

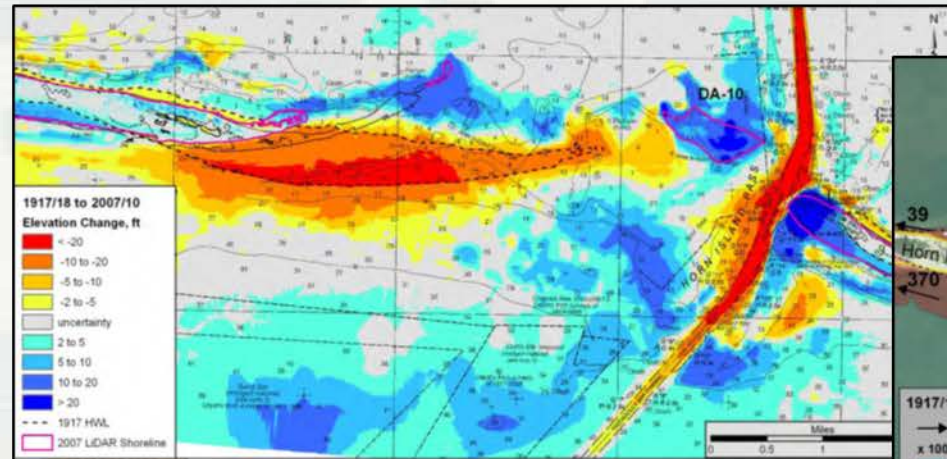
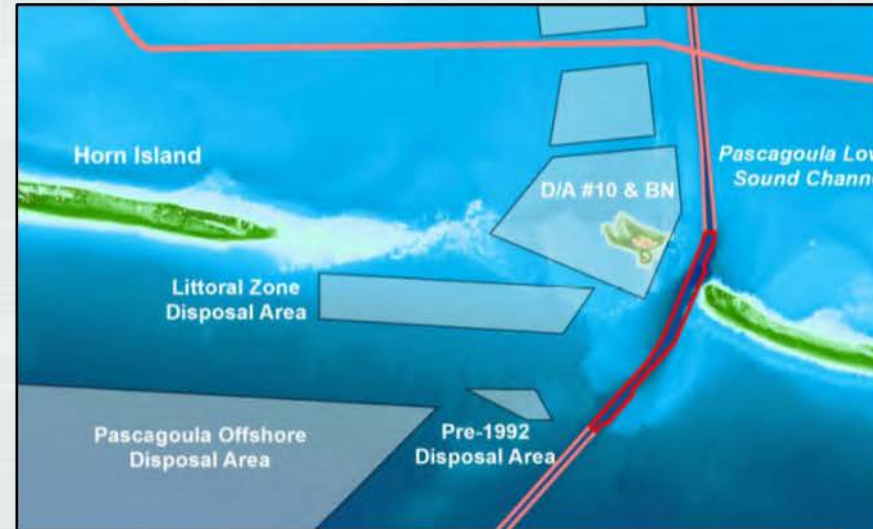
Pascagoula Harbor – Disposal Area 10 Littoral Zone Placement Sand Transport

Richard J. Allen, Mobile District

BLUF: The Mississippi Coastal Improvements Program (MsCIP) and the Pascagoula Harbor Federal Navigation program has proposed modification in the future placement location of dredged material for the Pascagoula Federal Navigation Channel. The intent of revisions is to ensure placement of future dredged material, within the littoral zone, will enhance the natural transport of dredged material to Horn Island while not increasing costs of operation of the Pascagoula Federal Navigation Channel.

Objectives/Approach

- Complete a Sand Tracer Study
- High Res Bathymetric Change
- Update Existing Models and Studies
- Apply Adaptive Management Techniques
- **Optimize Placement of Dredge Material**



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Stakeholders and Partners

District/Other USACE PDT Members

- Larry Parson, Planning, SAM
- Elizabeth Godsey, Engineering, SAM
- Nate Lovelace, Operations, SAM
- Richard Allen, Engineering, SAM
- Justin McDonald, Engineering, SAM
- Susan Rees, Ph.D, MsCIP, SAM

- National Park Service (NPS)
- United States Geological Survey (USGS)
- U.S. Marine Fisheries (USMF)
- U.S. Fish and Wildlife Service (USFWS)
- Mississippi Department of Marine Resources (MDMR)
- Mississippi Department of Environmental Quality (MDEQ)
- Bureau of Ocean Energy Management (BOEM)
- Environmental Protection Agency (EPA)

Leveraging/Collaborative Opportunities

- MsCIP Long-Term Monitoring and Adaptive Management Plan (MsCIP-MAMP)
- Mobile District Navigation Program
- Coastal Inlets Research Program (CIRP)
- ASBPA Abstract Submitted



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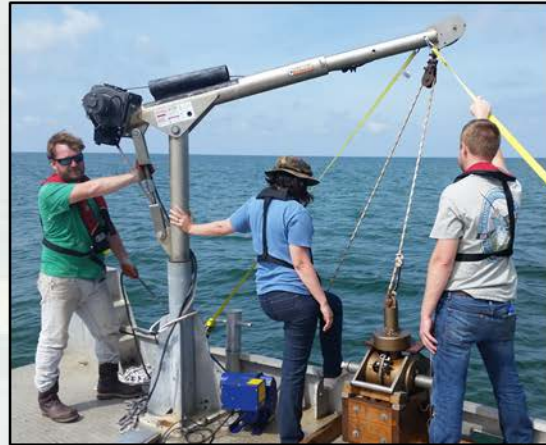
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Accomplishments/Deliverables

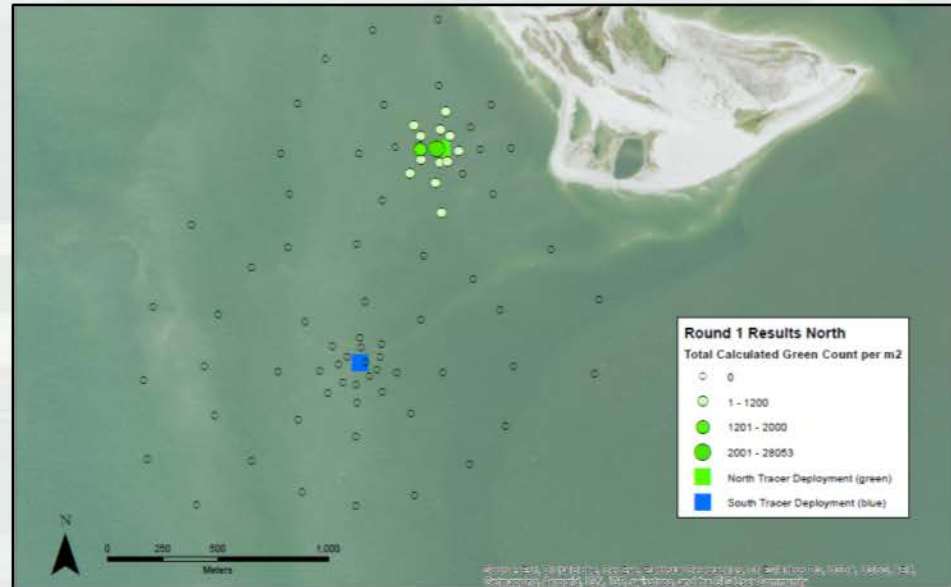
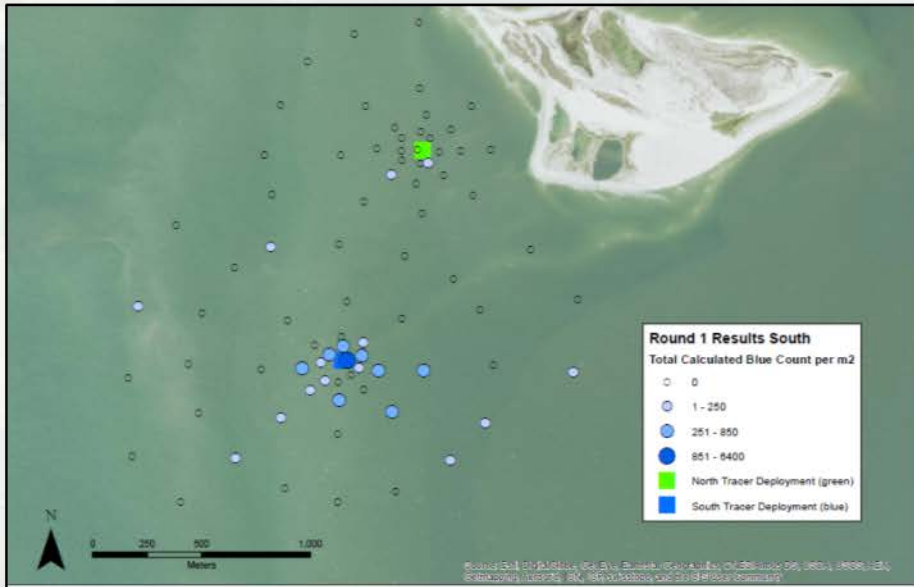
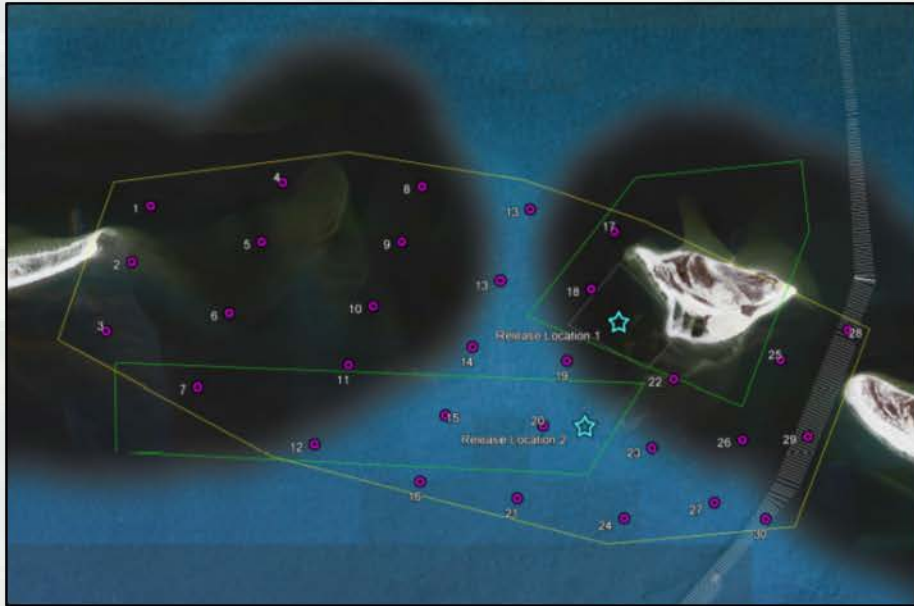
Lessons Learned/Actions-construction

- Before/After Dredge Surveys (12/15 and 4/16)
- Acoustic Doppler Current Profiler (ADCP) Deployment north and south of DA 10 (4/16)
- Background Sampling and Deployment of Sand Tracer (5/16)
- Sampling 60 Days Post Deployment (7/16)
- Bathymetric Surveys (3/17)
- **Modification for Coring during Round 2 Sampling (3/17)**
- Sampling ~12 Months Post Deployment (4/17)
- Identification/Optimization of Dredge Material Placement Sites **(TBD)**
- Dredging Operation **(Summer 2017)**



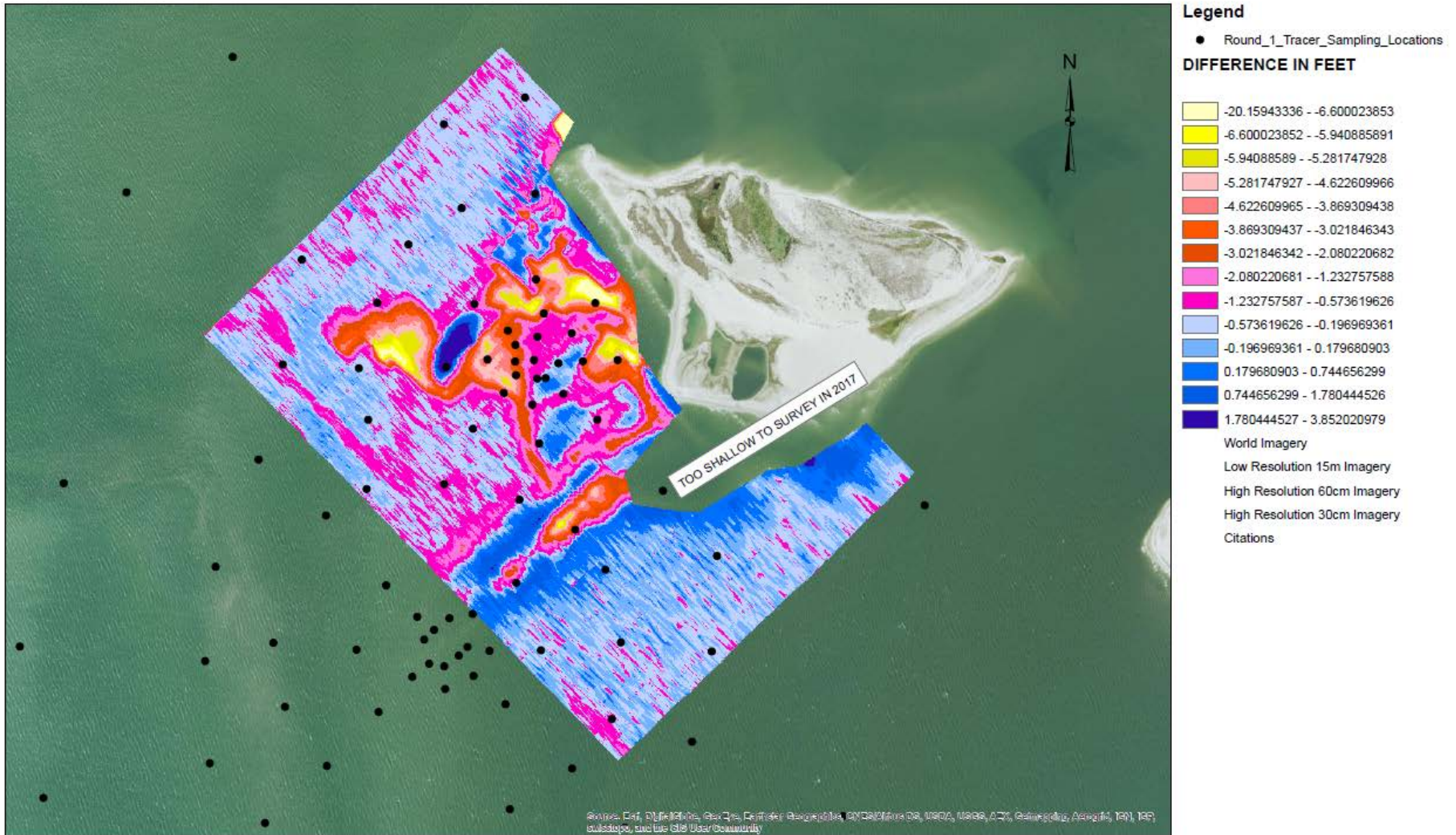
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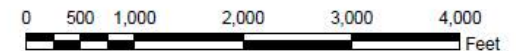
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NOTE: THE COLOR LEGEND DEPICTS THE DIFFERENCE IN FEET BETWEEN THE 2015-2016 COMBINED SURVEY AND THE APRIL 2017 SURVEY. ALL NEGATIVE VALUES DEPICT LOSS OF MATERIAL FROM 2016 AND ALL POSITIVE VALUES DEPICT GAIN OF MATERIAL.

DA 10 SURVEY COMPARISON MAP



How is this project benefiting the USACE and Nation?

- **Maintaining the federal standard for dredge material placement while meeting the expectations and needs of the National Park Service.**
- **Optimizing placement of dredge material to in the littoral zone to maintain and enhance the Mississippi Barrier Island complex.**
- **Increased sediment source will provide long term benefits to the MsCIP Barrier Island Restoration Project.**
- **Data collection will supplement ongoing and future CIRP research focused on the Horn Island Pass.**

