

Mobile Bay National Estuary Program Science Advisory Committee Meeting



October 8, 2021, 10:00 am - 12:00pm Zoom Virtual Meeting

Agenda

Meeting Objectives:

- a) Update on D'Olive watershed restoration monitoring report
- b) Discuss reconciling WMPs with indicators for SotB
- c) Discuss the completion of the full Stressor Matrix

1. Welcome

SAC Co-Chairs:

Dr. John Lehrter, Dauphin Island Sea Lab Dr. Amy Hunter, ADCNR-DWH Restoration

2. Review and Approval of Minutes

3. Updates and Presentations

- a) Updates on the effort to analyze and assess the effectiveness of the D'Olive Watershed Restoration Monitoring Program. Dr. Missy Partyka, MBNEP
- b) State of the Bay: Reconciling the goals and objectives of the WMPs—Christian, MBNEP
- c) Stressor Matrix evaluation: 2021
 - Overview of this effort—Dr. Partyka, MBNEP
 - Discussion and questions—SAC membership
- d) Overview of the DISL Data Quality Management Plan—Dr. Partyka, MBNEP

4. Announcements

5. Adjourn

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 MBNEP activities will be conducted in a scientifically relevant and rigorous manner.

In attendance:

Alex Bebee, Amy Hunter, Autumn Nitz, Behzad Mortazavi, Bethany Kraft, Brian Dzwonkowski, Bridget Cotti-Rausch, Chris Anderson, Don Blancher, Dottie Byron, Evan Reid, Fred Leslie, Greg Pierce, Jay Estes, John Lehrter, John Mareska, Joie Horn, Kara Fox, Kathryn Keating, Katie Baltzer, Kevin Calci, Latif Kalin, Mary Kate Brown, Matthew Love, Meredith LaDart, Newton Cromer, Patric Harper, Paul Mickle, Rich Fulford, Scott Phipps, Stephen Jones, Steve Heath, Steven O'Hearn, Tim Thibaut

MBENP Staff: Jason Kudulis, Roberta Swann, Missy Partyka, Tom Herder, Christian Miller

This meeting continues to be held remotely due to the COVID-19 pandemic.

Dr. Amy Hunter called the meeting to order at 10:03 CST. Minutes from the May 21st meeting were shared via email along with the agenda. John Lehrter made a motion to accept the minutes. Fred Leslie seconded.

Dr. Missy Partyka gave a presentation on her recent efforts to analyze and assess the effectiveness of the D'Olive Watershed Restoration Monitoring Program that will eventually lead to a report that will be circulated with the SAC.

Key take-aways include:

- Monitoring efforts for the D'Olive Watershed restoration programs were extensive, varied, and intensive. The wide array of monitoring parameters has made an overall assessment of monitoring success difficult.
- The purpose of this report is to distill the results of the various monitoring programs to determine 1) which were most successful, 2) which were most efficient, and 3) which should be considered for future projects/watershed monitoring plans.
- The report will be circulated with the SAC who will be given the option to provide comment prior to submission to MBNEP leadership.

Christian Miller of the MBNEP gave a presentation on the need for **focused monitoring efforts across coastal watersheds** with specific emphasis on the relationship between monitoring requirements outlined in the Watershed Plans and data needed to generate a State of the Bay report.

Key take-aways include:

- All watershed plans require comprehensive monitoring and evaluation programs. While some Watershed Plans are new or still being created, some of the other ones likely need review.
- Monitoring needs are largely driven by identified impairments within the streams/rivers

- covered by each WP. They are broken into several types: pathogens, nutrients, sediment, invasives, habitat loss, climate change, and litter.
- Discussion centered around the need for additional parameters that have impacts on the
 receiving waters including some physical and chemical indicators. Particularly those that
 may be more cost-effective and labor-efficient for answering key questions about the state
 of the bay(s).
- ADEM's Mobile Bay Sub-Estuary Monitoring Report (2017) is <u>available online</u> and may be helpful with these discussions going forward.
- Questions were asked about the ARCOS system, current bay-wide monitoring programs, and how these programs can be supported/funded moving into the future. There is a need to coordinate with ADEM moving forward to avoid duplication of effort.

Dr. Partyka led a discussion on the ongoing Stressor Matrix efforts including a **review of the 2012 Matrix results** and an introduction to **the purpose**, **goals**, **and objectives of the 2021 effort**.

Key take-aways include:

- The 2012 matrix was intended to give the MBNEP a synthesized view of the SAC's opinions on the various ecosystem services, habitat, and stressor combinations that might warrant attention/focus from the MBNEP moving forward.
- The 2021 matrix is focused on revisiting many of those same combinations, but with inclusion of additional ES and habitat combinations.
- Discussion arose around the specific stressors included in the 2021 matrix and whether
 additional clarification/definition may be necessary. For example, nutrients as a stressor
 does not capture the fact that additional nutrients can cause a cascade of impacts that
 differentially stress organisms/habitats (e.g., oysters).
- Questions were raised about balancing the pros/cons of a particular stressor and how best
 to rectify potential conflicts. For example, sedimentation can be beneficial in sediment
 starved systems but devastating for some benthic habitats/organisms. It was noted that the
 listed stressors are meant to be negative, as is implied by the word stressor, and might not
 warrant a positive score.
- Discussion was had on the appropriate way to organize/analyze the data such that the
 impacts of individual stressors are captured across habitats and ES, as well as average
 stressors scores across habitats and ES. Specifically, it might be important to acknowledge
 not just combinations with high scores but combinations that are likely to undergo rapid
 change in the coming years.
- May need to have sub-sheets that allow for the SAC to delve more deeply into specific combinations of ES, habitat, and stressors if there are places that require more discussion.
- The 2012 effort required several meetings to flesh out directions. This 2021 iteration is likely
 to need additional discussion to ensure that all criteria are clearly defined, that guidance for
 scoring is explicit, and that the purpose, goals, and objectives of the effort is unambiguous.

Dr. Partyka gave a brief overview of the **DISL Data Quality Management Plan** and how those efforts fit into EST-1: Increase availability and use of data related to coastal ecosystems and their services' response to manmade stresses.

Key take-aways include:

- The development of a Quality Management Plan is required by programs/projects funded under the EPA. A master plan is required for all lead organizations.
- Completion of the QMP is necessary for continued funding of programs/projects under the Gulf of Mexico Program as well as the EPA. Its completion will also signify the successful accomplishment of EST 1.1 (Establish a data management and usage strategy) under the current CCMP.
- The DISL is a data CoE and so has been drafting a QMP. This draft will be made available to
 the SAC for comment in the coming weeks. This will likely be an iterative effort with multiple
 improvements over time.

At 11:46 am, Dottie Byron made a motion to adjourn. Tim Thibaut seconded. Meeting Adjourned.