GOMA Federal Working Group Call Notes
7.30.15

Participants:

COE – Elizabeth Godsey and Justin McDonald
EPA – Jerry Boos, Lael Butler
FWS – Linda Walker, Chris Pease, Glenn Constant, Patric Harper, Shannon Holbrook, Jeff Gleason, John Tirpak
USGS – Larry Handley
BOEM – Lora Turner, Mike Miner
NOAA – Julie Bosch, Matt Chasse, Kristen Laursen, Kate Rose, Becky Allee, Heidi Stiller, Kristin Ransom, Amy Clark, Julien L.
Others – Frank Parker (NOAA), Bill Vermillion (FWS), Doug Jacobson (EPA), Debbie D (FWS), Hank Hodde (NOAA)

Agenda Topics:

Alabama Barrier Island Restoration Assessment – Justin McDonald and Elizabeth Godsey (COE, Mobile District)

- Recent effort (just kicking off!) and funded by NFWF. Dauphin Island-centric study
- DI is significant b/c of its valuable beach/dune habitat; serves as a protective feature for MS Sound and AL mainland coast; Audubon recognizes its importance as birding habitat; cultural significance; tourist destination
- Impacted by hurricanes (Katrina, Ivan, Isaac), DWH, development, climate change
- Some things that have been done in the past on the island include rip rap, groins, revetments, emergency berms. There have been studies/plans for restoration, but there's never been a plan that focuses on how to preserve/restore natural resources to make the island resilient. That's the focus of this study (the resilience piece).
- Collaborative effort b/w COE, ERDC, USGS, State of AL, NFWF – investigates viable restoration options and how to make the island more resilient now and for the future.
- Scope is heavy in data collection and modeling. 4.2 million $ study over next 3.75 years. Final report in March 2019.
- Study will answer these questions:
    - Is restoration feasible?
    - Can we support BU of dredge material for restoration?
    - Would natural processes support or degrade island resources over time?
    - Etc…
- Have started on data collection and visualization tasks. USGS and ERDC are helping with bathy and geophys surveys starting in mid-August; tidal current measures will be collected by ERDC; wave measures collected by ERDC, too; sediment characterization by USGS, water quality and database visualization tools by USGS.
- Study Tasks
    - First effort is analysis of gulf facing shoreline. Want to look at long term and short term trends and causes. Also looking at estuarine shorelines to look at trends. Will take core samples to evaluate feasibility of restoration. Habitat mapping will utilize aerial imagery and field data.

    - Updated sediment budget analysis will be part of study tasks. Want to highlight new areas of erosion and deposition. Also doing some hydrodynamic and morphological change models to evaluate island response to restoration options. Will couple with habitat model to see how environments on island are impacted
    - Will assess Katrina Cut structure. What will it look like now and in the future? Also doing WQ modeling to understand quality in MS Sound
    - Habitat modeling will link to morph model to evaluate changes in habitat over time for restoration alternatives.
- Intent of all is to ID alternatives to restoration. These will be created collaboratively by project team. They will identify, test, and evaluate each option so that state can make future decisions
- Reports will not make recommendations but will lay out all possibilities/alternatives and pros and cons with each. (e.g., beneficial use, establish wetlands/seagrass, etc.)
- Will develop a tool to evaluate restoration alternatives against objectives and likelihood of success to help evaluate sustainability of the restoration project with project objectives considered. Utilized in MSCiP Plan, and it was helpful to vet alternatives.
- Will also estimate costs for each alternative
- Will develop feasibility level management plan around the alternatives to develop good representation of ecosystem and ID performance measures, desired outcomes, uncertainties, etc. Hope that plan will be expanded/fine-tuned as project alterantives are implemented
- Feasibility report and interim report will be developed. Intereim will include potential restoration projects. Final repor will wrap up all modeling, assessments, and evaluation due in March 2019.

Questions:

- Have you contacted DI Sea lab? Will you share data with them? A: yes, identified additional WQ sample sites in coordination with the lab. Also coordinating on WQ modeling outputs. Important to us that we don't duplicate data collection efforts.
- Study will be completed? A: March 2019. That study is intended for NFWF to help them make decisions on the island? A: That's the hope. Hope the state uses it too.
- Assessment tool – what is the audience for it? A: D-Ms. Informed by experts and stakeholders. Want D-Ms to use tool. Not just COE. USGS is leading this effort. Will bring in DISL, island stakeholders, etc. It's a much larger group who will provide input.
- Project website? A: working on this now… will share when it's available.

Marine Minerals Geospatial Information – Lora Turner and Mike Miner (BOEM)

- The Marine Minerals Program is responsible for management offshore marine mineral resources (e.g., sand and gravel) for restoration, beach nourishment. Respond to requests for use of sand through leases. Thorough environmental reviews are conducted through NEPA. Work with stakeholder through the process, too.
- The project itself is a geodatabase management project. It supports the following needs:
    - Maintain a marine mineral resource inventory
    - Characterize resources
    - Analyze marine geophysical and geological datasets
    - Incorporate data from leases and BOEM-funded studies
    - Incorporate data from dredge projects
    - Incorporate shoreline and restoration data.

- All of this is important so that the program can manage marine mineral resources in a sustainable way, provide info to support leasing and other decisions, delineate sand resources, and provide information to characterize the environment.
- NOAA interagency agreement is helping to develop use cases to help make this iterative.
- Here are some examples of baseline data layers that go into the database (slide 7):
    - Political boundaries, environmental features (all coming from partners like NOAA, USGS); leasing layer; boxes on right are for analysis (environmental source data, core data, bottom samples, bathymetry,etc.)
- Note sand lease areas on slide 8…Work throughout Atlantic and Gulf. 48 leases over last 20 years.
- The program does a lot of coordination – We work with federal, state, local partners partners to ID gaps and develop plan for collection and/or use of existing data.
- Type of data we like to collect includes seismic, bathymetry, sidescan sonar, vibracores, etc.
- This type of database project can't be done alone. Takes all sorts of partners (state, federal, academia, industry)
    - 1st year was organization
    - 2nd year will be more outreach and feedback
    - Have a sand mgt working group that will demo project – where we are and where we need to go.
- Timeline – Currently in year 1. Have outreach planned out for next fiscal yr. Hope to test system and have functional system by 2017.
- Hope to have public-facing piece. Will push to geoplatform and marine cadaster at a minimum.
- See list of active Gulf projects on slide 14…
- Current cooperative agreement with FL for mapping activities that assess offshore sand resources. Here's a link: Ross.urs-tally.com.
- Project isn't just to ID sand resources for use for upcoming projects but to protect resources from potential use conflicts

Questions

- How can this info feed into data/monitoring PIT with GOMA? A (Julie B.): Appreciate speakers listing the data types for the collection efforts. It's helpful. For GOMA work, especially COE collection efforts, it fits with data/monitoring PIT and would like more details on the data for the BOEM project.
- After lease occurs, does additional data collection happen? A: there are pre and post surveys and env. monitoring pieces for post-lease work
- Noted public in slides. Plan for public, searchable website? A: Right now it's in the plan, but don't have it together yet.
- Mineral resources are important for restoration. Need for compatible sediment is big. Wonder how these data will be used by funding agencies that drive restoration (NFWF, RESTORE, NRDA). Is there awreness among these entities of the data itself and value for project planning? A: A lot of these data exist and were developed by co-ops over last 20 years. A lot of resources have been delineated on a geological scale. They help with long-term planning and remove uncertainty from the process. Esp where nearshore resources are limited … In areas where we've done a lot of work with partners, we can go/match/define a borrow area – not just a sand resource. Other areas lack that certainty, but hope to increase in future so project managers have better understanding of what/where material is and cost of acquiring it. We do reach out to partners and offer info to them as they are designing projects.

- NOAA OCM has a standing geospatial IDIQ contract. Long-standing relationship with BOEM on this. If anyone has a need/project where you have geospatial services needs, we have a vehicle you can use.