Mobile Bay National Estuary Program
Project Implementation Committee Meeting
Thursday, August 2, 2012
Tricentennial Room, Mobile Area Chamber of Commerce

Minutes

Attendees:
L. G. Adams (ADCNR/Weeks Bay NERR) Kit Alexander (City of Orange Beach)
Nick Amberger (City of Mobile) Dave Armstrong (ADCNR-Wldlfe&FrshwtrFshries)
Emery Baya (Thompson Engineering) Mark Berte (ACF)
Celena Boykin (Baldwin County) Casi Callaway (Mobile Baykeeper)
Ashley Campbell (City of Daphne) Dr. Jim Connors (Univ.of South Alabama)
Evan Cornielle (AL Coastal Foundation) Mike Dardeau (Dauphin Island Sea Lab)
Jeff DeQuattro (TNC) Dan Everson (U. S. Fish & Wildlife Service)
Carl Ferraro (ADCNR-State Lands) Jennifer Fidler (City of Fairhope)
Meg Goecker (NOAA) Bob Harris (AL State Port Authority)
Tammy Herrington (Mobile Baykeeper) Jeff Jordan (ADCNR-SLD)
Teddy King (ADPH) Kara Lankford (Ocean Conservancy)
John Mareska (AMRD) Larry Parson (USACOE)
Lee Reach (ALDOT) Tina Sanchez (Mobile County)
Katie Sourbeer Dr. LaDon Swann (MASGC)
John Valentine (Dauphin Island Sea Lab) Lee Walters (Goodwin Mills & Cawood)
Bob Howard (EPA Region IV) – remotely via Webex and conference call
MBNEP Staff: Kelley Barfoot, Kathy Eddy, Christian Miller, Roberta Swann, Tom Herder

1. Call to Order
PIC Chairman Jeff DeQuattro called the meeting to order at 1:36 p.m.

2. Approval of Minutes
Mr. DeQuattro asked for any corrections or a motion to approve the minutes from the April 5, 2012 meeting. Mark Berte made the motion which was seconded by Larry Parson and carried unanimously.

3. Roberta Swann – Getting to a New Comprehensive Conservation Management Plan (CCMP)
Ms. Swann began her presentation with a slide showing "ingredients to the new CCMP pie," three of which have been initiated with a fourth – "developing criteria for prioritizing restoration activities" – being the business at hand. The first "ingredient" involved a recently-completed evaluation of the current CCMP that is currently in press. It was completed by a team of Volkert engineers (Brett Garr, Paul Looney, Henry Malec, and Skeeter McClure), guest commentators with expertise on the five priority issues of the CCMP (Cherie Arceneaux, John Carlton, Dr. George Crozer, Stevens Heath, Randy Roach, and Dr. Rick Wallace), Ms. Swann, and MBNEP staff. This document makes 102 specific recommendations that involve expanded research and monitoring; identification, restoration and protection of areas throughout the estuary, improved

state and local governance, continued citizen participation, and expanded and coordinated education and outreach. It will soon be available on the MBNEP web site.

Another "ingredient" was citizen input derived from a Community Attitudes Assessment conducted in summer 2011, targeted audience presentations and input sessions, and scheduled public meetings. She noted that primary public concerns were trash and stormwater, while citizen values centered on fisheries and water quality. The primary area of concern was "Environmental Health," for which she provided a definition that broadly included MBNEP roles in ecosystem-based management that include assessment (Science Advisory Committee), correction (Project Implementation Committee), control (Government Networks Committee) and prevention (Management Project).

A third "ingredient" involved work by the Science Advisory Committee (SAC) to determine which ecosystem services provided by ten coastal habitats was most stressed by a suite of stressors. This work, which she said would be further described by Mike Dardeau in the next presentation, would be useful in developing criteria for determining ecosystem restoration priorities. She provided Three Mile Creek watershed as one opportunity for collaborative ecosystem-based management and introduced Mike Dardeau to explain the SAC effort.

4. **Mike Dardeau - Summary of MBNEP Science Advisory Committee (SAC) Efforts to Identify Stresses in the Estuarine System**. Mr. Dardeau, who chairs the SAC, first explained the Biological Condition Gradient (BCG) framework with a graph and a descending line plot. He explained that the Y axis represents some biological condition, broken down into six steps with the highest representing "natural structural, functional, and taxonomic integrity preserved." As one moves down this scale, the sixth and lowest level represented a degraded condition lacking in structural, functional, and taxonomic integrity. The X axis represented levels of stress, with the origin representing no stress, increasing to some maximum level that corresponds to the degraded biological condition. The graph he projected displayed a linear response to increasing stress, but he explained that reality was potentially much more complex, with possible "tipping points" or thresholds that could not be demonstrated linearly. He also noted that the SAC was not necessarily comfortable representing condition with as many (or as few) as six describable levels of condition. Mr. Dardeau said that such a framework was necessarily based in science, and that it had great value in tracking improvements or further degradation as we move forward in time. The SAC will assess and quantify the critical ecosystem services provided by coastal habitats, consider the major anthropogenic stresses degrading the estuary condition, and ascertain which of the habitats providing the services are most (or least) at risk.

To do this, he explained that the SAC recruited researchers from the area or experts on the ten selected habitats to assess a suite of 13 stressors impacting critical ecosystem services that are provided by those habitats. Respondents were asked to rate, for each of the ten habitat types, the relative impact of each of the stressors on each of a suite of 14 potential ecosystem services provided by that habitat type. A scale of one to three was used with one being no impact and three representing the most severe impacts. For cases where the respondent did not feel qualified to rate the stress, he/she provided a zero response. If five ratings were not secured, the SAC solicited ratings from an additional expert, until the minimum of five was obtained. Potentially, each respondent was asked to grade 13 stressors to 14 ecosystem services over a range of 10

habitats, so 1,820 individual responses were possible. Responses were averaged, standard deviations were applied, and the three habitat types ascertained to be at the greatest risk were freshwater wetlands, intertidal marshes and flats, and streams and rivers (riparian buffers). Mr. Dardeau showed a slide with these three habitats, the ecosystem services that each provided that was most in threat, and the stressors most impacting them.

Dr. LaDon Swann asked whether weather and climate were also included on the list. Mr. Dardeau explained that they were, but that those stressors "didn't make the cut." There was some discussion over what level of stress "the cut" required, and Ms. Swann responded that 2.4 was the threshold. Meg Goeker questioned how we would scale an attribute such as water clarity, and Mr. Dardeau conjectured that satellite imagery would be necessary. Mark Berte asked whether the BCG considered or included historical data, and Mr. Dardeau said that ideally it would, and provided sedimentation as an example of a stress that preceded human impact.

Mr. Dardeau explained that the next steps towards developing a BCG framework for tracking Mobile Bay estuarine health or condition is to identify indicators sensitive to or representative of the ecosystem services provided by the threatened habitat. Then those indicators would be combined into indices that would be used to represent condition on the BCG's Y axis. He provided some example parameters, like acres of habitat gained, lost, or put under protection; primary production; water clarity; days/years of hypoxia; oyster size; or any number of others. Similarly, indicators of stress would also be required and combined into indices, and he provided examples like ratio of armored/unarmored shoreline, amount of sediment removed from the Bay, area of impervious surface, and freshwater discharge.

He reported that SAC efforts will be supplemented by two sources of help. A Sea Lab graduate student, Ashley McDonald, will search literature and examine relationships between stressors and ecosystem function, both locally and in other systems. She will then do field work locally to quantify gains in ecosystem services with restoration of coastal fringing habitats. An EPA program, the Healthy Watersheds Initiative, will provide additional information that will be useful in the SAC's efforts. This systems-based integrative approach analyzes existing data sets to grade status of 12-digit Hydologic Unit Codes (HUCs) throughout the State of Alabama and within the Mobile Bay Watershed in Georgia and Mississippi to rate the relative health of watersheds. The indicators that they are using might be adaptable to our efforts.

He concluded that the BCG is just a tool to indicate progress, due to implementation and restoration of habitat function, and to view "progress up the curve." He asked for questions.

Dr. Swann commented on the jump from ecosystem-based management to ecosystem services and

Casi Callaway asked how public perception would be integrated into the process, and Ms. Swann responded that will be a Community Action Committee, and not a PIC's, charge. Ms. Callaway recommended that there be overlap in committee membership to ensure good communication and understanding. Ms. Swann yielded the floor to Jeff DeQuattro.

5. Jeff DeQuattro - Developing project selection criteria for the CCMP – determining what we will restore and why. Mr. DeQuattro's presentation began with an overview of the CCMP followed by a slide which expressed what he hoped to accomplish at today's PIC Meeting: "Begin to think about how to score, select, prioritize, and or choose the restoration and protection activities that:

    a. are focused within Mobile and Baldwin Counties, within Mobile Bay/Portersville Bay/Mississippi Sound, and up to 3 miles into the Gulf
    b. are 'shovel-in-the-ground' projects
    c. directly impact Water Quality, Living Resources and Habitat Management.

It also expressed what was NOT on today's agenda: We are not:

    a. prioritizing any projects
    b. developing criteria
    c. subtracting any projects from "the list"
    d. focusing on policy/outreach/education/access
    e. focusing on the Deepwater Horizon Oil Spill

He displayed a spreadsheet showing a compilation of recommended projects and asked Tom Herder to elaborate on "the list." Mr. Herder explained that it represented an attempt to compile projects meeting the criteria above from the number of lists largely prepared in response to the Oil Spill, the Natural Resource Damage Assessment (NRDA) process, and the Restore Act. The lists from which this compilation was derived includes the lists developed by the Coastal Recovery Commission, Mobile Baykeeper, the MBNEP (requested by EPA Region IV), ARBOR (Alabama Coastal Recovery and Beneficial Use Operation and Response Plan by the U. S. Army Corps of Engineers), the NOAA compiled list of NRDA projects, and other suggested projects. Many of the recommended projects were included on more than one of the source lists. He explained that the list was prepared to represent the breadth of projects to be considered and that project costs were not included. The list will be made available on the MBNEP web page, and Mr. DeQuattro directed members to send Mr. Herder (therder@mobilebaynep.com) the details of any project that might have been omitted. Some discussion about the need for lists ensued.

Mr. DeQuattro continued the discussion by explaining why project prioritization was important and presenting possible means of prioritizing projects. Among the methods used to prioritize projects, he listed:

    a. build upon work done by the SAC to identify stressors to ecosystem services provided by critical coastal habitats
    b. base prioritization upon a matrix developed by the Coastal Recovery Commission
    c. employ NRDA criteria, as they relate to all defined stressors
    d. guidance from ARBOR, including "multiple lines of defense"
    e. use methods similar to Charlotte Harbor's oyster project prioritization model
    f. build off the Habitats Tool created by TNC, NOAA's Coastal Services Center and the MBNEP
    g. National Fish and Wildlife Foundation and Bureau of Land Management protocols

He asked members to submit other ideas for prioritization to Mr. Herder.

Mr. DeQuattro briefly addressed each of the listed prioritization methods, and during this discussion, Ms. Swann said that some assumptions should be made in developing the criteria.

She felt that we should go forward not assuming that any additional money was available (from Restore Act), that there was never an oil spill, and that what was selected would be based upon protecting our water. Dr. Swann opined that using the Community-based Partnership Grant experience might be a good starting point. He said, "Give me a title and 15 pages and see how THAT weeds out some projects," turning the list into a portfolio. Mr. DeQuattro felt that might be burdensome, but Dr. Swann felt that is would be and expression of the level of commitment. Meg Goeker asked what our goals were. She felt that if a matrix or database is set up, it could be queried to filter specific goals. Mr. DeQuattro recommended that the PIC develop a working group to evaluate options then make recommendations. He also recommended basing criteria around SAC findings about habitats that are the most stressed and not just the easiest or best to restore. He said that the SAC would be tracking condition and improvements over time and that the PIC would be charged with making those improvements after developing comprehensive prioritization criteria for restoration and other conservation activities. Ms. Callaway asked how we get to goals.

Ms. Swann responded that the CCMP is a five-year document, that the first CCMP was "kitchen sink," and that we can't do "it all" in five years. She suggested that for this one plan, we select the three habitats (freshwater wetlands, intertidal marshes and flats, and rivers and streams), and from them we could develop a CCMP.

Mr. DeQuattro asked Dan Everson about the Fish and Wildlife Service's experience with prioritization. He responded that over the years, it's been problematic. The new buzz word, he said, was "surrogate species" (indicators). He said that he had some very specific ideas and that he would be enthusiastic to participate on a group to do this.

Mark Berte agreed that a subcommittee was the appropriate approach. Ms. Goeker warned about the scope of work we are proposing for ourselves. Ms. Callaway made comments about human perspectives, including employment and local training in a restoration economy as possible prioritization criteria. Ms. Swann said that things like that could be used as conditions. Mr. DeQuattro's solicitation of volunteers to serve on this subcommittee resulted in Dan Everson, Dr. Jim Connors, Jeff DeQuattro, Mike Dardeau, Lee Walters, Mark Berte, and Casi Callaway.

Mr. Everson said that the first job is to develop objectives. Ms. Swann wondered if we should ask the PIC to authorize having our efforts be guided by SAC efforts and results. Mr. DeQuattro asked for a motion that new CCMP be guided for the next five years towards conservation activities improving condition at the three identified habitats facing the greatest stress. Ms. Callaway made the motion, which was seconded by Tina Sanchez. John Mareska warned that for a five-year period, this is an ambitious amount of work, but Ms. Swann responded that it would provide guidance toward what activities are selected. The motion carried.

Mr. DeQuattro moved to adjourn the meeting, and Carl Ferraro seconded the motion which carried. The meeting was adjourned at 3:20 p.m.