



Albemarle-Pamlico National Estuary Partnership

Scientific and Technical Advisory Committee

February 11, 2015

East Carolina University, Willis Building Auditorium,
300 East First Street Greenville, North Carolina 27858

MEETING NOTES

APNEP STAC Members Present: Kirk Havens (VIMS), Robin Dennis (USEPA), Hans Pearl (UNC IMS), Don Field (NOAA), Sid Mitra (ECU), Tom Allen (ECU), David Kimmel (ECU), Ana Garcia (USGS), Michelle Moorman (USGS), Heidi Wadman (USACE), Jessica Whitehead (NC Sea Grant), Heather Deck (PTRF), Bob Miller (UWSP, retired), Rich Whittecar (ODU), Christine Avenarius (ECU), Jud Kenworthy (NOAA, retired), Burrell Montz (ECU)

APNEP Staff Present: Dean Carpenter, Bill Crowell, Dana Gonzalez, Jim Hawhee, Jimmy Johnson, Marie English

Call to Order, Welcome and Introductions

Science and Technical Advisory Committee (STAC) Chair Burrell Montz covered meeting logistics.

Approval of spring (April 2014) and summer (July 2014) meeting notes. Motion to accept previous notes. David moved. Heidi seconded. Unanimously approved.

Burrell welcomed everyone and went through the agenda items mentioning a survey of managers in the region that includes questions such as- If and how environmental managers use science? What are the constraints? The STAC committee is here to help with the science so we need to know how that science might be used, what managers are looking for, and we will lead a discussion on this.

Burrell reviewed the agenda (see bold headings below which correspond to agenda headings).

APNEP Update, Dean Carpenter

Dean thanked Burrell for arranging the meeting location.

FYI: January 30 passing of South Atlantic Landscape Conservation Cooperative director Ken McDermond. SALCC is one of 30 LCCs in the nation. The South Atlantic one was one of the first. APNEP interacts with SALCC staff because their mission is similar but at a grander scale.

APNEP project coordinator Lindsey smart resigned on August 15 to pursue a doctoral degree at NC State.

Tom Allen is attending as a representative of the APNEP policy board. There are two STAC representatives on the policy board but there is no mandate for policy board members to serve on the

STAC, so it is very nice that he is here. In January he began a two-year term to lead the policy board. He is interested in APNEP being a science-based partnership.

Tom spoke on his vision for APNEP: Welcome to ECU and Greenville. He has served on the policy board for six years and has seen its evolution. The political winds are changing and we will see quite a bit of shifting for APNEP, which may mean working closer with universities. He has written reports for the STAC and is very familiar with the CCMP. He wants to have stronger engagement, participation, and recognition for STAC activities and he will propose ideas for this later. This includes a program to recognize scholarship in the APNEP region: scientists, citizens, stewards, etc. There are a number of things happening that could use support from APNEP. Tom expressed thanks and said he will be taking plenty of notes.

STAC members that have resigned and have been added- Dr. Adam Gibson got a faculty position at the University of Oklahoma so the STAC needs formal resignation from him. Founding STAC member Robin Dennis is retiring from EPA this month. Robin, who will stay on for his full STAC term, adds a lot to the STAC's atmospheric sciences portfolio.

A reminder: The terms of one-third of STAC members come to an end every year. They will get an inquiry on whether they are interested in serving and re-upping. Results will be announced at the STAC summer meeting.

Dean welcomed Sid Mitra, who is attending his first STAC meeting.

The summer STAC meeting has been scheduled for July 29.

APNEP is planning to hold a fourth symposium on November 3 at the New Bern convention center. Staff will be soliciting members to give abstracts.

APNEP has scheduled the next policy board meeting for Friday, March 27. The location will most likely be in Raleigh.

Updates on APNEP engagement for STAC member involvement, Jim Hawhee

Tools available for members to tie in with APNEP.

1. APNEP website. The committee tab has a STAC area including membership, meeting agenda and notes, presentations, publications, list of alumni, implementation workgroup assignments. The workgroups also have their own pages. This is a way to stay up to date with workgroup-sign up for listserv, to view supporting files through Google drive, reflects status of different workgroups
2. Email. If members did not receive the email regarding new APNEP positions, please click on the mail logo on our homepage. This is a sign-up for the APNEP listserv, which includes general program updates and is meant for a broader audience. There are also smaller listserves for workgroups
3. Social media accounts- Facebook, Twitter. APNEP is in the middle of the "I heart estuaries" campaign. Instagram and Flickr have photos available for your use. APNEP appreciate photo credits but you are most welcome to use any of them. The RSS feed is an easy way to sign up for and get news clips straight to your inbox. APNEP's Delicious tool has an archive since 2011 with over 2000 articles.

Staff is happy to write letters of support for research activities that support Comprehensive Conservation Management Plan (CCMP) actions.

Currently, staff is recruiting for two short-term positions. Both internships will be located in Raleigh. APNEP is also co-hosting an AmeriCorps position with Pamlico-Tar River Foundation (PTRF) in Washington.

APNEP Updates continued, Dean Carpenter

APNEP highlights for July 2014: Staff contributed to boat-based SAV surveys. APNEP gave a grant to Dr. Joe Luczkovich (ECU), which provided support for two survey periods. One survey is referred to as the Quibble survey where APNEP replicated the protocol from a 2005-2010 survey by Quibble & Associates of 17 stations. One of the Quibble stations should become an APNEP sentinel station. APNEP is working to design a boat-based sentinel component of SAV monitoring to supplement the aerial component. This would include a series of stations spaced out among the system. APNEP piloted the idea by intensely surveying the perimeter of Albemarle Sound in 2014. This was a tremendous effort. The boat goes along 1 meter isobaths with sonar and takes readings continuously and every 300 meters a video point measure is taken. The plan is for APNEP's SAV monitoring & assessment team members to discuss where stations should be placed in 2015. Once stations are established they will be visited at least annually, acting as ground truth to aerial surveys.

What is the sense of SAV trends? Dean replied that trends are yet unknown. This is the first systematic approach to get a baseline so in the future a trend can be detected.

Hans asked if other samples were taken during the SAV monitoring. Dean replied that no water quality data was taken. Once we sentinel sites are established, there will be an opportunity to tie the project with other metrics because it would be a good opportunity to collect relevant data. One of the endpoints is going to be SAV compared to nutrient contents.

In May 2014 APNEP completed second survey of SAV using aerial photography. APNEP attempted to complete the survey in 2013 but unfortunately there were clouds.

August 2014: Contaminants workgroup kickoff meeting

September 2014: Aquatic Nuisance Species Management Plan (ANSMP) steering committee meeting was held, NCDENR has lead on this plan, South Carolina and Virginia already have plans but this is first time for North Carolina. There were two SAV boat surveys in September- each one with at STAC member: Wilson Laney then Jud Kenworthy. Audubon meeting was attended along with a number of APNEP partners; APNEP held a policy board meeting at Coastal Studies Institute.

October 2014: One more series of SAV surveys was conducted with Kendall Smith from FWS. APNEP emerging contaminants and metals teleconference took place to discuss two actions: risk assessments of emerging contaminants, and metals in sediments. APNEP contaminants workgroup had a meeting.

November and December 2014: North Carolina wetlands program plan stakeholders held a meeting at Research Triangle Park. Water resources coordination workshop meeting was held in Raleigh that involved multi-scale indicator coordination.

January and February 2014: STAC executive board teleconference.

Upcoming events include a SALCC blueprint (strategic plan) revision workshop.

Changes for APNEP, Bill Crowell

Things are changing rapidly. The policy board and STAC leadership have met a couple of times over the past two years to be a broader steering committee for APNEP because the implementation groups are not

running yet. One thing that has been discussed in these meetings is finding the appropriate host for APNEP. APNEP has been hosted in the North Carolina Department of Environment & Natural Resources (NC-DENR) since 1987. APNEP staff has been moved around different divisions and offices within NC-DENR. One option discussed is finding a public university as partnership host. Bill has been having conversations with partners, and staff has done initial internal strengths and weakness assessments, and has discussed how to give autonomy to the program, which is what EPA has wanted for a number of years. Back in the spring, NC-DENR management was opposed to moving APNEP and now they are supportive, so staff are exploring that pathway. Last week, the governor proposed moving some divisions from NC-DENR to North Carolina Department of Cultural Resources, which puts APNEP in limbo. Most of the CCMP actions are regulatory, but on the management side APNEP has natural resource management partners. It remains to be seen what will happen to North Carolina Division of Marine Fisheries. The North Carolina governor's upcoming budget will provide insight on see how these changes will be addressed. This separation may need to be a separate action it could be a drawn-out process. APNEP will be housed within NC-DENR until we find a university host so there is a lot up in the air. These changes dramatically impact how APNEP is able to implement the CCMP. APNEP will continue with developed workgroups, ones that have not been kicked off may be put on hold.

The APNEP project coordinator position that has been vacant since August now has been approved to be filled. Two new positions are also supported. APNEP will most likely find a contractor instead of filling ecosystem analyst position in the near term.

What does this mean for APNEP's relationship with EPA? There are 28 National Estuary Programs (NEPs) housed in different places. APNEP's policy board is supposed to set the direction not NC-DENR, university, or non-profit. If you were to go in with a University host, good models would be North Carolina Water Resources Research Institute (WRRRI) and North Carolina Sea Grant. Duke might be an option but right now there are no NEPs in private universities.

There is a change related to EPA headquarters. APNEP's long-time manager at EPA Headquarters retired and her replacement decided to take early retirement too so staff don't know who we will be talking to.

Only part of APNEP's funding is from the EPA, correct?

Bill replied that APNEP's operating budget is from EPA, with an in-kind project match from North Carolina Clean Water Management Trust Fund (CWMTF). CWMTF's focus has changed: match used to come primarily from water infrastructure upgrades as opposed to acquisitions. Some will still apply. The match APNEP uses when moving to a new host will be the biggest concern. Currently APNEP's match primarily comes from CWMTF. The other match is from NC-DENR in the form of Jimmy Johnson's time.

Has the decision to move been made?

Bill noted that APNEP has gotten to the point where NC-DENR would allow a change in hosts. What is not known however are all of the drawbacks of being housed in a university. What would university overhead be? Physical space at a university is also an issue. He is talking to people at the department level, college level, and system-wide level to see what the possibilities are for hosting APNEP. One thing to remember is that APNEP has to be housed within its watershed.

Kirk asked if APNEP may be housed in a Virginia University. Bill replied that moving out of Raleigh would be hard on the current staff but these options are on the table. Are you contacting marine labs, field labs, etc.? Bill said yes.

Burrell noted that today's agenda is meant to be dominated by discussion periods. She encouraged people to speak up about priorities for the upcoming term.

Committee Discussion on STAC action plan, Burrell Montz

Dean noted that a formal approval of the plan will not occur today because feedback is required by all STAC members. The approval will be completed online after all members have had time to review.

Burrell stated that there are three parts to the action plan. Under the mandated activities, each proposed task will be addressed. STAC also needs to identify indicators so they can manage these projects as they proceed.

Hans asked about the word “project” and its meaning. Dean noted that the purpose of the workgroups is to implement the CCMP through actions involving mitigation, engagement, etc. over a ten-year period. One of the first charges of the workgroups is to decide what activities they want to take on in order to move the actions forward.

Hans noted that a project can mean lots of things and often involves time. It could require lots of time for APNEP to do these projects. The workgroups could be agents that provide information. Nutrient area example- focus on criteria development, maybe once the TMDL is set, the project would be the on-the-ground thing. STAC would decide the most efficient project and show how the system is expected to respond based on the science. The workgroup would appeal to implementation committee that they want a project funded.

What is the carrot for partners to be involved in workgroups? APNEP is helping their mission. A workgroup is forum to get science off the ground.

Second is to evaluate effective information management systems, basically being a resource. The best practices database would be done mostly through workgroups.

The ecological models database task would be completed by staff with input from STAC along with the decision support workgroup that would be cross-cutting with this task. Robin noted that it is difficult to have a database of models because people need to know the models well to do this.

Michelle asked how much of this is already being done by the SALCC and the NC Coastal Atlas. Dean replied that part of this project is to search what resources are already out there. This database might just be a place where we put links or reference others, but because people go to the APNEP site looking for models, we want to be able to direct them.

The database would be more for scientists than citizens and a lot of the work on the database should be completed by the decision support workgroup.

Robin mentioned that we should add a word to the action that infers that we are pulling together sources. The word collate will be added after develop and enhance. Burrell asked if people are comfortable adding this word? Unanimous yes.

The action is to develop requests for proposals. Kirk noted that these should complement the workgroup that put it together. Proposals should include a significant science component relevant to the CCMP or address a STAC critical emerging issue.

Will APNEP be distributing funds for these proposals? Funds would come through APNEP but it may not be solely APNEP funds because it might also be partner funds. For example, a workgroup applies for a NOAA grant and then APNEP distributes.

Hans noted that APNEP has a policy for STAC members who might get funded on one of these projects. What is the conflict of interest?

Kirk suggested constraining the scope of STAC's review for RFPs. Dean changed the language.

Review and evaluation of proposal. Referencing a Chesapeake Bay Program model from Kirk on approving the review criteria. This is being worked on, waiting to see this.

Mandated assistance and proposed tasks.

Coordinate APAMon- upon joining STAC, members are assigned a monitoring and assessment team. Are people okay with this? Yes, no comments.

Burrell asked if there were any more questions or comments on tasks under proposed #1.

#2- Track key indicators of ecosystem health.

Comments, questions?

Dean provided a little more info on this task. Staff is supporting the next version of the APNEP ecosystem assessment. The 2012 ecosystem assessment featured 24 indicators, not because they are most important but because APNEP had a volunteers to write these chapters and there were high quality regional databases available. Staff wants the next version to be more comprehensive, including updates and expanding on those trends. Staff will contact the original authors to give them the first cut for the original metrics. Given the great spread of expertise around the table, staff hopes there are other indicators that we can hopefully engage the STAC in their completion.

#3- Develop decision support system

Dean asked what would a decision support system look like? Staff is thinking of making the 2012 ecosystem assessment more accessible. Tentatively for the symposium staff would like to develop some kind of report card. The ecosystem assessment is targeted to technical managers so a citizen friendly reporting scheme for the ecosystem is a report card. Each indicator would have a summary in this report. The ecosystem assessment didn't say what indicator values were good and what values were not good. This is the first venture in setting reference points in order to give the citizen an idea of what's healthy and what's not.

Are there any comments on this action?

Does that mean coming up with a threshold?

Dean replied that part of ecosystem-based management is re-evaluating the indicators. Our CCMP from 2012 did not identify targets. What is healthy? What can APNEP achieve over a decade? For many metrics there is no government or regulatory standard but APNEP can still have a goal. We ask scientists, we have a conversation amongst other stakeholders as well, then use this feedback to create health benchmarks and report on the trends.

Don asked if there was any effort to replace Lindsey Smart with someone who has GIS skills. Dean replied that for the ecosystem analyst position, GIS is a substantial skillset staff is seeking. Jim replied that as staff increases, there is a desire for a project manager and then someone with an analyst skill set. Dean mentioned that he wants someone to lead in the upgrade of maps in the ecosystem assessment.

Burrell asked if there were any other comments on action plan.

Robin noted that budget cuts are coming for many partners so tracking indicators may be tougher since many things are already hanging by a thread.

Dean replied that this plan was developed in mid-2014. APNEP has started these priorities de facto in 2014. Whenever APNEP starts the design framework, there will be a reference to what monitoring networks are in existence. There is always the threat of additional monitoring networks expiring. We inherit what monitoring is already going and APNEP will encourage where gaps are identified. When 300,000 acres of oyster habitat was closed because 80 water quality stations were no longer funded, APNEP made sure recreational stations were kept open by funding 30 of those stations. The role that an engaged monitoring group can play is being able to articulate maintaining monitoring using NC-DENR reports and APNEP products. APNEP must demonstrate that those products are being used.

Burrell noted that when members start flushing these things out, they will be working on subtasks.

Dean mentioned the new model of STAC where most of the work by the members will be done through workgroups. Staff hopes this is a better way to tap expertise. Once things get going, workgroups will be meeting mostly through webinars and online.

Not asking for approval, but how about an okay? The plan got a unanimous thumbs up.

Implementation update, Jud Kenworthy and APNEP Staff

Jud noted that workgroups are an opportunity where STAC members can have a significant contribution. Some workgroups have been delayed but we have some operating so we are going to hear from Jim regarding the status of these. That discussion will be followed by one on how to get the other workgroups started.

Dean will be adding columns to the STAC webpage with everyone's workgroups assignment and monitoring assignment.

Jim Hawhee gave an update of the contaminants workgroup. In 2013 APNEP made comments to North Carolina's Division of Water Resources (NC-DWR) on nutrient criteria. In the initial draft, estuaries were omitted. APNEP offered to look at nutrient waters. Over time negotiations between APNEP, EPA, and NC-DENR led to APNEP taking on the initiative to develop criteria for the sounds. The launch of the contaminants workgroup was also the launch of nutrient criteria development. STAC members Hans, Sid, Heather and Michelle are on the contaminants workgroup. The workgroup has met twice and things are moving. Much of the preliminary discussion has been on the resources and projects needed for criteria in the sounds. We are seeking resources from EPA to do statistical studies and legal issue studies through Duke University policy students, and Michelle found some funding through NASA. Nutrient development attacks two actions, and the other two actions are addressed by the emerging contaminants group. Staff are trying to recruit a solid nucleus of people for contaminants. Workgroups are tasked with finding external funding with the potential for APNEP match. We have met twice formally. Next will probably be a conference call. Our first meeting had 20 people and it was good to have people in a room to gel at first. Who is the workgroup leader? Staff envisioned people would step up to leadership roles. Sid, Tom, and Michelle have pulled a lot of resources. Logistics and facilitation has fallen to Jim. All groups are working a little different.

Sid asked about the different levels of work needed.

Jud asked how many people have not had an up and running workgroup.

Someone asked Sid what emerging contaminant means.

Sid explained they are candidates on a list based on toxicology and that it is extremely challenging to come up with risk assessments, detectable concentrations, and how to legislate them. It is really an administrative definition of emerging. They are emerging as threats to water quality.

Dean gave an update on the SAV workgroup. He noted that it was based on an existing group. Their first meeting was to get people re-acquainted, develop a two-year action plan, and work to establish a baseline and the extent of resource. They want to do a revision to the 2012 action plan, develop indicators and metrics and thresholds for SAV, and create a guidance document for regions with regards to SAV. They haven't done a lot of protection work and seek out examples in the region. They have done some restoration activities. The next meeting is in April.

Jud noted that you can clearly see that this workgroup didn't have problems getting started, and hoped they can increase participation. If you reference those contributing to the original SAV partnership, this is a small subset. Dean stated that workgroups had a target number of 10 individuals by design, and staff chose ten of the most involved members. As a first cut, staff took individuals who were most interested in moving forward and then at the first meeting we asked them who else should be participating.

Jud asked what is the priority of the SAV group.

The ecological flows workgroup was discussed briefly. Mike and Scott are STAC members on this workgroup, whose next meeting is rescheduled for April.

Bill listed the status of the other workgroups:

Invasives: soft start

Oysters: started

Policy: delayed

Shoreline: soft start

Sid asked whether there is an air quality workgroup. No.

Why are some delayed? Bill replied that staff don't want to start something staff can't support. Priority starting? Opportunity driven.

Jud noted that some people raised their hands for being in workgroups that haven't started and asked what these people should be thinking about. Bill said that if members have interest, they are welcome to join any other workgroup. Staff was careful doing member's primary assignments so staff might ask members to return to their assigned workgroup once it starts but if members want to help with others, please do.

Jim updated members on the status of the Education and Engagement workgroup, which met at the Estuarium in December. There were about 25 attendees. The environmental education community is already a reasonably tight-knit group. Staff received recommendations for people to invite to the group. The workgroup spent the afternoon briefing on everyone's activities and on things where they are looking for support. This was illuminating. There was a lot of enthusiasm for another meeting. John McCord with CSI will be sharing his video library. They met with GCSP, which has proposed a reasonable project for a kayak launch access. There are two upcoming summer teacher institutes. Jess Whitehead is the policy board representative in this workgroup. No action plan but good discussion. EPA model grants and smaller local grants were discussed and while no one who picked this up to run with it, staff are hoping in the future that workgroups can find external funding. Next meeting, the workgroup will determine some short-term tasks and metrics for measuring environmental education.

Dean mentioned that staff are allowing workgroups to run at their own pace. Champions are needed to get more workgroups running because their facilitation takes much staff time.

Burrell asked if it would be worth it to prioritize the rest of the workgroup launches.

Bill replied that at the moment it is not worth the effort. Once staff is increased, we need to see where their expertise lies. The reality is that the workgroups are opportunity driven. If STAC wants to take the lead on any groups staff could shepherd them, but it is important for APNEP to do what we do well instead of doing too much.

Tom noted that the policy board has discussed combining workgroups, but they don't want to push that. Instead they are supporting soft starts or delays to the workgroup launches. Bill gave shorelines as an example of a soft start. There have been people talking and conversations about the shoreline issues, but no official committee meeting yet.

Jimmy gave an update on the oyster workgroup. He said that an oyster workgroup has been meeting for a number of years. When the CCMP was released, the workgroup geography was rearranged and they agreed to incorporate the CCMP actions. The oyster summit will be held March 10-11 and is sponsored by North Carolina Sea Grant, APNEP, North Carolina Coastal Federation, and NC Catch.

Jud asked what would be happening at oyster summit. Bill noted that the issues identified in the oyster blueprint will be discussed.

Jud asked for questions.

Hans stated that some of these workgroups might end up talking a bit. For example, ecological flows is inseparable from water quality and contaminants based on what you see at the end like algal blooms and hypoxia. It would be good to have the groups remain modular so they can plug into other groups and act in synergy.

Dean mentioned that the purpose of the general STAC meetings is to discuss crosscutting technical issues.

Bill said that eventually a member from each committee will join the implementation committee.

Dean reminded members that the current Governor's executive order says that the NC-DENR secretary appoints this committee.

Jud asked for any other questions or thoughts.

Discussion Session on STAC-Sponsored Surveys of APNEP Stakeholders, Jessica Whitehead and Burrell Montz

Burrell listed some of the questions they are hoping to answer with this survey. Who are the users and what do they need? What kind of science do managers need? Jess and Burrell will be leading a survey to answer these questions if members think this is a good use of time.

Burrell addressed the group with these questions: Is this a good idea? What should the goals be? Who do we gear it to, and at what level?

1. Is this a good idea?

Kirk mentioned that he has done a similar survey in the past and found that managers wanted to know if their management actions have had an impact. His group also found a need for resource managers to better understand uncertainty and that educating them on this is important for decision-making. They were looking at realigning monitoring programs in the Chesapeake Bay Program watersheds because budget cuts brought the need to the table of state environmental secretaries. The secretaries wanted to

know which actions are having an impact. Keeping monitoring data allowed them to be able to delist waters. The difficult part was the reallocation of funds. Kirk was asked to talk more about uncertainty. He replied that it was really a conversation about modeling uncertainty and the understanding that there is a level of uncertainty. When making a management action, we have to have some level of impact, what do we expect that action to do. If we expect to go on a trajectory, where do we expect to be in five years, where is your uncertainty around that action? If you project a 50% reduction in a ten-year plan, can you say that there will be a 25% reduction at five years? If you only get to 15% then should you kick out that management action and try something else? It helps managers to understand the level of uncertainty around an action, and when to make the decision that a different action should be taken and how to communicate that to the public.

Christine mentioned bringing in town and county managers to assist. Tailored answers are required that they can break down to the public. It would be great if they knew they could get something out of participating in the survey efforts.

Bob mentioned working with agricultural agents because they are on the ground working with farmers.

Sid mentioned addressing loading from homeowners and how the survey could incorporate the public. Burrell noted that we are not looking at the public. Sid asked if there is someone who deals at this level? Town planning?

Bill suggested asking managers: What information can we provide you to provide your citizens?

Dean noted the question: What scale do you manage? We could have different surveys for different levels. Are there particular areas of concern- contaminants, SAV, oysters, water quality?

Regarding ecological concepts of flow for water withdrawal, the legislators set up another committee to address on the aspect of that and NC-DWR was mandated to create this committee.

When they showed the NC-DENR assistant secretary what full managing involved, he was shocked.

Heather noted that NC-DWR has plans that include what they want, yet what they have failed to do is prioritize those needs which is important because funding and staff are so short. It would help to think about where the greatest needs are because NC-DWR has already laid out what is needed.

Burrell noted that those needs might already be being met somewhere. Are the plans used?

Kirk asked about the best mechanism to get stuff to people.

Bill mentioned the Watershed Stewardship Network set up by WRRI.

Bob said you can get a lot of information from people who don't know what they're doing. Where do they get information? For example, some with farmers who are maintaining ditches, don't know how to help with erosion.

Christine stated that instead of broad questions it would be good to ask people about their current practices with questions like: What are YOU doing? Where do YOU usually get your information? Dean added to Christine's comment with questions like: How do you use science in day-to-day decisions? Gut versus science? Do you have a process?

Jess Whitehead agreed and provided an example of a survey on weather and climate related to fisheries. They asked fishermen what decisions they are making. For example, ask: How do you decide how much fuel you need? Instead of asking: What kind of climate help do you need? People draw a blank.

Tom noted that this survey could be testing grounds for products like report cards.

Dana asked about a user friendly way to access data. She noted mapped versions of data can be the easiest way for them to approach data. It would be good to find out how they want information, in what format?

Jim noted the importance of IT infrastructure and design. Any sort of marketing, outreach, communication, this is a good time for us to think about how we might retool these things.

Rich noted how it might be important to keep the survey short.

It was noted that Jessica, Burrell, and Christine have a lot of experience with surveys and focus groups.

Jud mentioned the coastal habitat survey. Rachel Gittman sent postcards for a survey. Hans will ask her about the response rate of using the postcards.

Hans asked about the range of the NC-DWR plans.

Heather noted that it is a range. There is a lot of low-hanging fruit that would be a source of information for them. Who completes those plans? One woman doing non-point source planning, she gathers it.

Jess gave a summary so far: We want to figure out the best way to reach local, county, and regional managers. The topic will determine what level you should go to.

What are the most important concerns? Depends on survey responses and who responds.

Michelle mentioned water-quality-focused surveys.

How do you use science information vs. a specific area of science information? Is our goal how they use science or what kind of water information do they want?

Bob noted that he thinks we want both: What are you using and what don't you have?

Michelle asked about the focus of the survey and if we should pilot it both ways.

Rich asked if town managers will be dealing with anything related to the estuaries.

Flows, water quality, etc. Planners, farmers, etc. They would then have a cross section of how the groups get and use data. Don't survey across disciplines, rather be specific surveys per discipline.

Jess went back to Tom's point noting framing a survey within a workgroup or logical grouping of people so that it could drive a report card eventually.

Michelle noted that it might be interesting if it is focused on a topic and if you did develop a couple topic-focused surveys. It would be interesting if answers were similar across survey groups.

How important would this other area of information be for you?

Ana asked about the notion of functions and the possibility of a topical organizing framework.

Jess mentioned having a focus on regional entities, how to reach managers, information used to make decisions. She suggested starting with focus on logical groups or group of workgroups.

Burrell asked if it is worth it for some STAC members to spend some time on this survey. Would the results be helpful to this committee? It was noted that the survey could be good public relations for the STAC. Is it worthwhile for this group to pursue? Yes, there were many head nods.

Need to investigate if success is achieved by adding more materials, if people use this information, and ask managers, if you had this information how would you use it?

Jim mentioned other organizations that reach out. North Carolina Sea Grant has some capacity. NERRS recently did a survey with policy makers. First lets make sure we have a hold on everything that's been done before continuing. Jess noted that the NERRS study was focused on training needs, saying that we do want to be sensitive to survey overkill. Is there an opportunity to join forces, for example sentinel sites?

Heather noted to think about managers who, through the work they do, might have the most impact on the region. Can local planners and developers have an impact in the APNEP region or is it those at the state level? We need a survey aimed at those that have the best opportunity to make an impact. There is a need for the knowledge of the Neuse and Tar-Pam TMDLs to be with managers. Do local decisions or state decisions have more of an influence?

Bob noted starting with one issue and one group as a pilot. The pilot might get great feedback to help make the survey bigger in the future.

Dean agreed with Heather, noting that to make the biggest impact we should think about decision makers who are most influential. Staff did a similar exercise with the CCMP.

Burrell asked everyone if the results would be useful? Yes.

Jess noted that if we focus on workgroups, then she would like to run iterations by workgroups.

Burrell noted that she can use free ECU survey software.

Action Items, Jud Kenworthy

The STAC action plan is now out for approval.

Dean will post committee lists.

If members are on a workgroup that is inactive and want to join another, feel free to do that. Keep in mind that when a new workgroup is activated, members might get assigned to their original workgroup.

Survey info will be condensed and released for future input.

Committee Discussion and Action, Jud Kenworthy

In the future STAC will schedule semiannual meetings. Even though STAC members are prioritizing as workgroups, it is good to come to general STAC meetings. In July we will have more reporting on workgroups and activities that may involve formal presentations and discussions.

APNEP might start rebooting monitoring and assessment teams.

How will an agenda and participation be developed for the November conference? Is that an action item? Bill noted that APNEP will be putting out a draft for a contract for someone to work on the report card. Hans asked if the conference had a theme? Dean mentioned the boat analogy. Charting a new course, embarking on a voyage, what's next?

Hans asked about the interaction of climate change and how to manage things in a conventional way.

Jim mentioned that APNEP plans to host a summer sound series with public talks. This is a way to engage the Raleigh core of operations. Staff is hoping to schedule three Thursday afternoon talks around 4 pm. This would include a sit down with Brian Mallow, the science comedian in the Daily Planet. Staff would record these and put them online. If you have a creative twist on research you have been engaged in let Jim know. Staff is in the process of soliciting names and the first one is in June. This is a good chance to engage the general public and NC-DENR managers. Staff is looking into broadcasting the talks to both UNC's Institute of Marine Sciences and Coastal Studies Institute.

Jud asked for other closing thoughts or comments.

The meeting adjourned at 2:15 pm.