Mobile Bay National Estuary Program
Project Implementation Committee Meeting
Tuesday, May 31, 2016
5 Rivers Delta Resource Center Blakeley Classrooms

Minutes

Attendees:

Sherry Allison (Allen Engineering)
Don Blancher (Moffat & Nichols)
Scott Brown (ADEM)
Celena Boykin (Baldwin County)
Wade Burcham (Int. Science & Eng)
Ashley Campbell (City of Daphne)
Ray Clifton (AL Forestry Commission)
Alan Doyle (AL Coastal Foundation)
Paige Felts (Volkert)
Leslie Gahagan (City of Foley)
Judy Haner (The Nature Conservancy)
Bob Harris (Alabama State Port Authority)
Byron Hinchey (AMEC Foster Wheeler)
Matt Hinton (City of Spanish Fort)
Jim Jeter (AL Forestry Commission)
Jason Kudulis (Mobile Baykeeper)
Shannon McGlynn (ADEM)
Coen Perrott (MS DEQ)
Ray Richardson (City of Mobile)
Rosemary Ginn Sawyer (City of Mobile)
Kari Servold (Dewberry)
Randy Shaneyfelt (ADEM)
Mary Beth Sullivan (City of Mobile)
Lee Walters (Goodwyn Mills Cawood)
Mark Berte (AL Coastal Foundation)
Denise Brown (City of Mobile)
Dan Bond (City of Gulf Shores)
Leah Bray (Anchor QEA)
Roger Burke (Tetra Tech)
John Carlton (Thompson Engineering)
Joe Dalrymple (Louis Berger)
Mike Eubanks (Thompson Engineering)
Carl Ferraro (ADCNR-SLD)
Meg Goecker (Moffatt & Nichols)
Patric Harper (US Fish & Wildlife Service)
Doug Heatwole (Ecology & Environment)
Phillip Hinesley (ADCNR-SLD)
Andy James (Volkert)
Dina Knight (Dewberry)
Kara Lankford (Ocean Conservancy)
Steve O'Hearn (Thompson Engineering)
Larry Parson (US Army Corps of Engineers)
Justin Rigdon (ADEM)
Morgan Schneider (AL Coastal Foundation)
Barbara Shaw (MAWSS)
Mike Shelton (WBNERR/ADCNR-SLD
Will Underwood (ADCNR-SLD)

MBNEP Staff: Roberta Swann, Mareike Flatow, Amy Newbold, Christian Miller, Tom Herder

Takeaways

- Watershed management planning continues with Fowl River completed, Bon Secour, Bayou Le Batre, the Weeks Bay complex, and Dog River currently in development and with consideration of NFWF-funded plans yet to be undertaken and 19 additional RESTORE-funded plans, some being incorporated into complexes with NFWF-funded projects.
- The Habitat Restoration Plan and Watershed Comparison Tool are in development by The Nature Conservancy. A survey distributed to all Management Conference participants and made available to the general population through social media has not gotten the attention that was expected, and Ms. Haner gracefully admonished PIC members for broader response. The survey queries respondents over the relative importance of various data sets to drive decisions through the Plan and Tool.
- Dynamic modeling was developed through the six-year, NOAA-funded, collaborative, Ecological Effects of Sea Level Rise in the Northern Gulf of Mexico for our region, tested here, and hopefully will be applied here. It captured many of the complexities of coastal processes and how they interact in the face of SLR. These models have high resolution outputs based on years of interdisciplinary research, and we now have the opportunity to have these data formatted in a way that we can use.

1. Call to Order

After a lunch that was kindly provided for Coastal AL Clean Water Partnership Steering Committee and PIC members by Thompson Engineering, the meeting was called to order at 1:04 pm by Patric Harper.

2. Approval of the Minutes

Mr. Harper asked for any deletions, additions, changes to the minutes from February 18, 2016. Hearing none, he called for a motion to approve the minutes. Randy Shaneyfelt made the motion, which Carl Ferraro seconded. The motion carried unanimously.

3. Old Business

A. Progress Reports/Updates on Watershed Management Planning – Christian Miller, MBNEP/AUMERC/CACWP

Christian Miller began his report with a map showing groupings of 12-digit HUCs into complexes to provide economy of scale and ensure rapid development of watershed management plans (WMPs), including the Dog River Complex (Upper Dog River, Lower Dog River, and Halls Mill Creek with Garrows Bend) (Goodwin Mills Cawood); Bayou Le Batre with West Fowl River and Dauphin Island (Dewberry); the Weeks Bay Complex (Upper, Middle, and Lower Fish River; Perrone Branch, and the Magnolia River) (Thompson Engineering); the Wolf Bay Complex (Graham's Bayou, Mifflin Creek, and Sandy Creek) (Planner TBD); Gulf Frontal Complex (Perdido Pass-Frontal Gulf of Mexico and Little Lagoon) (Planner TBD); and the Tensaw-Apalachee Complex (Tensaw-Apalachee, Grand Bay, and the Basin) (Planner TBD). Realized cost savings have allowed us to do supplemental sediment studies – ASK CHRISTIAN. Each WMP developed comes with storm surge modeling at an average cost of $30-40K. An idea for cost savings will be presented when Renee Collini discusses the NOAA Ecological Effects of Sea Level Rise effort.

With the Fowl River WMP complete, implementation measures are being planned. The priority implementation measure is restoration of four spits in the coastal zone using shoreline stabilization and marsh restoration, while attempting to understand what is going on with marshes there. NFWF is being investigated as a source of funding to undertake marsh and hydrology surveys, followed by shoreline stabilization and marsh restoration to keep the four spits from being degraded into islands.

The scope of the Bayou Lee Batre WMP has been expanded to include West Fowl River and Dauphin Island. MBNEP was approached by the US Army Corp of Engineers to provide outreach and public engagement to supplement their barrier island study. The BLB portion of the project is more or less complete. The major issues identified in the Bayou relate to resilience and access. Initial recommended management measures include safe harbor locations, sanitary sewer overflows and stormwater infrastructure, bacterial and litter mitigation, and recreational trail access.

The scope of the Bon Secour WMP has been expanded to include Skunk Bayou and will be completed by the end of the year. The Bon Secour Complex also includes the Oyster Bay Watershed.

Key issues in the Dog River Complex are associated with urbanization and include stormwater management, water quality/bacteria/litter, and access. Field assessments are ongoing with additional water quality monitoring underway. Steering Committee Working Groups include Water Quality/Fish/Wildlife, Access/Culture/Heritage, and Resiliency/Shorelines. The plan is expected to be completed by the end of 2016.

A WMP for the Weeks Bay Complex has been in development since January. A stakeholder workshop was held, and strengths, weaknesses, threats, and opportunities were assessed. A sediment survey is complete, watershed characterization is ongoing, and Dr. Latif Kalin of Auburn is developing a SWAT (Stormwater Assessment Tool) model to assess different scenarios of future build-out within the watershed and potential water quality impacts associated with each scenario.

4. New Business

A. Habitat Restoration Plan and Watershed Comparison Tool – Judy Haner, The Nature Conservancy

Judy Haner assumed the floor to discuss Habitat Restoration Plan and Watershed Comparison Tool being developed by TNC and the survey created to inform them. On the tail of Mr. Miller's presentation, she had very favorable comments about the momentum and progress being achieved in the WMP development process. She was not positive about preliminary results from the survey, which was distributed via email to all MBNEP Management Conference Committee members. In fact, she reported, that only seven individuals from the PIC had completed the survey. She discussed the various value-based categories – Habitats, Access, Living Resources, Heritage and Culture, Community Health and Resilience, and Water Quality, along with general information layers and demographics under which respondents were directed to review and rank listed data layers in order of importance. They also were offered opportunities to recommend data that was not included in the survey. With the survey not yet closed, Ms. Haner reviewed results from the 32 respondents and strongly admonished participants to "take the five minutes necessary to complete the survey."

B. Ecological Effects of Sea Level Rise in the Northern Gulf of Mexico – Rene Collini, Dauphin Island Sea Lab

Renee Collini provided an overview of potentially useful products from the NOAA-funded, application-focused collaborative effort Ecological Effects of Sea Level Rise in the Northern Gulf of Mexico. Originally funded for five years but with an additional year to get data finalized and integrated, the project was designed to aid management and restoration through field and laboratory experiments to improve circulation and transport models with targets ranging from watersheds to the open ocean. The project had a "wide lens" and investigated many different parameters that impact critical coastal habitats and how salinity, sediment transport, tides, waves, and storm surge might be expected to change with rising sea level. The project team is in the process of developing management tools, including some that may be of value as we work to develop a Habitat Restoration Plan and Watershed Comparison Tool. Slide 5 of her powerpoint presentation (http://www.mobilebaynep.com/assets/landing/NGOM_EESLR_Project.pdf) provides links to key publications deriving from this collaborative effort.

Ms. Collini expressed hopes to address three questions in the presentation: 1) For what management/restoration applications could these data be useful? 2) Which of these

applications/needs are most immediate? and 3) How would you like to access these data? She listed five main areas, all interrelated, resulting from the research conducted in this project:

- Improved sea level rise modeling
- Tidal dynamics and shoreline morphology
- Remote sensing and elevation
- Habitat vulnerability and suitability models for marshes, oysters, and SAV
- Dynamic storm surge modeling.

Improved SLR modeling goes beyond the bath tub effect of rising SL and takes into account changes in erosion, tides, watershed inputs, and land use, as well as employing corrected digital elevation models (DEMs).

A hydrodynamic marsh equilibrium model (hydro-MEM) that couples the previously existing MEM model that incorporates initial biomass density, changes in biomass based on sediment inputs, and biological responses with a hydrodynamic model that is spatially-explicit and incorporates marsh topography and tides. Comparisons of Hydro-MEM to MEM reveal improved spatial predictability of marsh biomass under a variety of SLR scenarios.

An Oyster Habitat Suitability Model was constructed using a hydrodynamic model to analyze how changes in sea level, winds, tides, river flow, and sediments will change salinity and, therefore, oyster production. The Model was developed for/conducted in Apalachicola, and the project team is working to replicated in other areas of the northern Gulf. Similar work was conducted for SAV with a focus on water quality, the primary limiting factor for SAV.

The EESLR team incorporated dynamic storm surge into habitat modeling. This parameter can change not just due to increased SL but also from coastal changed generated by increased SL. Dynamic storm surge modeling takes into account changes in landscape, including changes in habitat already discussed along with changes in shorelines, barrier islands, tides, dune height, population, land use, etc.

Ms. Collini summarized that the dynamic modeling was developed and tested for our region here and hopefully will be applied here. It captured many of the complexities of coastal processes and how they interact in the face of SLR. These models have high-resolution outputs based on years of interdisciplinary research, and we now have the opportunity to have these data formatted in a way that we can use. She posed three questions to be left for the PIC in anticipation of Habitat Restoration Plan and Watershed Comparison Tool development:

1) For what management or restoration application could these data be useful?
2) Which of these applications/needs are most immediate?
3) How would we like to access these data?

4. Reports on Restoration Projects

Carl Ferraro assumed the floor to provide a report on State project implementation. The Marsh Island restoration project, funded from NRDA Early Restoration Phase 1, is currently under construction with the contractor having mobilized two weeks ago. The rock dike has been constructed with the crest just above MHW. Thompson construction engineering and inspection are on site daily.

With regard to NFWF Gulf Environmental Benefit Fund Phase IV projects, Requests for Qualifications for Shell Belt and Coden Belt Roads/Point Aux Pines Living Shoreline project design have been distributed, and responses are being received. Hopefully before August, professional survey contracts will be in place.

A project to install five Osprey platforms funded through NFWF GEBF Phase IV with five years of monitoring is currently under development, and whether it is done by State personnel or contracted is currently being discussed.

The NOAA Swift Tract restoration is preparing to get underway. Dan Van Nostrand reports anticipating a Notice to Proceed for construction within the next month to a month and a half with construction commencing in August or September.

Mr. Ferraro closed by noting that several projects on the Federal Priority List are standing by as the system is established.

Tom Herder reported on NFWF GEBF-funded stream restoration in the D'Olive Watershed. He reported that the Tiawasee Creek restoration has been substantially completed. The five projects remaining in the comprehensive restoration of Joe's Branch will be substantially completed in June. The enormous D4-D6 restoration project between I-10 and US Highway 90 is in full construction with seven excavators on site to relocate the stream channel. Projects DA3, DAF, and DAE are currently in design phases.

5. Adjourn With no other new business, Mr. Harper adjourned the meeting at 2:45 pm.