Members Present: Dr. Tom Allen (ECU), Timothy Baynes, Rhonda Evans (USEPA), Dr. Kirk Havens, Dr. Wilson Laney, Granville Maitland, Tony Reevy, Linda Rimer, Marjorie Rayburn, and Todd Miller.

APNEP Staff Present: Dean Carpenter, Bill Crowell, Scott Gentry, Jim Hawhee, Jimmy Johnson, Todd Herbert, and Chad Smith.

Guests Present: Dr. Reide Corbett (ECU), Dr. Carl Hershner (VIMS), Dr. Joe Luczkovich (ECU) Dr. Deirdre Mageean (ECU), Janine Nicholson (NCDENR), Linda Pearsall (NCDENR), Anna Zivanovic-Nenadovic (NCCF), others.

Welcome

Policy Board Chair Tony Reevy led introductions of Policy Board members, APNEP staff, and guests.

Welcome from ECU

Dr. Deirdre Mageean, Vice Chancellor of Research and Graduate Studies at East Carolina University, welcomed the Policy Board to ECU. She further described ECU's mission as it relates to estuarine and coastal planning, which includes research, engagement, and outreach initiatives.

Welcome

Tony Reevy summarized the meeting agenda and asked for comment. With none being made, he read the conflict of interest statement to the Policy Board. Bill Crowell, Director of APNEP, noted that APNEP will host a visit to Rose High to visit an APNEP funded outdoor classroom after the meeting's adjournment.

Recognition of Service of Dr. Brinson

Dr. Tom Allen of ECU recognized the service of Dr. Mark Brinson, ECU professor and a member of APNEP's Science and Technical Advisory Committee. Dr. Brinson passed away unexpectedly in January.

Public Comments

Tony Reevy invited public comments from the meeting's attendees. While no public comments were presented, he noted that public comments will be allowed through the course of the meeting.

Approval of September Meeting Notes

Tony then invited comments regarding notes from the previous Policy Board meeting. No comments were made. Policy Board member Linda Rimer made a motion to adopt the minutes. This motion was seconded by Policy Board member Granville Maitland. The minutes were adopted unanimously.

Nominating Committee Report

Todd Miller, Vice-Chair of the Policy Board, presented a report from the nominating committee on efforts to secure a commercial fishing/seafood industry representative to the Policy Board. The committee nominated Willy Phillips for the position. Todd presented his qualifications to the Policy Board and then put forth his name for consideration. Todd, on behalf of the nominating committee, recommended Mr. Phillips as a candidate to serve on the Policy Board.

Tony noted his support of Willy Phillips.

Policy Board member Kirk Havens moved to accept Willy Phillips as the commercial fishing/seafood industry representative to the Policy Board. Policy Board member Rhonda Evans seconded the motion.

Discussion regarding the motion indicated that Mr. Phillips has agreed to serve in this capacity should his nomination be accepted.

Linda Rimer thanked the committee for finding Mr. Phillips and noted her support.

Bill Crowell also noted his support of this candidate.

The Policy Board unanimously elected Willy Phillips to serve as the commercial fishing/seafood industry representative to the Policy Board.

Director's Report

Bill Crowell provided the Director's report.

Bill Crowell introduced Jim Hawhee as a new staff member and provided a brief overview of his experience and qualifications.

Bill Crowell noted APNEP's participation in the annual Association of National Estuary Programs' meeting. He further noted Program Scientist Dr. Dean Carpenter's presentation at the meeting regarding APNEP's approach to ecosystem-based management. Bill also noted the presence of Rhonda Evans and Carl Hershner at the meeting, which was held in Punta Gorda, FL.

Bill provided a summary of the three Environmental Education and Awareness Grants selected by the Policy Board's Executive Committee in January. The North Carolina Aquarium on Roanoke Island was granted \$6,560 to conduct a campaign entitled "Estuary Essentials" Program for Libraries," North Carolina's Division of Water Conservation was granted \$3,200 to conduct an environmental education bookmark contest, and the North Carolina Coastal Reserve and the National Estuarine Research Reserve was awarded \$27,698 to conduct a campaign entitled "Promoting Awareness and Stewardship of APNEP's Estuarine Habitats and Shorelines." In sum, \$37,458 was awarded for these three projects. The Executive Committee allocated the remaining funds to the development of the upcoming CCMP, which will serve as the primary guide for APNEP's education and awareness efforts upon its adoption. Rhonda Evans noted she'd like to see the estuary essentials program address areas in the upper watershed. Bill thanked the committee for their time to review the proposals and noted that the process has become more transparent and efficient over the years.

Bill then presented leveraging summaries (2003-2010), which were recently sent from EPA headquarters. Bill defined leverage for the committee. APNEP is 5th highest of the NEP's in leveraged funds at a level of 14:1. Median leverage for the National Estuary Programs was 6.2:1. Further discussion was given on various categories of leveraging, including support, primary, and significant levels. The NC Clean Water Management Trust Fund is one of APNEP's primary leveraging partners. Its leveraging was graded as significant beginning in 2008, which largely explains a significant drop in leveraging over the past few years. Rhonda Evans noted this may be explained by states' lack of ability to match, and Bill confirmed. Rhonda also noted that it might be helpful to track these figures in a more precise way. These cuts are affecting many programs. She further noted that the federal government may also decrease funding significantly in coming years.

Tony Reevy thanked the staff on behalf of the Executive Committee for their organization in the grant review process. He also said that he was impressed with APNEP's leveraging numbers, including its ranking in the first quartile.

STAC Report

Tony Reevy introduced Dr. Dean Carpenter and Policy Board member Dr. Wilson Laney.

Wilson Laney noted that the Science and Technical Advisory Committee met the previous Thursday. At the meeting there was discussion of draft CCMP material provided to the STAC, and the STAC was asked to review the information and make comments. Comments were expected to arrive at the date of this meeting. The STAC also spent time discussing the 2011 ecosystem assessment, which will report upon a number of environmental indicators. No forecasting will be conducted, nor will efforts be made to identify causal relationships related to environmental conditions. Where possible, linkages to the 1991 APES report and the 1994 CCMP will be given. Regarding format, a brief 1-3 page report will be provided for the value, utility, and availability for each indicator.

CAC Report

Tony Reevy introduced Charlie Bass to give the CAC report.

Charlie noted that the primary order of business for the CAC meeting was the selection of environmental enhancement and demonstration project grants. Four proposals were funded: UNC Institute of Marine Sciences was granted \$24,168 to provide oyster habitat by reshaping crab pots, the NC Coastal Federation was granted \$8,159 to engage in habitat restoration on the banks of Bogue Sound, The UNC Coastal Studies Institute was granted \$25,000 to institute a workshop that ultimately will allow students to build a buoy and incorporate water quality monitoring into their curriculum, and Elizabeth City Middle School was awarded \$25,000 to reconfigure their stormwater system to support an educational and functional wetland habitat at their school. Charlie also noted that Policy Board Chair Tony Reevy attended the meeting and moderated a discussion with CAC members regarding the APNEP program. Charlie noted that five of seven 2010 CAC projects were nearing completion, and that nominations were being sought by the CAC to fill vacant committee positions.

Tony Reevy noted that he attended the last Citizens' Advisory Committee meeting. After attending, he brought a number of discussion items back to the Policy Board. These included a desire for closer ties between the CAC and the Policy Board, concerns about local economies and how they relate to APNEP's mission, and a desire to engage in more adult education. Tony also mentioned he would like to see more diversity in our membership.

Some discussion arose about the 2011 "State of the Sounds" conference. Bill noted conference might be a bit more difficult to host due to state budget concerns and resulting restrictions within state government. He noted that support from the EPA and policy board members would be appreciated if any resistance is encountered. Bill noted that he feels this conference is important for our program. Rhonda Evans noted that EPA may be able to assist with travel arrangements for out-of-state invitees. Rhonda further mentioned that the 5-star awards program has a ceremony, and it may be nice to hold these for grant recipients at the conference. She offered assistance in this role and noted that these awards might be a nice way to draw the public to the forum.

CRE Project Report

Bill Crowell introduced Bill Holman and gave a brief overview of his experience and qualifications. Crowell noted that Bill Holman and the Nicholas Institute for Environmental Policy Solutions were contracted to prepare APNEP's climate ready estuaries report. Crowell noted that the draft has already been informative for staff.

Bill Holman summarized his outreach to local governments in summer and fall 2009, including presentations at county commission meetings. He noted that it was important to ask communities what they think, and bring that information back to policy makers (APNEP). He also noted specific contacts with water managers, where impacts are already being felt, and with mayors and administrative staff.

Findings from the report include: 1) people in the region are very resourceful and adaptable; 2) people that live in the region value the estuary, though they might use other terms; 3) climate change competes with other urgent priorities, and accurate and accessible information and maps are vital; 4) some dispute climate change and sea level rise, but municipal officials have seemed more receptive than county officials as they struggle with sewer lines flooding and water on the roads.

Recommendations from the report note three areas of need: 1) improving access to and the quality of information, 2) improving government efficiency and coordination related to the issue of climate change, and 3) implementation steps that APNEP can take. More detailed recommendations are in the draft report that was issued to attendees.

Improving information may include developing and updating floodplains and other maps, monitoring and mapping threats to drinking water, mapping risks to existing septic tanks and wastewater infrastructure, and engaging in comprehensive water management. He also noted that local officials want numbers to give them a starting point for adjusting policies and regulations. An opportunity exists to collect data from areas engaging in reverse osmosis to quantify issues, and collaboration with health departments on septic tank issues was recommended. Finally, he noted that education opportunities regarding drainage issues are necessary, as bigger ditches result in getting better drainage but also allow saltwater encroachment.

With respect to improving coordination and efficiency, Holman recommended determining clear agency roles and responsibilities. An analogy was drawn related to coordination in state-local-federal emergency response planning. APNEP is a non-regulatory agency and is positioned to take a non-regulatory approach to helping communities plan for climate change. He also recommended establishing and coordinating goals with other agencies. He also noted that APNEP could take a lead in identifying and prioritizing protection and restoration of ecosystems and shorelines.

Other recommended strategies for APNEP include developing, implementing, and sustaining a communications plan. APNEP can also engage in helping pilot communities adapt by providing technical assistance, with the goal that other communities will follow their lead. APNEP should also engaging insurance and

markets in the issue of climate change. At the national level there has been dialogue discussing the management of risk, and this might be appropriate for the state level. Also, the region needs an advocate, and APNEP can serve this function for the Albemarle-Pamlico estuarine region.

Tony Reevy asked about sea level rise occurring in the Albemarle-Pamlico estuarine region. He further asked if there has been coordination between NC Division of Coastal Management and APNEP. Tony is interested in a presentation for APNEP committees regarding sea level rise, and noted that transparency in the sea level rise reporting process hasn't been ideal. Tony requested that staff looks at the report when it comes out, then recommend a presentation if necessary.

Linda Rimer noted recent developments on the topic. Congressman Price is requested a briefing from John Dorman on the study. EPA also signed a Memorandum of Understanding with FEMA to incorporate climate change planning into pre-emergency response plans. Current FEMA legislation only requires inclusion of past data, rather than future projections. APNEP might be able to coordinate in this process to include future projections.

Kirk Havens noted a theme for decision-maker education. Holman agreed, but also responded that local elected officials won't get too far in front of their constituents. Therefore, education must also be targeted to the public.

Bill Crowell noted APNEP's listening sessions. An important lesson from this project was that disenfranchised communities are beginning to realize that sea level change doesn't just affect rich beach owners, but inland persons as well.

Wilson Laney recently attended a South Atlantic Landscape Conservation Cooperative meeting, and noted that a great deal of scientific effort is going into evaluating sea level rise on fish and wildlife resources. APNEP is in a position to integrate this information into its other initiatives.

Tony Reevy requested a bullet-point summary of recommendations from the report (an executive summary is provided in the final report).

Todd Miller noted that there is value in looking backward regarding sea level rise trends to document what we've done and spent money on in the last 400 years. Even photos from the 70's are instructive. The need for local knowledge is instrumental, and a farm community in Hyde County is cited as one example of a group dealing with rising waters issues.

Rhonda Evans noted importance of working with local governments to develop the CCMP, as well as opportunities to bring money back into their communities for adaptation projects.

Linda Rimer asked about military installations, and Bill Crowell mentioned there are around five in the region. The Department of Defense has been engaging in climate change initiatives and has funds available. She also noted that our region contains many of the communities most vulnerable to sea level rise, and recommended reaching out to historically black colleges and universities to provide educational opportunities. Elizabeth City State University and North Carolina Central University were both discussed as important partners in this regard.

Working Lunch

Separate presentations were made to the Policy Board by Drs. Joe Luczkovich and Reide Corbett of ECU regarding SAV mapping methods and shoreline mapping, respectively.

Joe Luczkovich presented first and described the four sites for their study. Two were low-salinity, and two were higher-salinity. Joe summarized the research methods and results of the study, which was designed to provide broad-scale information on SAV growth in the APNEP region using multiple survey methods, including acoustics, video, and satellite data. Each method has benefits and drawbacks, and the most effective sampling regime will use incorporate different survey methods according to site characteristics. The time of year for surveying is also important, as SAV distributions are seasonal.

Reide Corbett next discussed his work studying shoreline changes in North Carolina. Most of North Carolina's shorelines are found in the APNEP region. For the study, the research team used aerial imagery to study changes in the shoreline. At most locations, erosion is occuring. This data can be used to predict future changes in the shoreline, and the team has a contract with North Carolina to digitize the state's entire coastline. Aerial imagery has also been supplemented with helium balloon photography and transect walks using GPS.

CCMP/EBM Progress Report

Bill Crowell presented the overall Comprehensive Conservation and Management Plan structure to the board, relating goals, outcomes, objectives, and actions. He requested that policy board members review the plan closely and provide feedback to staff. He also noted the membership and contributions of the EBM transition team.

Bill provided a diagram of the overall structure of the plan and provided the three overall goals for the new CCMP. Each goal has a number of ecosystem outcomes that we desire (e.g., waters are safe for personal contact).

He reviewed each goal and their associated outcomes for the committee. Bill noted that our program is following the Puget Sound model. He noted its benefits but understands that the plan's logic can be difficult to follow. Staff members are aware of this and will be taking steps to ensure the final document is concise and easy to follow.

Next, he discussed the five management strategies (identify, protect, restore, engage, and monitor) and the associated objectives for each strategy.

Todd Miller mentioned he'd like to see a wider engagement focus on government officials and decision makers. Bill noted that in our current ongoing analyses conducted in partnership with VIMS, targeted engagement toward local and regional decisionmakers is rising as a high priority. Considering APNEP staff's position in NCDENR, engagement efforts by staff at the state level are approached with caution.

Rhonda Evans noted it will be important from EPA's standpoint that the plan explicitly states outcomes and that APNEP document progress toward meeting these outcomes. Tightening government budgets will require programs to demonstrate their successes in order to maintain support. She also recommended consulting with local governments regarding their opinions on where they think they fit in. Bill noted that resources for a majority of our local governments aren't focused on environmental issues, and he mentioned APNEP is considering using particular localities as pilots and letting their successes lead other communities.

Dean Carpenter mentioned APNEP's adaptive management focus and expressed concerns that APNEP may be penalized for explicitly laying out actions, factors, and outcomes. Rhonda mentioned that in this current political climate, linking actions to outcomes is the first step that EPA will be looking for. Next, they want to see demonstrated success in achieving that outcome.

Policy Board member Marjorie Rayburn noted that APNEP should be mindful of where the bar is set for particular outcomes. She mentioned that outcomes should be reasonable, but where APNEP sets the bar reflects the ambition of the program.

Rhonda Evans also expressed a desire that the actions and outcomes should be understandable to the people that live in the region.

Tony Reevy asked the Policy Board whether they were comfortable proceeding with the CCMP at this point, given the current information. Some discussion occurred, and Tony noted that the feeling of the group was to proceed as planned.

New and Old Business

Tony Reevy provided a summary of new and old business. He noted that the Clean Estuaries Act did not pass. We're in a new Congress, and we're operating under a continuing resolution. He noted that Congressman Jones did vote for the bill despite its defeat. Tony also noted that he would like to increase diversity on the Policy Board's membership. As previously discussed, he also noted that he addressed this point with the CAC, which should most closely reflect the region's population. Tony also proposed requiring matching for projects over a certain amount. He indicated that staff and the Executive Committee will send out a proposal for review before the next meeting. He noted that the next Policy Board meeting will be May or June, perhaps in the Williamston area.

Bill Crowell noted that the upcoming work plan will be aligned as closely as possible to the upcoming CCMP.

Todd Miller announced that the National Wildlife Foundation designated the Albemarle-Pamlico estuary as one of America's Great Waters."

Adjourn at 3:00pm