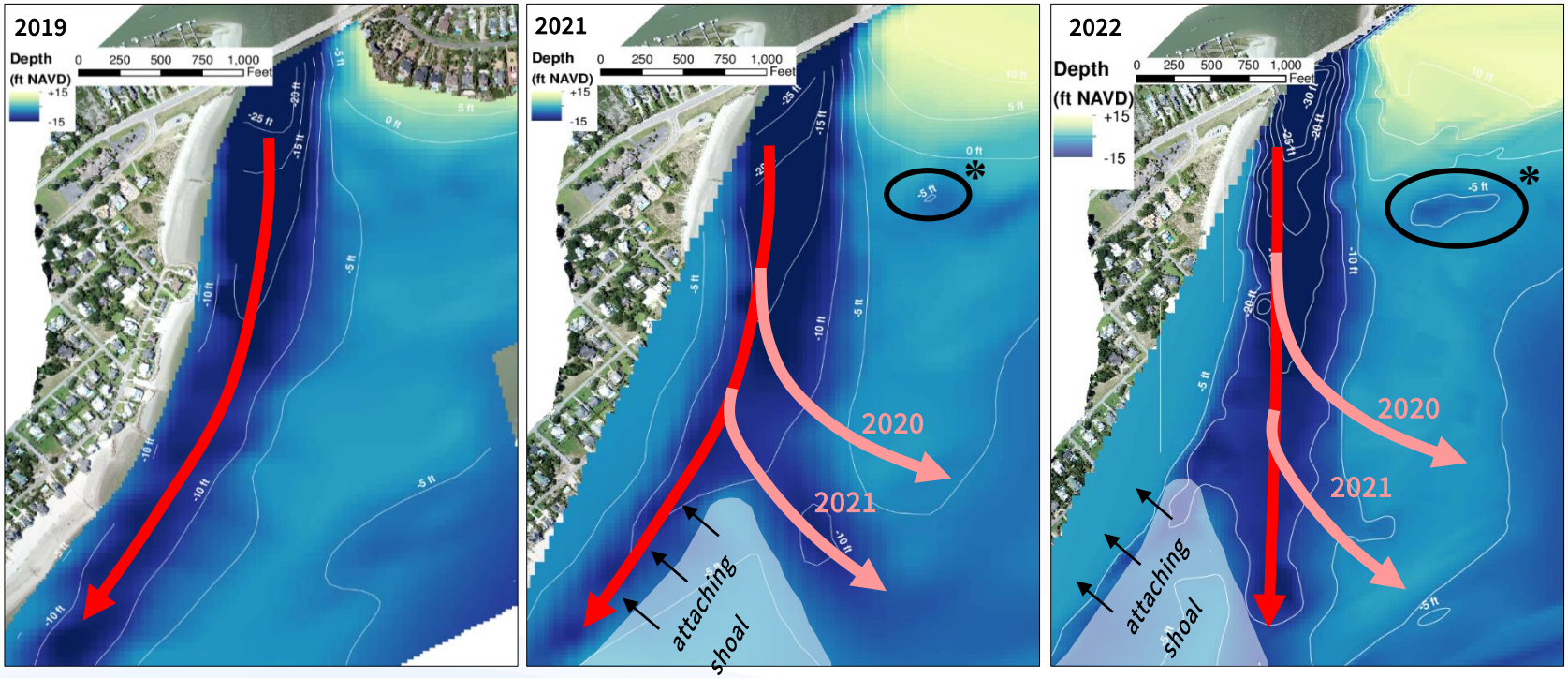


Breach Inlet

- Episodic erosion caused by:
  - periodic shifts in channels and shoals in inlet



*deepening and widening channel ~250-500 ft offshore near eroded area

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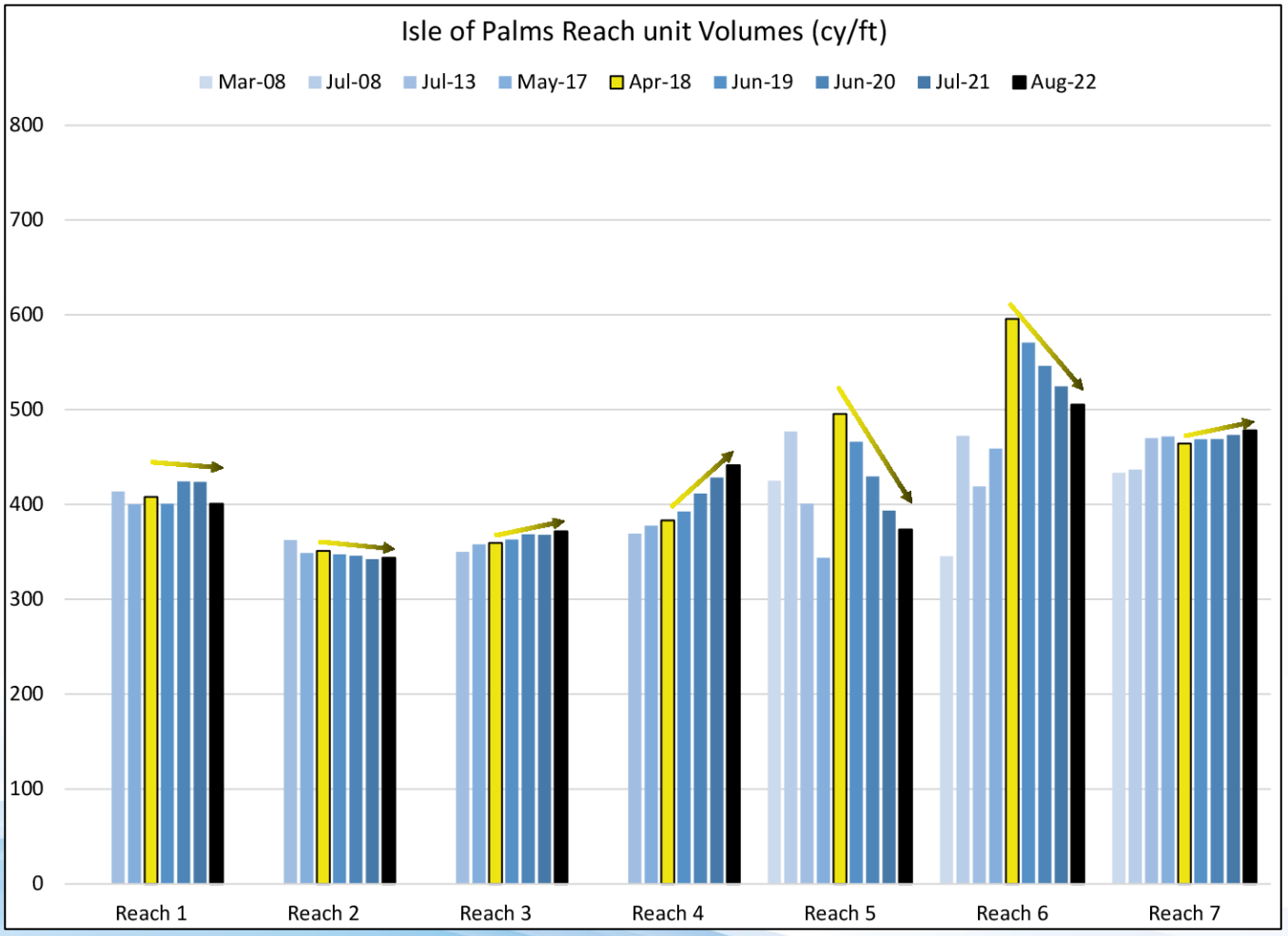
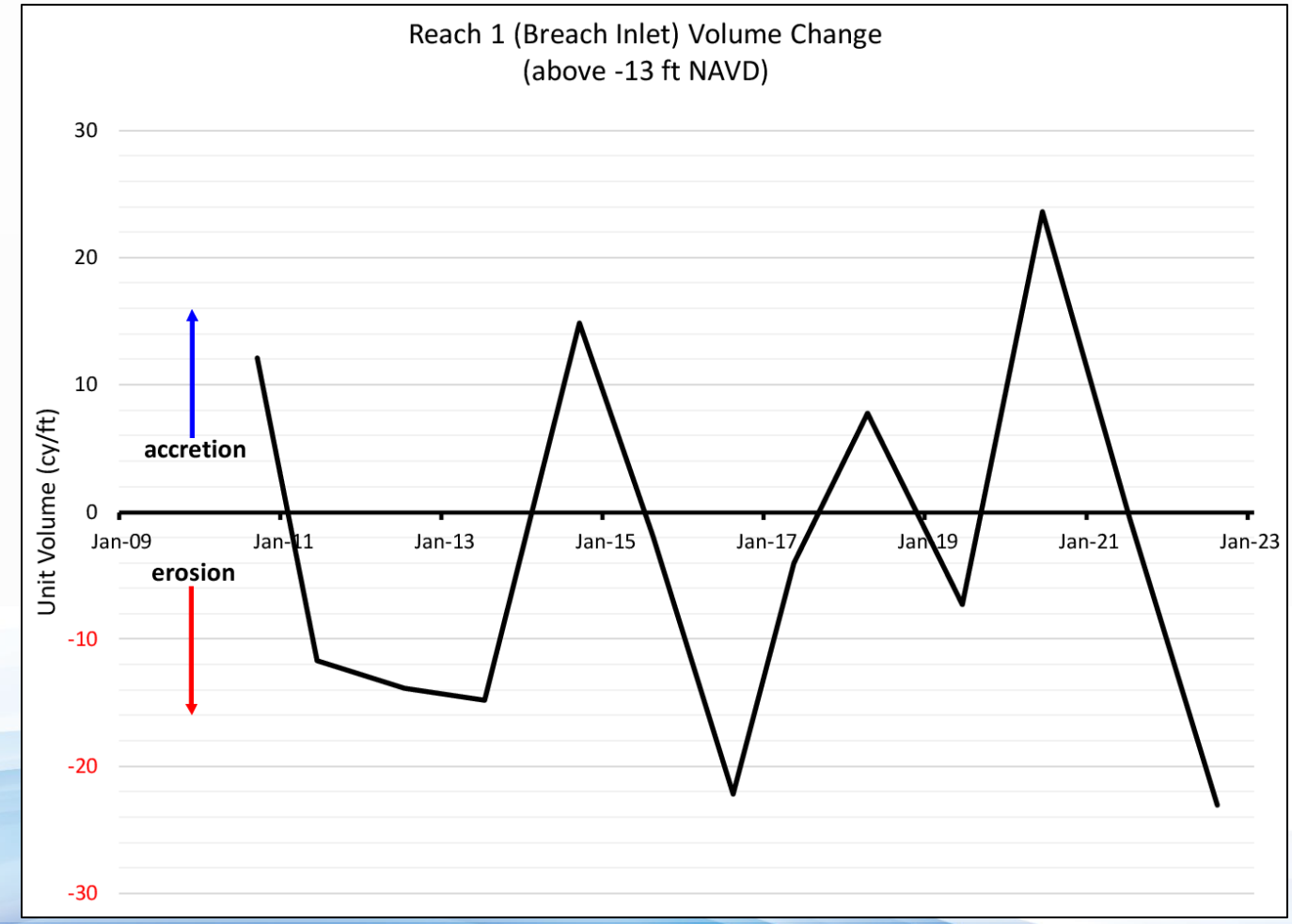
  - migration of beach sands from the central and eastern portions of island



Breach Inlet

- Episodic erosion caused by:
  - *periodic shifts in channels and shoals in inlet*
  - *migration of beach sands from the central and eastern portions of island*
- Results in oscillations between accretion and erosion (typical near inlets):



Current Options

Emergency Permit Measures

- Applies when MHW <20 ft from structures
  - Scraping
  - Sandbags
  - Minor dune nourishment

General Permit Measures

- Minor dune nourishment
- Sand fencing

Current Options

Date: **12 June 2023**

0 200
Scale (Feet)

Moving Forward

- Emergency measures may be effective for short term, but additional sand is likely to be required
  - Scraping and/or sandbags can provide limited emergency relief
- Bringing in sand (via truck or dredge) helps increase beach volumes
- Potential for beneficial use project with USACE
  - Late 2023 – Early 2024
  - 200,000 cy likely minimum (~10 yrs' worth of losses mitigated)
- Longer-term consideration for dredging
  - City sponsoring sand searches and permitting/engineering for future nourishment efforts