



Albemarle-Pamlico National Estuary Partnership

Draft Policy Board Meeting Notes

10:00 am – 3:00 pm
February 6, 2013

Green Square
217 W. Jones Street
Raleigh, NC

Policy Board members present: Todd Miller, Dr. Tom Allen, Timmy Baynes, Willy Phillips, Dr. Wilson Laney, Bill Cox, Dr. Kirk Havens, Brad Ives, and Jeb Wilkinson (proxy for Sara Benghauser)

APNEP staff present: Dr. Bill Crowell, Dr. Dean Carpenter, Jim Hawhee, Jimmy Johnson

Guests present: Brian Van Eerden (The Nature Conservancy), Jennifer Derby (US Environmental Protection Agency), Linda Pearsall (NC Office of Conservation, Planning, and Community Affairs)

Call to Order: Todd Miller, Chair

Todd called the meeting to order at 10:11. He offered a welcome and asked those present to introduce themselves. He noted full participation from the board.

Welcome and Introductions, Brad Ives, NCDENR Asst. Secretary

Brad Ives brought warm greetings from Governor McCrory and Secretary Skvarla. He noted potential concerns about the new Republican administration, but assured the Policy Board that the new administration wants to protect the environment. He noted an absolute focus on environmental quality from the new administration, which fits the McCrory team's focus on economics and its relationship to tourism, fishing, and living life on the water. He indicated that it was a pleasure meeting everyone, and he is looking forward to working together further.

Adoption of Minutes (Action Item), Todd Miller

Todd entertained a motion to adopt the minutes as recorded from the previous meeting. Kirk Havens motioned to approve the minutes, Tom Allen seconded. All voted in favor of adopting the minutes.

Director's Report, Dr. Bill Crowell

Dr. Bill Crowell noted the new Governor's executive order and welcomed everyone to Green Square. He provided staff updates, noting that Jim Hawhee's role and title have been changed to Policy and Engagement Manager. He also noted APNEP project coordinator Scott Gentry's departure since the last meeting, who will be replaced by Lindsey Smart beginning March 1. Lindsey's significant GIS and database expertise will be an asset for the program.

The 2012 Comprehensive Conservation and Management Plan (CCMP) was formatted and printed since the last meeting. Bill¹ commended the NC DENR Public Affairs office for their excellent work in formatting the document. The expense of the document to print meant a limited printing run. The document is available online.

Bill noted the recurring contract for APNEP's Virginia Field Coordinator with the Virginia Department of Conservation and Recreation (VA-DCR). Todd Herbert recently accepted a new position in the private sector and his VA-DCR supervisor, Noah Hill, is currently seeking a replacement. Bill noted a desire to do more collaborative work with Virginia and expressed his desire that VA-DCR will eventually fully fund the position as match for the program and to support activities in Virginia.

APNEP's annual reporting for the Governmental Performance and Results Act (GPRA) occurred in September. Leverage on APNEP funding included \$2 million on primary sources of leverage, \$4.3 million on significant sources of leverage, and \$15.5 million in supporting sources of leverage. The primary areas of leverage expenditure were engagement, research, and wastewater upgrades.

Habitat types that were protected and restored throughout the region were also reported for GPRA. Primary habitat types protected and restored were forests and agricultural lands.

Bill briefly noted several projects in the current work plan that are contracts and said they are moving along. There have been some delays getting certifications from contractors.

Regarding mapping efforts for the program, the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory staff completed a wetlands mapping project substantially similar to the one proposed by APNEP, and therefore the APNEP funds were reallocated to submerged aquatic vegetation (SAV) monitoring and restoration grants. Other unexpended funds were also used to increase the amount of funding available for restoration projects.

Regarding the renewal of SAV monitoring, APNEP took aerial imagery and coordinated ground monitoring efforts from Roanoke Island to Back Bay, Virginia. Policy Board members were invited to examine imagery from this effort plus an infrared map of the sound. This coming spring, APNEP will again collect imagery from Roanoke Island along the west side of the Outer Banks to the White Oak River, areas where aerial photography provides the most efficient means for SAV monitoring.

Willy Phillips asked about SAV monitoring in Albemarle Sound. Program Scientist, Dr. Dean Carpenter, explained how APNEP is supporting the monitoring of SAV in five regions using a combination of aerial imagery, and boat-based acoustic and underwater camera techniques. Much of Albemarle Sound will be monitored using boat-based techniques.

Tom asked about the availability of the imagery acquired through these flights, noting it is also valuable for wetland mapping and other applications. Bill mentioned that APNEP has data available on the website and is working to post additional items. NC-DOT will have the recent flight available, and that wetland mapping is another potential application for this data.

¹ Note that hereafter any use of the first name "Bill" refers to Bill Crowell.

Bill discussed the restoration request for proposals and the selected projects. They include an anadromous fish passage project on the Cashie River, a hydrological restoration project in Hyde County, and two combination restoration and research projects by UNC Institute of Marine Sciences researchers who are examining restoration techniques for both oyster and SAV habitats.

Willy noted that there have been successes in the Chesapeake Bay with oyster culturing efforts. Citizens can transfer oysters grown under their docks to areas of restoration need. Kirk confirmed a tremendous boom in aquaculture activity.

Bill also mentioned the upcoming APNEP site visit and program review by an Environmental Protection Agency's (EPA's) National Estuary Program (NEP) team coming in April. The team will also attend the next Policy Board meeting. Rhonda Evans of EPA Region 4, Marilyn Katz from EPA headquarters, and Troy Rice of the Indian River Lagoon NEP will be on the review team.

Willy asked about the stability of funding for salaries and other things regarding APNEP's budget. Bill Crowell noted relative stability, but that the NEP's budget is also operating under a continuing resolution.

Bill Cox noted potential sequestration impacts on the NEP.

Willy asked whether APNEP was getting a proportional share of NEP funding. Bill Cox noted that every program gets equal treatment. Wilson Laney noted that in terms of program area, APNEP doesn't receive a lot of funding.

Todd encouraged staff to also look at section 319 funding and the state revolving fund when reporting match for GPRA.

Review of Executive Order #133, Jim Hawhee

Jim Hawhee reviewed the contents of Governor's Executive Order #133 and their implications for APNEP. He highlighted significant changes from the previous executive order, including APNEP's name change from "Albemarle-Pamlico National Estuary Program" to "Albemarle-Pamlico National Estuary Partnership." APNEP's advisory structure was also changed, with fewer Policy Board members and the replacement of the Citizens and Management Advisory Committees with an Implementation Committee.

Adoption of Draft Bylaws (Action Item), Dr. Tom Allen

Tom began by noting the role of the Policy Board as an advisory board rather than a governing board. The bylaws also detail the interplay between the Policy Board and other advisory committees. The draft bylaws also detail the duties of members attending, rules governing notices and statements of policy of the board. Policy Board members must have interests and/or residence in the APNEP region. Regarding the terms of membership, there is a clean state for the members currently serving. Tom noted his current service as an at-large member, whereas he served before as a higher-education representative. One significant change from the previous bylaws allows for Policy Board members to be reimbursed in cases of extraordinary expense.

Tom continued by naming the members of the Executive Committee and noted that it recently met. He discussed proxy voting and the requirement of 30-days' notice and provision of materials for Policy Board members envisioning a vote.

Tom also referenced the ground rules for meetings, noting that generally civility is expected.

Kirk noted that he had read through the draft bylaws and had no comments.

Wilson asked for clarification on whether the terms for members representing the Science and Technical Advisory Committee (STAC) on the board were term limited. The STAC and Implementation Committee are responsible for appointing their representatives.

Wilson moved to adopt draft bylaws as written. Brad seconded. The motion was unanimously adopted.

Review of CCMP and Implementation Actions (Overview and Status of Current Work Plan), Dr. Bill Crowell

Bill noted that the Policy Board adopted the CCMP in March 2012. It is currently available on the website. The plan is based on the concept of ecosystem-based management, including an adaptive management approach and measuring changes in the ecosystem related to the outcomes identified therein.

Pages 10 and 11 of the CCMP contain a chart that provides the goals, outcomes, actions, and candidate indicators for the program.

He used shellfish closures as an example to exemplify targets, benchmarks, and adaptive management. Not only are targets set, there is a need to monitor the ecosystem and assess progress, then if necessary change APNEP's actions accordingly. If progress is not observed then three main areas of concern must be considered: monitoring is insufficient, our qualitative model misunderstands the ecosystem, or there was insufficient implementation of the agreed-upon management actions. Bill noted that some refer to such adaptive management as an evidence-based approach.

Bill Cox asked if the assessment effort is related to indicators. Bill Crowell said yes, but both environmental and management indicators need to be monitored. To the extent possible, APNEP wants to work with monitored data. Where there are gaps, APNEP will work to fill them.

Willy Phillips related his impression that there isn't enough monitoring in the sounds, and Bill Crowell generally agreed, noting that APNEP staff is engaging with North Carolina's Division of Water Quality (DWQ) on this issue.

Kirk noted that a gap analysis is appropriate here. If managers want to reach a certain goal, then they must monitor the ecosystem to determine whether they have met it.

Willy noted that monthly sampling is not necessarily sufficient, particularly with biological indicators. Wilson noted the value of continuous monitoring stations to help improve this information. Wilson also noted new continuous monitoring in Lake Mattamuskeet because of SAV die-offs. Willy would like to see more private funding help with monitoring issues.

Kirk also noted that APNEP's new goal-based approach could help show the benefits and value of monitoring.

Bill also noted other data sources, including municipalities, that aren't traditionally used in state monitoring efforts that might ultimately be integrated.

Bill discussed the new matrix identifying APNEP actions being taken according to the CCMP. The matrix includes key partners, next steps, APNEP's role, whether it is being addressed now and whether it is a priority action in FY 2014.

Jeb Wilkinson noted the importance of identifying the percentage of each action that has been completed in reference to a ten-year plan.

Bill noted that there are 58 CCMP actions, and for implementation purposes APNEP staff wanted to create workgroups with common interests regarding several actions. Therefore, staff identified 15 themed workgroups.

Todd noted that the matrix would also be useful for reporting leverage as well.

Bill discussed APNEP's plans to develop a database tracking this information and for additional actions that are taken that support the CCMP.

Bill indicated that what's currently missing is a final version of environmental and management indicators, including target values.

Todd asked about the mechanism for CCMP updates and how fixing it should be considered.

Bill noted the role of the Policy Board in adjusting the CCMP, identifying new actions, and providing adaptive management guidance. Todd noted that this should be a regular agenda item for the Policy Board.

Bill Cox asked whether there is a plan to develop workplan actions using the CCMP matrix. He noted this would be helpful to see where APNEP funding can be used to fill areas of implementation need.

Bill Crowell confirmed that there are 58 actions, each moving at a different pace of implementation, and some actions logically precede others. However, generally APNEP wants to see the broader environmental management community move all of these actions forward.

Todd thanked Bill for clearly laying out the CCMP matrix, noting it is very helpful.

Willy also noted that wonderful job that APNEP's staff did in putting this work together, taking the shotgun approach and moving for solutions to these problems. He noted some concerns about showing meaningful environmental progress related to these actions.

Willy also discussed the idea of developing video production capabilities for APNEP, to document various partnership activities. Video could be used to document successes and collaboration, and to offer outreach in the region. He would like to see that area developed, ultimately generating enthusiasm for APNEP's mission.

Kirk noted that corporate resources could be brought to bear in this area, as everyone wants to be part of a winning team.

Bill noted the “Shad in the Classroom” project and its video components. Many grant programs require illustrating their results, and this is something APNEP might consider requesting from our contractors. APNEP might also consider other partnerships that might inexpensively develop productions of interest.

Wilson noted some success using video to document a recent fish tagging cruise.

Bill also noted that an outreach component is part of most APNEP requests for grant proposals, though not necessarily video.

Discussion of Key Program Objectives for 2013-14, Todd Miller

Todd noted that in May, APNEP’s workplan for FY 2014 will be adopted. Todd asked what the Policy Board would like to see in project expenditures. After administrative and salary expenses the partnership has approximately \$300,000 available. The Policy Board will need to consider how to prioritize those funds. Todd opened the floor for suggestions.

Kirk noted that with this budget APNEP simply cannot fund projects for all 58 actions to be implemented.

Willy asked if staff has recommendations to bring forward. Bill noted that staff does not at this time. Having said that, there are some pending actions staff may want to wait to commit resources for.

Dean said APNEP is at a little bit of a disadvantage at this stage, prior to forming implementation groups. For many CCMP actions, APNEP needs to convene the experts to develop recommended steps for a particular action. Then APNEP would have a better idea of areas where funding and investment are desirable. Developing a monitoring program or coordinating interests can happen at relatively low cost.

Todd asked if it would be wise to dedicate some money to coordinate the implementation workgroups to ensure we have sufficient capacity.

Bill noted that APNEP traditionally has done relatively little external contracting. In some cases APNEP may need external support to move forward on CCMP actions.

Willy noted that while implementing the CCMP is a long-term effort, APNEP should find some shorter term projects to demonstrate a sense of more immediate accomplishment.

Bill noted that the board’s executive committee did discuss the prioritization for short and long term actions. The restoration category in particular is ripe for support to show short-term results. Bill would like to see a combination between on-the-ground benefits and longer term plan implementation.

Wilson asked whether APNEP should solicit input for priorities for 2013, because there is no implementation committee?

Todd noted that this is a difficult issue, because the implementation committee will guide implementation of the actions and they have not formed yet. Shoreline, wetland, and education

projects tend to show more short-term success. Shoreline restoration regulatory policy could be revisited to spur the restoration process.

Bill Cox asked about regulatory hurdles for restoration. Kirk noted that general permitting for living shorelines exists in Virginia. Todd noted difficulty in complying with policies designed to protect from development rather than facilitating restoration.

Todd also noted that regulatory agencies often don't have the time to step back and do evaluations because they are too busy with implementation. Bill Cox noted that it costs time but relatively little money to do these evaluations. Jennifer Derby noted the existence of models for this type of work.

Todd noted that a very good outline was provided for the status of CCMP actions. Individual Policy Board members should feel free to interact with staff regarding work plan recommendations.

Bill noted that in future years the Policy Board will rely upon the implementation committee to develop potential work plan items.

Willy wants to see staff recommendations, but these would come in the draft workplan for Policy Board approval. He suggested potentially doing a survey for Policy Board members.

Working Lunch: Restoring hydrology in the Great Dismal Swamp area, Brian van Eerden

Brian Van Eerden introduced himself as the Southern Rivers Program Director for The Nature Conservancy (TNC). His program area is in southeast Virginia, and he also serves as the co-lead with TNC's Albemarle Sound initiative. The area has been a TNC priority for 40 years, and they helped with the initial land transfers that created the park and refuge at the Dismal Swamp. The Dismal Swamp is one of the largest forested wetland blocks in the eastern United States, but needs active management to improve its health and build its resiliency.

Brian thanked APNEP for funding recent restoration work here, noting that the APNEP funding has leveraged itself several times by creating new opportunities.

He described the characteristics of the swamp. Dismal swamp is approximately 126,000 acres, 112,000 of which are owned by the U.S. Fish and Wildlife Service. The Suffolk scarp is the western edge of the swamp, and on the east side is the Dismal Swamp Canal. Runoff from this land connects most actively to the sounds through the Pasquotank River.

Other large histosol forest blocks in AP region include Pocosin Lakes National Wildlife Refuge, Alligator River National Wildlife Refuge, and Croatan National Forest.

The carbon storage value of these ecosystems surpasses any other. Peatlands cover 3% of the land surface of the earth but contain twice as much carbon as the entire world's forest biomass.

Fire plays an important role in these ecosystems. Lightning strikes and Native American management used fire to manage the forest biomass. Cedar, bald cypress, and canebrakes were dominant species here. Beginning 300 years ago, ditching and conversion are changing the habitat, which is now about one third of its historical size.

Wilson asked whether there was historically a natural outlet from Lake Drummond to Albemarle Sound. Brian answered that historic maps suggest a connection to the Northwest River. Lake Drummond is about 4,000 years old, likely created when a big peat burn carved out its depression.

Willy asked Brian to talk about mercury concentrations in peatlands. Brian noted that peatland soils promote methylation of mercury, and methylated mercury can move up into the food web. This process has been documented in Pocosin lakes and Dismal Swamp. This mercury is released into the system when the system is ditched and drained, but hydrologic restoration can reduce the flow of methylated mercury into the sounds.

There is a five-foot elevation difference between the east and west sides of the Dismal Swamp Canal due to oxidation of the soil from ditching.

Recent wildfires have burned not just the tree biomass but also the peat. This also causes a loss of the substrate that supports the trees. 20 million metric tons of carbon have been burned in the last four major fire events in the Albemarle Sound region. It has cost around \$58 million to extinguish these fires.

A drained system results in lower groundwater levels, increased vulnerability to fire, and soil subsidence. Pursuing a no regrets approach, TNC and USFWS have put 4,000 acres under much tighter hydrologic management control.

If cap and trade legislation becomes law, it may be possible to leverage funding for preservation of these peatlands.

Further work (and needs) include identifying flow patterns in the 150-mile drainage network, determining water budgets, mapping soils, examining vegetation controls on peat chemistry, and studying the interaction of climate change on the swamp's hydrology and vegetation.

Willy asked, whether it is impossible to restore the original integrity once the peat is drained. Brian noted that in a good year, peat accretion is 3 mm. In the short term the goal is to arrest the loss of peat soils. Willy asked whether drained and reconstituted peat has the same carbon sequestration value of peat that hasn't been drained. Brian noted that the peat that accumulates won't be as carbon-rich.

Wilson asked whether there been any discussion about maintaining aquatic connectivity in the swamp as it relates to fisheries management. The only waterways are the Dismal Swamp Canal and the Pasquotank River. Brian said this has not been a significant concern to date, but he will look into the issue.

Willy requested that they might consider allowing water to flow at certain times from the structures to encourage anadromous fish runs.

Tom mentioned that analogous lessons may be learned from the Buckridge Coastal Reserve. Saltwater intrusion is a complicating factor there as well. One-way valves have been installed, but overwash can still occur.

Willy and Brian discussed low elevation peatland restoration like that at Alligator River National Wildlife Refuge. Brian noted it is difficult trying to predict future shorelines, but the idea is to maintain constantly forested shorelines.

2012 Ecosystem Assessment, Dr. Dean Carpenter

Dean presented and circulated a copy of the 2012 Albemarle-Pamlico Ecosystem Assessment. He noted that he had provided interim briefings on the project for the Policy Board in fall of 2011 and in March 2012. At the latter meeting the Policy Board not only accepted but endorsed the draft product.

Dean then provided a brief overview of ecosystem-based management principles and highlighted the role of assessment in that process. This assessment contains select provisional indicators and status and trends generally from the mid-1990's to present. Future phases will focus on diagnosis and forecasting of environmental trends.

While this assessment product provides a snapshot of the Albemarle-Pamlico Ecosystem, it is not a comprehensive analysis and that we have much to monitor and study within our regional ecosystem.

Dean mentioned that in 2013, staff would like to solidify management metrics and establish targets to assess progress. This would allow for the development of a document formulated for the public providing feedback on the state of the ecosystem. He also noted plans to expand metrics to include 1) forests, farmlands, and grasslands and 2) urban and suburban landscapes. Dean also provided his vision for longer-term assessment activities, including a decision support system.

1:35 p.m. STAC Action Plan, Dr. Wilson Laney

Wilson provided an overview of the STAC action plan. This year, the STAC is working to research and collate best practices. Theme-based workshops being held include sea-level rise in November 2012 and water resources in March 2013. Potential future topics include shoreline development and stabilization, and ecological responses. Each workshop is intended to produce deliverables for the public and Policy Board to consider. Also, the STAC has taken an active role coordinating APNEP's monitoring approach and indicator assessments.

The STAC also provides planning, review, and recommendations. This includes the 2012-2014 action plan, but the STAC is also available to review drafts for technical merit, or to provide support for APNEP staff and other advisory committees.

Todd asked if STAC meetings are open to the public. Dean confirmed that they are. Jim Hawhee also noted that meetings are advertised on both DENR and APNEP websites.

Dean further noted that occasionally science meetings may be on sensitive topics, but that their purpose was focused on the science underpinning these issues. Policy recommendations for APNEP would come through the Policy Board.

Wilson mentioned energy topics of scientific interest in North Carolina, including hydraulic fracturing for shale gas development, hydropower, offshore wind, and wood biomass.

1:55 pm Implementation Committee Organization and Membership Options (Action Item), Jim Hawhee

Jim opened briefly by noting the new Governor's executive order called for the formation of an implementation committee, and that staff is requesting insights regarding its formation. A staff

proposal was provided, through which the Implementation Committee would be comprised of the chairs of 15 teams, each assigned to promote and implement a subset of related CCMP actions.

Todd noted the focus on implementation and indicated a preference for nominating people who will get work done rather than a figurehead whose time is limited.

Kirk offered a cautionary tale from his service with the Chesapeake Bay Program, noting also the importance of aligning goals and monitoring. When a program begins discussing the reallocation of resources, the “knives come out.” In the Chesapeake Bay watershed, \$1 million was shifted from estuary initiatives to the upper watershed areas.

Linda Pearsall noted that implementation teams have to get into the weeds of a specific subject area and proposed an annual report to agency representatives as a way to have conversations about progress and a way to recruit people.

Rhonda Evans noted that it was important for these teams to bring items before the Policy Board. For a NEP to function well, committees should have a forum to take things in front of decision-makers.

Brad noted in some ways, even DENR’s executive leadership aren’t the decision-makers, at least regarding funding. He asked rhetorically how we engage the legislature to support the level of monitoring requested. He sees monitoring initiatives as a potential priority for the administration.

Jeb Wilkinson emphasized a desire to see metrics for success. He related Virginia’s efforts to prioritize best management practices to the exclusion of environmental education, but concerns were raised. In Virginia, the focus has been turned to nonpoint source pollution.

Timmy Baynes asked whether the Policy Board should appoint members they think are best for the Implementation Committee. Bill indicated that when the Policy Board meets again on April 30 staff will identify initial members of workgroups for their approval.

Todd noted that the DENR Secretary makes the initial appointments to the Implementation Committee.

Brad noted it is important for the Policy Board to be able to serve as a check upon Implementation Committee members that are ineffective.

Wilson indicated his support by noting the current proposal seems to be a logical way to proceed. He emphasized that we want to ensure people with decision-making authority can help get things implemented. He inquired whether Policy Board members might serve as liaisons.

Todd also noted that the Implementation Committee should not be caught up in a static structure. Perhaps the structure might adapt over time.

Linda recommended that instead of the Implementation Committee being composed of chairs from each team, the assignment might be the chair or designee.

Brad moved to endorse framework as presented with the changes discussed. Timmy Baynes seconded. The motion passed unanimously.

2:20 p.m. Public Comments, Todd Miller

Todd Miller asked if there were any public comments. There were none offered.

2:30 p.m. Old & New Business, Todd Miller

Bill recognized the ecosystem-based management transition team members. Bill recognized Dr. Laney's support as a member of the team and thanked him. He presented a plaque to Wilson memorializing his service. He also noted that Dr. Havens would receive his plaque at the next meeting as Kirk had to depart the meeting early.

2:50 p.m. Notice of Future Meetings, Todd Miller

The next meeting is scheduled for the Morehead City area on April 30, 2013.

Todd encouraged all Policy Board members to keep the discussion going with APNEP staff regarding work plan priorities, which will be voted upon at the next meeting.

Adjourn

Todd Miller adjourned the meeting at 2:39.