



SAV Team Meeting - SAV Communication Strategy

Teleconference/WebEx

2:00 – 3:30 PM

November 16, 2018

MEETING NOTES*

*Notes by APNEP (KE, TE, SF, HJ, and TM), with compilation and editing by TE.

Team members in attendance:

Anne Deaton (NCDMF)
Matt Duvall (USDA - NRCS)
Kathy Herring (NCDOT)
Jessie Jarvis (UNC-W)
Jud Kenworthy (NOAA - ret.)
Brandon Puckett (NERR)

APNEP staff in attendance:

Dean Carpenter
Bill Crowell
Kelsey Ellis
Tim Ellis
Stacey Feken
Heather Jennings
Trish Murphey

Guest:

Abigail Brewer (UNC-CH)

Summary:

Tim Ellis: Welcome/Introductions. APNEP is excited to focus on SAV outreach/communications. This team had a lengthy discussion on this topic at its last in-person meeting in June. We will talk about that first today and then Abigail Brewer will talk to us about her project.

To recap, the SAV Team has been talking about outreach/communications for over a decade. In the early/mid 2000's, an SAV poster was created to support the NC Coastal Habitat Protection Plan (CHPP). A spreadsheet was also created by an SAV Partnership outreach subgroup (APNEP will post that spreadsheet to the team's Google Drive). This effort identified and prioritized

target audiences and informational products. Later, there was a campaign by NCWRC to create and put up educational signage about SAV at boat ramps, and members of this team provided substantial guidance at that time. NC Sea Grant also created a coastal SAV [Fact Sheet](#) and collaborated with APNEP on online information regarding [Hydrilla](#). Beyond that, not much has been done by the SAV Team in a while regarding outreach/communication. Other ideas discussed by this team in the past include the creation of a viral YouTube video (e.g., scoop the poop campaign), K-12 materials targeting younger audience, expanding on APNEP economic valuation study to focus on more ecosystem services provided by SAV besides carbon sequestration, a PSA/TV video, and magazine articles.

At the June-2018 meeting, this team talked a lot about outreach but there was no interest by members to form a subgroup. Since then, APNEP has been looking for opportunities to advance SAV outreach/communication. Abigail Brewer, APNEP Intern for Summer 2018, attended the team's June meeting and became interested in the issue. We are excited that she is interested in focusing on the topic for her master's thesis, but we'll talk more about that in a moment. At the June meeting, there was discussion about a lack of awareness in low-salinity areas, creation of one-pager for legislators, and the need for an outreach/communication strategy. The main challenge that was identified is how to get people interested/motivated without a crisis.

Stacey Feken: In 2015, APNEP also created an SAV [lesson plan](#) for the Scientific Research and Education Network (SciREN).

Bill Crowell: The Roanoke Aquarium also has a soundfront display about SAV.

Tim Ellis: The Core Sound Waterfowl Museum has video about SAV.

Anne Deaton: UNC-IMS has done some Coastal Recreational Fishing License (CRFL) funded projects related to SAV outreach/communication, including surveys for incorporating stakeholder knowledge of the status and value of coastal habitats into education, outreach, and conservation initiative (APNEP will post the 2017 final report to the team's Google Drive) and coastal ecology [lesson plans](#) on SAV and more.

Tim Ellis: Introducing Abigail Brewer - She was the Summer 2018 APNEP GIS and Communications Intern. Prior to internship, she was an Exhibits Research Specialist at the Museum of Life and Science in Durham. She received undergraduate degrees from UNC-CH in journalism and biology, and she is currently pursuing a graduate degree in strategic communication with an emphasis in science communication at the UNC School of Media and Journalism. Today, she is looking for feedback, direction, and advice from the SAV Team about her project.

Abigail Brewer: For my thesis project, I am proposing some kind of SAV communication plan that APNEP can implement in the future. There are two options - traditional outreach vs. a social marketing campaign. The difference is that a social marketing campaign focuses on

changing behavior, as opposed to just conveying information. In this case, a social marketing campaign might be beneficial because of the general lack of appreciation for SAV in the Albemarle-Pamlico region, so providing some kind of persuasive element could be helpful for getting people to care. Social marketing campaign elements are – defining problem, goals, target audience, barriers – like traditional outreach. In previous discussions with APNEP staff, the possibility of limiting an SAV campaign to a few counties in Outer Banks and/or limiting arguments to just boaters, fishers, etc. I’m looking for thoughts from the team today on developing a target audience, as well as any priority issues with SAV.

After defining a target audience, there is a research component that is generally qualitative – interviews. I could potentially interview people who have done other similar types of campaigns and can also interview members of a target audience. After defining the problem/audience, the next step is to brainstorm strategies and messages. Implementation would occur after the end of the thesis project, followed by an evaluation.

There are a couple NEPs that have done social marketing projects, which can also be viewed as outreach projects. Tampa Bay Estuary Program – [Be Floridian](#). The main goal of this campaign is to decrease the amount of fertilizer people use on their yards during the summer. Their website provides videos, links, homeowner toolkits, etc. It is informative but also a little more persuasive in nature. Puget Sound Partnership – [Puget Sound Starts Here](#). This campaign is more explicit in messaging – provides facts about the estuary and information on ways to take action.

Discussion Questions

Tim Ellis: Abigail has come up with a list of questions for us to discuss today to help provide some direction and focus for her thesis project. First question – what are the challenges for SAV in the Albemarle-Pamlico region that we might want to convey through an outreach campaign?

Jud Kenworthy: Maybe we should condition that statement you made earlier and attributed to me and someone else, if there isn’t a problem then how do you motivate people. Likely, there is a problem and it is probably greater for low salinity SAV. High and low salinity SAV are almost entirely different systems. Low salinity SAV are facing more issues. Could narrow focus to low salinity SAV, which is facing more imminent threats - algae blooms, low dissolved oxygen events are signs of that.

Anne Deaton: I agree with that and would add that there is less awareness of SAV in low salinity because you can’t see them as well. There are more issues with boat entanglement in these areas and this may also be a less environmentally aware audience, which can be a challenge for a communication campaign.

Jud Kenworthy: Dean coined the term “invisible grass” – out of sight, out of mind is pretty much the concept there. People can’t see SAV because of the conditions in the water. Water

quality from eutrophication and sediment loading could be possible themes for a campaign but may be harder to communicate.

Abigail Brewer: To recap, you would say the biggest problems in those areas are nutrient loading/algal blooms and boating?

Jud Kenworthy: Not so much boating, more nonpoint sources of pollution and sediment loading. Poor water clarity - can't see the grass and those conditions are also negatively affecting SAV. Problem is already documented through other parts of the ecosystem – in particular, algal blooms in these rivers.

Brandon Puckett: I don't disagree with anything that's been said but be careful with the sediment loading message. For a long time, the message has been to decrease sediment loading, but marsh ecologist would tell you that marshes are sediment-starved. The messaging is tricky – how to balance those different aspects?

Anne Deaton: That's related to stormwater runoff – instead of sheet flow into the marshes, the flow is more channelized and ditched, which is more the issue.

Brandon Puckett: I agree, but it's something to be aware of.

Bill Crowell: In a social marketing campaign, you need to identify a targeted action. Do we want people to know what SAV is and why it is important, or take an action to protect the habitat? Two very different approaches. Action means something more like a stormwater campaign but raising awareness about habitat and its importance is a whole different approach.

Jud Kenworthy: I agree, good point. If you could make the argument that low salinity SAV are threatened and generate a story to highlight the awareness, including that it isn't totally disconnected from the rest of the SAV ecosystem. Try to champion some interest in terms of showing the threats without completely disconnecting from the rest of the ecosystem. Part of the message is that if one part of the SAV ecosystem collapses, then it is going to affect many other parts of the ecosystem as well.

Abigail Brewer: Do you all think that it's important to create something more information-based, or are people ready to receive a more persuasive approach?

Jud Kenworthy: Could both be done at the same time?

Abigail Brewer: They could, but focus could be more informative/educational if needed.

Tim Ellis: In terms of strategy, is a traditional outreach approach more helpful? Or is social marketing – changing behavior – more helpful? One concern that I expressed to Abigail about a social marketing campaign for SAV in NC is that because there is still an overall lack of awareness/appreciation, a persuasive strategy may not be effective – people won't care if SAV

disappears. Jumping next to Abigail's second question, are there behaviors/attitudes that we can target through a social marketing campaign that would have a positive impact on SAV?

Matt Duvall: I think it's worth taking the social marketing approach. Education with action is a higher bar to achieve but is likely to have more impact. Initial sense is a good idea. Regarding the second question, I would think about connecting the fate of SAV to the fate of local fisheries. Since this is partly an urban stormwater issue, an inland audience would be appropriate (e.g., many Raleigh residents enjoy and value seafood).

Anne Deaton: I agree with Tim that although I would love to get out a message of what people can do to fix it, first we need to get people to love SAV. We're not there yet. At this point, I would suggest an informational approach as a Phase I. Phase II is what we need to do about it. Phase I could include reaching out to local residents, such as through social media. Bogue Sound may be a better area to target first because we know we have SAV in the sounds with some nutrient problems and there is a large population – achieve success there and then grow the campaign out to other areas.

Brandon Puckett: Actionable items in Bogue Sound – prop scars are an issue in that area.

Jessie Jarvis: There are some stats about seagrasses you can use to get people's attention. Use wow factors to hook people and then transition to less interesting, more local information.

Anne Deaton: Underwater photos/video of juvenile fish/invertebrates in seagrasses would be very popular and would gain attention.

Tim Ellis: Pertaining to rest of Abigail's second question, has there been any previous research done concerning individual's behavior/attitude towards SAV?

Anne Deaton: In the CRFL project I mentioned earlier (see above), UNC IMS did extensive surveys of social attitudes toward coastal habitats in NC. Joel Fodrie is contact.

Jud Kenworthy: Over the years I've known several people who have worked at the NC Aquarium. That could be a venue for getting your message out to many people. If there's a way to conduct this exercise where something could be placed in the NC Aquarium and it would be visible, it would have tremendous scope in terms of the people that could potentially get this message.

Abigail Brewer: In one of my previous meetings with APNEP staff, Stacey Feken talked about the Aquariums as a potential venue. If that's something APNEP wants to pursue, it could be useful.

Stacey Feken: We wanted to have this call between the SAV Team and Abigail to first get ideas and possible directions for an outreach campaign before considering options to implement a campaign. Dia Hitt from the Roanoke Aquarium is on the APNEP Engagement and Stewardship

Action Team. I know they do a lot of research and she could be a source to talk to about what they've done and potential for future collaboration.

Jud Kenworthy: If you can establish a presence in the aquarium relating this resource, being both informative and persuasive at the same time, it would reach so many people. Also, there would be the opportunity to get feedback from the public to improve future outreach efforts. It is important to place this somewhere that will endure, instead of pamphlets. You could probably find a ton of examples of this from Florida.

Anne Deaton: Don't the aquariums already have seagrass on display?

Jessie Jarvis: The Fort Fisher Aquarium has a tank with seagrass, but the information is only about fish. Signage could be added about grasses.

Tim Ellis: Has any education on the CHPP been done through the aquariums?

Anne Deaton: No, not directly. The aquariums would be a good way to get the message out. Another idea would be to work with UNC-TV (PBS). The [Sci NC](#) and [Sci Tech Now North Carolina](#) shows cover environmental topics like oysters and living shorelines. I don't know if something like that costs money and who pays for it, but I haven't seen anything about SAV on the show yet.

Abigail Brewer: There was a [video from students in the UNC Marine Science Program about synthetic seagrass](#) on UNC-TV. APNEP also had a student from Wake Forest University express interest in doing a video on SAV, but I'm not sure where that stands.

Tim Ellis: To clarify, there was fine arts graduate student from Wake Forest that reached out to APNEP about doing a documentary on NC estuaries as a master's project. He was interested in a similar call-to-action message but through a documentary approach. We discussed narrowing the focus of the project to SAV and offered our assistance with connecting him to partners on the SAV Team to acquire any footage he needed (e.g., field, interviews). Due to a busy class and work schedule in 2018, the student decided to table the project until 2019. APNEP will update the SAV Team if this project develops any further.

Trish Murphey: I had brief conversation with Susan White of Sea Grant and she informed me that UNC-TV is looking for more outdoor education shows, but you must provide the funds to produce the material.

Abigail Brewer: My deliverables are more like social media, pamphlets, exhibition, etc. A video could go in the plan later but is not within the scope of my graduate project.

Tim Ellis: Abigail will be doing the necessary research to develop a targeted SAV campaign, which includes strategies for successful implementation. One strategy could be to identify the types of outreach products that would be most effective at achieving the campaign's goals. If a

video of some sort is identified as necessary to implement the campaign, then APNEP can work with partners on the SAV Team to make that happen.

Bill Crowell: So, what I hear is that the team first wants more of a traditional outreach campaign that focuses on awareness, then transition to a social marketing campaign on actions that groups can take to protect SAV.

Tim Ellis: Besides prop scarring issues, are there other behaviors that we can identify today that affect SAV health? With Kitty Hawk Bay, this team discussed how things like lawn fertilizer contributes to nutrient loading and promotes growth of invasive SAV species.

Brandon Puckett: A lesson learned from NERR's work in the living shorelines arena is that no matter how strongly we promoted the environmental benefits of living shorelines, property owners ultimately cared more about cost, durability, effectiveness. Messaging strictly for environmental benefits in an SAV campaign may not be the best way to go.

Jud Kenworthy: Along the lines of the behaviors, there are a lot of behaviors that humans do that affect SAV. Locally you could nail those down, but generally it's hard to do. There are two considerations looking ahead in terms of "we don't have a crisis but could have a crisis." First, the likelihood of success for restoring SAV is globally about 37% - less than a coin toss. Second, it is extremely expensive to restore SAV. People need to be aware that we need to do everything we can to protect the SAV we have, otherwise it's going to be very expensive to fix. Those concepts could be placed in layman's terms for a call to action.

Tim Ellis: So, the consensus seems to be for more of a traditional outreach campaign. Moving to the last part of Abigail's second question, are there barriers people face regarding SAV and what might motivate them to act? The lesson learned from living shorelines that Brandon mentioned is one example.

Anne Deaton: Another problem with SAV, unlike oysters (people can eat) and living shorelines (protecting property) is what do people get out of protecting it? This maybe goes back to economic valuation of SAV - motivate people to care about SAV protection by placing economic value on the ecosystem services provided by SAV.

Brandon Puckett: As Jud pointed out earlier, we're dealing with an out of sight, out of mind issue. Economic value is something most people easily understand. A strong case for the economic value of SAV in NC can be made, but the relationships between monetary value and ecosystem services are more indirect.

Tim Ellis: In the [RTI economic valuation study of the Albemarle-Pamlico region](#), SAV value was only assessed in terms of carbon sequestration. APNEP recognizes the need for an economic valuation study for all the ecosystem services provided by SAV in the region, especially since economic information is critical to bolstering support for resource protection. The information necessary for this type of study is out there and just needs to be compiled/calculated for NC.

One of the largest and most direct economic connections is through the service that SAV provides as essential habitat supporting NC's valuable recreational and commercial fisheries.

Bill Crowell: The difficulty is that SAV has a societal benefit and not a personal benefit. Oysters have personal and societal benefit. Fishermen may recognize the value of SAV but not compared with other habitats like oysters. It's a hard argument because the benefit to the individual citizen isn't there – many people see SAV as an inconvenience. Conveying the economic component could be challenging.

Matt Duval: I maybe off base, but I see a lot of value in the marketing campaign of "Got to be NC" done by the NC Dept of Agriculture and Consumer Services. If I travel somewhere along the coast, I want to be able to buy local seafood. I think you've got a pretty good hook there to a large audience with the food connection, between what people want to eat and what the ecosystems can provide. The biggest consumers of those products also aren't along the coast. Unless you're going after septic systems along the coast, the biggest source of those nutrient issues are people in urban watersheds/upstream. Many people in areas like Raleigh are concerned with buying local seafood.

Bill Crowell: It goes back to who the audience is and the behaviors you're trying to modify. It might be difficult to focus just on SAV as habitat because you also need to focus on its connection to clean water - both good water quality and good habitat support productive fisheries. The ["Save the Crabs - Then Eat Them" campaign](#) comes to mind.

Matt Duvall: That's why I suggested earlier that the audience is maybe not the group that Abigail originally came to the table for. Fishermen are more likely to know about SAV, except for prop scarring. We know that a very big challenge is the behavior of urban residents. People care about coastal ecosystems but don't always behave accordingly. Social marketing needs to raise awareness, but it goes that extra step and asks people to change behaviors.

Tim Ellis: In the past, this team has talked about the need to engage stakeholder groups that are going to be champions for SAV. One group we identified are recreational and commercial fishermen. Even though many fishermen are already informed about the importance of SAV, it is that understanding that makes them likely one of the biggest potential champions of SAV protection, including through reaching out to other less informed stakeholders. Also, coastal residents are usually more vocal about protecting coastal ecosystems. For example, marine fisheries management in NC hasn't historically gotten the same level of interest from inland communities as coastal communities. This moves us to Abigail's next question - are there specific populations to target in terms of demographics (location, age, etc.) as well as psychographics (hobbies, attitudes, beliefs). We've talked about this some already - inland vs coastal, low salinity areas vs outer banks communities. Due to Abigail's brief timeline to complete her thesis, limiting the focus of the campaign is important.

Bill Crowell: As a reminder, APNEP can't lobby. If the target audience is the general assembly, for example, then we can't approach them.

Stacey Feken: Even with an informative/educational approach?

Bill Crowell: It would be tricky.

Anne Deaton: I thought we could give one-pagers to legislators?

Bill Crowell: As long as funding isn't attached, it isn't considered lobbying. However, you must be careful with how it's received. APNEP partners can lobby though.

Tim Ellis: We hit on this at the team's last meeting in June – engaging with NGOs and other groups that have ability to convey our message.

Anne Deaton: So, if the message for a campaign is established, then what are we asking from legislature – just to be informed? There needs to be an ask because we're currently not monitoring SAV comprehensively because of lack of funding.

Bill Crowell: To recap, we've talked about urban populations and Bogue Sound communities for the regional focus. We also discussed that people who consume finfish/shellfish or other hobbies/actions would define a target group.

Tim Ellis: Seafood consumers would cover a lot of different groups, including fishermen (hobby/action) and coastal residents (regional focus).

Trish Murphey: What about duck hunters? Ducks Unlimited has a wetlands campaign.

Tim Ellis: That would certainly be a group to target as a champion for SAV protection. Smaller, local duck hunting and bird watching groups would be good as well given that the region is a destination for migrating waterfowl enthusiasts.

Bill Crowell: We also had placemats developed in partnership with NC Catch. We would need an appealing placemat that talks about seagrass.

Stacey Feken: Different groups also have placemats in the cafeteria of the legislative building.

Tim Ellis: The SAV Partnership talked in past about an informational card that can be mailed out with fishing licenses or placed in seafood restaurants.

Bill Crowell: The [Be Floridian](#) campaign had things at Lowes where you would buy your fertilizer.

Jud Kenworthy: The [Integration and Application Network \(IAN\)](#) at the University of Maryland Center for Environmental Science specializes in this kind of communication. One of the people

who originated that program was a seagrass person. They have a lot of experience, real time examples, contacts.

Stacey Feken: Great suggestion. We'll have to look into that as a strategy for rolling out information about our next ecosystem assessment (e.g., report card).

Tim Ellis: Thank you all, we'll be in touch.