

**Policy Board Meeting**  
**Albemarle-Pamlico National Estuary Program**  
**10:00 am – 3:00 pm**  
**May 17, 2012**  
**Green Square**  
**217 W. Jones Street**  
**Raleigh, NC**

**Draft Meeting NOTES**

**Board Members Present:** Tom Allen (ECU), Kirk Havens (VIMS, via telephone), David Knight (NCDENR), Wilson Laney (USFWS), Brian Long (NCDACS), Todd Miller (NCCF), Tony Reevy (UNC-CH, Institute for the Environment), Linda Rimer (USEPA), Marjorie Rayburn (CAC) and Jack Thigpen (UNC Sea Grant).

**APNEP Staff Present:** Dean Carpenter, Bill Crowell, Scott Gentry, Jim Hawhee, and Jimmy Johnson.

**Guests Present:** Erin Thompson (APNEP intern), Linda Pearsall (Office of Conservation, Planning and Community Affairs), Taylor Pool (NCCF Stanback fellow), Kelsey Ducklow (NCCF Stanback fellow), Ashley Duplanty (NCCF Stanback fellow), Zachary Fasking (NCCF Stanback fellow), Melissa Dowland (N.C. Museum of Natural Sciences), Janine Nicholson (Office of Conservation, Planning and Community Affairs)

**10:04 a.m. Call to Order Todd Miller, Chair**

Todd called the meeting to order and reminded everyone of the conflict of interest policy. He welcomed Secretary Freeman to say a few words of welcome.

**10:05 a.m. Welcome Dee Freeman, NCDENR Secretary**

Secretary Freeman welcomed the Policy Board to the facility and noted how proud they are of the facility, and how they are walking the walk, not just talking the talk. He expressed appreciation to the Policy Board for its commitment to the coast, and for keeping it a treasure. He noted that he was talking to the choir. He noted that it can be a challenge across the street when speaking to these issues, because the point of view there can be quite different. He noted that the governor has a commitment to the coast, and has committed much time to coastal protections, and moving NC forward. He asked if we had any questions or any needs to let him know. He noted that his office is just down the hall on the west side of the building.

Wilson asked what issues are a top priority for the Governor for the next year? Hardened structures, climate change and sea level rise, particularly with the Coastal Resources Commission, and issues with marine fisheries, both here in NC and at the national level, dealing with endangered species, and the issue of the budget, particularly with regard to coastal issues.

Also, the budget issues are stressing EPA at the federal level, which will affect the states as well. Dredging is an issue, and nutrients are always an issue. Jack Thigpen provided the Secretary with a copy of Coastwatch which contained an article about a project which they had just completed in Plymouth.

Todd asked the Policy Board members to introduce themselves.

#### **10:15 a.m. Public Comments Todd Miller**

There were no public comments, initially. David Knight noted that this is a federally-funded program. He noted that all need to pay close attention to the state budget, since there is potential for further reductions. David noted that the requirement for observers for monitoring sea turtles and Atlantic sturgeon is very costly. The governor has put 1.5 million in her budget for this purpose but it is unlikely to be funded. DENR had proposed a fee, earlier. The funds have to come from somewhere. All of this is interlaced. We need to keep this in mind with regard to the way that this could affect the APNEP budget.

Todd agreed that it is all cascading. David noted that Sea Grant and all the other programs are also tied together.

Wilson briefed the Policy Board on recent events at ASMFC with regard to Atlantic sturgeon. The ASMFC passed a couple of motions which mandate the ASMFC TC, to review the NMFS science, and also to begin preparation of a delisting petition.

Linda Rimer asked about any funding received by the South Atlantic Alliance.

Bill indicated that they focused more on the ocean, and alternative energy issues.

Jack noted that they were supposed to get some funding, but apparently not much.

Tom noted that there is an RFP out there right now, but it doesn't appear to have much of a shift.

Todd noted that there seems to be a movement in NOAA right now, to shift more to the fisheries side of the shop and away from the habitat side.

Todd asked if there were any more public comments.

Jack stated the hot topic last week is that Congress has two exclusions for funding, one on turtle excluders and the other on catch shares.

#### **10:25 a.m. Review/Approval of March Meeting Notes**

Tony Reevy moved and Tom Allen seconded approval of the meeting notes from March. The minutes were approved by consensus.

#### **10:25 a.m. Director's Report: Dr. Bill Crowell**

Bill noted that funding for the program is slightly down from last year, and down considerably from the bump APNEP received several years ago. Bill noted that it is anticipated that we will have a cost reduction again this year.

Linda asked about budget specifics. Bill noted that the NEPs are covered under Section 320, and ensures that the program is budgeted for \$600,000 less any rescission.

Todd asked if some programs get more than the minimum. Yes, some do, and Bill named them. They include Puget Sound and San Francisco Bay and these are usually in an earmark. Bill noted that next year, they plan to work with Policy Board members to develop sub-priorities within the plan for what to fund on any given year. These things will go down to the action level. The budget guidance which recently came from EPA noted that the NEPs have the ability to spend staff time applying for non-federal grants. Bill noted in the past they were precluded from doing this so this is a big bonus. The other thing from the guidance is that NEPs can actually purchase land, though the amount of funding for APNEP makes this approach unlikely.

Bill noted the CCMP is now up on the web site, and has numerous hyperlinks on it. The Assessment also is being edited now and will be posted soon.

Linda noted that the web site has been greatly improved.

Bill noted that Jim runs a news feed each day, and a lot of the web site improvement is due to Jim. Bill noted that it is much improved over when he began, and is a lot more functional.

The past year, they received \$598,000 for projects. Todd has asked for an overview of those. Bill reviewed those for us using a projected spreadsheet. For this year, APNEP still has about \$23,597 to spend. Bill noted that there has been no expenditure on one item, for the VA Watershed Field Coordinator, but they will bill once a year.

Todd asked if there was any deadlines for expenditures. Bill indicated that he tried to spend it down by the end of the FY. Each month, DENR sends EPA an invoice, for all the things charged this month.

### **10:45 a.m. Overview of Recent Projects and Current FY2012**

Bill Crowell reminded the Policy Board of the plans for this year. It will be difficult to move forward without targets and indicators. We do know what outcomes we are looking for. The program priority is to develop those this year.

Since the Columbia meeting, a work group met to discuss monitoring. The decision was made not to continue the existing Citizens' Monitoring Program at this time, and have so notified ECU. If they want to continue the 15 existing sites, they can do so.

Linda Rimer clarified that we aren't giving up on the program, it will be revised.

The STAC met April 25<sup>th</sup> and discussed endangered species. They also elected new co-chairs, Brian Boutin and Reide Corbette. The STAC Executive Board will be meeting next month to develop their action plan. We also plan to have a CAC meeting soon as well.

Linda Rimer asked if it would be useful to have someone from the Southeastern Natural Resources Leadership Group to brief the STAC. Bill indicated that it would be, once they decide what project they want to undertake. They have selected the APNEP region as a focus, and are considering three projects.

Todd asked if there were any questions for Bill. Todd noted that it may be useful to have a uniform process for the CAC and STAC to use in reviewing annual priorities.

Tom Allen asked if there would be an opportunity to have a face-to-face meeting between the STAC and the CAC. Bill indicated that we have tried to have an all-hands meeting, each year. He noted that the CAC meetings really helped in keeping the CCMP grounded. He noted that the annual work plan for this year is transitional and next year the committees will be involved in developing the annual work plan.

#### **10:40 a.m. Work Plan Scott Gentry**

Scott reviewed all the grant projects completed in 2011-2012. A handout of these was provided, and Scott also reviewed them on the screen. Scott noted that the bookmark project was relatively small, but reached a large number of students. With regard to the oyster project, eight reef sites have been developed. Jack Thigpen asked about the use of crab pots for oyster reef development. Scott explained how these are being used to build new oyster habitat.

Scott reviewed the CAC demonstration projects. The first was at Elizabeth City Middle School in the Pasquotank River Basin. Scott showed us the plan and photographs of construction. Students were involved in surveying the site as well. Bill noted that the planting occurred just a few days after a hurricane, so the area was flooded by Hurricane Irene.

The oyster reef project is being done by UNC-CH, IMS. They are using abandoned crab pots as a substrate. They are testing different depths and salinity against reef growth. Jack asked how hard it was to get permits. Scott indicated that DMF was actually one of the partners. They collect the traps. The VIMS was also a partner, with Kirk Havens assisting. Todd asked if they do have to get permits from the COE and DCM. Scott indicated they do.

Wilson noted that the permitting of restoration projects was often just as difficult, if not more so, than development projects. He noted that it would be nice to have some general permits to expedite things.

Todd agreed and noted that it was rather hit and miss. He noted that all the rules are designed to deal with development and not with restoration. Linda Rimer suggested that this would be a good thing to do. She asked Wilson if there was any effort to develop nationwide permits. He indicated he would have to ask his ES colleagues.

Jimmy Johnson noted that they are working on this issue through the CHPP.

Jimmy asked how the crab pot reefs are tied down. Jim indicated it was re-bar which was driven into the bottom and hooked into the traps. Jack asked if the reefs so created are sanctuaries, and if you can fish around them? Yes, and yes. Recreational fishermen are encouraged to fish around them and document which species are using them.

Jack noted that Dave Eggleston had created a reef with shell and marl off Hatteras, and is continuing to monitor that reef.

Another project, done through NCCF, is a Living Shoreline at the CMAST Campus of NCSU. Scott showed us photos, and noted that over 40 volunteers planted over 8,000 marsh plugs. Todd indicated that some replanting has occurred each year. Jimmy noted that the first time it

was planted it was just before a hurricane and was pretty much wiped out. Scott noted that it takes a lot of effort.

Another project was the BOB, Basic Observation Buoy, done through the UNC Coastal Studies Institute. The CSI is promoting this one. APNEP funded five such units, which were constructed at high schools after appropriate teacher training. The units were deployed after construction. Part of the process entails having the students design and build the units. The program was begun by NOAA. Jack asked what kind of data they collect. Weather and water quality data. Scott noted that there is a web site, into which they are housing the data. The web site isn't as user-friendly as anticipated, so they are trying to improve that this year. The Coastal Studies Institute is the PI. Jack asked if salinity was being measured. Yes. Jim Hawhee indicated he thinks they are also tied into SECOORA as well.

Another project is the Estuary Essential Program for Libraries. Scott noted that there was a tremendous public response to this program. People involved learned a lot. The project covered a large part of the APNEP region.

The bookmark project was done in collaboration with the NC Division of Soil and Water Conservation. It had an educational component as well as entailing creative design. Jimmy asked if we had any of these. Scott indicated that several thousand were printed, and were provided to libraries across the region. Jim indicated they did have some in the office. Scott noted the printing was done by NCDA, and they were able to come in under budget, since they have their own print shop.

Another project was promoting awareness and stewardship of APNEP's estuarine habitats and shorelines. Scott shared details of the project with us. Tweets and Facebook posts were used. Jack asked if they learned anything about using the social media part of this. He noted that everyone was grappling with this. Jim Hawhee noted that having someone plan the social media campaign was really useful to him. It was good to strategize about the message which APNEP wanted to get out. Bill Crowell noted that the estuarine shoreline workshop presentations were posted on the web. Scott noted that often we do something, and others build upon it. Now the NCCR and NERR is building on this with additional efforts.

Marjorie asked how many coastal management folks, planners and so forth, were engaged. It seemed to her that it was mostly students. Scott noted that Jimmy had attended one, and there was a mixture there, including some realtors, and scientists, and local citizens interested in Outer Banks land use.

Todd noted that the web-based stuff they are doing is being monitored for hits, so it would be good to have those data. Jim Hawhee noted that they are looking at those data in a general way. He explained that the Coastal Reserve could establish a link to APNEP, and they can tell how many folks visit.

Todd noted that the point is to have the feedback loop.

Jack stated that through NOAA and the National Sea Grant Office, they are trying to increase the monitoring of these sorts of activities.

Wilson noted that the SAFMC was definitely moving toward electronic media use as well, having agreed to develop a Council application for smart phone use.

Bill Crowell noted that this is a good area for growth, for APNEP.

Scott noted some additional projects. APNEP is working with the NHP to conduct surveys of significant natural area on the brown water part of the Roanoke. Jockey's Ridge State Park has a community based shoreline restoration project being funded, using student volunteer labor. Shoreline plantings are also being done. Another project is looking at enhancing oyster reefs in tidal creeks, using derelict crab pots. They have received a lot of positive feedback from property owners.

The last project is the AP Peatland Enhancement Project, which is a collaborative effort between ARNWR, GDSNWR and GDS State Park, to use strategic restoration to bring the water table back up.

Todd asked if there were any questions. There were none. Bill Crowell noted that Scott is leaving the program, at the end of the month, and noted how beneficial his work has been on the CCMP. Scott is going to an engineering firm in the Triangle, and will be working among other things on floodplain mapping.

Todd expressed appreciation to Scott for his services to APNEP. He received a round of applause.

#### **11:00 a.m. Staff Presentation of FY2013 Work Plan Dr. Bill Crowell**

Todd asked that we allow Bill and the staff to lay out the plan for us, then deal with questions and any policy issues, after lunch.

Bill noted that the plan is done annually, and accompanies our annual funding application to EPA. The contents of the plan overall, are dictated by the terms of the grant from EPA. Bill noted that he had tried to reduce it in length this year. He has included a description of the projects, and their status. Bill noted that he has attempted to include any leveraged funds as well. Last year, for the FY, the ratio was ten to one, so Bill was quite pleased with that. Pages 8-13 cover the projects which Scott reviewed. He asked for questions.

Marjorie asked about the BOB project. Bill noted that was covered in the next section, since it is carried over to FY 13. Any funding they cut, affects other things as well. Marjorie asked if projects would be automatically expanded. Bill indicated if the Board approves them, they will be automatically extended and won't be included in the current year RFP. Bill noted that the library project was very well received, as was the Shad in the Classroom one, and they received lots of positive feedback.

Jack asked how they defined leveraged funds. Bill explained that it was similar to match, but could come from a variety of sources, including federal funds. Leverage is broader than match. It could include volunteers' time, equipment and other things used on a given project. So it is any funds which support a project that APNEP does not provide. Bill noted that in September, they report it as primary and secondary support.

Bill reviewed the Proposed Projects and Actions for FY 2013. He noted that moving twice had entailed some unanticipated costs. With regard to the Virginia Field Coordinator, he has advised Virginia that they would like to reduce these costs and have Virginia pick up more of them. Todd Herbert attends a lot of meetings in VA, on behalf of APNEP. Linda Rimer asked if he was essentially the "Jimmy" of Virginia. Yes, he is. Jim and Bill noted that Todd was on his

way here, but has had vehicle issues. Tom asked what percent of his time we cover. It is half his time. Bill noted that it has been very useful to have him, as the functional representative of the Virginia southern rivers effort.

Bill noted that \$3,000 may be a bit high, for Board support. Bill noted that they have to go through a big approval process, for the food. He noted that today, it will cost \$200 dollars to keep us here by having lunch on site and also will save additional expenses from having to have those traveling stay overnight. Bill (with Kirk chiming in) noted that the Chesapeake Bay Program STAC members are compensated for their participation.

Bill noted that he may go with Dean and others may go to meet with Kirk and Carl Herschner regarding additional EBM support. There will also be a CCMP workshop, to help develop monitoring.

Kirk noted that he doesn't get any support from the grant to VIMS, but he will abstain from voting on it. Bill noted that it is advantageous for us to have a relationship with VIMS because they are so directly engaged in the Chesapeake Bay Program. Kirk noted that we can avoid some of the pitfalls they have experienced.

Bill moved to Wetland Mapping. He explained that this funding would continue a mapping effort, and use data to build some partnerships. If this doesn't work out, they may come back to the Board to reallocated this funding. He asked Dean to comment. Dean indicated that right now, we have been relying on the NWI and we need an updated map.

Linda Rimer noted that she chairs the federal coordinating council for geographic mapping. She wondered if it would be useful to have someone from APNEP come and talk to that group, since there may be some beneficial input from members of that group.

Todd Miller noted that they have done some work which may be of use.

Tom Allen noted that there is an NWI update scheduled, and there is other information which could be useful as well. Bill noted that he was hoping that we could use the SAV imagery, to do some estuarine shoreline mapping as well. Now that imagery is dated, from 2006-2007. It does give us a nice snapshot. Linda Rimer asked if they weren't working with the SALCC. Yes. Bill Crowell noted that it would be nice to bring Rua or Ken in, and have them update the Board. Their program is really complementary to APNEP. We are hoping that they will use the APNEP program as a pilot, to test some of their initiatives.

Bill moved to programmatic and partnership activities support. He noted that the estimated cost figure is odd, since it reflects some leftover funding.

Restoration Project RFP: Bill expects to do a few projects out of this funding. The RFP would be issued in September, so that we will be ready to go when we know we have the funding. Bill noted that the funds are usually available in October, so we do need to have the RFPs out. Getting a project chosen and through contracting will take 2-3 months, so we need to have things lined up. The funding doesn't always fit well with the need for vegetative planting. Sometimes it has to be done in the fall, after the grant has technically closed. They have had a couple projects where plants were bought, and mulched throughout the summer, and additional funding was used to maintain the plants and eventually plant them.

Todd requested a reminder regarding whether the Policy Board had decided to require a one-to-one match. Bill indicated we had. Todd asked if we should consider requiring a higher matching ratio. Kirk noted that he recalled that we had discussed this could be problematic for NGOs, especially smaller groups, to find a match. Todd Miller agreed that it could be a problem. Kirk noted he thought we had discussed that 1:1 was appropriate, but anything beyond that would be problematic. Bill noted it was mainly for the smaller grants that this was deemed problematic.

Bill noted that he was in a meeting learned of the need for 10,000 trees to be purchased. He noted that the Atlantic White Cedar project would fit well into the peatland project. The proposal is to purchase the seedlings from the NCFSS, and then have volunteers plant them. The amount of money is small, with a large return, and it dovetails nicely with the hydrologic project.

The next project is the 2013 Teacher Institute. This will be in partnership with the UNC Institute for the Environment. Bill Crowell invited us all to come out in July and meet with the teachers. Tony asked for the dates. Bill indicated that he would provide that to us by the meeting end. Jim advised it was July 14-20, at the Trinity Center in Atlantic Beach.

The next item is the BOB Project Expansion. This would expand the program a little bit. It is a way to engage students and collect data. They learned the first year that their sensors were not rugged enough. Bill noted they found that “watertight” and “waterproof” were relative terms.

Todd Miller asked about the value of the data? Bill noted that at the present level, it was more of an engagement project. Scott noted that with all the web potential, it could be more important in the future. Todd Miller noted the FerryMon project, but it was a lot more expensive.

Jack Thigpen noted that they are working on a program for precipitation measurement on the Outer Banks in order to groundtruth models. He wasn't sure the data would be of the caliber they could use.

Bill Crowell noted that they had recently moved into the NRC, across the street. They are really trying to get citizen science up and running. The museum has hired a Citizen Science Coordinator, and we want to work on that relationship with them. Having APNEP in that wing of the museum can be very beneficial to APNEP. Bill noted that for future projects, we will have contractors come and give presentations in the NRC to showcase the APNEP and the projects.

Bill noted that the Shad in Schools project is next, led by the N.C. Museum of Natural Sciences in collaboration with the USFWS and NCWRC. Melissa will be here to brief us during lunch. Bill noted that he wants to build APNEP's presence in this program. Because of the shads' presence in Raleigh, it is a good project. He noted that Scott attended one release this year, on the Roanoke. Last year, one student brought a parent, and was asking good questions. Some of the parents were really engaged by the students and teachers.

Marjorie asked if the fry are marked. Wilson explained that the ones released by the students have not been, but noted that we (SIC Partners) are moving to using genetics as a marker, so we can cease the OTC marking.

Bill reviewed the Estuary bookmark project.

The next project is the SAV monitoring project. He noted that the effort is to acquire more data. The first project produced the first ever comprehensive SAV map for NC. Bill noted that

NCDMF is interested in the SAV for fish habitat, and USFWS is interested for both duck food, and habitat. Todd Miller asked if this would repeat the past coverage. Bill indicated it would. He noted that NCDOT now has a new camera, which we may be able to use, and would hopefully cut the cost. Bill noted that while flying for SAV detection, there are many more variables about which you have to worry, such as turbidity and so forth. Bill noted that we have identified several windows thus far with NCDOT, and in three of them there have been no suitable days for flying the imagery. Todd asked if we are trying to map every five years as a standard. Bill noted that we don't yet have a standard. He noted that they have received a CRFL grant, to ground-truth SAV mapping, working with ECU and other partners. Jimmy noted that the CHPP recommends every five years, but that isn't likely practical right now. Bill noted that this is a start. He noted that APNEP is part of a partnership which is spearheading this work.

Bill noted that the next project doesn't yet have a budget. Jim will provide an update on this, after lunch. Bill noted that we will also hear about the Chowan Healthy Waters Initiative this afternoon. He explained how the project works.

Through Jimmy, we are still engaged in the AP3C. Todd Miller asked if there had been a meeting of that group. Jimmy advised that the Steering Committee is meeting regularly, and some subcommittees are also meeting. Tony asked who is on the Steering Committee. Marjorie, Cynthia Brown, Mayor Brian Roth, Kay Wynn, Pete Benjamin is on it but hasn't been attending.

Bill Crowell noted that his biggest hope with regard to continuing interaction with this project is to maintain interaction with the communities.

Linda Rimer asked about the climate communication project led by Sea Grant. Bill indicated that they will continue to work with Sea Grant, on this project. They met with Sea Grant several weeks ago, regarding that project. They have requested funds from NOAA. Linda noted that she was in a meeting with Rick DeVoe, on Monday, and asked if this was the same \$30,000? Jack Thigpen indicated that it was.

Bill reviewed the additional APNEP initiatives which are not included in the draft work plan, and provided some additional detail on them. Bill noted that they are working primarily with Duke University, providing projects for MEM candidates. One of them will be working on invasive species, and another on social network analysis. Bill noted that they will have more help than they have had in years. Bill noted that working on the monitoring strategy is another component.

Jack Thigpen asked what SNLRG is (Southeastern Natural Resources Leadership Group)? Linda Rimer explained. Dean explained that they have selected the A-P region as their pilot study. Linda noted that Jim Fox, UNC-A, facilitated the group. The high-level federal agency directors had been struggling with what they might be able to do regarding climate adaptation, that would use all their expertise. Out of all of the identified projects, through Jim's process, they identified the A-P. They plan to use a Bayesian Belief Network. Jack noted that it would be good to collaborate with them on some of the NC initiatives. Linda Rimer noted that NOAA is represented on the group.

Bill noted that all of these items are summarized on page 31.

12:04 p.m. Todd indicated that we should take a break, before our lunch arrives.

**Noon Working Lunch: Shad In The Classroom: Melissa Dowland, Museum of Natural Sciences**

Melissa showed the Policy Board several of the videos and noted that they were produced by Art Howard, who is a Friend of the Museum. There are nine videos available for use now in the program. There are videos about the hatchery, about fish passage at Lock and Dam No. 1 on the Cape Fear, and about graduate student research. Melissa noted that the flexibility issue is big, when it comes to releasing the fry, since they don't always know when they are going to receive the eggs and consequently when the fry will be ready for release. She noted they managed this year to work around all the various spring breaks. Melissa noted that there are a number of challenges for the future of the program, including changing regulations regarding fry release based on genetic studies of shad; numbers of shad eggs available for raising in the classroom; and funding to run training and field excursions, tank replacement and refurbishment.

Wilson noted that Karen Curry is married to Bob Curry, chief of the NCWRC Division of Inland Fisheries, which helped in getting a NCWRC electrofishing vessel out to sample adult American shad on the Neuse River. He noted also that the program is inspiring to the students, even if, as in the case of the one class he met in the field this year, they had one hundred percent mortality of their eggs and fry due to equipment malfunction. The teacher and students noted that they still learned a lot from the experiment. They also went to the river anyway, and took water quality measurements, and collected aquatic organisms.

Tony asked what age the students are, and how Melissa selects schools for addition to the program. The program targets grades 5-12, but she has had one Second Grade class. She keeps a list of teachers who wish to participate, and now is requiring applications so they make sure that they get teachers who really want to participate.

Erin asked if there are any at-risk schools involved in the program. They have some.

Linda Rimer asked if there is any way to track the students, to see if any of them choose careers in the natural sciences. Melissa noted that was not easy to do. Some of the teachers have indicated that they do see some changes in their students.

Tom Allen noted that he would like to see some follow-up evaluation by some of the universities. He noted that he can pass this along to some of the folks at ECU.

Marjorie asked about parent involvement? Melissa noted that most classes have parents along as chaperones. She noted that one class actually had a video on WRAL. She noted that they had one shad angler, at one of the releases. He has a middle school son, and has been trying to get his son's class engaged next year.

Bill Crowell noted that Liz Baird, Mike Dunn, and Melissa Dowland's enthusiasm has really been translated out to the teachers, and it nice for the APNEP folks to get very positive feedback in the office. Jim Hawhee noted that this kind of feedback is ready-made, for social media.

Wilson noted that he will be working with Melissa to post a 300-word capsule summary of the program, on the USFWS national web site. Also, he has been discussing with Liz Baird, and Mike Dunn, the possibility for doing live streaming video next year from the Cooperative Winter Tagging Cruise which will take place on the National Science Foundation R/V Cape Hatteras.

Adult and juvenile American shad are usually encountered during the Cruise. The Cruise and all the striped bass tagging off NC and VA next year will be funded via a NC Coastal Recreational Fishing License grant to Wilson and Dr. Roger Rulifson, at East Carolina University.

#### **1:14 p.m. Discussion of FY2013 Work Plan Todd Miller**

Linda Rimer noted that there is nothing in the plan regarding Climate Ready Estuaries. Linda noted that last year, the plan said Climate Ready Estuaries was ongoing. Bill indicated that he can replicate the paragraph.

Jack Thigpen noted that there is plenty of room for APNEP to be involved in climate initiatives. Linda noted that she was okay, as long as we don't give up on this. Scott noted that the peatland enhancement project at ARNWR has climate implications as well.

Marjorie noted that some of the match comes from the CWMTF. She asked if that would come through again. Bill indicated that he had talked to Beth McGee, and she believes that she can provide that match. Bill noted that Clean Water will usually do at least one project in the APNEP area. They will spend \$500,000 easily on the Wake Forest WWTP upgrade. Todd Miller asked if we should list that, in the work plan. Bill indicated that because it is match, and expenditure of the funds in the coming year, it is better to identify the project, in the financial report to EPA, rather than in the Annual Work Plan. They can pull from a couple of projects as they need. Bill noted that he would like to have a project identified up front.

Kirk noted that he was still there, and commended the staff on setting the plan up to link to the CCMP goals and objectives.

Tom Allen suggested that next year, we have a matrix which identifies all the CCMP items, and have the projects pop up somehow. He noted that it was hard to remember all the alpha-numeric designators.

Tony moved, and Linda Rimer seconded, approval of the package. Todd Miller asked for discussion.

Several members indicated that they may need to abstain from the vote, since their institutions could benefit if the projects are approved. It was also noted however, that most of us don't have any span of control over the funds.

Bill noted that the program is supposed to be collaborative, with lots of partners. EPA has the final approval authority, but they listen to the Board's opinion. Tony asked what sort of relationship, given what Brian raised, would warrant that we abstain from voting on the package. Bill Crowell noted that some of the funds do go to certain entities, such as the VIMS and NCDACS. Bill noted that thus far, the EPA has been comfortable with the process we have used. Kirk noted that we need a majority vote of the non-interested parties.

There were three abstentions (Kirk, Brian and Tony abstained). All other members voted in favor.

Todd Miller noted that it was important for all of us to engage with regard to next year. He noted that we need to concentrate our efforts toward really showing results, especially since it is very hard to move the needle these days on environmental issues. Bill noted that the concern was

expressed that we were perhaps spreading things a bit too thin. Bill noted that we need to tie things very closely to the CCMP, next year. Also, we need to identify what ecosystem outcomes we want to achieve. Todd Miller stated that it will be hard to develop indicators for everything. Bill agreed and noted that we have to have some things in place, before some things can be achieved. Some outcomes may require thirty years.

Todd Miller noted that we have an approved work plan.

### **1:28 p.m. Climate Ready Estuary/ Utilities Update Jim Hawhee**

Jim gave us the update. He reviewed the water utilities project, and noted that there is support from EPA in Washington, and also from a contractor in Cape Cod. He gave the project overview. The project employs CREAT, Climate Resilience Evaluation and Awareness Tool. The pilot efforts are in Columbia and Manteo, and build from recommendations include in APNEP's Climate Ready Estuaries report and draft CCMP. The partners include Columbia, Manteo, APNEP, EPA, and the Horsely Witten Group. Jim showed us the map of what the coasts will look like, at varying levels of sea rise. Manteo has a little high ground, and Columbia is on the edge. That is why they were chosen. Jim gave us some high-level information on the WW system in Manteo. Manteo has 9 miles of gravity sewer, 3 miles of force main, 8 lift stations, and tertiary treatment. There were major flaws in the state GIS information. There have been substantial recent investments. Linda Rimer asked if Jim had provided feedback on the errors in the GIS information. Yes, he has. Jim noted that Manteo's operations record is pretty good. Jim noted that there was an 8-foot storm surge associated with Hurricane Irene. He also provided an overview for the Columbia WW system. All they have is an outline of the service area. Columbia was just missed. There is characterization underway by the project team. There is very little GIS information available. Jim noted that with a sample size of two, he found the system wanting in terms of the data available.

Jim gave us the project status and timeline. Project scoping is completed, and work is underway with Columbia and Manteo. He reviewed the areas of current focus. Completion of the analysis is anticipated in fall 2012. Final reports are due in winter 2012. Jim noted that they will explore the risks and consider how much they might want to invest. The tool will give the option of running through some of these scenarios. Jim noted that the approach here is bottom up and he likes that very much. In 2013 and beyond, APNEP hopes to bring this work in-house, and have Jim these routinely as time and resources permit. They also want to consider how to incentivize communities to do this kind of planning.

Bill Crowell noted that they have discussed incorporating the findings of these studies, into their CAMA Land Use Plans and other local planning documents.

Linda Rimer asked if Columbia and Manteo are included in the Community Rating System. Jim noted that Sea Grant had done a great study on that and he was sure we can find out. He noted that this was more tied to the homeowners insurance. Linda Rimer thought it was tied to the community.

Linda Rimer asked if CREAT works for drinking water, as well as wastewater. Yes, it does. Linda asked if the Environmental Finance Center, at UNC-CH, was a possible partner. Jim hopes to develop that relationship. Tom Allen asked if it does stormwater. This tool does not evaluate that aspect. Todd Miller noted that the Community Rating System provides up to 40 percent discount, but most in NC have very little discount, so there is a huge opportunity there, in terms of incentives.

Tom Allen guessed that two-thirds of the towns east of US17, have no GIS coverage. Jim noted that the only reason Manteo has it is because of a past contractor. Due to dated information, some of the infrastructure is mapped in the wrong place.

Jack Thigpen provided an update. He noted that their national office had provided some funds a few years ago for climate adaptation. They worked with Plymouth and produced a report which Jack provided to us. He noted the people with whom they had worked, including Jessica Whitehead and Gloria Putnam. Jack described how they proceeded with the work. He noted that even before this latest controversy, they were cautious about using the term "climate." Jack noted the maps provided with the report, and noted that the focus was on storm events, although they realize that SLR will just exacerbate these. He explained the VCAPS tool and the diagram it produced. He noted that he was skeptical initially, but the tool was pretty easy to use in actuality. When their WWTP is flooded, it is inaccessible essentially. During flooding, water comes up and gets in the pipes, pumps are shorted out, and so forth. They were in a quandary as to what to do. The estimates for relocating the plant were \$20 million, and they don't have that kind of money. This exercise enabled them to determine some things which will be effective in the interim, and give them some breathing room. The VCAPS enabled some things which are doable and useful. Jack asked that we contact Gloria Putnam in their office if we had other questions. Jess Whitehead just had a baby last week, so she isn't currently available.

Jack briefed us on a second project. This one used a facilitated process to identify useful tools for coastal communities. Jim Hawhee, Bill Crowell, and Gloria Putnam met a couple of weeks ago. They will select a core team, which will have local representatives on it as well. They will do a needs assessment. The first year will identify what they need to do, including looking at the kind of tools Jim is testing. Also, Tom Allen and his crew at RENCI are also being brought in. They are looking at some coastwide projects, which will be useful, in terms of providing graphic tools, and also Michelle's expertise as a facilitator. Jack indicated that he would keep us in the loop. Let him know if we are interested in being on the core group.

Linda Rimer recommended that we contact John Dorman, because they should have their stuff ready for the coastal counties. Jack said he would definitely be involved and Spencer Rogers is involved. Jack indicate they will focus on flooding, and saltwater intrusion, and stay away from using the term "climate change." They want to focus on the things that are needed anyway, regardless of climate change.

Jack provided us a flier on NC's Local Catch initiative. He noted that he and Jimmy Johnson both sit on the advisory board for this project. This is seeking to help local catch groups find innovative ways to market local, fresh-caught seafood to local markets. The television program does a great job. Jack stated that if this was on television, he would watch it. The web site is on the top right-hand corner of the flier. Jack has DVD's for those who need them. Jack noted that with regard to Linda Rimer's concerns about APNEP getting short shrift on climate change, APNEP is going to be in the middle of things going on.

Jim Hawhee noted that as he has had more time, he is working on developing communication resources. He wants the Board to be able to access the information. He showed us the mailing lists for which we can sign up, at the upper right-hand corner of the web site. They are going to start offering some new services. They are re-working the web site and he noted that he won't go into the technical details. They are going to change the portal a bit. They have re-branded the news items, and Jim encouraged us to check this out, with regard to issues in the sounds. Soundings is going from a quarterly newsletter to a blog format, with a new article once every

two to three weeks. They plan to highlight APNEP projects, and he solicited articles from Policy Board members as well. He encouraged us to prepare articles. Bill agreed and noted that they would like for us to highlight our partnership activities, as well as collaborations with APNEP. We can do these ahead of time, or after the fact. Jim asked that we call him, and he can discuss format, and when things will be published. This is something for us to consider. One will be coming out soon on the brownwater NHP survey.

There is an Ask an Ecologist page, which is even better now that they are tied in with the museum. The idea here is to keep the content fresh. There is a link to the regional map. There is a section asking for ideas. Jim indicated that we would see this, probably Friday or Monday. If we have recommendations, please let him know.

Jim noted that they don't post excessively on Facebook, but they do put things there, including some of the Shad in the Classroom correspondence, and an article from Meg Lowman. Todd Miller suggested that one thing to consider is that when guests write something, they have to provide a qualifying statement about official positions, etc.

### **2:00 pm Chowan Healthy Waters Initiative Update Todd Herbert**

[This item was not done since Todd didn't make it to the meeting due to vehicle issues.]

### **2:00 p.m. Old & New Business Todd Miller**

Tom Allen asked Jim to go to the ECU web site, and Jim did so. Tom noted that next Thursday, at ECU, with multiple co-sponsors, there will be the third annual hurricane workshop. A lot of NC coastal communities were devastated by Hurricane Irene. The Director of the National Hurricane Center will be there, to talk about forecasting. Others speakers will be there as well. The detailed agenda is on the web site, and the registration deadline is tomorrow.

Bill Crowell noted that a lot of things partners are doing, are also posted on the APNEP calendar. There is a SLR workshop coming up at Nags Head, and other items.

Bill Crowell noted that for those interested, we can stay for a quick tour of the NRC.

Jack asked David if he can share anything regarding the work of the Fish and Wildlife Study Committee and the potential for the NCDMF to be transferred out of NCDENR. David shared the four recommendations from the committee. The two directors, NCWRC, NCDMF, and the Commissioner of Agriculture, would be directed to do a study. David noted that this is proposed legislation, so nothing has yet been passed. There is some language for the MFC to be disbanded, and the merger to take place, next year. The thought is to merge things into one commission. All of that is in one piece of legislation. Jack asked if the MFC could go away. Yes, David indicated. Both DENR and the governor oppose it. David stated that what DMF does is very different from what NCWRC does. We will see what happens with it. Todd Miller noted that other elements are being downsized. Some of the committees are being downsized. David noted that they actually support some of the reduction in committees, but not the removal of the commission.

Todd Miller noted that the CRC is supposed to go from 15, to 9, and eliminate the three at-large seats. Todd noted that the forestry seat was left only because that is the current chair. Todd noted that perhaps a more select group, will be more engaged. Instead of every county having

a representative on the EMC, they would reduce it to ten. There are reductions in the various levels of representative. Todd indicated that all of this is in the Boards and Commissions Bill. David indicated that it is out there, and we can get it. They are waiting to see what sorts of responses they get to these proposals. David shared some additional aspects of the proposals. Todd asked if DENR was asked for any advice.

Bill Crowell asked David to brief us on the proposed SLR bill. Todd indicated that any public institution could only use projections, based on the last 100 years of data, which limits to linear projections, and not any modeling. Todd and Linda Rimer noted that it would preclude the use of any other numbers.

Bill noted that we intend to continue to work on inundation and flooding issues.

### **2:15 p.m. Notice of Next Meeting (Set Date)**

Bill Crowell asked if we would consider November 7 and 9, February 13, and May 13, for future meetings. Dean noted that November 14 is the 25<sup>th</sup> anniversary of the program. Todd noted that we need to check with the members who are not here. He asked that we hold the dates for November for sure.

2:20 p.m. Adjourn

Optional Tour of Green Square/ Nature Research Center Jill Pafford