

# **ALBEMARLE-PAMLICO NATIONAL ESTUARY PROGRAM**

Science & Technical Advisory Committee

Quarterly Meeting Summary

Autumn Meeting – November 10, 2004

Ironwood Country Club, Greenville, NC

## **STAC Co-Chair, Secretary Elections**

STAC Executive Board member Michael Rickard was elected as STAC Co-Chair to fill the seat vacated by Mike Wicker and Martin Lebo of Weyerhaeuser Corporation was elected to fill the seat vacated by Patti Bernard. The minutes from the Summer (July 27) 2004 meeting were approved.

Dean Carpenter, APNEP Science Coordinator, asked for one or more STAC members to serve as Secretary. In the discussion that followed, some STAC members requested that APNEP provide a staff person to take meeting notes, while others agreed that the Secretary should come from the STAC membership. The issue will be discussed further at the next STAC Executive Board meeting.

## **APNEP Update**

Dr. Carpenter informed the STAC about significant APNEP activities that have occurred since the summer STAC meeting:

- On August 13 APNEP held a strategic planning meeting where the North Carolina State University's Cooperative Extension staff recommendations to APNEP management were discussed with APNEP Coordinating Council and Regional Council members.
- On September 20, the STAC Executive Board held their inaugural meeting in Greenville. Their next meeting will be held December 17 by conference call.
- APNEP is facilitating the development of a Memorandum of Understanding among state agencies and universities support the mapping and monitoring of submerged aquatic vegetation (SAV) coast-wide. The Principal Investigator for the mapping activity is Liz Noble at ECSU. A coverage mapping of the Phase I study area should be available by the end of December.

He also reminded members that next week (November 17) APNEP's Power of Partnerships symposium will be held in New Bern. All those attending were requested to register beforehand.

## **NC Coastal Habitat Protection Plan and NC-DMF Overview**

Mike Street of the North Carolina Division of Marine Fisheries (DMF) provided an overview of the Coastal Habitat Protection Plans (CHPP) and DMF overview. Mr. Street's Powerpoint presentation will be posted on the APNEP web site. His presentation covered the following topics:

- Fisheries Reform Act (FRA) of 1997- This is the primary basis for action by the North Carolina Marine Fisheries Commission (MFC) and DMF. It addresses fishing licenses (commercial and recreational).
- MFC Membership and standing committees are extensive and very active.
- CHPP(s): The CHPP was presented to the tri-commission on September 9. This is a North Carolina Department of Environment & Natural Resources (DENR) effort carried out mostly by the DMF CHPP staff. The CHPP is to be adopted by the MFC, Environmental Management Commission (EMC), and Coastal Resources Commission (CRC) by December 31. It is a 600-page scientific document, but an introductory document is also available that provides a good summary.
- Enforcement of fisheries regulations.
- DMF research and monitoring efforts and data collection and management are geared toward making and evaluating decisions.

#### Questions/Discussion:

Nancy White asked if there is coordination with North Carolina Department of Transportation (NCDOT). She was concerned with the lack of coordination, especially with regards to stormwater management. Mr. Street replied that there is some coordination: currently DMF works with NCDOT on causeway removal projects for mitigation credit. Doug Rader mentioned that with regards to mitigation efforts he is concerned about the transition period (now) before the Ecosystem Enhancement Program (EEP) actually assumes responsibility for NCDOT mitigation.

Hans Paerl asked whether the CHPP address turbidity with regards to its effects on fish habitat. Mr. Street replied that DENR did release a list of proposed actions which includes the development of coherent indicators for use in fish habitat assessment.

Dr. Paerl indicated that data from DMF and Division of Water Quality (DWQ) are not integrated, and there is a need to establish consistent indicators among the agencies collecting data. Mr. Street agreed that data collection and management both need to be consistent and coordinated among agencies. DENR is moving toward integrating all of its data collection and management. Currently DWQ monitoring doesn't continue into saltwater systems. Mr. Street would push for coast-wide automated sampling to be uploaded to the web automatically.

Jeff Johnson stated that status and trends for social data are not being collected except for what limited amount that DMF does on fishing data. He participated on the APES committee that recommended this kind of data collection. Dr. Rader noted that the Atlantic Coast Cooperative Statistics Program (ACCEP) has social and biological data and may be a resource.

Dr. Paerl asked what percentage of commercial and recreational fisheries spend a portion of their lifecycle in the Pamlico Estuary. Mr. Street indicated that two-thirds of recreational fisheries are estuary dependent and 90% of commercial fisheries are estuary dependent.

Mike Mallin inquired as to why bay scallops have not recovered from red tides. Mr. Street was not sure, although many live in high quality waters that have not been degraded. He was not sure of their population sizes however.

Mr. Street indicated that DMF is state funded and wants to collaborate on projects and research.

Dr. Rader inquired about the status of forage species. Mr. Street indicated that their status was unknown, although some data may be available to analyze.

#### **APNEP Comprehensive Conservation and Management Plan Review**

Because of the extended discussion on DMF activities, the CCMP discussion was postponed to the winter STAC meeting. Dr. Carpenter, who with APNEP Director Bill Crowell was to lead the CCMP discussion, requested that STAC members be prepared to comment on management actions and critical steps for each CCMP objective. The structure of CCMP has four action plans: Water Quality, Habitats, Fisheries and Stewardship. Each action plan has multiple objectives, each objective has multiple management actions, and each management action has critical steps.

STAC members asked how ratings were derived for each management action on the 2001 APNEP report card to EPA (provided to STAC members prior to the meeting). Guy Stefanski of the North Carolina Division of Coastal Management (also former APNEP Director) informed members that there is a report where staff analyzed the critical steps in terms of implementation level (e.g. adequate, moderate). Each

critical step was given a rating of 1-5 then averaged to get a number rating for each management action. Dr. Carpenter will try to locate the report so the STAC can review it ASAP for the winter meeting.

### **STAC Indicator Development Subcommittee Report**

Dr. Rader, Subcommittee Chair, explained that the Subcommittee is trying to collect information on indicator work that's already been done by other programs. He distributed a first draft of potential indicators under consideration. He requested that STAC members review their area of expertise and provide feedback. The goal is to develop a suite of necessary indicators to track the health of the estuary in terms of the CCMP components. The draft list will be as inclusive as possible, then evaluated and distilled to those that are indicators that truly will indicate the health of the Albemarle-Pamlico estuarine system. They are considering scheduling two workshops next year to bring experts together to help work on the list and/or to help with what data compilation. Indicator importance and tractability are key. In other words, is the indicator meaningful to assessing the health of the estuary and are the resources available to sustain the data collection? Dr. Rader proposed using the 1990 APES status & trends report as a possible baseline and as a source of some indicator that could be used.

There was some discussion of human dimensions that lead to impacts and effects on resources and terrestrial and aquatic habitats.

Barry Burgan offered that some National Estuary Programs (NEPs) have taken a stressor-response approach. Need to define the audience: Public? Scientists?

Dr. Johnson: National Marine Fishery Service (NMFS) project included human relationship- stressor versus state of estuary.

Dr. Paerl: There are response indicators versus status and trends type indicators.

Dr. White: Would some indicators be eliminated once estuary health improves- and then there wouldn't be a need to monitor them?

Dr. Mallin: There can be a range for some indicators depending on where you are in the system  
Barbara Doll: Which indicator you use may also change depending on where you are in the system.

Kirk Havens: Indicator criteria for Chesapeake Bay Program:

- Condition or present state
  - stressor/diagnostic
  - management performance
  - communicable
  - predictability
- and a temporal and spatial scale

Bob Christian: DPSTIR approach

- Drivers
- Pressure/stressor
- State
- Impacts
- Response

For the workshops, STAC needs to provide a framework and get an outside response on the list within the framework.

Ms. Doll: Propose one more Indicator Subcommittee meeting for framework, then work on indicators as subgroups and present to STAC at February meeting. DENR representatives should be on subgroups.

Dr. Rader: Would like feedback on existing models known by STAC members. Also need to ensure Virginia representation is adequate.

Jim Ebert: National Park Service used the USGS-BRD method with “vital signs” as indicators.

Mr. Burgan: Other NEPs have developed indicators and gone to their advisory committees who wanted to know how the indicators would be used.

State (of estuary) → pressure → Response → management needs → feedback loop

Dr. Christian: Need to look at the APES status & trends report to tease out some indicators to consider

Dr. Paerl. Consider whether data is collected remotely or on the ground

The Indicator Subcommittee will meet soon on framework and criteria and discuss indicators versus measurements. STAC members wish to review the progress on indicators before the winter STAC meeting.