



## **Mobile Bay National Estuary Program Science Advisory Committee Meeting**

**10 am – 12:00 pm May 25<sup>th</sup>, 2016  
Killian Room, International Trade Center  
250 N. Water Street Mobile, AL 36602**

### **Agenda**

#### **Welcome & Review and approval of minutes from previous meeting**

Fred Leslie, Alabama Department of Environmental Management

#### **Align Around Areas of Concern**

##### **Updates**

Watershed Management Plans – Christian Miller, Mobile Bay National Estuary Program

Habitat Mapping – Tom Strange, Covington Civil and Environmental

Soil Survey – Jerome Langlais, USDA Natural Resources Conservation Service

Ecosystem Services in D'Olive – Renee Collini, Mobile Bay National Estuary Program

TNC Tool Survey – Renee Collini, Mobile Bay National Estuary Program

#### **Storm Surge Modeling in Watershed Management Planning**

Renee Collini, MBNEP

#### **Execute with/through Partners**

##### **State of the Bay: Index Use?**

Renee Collini, Mobile Bay National Estuary Program

#### **Adjourn**



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*The Mobile Bay National Estuary Program Science Advisory Committee was established to bring area experts together to provide advice, guidance, and recommendations to ensure that the MBNEP activities will be conducted in a scientifically relevant and rigorous manner.*

In attendance:

SAC Voting Members Present: Brian Dzwonkowski, Carol Dorsey, Fred Leslie, Kevin Calci, Randy Shaneyfelt, Ruth Carmichael, Stephen Jones, Steve Ashby, Steve Heath, Tim Thibaut, Tom Strange

Phone-in Voting Members: Dennis Devries

Proxy Voting Members: Dottie Byron for Ken Heck

Other Attendees: Scott Phipps, Kari Servold, Rich Fulford, Chris Warn, Mark Ornelas, Evan Reid, Matt Love, Steve Dykstra, Nicole Jeter, Meg Goecker, Patric Harper, Jerome Langlinais, Just Cebrian, LaDon Swann

MBENP Staff: Renee Collini, Ashley Camp, Amy Newbold, Christian Miller

**Takeaways**

- Updates on MBNEP projects: watershed management planning, habitat mapping, soil survey, ecosystem services in D'Olive, results of TNC survey
- The SAC would like to see EESLR-NGOM storm surge model used for watershed management planning. The team also recommended for sea-level rise impacting marshes one continuous model run for consistency
- Reviewed potential methods for synthesizing data in the upcoming State of the Bay – expanded the working group
- Action Items:
  - Need to have an ecosystem services working group meeting to determine next steps
  - Need to have a State of the Bay working group meeting to discuss indices and other additional content

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Mr. Fred Leslie called the meeting to order at 10:07 CST.

Minutes from February 24<sup>th</sup>, 2016 were distributed prior to the meeting. Motion made by Dr. Kevin Calci and seconded by Mr. Stephen Jones to approve the minutes. No objections to the motion.

The first portion of the meeting was focused on updates. Mr. Christian Miller started the group off by reviewing the current status of the watershed management planning ongoing around Mobile Bay. Christian reviewed the current status of each watershed and covered some of the combination of different HUC-12s for efficiency. He also covered specific implementation projects that are under way. See presentation in

Appendix.

Next Tom Strange updated the group on the ongoing habitat mapping. Despite some initial delays with weather and military operations they're well underway at this point. In addition to aerial acquisition, they are doing field validation sampling as well. He covered some of the methods and gave a real-time example of some of the data that have been collected already. There will be 450 sites total and there will also be a change detection analysis from the 2002 habitat mapping. See presentation in Appendix.

Next Mr. Jerome Langlinais updated the group on the soil survey. The survey got started in March, 2016. They used to have large delineations and the update will help capture the actual soil content. Doing all of Mobile County, but starting out on the coast to inform the watershed management planning. Have over 700 historical descriptions, but unfortunately many of them don't have lat longs associated with them – trying to get as many incorporated into the study as possible. See presentation in Appendix.

Next Ms. Renee Collini updated the group on the current status of incorporating ecosystem services into D'Olive watershed. Renee has spoken with Dr. David Yozkowitz and Dr. Richard Fulford about where to move going forward to leverage ongoing efforts. Currently we're working on utilizing lists already generated for the CCMP as a starting point. There was some discussion about what exactly we want to measure and why and to not reinvent the wheel. Richard Fulford talked a little bit about his methods that the team is looking at leveraging. Drs. LaDon Swann and Steve Ashby volunteered to also serve on the Ecosystem Services working group moving forward.

Next Renee updated on the preliminary survey results for the TNC Tool, there weren't many responses and Renee requested that everyone fill it out.

Time was then devoted to reviewing available storm surge models. Renee presented on the two primary options available to the NEP – SLOSH and a newly completed storm surge coupled with sea-level rise model (*NGOM3*) from the Ecological Effects of Sea-Level Rise of Northern Gulf of Mexico (EESLR-NGOM) project. *NGOM3* is an enhanced ADCIRC model that is the result of 6 years of research into northern Gulf of Mexico coastal processes including: tides, waves, wind, erosion, salinity and sediment transport, and critical habitat response. See the presentation in the Appendix for details. The general consensus was that the EESLR grant would be preferable because it is more accurate. Additionally, there was discussion about the type of modeling used for assessing impacts of sea-level rise on critical coastal habitats separate from looking at storm surge. The group agreed that whatever is run should be done once in a large, consistent basis across both counties so that everything will be comparable and scalable.

The rest of the meeting was devoted to talking about the potential use of an index in the upcoming State of the Bay. Renee presented on two examples of synthesizing data from Chesapeake Bay and Tampa Bay. Each took different approaches to their indices or "report cards." Their indices combined data in different ways, but the commonalities hinged on: thresholds or acceptable limits for each parameter that went into the index, parameters directly linked to ecological health, division of the bays into smaller sections, and large, robust datasets. See Appendix for complete presentation.

This was presented as an option for the group to consider to enhance the State of the Bay. The main questions were: is this something that the SAC *wants* to do and are the data available so that the SAC *could* do it? The big concern that many saw was the need for setting thresholds for each parameter. This brought up concerns regarding regulation and negatively impacting relationships between MBNEP and both business and regulatory agencies.

There was acknowledgement of the benefits of some kind of broader synthesis beyond looking at each indicator disparately. Recommendations included having the State of the Bay team look into alternatives to

a pass/fail style index as well as perhaps taking one indicator that has sufficient data affiliated with it and analyze the causal effects for the trends and make recommendations on how this could be addressed. LaDon also recommended developing long-term trends and relating the current status to above or below average with context into what that means.

Throughout the discussion additional volunteers for the State of the Bay working group included: Patrick Harper, Marlon Cook, Fred Leslie, Randy Shanyfelt, Tim Thibaut, Dennis Devries, Steve Jones, and Nicole Jeter.

Tim Thibaut gave a quick update on the status of the SAV mapping. It's looking like a good year and they're hoping to be done by the end of the summer.

At 11:46 Fred asked for a motion to adjourn the meeting which was made by Randy and seconded by Tim.