



Habitat restoration and creation

Habitat Team: *Tim Keyes, Alex Wilke, Janell Brush, Sam Collins, Raya Pruner*

NOTES:

1. CONTOURS SHOWN ON THIS SHEET ARE DEPTH BELOW M.S.L., HOWEVER, CONTOURS REPRESENT ELEVATIONS ABOVE (-) OR BELOW (+) M.S.L.
2. CONTRACTOR SHALL PLACE UNCOMPACTED DREDGED MATERIAL TO CREATE NEW ISLAND. CONTRACTOR SHALL PLACE MATERIAL NO HIGHER THAN 13' ABOVE M.S.L.
3. CONTRACTOR SHALL SHAPE NEW ISLAND TO FINAL GRADE AS SHOWN ON THESE PLANS IN ACCORDANCE WITH THE SPECIFICATIONS.
4. IF OPTION IS FULLY AWARDED, CONTRACTOR SHALL UTILIZE NEW ISLAND SITE FOR PARTIAL DISPOSAL OF DREDGED MATERIAL. SINCE NEW ISLAND IS CONSTRUCTED TO CAPACITY, OR AT THE DISCRETION OF THE COR, CONTRACTOR SHALL UTILIZE "TRACT 86A" (SEE SHEET VH102) FOR REMAINDER OF DREDGED MATERIAL. SPECIAL FOR BOTH ALTAMAHA SOUTH AND LITTLE MUDD SHOALS LOCATIONS.

Habitat Management Team

Today's Session:

- Intro to Habitat Team – *Tim Keyes (GA DNR)*
 - Feedback on Habitat Team
- Vegetation Succession, Avian Response and habitat management following beneficial use placement – *Sam Collins (The Wetlands Institute)*
- Engineering Shorebird Habitat – *Brad Winn (Manomet)*
- Shorebird Restoration on Dead Neck Sampson's Island – *Lyra Brennan (Mass Audubon)*
- Microhabitat characteristics associated with American Oystercatcher – *Joanna Grand and Erika Knight (Audubon NC)*

Discussion

- Panel: *Tim Keyes, Sam Collins, Joana Grand, Mike Molnar, Lyra Brennan*
- Facilitator: *Alex Wilke*

Habitat Team Intro:

Growing urgency about habitat deterioration & loss

Acknowledge significant hurdles to manipulating/creating habitat

Some excellent projects have been completed

How can we best help build WG capacity to create/restore habitat?

Step 1: compile experiences of the WG via project summaries

- planning, goals, expenses, permits, partners, monitoring, lessons learned etc..

Step 2: Share summaries online

Habitat Team Goals

- Given the growing challenges of sea level rise and storms degrading and destroying suitable nesting habitat across much of the American Oystercatcher's breeding range, restoring or creating nesting habitat for the species will likely become a more important management tool in the future. This team hopes to facilitate communication among the working group about the growing experience with restoration projects. These can be daunting projects with many partners, varied goals, multiple planning elements, permitting requirements, high costs, and ongoing maintenance and monitoring needs. Early project failures may discourage future attempts. Effectively sharing what members of this group have learned can only improve current and future projects, maximizing their chance of success, and hopefully inspiring new projects as well. This team will initiate a dialogue among working group members to consolidate information about past projects, compile lessons learned and make them available in a format that provides concrete management guidance for those hoping to conduct similar projects in the future.

Project Summary Template

PROJECT INTRO:

Project Title:

Project Location (general):

Project Location detailed (latitude & longitude):

Project duration:

Names of all agencies involved in planning, funding and executing project:

Contact info for key partners if people want more information.

Project Website (if applicable):

PROJECT GOALS:

What were the focal species this project was initially designed to benefit?

What other species are likely to benefit as well?

What was the primary ecological goal of the project: *nesting habitat, foraging, roosting..*

What other goals did the project include? *Coastal resilience, beach renourishment, spoil disposal...*

DESIGN ELEMENTS

Did Project restore degraded habitat or create new habitat?

What type of habitat was restored or created? *Beach, shell rake, spoil island, marsh island*

What type of materials were used? *Sand, shell, rock...*

Was the project considered a Beneficial Use project with dredge material?

Project Size: how much habitat was created or enhanced?

Explain key design elements (elevation, erosion mitigation, hardened structures...)

CONSTRUCTION ELEMENTS

Construction Elements to reach ecological goals

Were containment actions required? If so, what was used (hay bales, berm, coir logs)?

What types of equipment were required?

How far was material transported?

PERMITS REQUIRED

What permits were required? *Federal, state, and local.*

Who was responsible to applying for permits?

CONSTRUCTION COSTS

What was the overall cost of the project?

List project costs by planning, engineering, permitting and execution?

What were the source of funding?

Was the project considered a “low-cost/no-cost alternative” to an ACOE project?

MAINTENANCE AND MONITORING

Does the project require ongoing maintenance?
Additional material, vegetation control, fire ant control, predator management.

Do you have funding for maintenance and monitoring?

Who monitors the project for bird use?

How often is the project monitored?

RESTORATION OUTCOMES & LESSONS LEARNED

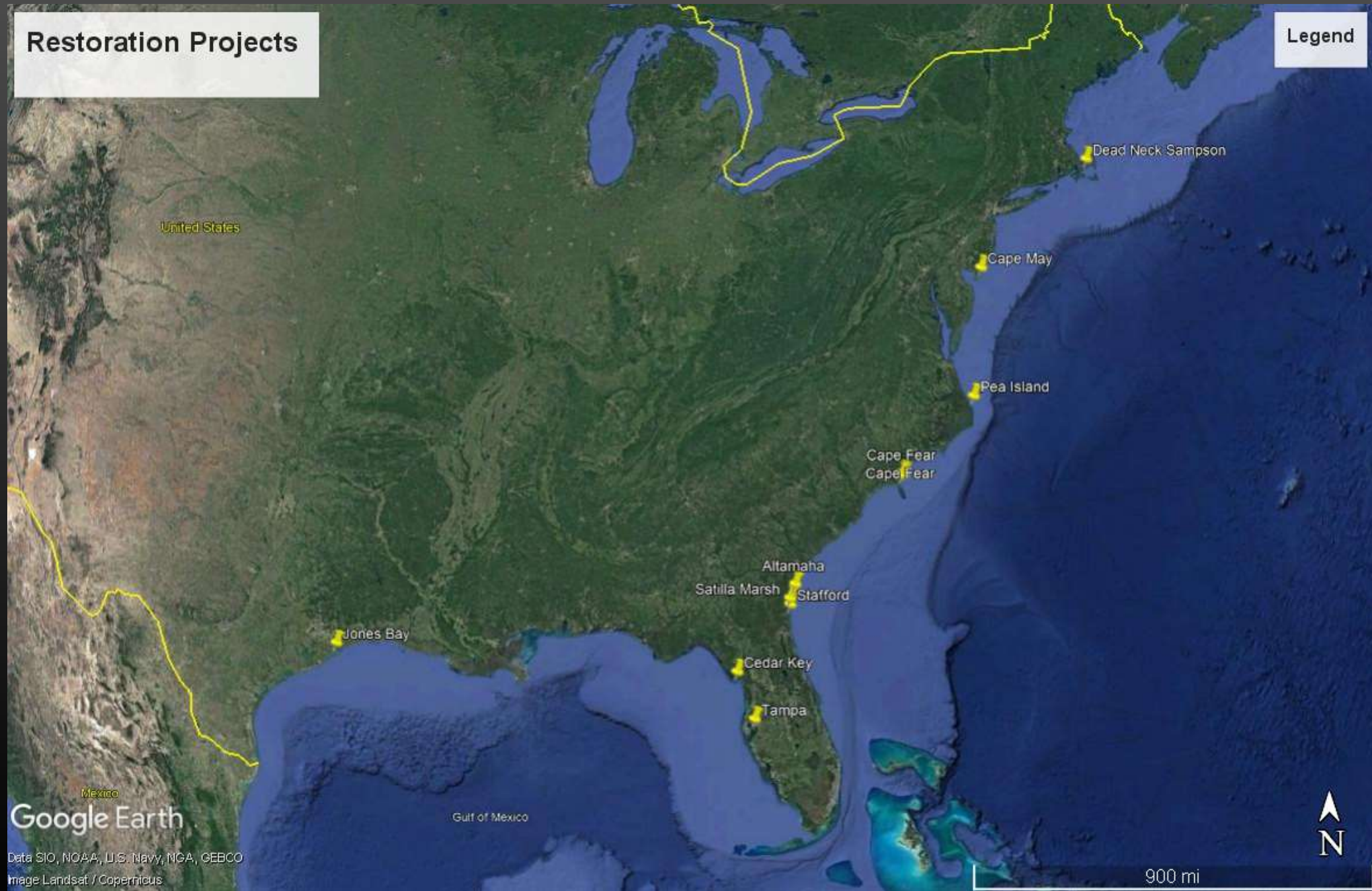
Were restoration outcomes met? *Target elevation, bird species response, plant response*

Whether or not the project was considered a success, what lessons learned would you take into the next project?

What advice would you give others attempting a similar restoration project?

Restoration Projects

Legend

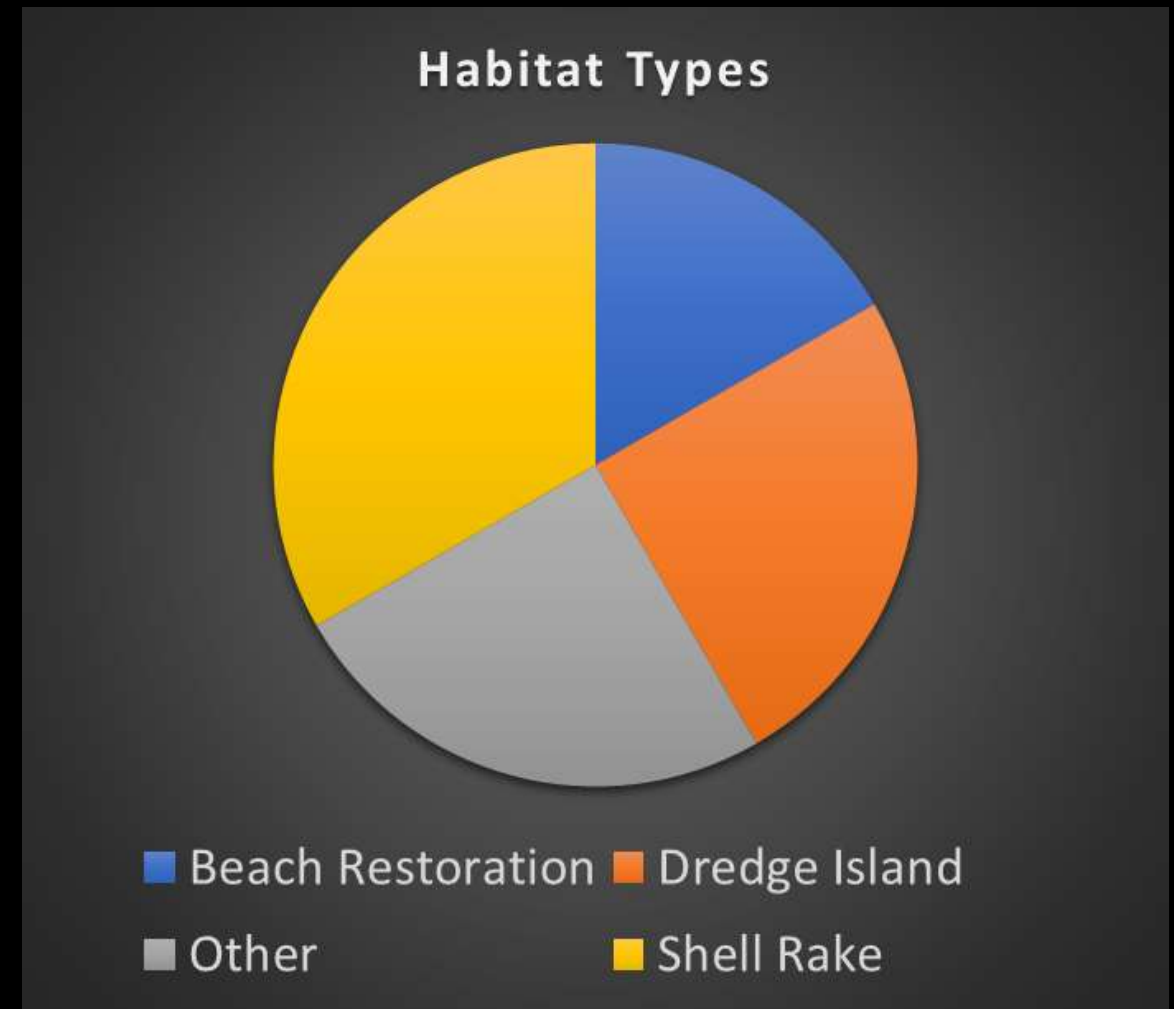


Google Earth

Data SIO, NOAA, U.S. Navy, MGA, GEBCO
Image Landsat / Copernicus

Project Summaries received to date (12)

- From TX to MA
- Habitat Type
 - Shell Rakes
 - Dredge Islands (new and maintenance)
 - Beach front restoration
 - Other goals (erosion control) ended up benefiting
- All created nesting habitat, some also foraging and roosting
- Costs
 - 70,000.00 – 17,000,000.00
- Partnerships – average 4, max 9



Habitat Team Feedback

Will collecting project summaries be useful?

Does the Template capture what you need to know?

How can we best make this available?
Online entry and searchable display?

What else can this team do to help facilitate restoration projects and sharing lessons learned?

Discussion:

Panelists: *Tim Keyes,
Sam Collins, Mike
Molnar, Joanna
Grand, Lyra Brennan*

Facilitator: *Alex Wilke*

Questions for presenters in this session.

Facilitating Partnerships

Design Elements for projects – How can we maximize the chance of success (ecological, longevity & permitting)

Challenges of Maintaining and Monitoring habitat on projects

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