Atlantic Coastal Fish Habitat Partnership

Steering Committee Meeting

October 22-23, 2012
Radisson Plaza-Warwick Hotel
220 South 17th Street, Philadelphia, PA

Draft Agenda

Monday, October 22, 2012

1. **Welcome and Introductions,** *C. Powell* 8:30AM

2. **FWS-NFHAP Project Solicitation FY13,** *J. Devers* 8:45
   - Overview of project review committee recommendations
     - Consider project ranking for approval

3. **Conservation Mooring Project,** *C. Boelke* 9:45
   - Overview of the opportunity
   - Consider proposals
     - Determine next steps

   Break 10:30

4. **Operational Funding,** *E. Greene* 10:45
   - Update on MSCGP grants
   - Potential Foundational Support
     - Overview of the seeking foundational support process
     - Consider approving the list of potential grant makers to contact
     - Consider approving content for the grant maker letter

   Lunch 12:00

5. **NOAA Community Based Restoration Grants,** *E. Greene* 1:15
   - Status of the Program
     - Consider participation and discuss next steps

6. **NFWF Funding Opportunities,** *E. Greene* 2:15
   - Overview of Keystone and Bring Back the Natives Initiatives
   - Overview of ACFHP Involvement to Date
     - Determine if/how to participate and steps to establish focal species

   Break 3:15

7. **Endorsements and Related Activities,** *C. Powell* 3:30
   - Regional efforts
     - Consider alternative options
   - Letter writing campaigns and informal letters of support
     - Consider participation

8. **Bringing in New MOU Partners,** *E. Greene* 4:30
   - Consider approving process for Bringing in New MOU Partners

9. **National Fish Habitat Partnership,** *E. Greene* 5:00
   - Overview of Activities and ACFHP Involvement

Recess 5:30

Tuesday, October 23, 2012

10. **Science and Data Working Group Update** 8:30
    - Status of Species-Habitat Matrix Publication
    - Summary of Habitat Assessment efforts
    - Update on Northeast Climate Center involvement

11. **Implementation Plan,** *various* 9:15
    - Presentation of Implementation Plan Tasks
    - Consider approval of the 2012-2013 Plan
      - Team breakouts to discuss next steps

12. **American Rivers Darby Creek Project,** *S. Lindloff and L. Craig* 11:15

13. **Other Business** 11:45

Adjourn 12:00

Atlantic Coastal Fish Habitat Partnership
Steering Committee Meeting Notes
April 24-25, 2012

FWC-Fish and Wildlife Research Institute 4th Floor Conference Room
100 8th Ave. SE, St. Petersburg, FL 33701

Steering Committee Participants: Kent Smith (FL), Wilson Laney (FWS-Region 4), Jimmy Johnson (NC and APNEP), Mark Rousseau (MA), Dawn McReynolds (NY), Chris Powell (ex-officio), Russ Babb (NJ), Chris Boelke (NMFS), George Schuler (TNC), Caroly Shumway, Marek Topolski (MD), Julie Devers (FWS-Region 5), Rachel Muir (USGS), Patrick Campfield (ASMFC), and Cheri Patterson (NH) .
On telephone: Stephanie (AR).

Partnership-at-Large Participants: Bill Shadel (ALS), Michele Dionne (WNERR), Lance Stewart (CT), John Buzzer (PA), Jake Kritzer (EDF), Patrick Geer (GA), and January Murray (GA).

Staff: Emily Greene

Tuesday, April 24, 2012

Welcome and Introductions, *K. Smith* 8:40AM

Kent convened the meeting and noted that we had a great field trip yesterday.

Kent gave us an overview of logistics (restrooms, vending machines, veranda, etc.) and potential lunch venues. He asked that we do introductions, since we have some new people on board.

Caroly announced that she, after two and a half years, has a new job as the Executive Director of Merrimack River Watershed Council. Julie noted that Callie McMunigal would be replacing Paul Pajak as the new USFWS NE Region representative on the Steering Committee and that she was here as Callie's proxy.

Kent noted that he was pleased to have several of our partners present at the meeting, specifically Michele and Bill.

Communications and Outreach Update, *E. Greene* 8:50

Emily noted that the ACFHP SC has three subcommittees: Outreach, Science and Data, and Finance. The Outreach Subcommittee is composed of Tina Berger, Chris Powell, Peter Steenstra (Craig Brook National Fish Hatchery, in Maine), and Deb Reynolds (Atlantic Coast Joint Venture Outreach Coordinator)

Emily noted that she had set up two panels outside the door, which were prepared by the OC. One is general. The other is more detailed. These are super lightweight, and can be easily used by Emily as Coordinator, or by any member who wants to use them. Emily will be happy to ship them to anyone who wants to use them. This is something which we postponed until the Strategic Plan was done.

Emily noted that she updates the website, and she reviewed the materials available on the site. She noted that she sends out breaking news to us as well, a total of five last year. She also provides information about funding opportunities, and posts the links on the site. She also sends announcements out to us about these. She asked how many of us are sending funding opportunity announcements on to partners? Almost all of us are. She asked how many of us are looking for funding opportunities on the web site? Stephanie indicated that she has. Emily noted that we should all feel free to send her items for the web site, or for distribution to the entire partnership. She noted that she is willing to send out more frequent Breaking News items, if we send them to her.

Caroly noted that Emily was doing a great job on communication.

Emily noted that she is routinely providing copies of the Strategic Plan, and fact sheets, to Tina Berger for distribution at trade shows. The Strategic Plans go like hotcakes.

Our project in the ACE Basin, received a "Ten Waters to Watch" designation, from the National Program (working with Ryan Roberts, the Communications Coordinator). Ryan has the ability to get these out to a broader audience. Also, Emily will be working with Ryan on the Sport Fish Celebration 75th Anniversary. We were just recently awarded a joint grant, with two other partnerships, the EBTJV, and SARP. The initiative is called Blue Water to White Water.

Michele indicated that she would be willing to do an update on the Shorey's Brook Project. They just reported to another funder and have received some more funding. Michele noted that the Land Trust which sponsored the project is totally jazzed by the project.

Emily noted that Chris has done a great job, making hats, vests and shirts. Caroly asked if he had any here? Emily did not bring them. Kent noted that George and Emily both have vests. Kent noted that Chris has done a great job. Chris indicated that hats were ten dollars, and shirts are $35.

Emily indicated that she will be attending the Board meeting, in Portland Maine, and they are considering a field trip to the Shorey's Brook site. Also, she will attend the AFS annual meeting, and participate in a symposium: The National Fish Habitat Partnership—Building Relationships to Enhance Conservation of Aquatic Ecosystems. She indicated that we should stop by if we are there.

George asked about Tina going to the trade shows, specifically, do we track which shows she attends? George thought it would be good to track which sectors have seen our stuff. Emily and Kent agreed that was a good idea.

Kent noted that we have encouraged as much outreach as possible, to get the word out about ACFHP. The Partnership also does this. He noted that any opportunity we have to distribute our outreach products, and RFPs. Emily has done a terrific job. Also, if you see an opportunity which would help expose us more, please let us know. Some of us are freer to travel than others. Kent noted that he's not able to go to every out-of-state function, so he needs to call on others to serve that ambassadorial function.

Michele noted that there is a second conference on fish passage, going on at UMASS, in June, so that might be a good one.

Caroly suggested that it would be good for Emily/Kent to provide a list of activities.

Wilson asked if Michele was talking about Fish Passage 2012? She was. Julie noted that you could find it online by searching "Fish Passage 2012."

Lance Stewart noted that there are some anti-establishment groups, working in some counties.

Chris asked if Emily was going to do an update on the Species-Habitat Matrix publication? Yes, later today.

FHP Performance Evaluation Test Drive, *E. Greene* 9:05

Emily explained how this process works. Currently we receive $90,000 a year, from USFWS, which we use to fund on-the-ground projects. There is a new bill in Congress, which would increase the funding for all NFHAP partnerships, nationwide. This is the third year the bill has been introduced, but it hasn't yet passed, in part because it is perceived as new funding. If that passes, there will be a new allocation procedure. One of the components would be how a partnership has performed in the past year. They tested the process, this year. The questions and responses are in our briefing books, and we can see how ACFHP fared, as well as how we compared to other partnerships.

Emily reviewed the results with us. She noted that the most prominent conclusion overall is that the older partnerships, which have been around for while, tended to score better than newer partnerships. They also decided that they will try to reduce the subjectivity in the survey in the future in part by allowing the FHPs to review their initial conclusions and provide some feedback before providing final scores.

Michele asked if ACFHP is the newest partnership? No, Emily advised we were approved in 2009, and there have been a half-dozen approved since then.

Emily noted that we nailed measures 1, 3 and 4. She thanked Julie and her awesome project criteria team, for making sure that our priorities are addressed. Measure 3 is due to our awesome Steering Committee for making sure that our projects address threats. Measure 4 was that we have more than a 2:1 match. She noted it is a credit to the Steering Committee that we nailed these.

Ones that we didn't fare as well on: Measure 2, effectiveness measures were not clearly described, so it was difficult to determine how project outcomes were being determined. We were told to better describe what specific changes to the habitat indicate that the project was successful. For example, what percent of shoreline change is considered to be successful.

Caroly noted that they have this on the "to-do" list. Julie is on that subcommittee. Michele stated that we should require the applicant to provide these. Julie noted that the National Science and Data Committee is working on assessment measures.

Kent noted that we need to have a clear statement of what is expected.

Chris noted that this partnership has had only two rounds of funding to date. We have spent a lot of time in planning. When we are as old as the older ones, we will do better as well.

Kent asked Julie when our next RFP will go out? Julie noted the schedule from last year, and noted that she would like to get the RFP out earlier this year. We as a group need to decide when to send it out, this year.

Kent noted that we probably need some sort of statement which goes into the RFP, for this round.

Russ asked how this would work. Should we seek out an expert, who will provide assessment measures for us to include? Kent stated if you in your group have the expertise, that is good, or you can ask someone on your staff.

Julie noted that she would cover this in her presentation.

Stephanie indicated that she wanted to comment on the project effectiveness measures. She noted that American Rivers has been administering some grants for EPA, in the Potomac Highlands Region, and she can pass along the measures which EPA specified for outcomes. She noted that there is a lot of confusion about the term. Grantors have not been specific. She wanted to assist in developing some meaningful metrics. She will pass these along to Emily and everyone for their consideration.

Kent asked for any ideas or thoughts.

Emily noted that we didn't score well on Measure 5. They said project selection criteria could be more comprehensive. She indicated that this was probably due to the way she responded. The other partnerships just cut and pasted their criteria, whereas Emily summarized. Since we had based ours on other partnerships, she doesn't believe that we need to make any changes here, other than what we just discussed. She read the criteria, but she felt that we could meet this one okay and no changes are needed.

Measure 6: The comment here is that a little more focus on collaborative efforts would improve the score. Emily noted that we need multiple joint projects. Michele asked about collaboration at the joint partnership level? Emily indicated it was either, or. She stated that once we begin implementing the projects specified in the multi-partnership proposal, we will get a higher rating.

George asked how the other partnerships fared, and how they responded? Emily shared the SARP response. They talked about their relationship with the EBTJV, and us, and also about their relationship with the SALCC, in getting their flow project funded. Another FHP was able to demonstrate work with another FHP on the same stream. Michele stated that SARP gave examples of how they are working with their partners. So, we can highlight how we are working with our internal partners, as well.

Michele noted that this is a bean-counting element to this, and it is surprising how many you can find, once you start listing them. That element has to be undertaken by the partnership, and you can't expect your applicants to track these.

Kent noted that we have tried to work closely with the LCCs. Tim Breaux will be here tomorrow to discuss how we have been doing this. We have reached out to other organizations, such as the USGS. We can also say how we have related to the Chesapeake Bay Foundation. Kent noted that we were not far off the mark on these. Our average score wasn't that far below the older partnerships. The

reviewer, Steve Perry, gave us a lot of accolades for being as young as we are. Emily noted that we were on par, from an average perspective, with the other partnerships.

Caroly noted that it will help us prioritize if we get some of these other tasks done.

Mark asked how often the reviews will be done, annually?

Kent advised that Steve said not annually, rather every three to five years. Kent noted that there are some ways we need to improve, such as the LCCs. He wondered how effective things are, when you begin piling partnerships up. The multi-partnership grant which we have will help to make sure that we are not competing with each other. These are sister partnerships and we need to work with them.

Wilson asked if we weren't well integrated, between Emily and Julie, in both the SALCC and NALCC? Yes, we are. Emily and Julie both serve on committees.

Measure 7: Emily noted that we were told our response didn't provide a clear indication as to the level our partnership is using science-based resource condition assessment and/or analysis to identify its priority conservation actions. She had noted our assessment, which was done by Moe Nelson et al., and our species-habitat matrix. She noted that the National Science and Data Team had released their assessment, last year, and released a report which color-coded habitat conditions. Now they are looking to the regional FHPs for assistance in further refining this. We also need to create our own specific assessment. We will discuss this later today. We need to move to a more specific, GIS-based approach.

Chris asked if the other, older partnerships have more staff support?

Wilson noted that SARP does, through their full-time Coordinator, Scott Robinson, and a former employee (Marilyn) who has since retired. Also, the USFWS SE Region, Fisheries and ES field staff, are providing GIS and other support.

Chris asked about the EBTJV? Julie indicated that they are not in as good a position as SARP. They don't have a full time coordinator, although Callie McMunigal (USFWS) does assist them.

George noted that we have discussed this in the past, but part of the problem is that they have not been very clear about what they need.

Caroly asked if the National Science and Data Committee has a web site? Yes, it is Fishhabitat.org.

Kent noted that we need to be cautious here not to duplicate the efforts of others. He noted that we had done a fair job in the past, but we are not to go out and do assessments. We have to depend on others.

George noted that when the National committee put out their assessment, the coastal ends were incomplete. NOAA is trying to fill in there, using post-docs and others. We may be able to tap into some of what they are doing.

Wilson noted that we can also tap into the NEP assessments. He noted that the new one from the APNEP is in the process of final editing. He had worked on that one with Dean Carpenter, APNEP Program Scientist.

Michele noted that we could also use the NERRs assessments.

Caroly noted that the Science and Data Subcommittee has a working group to do this.

Emily noted that the NFHAP noted that they also need to determine more clearly how a resource condition assessment is being used.

George noted that since some of the species we care about are both federal and state, and have EFH designations, our matrix descriptions are based on those. Also, since we are linked to ASMFC, demonstrating that EFH linkage would be appropriate. The inland partnerships don't need to worry about that as much.

Michele noted that we need to build bridges between USFWS and NOAA.

Measure 8 was skipped for the moment.

Measure 9, Emily indicated was provided to all the partnerships. There is a need to establish a stronger working relationship between the National Science and Data Committee, and each regional partnership. Emily noted what is required for full points. She noted that this is something to keep in mind as we move forward.

Chris asked how we do this? Moe Nelson is on our Science and Data Committee, and also sits on the National S&D Committee.

Emily turned to Measure 8: She noted that we were told that we need to develop more attention towards tailoring activities and events to garner media coverage; and also develop communications aimed at strengthening relationships among policy-makers.

Chris asked who they consider policy-makers? Emily asked for his thoughts. Chris noted that we are about as integrated as we can get, with ASMFC, which is all policy making. Kent noted that all of our agencies also have responsibilities in the policy arena. Kent felt that we could say this more strongly. Kent suggested that we could develop some specifics. He noted that it would be great to work with Bob, and get things on the SCDNR web site, for example. We can probably come up with a list of things, such as making sure that the ACFHP logo is included in all correspondence. Kent wasn't sure that we need to go to PSAs.

Chris stated when ASMFC has an annual meeting, don't we report to the Board? Yes, we do, and that is an element that other partnerships don't have.

Michele suggested that we inform all the members of the federal delegation in each state. She noted that all of this was about keeping Congress informed and looking good.

George agreed it was about looking good for Congress, and trying to get the act passed. Some other organizations which lobby Congress, could use our materials. That is something which we haven't pushed before. TNC has been pushing for this, but they didn't understand the point behind it all. TNC can contribute to getting ACFHP's message out there.

Chris Boelke noted that another good linkage is with the regional Fishery Management Councils.

Wilson agreed and noted that in the past we had some representation from councils, at least on the Habitat Committee. He noted that he and others serve on Council committees and certainly can take the message there. Also, we could use the Habitat Managers Database at ASMFC, to get out the word, if it is maintained.

Dawn asked if we need to tighten up what our applicants do with their projects? We can tick off a list, of how we are going to get at this. She wasn't sure that we were doing this as a partnership yet. All of these things we do to inform others, should be tracked, so we can respond as appropriate when asked.

Bill Shadel stated that Congress is the entity he was thinking that we should target.

Caroly noted that she agreed with Dawn's and Wilson's comments. She noted that she had interviewed with the Lenfest program, and they told her that they don't do coastal work. She noted that we integrate a lot, and we need to get that message to the NGOs.

Michele noted that those linkages are very important, and we don't have any data to demonstrate the linkages.

Kent noted that we really are trying to do a good job of dealing with the whitewater to blue water concept. It is to George's credit that we have done so. Kent noted that he understands the relationships.

Caroly asked what we could do, to reach out to the non-profits?

Kent noted that some of the prominent ones, are in the partnership. Perhaps as a way of moving forward, perhaps we can provide some prescriptive approach.

George stated that perhaps we might want to target some, like Pew, and EDF, and CBF, and take Steering Committee members and go talk to them about ACFHP. Maybe they would want to become partners. These are the places where we need to invest some partnership time. Michele indicated that the Conservation Law Foundation would be another important NGO.

Chris asked if we go to Restore America's Estuaries? Emily stated that we have in the past. Chris stated that is where all these NGOs attend. Emily noted that this year it overlaps with the ASMFC Annual Meeting. Chris stated that all of the NGOs would be in attendance at that meeting.

Wilson noted that he was prompted by Dawn's comments, and George's, to suggest that our Outreach Committee develop some text for inclusion in our RPF, which specifies what each grant recipient has to do with regard to outreach, once their project is completed. This could include sending a copy of their final report to their Congressional delegation, providing fact sheets to media outlets and so forth.

Measure 10: Emily noted that we were told that more clarity is needed for this performance measure. She noted that we are going to discuss this later today.

George noted that a strategic priority is not something that we can knock off, in the next year.

Emily noted that Measures 2, 7 and 8, are the ones that we need to improve. These are use of project effectiveness measures, use of resource condition assessments, and quality and quantity of outreach.

George asked if when project are funded, we send a notice to the Congressional delegation in the area where it is funded? Emily wasn't sure what he meant. Wilson and George explained. Julie noted that FWS is supposed to do this, but she wasn't sure it is happening. The congressional delegation information is in the FONS database.

Kent noted that we would just have to undertake making sure that the word gets out to the Congressional delegation.

Emily and Kent suggested that we take our break early, and come back at 10:15 AM.

FWS-NFHAP Project Solicitation FY13, *J. Devers 10*:20

Julie gave a brief overview of the RFP process. She noted that ACFHP gets $90,000 per year. This could change, depending on the outcome of a current effort to develop a new allocation formula. Julie explained how the process works. All proposals have to be submitted through the USFWS process, so the application is designed to meet USFWS specifications. After the applications are received, we now have six people review each proposal. Reviewers can come from the Science and Data Committee, or from the Steering Committee. All the reviewers last year came from the Steering Committee, and/or the Science and Data Committee (Jacklyn Daly, from NMFS). Julie noted that there were some recusals, but overall they felt that this process worked pretty well. That process yields ranked proposals, and they reviewed those as a group, and tweaked some of them. The Steering Committee then voted on the rankings. The ranked list is sent to USFWS for funding. They are still waiting on the approval from FWS headquarters, for the 2012 list. Julie suggested that we might want to wait until the approvals are there, for 2012, before we send out a new RFP. Emily said that Tom Busiahn says they are close to issuing notice. Julie noted that there was an effort made to change the process, and the Director balked, so we are still waiting. Julie noted that there is a desire to change the application process, to get stronger applications. There is concern that the way the process was administered, it led to us getting weaker applications. She noted that with only $90,000 available, that may have been part of the problem. She noted that it was decided to try to tweak the application process, to make is stronger.

Julie switched to PowerPoint to show us the changes which have been made. The intro language has been changed to mirror the EBTJV, since many of the applicants receive both RFPs. This helps to minimize confusion. We also had a suggestion that we require applicants to get a letter of support from their state agency, but she noted that we already have a requirement that the ACFHP rep get a letter from the FWS field office, so she asked if that was sufficient?

Dawn noted that she was ambivalent about this. She noted the application from NY last year, was not good. She wanted to know how much she should work with the applicant? She noted that she could recuse herself when it came to the vote, if she provided a lot of support. Julie noted that we would like to have the state member be involved enough with the project, to be able to support a project. Pat noted that it happens all the time, that he gets proposals at the last minute. Julie suggested that we might want to include a provision that the applicant provide the date when they began working with the ACFHP representative, as well as the FWS.

Caroly asked where it was advertised? Julie explained.

Bill noted that he collaborates with multiple other agencies (USFWS, NMFS, NRCS), so he is not as familiar with the state agencies. Julie asked if he was suggesting that we just say, letters of support would cause a proposal to be more highly ranked. He indicated that would be good, and suggested that we loosen the language to say "government agency" rather than specifying that it be a state agency.

Dawn noted that a letter could be meaningful, or not, depending on whether the supporting entity really knows the project well.

Kent noted that we already require that a USFWS regional representative be involved. Julie noted that is affected by the workload of the FWS staff, as well as any specified state representative.

Jimmy Johnson asked Kent, what SARP does? Kent said that they were operating under the NOAA Community Grant program, so they have different criteria. Kent stated that they are given credit for having letters of support. Michele suggested that letters of support may or may not mean much. Kent noted that if your supervisor tells you that you are going to write such a letter, you may comply.

Kent suggested an alternative. If we ask them to identify an ACFHP partner with whom they have worked, Kent felt that would be better, than just a letter of support. He noted that is likely to put more pressure on ACFHP Steering Committee members. Kent stated a letter of support is one more level of red tape, and he doesn't favor it.

Pat noted for oyster restoration projects, they will have to have a permit from the state. With a letter of support, that will positively influence permit review and issuance by the state. Kent thought that all projects which come to us, are already permitted. Julie noted that was not the case, since we can fund design work. Kent stated that was a good point. He noted that doing letters of support was fine, if applicants want to do them. He noted that having a permit in hand, was a strong point for the project.

Caroly agreed with Kent that it was adding quite a bit of red tape, to a grant that isn't providing a lot of money. Maybe we could just have a box for them to check off, stating with whom they have coordinated.

Kent stated he was inclined to just include a box, asking for the active partner.

Julie asked if they should be ranked on whether they coordinated? Dawn suggested maybe yes, or no, but not provide any value for that answer. Dawn indicated that in her case, the applicant said they had coordinated, but they did not.

Wilson wasn't sure whether a letter, or contact check box, was the way to go, but felt that it was really important to make sure that coordination took place. He noted that he has been involved in cases where this didn't occur, internally, and it created real issues.

Dawn noted that if someone writes a bad proposal, which wasn't coordinated, it simply should NOT be funded.

Kent agreed and felt that we had been good at providing feedback to the applicants.

Michele stated that most applicants may be trying to patch together multiple funding sources, to get a project done. She noted that we don't want to put people off, to make it very hard to apply. It has to be worth people's time and effort to apply.

Bill Shadel stated that letters of support demonstrate community support, and that a proposal has been reviewed. He noted that sometimes, they have not actually reviewed the proposal, but he summarizes it for him. He felt that letters of support demonstrate that support, especially from landowners. He wasn't sure how it would play with regulatory agencies, but noted they shouldn't be writing letters of support anyway.

Kent noted Bill is saying that we shouldn't dissuade anyone from seeking letters of support.

Bill stated that if guidance which was given, which hurt a project, that would not be good. He noted that he knows of one case where guidance provided by a reviewer, actually hurt the applicant's chances.

Stephanie felt that having a letter of support from USFWS, and a state agency, would be redundant, and perceived by applicants as duplicative. She was also concerned that getting a letter of support from a state fisheries agency, implied some strong support on the reviewing body, and she didn't believe that was necessarily the case. She indicated that she wasn't sure what we are trying to achieve here. Stephanie noted that the word on the ground she is hearing, is that there is a lot to this application, relative to the amount of funding to be awarded. She felt it was in our best interest to make the application user-friendly, to make it likely that we would receive good applications.

Caroly agreed with Stephanie's comments. We don't want the application to be burdensome.

Julie stated that Emily made a good suggestion, behind Wilson's back. We should just provide a list of ACFHP contacts, to the applicant, and at somewhere in the application, ask them who has lent expertise to the proposal.

Chris suggested that we just say, letters of support are appropriate and encouraged, but not required. Emily indicated that the list of ACFHP contacts is on the website. Discussion indicated that it could be any ACFHP member, and does not have to be the state fishery agency. Michele suggested that it be optional. Pat noted writing the letter isn't a problem, it is when you get it at the last minute.

Kent noted that he won't write letters, since their agency is a reviewing agency.

Pat asked how many proposals we received last year?

Emily indicated 7 last year, and 8 the year before. Jimmy asked how many were viable of those received? Julie advised that five of them were.

Chris suggested that all photographs be provided in tif format.

Julie noted that she had changed Section 3F so that it had no character limits. She asked specifically about project design, and asked that copies of those be submitted.

Pat asked if the applicant could submit materials directly into the FIS system? No, the local USFWS contact has to do this, but they can just cut and paste from the application. Julie noted that she either

condenses, or cuts and pastes. The additional details section is usually not included in any kind of roll-up, to the Washington Office.

Kent suggested that we should have some kind of constraint, in terms of review, for the project description. He suggested a five-page limit. George asked what our limit is now? Julie read the requirement. It doesn't presently specify a page limit. Kent stated perhaps we can let it ride this year, and see what it looks like, and adjust it next year. Julie noted that the Florida proposal from last year didn't adhere to the limit. Dawn noted that was one of the best ones. She didn't want to limit a person's ability to clearly explain the project. She noted that we only get so much funding, yet we are under the gun from NFHAP, to provide all of this information, and are having to modify our application in order to accommodate NFHAP, yet we aren't going to get more funding.

Caroly asked how we get more money?

Michele said pay attention to the elections. Kent noted that we all need to consider ways to conduct funding outreach.

Kent stated that we do need to see how things fall out, so let's try it.

Pat noted that Sea Grant requires two-page pre-proposals. You can review 40 of those in a couple of hours. They narrow things down to ten, and ask them for full proposals. You will get more, and some will be bad, some good. It adds an extra month to the review process.

Julie asked if they have review criteria? Pat stated that all the reviewers sit down together and review them all. Half of the proposals in GA go to full proposals.

Caroly suggested that if we do that, we could get the number down to the best three, of eight.

Pat stated the problem is that we are not receiving enough proposals. Some of these will be written at the last moment, and not be very good.

Chris felt that requiring pre-proposals, would be a good thing.

Emily asked if we had time? Julie wasn't sure we did, this year.

Mark asked for more details, from Pat, about how the Sea Grant process works. Pat stated that usually applicants should have already started working on the full proposal. Mark suggested that we could have a six-month pre-proposal period.

Dawn suggested that we continue this approach this year, and try the pre-proposal approach next year.

Kent noted that the USFWS Coastal Program also employs pre-proposals.

Michele noted that some programs which require pre-proposals, entail almost as much work as the full proposal.

Dawn noted again that the small amount of funding, is not much of an incentive to applicants.

Kent noted that our discussion was very good, but he felt that our time frame was tight this year to implement any pre-proposal process. He suggested that we develop this more and try it next year. The suggestion was made that last year's project selection committee undertake this task.

Volunteers were sought, and Bill volunteered, along with Dawn and Kent.

Chris asked where the 350-character limitation arose? Julie noted that it is a requirement in the USFWS database. Kent noted that it weeds out the chaff from the wheat.

Chris Boelke indicated that he would provide the pre-proposal format NOAA uses, to Emily and Julie.

Julie noted that last year, we had some proposals that were in two regions, and our reviewers were confused as to what to do. She has added a caveat that if a project has multiple sites, in multiple regions, they should only answer the questions for the region in which the majority of the project lies.

Caroly noted that part of the problem was that points were awarded for both regions. There has to be a way in the scoring system, to eliminate that issue.

Julie stated that it should be clear to the reviewers that they should not award points for both regions.

Kent suggested that an initial screening by Julie, should specify for which region any review should be done.

Marek asked if that meant that you would score the project, in each separate region, independently?

Kent felt that they should be submitted separately.

Marek asked for clarification. Julie and Kent felt that it should be scored for only one region, or another. They should score for the region in which the majority of the project lies. Chris Powell specified that was the physical region.

Julie noted that Emily had changed all the language to reflect the Strategic Plan. She noted that Jaclyn had suggested beefing up the monitoring component, to include biological monitoring. Julie asked Kent for guidance as to how much time to spend on this.

Kent noted that this was desired. He noted that Caroly and the Science and Data Committee have this on their agenda. It seemed to him that this should be handled by a subcommittee.

Michele asked if legal counsel goes through the language on these things? Kent and Julie said yes.

Kent noted that the issue on the biological monitoring is, how much do we want to dictate, and how much do we want to let them do on their own. Kent noted that we aren't trying to defend this stuff for journal publication. From a habitat perspective, he would rather have someone looking at stem counts, but if they can show they met the goal of having red drum use the area, that is good. Looking at metrics is good.

Michele noted that we can have some good discussion about this. Metrics are good, but if the target species isn't using the habitat, that isn't good.

Kent agreed but noted that you have to balance time and effort. To do monitoring well, you should do it for three to five years. Kent stated it needs to match the project goals.

Emily noted the present language. She felt that what we have now is very clear. If people respond as required, she felt that we don't need to modify the language very much. Perhaps we just need to work more closely with applicants, to ensure that our desired outcome is achieved. Kent felt that only some minor adjustments are needed. Julie noted that there are no biological examples of outcomes.

Julie noted that the action item here is to work with the Science and Data Committee, to define what the outcome should be, but in the meantime tweak the language and send it out.

Julie noted that there was a suggestion that we change the way points are allocated, to maximize the amount of match. There are lots of different options here. She explained them, showing us the points associated with each match ratio. She noted that there were some projects which were close to 1:1 last year.

Chris Powell asked if this was in-kind, or actual match? It includes both.

Michele asked if match has to be confirmed at the time the proposal is submitted and if it is a USFWS requirement? Julie stated that it is a FWS requirement that 1:1 be required.

George asked if the requirement is 1:1, why include the others? Julie noted that the EBTJV often has more than 1:1, so we are trying to accommodate.

Stephanie suggested changing the point values associated with each ratio. She doesn't see the application clarifying what match really is. With regard to federal funding, those funds can't be used as match, whereas a contribution can be used over and over as match. She felt that we need to be more explicit about this. Julie indicated that she would change the language to "contribution." She noted that this is the exact same type of program as the Fish Passage Program, where the dollars are not considered "federal" once they are awarded. Julie asked Stephanie if changing the word to "contribution" would fix her concern? Yes, it would.

Bill asked what the matching requirement is? Kent stated that we don't have a requirement, but it does add points to the proposal. Bill noted that as a potential applicant, he wanted to be sure he understood. He asked if it had to be cash, or in-kind? Julie indicated it could be either one. She noted that some projects had submitted applications for $30-40,000, and all of their match was in-kind.

Pat noted that it was appropriate, to use a state partner's time, as match. Bill asked if Pat had to submit a formal statement, to document his time. Yes, he did. But, Pat noted, if there are multiple partners, especially state ones, match usually wouldn't be an issue.

Julie asked if everyone was comfortable with Stephanie's change to the point values and associated ratios. Yes, they were. Julie made the changes.

Michele asked if the use of indirect was outlawed as matching funds?

Julie stated that there is wording in the NFHAP regulations about what percent can be used, but we have never included that in the application. Michele stated she would presume that an applicant could therefore use full indirect in their match.

Julie said we are taking applicants' word. There were projects which weren't confirmed, but were stated as constituting match.

Bill noted that some things may get reworked, during the course of the project. He noted that he would usually say, if he has a grant in hand, or not. But, it depends on where the project is. If you apply for funds at the beginning of a project, usually nothing is confirmed.

Michele stated that is the point she was trying to make earlier. She agreed with Chris on the need for confirmation.

Pat agreed that if there is stated match, there need to be letters of confirmation. Julie noted that isn't included in the application at present. We just added this language in last year. Michele noted that in early stages, things are kind of fluid and it isn't easy to get letters of confirmation. She noted that she hadn't come across another application process where you had to confirm the match at the time of the proposal.

Pat noted that in the final report, all the match had to be confirmed.

Caroly noted that requiring confirmation of the funding should not be required.

Wilson noted that such confirmation is required, for the NC Coastal Recreational Fishing License grant program. He noted that they even provided specific language for partners to use. He noted that letters of institutional support were required, and weren't that long, although it did take time to call everyone and make sure they were provided.

Kent asked for a final decision. The SC decided not to include the requirement. The points and ratios were finalized per Stephanie's recommendations. Rounding up will be done, if ratios are close.

Kent thanked Julie for all of her hard work on the application. He noted that it is essential that we document all of this information. He felt that we are doing a good job on all of this.

Michele noted that given that we are getting to the point where we have far more proposals than we can fund, that is another good point to make to NFHAP. Kent agreed that was a good point. Chris Powell noted that seven isn't a lot, and it would be nice to bump that up, so we can fund more.

NOAA Community Based Restoration Grant, *E. Greene and K. Smith* 11:40

Kent noted that we are tentatively scheduled to submit a grant for this one. We are going to do a quick overview, and discuss a plan of attack. Most of this will be subcommittee activities offline, but we want to make the partnership aware of this. Kent noted that this program comes around once every three years, and the next submittal period is this October. SARP, American Rivers, and TNC have all secured these grants. The requirement from NOAA is that you work with NOAA trust species, and NOAA issues. With anadromous species we meet this criteria. The partnership scale has to be large, as ours is. The

partnership has to have fiduciary responsibility. Kent asked Emily if we have identified that we can do this now.

Emily indicated that we have to sit down with Laura Leach and ask her if she has the ability to assume this burden? If not her, then we could ask about hiring another employee to take on that role, i.e., soliciting projects, handling all the paperwork, and doing all the monitoring. Those are the questions we need to ask her. If she says yes, awesome, if not, we need to go to NFWF. If they say no, we will have to reconsider. Kent felt that there are others out there who may have an interest in working with us.

Kent noted that the typical projects funded using this grant program are 80-90,000 dollars. It would bring a fair amount of funding to bear, to ACFHP, in partnership with NOAA. SARP has had two successful grants. TNC has been doing this since the 1980's. Kent noted that NOAA looks for long-term partners and does increase the level of funding. Kent indicated that you begin from scratch, every time you apply.

George noted that the TNC grant is now up to a million dollars.

Kent noted that it would be good to have a dedicated staff person to run the program, but to do so we will have to match that amount. It would take around $50,000 for a position. He noted that there are several ways that we could do this, e.g., from ASMFC, or from partners. We need to decide that we have the capacity, and the staff, to do this. He noted that we could work on this here, but we could put together a subcommittee to work on this.

Emily noted that the first step is for her and Pat to sit down with Laura, once this next Commission meeting is over. The big thing is to find someone to handle the finances. All of our applicants would have to demonstrate match, at the 1:1 level. So, if we hire someone, we would have to match their salary. The second piece is how to find the $50,000. For this program, it would have to be non-federal match.

Chris Powell clarified that this will be a separate pot of money, for which we will need a separate administration. Chris Boelke clarified that the funds would be limited to use for restoration.

Kent noted that we would have to work with the NOAA representative, in our region, and develop an implementation plan. We would have to develop the RFPs. This has been done with SARP, and they have been very willing to help us on this proposal. They have given us a SARP grant which we can use as a model.

Bill Shadel stated that they could assist, since they are a member of Restore America's Estuaries.

Kent stated that was a good point.

George stated that he and Emily had talked to the TNC person who administers that grant. TNC has been trying to pull together science, or communication, about restoration, and playing a value-added role. George noted that some ACFHP things, like the species-habitat matrix, fit right in. Rob told them they use only half an FTE for the finance piece, and they have a project manager. Kent asked if TNC used that for match? George thought that they may have done so. He asked Emily if TNC had 2.5 people on the project? Emily named the positions and what each one did. Emily noted that TNC is now up to a large sum of money now, but when they began they didn't have as much.

George indicated that he was willing to assist with this.

Stephanie noted that she was back on the line. Emily asked her if she wanted to provide an update on the budget? Stephanie asked if anyone in the room from NOAA, was willing to comment on the Restoration Program? Chris Boelke noted that he didn't know enough about it.

George indicated that there was a proposal in the Senate last week, to restore the funding to the program.

Stephanie noted that two weeks ago, it appeared that the entire program was going to be eliminated. The President's budget greatly reduced the amount of funding to this program. NOAA is really facing a challenge to maintain the level of funding for this program. The Senate did pass out of committee an amount consistent with the previous fiscal year, which is a decent amount and would allow the establishment of new partnerships. However, if the President's budget amount is all they get, NOAA may have to eliminate some existing partnerships. Stephanie noted that she can't speak for NOAA, and doesn't know when they might be advertising for new partners. She would hate to see ACFHP do a lot of work, and then see the program get shelved. It is likely that they will go ahead with solicitation for proposals, even if the funding has not been secured. She wanted ACFHP to be aware of this possibility.

Kent thanked her for the information and noted that we have to plan for this. We do have to get our ducks in a row, to be ready, if things are funded. We were too young as a partnership, the last opportunity. Kent asked everyone to think along the lines of getting ready to make such an application. Kent noted that the deadline is a way off, in September.

Chris Boelke noted that this is a really good point. No one knows what is going to happen. None of us really know for sure.

Kent noted that the legislative budget process is really fluid.

Caroly noted it is a fantastic funding opportunity for us. She had one of these grants herself, through TNC.

Dawn stated that our implementation plan would seem to lead us in this direction.

Kent stated it is consistent with our Strategic Plan.

Dawn noted that it would help us to narrow down the larger plan.

Kent noted that NOAA and FWS do talk to each other.

Michele noted that the NERRs are also interested in this program, as well as the NEPs. She noted that the ACFHP framework has been established to provide this service, to NOAA. It may make an application stronger, if there is some connectivity between ACFHP, and the NEPs and NERRS.

Stephanie noted that NOAA has a fairly long-standing partnership with Restoring America's Estuaries. If we are going to pull something together, we need to find ways to distinguish us from the other partnerships. The multi-habitat approach that we are taking, really distinguishes us from others. The

fact that we have the flexibility to fund projects from the headwaters, down to the bays and estuaries, is a plus.

Kent noted that we also have corals. He noted that Stephanie's point is a good one. He noted that George can help a lot with this.

Jimmy Johnson asked if those SC members who are state employees, are being leveraged for match? Emily indicated that they are, roughly, but haven't been explicit about how much. Julie indicated that amount can be used, unless the state person is funded largely from federal dollars.

Kent stated that it might be only about $40,000 dollars we need to find.

Bill Shadel suggested that we talk to NOAA early on, and see what they would like out of any project. With regard to Restore America's Estuaries, he wasn't sure what they are providing. He noted that the Partnership for the Delaware Estuary had tried a grant, and it failed, and it sounded to him as though it failed for lack of communication.

Kent noted that for us, applicants come with a project ready to fund, and are just seeking funding.

Kent and Emily indicated that it sounded like there is consensus for the ACFHP to move ahead with this.

George stated that we should talk to the NEP, and NERRS folks, to make sure that there isn't any overlap between what we submit and what they are doing. Michele indicated that in the Gulf of Maine, they are funding a lot of fish passage work.

Emily noted that we could use our Funding Subcommittee, to identify needs. She named that group, and asked if anyone on the list wasn't able to participate, or any new participants? Jimmy Johnson volunteered to serve on that subcommittee.

Kent thanked all for their participation, and noted that he feels this is a good move.

Kent noted that he wanted to defer the next item, until after lunch.

Kent asked that we come back by 1:15 PM.

The SC broke for lunch at 12:13 PM.

Joint MSCG Grant, *E. Greene* 1:15

Emily noted that this will be a brief update. She noted that our 2008 grant which we have been extending, will be expended this year. That grant has funded the coordinator, as well as our meetings. With regard to the new joint grant, we applied for two years of funding, but received one year of funding, at a reduced amount. When we learned that fact, we went back to SARP and EBTJV, and slashed a bunch of tasks to make it conform to a one-year project.

Emily noted that the new solicitation for 2013 is out, and in chatting with Kent, as well as the SARP and EBTJV, they have decided that this is a good opportunity to apply for the second year of funding which we didn't get approved.

Emily walked the SC through what is in the proposal. She walked us through each of the three objectives, starting with objective 1. She noted that we will begin to have webinars with the three Science and Data Committees of the three FHPs, to enable the identification of common needs. Emily noted that many of the tasks had been deleted, but all of these would be included in the new application, should we reapply this year.

Michele asked if our idea is that someone would be hired to do this work. Emily indicated the intent would be to work with the three Science and Data Committees, to identify the needs, but we could put money in the grant to contract for the actual assessment.

Michele noted that three years ago, she had hired one of her students to do a literature review, which may be useful. She will provide that document to Emily. NOAA has never done anything with the document, as far as she can tell. She noted to Chris Boelke that this was at the Restoration Center, far above him.

Emily reviewed Objective 2. She noted that originally, they wanted to hire a fund-raiser, but that is precluded by the grant provisions. So, George's idea was to hire someone to assist the partnerships, with regard to fund-raising recommendations, and how to improve organization operations. There is a communications piece as well. We basically want to streamline the communications strategy. The EBTJV has done a great job working the media connections. They created an awesome video, for their Smith Creek project, and distributed it widely. SARP has a part-time communications coordinator, with a lot of great ideas. Working together, the three partnerships can be bigger and better.

Caroly suggested that Emily indicate that the communication is targeted at policy makers.

Emily noted that we would begin having conference calls, with the three partnerships. The first one has been held. Emily has put up a draft page on the ACFHP site, which links to the other two partnerships. They did cross out the Facebook page, because it requires a lot of maintenance and is a big workload.

A representative of each FHP will attend at least one conference each year. We will do that at the AFS annual meeting. Funding for this comes through the grant. They also cut out the newsletter, for the same reasons as they cut the Facebook page.

Emily noted that we will have been together for a year, so we can develop materials for a newsletter, later.

Sub-objective 2.3, involves getting a TNC fellow to work with us. Michele asked if this was a competitive program. George indicated they just need to find someone with the right fit, to perform a capacity assessment.

Emily noted that they had also written in training workshops, but they eliminated those as well.

Caroly asked who funded these multi-state grants? Emily advised that they are Sport Fish Restoration dollars that are jointly administered by AFWA and USFWS.

Emily noted that the sub-objective, involving homework assignments, was eliminated.

Emily reviewed Objective 3. This one will support regular meetings of the individual FHPs. One sub-objective entails hiring a full-time coordinator for the EBTJV. Another one would hold a joint meeting of the three partnerships, with selected members of the Steering Committees, as well as one all-partner meeting.

Each FHP would commit to funding an average of three or more on-the-ground and at least one communication/outreach project annually. She noted that this one is rather dry, but they were trying to create a project out of operations.

Caroly noted that the grant as written doesn't contain any funding for the Science and Data Subcommittee. Emily agreed. Caroly stated that it could be attached to Objective 1.

George noted that all three FHPs have different goals in mind with regard to common needs. SARP and EBTJV are further along, so it was hard to come up with a joint need, since we are much younger.

Emily noted that another sub-objective would identify and vet among the three partnerships evaluation measures.

Emily noted that the question was whether or not we should apply for joint funding, for next year?

Kent stated yes.

Julie noted that the RFP is different this year, and asked if it was still an option on the table to apply for coordination and assessment funding, individually, and not apply with the other two partnerships?

Emily said that was an option, but she felt that the RFP this year was even more directed toward encouraging partnerships to collaborate. Kent indicated that we could investigate.

George noted that the Congress has said that all of these federal partnership things need to be less silo-ed. Also, George noted that all three partnerships are in the position of trying to find funding to keep the partnerships going. So, there is pressure to partner, and pressure to move things forward without additional funding. There is a dual pressure, of trying to keep things going, while at the same time trying to keep what is there intact.

Kent agreed and noted that Scott Robinson had so stated during their conference call.

George noted that the states are also strapped, and having to use some existing funding, for state needs. He asked if the funding was going to be strapped?

Emily said that was not the case, and also indicated that our need is the identified number one need.

Caroly argued that we should just go in as a single FHP. She noted that we are already multi-state, and we need to complete our assessment, to move our FHP forward. She suggested that perhaps we could make one objective ours, and the others collaborative.

Kent suggested that we could make the proposal kind of a chimera. He noted that if we got a read that collaboration across the partnerships is needed, it probably wouldn't be good to go in as one partnership.

Caroly noted that there are a lot of other big coastal initiatives ongoing, so the timing is good to go for funding to complete our assessment.

Kent agreed. He noted that we keep seeing more coordination, on top of more coordination. He thought that we had done a good job of getting the information out to partners. But, that being said, when you have other partners overlapping in your area of operations, this multi-state grant has provided us with a mechanism to do so. We didn't formalize the relationship at first, but now we need to do it.

George advised the end product that would be joint, could be a common set of habitat priorities. This goes back to Jake's curve, and Paul's admonitions that we not leave any gaps, between the mountains and the coast. George was trying to think about how we could go in jointly. He noted that we had discussed just putting in everything that we need, versus having something that was just a laundry list from the three FHPs. He felt that this was worthy of further discussion, to come up with something which helps our needs and furthers the bluewater to white water.

Kent felt that we had done this to some extent, in the other multi-year grant. We will achieve some of this in future meetings, as well. What George is suggesting also would create sort of a super-partnership. He gets where George is coming from. We will have to put some serious thought into this. Emily noted the deadline is May 11. She asked for thoughts from the other side of the room.

Michele noted that she was always supportive of any effort to put data together. She noted that the same graduate student she had referenced earlier, had worked with Jay Odell on the Great Bay project.

Emily asked for any further thoughts on a joint, versus individual, application. There was some discussion of the timing and funding issues. Caroly noted that it would be helpful to specify that some funds would go toward our assessment. Caroly noted that to George's point, we could say that we are going to find someway to collaborate on the habitat issues.

Julie stated that one of the other FHPs is proposing to make their assessment web-based, and also make it as a decision support tool. Julie suggested that if we work towards getting all three FHPs on the same website, and having a common decision tool, might be a good end point.

George noted that this would be a good way, not to have joint priorities, but to link all the things together, whitewater to blue water.

Dawn noted that we need to determine what actions we need to take, moving forward. If we can decide on those, that will help us to decide for which grant we should apply, and why. This can come from the Strategic Plan. She noted that we had this huge list, which we need to cull down.
Emily noted that we are going to do that this afternoon. It is like the stock market, highly risky. Going in jointly is more conservative, a safer choice. We may not get all the money we want, but we are not in a place to be high-rolling.

Dawn asked what common priorities all the three partnerships have in common.

Emily noted that we are also trying to collaborate with the two LCCs and secure funding from them as well. Kent noted that we span that entire region, and share all the partners.

Chris Powell asked what the down side to the multi-state application is? Emily indicated that we would have less financial resources. Kent noted that they weren't trying to merge all three partnerships.

George indicated that it is sort of priority-setting, by committee.

Michele indicated that it would be more work for Emily. Emily indicated that it would really mean more work for Pat, and Laura. She noted that Pat has been putting a lot of effort into it already.

Chris Powell asked what Emily thought?

Emily said she would rather have some money, rather than none, and this was the more conservation approach.

Pat noted that we already have success, as a three-headed proposal. We were encouraged to resubmit, but Emily noted that we don't know if that is routinely included in every letter.

Caroly noted that going in as a three-headed monster is fine, but she would still like to have some distinct priorities.

Kent liked that idea and felt it represented a blended approach. We have to determine what our top three priorities are, and include them. Kent noted that our performance can be geared to accomplish our objectives well.

Michele stated that we don't want to be grabbed into anything that we don't want to do.

Michele asked who is writing the proposal? Emily stated Kent and George, but also each FHP took a role. Emily noted that she had done the roll-up and submitted the entire grant. Pat noted that it was good to have something from which we can work already.

Kent noted that we could learn, from what they didn't fund. Those priorities, i.e., the items not funded, could still be priorities. A lot of evaluation will be required to get to the next submission. We need to work on this next week.

Implementation Planning, *G. Schuler and C. Powell 2*:00

Chris noted that this afternoon we are going to have more of a facilitated session, to try to focus on what we are actually going to do. We have 80 tasks in our implementation plan, and there is no way we are going to get all of those done. We want to determine what our priorities are for the next 12-18 months. Chris described the process. We will look at each of our categories for the objectives. All the categories are equally important (i.e., Finance is as importance as Restoration, etc.). We will look at all of these and will vote to eliminate items until we cull them down. We will vote by ballot. Chris noted that he had put together 60 slides with all of the options.

We will select by voting in each category. We will winnow out the selected objectives, then narrow down the rest, and work our way down to the tasks. This process should leave us with a list we can realistically accomplish in the next .

We were given a ballot for the Habitat Protection Objectives.

Dawn noted that it might help to look at the Strategic Plan, on our computers. Chris didn't want that done, since he felt it would bias the outcome. Dawn noted that we went through a similar process, the last time. Each subgroup had considered what could be done in a realistic amount of time. Chris noted that didn't work, so that is why we are doing this process. He noted that everything in here is what came out of that last meeting.

Each member marked their ballot. The final results were: Habitat Protection Objectives 1, 4 and 6 were selected as priority.

Strategic Action which was selected: Number 1 was selected for Objective 1.

There are seven tasks for Strategic Action 1: we have to select the specific tasks, the top three.

The top three selected were: 1, 3 and 7 (Wilson noted that these were the ones which FWS recommended).

Chris noted that Objective 4 only has one strategic action, so we don't have to select for that one.

Protection Objective 4: Strategic Action 1: There were only two tasks, and Task 2 was selected.

Chris noted that he forgot to put in Objective 6, so we would deal with that one later.

We moved to Habitat Restoration Objectives. There are four of them. Numbers 1 and 2 were selected.

There were five strategic actions for Objective 1: We had to pick three of the five. 2, 3 and 5 were selected.

Restoration Objective 1: Strategic Action 2: Task 2 was selected.

Restoration Objective 1: Strategic Action 3: Task 1 was selected.

Restoration Objective 1: Strategic Action 5: There were no tasks for it so no action was needed.

We moved to Restoration Objective 2: There were two Strategic Actions: Action 1 was selected.

Restoration Objective 2: Strategic Action 1: There were six tasks and we were asked to select three: Numbers 1, 2 and 3 were selected.

We moved to SCIENCE AND DATA objectives. There are only two of those. We needed to pick one. Number 2 was selected.

Science and Data Objective 2: Strategic Actions: there were five of these and three were to be selected: Numbers 1, 2 and 3 were selected.

Science and Data Objective 2: Strategic Action 1: Emily noted that some of these tasks are sequential, so it is hard to winnow down, when you have to do them in sequence. For this one, all the tasks have to be done since they are sequential.

Science and Data Objective 2: Strategic Action 2: The situation here is similar, Emily advised. This one would begin with the work Moe did. After we determine how to fill in the gaps, we would determine how to proceed. All of these tasks would remain.

Science and Data Objective 2: Strategic Action 3: Chris noted that we have to select from the list here. These are also somewhat sequential. Everyone felt that we should keep all six tasks here, in place. Julie wasn't sure if we would get to number six. Caroly wasn't sure that we would get to number 4. Chris stated if we don't finish these in the next 12-18 months, we could continue. Julie felt that it was realistic to stop at 4, or 5. Dawn noted that if we apply for a community grant, that would enable us to make some progress on this one. The SC agreed to stop at Task 5. Chris noted that we are not eliminating anything today, we are just pushing it beyond 18 months.

We moved to the Communication and Outreach Objectives. There are two objectives. George felt that the first one represented our tools, and the second one the outcome (relationships). The SC voted equally for each objective. We decided that a tie meant that we would do both objectives.

Communications and Outreach Objective 1: We needed to select two strategic actions: Numbers 1 and 3 were selected.

Communications and Outreach Objective 1: Strategic Action 1: there were three tasks and we needed to select two of them. The SC voted to select tasks numbers 1 and 2.

For Communications and Outreach Objective 1, Strategic Action 3, there was only one task so no vote was required.

For Communications and Outreach Objective 2: there are three strategic actions and we needed to pick two of them. Strategic Actions 2 and 3 were selected.

Communications and Outreach Objective 2: Strategic Action 2: there were two tasks and the one selected was: Task Number 2.

Communications and Outreach Objective 2: Strategic Action 3: there were no tasks for this one, so no vote was needed.

We moved to Finance Objectives: there were two of them. Jimmy noted that number 2 had different wording, in the document. Chris noted that he and Emily had changed "leveraging conservation dollars" to Secure ACFHP operational funding. Number 2 was overwhelmingly selected.

Finance Objective 2: Secure operational funding for ACFHP: There are 3 strategic actions under this one. Caroly noted that the tasks don't now match the actions for this one. Chris and Emily noted that they had flip-flopped some of the text. Strategic Actions selected: 2 and 3.

Wilson noted that it was far more stimulating to be out paddling canoes, than going through this exercise. Kent noted that the on-the-ground accomplishments were very meaningful and make all the strategic planning worth the effort.

Finance Objective 2: Strategic Action 2: there are three tasks, of which two were selected: tasks 2 and 3 were selected.

Chris indicated that was only one more to go. Finance Objective 2: Strategic Action 3: there was only one task for this one and therefore we didn't need to vote.

3:53 PM: Emily asked that we take a ten-minute break.

Science and Data Working Group Update, *J. Kritzer, M. Topolski, C. Shumway* 4:00

Emily noted that this was our last agenda item for the day. Caroly will begin, and then Jake and Marek will wow us.

Caroly noted that they actually got their act together and started on the matrix paper, as of the last meeting in Boston. It is hard to write a paper by committee. On May 9th, they will get together and finalize the draft they have prepared thus far.

Jake showed us the working title. The proposed authors are the management team who oversaw the project, and the regional leads. There is no way they can put everyone on the paper. That is their working plan thus far. They plan to send the paper to Science. They decided that, because it is a particularly timely paper, given the debate on the National Ocean Policy, and also the ASMFC and all three east coast regional Fishery Management Councils are engaged in EMB approaches.

Jake asked if he should give a quick update on the genesis of the matrix. He noted if Mari-Beth was here right now, she would be curled up in the fetal position on the floor. It was 2007, when he and Mari-Beth conceived the idea of the species to habitat matrix. They used a cape-to-cape demarcation for the four geographic regions. They thought that it wouldn't take too long to do this. The idea was to look at the comparative importance of living space for the selected species of fish. It is not a stand-alone conservation tool. The scale and scope is that it is coast-wide, with 26 different habitat types, and dozens (actually 90) contributors. This included people who helped manage, and fill in the matrix, and then review it. Some folks performed multiple roles. Jake noted that he wasn't aware of any other similar process. Jake noted that they plan to launch an on-line data portal, and they will pitch that to Science as well. Also, they see this as a foundational paper which others will follow. They are aiming high. If it falls short, they have backup ideas in mind. Michele suggested that they consider other journals, since Science won't take long to give a decision. Kent wondered if it was more appropriate for Ecological Monographs?

Jake noted that they are not yet ready to share the draft. Jake noted that the species included are all ASMFC species, all Council species, all diadromous species, many species which are under state plans, etc. For Florida, they asked Kent and his staff to select from the long list available. So, the list is not comprehensive, it includes species important for management and conservation purposes. There are a lot of things you can do with the list, such as look as only ASMFC-managed species.

There are five people on the writing team: Jake, Caroly, Marek, Mari-Beth and Emily. They believe that they can have something close to a full draft after their May meeting. The methodological process is so extensive that they will have to have some supplemental online material. Also, there are some really flashy graphics. The major points to be made, are that there are some similarities between the NA and MA regions, with some similarities to the SA. South Florida is a totally different story. Mangroves don't exist in two of the regions. The highest scoring habitat, was inert substrate, in most of the regions. This is not surprising since so many species use them. In south Florida, other habitats scored more highly.

They provided a qualitative ranking, and there are subjective definitions about what those mean. You could use just presence/absence. They chose a system which uses numerical values from 0-4. The most subjectivity came in the high and very high categories. Supplemental papers can be done to see how changing the scoring would change the habitat values. The riverine habitats scored very high. Marshes, mangroves, didn't score as high as they thought would happen.

Jake noted that species selection was biased. Michele stated that she wouldn't say that in the paper. Michele stated that we had selected representative species. Jake noted that someone, perhaps Marek, had pointed out that we didn't select any micro-invertebrates, such as some of the shrimp. He agreed that bias was probably not a good word. They are really looking at species of direct interest to fisheries. Kent felt that it was okay to use the term "bias." He noted that generally, we have to equate things to some sort of economic benefit. Michele stated that the term "bias" is really loaded. Jake noted that this was a deliberate choice, just to look at species of interest, so we should just say so.

Jake reviewed the figures they have developed thus far. They show the overall score. It was noted that several states are missing from the figure which shows the overall results. Jake noted it shows the similarities between the regions, and the distinctiveness of south Florida. The same three habitats are in the top five in the three northern regions.

Wilson suggested that they add, in parenthesis, after each of the bar graph captions, the number of species which were considered in each region (i.e., N=X).

Michele noted that there is a really nice photo in the habitats of the Gulf of Maine document, which she was sure they could obtain for use. Lance Stewart noted that there are a lot of photographs, which can be accessed, through the NOAA Undersea Research Program. These came from a lot of diving. He believes that every type of habitat likely is depicted.

Jake showed us the second figure, which includes all the habitats which fell out in the top five, for the analysis. Marek asked if photographs of the habitat types should be included in the supplemental online materials? Jake thought not. He noted that Science likes to have colorful and pretty things. He thinks that these photographs actually show something and are therefore useful. Lance suggested that the paper should show the full range of inert habitats. Also, Lance stated, seasonality is important. Some habitats may be used for different purposes, or by different life stages, at different times of the year.

Caroly noted that it will be helpful to have all seven of the habitat types in photographs, to show what they looked like and define the abbreviations for the next graph. There are 26 total habitat types, of which 17 wound up in the priority graphs. Jake explained the three graphs which collectively make up the second figure.

The last figure Caroly explained. There are two different concepts in this figure. This one shows how the life stages used habitats ranked high and very high. An inset in the upper right hand corner show the number of unique habitats for each region.

Michele suggested that the overall caption be moved to the bottom of the figure. Caroly will do so.

Julie asked if they had considered using the same scale in all of the figures? Jake felt that was a legitimate concern for this figure, but for the others that doesn't hold true.

Chris Powell suggested that the coastline drawing should change. Caroly indicated that it would change. Chris noted that if they add the coastline, she might want to move the inset to the bottom right.

Lance asked if we had calculated the discharge of each river? Jake indicated that we hadn't. Lance felt that was available.

Jake noted that even the habitat types we are using, are pretty broad. Some of them cover a pretty wide range of attributes. There is still a good bit of lumping going on, and they don't get down to any level of details.

Caroly asked if it made sense that Florida would require two more habitats than any other regions, for their species? Kent felt that it did, given that they have a greater diversity of habitats (i.e., mangroves and corals). Also, they have species which use multiple habitats, such as gag grouper. There are more components to their life histories. He thought that gag grouper was included. Jake noted that there were over a hundred species for that region. Kent noted that they would have added more, but the spreadsheet wouldn't support adding them.

Lance noted that there is a good big of difference between carbonate sand, and other types. Jake noted that is a good point and it should be added in the paper.

Caroly noted that the point is that the Florida region requires two more unique habitats, than the other regions. Julie asked if that was an artifact of how they divided up the habitats? Caroly didn't believe it was. She gave an example. The inset only counts habitats if they are different across life stages. Michele stated that most species with which she works, shift habitats with stage and age. Caroly stated that the graphs show that fact.

Jake asked if this is just those ranked H and VH? Yes. Jake noted that the further north you go, the more species are getting out of three miles, and out of our habitats. The further north you go, the more the species are migratory, as opposed to down south where they are more resident. Jake used alewives as an example. The matrix considers only benthic habitats. Species which move around a lot, don't score very high. The result could just reflect the number of H and VH rankings you have. Also, we did not cap the number of H and VH rankings a species could have. We didn't want to pick some arbitrary number. You should have only a couple of habitats, which rank VH. For example, American eels didn't have any VH habitats, because they can live anywhere.

Michele said something about critical habitat.

Lance stated that American eel, American shad, and alewife, have olfactory senses, which make it difficult for us to rank their habitats. In evaluating fisheries and their economic values, this could be

useful long-term. Jake agreed that it could be useful to weight each species by their economic value, and then put corresponding values on their habitats.

George noted, having seen this from early conversations, until now, he feels that the committee has come a long way, and this is really cool. The whole team should be bought beers, or something.

Jake noted that Jessie and Mari-Beth are not here and deserve useful accolades, since they have made valuable contributions.

Michele stated that she was asked by a colleague, just a short while ago, where he could go to find a compilation of what habitats are used, by what species?

Emily showed us quickly the template for serving these data. She showed us draft material on the ACFHP web site. The page to which we will link, has all the species listed alphabetically. The species page will have a photograph, list of references which went into developing the scores, regardless of region, and a complete list of contributors, regardless of region. The Excel spreadsheet for the species will be downloadable as well. That is the approach thus far. She asked if we had a chance to look at it, and asked for any thoughts.

Michele suggested that another data layer to add would be what genetic information is available for each species.

Jake asked if we can set it up in a way to allow for queries? Emily thought that might be possible, if they work with the ACCSP staff and/or ASMFC.

Michele noted that there is a query process which works really well.

Chris Boelke asked if you could pull up species for example, which use the same habitat? Michele suggested that you could.

Jake noted that you could add governance into the site, and mean trophic ranks.

Julie asked how many species are there, in total? Jake indicated there are 131 in total.

4:52 PM: Emily asked Julie to address what we have done, to secure funding to address assessment work. Julie noted that throughout the day, we have discussed this nebulous habitat assessment. The committee has to ultimately decide how they are going to approach this and what it will look like. She shared a brief presentation with us: why do this? Prioritize fish habitat restoration, for ACFHP, communication between funders and fundees, help prioritize habitat restoration state and local. The NFHAP Board also would use this in performance evaluation. There is also possible future funding allocation based on the number of acres and miles which we have identified which need protection.

We know that the National Habitat Assessment has already been done. The Midwest FHPs have already done something regional in scale. The EBTJV has something very different in scope for theirs. We could pull in the TNC Northeast Connectivity Project, and Michele has provided some great information about what the NERRS have done.

Julie showed the figures from the National Habitat Assessment, and from the EBTJV. The latter has been broken down into catchment level, and they are seeking funding to break it down further. Michele clarified that this is for native brook trout. Michele questioned the data behind the Maine portion of the graph. Julie stated that she had seen the Virginia data and they are much more refined.

Rachel stated that the EBTJV is refining things to the sub-catchment level. The EBTJV has developed a lot of very detailed information at a very fine level, so they could identify habitats which have the most potential for change. A lot of this is based on the work of Mark Hudey.

George noted that both of these represent two very different levels of investment. The national effort needed very consistent data across states. Mark and his colleagues actually pulled data from filing cabinets and actually did some modeling.

Caroly asked if the national habitat assessment was mostly freshwater? George and Julie noted that the coastal portion was very broad. Julie noted that due to the data set restrictions, they missed a lot of information and that the desert southwest illustrates this. The point is that the assessment is very broad brush in scope.

Julie noted that she had pulled up some screen shots of other ongoing activity. She showed us the NEAFWA connectivity map. Eric did a presentation on this last fall, and he is working on something more refined for the Chesapeake Bay, which will be more of a decision support tool.

The Midwest FHPs also did an assessment, about the same time as the National Assessment was done. They have ben working on it for three or four years. They did a brown bag seminar a couple months ago, and it is on the web. Julie indicated that SARP was involved in the Midwest assessment as well. They took a bunch of datasets and built a platform they could use across all the FHPs, and then asked them to come up with response variables. They came up with sensitive species and others. They then produced catchment condition maps. Julie showed us one for species richness and human impacts.

Julie turned to how we pay for this. She noted that she and Emily have been sitting on subcommittees for the NALCC, as they were determining their priorities for the next year. The Coastal Subcommittee, and Aquatic Subcommiteed both indicated that habitat assessment is a high priority. The SALCC also determined that marine and coastal habitat mapping came out as a top need. Rua Mordecai plans to link up with Roger Pugliese and SARP to conduct this activity.

Caroly asked if marine habitat mapping was the same as habitat assessment. Michele thought it would be, depending on what the criteria used are.

Wilson felt that habitat mapping was an essential first step. Once the mapping of the physical substrate is done, then the assessments can be made of the degree of impact/threat, such as the amount of trawling, or potential for ship accidents, spills, etc.

George noted that TNC had done the Mid-Atlantic Ecoregional Assessment, and was preparing to do one for the Carolinas region. Caroly noted that she was aware of some similar efforts for which the data are online.

Julie noted that we need to have consistent approaches in each region. We also have to have the data on the same server, at least in one place.

Dawn noted that we need an assessment of what is out there, and whether we can use it or not.

Pat noted that the SAA Healthy Ecosystems Team is trying to put together a spreadsheet which shows all the available data sets.

Michele noted that there is a Gulf of Maine mapping initiative as well.

Julie suggested that we try to find one contractor, who would try to find out where all this information is being pulled together, or where it can be pulled together.

Rachel thought that the NALCC and SALCC would do this for us, as well as the Climate Science Centers. We would need to tell them what kind of information we need.

Caroly felt that the first step is to get the subcommittee together, in person, and identify the information, which we can then supply to the contractor.

Julie noted that the multi-state conservation grant will cover deciding what data are needed. Julie noted that the NALCC is saying they want all the aquatic habitats to be mapped. The EBTJV has a larger chunk of funding, and they made a decision to use some of their NFHAP funding, toward their assessment. Julie didn't know if they have made a long-term commitment, but she thinks they may use a portion of their funding each year, to continue to update their assessment. The Midwest FHPs are seeking a multi-state grant, to continue their assessment, develop a decision support tool, and develop a web-based platform. They have offered to allow us to jump on their platform.

George noted that many of the FHPs have some sort of assessment. ACFHP has done much more work about the habitats which are important. We need to do some thinking, so that when we work with others who have a different concept, we make sure that we get what we need, and not what they think we need. We don't want to be left out, by having the date that doesn't kiss us at the end of the evening.

Wilson asked if we had considered the scope of the habitats which we want to map? He noted that ASMFC jurisdiction goes only to three miles. The LCC's have decided to extend their boundaries to 200 miles. It may be that some segmented or tiered approach would be appropriate.

Pat noted that is the approach which the SAA Healthy Ecosystems Team has taken.

Caroly noted that they went beyond 200 miles, in one case.

Julie reviewed some of the things that the NALCC has considered.

Lance noted that you can map large structures, but the habitat use by the species changes seasonally. Habitat can also change due to storms, and other factors. You don't want to approach habitat as a static feature, because it changes.

Emily noted in terms of moving forward, are we comfortable in terms of getting the subcommittee together, and then working with the two LCC's? Wilson stated that he was okay with that, but that we should also coordinate very closely with the three federal Fishery Management Councils. Both the Mid-

Atlantic and South Atlantic Councils have strong habitat programs. Chris Boelke advised that the NEFMC also has a good habitat program and is currently working on their EFH Omnibus Amendment.

George mentioned another NOAA program which should be tracked.

Emily asked what the SC thought about taking some of our NFHAP funds, and applying it toward the Habitat Assessment.

Caroly asked if we could take some of the funds and use them for travel? Emily stated that we can use funds from this year's grant, to do that meeting. Mark asked if the FWS didn't provide some additional funds, for this purpose. Julie indicated that FWS had made some of the overhead funds available, during one year. Mark noted that based on what has happened in the past, we may get more than $90,000. Chris Powell asked if using some of these funds, would affect our future review by the NFHAP Board? Julie stated that we can use a certain percentage of our NFHAP funding, for administrative costs. Mark asked if we could look at this as a proposal, and rank it along with others we receive? That way, if we treat it like a project, and it ranks highly, we can fund it. Kent and Emily thought that was a good idea. Pat liked that idea as well, because it ties in with having the subcommittee look closely at what the gaps are. We don't want to duplicate what others have done. Pat thought that would narrow the focus. Pat asked what level of detail we need to inform our need for restoration? He noted that you can keep looking at greater and greater levels of detail.

Julie gave an example, from the Midwest. She noted that she had asked the Midwest contractor for a an estimate, and she shared that with us. The first estimate was for providing five response variables, modeling only streams in the ACFHP, and employing the same exact process used in the Midwest assessments. The second estimate included the estuarine and coastal habitats, for only about $40,000 more, which Julie found interesting. Someone stated that was because they had never worked in those habitats before.

Dawn stated that to her it seemed a bit early to make a decision on the amount of funding required. Julie noted that the LCC's have a lot of money. She noted that the NALCC Coastal and Aquatic Subcommitee had said they needed $250,000. Rachel stated that they have $800,000 per year, but that may not hold up. Emily indicated they had been encourage to work through the LCCs. Rachel stated that she could see even the Climate Science Centers willing to bring the Science and Data Subcommittees together, especially adjacent ones, with the LCCs, because that would be a good investment. She indicated that she would do it.

Emily indicated that we would hold off on the NFHAP funding. Emily noted that the Midwest really wants to know if we want to partner with them on a multi-state proposal. Dawn felt that we need to drill down and determine what we want. Julie agreed that she didn't believe we are there yet. Emily indicated it seemed a bit like the tail wagging the dog.

Caroly indicated that if we go that route, with that particular data group, it could be more costly in the long run, to get it on a platform that we can use. Wilson asked if it is appropriate for the subcommittee to look at existing sites which might serve our purposes, such as the FWRI site? Caroly thought that it would be appropriate, perhaps later in the process.

Rachel asked if other FHPs would be involved in the subcommittee? Caroly stated not, it would just be ACFHP, looking at what Moe had provided and seeing how to take it down to a smaller scale. Rachel

stated that if we included other FHPs, then it would be more likely for these other entities to fund the work.

Caroly wanted to get the ACFHP subcommittee together first, to make sure that we know what it is that we need. Rachel noted that they got their money late, and they need to find ways to spend it, so she may be willing to provide some 2012 funding.

5:40 PM: Kent noted that we had accomplished a lot to day. Everyone can meet at 9:00 AM tomorrow, except for those who are on the endorsement committee, and those are Kent, Dawn and George. They need to meet at 8:15 AM.

The meeting recessed at 5:44 PM.

Wednesday, April 25, 2012

9:12 AM: Kent welcomed everyone and noted that he was convening late, to make sure that everyone had time to arrive.

Kent noted that the Endorsement Subcommittee had decided to endorse a number of projects, and he quickly named them for us. He noted that it is a good sign that others are coming to us for endorsement. He noted that it is part of our Strategic Plan and also our mission. It is not an intensive process. There are four on the subcommittee right now, Kent, Chris, Dawn and George (Lou is also on it but he was absent).

Chris asked Kent to explain the benefits. Kent explained. He noted that endorsees get to use our logo, and it benefits their funding applications. George suggested that we ask applicants to let us know, when they do receive funding for a grant.

Melissa Laser Award, *K. Smith* 9:15

Jimmy noted that the award committee met yesterday, and made sure that the nominee met the criteria. They have accepted a recipient for the first ever Melissa Laser Award, but have decided to wait until the fall, to make the announcement. Caroly asked how the nominations were made? Kent noted that the notice went out to all in the partnership, about a month or so ago.

Chris asked Kent to provide some background for the award. Kent explained that Melissa was a very good biologist, who was very instrumental in the development of ACFHP, and died suddenly in April 2010, shortly before our last meeting here in St. Petersburg. This will be the first ever Melissa Laser Award. Emily noted that we had nominated George for a different award, one at the national level, since he led us for four years. Kent noted that the last meeting we had in St. Petersburg was planned because Melissa had never been south of NJ. Kent noted that we will meet next in Philidelphia, PA, in late October, and the award will be announced then.

Implementation Planning (cont.) *G. Schuler and C. Powell* 9:30

Kent indicated that we will continue our implementation discussion. Chris had taken time last night to go over our decisions and compile a new document, which Emily projected on the screen. Chris reviewed the decisions we had made yesterday. He noted that Habitat Protection Objective 6 was not considered yesterday. He noted that it is more of a Communication and Outreach task. Emily noted that she had inadvertently left it out. Chris noted that there is only one task under it. Chris continued his review of the objectives, strategies and tasks that we selected.

Dawn asked that we add the responsible entities for each task. Chris felt that this would take a lot of time to complete, so he recommended sending the new document to everyone, and assigning leads later. He thought that it would take hours to complete. Emily indicated that we have an hour.

Dawn was okay with that, but felt that we at least should have a conference call to make sure that someone is assigned to each task. Chris noted that once people go through the list, they will realize that there is a lot less work to do.

Emily indicated that she would like to take the time to run through the list, and get as far as we could go.

Caroly wanted to see some examples of actions that could be taken, under some of the tasks.

Chris continued his review of the decisions made yesterday. There are no tasks for Objective 6 under Habitat Protection. Caroly asked if there is nothing to be done here in 2012. Chris indicated that the group will have to decide. Chris stated that we could leave this one where it is, or move it to the Communications and Outreach component. Emily stated we could leave it here for the time being, or move it, as we choose. She suggested that if there are outreach staff, in or organizations, who may want to develop ideas for public outreach materials, we might want to seek their involvement.

Caroly noted that there are already some outreach materials out there.

Chris Boelke noted that NOAA-NMFS had produced a document a while back on the non-fishing impacts of various activities.

Chris Powell thought that the HC had done a document on adverse impacts. Wilson couldn't recall for sure. Wilson suggested that we coordinate this activity closely with the federal FMCs, and noted that the South Atlantic Fishery Management Council already has an Information and Education Advisory Panel, and he recommended that we involve them in the process for this task. He noted that they already have representation from the states, and federal agencies.

Kent suggested that this task may be more of a resource-mining activity.

Rachel indicated that many of the states have communication divisions who may have produced materials that are relevant to this task. She suggested that we try to capitalize on existing resources as we implement this task.

Kent noted that we had developed a habitat plan component, using an intern. This task may also lend itself to an intern task. Pulling all the existing information, and reports, together, seems ideal for an intern.

Caroly said that sounds great. She encouraged that any intern touch base with the NEMO and think more broadly about impacts upstream.

Chris Powell felt that we would be able to organize this a lot easier, once we have all the contacts together.

Rachel indicated that she would put this up on her website, this week.

Russ Babb noted that NJ has an initiative, regarding the value of SAV. They are creating conservation, essentially no-wake, zones and are conducting an education blitz. Their LE folks will stop people who are speeding through SAV areas, and educate them. Russ thought it might be far enough along in draft form to be useful.

Chris Powell suggested that we also contact Boat US and look at their materials. Kent noted that their new president, Margaret Podlick, is very supportive of that kind of work.

Jimmy noted that the NCWRC has a poster that they are putting at WRC boating access ramps in NC, which educates the public about SAV.

Emily asked if the individuals who have spoken about this would be willing to assist in putting an intern in touch with these people? Jimmy indicated that he would.

Cheri noted that NH has boating courses required for licenses, and there is the opportunity to provide materials to them during the course. Also, their public affairs puts on classes to teach kids about things, so this could be a segue for kids.

Kent asked if every state has a boating license education requirement? Many states have courses, but are not required.

Kent thought that was a good idea.

Chris Powell noted that we have 30 slides to review. He suggested that we move on, and then try to add ideas and assignments later.

Julie wondered if we want to define this task further. She asked if we wanted to produce a small brochure? Kent indicated that he felt the data-mining component of it was the first step. He asked for volunteers to assist. Rachel and Wilson volunteered to serve as bridges for any intern to outreach people within USGS, and the South Atlantic Fishery Management Council. Jimmy volunteered to assist in NC.

Chris Powell reviewed the Habitat Restoration Objectives. He noted that we picked two, and reviewed those and the strategic action under each one. Emily noted that some of these are things we already do, such as fund on-the-ground projects. Caroly suggested that if we are going to focus on Strategic Action 2 of Restoration Objection 1, we should modify the RFP to include that language.

Stephanie (on the phone) noted that she would like to see us identify some priorities, each year, in the RFP, and give additional points if a project includes those priorities. She suggested that we should focus on the project type in so doing, and not the location.

Dawn agreed with that suggestion.

Chris Powell agreed and stated we could add a few points for such projects.

Cheri noted that some states have River Restoration Task Forces, or Dam Removal Groups, and it might be good to get their e-mail addresses, for use in distributing our RFP.

Stephanie noted that American Rivers was involved in all the task forces which exist, and they do distribute the RFP to all of which they are aware. Cheri noted that she is on the NH group, and she doesn't see them. Stephanie indicated that they usually send them to the chairs.

Chris Powell moved to Strategic Action 3, Restoration Objective 1: there were no comments on this one.

Restoration Objective 1: Strategic Action 5: Pat noted that the ASMFC Fish Passage Work Group has developed some materials which may be applicable for this one. Emily asked Pat if he would be willing to be a POC for this one. Yes.

Restoration Objective 2: Strategic Action 1: Tasks 1-3. Kent indicated that he could contribute to this one. FL is developing plans, which cover large swaths of habitat. Plans like that will have prioritizations in them, so that will fulfill some of these obligations. We can compile some of these, such as the Chesapeake Bay Plan, and bring them into the Partnership. We can say they are based on regional assessments.

Chris Powell indicated that he could cut and paste the responsible parties, into this version, and Emily can send it out. Since it has been winnowed down, perhaps people will not feel as overburdened.

Caroly asked if we could volunteer later, for different tasks? Kent and Chris Powell indicated that was fine. Caroly noted that the Science and Data Subcommittee has so much to do, that she doesn't want to volunteer for any additional work today.

Chris Powell reviewed the tasks under Science and Data Objective 2: Strategic Action 1: Michele suggested that some of the tasks could be merged. Emily indicated that there is already a subcommittee to do just that.

Science and Data Objective 2: Strategic Action 3: Tasks 1-5: Chris Boelke felt that Task 1, check with Moe to see if this fits under his work plan, needs some more descriptive language.

Kent and Caroly agreed that we can add some further descriptive language so non-members will fully understand.

Chris Powell reviewed the Communications and Outreach Objectives and Tasks: Emily indicated that she didn't feel that we needed to identify individuals responsible for maintaining and updating the website, since that is what she does on a regular basis.

Communication and Outreach Objective 1: Strategic Action 3: there was only one task and we all understood that one.

Chris Powell continued the review. There were no questions regarding Communications and Outreach Objective 2: Strategic Action 2: Task 2. Emily noted that our communications group is four people, all of whom are completely maxed out. So, if anyone in your agency wants to get out of their typical audience, and work with this coastwide group, they will be welcome.

Pat noted that there is a new Atlantic Communications Committee. All the leads from federal agencies have come together to share messages. Tina Berger at the ASMFC has headed that effort to get all the state outreach folks together. When we do have messages, we can get them out through that group.

Communications and Outreach Objective 2: Strategic Action 3: Emily noted that for this one, she needs to get together with state staff who work with their Congressional delegations. Wilson noted that Danielle Chesky (per Pat) is the designated Legislative Liaison for ASMFC and can no doubt help us out here. He noted that there are also handy desk reference guides to Congress, which would be useful for Emily to have in her possession. He noted that they are cram-packed with information about Representatives and Senators, so that we could target those with an interest in our issues. George agreed and noted that we can target especially those on natural resource appropriate committees.

Finance Objective 2: Strategic Action: Emily suggested that this one could be assigned to the Finance Subcommittee. Cheri suggested that we need not just a short list of foundations, but to compile a list, and sort it regionally. Chris Powell noted that the language came from what was submitted.

Julie suggested that we could have a list by state, and also a separate list of those which cross state boundaries. Chris Powell indicated that there is a book which lists all the foundations. Caroly noted that such a list would be useful for all the state partners. Michele noted that you have to cultivate relationships with foundations, so a short list of those which are particularly applicable, will be useful.

Chris Powell asked Emily to return to the beginning of the document, and spend some more time discussing tasks, since he had cut discussion short in the interest of time.

Julie noted that she liked the idea of putting names to each task, since there are a lot of people in the room today, who weren't here in November.

Dawn noted that we could solicit input from the entire group, later.

Chris Powell noted that many of the tasks do not have names associated with them.

Michele asked if we had in one of these tasks, developing a dialog with Restore America's Estuaries.

Chris Powell asked Emily to move back to the tasks and assign leads. We turned to Task 1 under A.1.1. Wilson noted that he would be pleased to assist, since he is on the Fish Passage Work Group, and the HC and the MSC. Emily asked what the output is here? Pat and Wilson indicated that the idea was to share any priorities which had been developed by others. Stephanie noted that there is a lot of overlap between Tasks 1 and 3. Chris Powell noted that we had selected those two. Emily noted that one is communicating, and the other is compiling. Cheri elaborated on the actual task. Pate Geer, Cheri and Wilson and Kent, were going to work regionally on Task 3. Stephanie noted that there is no global

priority list, it is all regional, or state, or on a watershed basis. She suggested that we focus on Task 3. Julie asked what the purpose is? Wilson noted that he thought the intent is to make sure that everyone has the information, and also to assist the states during their preparation of their Habitat Plans, under Amendment 3. Also, Wilson saw utility for using the list by applicants to ACFHP, to note the priority. Kent agreed that would be useful in deciding on endorsements as well.

Bill Shadel wondered about the utility of other priority lists being used to establish ACFHP priorities.

Chris Powell suggested that it didn't preclude ACFHP considering their own priorities.

Kent explained that we want to make sure that projects we may identify, are priority on someone's list. It is a reality-check for us. Kent noted with respect to American shad, in Florida, it won't mean much since that species is only in the St. Johns River on the east coast. But, for other areas in the NE, there are thousands of potential structures, so it would be more meaningful.

Bill asked if the applicant shouldn't provide that information to us? Kent said that would be fine, but we still need to be aware of the information others have developed.

Chris Powell moved on to the next Task selected, the Science and Data Committee task regarding selecting at which scale of watershed the ACFHP wants to deal? Wilson thought it was a bang for the buck kind of thing. George thought that it was a matter of seeing how many potential projects, might be in various watershed units. Wilson noted that there is an effort ongoing in NC, through Lynnette Batt of American Rivers, who leads the NC Aquatic Connectivity Team (NCACT).

Rachel suggested that it would be useful as well to compile a list of land trusts. This may be a way to target low-hanging fruit. Michele noted that they have targeted land trusts. Rachel agreed that the LTA regional meetings, and the national group, would be good to target.

George noted that the problem is that a regional analysis showing thousands of points, doesn't really assist us that much. The way he reads this one, it is a way for us to conduct an analysis, across the entire coast, to see what priorities have been identified. George suggested that we could put in priorities, using the TNC list, and run it and see what pops up.

Caroly asked if the program doesn't allow us to put in the HUC as well? George thought it did.

Emily asked if Caroly thought that we could pull some folks from the Science and Data Subcommittee to work on this task? Caroly said yes, but she was somewhat confused about the value. The TNC Connectivity Report pulls out the top five percent, based on anadromous fish. George indicated that it was. Caroly suggested that if we can have regional lists, that would help us. She wasn't sure that we should use top tier, or a watershed basis.

Emily suggested that we accomplish these first two tasks, with the people identified.

Chris Powell noted that we shouldn't forget the state's diadromous fish restoration plans as a resource.

Wilson suggested that we could produce an Excel spreadsheet, which lists everyone's priorities and identifies their HUC, etc., and this would be useful tool. Caroly and Emily agreed that would be useful.

Emily suggested that since we meet only twice a year, we should have a conference call to discuss this further. All thought that was a good idea. Chris noted that we had winnowed the list of 80, down to 29, so that should make us all feel better. Emily noted that we may decide to further winnow the list. She noted that we need to break on schedule, since we have some further agenda items, and some presentations.

Break 10:30

Cape Fear River Initiative*,* 10:50

Kent reconvened the group. He thanked Melanie Harris for participating with us via telephone to discuss the Cape Fear River Initiative. Emily noted that if ACFHP wants to take a more active role in the initiative, we can decide to do so. She asked if there were any questions?

Jimmy Johnson noted that he is keeping up through the state process, and indicated that Fritz Rohde had given perhaps the same presentation at the last CHHP meeting.

Wilson noted that he was engaged in the initiative, as part of the Fish Passage Work Group, and also that FWS staff at the Raleigh Ecological Services Office were also very engaged.

Melanie Harris gave a Power Point presentation for us, on the project. She reviewed her outline. She explained that NMFS had decided that they want to pilot a regional watershed approach. They selected the Cape Fear because it is a large basin with diverse opportunities, which are not insurmountable. Also, the Corps is building a really neat rock arch weir, at their Lock and Dam Number 1, which will provide passage past the gateway barrier. There are also multiple partners, and diverse conservation needs. So, they created a new partnership to develop multi-year watershed action plan to improve migratory (read diadromous) fish populations. They have 50+ partners from federal, state, local, academia and NGOs. The project will benefit local communities as well.

The overarching goal is to produce self-sustaining, robust, and productive stocks of migratory fish capable of producing sustainable fisheries in the river. There are four priority issues, improving water quality, improving habitat conditions, improving fish passage/access and socioeconomic benefits of improving populations. The rock arch weir should be completed next spring, but the partial structure is already useable and being monitored this spring.

Partners are developing short, medium and long-term actions. They are addressing protection and restoration challenges through multiple approaches, considering regulatory, voluntary and grant-based solutions.

Melanie reviewed the timeline. The draft watershed plan will be developed by June. They are sticking to the time frame and making progress.

Melanie noted that she didn't send out the entire list of actions, but wanted to give us some examples.

We had a technical issue in that the projection of the presentation was cutting off part of the presentation. Melanie couldn't fix it. She suggested that Emily run it from her computer, and Melanie will just tell her when to change slides. Emily did so.

Melanie noted that she didn't want to overwhelm us with actions. There are actions which involve assessment, regulatory actions, and policy change actions, and so forth. She provided five examples for us, from various categories. Melanie provided information associated with each draft action. She shared Habitat Objective 3, Habitat/Fish Passage Objective 6; Fish Passage Objective 5, Water Quality and Quantity Objective 1, and Water Quality and Quantity Objective 2.

Chris Powell asked that Melanie send the tax credit information on buffers in NC. Melanie will send that to Emily.

Melanie reviewed the alignment with ACFHP. She noted that we have several shared interests and goals, specifically, conserving, protecting, restoring and enhancing habitat for migratory fish, and we have common partners, and habitat interests. We also share a desire to address ACFHP priority threats and corresponding protection and restoration objectives. They are trying to address water withdrawals in the basin, and how climate change will affect things.

With regard to potential ACFHP roles, Melanie suggested that ACFHP could fund a specific Cape Fear action plan project, could endorse Cape Fear project overall, and consider whether specific ACFHP priority actions for FY 2012 may be applicable. She asked for other ideas as well. She noted that any endorsement would be somewhat different from others ACFHP has provided. She stated that this endorsement would likely help both of our efforts. She noted that endorsement would also strengthen the NOAA/ACFHP relationship. She wasn't sure whether any of the FY 2012 prioirities for ACFHP would be applicable to the Cape Fear.

Kent asked if they would be interest in applying for an ACFHP grant? Melanie indicated that they would, but not this year since they will not be ready yet. Kent advised that the next ACFHP funding cycle will begin in July, so if they have something ready, they would be interested in seeing it. He noted that ACFHP has never endorsed a whole project like this, but we will take it under consideration. He noted that it would be almost like "endorsing" the entire Chesapeake Bay Program.

Caroly asked Kent to explain the difference, between co-sponsorship, and endorsement. Kent explained that with an endorsement, you are not putting too much in the way of resources forward, but you are considering future support, and providing greater impetus for other entities to look at it favorably, and so forth. Co-sponsorship would imply some sort of resources on the ground.

Caroly noted that she agreed it merits further discussion. She agreed that we should look at the ACFHP and consider which actions might apply to this area.

Emily asked if Melanie caught what Caroly had said? No, she didn't. Emily repeated that what Caroly suggested was seeing which of our 2012 actions may apply. One that Emily thought may apply, is to see what priority lists for barrier removal have been done elsewhere. That might be useful for the Cape Fear River effort. Melanie indicated that might be promising.

Chris Boelke noted that some things ACFHP has identified, may not be doable coastwide, so we may decide to focus in on the Cape Fear.

Kent asked what we need to do to evaluate this?

Chris Powell suggested that we just ask them to complete an application. Kent noted that this might be more involved than other applications.

Caroly indicated if we endorse it, does that enable us to put on our web site that this is a nice model for others to use, for fish passage? Kent thought that we could. He noted that this feeds back into our other plans. We want to highlight that connectivity. If the components come to us for future funding.

Wilson noted that Kent had mentioned the Chesapeake Bay Program and noted that there are other such large-scale programs, such as the NEPs, and Diadromous Fish Restoration Plans for multiple watersheds, and river basin plans. He suggested that we consider how we want to proceed down that pathway, and certainly didn't oppose us doing so.

Kent asked Melanie to prepare an endorsement request. She agreed to do so.

Rachel asked if the project had a USGS contact? Melanie indicated that Joe Hightower was involved in the project, from the NC Cooperative Fish and Wildlife Research Unit. Rachel noted that the USGS Water Science Center was engaged in the Cape Fear, and she would provide a contact for Melanie.

Kent thanked Melanie for giving us the presentation.

Peninsular Florida LCC, *T. Breault* 11:15

Kent introduced Tim Breault to talk to us about the Peninsular Florida LCC. Kent noted that since we are in Florida, he thought that this was appropriate. He noted that we want to encourage LCC engagement with us, and we with them.

Tim asked who, other than Rachel and Wilson, was aware of LCCs? Many of the members were aware of them. Tim noted that the LCCs arose as an initiative of the USFWS, to address landscape scale issues. Tim noted that the LCCs were funded a few years ago, and began with 9 units, and now have expanded to 22. He noted that the new approach is to consider all fish, wildlife and their habitats at a landscape. The LCCs are self-directed, not run by USFWS. The model has changed from competition, to collaboration. In the past, if you needed some resource, you went out and got it, and didn't think about partnering with others. We now try to think about who the best in the world is, and then partner with them.

Tim explained the rationale. No one has enough resources, or capability individually to tackle this landscape scale. Tim noted that all conservation is eventually local. There will be a big plan, but local partners need to be incorporated. Tim noted that the LCCs want to have a conversation, about conservation, with partners.

Tim noted that no one will be asked to work outside their existing authorities, but instead will coordinate to identify science needs and BMPs. The intent is to connect ongoing efforts through establishment of a conservation forum. They also want to eliminate duplication.

Tim showed the map of the 22 LCCs. There is a Caribbean one as well, and Tim noted that he had volunteered to be a representative for that one, but someone from USFS volunteered. Tim noted that some of the LCCs span multiple states.

Caroly asked how the boundaries work? Tim explained that the initial boundaries were based on watersheds and bird conservation regions (BCR). Tim noted that the Peninsular Florida LCC was based on a BCR. Wilson explained that those were developed by Partners in Flight. Caroly noted that it was stated on the first slide, that all taxa were to be considered, and not just birds.

Wilson and Tim explained that during the early genesis of the LCCs, the organizational structure was built around existing Joint Ventures, because that was the desire of our then USFWS Regional Director, Sam Hamilton. There was discussion of other landscape units, such as watersheds, and physiographic provinces, but the important point is to have some organization at the landscape level, for collaboration.

Tim and Rachel, and Julie, noted that the boundaries can be changed, and have to be coordinated with partners.

Cheri asked why the Florida Keys were a different color? Tim and Emily explained that the color represents federal lands managed by USFWS.

Chris Boelke asked about the oceanic boundary? Tim explained that different coastal LCCs had to decide individually. All the east coast LCCs decided to go to the extent of the EEZ. Tim noted that the west coast LCCs have not yet decided what to do.

Michele asked if the designation of the ocean had any jurisdictional implications? No, it doesn't, it just means that the LCC can partner with those working in the EEZ.

Tim noted that he is the Coordinator of the Peninsular Florida LCC. They are scheduled to get funding in 2013, but since they already had a lot going on, they got organized. Tim noted that Florida has 23 percent of its land, in conservation status. They have done a lot of planning (CLIP) which has designed a Cooperative Conservation Blueprint. This is a regional approach to conservation delivery. There are local politicians, planners, and others who are using CLIP to determine what a sustainable landscape would look like. Tim stressed again that all conservation is local at the end of the day.

Tim noted that the Florida Wildlife Action Plan, is another foundational tool they plan to use for their efforts in Florida.

Tim shared an earlier version of their vision. They want the landscape to be valued by the people.

Tim noted that he was hired last July. Their LCC looks a little different. They have private landowners participating on their Steering Committee, probably the only one in the US to do so. They have 18 landowners, who collectively own 19 percent of the state. They are sugar producers, and ranchers. Many of them want to remain on the landscape. Chris Powell asked how many are corporations? Tim advised about half of them are. As of four weeks ago, Tim noted that he has a 22-member SC, and he is looking for full membership of 32. They want to create a Strategic Plan, continue partnership outreach, and develop a communication strategy. Tim wants to share information on the science occurring in FL, since many researchers don't know what others are doing.

Tim shared his LCC's organization, which includes a Landowner Incentive Team, a Geomatics Team, Communication Team, Adaptive Science Team, a Partnerships Advisory Council, and Other. All these feed into the Interim Steering Committee. Tim noted that he has the same communication issues as

ACFHP, with regard to communication. He has the Landowner Incentives Team, and Geomatics Team, in place. He noted that chaos results usually when you put a bunch of scientists in a room. Michele said the same thing happens when you get a bunch of managers together.

Tim noted the PFLCC has it owns networking hub for partners: http://peninsularflorida.org

Tim noted has last slide shows current partners, which including the Miccosukee Tribe. He noted that the Seminoles are the only tribe which has never signed any agreement with the US. All the federal agencies are partners, including EPA and the Corps of Engineers. There are some cultural, and other barriers, to overcome.

Tim noted that he met with the Cooperative Research Unit Leader in Gainesville, yesterday, to discuss their participation.

Michele suggested that compiling a searchable database of documents, would be a useful tool to have on the PFLCC web site.

Tim noted that he wants to develop a web-based application, which would enable anyone who wants, to draw a polygon on the FL map, and generate a list of what information is available in that polygon. Also, he wants to create a decision support tool, which will allow the overlay of various layers. This can be perused to investigate policy changes and assess the potential impact on conservation. The tool also could show what happens to species, and water resources, by overlaying all the data layers. This will facilitate the decision-making process. Tim noted that the transportation agencies, and utilities, have indicated they want to see this, and he has suggested that they could help fund it. They have a new director, and he envisions building a sustainable Florida, beginning with what is important for fish and wildlife, then put infrastructure on top of that.

Julie asked if that was the vision for other LCCs as well? Tim advised that it is the vision for the entire SE. Michele asked what was done in the NE, regarding the boundary? Julie indicated that they had moved Lake Champlain.

Tim noted that other LCCs were not as far along in planning, as is the PFLCC. Other LCCs are going to have to build their own CLIP model. Tim noted that Florida can begin modeling, on a Beta basis, and see how things perform. Michele noted that FL has a lot more habitat, than some other states. Rachel noted that it is certainly different. Tim agreed and noted that the Everglades are certainly unique.

On his last slide, Tim noted the Aristotle quote, “the whole is greater than the sum of its parts.” Tim noted that when he was working with Wilson, he had no idea that he would wind up as the LCC Coordinator. He noted that he is working with a lot of other LCCs, and is excited about doing so.

Rachel asked Tim to address his relationship with the SE Climate Science Center. Tim did so, noting that the SECSC is based at North Carolina State University in Raleigh. They held a meeting about a month ago, with the Director Jerry McMann. Tim noted that the CSC’s can’t look the same, as the LCC’s, otherwise Congress will go nuts.

Rachel noted that there are only eight CSC’s across the country, and the LCC’s are their principal customer. Rachel stated that she had started a CSC, and she went to the LCC’s for guidance in creating the mission for the CSC.

Kent thanked Tim for his presentation. He noted that he would like to have some contacts. Kent noted the main contact will be Emily, and him as well. Kent noted that we have joint representation on the other LCCs as well. George and Rachel are on the SALCC, and Rachel, Emily and Julie on the NALCC.

Tim noted that the last four or five LCCs were done in the last few months. So, they are all of various ages. He noted that they are very conscious of partnership fatigue, so they want to have some conversations about having a joint meeting, with all the LCC Coordinators. They are trying to determine how to get communication going.

Other Business 11:45

☐Fall NFHP Workshop

Kent asked Emily to address the fall workshop. Emily noted that the National Fish Habitat Partnership put in funding to help build skills to bring in non-traditional partners. Each partnership will potentially be able to bring several people. This will be held some time in the fall. Emily will send out the proposal to the SC.

☐Fall ACFHP meeting

Emily proposed that we meet next with the ASMFC, on October 21-24, in Philadelphia. She noted that we have less flexibility in the fall, due to the ASMFC schedule, but we do have the opportunity to meet with Commissioners. Chris Powell asked if we would do it back-to-back with the HC. Yes, we will.

Kent noted that the HC meeting will begin promptly at 1:00 PM. Kent noted that we got a lot of work done, and felt that this meeting has been very good overall, from a productivity perspective. He noted that we made some new friends, and thanked Tim again, and noted that we had viewed some good conservation projects on the Florida west coast. He thanked Emily for all of her good work, and Emily thanked Kent for his work.

Adjourn 12:08PM

Technology Transfer: Conservation Moorings to Protect Submerged Aquatic Vegetation in Chesapeake

Introduction

Submerged Aquatic Vegetation (SAV) is vulnerable to impacts from a wide range of anthropogenic effects, including boating. One example is the direct physical disturbance caused by chain scour around a mooring. Traditional moorings, typically consisting of a heavy mushroom anchor and chain, can rip up SAV habitat and prevent plants from growing in the scoured area. Chain dragging can also increase water column turbidity, shading adjacent plants. Individual mooring impacts may seem small; however the cumulative effects in ever crowded mooring fields is a growing concern. New mooring technologies referred to as "conservation moorings" may serve to minimize this impact. Conservation mooring designs include a flexible rode that is kept off the bottom,minimizing scour, and may include a helical anchor to reduce direct bottom impact.

In Massachusetts, the National Marine Fisheries Service (NMFS) partnered with the EPA, Massachusetts Division of Marine Fisheries, The Nature Conservancy and local towns to promote the use of conservation moorings while simultaneously studying their effectiveness at minimizing SAV (eelgrass) impacts. This partnership hadtwo main objectives; 1) to promote SAV habitat awareness and protection and foster stewardship by encouraging voluntary use of conservation mooringsand, 2) to design and implement a demonstration project to study the effectiveness of the conservation mooring technology in protecting SAV. Although the demonstration projects are still being monitored, sufficient information exists to show the benefit of these moorings. As such, this technology is now readily promoted throughout Massachusetts coastal areas and has gained wide spread approval for use in protecting and/or mitigating adverse impacts to SAV. This project was the first to receivean endorsement from the Atlantic Coastal Fish Habitat Partnership (ACFHP) as an activity that supported the strategic goals of the Partnership.

Mooring of boats and the establishment of mooring fields in SAV beds is generally recognized as a significant threat to these important ecological communities across their range. It is ACFHPs intent to promote the use of this mooring technology for specific habitat protection and remediation actions which address historic impacts or impacts currently occurring in mooring fields due to the scouring effects of traditional chain and block-anchor mooring systems. ACFHP is not promoting these systems for use in areas of SAV that are not already impacted nor for the establishment of new moorings in SAV.

Technology Transfer

SAV has been recognized as playing a key role in the health of the Chesapeake Bay ecosystem. However, SAV within the Bay is still subject to many threats and continues to decline in many areas. The Atlantic Coastal Fish Habitat Partnership (ACFHP) will capitalize on the progress made in Massachusetts and will work with local organizationsand partnerships, such as the Chesapeake Bay Foundation, or a Chesapeake

Bay Goal Implementation Team(s), to implement a conservation mooring demonstration project in a high profile location of the Chesapeake Bay and through outreach activities gain acceptance of the habitat protection technology and stimulate voluntary use by the boating public. This project will address ACFHP protection and restoration objectivesand amid-Atlantic Subregional Priority Habitat, as described in its Conservation Strategic Plan.

ACFHP and its partners will identify an appropriate location(s) where SAV habitat has been lost primarily due to the scour of mooring chains, to demonstrate the mooring technology. The location(s) selected will be: an area easily accessible to the public, most likely a public marina with an existing mooring field; under the control of a willing local harbor master or other public entity; and has the capacity to provide information and outreach materials to the public. The ultimate goal of this project is to establish conservation moorings as a best management practice for the protection and restoration of SAV habitats within Chesapeake Bay.

Project Activities

1. Identify potential candidate sites in Chesapeake Bay for the demonstration project
2. Seek assistance from site managers to undertake demonstration project
3. Purchase several conservation moorings for installation at selected sites(s)
4. Produce informational material to showcase demo project, (e.g. kiosk, posters, etc.) to educate the boating public of the benefits of converting traditional moorings using this technology
5. Conduct workshop geared towards harbor masters, marina owners, and others to show benefits of conservation moorings and to promote their use in existing mooring fields.
6. Work with boating community to stimulate interest in conservation moorings and seek voluntary implementation
7. Provide a model for transfer of this technology to coastal areas outside of the Chesapeake Bay

Funding Needs

1. Purchase of conservation moorings (2-4)
2. Production of outreach materials
3. Conducting workshop for harbor masters and marina owners
4. Attend meetings with local government agencies and boater community interests

Moorings	$2000.00	X3	$6000.00
1 Workshop			$4000.00
Outreach Materials			
(kiosk, posters, brochures)			$4000.00
Stakeholder meetings			$2000.00
ASMFC indirect			$4000.00
TOTAL			$20,000.00

Executive Summary

I. Title of Project: Conserving Fish Habitat from Whitewater to Bluewater

II. Applicant Information: Patrick Campfield
Atlantic States Marine Fisheries Commission
1050 N. Highland St., Suite 200A-N, Arlington, VA 22201-2196
phone: 703.842.0740; fax: 703.842.0741;
e-mail: pcampfield@asmfc.org

III. Project Objective(s):

Objective 1: Collectively advance each partnership's habitat assessments through identification of mutual data needs, data acquisition and landscape-level-analysis techniques for the benefit of fish, mussels, and other aquatic animals. Assist the National Fish Habitat Science and Data Committee in improving the 2015 status report by identifying major data gaps in regional-specific fish population, habitat, and human impact monitoring data.

Objective 2: Coordinate Atlantic Coastal Fish Habitat Partnership (ACFHP), Southeast Aquatic Resources Partnership (SARP), and Eastern Brook Trout Joint Venture (EBTJV) partner engagement and outreach activities to strengthen and expand an already robust base of on-the-ground conservation partners. Assess the structure and function of the three FHPs and identify and implement strategies to enhance their organizational capacity.

Objective 3: Retain and enhance critical capacity to implement each of the individual FHP's Partnership Strategic Plans by facilitating completion of prioritized, on-the-ground, partner-led fish habitat conservation projects that achieve measurable results towards National Fish Habitat Action Plan goals and interim strategies and are easily communicated and understood.

IV. Proposed Length of Project: 1 year

V. Funding Requested: March 1, 2012-February 28, 2013: $261,440.38

VI. Funding Source: 100% SFR

VII. States Benefited: 27 States: ME, NH, VT, RI, MA, CT, NY, NJ, PA, DE, WV, MD, VA, NC, SC, GA, FL, AL, MS, LA, AR, TN, KY, OH, MO, TX and OK; all states in USFWS Region 5 (ME, NH, VT, RI, MA, CT, NY, NJ, PA, DE, WV, MD, VA); all states in USFWS Region 4, excluding Puerto Rico and the Virgin Islands (NC, SC, GA, FL, AL, MS, LA, AR, TN, KY); all states of the Northeastern Association of Fish Wildlife Agencies (NEAFWA), all states of the Southeastern Association of Fish and Wildlife Agencies (SEAFWA), and three states of the Midwest Association of Fish and Wildlife Agencies (MAFWA).

VIII. NCN Addressed: NCN 5: Formation and Operation of Fish Habitat Partnerships to Facilitate NFHAP Implementation.

IX. Summary Statement: This project will support and enhance the continued operation of, and enhance coordination between, the ACFHP, SARP, and EBTJV to implement the National Fish Habitat Action Plan. Funds from this grant will support the three primary operational categories for each of the three FHPs: communication and outreach; steering committee operation; and scientific assessment. This will be achieved through coordination within and between Partnerships, as well as with the NFHAP Board and Science Data Committee, thus contributing to the achievement of National Fish Habitat Action Plan goals and objectives, and fostering implementation of NFHAP Board guidelines. FHPs will evaluate their progress towards achieving the NCN using a set of objectives and clear measures.

A. Title: Conserving Fish Habitat from Whitewater to Bluewater

B. Objective(s): The purpose of this project is to advance the coordinated implementation of strategic plans and habitat assessments of the ACFHP, SARP, and EBTJV and promote a more cohesive implementation of NFHAP Conservation Strategies and Targets across 27 states, thus providing meaningful and measurable benefits to the NCN and the State fish and wildlife agencies. The FHPs will identify aquatic data gaps at the regional scale, and develop complementary communications and outreach strategies. The objectives of this project are as follows:

Objective 1: Collectively advance each partnership's habitat assessments through identification of mutual data needs, data acquisition and landscape-level-analysis techniques for the benefit of fish, mussels, and other aquatic animals. Assist the National Fish Habitat Science and Data Committee in improving the 2015 status report by identifying major data gaps in regional-specific fish population, habitat, and human impact monitoring data.

Objective 2: Coordinate ACFHP, SARP, and EBTJV partner engagement and outreach activities to strengthen and expand an already robust base of on-the-ground conservation partners. Assess the structure and function of the three FHPs and identify and implement strategies to enhance their organizational capacity.

Objective 3: Retain and enhance critical capacity to implement each of the individual FHP's Partnership Strategic Plans by facilitating completion of prioritized, on-the-ground, partner-led fish habitat conservation projects that achieve measurable results towards National Fish Habitat Action Plan goals and interim strategies and are easily communicated and understood.

Each objective is clearly defined and achievable and contains milestones, expected outcomes, and measures by which to evaluate progress towards the objective and subsequently the project's contribution towards addressing the NCN.

C. Problem Statement: The National Fish Habitat Action Plan was established in 2006 to address declining health of aquatic habitats in a regionally-coordinated, multi-stakeholder and cross-jurisdictional fashion. The Fish Habitat Partnerships are the primary entities through which the National Fish Habitat Action Plan is implemented, and their continued operation is essential to the success and survival of this national effort. NCN 5 is the primary NCN that the proposed project addresses. This project will support and enhance the continued operation of and enhance coordination between the ACFHP, SARP, and EBTJV to facilitate National Fish Habitat Action Plan implementation. Funds from this grant will support the following activities for each of the three FHPs: coordination and communication; steering committee operation; mutual data compilation, development, and sharing methodologies, to improve habitat condition assessments and project selection criteria, for the three FHPs and their member states and other partners. This project will contribute to the achievement of National Fish Habitat Action Plan goals and objectives, foster implementation of NFHAP Board guidelines, and support coordination between ACFHP, SARP and EBTJV as well as with the NFHAP Board and Science Data

Committee and the newly formed Landscape Conservation Cooperatives (LCCs). The states, and their respective fish and wildlife agencies, that will benefit from the enhanced coordination and assessment capabilities provided by this project are as follows: ME, VT, NH, MA, CT, RI, NY, NJ, PA, OH, DE, WV, MD, VA, NC, SC, GA, FL, AL, MS, LA, AR, TN, KY, TX, OK, and MO. In addition, this project will contribute to achieving NCN needs 1, 3 and 4.

D. Experience: Under a previous MSCGP grant, administered through the Atlantic States Marine Fisheries Commission (ASMFC), it was successful in developing a Board-approved Fish Habitat Partnership, ACFHP. Under this contract, the ACFHP succeeded in hiring a coordinator, completing two science projects (one partially under contract, and one through significant in kind support), and developing an organizational webpage (through contract), outreach materials, and governance documents. Partner recipients of this grant the SARP and EBTJV, have received MSCGP grants in the past, which have been successfully used to operate and grow these highly successful Fish Habitat Partnerships. The EBTJV has completed a range-wide assessment of brook trout habitats including categorization of the status of and identification of the primary threats to these habitats; developed and initiated a range-wide conservation strategy for eastern brook trout; via partners, implemented more than 25 on-the ground habitat improvement projects; and is in the process of refining the range-wide habitat assessment at the catchment scale. EBTJV data and priorities have also been incorporated into the interagency implementation strategies developed under the President's Executive Order 13058 and USDA Farm Bill Programs in the Chesapeake Bay watershed.

E. Approach:

Objective 1: Collectively advance each partnership's habitat assessments through identification of mutual data needs, data acquisition and landscape-level-analysis techniques for the benefit of fish, mussels, and other aquatic animals. Assist the National Fish Habitat Science and Data Committee in improving the 2015 status report by identifying major data gaps in regional-specific fish population, habitat, and human impact monitoring data.

Outputs/Milestones:

- By June 30, 2012, regular webinar meetings of the Science and Data Committees of the three FHPs will be established to enable them to share, identify and assemble existing data pertaining to threats to fish habitats. The three FHPs met with the three large LCCs of this region (North Atlantic, South Atlantic, and Gulf Coastal Plains and Ozarks) in early 2011 to begin to identify mutual science and habitat assessment needs related to implementation of the National Fish Habitat Action Plan. This project will allow the FHPs to continue to develop those relationships and collaborate effectively. Common data needs identified in the 2011 meeting that will be addressed during this project include riparian area conditions, barriers to aquatic animal movement, alteration of instream flows and inflows to estuaries, water quality, sedimentation, and geo-referenced fish population data. Discussion and results from meetings can be documented and published on online.
- By December 31, 2012, develop a written list of action items resulting from the joint Science and Data Committee webinars that will be the focus of the efforts of the

committees. This information will be published online and can be provided to the LCCs, JVs, universities and other regional partners.

Outcomes:

- Effective regional cooperation among conservation partnerships that maximizes the conservation benefits of each partnership and the actions of individual partners.
- Continued and increased FHP engagement and collaboration with other regional conservation efforts such as the National Fish Passage Program, Coastal and Partners for Fish and Wildlife Programs, Bird Joint Ventures, Landscape Conservation Cooperatives, Climate Science Centers, Regional Ocean Governance bodies, and Regional Coastal and Marine Alliances.
-

Measures:

Whether or not a list of actions items is generated from the meetings that will enable the three FHPs to share, identify and assemble existing data pertaining to threats to fish habitats.

Objective 2: Coordinate ACFHP, SARP, and EBTJV partner engagement and outreach activities to strengthen and expand an already robust base of on-the-ground conservation partners. Assess the structure and function of the three FHPs and identify and implement strategies to enhance their organizational capacity.

Sub-objective 2.1: Develop and implement a streamlined communications strategy and outreach products for the three Eastern U.S. Fish Habitat Partnerships that highlights both synergies and distinguishing characteristics across the individual FHPs, and identifies FHP needs that would be best served individually and those that would benefit from a collective message.

Outputs/Milestones:

- Starting within three months of project approval and continuing throughout the project period, joint FHP Communications and Outreach meetings will be held quarterly via conference call and/or WebEx with coordinators and/or appointed staff from the partner FHPs to provide regular, focused coordination of overall communications and outreach efforts.
- By June 31, 2012, develop individual FHP and joint messaging strategies that would identify key target audiences and generate core messages for members of the partnerships to communicate clearly and consistently with those audiences.
- By December 31, 2012, develop content for and the design of an "Implementing the NFHAP from Whitewater to Bluewater" program web page which would include:
    - a map illustrating the territory jointly covered by the Eastern FHPs and the areas and communities where they work;
    - links to or integrated with partner websites;
    - select keystone or iconic species profiles that that would feature the work that FHP partners are doing related to these species

- A representative from each FHP will attend at least one conference or other meetings to give presentations/updates either individually or jointly where possible, to various conservation audiences, to inform attendees of FHP purpose and activities, and gain support.
- Throughout the project period, FHPs will maintain their individual websites and outreach materials (e.g. fact sheets, feature article(s) in partner newsletters and other available outlets, existing social networking tools, etc.) that will be dovetailed, where appropriate, with the other Eastern FHPs resources and efforts.

Outcomes:

- Improved communication between FHPs and with partners, key decision makers, potential funders and the general public;
- a unified and strengthened message across the FHPs, should result in increased public support;
- up-to-date and informative outreach tools and materials; and
- better collaboration between individual FHPs will strengthen collective efforts to implement NFHAP.

Measures:

- Joint FHP meetings are held on schedule and include representatives from member(s) of each of the three FHPs;
- visits to the 'Whitewater to Bluewater' web page and individual FHP websites;
- number of fact sheets generated or articles featured in various communication outlets and the estimated number of people to which the publications are distributed; and
- the number of conferences or equivalent outreach events where an FHP representative made a presentation/update.

Sub-objective 2.2: Assess the structure and function of the three FHPs; identity strengths and weaknesses with current delivery of the FHPs; and provide recommendations to enhance the effectiveness and capacity of the FHPs to achieve their missions and goals.

Outputs/Milestones:

- ACFHP, EBTJV, & SARP develop Terms of Reference (ToR) or Request for Proposals (RFP) for services to evaluate the structure and function of the three FHPs and make recommendations to improve their organizational capacity by February 2012.
- The FHPs select a qualified applicant by March 2012.
- FHPs in collaboration with the successful applicant complete a review of the FHPs external/internal environment and the past performance to create a detailed understanding of current strategic position and organizational capacity by June 2012.
- Based on the capacity assessment, the FHPs develop Sustainable FHP Plans, outlining organizational capacity objectives and begin to implement those plans by February 28, 2013.

Outcomes:

- Objectives and strategies for maintaining or enhancing FHP organizational strengths and improving upon organizational weaknesses, within each individual FHP and across the three Eastern FHPs.

Measures:

- The extent to which the three-year Sustainable FHP Plan is supported by FHP Steering Committees and partners.

Sub-objective 2.3: Build sufficient organizational capacity within and across the three Eastern U.S. Fish Habitat Partnerships to fully implement the Sustainable FHP Program and Plan (i.e. Sub-objective 2.2)

Outputs/Milestones:

- Each of the FHPs will designate member(s) to serve as part of a collaborative organizational capacity network.

The successful applicant will present the findings to the Partner representatives at the joint meeting (ie. report/recommendations) by November 30, 2012 for the group to review and discuss.

Outcomes: Increased capacity within the three FHPs and their members to secure project and operational support and communicate the value of aquatic habitat conservation efforts in the region, and implement their strategic plans and the National Fish Habitat Action Plan.

Measures:

- The extent of FHP Steering Committees and partner engagement and willingness to implement their Sustainable FHP Plan;

Objective 3: Retain and enhance critical capacity to implement each of the individual FHP's Partnership Strategic Plans by facilitating completion of prioritized, on-the-ground, partner-led fish habitat conservation projects that achieve measurable results towards National Fish Habitat Action Plan goals and interim strategies and are easily communicated and understood.

Sub-objective 3.1: Support regular meetings of the individual FHPs to engage with partners, identify opportunities to implement the FHP Strategic Plans, and prioritize actions toward protection and restoring function of eastern aquatic habitats.

Outputs/Milestones:

- By June 30, 2012, an EBTJV coordinator is hired and effectively working with the EBTJV Committees and partners;
- By December 31, 2012, hold one joint meeting of coordinators and leadership (10-15 people) from the ACFHP, EBTJV, and SARP to facilitate inter-FHP exchange of successes and challenges and foster "Whitewater to Bluewater" collaboration;
- By December 31, 2012, hold one all-partner or steering committee meeting each for ACFHP, EBTJV, and SARP to review progress toward objectives and update strategic plans;

Outcomes:

- Cohesive FHPs that are informed and supportive of the effort;
- Prioritized projects are identified and implemented;
- Enhanced understanding of effective avenues for implementation of FHPs
- Strategies for effective inter-FHP communication among ACFHP, EBTJV and SARP

Measures:

- Partners' assessment of progress toward conservation strategies;
- Number of partners that participate in the Whitewater to Bluewater joint meeting
- Number of partners that participate in ACFHP, EBTJV, and SARP meetings and activities.

Sub-objective 3.2:Enhanced capacity of the ACFHP, EBTJV, and SARP to implement design, construction, and monitoring phases of on-the-ground aquatic habitat conservation projects and aquatic habitat education efforts.

Outputs/Milestones:

- Each FHP will fund an average of three or more on-the-ground and at least one communication/ outreach project annually;
- By February 28, 2013, ACFHP, EBTJV, and SARP have begun to implement strategies to improve delivery of FHP as identified in Objective 2

Outcomes:

- Restored function of aquatic habitats
- Increased ability to secure future funding for on-the ground and communications projects
- Enhanced understanding of effective strategies/ actions for implementation of FHPs

Measures:

- Number of on-the-ground projects implemented by partners
- Number of miles of lotic habitat and acres of lentic habitat that are protected or have function restored
- Funds available to the FHPs for on-the-ground projects
- Strategies to improve delivery of FHPs

Sub-objective 3.3: By September 30, 2012, identify and vet mechanisms for evaluating and reporting the benefits of fish habitat conservation projects to a wide range of audiences by monitoring region-specific variable(s) that will inform and add to the National Fish Habitat Action Plan tracking effort.

Outputs/Milestones:

- By September 30, 2012, identify and vet among the science and data partners for ACFHP, EBTJV, and SARP potential monitoring / reporting measures that may serve to track progress of FHPs, including consideration of current measures used to report accomplishments achieved with existing federal NFHAP funds.

Outcomes:

- A list of potential measures for describing progress in protection and restoration of system function of aquatic habitats in the eastern United States
- First steps completed towards an enhanced ability to monitor and communicate benefits of aquatic habitat protection, enhancement and restoration projects
- First steps completed towards an integrated approach that links upland (whitewater) and marine (bluewater) habitats and the conservation partnerships that address them.
- First steps completed towards measures identified via "Whitewater to Bluewater" collaboration are adopted by NFHAP as measures to track nation-wide progress of FHPs

Measures:

- Whether or not a list of potential measures is created that FHPs are willing to evaluate for selection and implementation.

F. Expected Results or Benefits: In addition to the specific outcomes and products, who will use them, and how they address the NCN, noted in section E., the benefits to state conservation agencies, include: (1) reducing data requests to states, (2) reducing variation in the products of the FHPs and LCCs, and (3) paying some travel costs for state agency members to participate in FHPs and related meetings. Many of the outcomes noted above will provide an infrastructure or framework that can be updated, added to, or improved upon, through use and as new information becomes available, allowing for extended use after the project is complete.

G. Certification regarding fishing/hunting: "By submitting this proposal, the organization's primary contact and/or authorized representative identified in this grant application certifies that the Atlantic States Marine Fisheries Commission (1) will not use the grant funds to fund, in whole or in part, any activity of the organization that promotes or encourages opposition to the regulated hunting or trapping of wildlife or the regulated taking of fish; and (2) that the grant funds will not be used, in whole or in part, for an activity, project, or program that promotes or encourages opposition to the regulated hunting and trapping of wildlife or the regulated taking of fish."

H. Certification regarding partnership funds: "By submitting this proposal, the organization's primary contact and/or authorized representative identified in this grant application certifies that the Atlantic States Marine Fisheries Commission: 1) understands that partnership fund contributions are assessed in the Association's review and selection of its priority list of MSCGP projects, but are not considered by the USFWS to be an official non-federal match/cost-share; 2) will provide the partnership funds identified in order to complete the proposed project; 3) understands that if the promised partnership funds are not provided, and there is not a sufficient explanation, potential consequences could include a poor "quality assurance" evaluation by the National Grants Committee for the organization's future MSCGP applications; the imposition of "special award conditions" on this proposed grant and/or future grants (pursuant to 43 CFR 12); and if the failure to provide partnership funds affects the scope/objective or deliverables or other terms and conditions of the grant, then the USFWS could take necessary enforcement and termination actions (pursuant to 43 CFR 12).

Budget

Funds will be split among each of the three eastern Partnerships in accordance with unmet needs and other available partner support.

Funds for ACFHP will be administered directly by ASMFC. Funds for SARP and EBTJV will be transferred from the ASMFC to SEAFWA and NFWF, respectively. ASMFC indirect is 20%, to be applied to ACFHP funds only; National Fish and Wildlife Foundation (NFWF) indirect is 10%, to be applied to EBTJV funds only; no indirect will be applied to SARP funds.

Note full operational support for the three FHPs will require supplemental funding from sources other than MSCGP.

Expenses (in $)	**2012**	
	MSCGP	**P.F.**
Personnel	116,800	90,900*
Fringe (25%)	29,200	
Travel	45,000	30,000**
Supplies	5,000	
Equipment		
Contractual	41,673.07	
Other		280,000†
Total Direct Costs	237,673.07	400,900
Indirect Costs: 10% (avg of 20% ASMFC; 10% NFWF; 0% SARP)	23,767.31	
Total Expenses	261,440.38	400,900

* in-kind support including: partner time at the FHP joint meeting (15 partners total x 2 day meeting = 30 in-kind days) and one individual Steering Committee or All-Partnership Meeting per FHP (25 partners per FHP x 3 FHPs x 2 day meeting per FHP = 150 in-kind days), for a total of 180 partner days x $505 rate per partner day. Rate per partner day is based on average annual salary as derived from salaries provided by individual partners.

**The travel funds (lodging, transportation, meals, etc.) contributed by partners are for Federal employees, who would not be reimbursed for travel.

†Estimated cost of 7 of the on-the-ground projects noted in Sub-objective 3.2

Qualifications of Key Personnel

Patrick Campfield, Science Director, Atlantic States Marine Fisheries Commission
Patrick is responsible for oversight of the Commission's Marine Science Program, including stock assessment activities, fisheries data collection programs, and scientific support to the Atlantic coastal states. In addition to the Science Program, Patrick also oversees the Atlantic Coastal Fish Habitat Partnership and the Commission's Habitat Program. He has a B.S. in Marine Biology and M.S. in Fisheries Science and Management from the University of Maryland Center for Environmental Science.

Scott Robinson, Coordinator, Southeast Aquatic Resources Partnership
Scott has served as SARP Coordinator since September 2005. Prior to that he was a Fisheries Biologist for the Georgia Department of Natural Resources for eleven years. He is currently managing the administration of several grants, including a Multi-State Conservation Grant, for SARP. He received a B.S. degree and M.S. in Fisheries and Wildlife Biology from Clemson University. He is a Certified Fisheries Professional and past President of the Georgia Chapter American Fisheries Society.

Emily Greene, Coordinator, Atlantic Coastal Fish Habitat Partnership
Emily coordinates all ACFHP activities, providing daily support to the development and operations of ACFHP by facilitating committee and working group activities, managing contracted projects, identifying funding opportunities, and developing outreach activities. Emily has a B.S. in Biology and Environmental Science from the College of William and Mary and an M.E.M from the Nicholas School of Environment at Duke University.

Callie McMunigal, Appalachian Partnership Coordinator, U.S. Fish & Wildlife Service
Callie currently serves as the EBTJV Coordinator. Since 2008, she has managed the $600,000 of project funds that EBTJV receives each year. She also manages hundreds of thousands of dollars in grants and cooperative agreements each year for habitat projects. Callie has a B.S. and a M.S. in Hydrogeology and a minor in Geographic Information Systems from Florida Atlantic University and 15 years of experience working for state and federal government agencies on large scale partnership efforts.

George Schuler, Director of Conservation Science & Practice and Co-Director, Eastern U.S. Conservation Region Anadromous Fish Program, The Nature Conservancy (TNC)
George is currently the ACFHP Steering Committee Chair. George is responsible for coordinating diadromous fish policy and on the ground conservation efforts along the Atlantic Coast, developing and implementing measures and evaluations for conservation projects and supervising all areas of conservation science, strategic planning, project management, measures and evaluation for the Eastern New York Chapter of TNC. George has a B.S. in Environmental Science from Allegheny College and a M.S. in Environmental Studies from Yale University School of Forestry and Environmental Studies.

Douglas Stang, Assistant Director – Division of Fish, Wildlife and Marine Resources, New York State Department of Environmental Conservation

Doug is currently the EBTJV Steering Committee Chair and has served on the EBTJV Steering Committee since the partnership's inception. With the DEC, Doug provides oversight for the agency's broad fish, wildlife, marine and habitat programs delivered by more than 350 staff with annual program expenditures of $58 million. Doug has a B.S. in Forestry and Wildlife (Fisheries Science) from Virginia Tech and a M.S. in Fishery Biology from Iowa State University.

2013 Multistate Conservation Grant Program

Part I: Grant Proposal

Executive Summary

1. **Project Title:** Promoting Strategic Fish Habitat Conservation through Regionally-coordinated Science and Collaboration

2. **Full Legal Name of Organization:** Association of Fish and Wildlife Agencies on behalf of the National Fish Habitat Board.

3. **Organization Information:**
   - **a.** Applicant Classification: Non-governmental organization
   - **b.** Nongovernmental Organization Classification (if applicable): 501(c)(6)

4. **Lead Applicant's Contact Information:**

Mr. Kelly Hepler
Chairman, National Fish Habitat Board
Alaska Department of Fish and Game
333 Raspberry Road
Anchorage, Alaska 99518-1599

e-mail: kelly.hepler@alaska.gov
Fax: 907-465-2332
Phone Number: 907-242-1907

5. **Name and Affiliation of Co-Investigator(s)/Partner(s) (if applicable):**

Mr. Matt Menashes, Director of Operations
Association of Fish &Wildlife Agencies
444 North Capitol Street NW, Suite 725
Washington DC, 20001

Tom Busiahn, U.S. Fish &Wildlife Service
Scott Robinson, Coordinator, Southeast Aquatic Resources Partnership
Emily Greene, Coordinator, Atlantic Coastal Fish Habitat Partnership
Callie McMunigal, Appalachian Partnership Coordinator, U.S. Fish & Wildlife Service
Heidi Keuler, Coordinator, Fishers & Farmers Partnership
Robin Knox, Coordinator, Western Native Trout Initiative
Lisa DeBruyckere, Coordinator, Pacific Marine & Estuarine Partnership
Sue Rodman, Alaska Department of Fish & Game

6. **Project Length:** 3 years. This proposal requests first-year funding for a project that is projected to run for 3 years.

7. **Funding Requested:**
   - **a.** Total Amount: $490,617
   - **b.** Year 1 Amount: $490,617
   - **c.** Year 2 Amount (if applicable): $
   - **d.** Year 3 Amount (if applicable): $

8. **Estimate of Partnership Funds to be Leveraged (if applicable):** $416,667

9. **Funding Source.**
   - **a.** Funding Source: 100% SFR
   - **b.** Percent WR:
   - **c.** Percent SFR:

10. **State Benefit Requirement:** Project benefits all 50 states. Currently, each State is engaged with one or more FHPs; therefore benefits will extend to fish habitats in all states.

11. **Primary National Conservation Need (NCN) Addressed:** Subject 1: Strengthening the National Fish Habitat Partnership

12. **Summary Statement (200 words or less):** Through regional collaboration, Fish Habitat Partnerships will address the five objectives in the newly updated National Fish Habitat Action Plan (objectives abbreviated here):

    1) achieve measurable habitat conservation results,
    2) establish a consensus set of national conservation strategies,
    3) broaden the community of support for fish habitat conservation,
    4) fill gaps in the National Fish Habitat Assessment, and
    5) communicate conservation outcomes as well as new opportunities and voluntary approaches for conserving fish habitat.

    Priority needs identified by Fish Habitat Partnerships vary across regions, and include improving hydrography data in Alaska, engaging landowners in the agricultural Midwest, and setting restoration and protection priorities for estuarine habitats on the Pacific coast by developing a spatial framework for nearshore and estuarine habitats. In broad swaths of the eastern and western U.S., Fish Habitat Partnerships seek resources for habitat data acquisition and analysis at both the local watershed and larger landscape level, increasing partner engagement and outreach, and identifying and facilitating on-the-ground projects that address conservation priorities. This proposal addresses each of those needs.

13. **Terms and Conditions.** *Use of MSCGP Grants - All applicants must ensure that their proposed project does not fund, in whole or in part, an activity that promotes or encourages opposition to the regulated hunting or trapping of wildlife or taking of sport fish.*

    ⊗ I agree with the above terms and conditions.

Project Narrative

Project Title: Promoting Strategic Fish Habitat Conservation through Regionally-coordinated Science and Collaboration

Objective(s)

Through regional collaboration among FHPs,

- Collectively advance each FHP's habitat assessments through identification of mutual data needs, data acquisition and landscape-level analysis for the benefit of fish, mussels, and other aquatic animals.
- Provide region-specific fish population, habitat, and human impact data to fill regional data gaps and to assist the national Science & Data Committee in improving the 2015 national status report.
- Develop and demonstrate best management practices for habitat conservation, and methods to effectively engage local communities in fish habitat conservation projects.
- Develop and/or improve strategic plans of individual FHPs, and develop landscape-scale linkages among FHP priorities and those of other landscape conservation efforts.

Problem Statement

The National Fish Habitat Board is responsible for overseeing and coordinating implementation of the National Fish Habitat Action Plan. As the primary work units of the Action Plan, Fish Habitat Partnerships are responsible for:

- Coordinating and compiling scientific assessment information on fish habitats within their partnership areas,
- Establishing strategic goals and objectives that define desired outcomes for fish species and habitats within their partnership areas,
- Identifying priority places and/or issues to focus conservation action, and prioritize fish habitat conservation projects to meet goals and objectives,
- Coordinating and compiling information on outputs (conservation actions) and outcomes (changes in habitat condition) for reporting to the Board and stakeholders, and
- Collaborating with other FHPs where appropriate to carry out these responsibilities.

Current funding is insufficient for FHPs to meet the above objectives, to develop strategic priorities for fish habitat conservation actions (protection, restoration, and enhancement), and to contribute regional data that addresses gaps in the 2011 National Fish Habitat Assessment.

The responsibilities of FHPs align closely with the needs documented in NCN #1. This project will provide resources to support broad regional collaboration among FHPs to carry out these responsibilities in an efficient manner.

Experience

The National Fish Habitat Board, organized in 2006, is responsible for developing policies and guidance for recognizing Fish Habitat Partnerships (FHPs), and for establishing national measures of success and evaluation criteria for FHPs. Since 2007, the Board has recognized 18 FHPs based on its policies and guidance, and in 2012 completed the first performance evaluation

of FHPs. Kelly Hepler has chaired the Board since May 2008, supported by an interagency staff from state and federal agencies and the Association of Fish and Wildlife Agencies.

Fish Habitat Partnerships, the primary work units of the National Fish Habitat Action Plan, are supported by a variety of funding sources and in-kind contributions. The FHPs are dynamic, inclusive coalitions of public and private institutions, each with an established governance structure, a strategic plan identifying conservation priorities, and capabilities for scientific assessment. The National Fish Habitat Board's FHP recognition process ensures that the individual FHPs all have in place the diverse partners, governance structure, and planning capabilities needed to identify strategic priorities and to select projects that address their priorities.

FHPs themselves do not collect scientific information or conduct fish habitat conservation projects. State agencies or other partners involved with FHPs provide the personnel and other resources to do these jobs. FHPs add value to fish habitat conservation by assembling and analyzing information at a landscape scale, recruiting new partners, and providing strategic frameworks that focus resources on the highest priority conservation needs. In the near term, FHPs may place a burden on state agencies and other partners, which are already resource-limited. In the longer term, FHPs will help state agencies and other partners to be more efficient in achieving desired conservation outcomes.

While all of the FHPs have made significant accomplishments in their short histories, they operate under the Action Plan's tenet that conservation actions must be sustained and accountable. This project builds upon the capacity and experience of FHPs to achieve long-term conservation outcomes.

Approach

This proposal takes a regional approach to addressing the objectives of the National Fish Habitat Action Plan, and the needs identified in NCN 1: *Strengthening the National Fish Habitat Partnership*. Seventeen of the 18 FHPs have defined geographic boundaries; one, the Reservoir Fisheries Habitat Partnership, focuses on a *type* of aquatic system rather than a geographic area.

The National Fish Habitat Board has consistently urged the FHPs to cooperate with neighboring or overlapping FHPs, and with other partnerships and entities, to ensure that their goals and activities are complementary. Regional cooperation among FHPs (as well as Landscape Conservation Cooperatives and migratory bird Joint Ventures) has become routine, and continues to increase. This proposal builds upon the regional cooperation among FHPs.

Eastern United States

Three FHPs that engage 25 states in the eastern U.S. (Southeast Aquatic Resources Partnership, Eastern Brook Trout Joint Venture, and Atlantic Coastal FHP) will cooperate on coordinated scientific assessments, developing data sharing methodology, and collecting and analyzing aquatic data at the regional scale. The three FHPs will contribute data and participate in the development and refinement of the National Fish Habitat Assessment; collaboratively develop methods of collecting, compiling, and managing regional data on fish populations and aquatic

habitats; and produce refined conservation focus area maps and lists of priority criteria for each FHP.

The FHPs will also coordinate partner engagement and outreach activities to strengthen and expand their already robust base of on-the-ground conservation partners. This activity is an implementation of strategies developed in 2012, supported by MSCG funds.

Requested funds will also enhance capacity to implement each FHP's strategic plan, through completion of prioritized on-the-ground partner-led fish habitat conservation projects. Funds will support communication within the FHPs' governance structure, allowing them to identify opportunities to implement each FHP's strategic plan, and prioritize actions to protect and restore functions of eastern aquatic habitats.

Outcomes will include improved habitat condition assessments and project selection criteria for the three FHPs and their member states and other partners. A more coordinated approach to developing assessments will result in reduced data requests to states and reduced variation in the products of the FHPs and LCCs. The work will provide an infrastructure that can be updated, added to, or improved upon, through use and as new information becomes available, allowing for extended use after the project is complete. Increased coordination among FHPs at the regional scale will also result in a strengthened approach towards promoting FHP scientific needs within LCCs.

Midwest United States

The Fishers and Farmers Partnership for the Upper Mississippi River Basin (FFP) brings agricultural interests to the table to find ways to conserve aquatic habitats while maintaining productivity and profits for agriculture across a 7-state area.

During a three-year period, the Fishers & Farmers Partnership will work with other FHPs to create landowner engagement opportunities in the Midwestern United States, enhancing the effectiveness of conservation through leveraging and community involvement, and providing a report of best management practices for potential use by other FHPs and partners. During the first year, funds will support up to four training workshops for land conservation employees from federal, state, and local agencies. During the first and second year, FFP and their partners will organize up to four landowner engagement activities, which could result in landowner committees in FFP watershed projects. This effort builds upon the work of the Missouri Department of Conservation (MDC), which has been very successful with landowner committees in the Bourbeuse/Meramec watershed, completing more restoration projects than was predicted based on prior experience. Landowner committees 1) have the capacity to identify and help protect healthy waters, 2) help choose target species using State Wildlife Action Plans, 3) work with partners to restore natural variability in streams and reconnect fragmented rivers, 4) help reduce sedimentation, phosphorus, and nitrogen runoff by promoting best management practices, and 5) organize community events that raise awareness.

Experience in Missouri has shown that when local watershed work is led by landowners, with organizational and technical assistance from conservation partners, more work is accomplished, community resources are leveraged, costs are reduced through cooperative planning and

purchasing, communities are strengthened through shared experiences and recreational opportunities, and habitat projects "sell themselves", spreading throughout the landscape. Landowners tend to also engage in citizen science, helping to monitor the effects of aquatic habitat improvement on their farms and associated watersheds around them. This work also provides opportunities to bring in Farm Bill funding for qualified projects.

During the second and third year, FFP will work with MDC, landowners, and other partners to develop a methodology report, which will undergo peer review prior to submission to the National Fish Habitat Board for potential application where appropriate in other areas of the U.S.

Western United States (inland)

The Western Native Trout Initiative (WNTI) focuses on coldwater habitat and native trout species in 12 states of the western U.S., including Alaska. In many locations these habitats are upstream from desert and prairie stream habitats that are the focus of the Desert Fish Habitat Partnership and the Great Plains Fish Habitat Partnership.

Requested funds will support cooperative efforts of WNTI and neighboring FHPs to conduct scientific watershed assessments, focus on cooperative planning, leverage resources among partners, and report on outcomes of past actions. WNTI will continue its "Campaign for Western Native Trout" to raise awareness about and generate funding for an increased level of conservation actions.

WNTI will coordinate and compile scientific assessment information through local partnerships and cooperative efforts, including, where appropriate, watersheds that are shared with the Desert FHP and the Great Plains FHP. Priority data needs for the Desert FHP are assessment of desert springs and cienegas and their hydrologic alteration. The Great Plains FHP has identified fish barriers (fragmentation) and water withdrawals (instream flow protection status) as primary data needs. WNTI has identified the need to complete habitat assessments for interior redband trout, coastal cutthroat trout, Dolly Varden and Arctic char to develop priority conservation actions.

Requested funds will also enhance capacity to implement WNTI's strategic plan, through completion of prioritized on-the-ground partner-led fish habitat conservation projects. Funds will support communication within WNTI's governance structure, allowing partners to identify opportunities to implement WNTI's strategic plan, and prioritize actions to protect and restore functions of western native trout habitats.

WNTI's Campaign for Western Native Trout was created to raise awareness of the importance of western native trout and the ecosystem services provided by healthy watersheds to western communities. WNTI will work to increase the size, scope, and investment of grassroots and new strategic partners to support and accomplish habitat conservation actions for western native trout habitats.

Outcomes will include an increase in the number of healthy, fishable western fish populations resulting from sharper focus and commitment to priority conservation actions. These populations will be supported by an increased number of stream miles or standing water acres protected, restored, or enhanced. State fish and wildlife agencies and federal land management

agencies will benefit from projects within their watersheds that improve the status of western native trout and their habitats. All of these outcomes will be supported by improved coordination among FHPs and other overlapping partnerships to address objectives of the National Fish Habitat Action Plan.

Pacific Coast

Fish habitats in Pacific coastal waters and estuaries only recently came under the purview of the Action Plan, with approval of the Pacific Marine and Estuarine Fish Habitat Partnership (PMEP) in January 2012. Their newly completed strategic framework focuses on nursery habitat for fish and shellfish. The PMEP is working to 1) prioritize conservation efforts at local spatial scales, 2) determine local threats to fish (including sport fish) habitats and their spatial extent, and 3) assess how threats to fish habitat as well as possible restoration and protection measures will affect fish and shellfish populations.

Requested funds will support a workshop to advance mutual multi-partnership, regional-scale goals in cooperation with the California Landscape Conservation Cooperative, North Pacific Landscape Conservation Cooperative, Pacific Coast Joint Venture, and California Fish Passage Forum. Representatives of these organizations will be invited to participate in a workshop with the PMEP Steering Committee to chart a course for future cooperation on fish habitat projects on the West Coast, to advance goals that align with all of these entities.

To date, PMEP has completed an initial review of the goals and objectives of each entity and identified particular areas of alignment. The workshop will chart a course to achieve specific deliverables, define a budget, and articulate key next steps that will improve fish habitat in estuarine and nearshore marine environments. PMEP is committed to moving the needle with large, landscape-scale conservation efforts, requiring coordination and planning across a significant geographic scale. A key deliverable from this workshop will be a report that summarizes common elements of the partnerships and defines criteria for a set of projects that could meet common goals among the entities. Specifically, the funding would provide for workshop planning and coordination, a workshop summary report, and travel support for meeting attendees. Matching contributions would be for participant salary and other administrative contributions.

Alaska

Alaska is unique among the 50 states in the extent of its fisheries and aquatic resources, with 3,000 rivers, 3 million lakes, and 46,882 miles of coastline, supporting recreational fisheries worth $1.4 billion annually. Alaska is also unique in the lack of systematic information on its aquatic habitats. Alaska's hydrography data set is incomplete and inaccurate for most of the state. In the 48 conterminous states, digital geospatial data for surface waters are available through the National Hydrography Dataset Plus (NHD+), providing improved names, value-added attributes (such as stream order), incremental drainage areas with landscape characteristics, and flow volume and velocity estimates for pollutant dilution modeling. NHD+ is the base data layer used in the National Fish Habitat Assessment.

The lack of available NHD+ data for Alaska, and even the lack of an accurate NHD base layer, limits the ability of the National Fish Habitat Partnership to evaluate Alaska fish habitats and

conservation efforts in a manner that is comparable to the rest of the nation. The 2015 National Fish Habitat Assessment will encounter these data gaps once more. Alaska seeks to advance the NHD to NHD+ for the entire state.

Through this proposal, the gaps would start to be addressed for south-central Alaska, with involvement of partners in the Kenai Peninsula Fish Habitat Partnership and the Mat-Su Basin Salmon Habitat Partnership. This effort supports the evaluation of fish habitat in Alaska with respect to the national standards established by the National Fish Habitat Partnership. Bringing Alaska toward NHD+ will support the incorporation of Alaska streams into the NFHP Habitat Assessment Decision Support Tool, enabling the prioritization of protection, restoration, and enhancement actions.

This project will develop a methodology for editing stream geometry and location by using LiDAR (digital ortho-imagery). University of Alaska-Southeast staff and the GIS technician at the Kenai Watershed Forum will determine how to edit stream information by applying LiDAR instead of field surveys. This pilot project will be applied to the Anchor River on the Kenai Peninsula, where LiDAR was attained in 2008 by the Kenai Peninsula Borough. The Kenai Peninsula Fish Habitat Partnership set the Anchor River as a high priority for improving hydrography data. Once established, this methodology will be applicable to the entire Cook Inlet drainage as more LiDAR imagery becomes available.

Expected Results or Benefits

In general, this project will support activities of the Fish Habitat Partnerships that will help to achieve the objectives in the National Fish Habitat Action Plan, 2nd Edition, recently approved by the National Fish Habitat Board. The five objectives are:

1. *Achieve measurable habitat conservation results* through strategic actions of Fish Habitat Partnerships that improve ecological condition, restore natural processes, or prevent the decline of intact and healthy systems leading to better fish habitat conditions and increased fishing opportunities.
2. *Establish a consensus set of national conservation strategies* as a framework to guide future actions and investment by the Fish Habitat Partnerships by 2013.
3. *Broaden the community of support for fish habitat conservation* by increasing fishing opportunities, fostering the participation of local communities – especially young people – in conservation activities, and raising public awareness of the role healthy fish habitats play in the quality of life and economic well-being of local communities.
4. *Fill gaps in the National Fish Habitat Assessment* and its associated database to empower strategic conservation action supported by broadly available scientific information, and integrate socio-economic data in the analysis to improve people's lives in a manner consistent with fish habitat conservation goals.
5. *Communicate the conservation outcomes* produced collectively by Fish Habitat Partnerships, *as well as new opportunities and voluntary approaches for conserving fish habitat*, to the public and conservation partners.

More specifically, the project will:

- Enhance regional aquatic habitat condition assessments and landscape-scale conservation design for coastal habitats on the Atlantic and Pacific coasts, coldwater habitats in the Appalachians and interior west, and the southeastern United States through cooperative efforts of FHPs.
- Improve strategic prioritization of conservation actions and reporting of outcomes by FHPs across the eastern and western United States.
- Create landowner engagement opportunities in the Midwestern United States, enhancing the effectiveness of conservation through leveraging and community involvement, and providing a report of best management practices for use by other FHPs and partners.
- Lay the necessary foundation for creating a complete and accurate hydrography dataset for aquatic systems of Alaska.

Certification regarding fishing/hunting

"By submitting this proposal, the organization's primary contact and/or authorized representative identified in this grant application certifies that the (insert name of organization) (1) will not use the grant funds to fund, in whole or in part, any activity of the organization that promotes or encourages opposition to the regulated hunting or trapping of wildlife or the regulated taking of fish; and (2) that the grant funds will not be used, in whole or in part, for an activity, project, or program that promotes or encourages opposition to the regulated hunting and trapping of wildlife or the regulated taking of fish."

Certification regarding partnership funds (if applicable)

"By submitting this proposal, the organization's primary contact and/or authorized representative identified in this grant application certifies that the (insert name of organization): 1) understands that partnership fund contributions are assessed in the Association's review and selection of its priority list of MSCGP projects, but are not considered by the USFWS to be an official non-federal match/cost-share; 2) will provide the partnership funds identified in order to complete the proposed project; 3) understands that if the promised partnership funds are not provided, and there is not a sufficient explanation, potential consequences could include a poor "quality assurance" evaluation by the National Grants Committee for the organization's future MSCGP applications; the imposition of "special award conditions" on this proposed grant and/or future grants (pursuant to 43 CFR 12); and if the failure to provide partnership funds affects the scope/objective or deliverables or other terms and conditions of the grant, then the USFWS could take necessary enforcement and termination actions (pursuant to 43 CFR 12)."

Budget

Budget by Region

Expenses		2013		Total MSCGP Costs Only
Region	**Fish Habitat Partnerships**	**MSCPG**	**P.F.**	
Eastern U.S.	Atlantic Coastal FHP, Eastern Brook Trout Joint Venture, Southeast Aquatic Resources Partnership	$195,000	$255,600	$195,000
Midwest U.S.	Fishers & Farmers Partnership, Driftless Area Restoration Effort	$50,000	$30,000	$50,000
Western U.S.	Western Native Trout Initiative, Desert FHP, Great Plains FHP	$100,000	$28,875	$100,000
Pacific Coast	Pacific Marine & Estuarine Partnership	$50,000	$32,000	$50,000
Alaska	Kenai Peninsula FHP, Mat-Su Basin Salmon Habitat Partnership	$51,015	$7,750	$51,015
Total direct costs		$446,015	$354,225	$446,015
Indirect costs (10%)		$44,602		$44,602
Waiver of 14% IDC by AFWA			$62,442	
Total Expenses		**$490,617**	**$416,667**	**$490,617**

Total MSCGP for Year 1 of the 3-year project is $490,617; Total partnership funds for Year 1 of the 3-year project are $416,667.

Budget by Federal Cost Categories

Expenses	2013		Total MSCGP Costs Only
	MSCGP	**P.F.***	
Personnel			
Fringe (__%)			
Travel			
Supplies			
Equipment			
Contractual	$446,015	$354,225	$446,015
Other			
Subtotal			
Total Direct Costs	$446,015	$354,225	$446,015
Indirect Costs (10%)	$44,602		$44,602
Waiver of 14% IDC by AFWA		$62,442	
Total Expenses	**$490,617**	**$416,667**	**$490,617**

Qualifications of Key Personnel

National Fish Habitat Partnership

Kelly Hepler, Alaska Department of Fish and Game

Kelly Hepler currently serves as the chairman of the National Fish Habitat Board and is the Assistant Commissioner for the Alaska Department of Fish & Game. Prior to joining the Board, Hepler had been appointed to a number of national committees by the Association of Fish and Wildlife Agencies (AFWA) and the Director of the U.S. Fish and Wildlife Service (USFWS). Through his participation on these committees, Hepler has assisted in the development of a strategic plan for the USFWS fisheries program; participated in a review of the federal aid program; and examined national fisheries and water resource policy issues. Hepler began working at the Alaska Department of Fish & Game in 1979 as a fisheries biologist and has held increasingly complex positions throughout his career. Kelly is a seasoned budget manager and has strong team and administrative skills that enable him to be a sound policy advisor. Kelly holds a B.S. in Fish and Wildlife Management from Montana State University.

Matthew E. Menashes, AFWA

Matthew E. Menashes is the Association's Director of Operations and will serve as the Principal Investigator on this award. Mr. Menashes has over 12 years' experience as an association executive and an additional eight years in federal service. Mr. Menashes is responsible for the Association's day-to-day operations as well as fisheries, water resources, and ocean policy issues. He supervises the finance, communications, education and training, and operations functions of the Association. He also serves as a member of the core staff team for the National Fish Habitat Partnership. In addition, Matt manages a variety of special projects related to the National Survey and aquaculture drug approvals.

Tom Busiahn, NFHP Coordinator, U.S. Fish and Wildlife Service

Tom Busiahn has 35 years of experience in fisheries conservation and policy, working for federal, tribal, and state agencies, and has extensive experience in leading interagency planning efforts for habitat and species restoration, invasive species control, and managing harvest in mixed fisheries. He has an M.S. in Fisheries Science from South Dakota State University and a B.S. in Fish & Wildlife Management from the University of North Dakota.

Eastern United States

Patrick Campfield, Science Director, Atlantic States Marine Fisheries Commission

Patrick is responsible for oversight of the Commission's Marine Science Program, including stock assessment activities, fisheries data collection programs, and scientific support to the Atlantic coastal states. In addition to the Science Program, Patrick also oversees the Atlantic Coastal Fish Habitat Partnership and the Commission's Habitat Program. He has a B.S. in Marine Biology and M.S. in Fisheries Science and Management from the University of Maryland Center for Environmental Science.

Scott Robinson, Coordinator, Southeast Aquatic Resources Partnership

Scott has served as SARP Coordinator since September 2005. Prior to that he was a Fisheries Biologist for the Georgia Department of Natural Resources for eleven years. He is currently

managing the administration of several grants, including a Multi-State Conservation Grant, for SARP. He received a B.S. degree and M.S. in Fisheries and Wildlife Biology from Clemson University. He is a Certified Fisheries Professional and past President of the Georgia Chapter American Fisheries Society.

Emily Greene, Coordinator, Atlantic Coastal Fish Habitat Partnership
Emily coordinates all ACFHP activities, providing daily support to the development and operations of ACFHP by facilitating committee and working group activities, managing contracted projects, identifying funding opportunities, and developing outreach activities. Emily has a B.S. in Biology and Environmental Science from the College of William and Mary and an M.E.M from the Nicholas School of Environment at Duke University.

Callie McMunigal, Appalachian Partnership Coordinator, U.S. Fish & Wildlife Service
Callie currently serves as the EBTJV Coordinator. Since 2008, she has managed the $600,000 of project funds that EBTJV receives each year. She also manages hundreds of thousands of dollars in grants and cooperative agreements each year for habitat projects. Callie has a B.S. and a M.S. in Hydrogeology and a minor in Geographic Information Systems from Florida Atlantic University and 15 years of experience working for state and federal government agencies on large scale partnership efforts.

Douglas Stang, Assistant Director – Division of Fish, Wildlife and Marine Resources, New York State Department of Environmental Conservation
Doug is currently the EBTJV Steering Committee Chair and has served on the EBTJV Steering Committee since the partnership's inception. With the DEC, Doug provides oversight for the agency's broad fish, wildlife, marine and habitat programs delivered by more than 350 staff with annual program expenditures of $58 million. Doug has a B.S. in Forestry and Wildlife (Fisheries Science) from Virginia Tech and a M.S. in Fishery Biology from Iowa State University.

Midwest United States

Heidi Keuler, Fish Biologist, U.S. Fish and Wildlife Service
Heidi is the coordinator of the Fishers & Farmers Partnership for the Upper Mississippi River Basin. Heidi has experience with the multistate Upper Mississippi River Conservation Committee (UMRCC) and outreach.

Chris Vitello, Fisheries Division Chief, Missouri Department of Conservation
Chris is chair of FFP and is the State Representative for Missouri on the FFP Steering Committee. Chris initiated formal stakeholder training for biologists from different fields (fisheries, forestry, and wildlife) in MDC.

Rob Pulliam, Fisheries Management Biologist, Missouri Department of Conservation
Rob is experienced in working with multiple landowner committees and as project manager for projects at the watershed scale. Rob has worked on Theory and Application of Conservation Marketing.

Ange Corson, Fisheries Programs Coordinator, Missouri Department of Conservation
Ange has led multiple MDC Stakeholder Training Workshops.

Landowners/dairy farmers are in the Lower Bourbeuse Conservation Opportunity Area (COA) Landowner Committee. Due to their efforts and the efforts of Kenda Flores, MDC, they received a 2010 NFHP award for extraordinary action in support of Fish Habitat Conservation.

Dr. Christopher Jones, Environmental Scientist, Iowa Soybean Association. Experience in technical assistance, project management, action plans and applied research.

Eileen Bader, Freshwater Specialist, The Nature Conservancy, IA. She has successfully worked with landowners on aquatic habitat projects including the listed species, Topeka shiner.

Steve Taylor, President and Executive Director, Missouri Agribusiness Association
Co-Chairs the Fishers & Farmers Partnership Steering Committee.

Jeff Hastings, Trout Unlimited, Project Manager for Driftless Area Restoration Effort. He has prior experience in working with landowners as a county conservation department employee in Wisconsin.

Louise Mauldin, Fish Biologist, U.S. Fish and Wildlife Service, La Crosse Fish & Wildlife Conservation Office. She is the Service lead for the Driftless Area Restoration Effort fish habitat partnership.

Western United States (inland)

Robin Knox, Coordinator, Western Native Trout Initiative
Robin Knox has been the Coordinator of the WNTI for six years. He was the assistant Chief of Fisheries for the Colorado Division of Wildlife for 20 years, and the Instream-habitat Coordinator for the Indiana Department of Natural Resources for 4 years. He has a BS in Zoology from the University of Illinois and a MA in Fisheries Biology from the University of Missouri.

Erica Stock, Director of Strategic Partnerships, Western Native Trout Initiative
Erica Stock has extensive background in developing strategic partnerships and has been involved in the conservation of aquatic freshwater and marine resources through her work with the Wild Salmon Center and Trout Unlimited. Erica has a B.A. degree in Psychology with an emphasis on quantitative research methods in social psychology and a minor in biology.

Charlie Corrarino, Chair, WNTI Steering Committee
Charlie Corrarino has worked for the Oregon Department of Fish and Wildlife 1985 to present in various capacities including Sport and Commercial fishery data base manager, Sport Fishing Regulations Coordinator, Salmon and Trout Enhancement Program Coordinator, Fish Restoration and Enhancement Coordinator, Fish Passage Coordinator and for the past 10 years Native Fish Conservation and Recovery Program Manager. He has a B.S. in Fishery Biology from Colorado State University and a M.S. in Entomology from the University of Idaho.

Julie Carter, Co-chair, WNTI Steering Committee
Julie Carter is the Co-chair of the WNTI Steering Committee and has been involved in WNTI since 2005. She has been the Native Trout Coordinator with the Arizona Game and Fish Department since 2005, serving as the Department's lead biologist for Apache trout and Gila trout recovery projects. Prior to working with southwest native trout, she was a research biologist with USGS in Alaska for eight years, working predominately with steelhead and resident rainbow trout life history projects. Julie has a B.S. in Biology with Emphasis in Wildlife and Fisheries Management from Northern Arizona University, and a M.S. in Fisheries Science from the University of Alaska Fairbanks.

Warren Colyer, Trout Unlimited
Warren Colyer has been involved with the WNTI from its founding in 2006. He is a member of the Initiative's Steering Committee. Warren has an extensive background as a Trout Unlimited representative in the scientific assessment of watersheds for habitat and species restoration projects in Utah and Wyoming over the past 6 years.

Shannon Albeke PhD., University of Wyoming
Shannon Albeke is a research scientist with the Wyoming Geographic Science Center. He was one of the co-developers of the Interstate Cutthroat Protocol, a GIS-based database protocol that has been used extensively across the West to develop status reviews of western native trout that result in the identification of priority watersheds for conservation actions that preserve, protect, and enhance the status of western native trout.

Pacific Coast

Lisa DeBruyckere, Coordinator, Pacific Marine & Estuarine Partnership
M.Sc. University of Maine at Orono. Experience administering the operations of two West-Coast partnership groups, the PMEP and the West Coast Governors Alliance on Ocean Health, and one state-based partnership, the Oregon Invasive Species Council.

Correigh Greene, NOAA Fisheries, Northwest Fisheries Science Center
Ph.D. University of California, Davis, M.Sc. University of Michigan, B.S. Tufts University. Population biologist/estuarine ecologist with 10+ years of expertise in biology of salmon and forage fish, pelagic food webs, and population modeling; helped lead the 2010 NFHP national effort to characterize threats to estuary systems. Chairs the PMEP Science & Data Committee.

Van C. Hare, GIS Manager, Pacific States Marine Fisheries Commission
M.S., Natural Resources (GIS), Humboldt State University; B.A. Lewis & Clark College; Certified GIS Professional (GISP). Coordinates PSMFC's GIS program for West Coast fisheries data projects including StreamNet.

Laura Brophy, Institute for Applied Ecology
M.Sc. University of Minnesota, B.S. Carleton College. Principal, Green Point Point Consulting; Director, Estuary Technical Group, Institute for Applied Ecology; Courtesy Faculty, College of Oceanic and Atmospheric Sciences, Oregon State University. Certified Professional Wetland Scientist with 30+ years of field experience; leads teams on Oregon tidal wetland restoration projects.

Mary Gleason, The Nature Conservancy
Ph.D. U.C. Berkeley, B.A. U.C. Santa Barbara; Ecologist; Assoc. State Director of Science for TNC's California Coastal and Marine Program. Supports TNC's marine spatial planning activities, fisheries reform, and estuarine conservation activities; led an assessment of West Coast estuaries.

Eric Grossman, U.S. Geological Survey
Ph.D., M.Sc., U. Hawaii; B.A. U.C. Berkeley; Coastal and Marine Geologist; USGS Pacific Coastal and Marine Science Center and Western Fisheries Research Center; Adjunct Faculty U.C. Santa Cruz and Western Washington University; Addresses coastal and shelf sedimentation, nearshore hydrodynamics, habitat change, sea-level history, and vulnerabilities in coastal habitats. Supports DOI Coastal and Marine Spatial Planning efforts.

Mark Petrie, Ducks Unlimited, Pacific Coast Joint Venture
Ph.D., University of Missouri; M.Sc., University of Missouri; Manager of Conservation Planning; Research support for the Black Duck and Gulf Coast Joint Ventures.

Steve Rumrill, Shellfish Program Leader, Oregon Department of Fish and Wildlife
Ph.D. University of Alberta; M.Sc. University of California at Santa Cruz; Courtesy Faculty, University of Oregon–Oregon Institute of Marine Biology. Estuarine ecologist, invertebrate zoologist, and marine scientist; studied ecological interactions along the Pacific coast for 30+ years; 20+ years as Chief Research Scientist for South Slough NERR.

Randy Carman, Washington Department of Fish and Wildlife
B.S. University of Washington; Senior Marine Ecologist; Worked on marine shoreline issues in Puget Sound for 24+ years, leads the Nearshore Section at WDFW, works with the Puget Sound Nearshore Ecosystem Restoration Project on strategies that focus on nearshore processes.

Martha Sutula, Southern California Coastal Water Research Project
Ph.D., Louisiana State University; M.Sc., Tulane University; B.S., Purdue University; Principal Scientist at SCCWRP; leads Biogeochemistry Department and oversees projects in eutrophication and harmful algal blooms, estuaries and nearshore waters, monitoring of stormwater, watershed and water quality model development, and atmospheric deposition.

William Pinnix, U.S. Fish and Wildlife Service
Ph.D. Candidate Oregon State University, M.Sc. University of Washington, B.S. Humboldt State University. Fish biologist with 20 years of experience in fish ecology with emphasis on juvenile marine fish population dynamics in relation to large scale oceanic and atmospheric forcing.

Alaska

Sue Rodman, Program Coordinator, Alaska Department of Fish & Game
Since 1999, Sue Rodman has worked in Alaska's boreal forest serving to conserve natural and cultural resources from wildland fire. Her work in forestry and community preparedness has been important to the Municipality of Anchorage and its residents. During this time, she has managed the Anchorage Wildfire Program and administered grants and congressional appropriations totaling $20 Million. Her work at ADF&G crosses interagency organizations with respect to Fish Habitat Partnerships and Landscape Conservation Cooperatives in addition to mapping wildlife on behalf of the Western Governor's Association Wildlife Council.

Mike Plivelich, SEAK Hydro Technical Steward, University of Alaska Southeast
Mike Plivelich is a staff member of the University of Alaska Southeast in Juneau. Along with faculty Sanjay Pyare, he received a Special Achievement in GIS award from ESRI in 2011. His work at UAS on the SEAK Hydro project supports collaboration among the USDA Forest Service, Alaska Dept. of Fish & Game, US Fish & Wildlife Service, US Geological Survey and University of Alaska Southeast to develop, standardize, and unify a mapping data relating to hydrography for better resource management across the region.

Atlantic Coastal Fish Habitat Partnership
Project Endorsement Application

Project Name	Cape Fear River Partnership's Watershed Action Plan for Migratory Fish
Project Location(s)	Cape Fear River Watershed, North Carolina
Organization(s) Requesting Endorsement	NMFS Office of Habitat Conservation on behalf of the Cape Fear River Partnership
Project Contact (s)	Melanie Harris, 301-427-8636, Melanie.Harris@noaa.gov

Endorsement Criteria
Section A

Is the project being proposed required by an existing regulatory program, court order, or decree?

	X	Explanation
Yes		
No	X	This voluntary plan is comprised of actions the Cape Fear River Partnership believes are necessary and feasible to restore diadromous fish populations in the Cape Fear watershed.

Does the project being proposed have an evaluation plan (I.e., will attainment of project goals be evaluated)?

	X	Explanation
Yes	X	The watershed action plan contains discrete actions with specific timeframes to achieve those actions, as well as ecological endpoint targets that the actions will lead to achieving. Progress in completing the actions and meeting the ecological endpoint targets will be tracked by the implementation team.
No		

Section B

Does the project address one or more of the ACFHP protection or restoration objectives? Please note all that apply. For Subregional Priority Habitats please see p.11 of the Atlantic Coastal Fish Habitat Partnership Conservation Strategic Plan (2012-2016).

Objective	X	Explanation
Protection Objective 1: Ensure adequate and effective fish movement past existing or potential barriers to maintain connectivity within Subregional Priority Habitats.	X	The plan contains actions that will improve diadromous fish passage past current barriers preventing access to historic spawning and nursery habitats in the Cape Fear River (e.g., Corps Lock and Dams). (South Atlantic Subregional Priority Habitat: Riverine Bottom)
Protection Objective 2: Maintain or improve water quality and hydrology in Subregional Priority Habitats that are currently functioning, through incorporation of BMPs and/or technological controls.	X	The plan contains actions that will improve water quality in the Cape Fear River through the pursuit of BMP and other voluntary and regulatory measures (e.g., promote existing NC Agriculture Cost Share Program with emphasis placed on BMPs that can improve water quality in critical habitat areas). (South Atlantic Subregional Priority Habitats: Riverine Bottom and Tidal Vegetation)
Protection Objective 3: Define the water flows and volumes needed to sustain the structure and function of healthy aquatic ecosystems (including groundwater and surface water interactions, maintaining appropriate salinity regimes) and ameliorate consumptive water usage where detrimental to Subregional Priority Habitats.	X	The plan contains actions that will define and seek to improve the ecological flows necessary to sustain diadromous fish in the Cape Fear River (e.g., Environmental Flows Science Advisory Board will determine species environmental flow needs and incorporate environmental flows into existing Neuse and Cape Fear joint River model). (South Atlantic Subregional Priority Habitats: Riverine Bottom and Tidal Vegetation)
Protection Objective 4: Minimize or reduce adverse impacts to Subregional Priority Habitats associated with coastal development and water dependent activities (e.g. recreational boating, and marine transportation).	X	The plan contains actions that will minimize or reduce adverse impacts to Riverine Bottom and Tidal Vegetation associated with coastal development and water dependent activities in the Cape Fear River (e.g., develop joint interagency recommendations that state and federal agencies would use when reviewing permit applications for dredging and filling).
Protection Objective 5: Maintain or increase the resiliency of Subregional Priority Habitats to the impacts of climate change.		
Protection Objective 6: Increase public awareness of the threats facing Subregional Priority Habitats and the protection measures available to avoid and minimize those threats.	X	The plan contains actions that will increase public awareness of the threats facing Riverine Bottom and Tidal Vegetation and the protection measures available to avoid and minimize those threats in the Cape Fear River (e.g., produce outreach materials on the value of vegetated shorelines for diadromous fish habitat protection and importance of reducing non-point runoff associated with agriculture, forestry, and development land use activities).
Restoration Objective 1: Restore and enhance hydrological or physical connections between Subregional Priority Habitats to promote fish utilization and improve overall aquatic health.	X	The plan contains actions that will restore and enhance hydrological connections between Riverine Bottom and Tidal Vegetated habitats to promote utilization by diadromous fish in the Cape Fear River (e.g., assess impairments to floodplain connectivity and identify priority sites where improvements needed).
Restoration Objective 2: Restore Subregional Priority Habitats, such as replanting eelgrass beds or restoring oyster beds, in locations where threats have been minimized or removed (does not include dam or other barrier removal).	X	The plan contains actions that will restore Tidal Vegetation in the Cape Fear River (e.g., effectively manage or restore wetland areas currently conserved by TNC which are identified as priority buffers for diadromous fish species).

Restoration Objective 3: Restore water quality in areas where it has degraded or eliminated Subregional Priority Habitats.	X	The plan contains actions that will restore water quality in areas where it has degraded diadromous fish use of Riverine and Tidal Vegetated habitats in the Cape Fear River (e.g., identify potential detrimental non-point and point water quality pollution sources around Lock and Dams #1 and #2 and throughout sturgeon nursery habitat that could affect sturgeon spawning and recruitment sites).
Restoration Objective 4: Maintain or increase the resiliency of Subregional Priority Habitats to the impacts of climate change through restoration activities.		

Which habitat(s) does the project address and is it a Subregional Priority Habitat? Please note all that apply. Please see the Atlantic Coastal Fish Habitat Partnership Conservation Strategic Plan (2012-2016) for habitat definitions (pp.24-27), subregion boundaries (p.7), and Subregional Priority Habitats (pp.11).

		X	Explanation	Subregional Priority Habitat?
Marine and Estuarine Shellfish Beds	Oyster aggregations/ reef			X
	Scallop beds			X
	Hard clam beds			X
	Shell accumulations			X
Coral and Live/Hard Bottom	Coral reefs			
	Patch reef, soft corals or anemones			
	Live rock			
Macroalgae	*Fucus* spp., *Laminaria* spp., *Ulva Lactuca*			
Submerged Aquatic Vegetation	Tidal fresh & oligohaline plant species	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.	
	Mesohaline & polyhaline plant species	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.	
Tidal Vegetation	Estuarine emergent marsh	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality	X

			and quantity.	
	Tidal freshwater marsh	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.	X
	Mangrove			X
Unvegetated Coastal Bottom	Loose fine bottom			
	Loose coarse bottom			
	Firm hard bottom			
	Structured sand habitat			

Riverine Bottom	Higher gradient headwater tributaries	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.	X
	Lower gradient tributaries	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.	X
	Higher gradient large mainstem river	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.	X
	Lower gradient large mainstem river	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.	X
	Low order coastal streams	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.	X
	Non-tidal freshwater mussel beds			X
	Coastal headwater pond			X
	Non-tidal freshwater marsh			X

Additional Information

Is the project funded in part or wholly by mitigation or similar settlement funds?		
	X	Explanation
Yes		
No	X	The watershed action plan is not currently funded; however, potential funding sources that are being investigated to fund specific actions do include Natural Resource Damage Assessment funds (federal/state settlement funds) and the North Carolina Environmental Enhancement Grants (state settlement funds), among other sources such as federal and state grant programs.
Note: See definitions for mitigation and compensatory mitigation provided.		

Which ACFHP Priority Threat(s) does the project address? Please note all that apply. For Priority Threat definitions please see pp.12-15 of the Atlantic Coastal Fish Habitat Partnership Conservation Strategic Plan (2012-2016)

	X	Explanation
Obstructions to Fish Movement/Habitat Connectivity	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.
Dredging and Coastal Maintenance	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.
Water Quality Degradation and Eutrophication	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.
Consumptive Water Withdrawal	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.
Sedimentation	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.
Vessel Operation Impacts		
Contamination of Water (ground and surface) and Sediments	X	The plan contains actions that will improve the Cape Fear River for diadromous fish by restoring access to historic habitat, improving habitat conditions, and improving water quality and quantity.
Invasive Species		
Climate Change		

Does the project involve partners? Please note all that apply.		
	X	**Explanation**
Federal	**X**	NOAA, USFWS, U.S. Army Corps of Engineers
State	**X**	North Carolina Department of Agriculture and Consumer Services Division of Soil and Water Conservation, North Carolina Department of Environment and Natural Resources: Division of Water Quality, Division of Water Resources, Division of Marine Fisheries, and Ecosystem Enhancement Program, North Carolina Division of Coastal Management, North Carolina Wildlife Resources Commission
Tribal		
Local	**X**	Cape Fear Arch, City of Wilmington, New Hanover County
NGO	**X**	The Nature Conservancy, American Rivers, Cape Fear River Watch
Academic	**X**	Lower Cape Fear River Program, North Carolina State University, University of North Carolina Wilmington
Industry	**X**	Progress Energy
Other	**X**	ACFHP

Is the project transferable to other systems within the Partnership boundaries or nationally? Please note all that apply.		
	X	**Explanation**
Management efforts	X	The management actions in the plan could be applied to other systems within the Partnership boundaries or nationally where efforts are being made to restore diadromous fish populations at the watershed scale.
Monitoring efforts	X	The monitoring actions in the plan could be applied to other systems within the Partnership boundaries or nationally where efforts are being made to restore diadromous fish populations at the watershed scale.
Research efforts	X	The research actions in the plan could be applied to other systems within the Partnership boundaries or nationally where efforts are being made to restore diadromous fish populations at the watershed scale.
Other	X	The entire holistic watershed planning effort could be applied to other systems within the Partnership boundaries or nationally.

Will the project result in a long-term solution to the problems addressed?		
	X	**Explanation**
In perpetuity	X	The actions in this watershed action plan are intended to permanently improve the Cape Fear River for diadromous fish with associated social, cultural, and economic benefits for humans.
10-25 years		
<10 Years		

Other

Agency Contact(s)	Melanie Harris, NMFS, 301-427-8636, Melanie.Harris@noaa.gov

Is a work plan or proposal provided? If so, does it include quantifiable and metric monitoring, and could ACFHP request these data in the future?		
	X	**Explanation**
Yes	X	Emily Greene already has a copy of the draft Cape Fear watershed action plan. The final plan is expected to be completed later this calendar year.
No		

Does your submission include any other supporting information that you would like considered?		
	X	**Explanation**
Yes		
No	X	

Endorsement Time Frame

Please note the date by which you would like to receive a response from ACFHP.	
Date	**Explanation**
As soon as is feasible	We would like to note ACFHP's endorsement in our use of the draft plan to solicit stakeholder feedback and in the development of the final plan.

Endorsement Type

Do you have any specific endorsement requests?		
	X	**Explanation**
Yes		
No	X	

Would you like to use the ACFHP Endorsement Logo? If yes, please describe its intended use.		
	X	**Explanation**
Yes	X	To include on the Cape Fear River Partnership website (http://www.habitat.noaa.gov/protection/capefear/index.html), associated one-pagers and other outreach materials, and with other partners' logos in the draft and final plans.
No		

Has your project gained all of the necessary permits from pertinent agencies?		
	X	**Explanation**
Yes		
No	X	N/A

August 1, 2012

The Honorable Ken Salazar
Secretary
U.S. Department of Interior
Washington, D.C.

Dear Mr. Secretary:

On behalf of [insert organization/entity], I write in strong support of the "Chesapeake Great Rivers Landscape Collaborative" proposal that seeks to protect significant landscapes in the Chesapeake Bay watershed to meet shared conservation goals. We believe the Chesapeake is a national treasure and should be a LWCF conservation focal area in the FY14 budget.

The [insert organization/entity] has conserved [x] acres in the [Rappahannock, Nanticoke, Potomac, or James] River watershed. We remain committed to the conservation of large landscapes in our organization's jurisdiction in the Chesapeake watershed.

The many rivers that feed our nation's largest tidal estuary and the Captain John Smith Chesapeake National Historic Trail, provide an innovative framework to achieve the President's conservation and access goals for the region, as outlined by the *Executive Order #13508 Strategy for Protecting and Restoring the Chesapeake Bay Watershed* and by the Administration's *America's Great Outdoors* report.

We firmly believe the Chesapeake Bay is a national natural treasure and is worthy of receiving Land and Water Conservation Funds to act upon the watershed's most urgent conservation needs. Thank you for your time, consideration of this matter, and commitment to protecting our nation's treasured landscapes.

Sincerely,

(Name)
(Title)

CC: State and federally elected officials
Joel Dunn, Executive Director, Chesapeake Conservancy

THE SECOND EDITION OF THE NATIONAL FISH ACTION PLAN HAS BEEN REMOVED FROM THIS DOCUMENT DUE TO FILE SIZE; GO HERE - http://fishhabitat.org/content/national-fish-habitat-action-plan-2nd-edition-2012 TO ACCESS THE DOCUMENT DIRECTLY

Request for Proposals

NORTH ATLANTIC
LANDSCAPE CONSERVATION COOPERATIVE
PRIORITY SCIENCE PROGRAM

The North Atlantic Landscape Conservation Cooperative (NALCC) is pleased to announce a Request for Proposals (RFP) for grants under the 2012 NALCC Priority Science Program.

Please Read This Entire RFP, Including the Frequently-Asked-Questions Section, Before Submitting An Application for NALCC Grant Funds.

The Wildlife Management Institute (WMI) Coordinates and Administers the NALCC Priority Science Program on Behalf of the NALCC.

Background:

The Department of the Interior and the U.S. Fish and Wildlife Service have developed a coordinated network of landscape conservation cooperatives to provide the science necessary to undertake strategic conservation efforts across large geographic areas, in part to address major environmental and human-related factors that limit fish and wildlife populations at the broadest of scales.

To protect the natural and cultural resources of the Northeast, natural resource managers and partners have formed the North Atlantic Landscape Conservation Cooperative (NALCC). The North Atlantic LCC partnership includes: States, Tribes, Federal agencies, non-governmental organizations, and other species-specific partnerships like migratory bird joint ventures and fish habitat partnerships.

The North Atlantic LCC partners work together to identify common science needs, shared scientific capacity and information and coordinate natural resource conservation actions across the region. The objective of the NALCC Priority Science Program is to address landscape-scale conservation issues by combining resources, leveraging funds, and prioritizing conservation actions identified by the best available science.

2012 NALCC PRIORITY SCIENCE NEEDS

NALCC Topic 1: *Quantify and Map Habitats, Threats, and Current Range Distribution for Aquatic (Including Coastal) Species to Assess Species-Habitat Relationships, and Identify Priority Areas and Corridors for Conservation*

Background: Healthy waterways and vigorous populations of fish and other aquatic organisms are vital to millions of people in the North Atlantic LCC region. They provide clean water, sustainable fisheries, and myriad recreational opportunities. To better protect these resources across large areas, there is a pressing need to assemble and synthesize spatial information about distribution, habitat, and threats for aquatic species. Information developed to meet this need could be used in prioritizing coastal, estuarine, and freshwater habitats for management and restoration; quantifying threats to aquatic species; and identifying species-habitat relationships that serve as a foundation for species conservation and management. This need has been identified as being a high priority for the Atlantic Coastal Fish Habitat Partnership.

The potential scope of this project is the entire North Atlantic LCC (Nova Scotia to Virginia), from headwaters streams to estuaries and coastal waters, and the upland landscape that is linked to the aquatic environment. Project efforts may need to extend beyond the NALCC boundary where watersheds extend into adjacent LCCs. A list of 135 high priority species identified by NALCC partners is attached to assist in focusing the scope of the project (Appendix). Not all of these species must be addressed, and the project is not restricted to these species, but its relevance will be enhanced to the extent that multiple species on the list are considered.

Tasks and Deliverables:

a) Identify data to be assembled: review existing efforts and databases (more information provided in the next section), identify gaps, and identify data to be collected. This task should include an assessment of the needs of decision makers to understand the type, scope, and resolution of data most useful to resource managers. *Note:* the project is to be directed at assembling existing data, not collecting new field data.
b) Collect, synthesize, and analyze existing data, particularly spatial data. Information gathered could include species occurrence data, such as presence or absence, relative abundance, and species condition. It also could include data on habitat distribution and condition, temporal distribution, threats to species or habitats, and potential for restoration. Data should be useful at both state and subregional scales.
c) Create a new database or augment existing databases to organize and make widely available the data described under task b. Data are to be incorporated into an NALCC information system (under development) and compatible with or incorporated into fish habitat partnership information management systems.
d) Create new or augment existing maps and geospatial products that depict and summarize collected data. Examples include maps (or spatially-explicit datasets that can be viewed by users) of species occurrence (identified by particular life cycle needs, if applicable), habitat condition, threats, and restoration potential.
e) Create new or augment existing decision support tools to assist in applying the data and spatial products in decision making by resource managers.

Pre-existing Activities and Tools Related to this Project: It is important that this project build upon but not duplicate prior and existing efforts to compile, analyze, and publicize data about aquatic species and habitats. These efforts include (but are not limited to):

- Work of the Atlantic Coastal Fish Habitat Partnership (ACFHP), including the *Species-Habitat Matrix Project*; the *Assessment of Existing Information on Atlantic Coastal Habitats*; and *Conservation Strategic Plan 2012-2016.* High priority threats identified by this partnership include: Obstructions to Fish Movement/Habitat Connectivity; Dredging and Coastal Maintenance; Water Quality Degradation and Eutrophication, Consumptive Water Withdrawal, Sedimentation, Vessel Operation Impacts, Contamination of Water (ground and surface) and Sediments, Invasive Species, and Climate Change.
- Work of the Eastern Brook Trout Joint Venture, including mapping products and *Conserving the Eastern Brook Trout: Action Strategies.*
- Work of the National Fish Habitat Action Partnership, including the *National Fish Habitat Action Plan.*
- Work of the U.S. Fish and Wildlife Service Northeast Region Fisheries Program.
- Efforts by states of the region, including State Wildlife Action Plans, the Association of Fish and Wildlife Agencies, and the Northeast Association of Fish and Wildlife Agencies.
- Work to classify aquatic species habitat, including the *Northeast Aquatic Habitat Classification* (coordinated by The Nature Conservancy); classification used in the ACFHP *Species-Habitat Matrix*; and work underway by TNC and others to classify habitats using the Coastal and Marine Ecological Classification System (CMECS).

- Ecoregional assessments prepared by The Nature Conservancy (Northwest Atlantic Marine Ecoregional Assessment, North Atlantic Coast Ecoregional Assessment)
- Species distribution and occurrence data and maps compiled by NatureServe.
- NOAA Essential Fish Habitat Mapper.
- NALCC-sponsored projects, led by the University of Massachusetts, that are developing enhanced hydrography datasets and models of flow and stream temperature.
- Efforts and examples of other regional, national, and international organizations to compile data and present maps. A representative example is the StreamNet Mapper available for the Pacific Northwest (www.sreamnet.org).

Funding: A maximum of $250,000 is available to fund Theme 1 projects.

NALCC Topic 2: *Evaluation of restoration methods that allow salt marshes to adapt to sea-level rise*

Background: Salt marshes and associated habitats form critical, productive coastal systems along the coast of the North Atlantic LCC. These salt marsh systems have long been threatened by filling, ditching for mosquito control, encroachment by adjacent development and other stressors. They are now and will increasingly be threatened by sea level rise, increased storminess and other climate change related impacts. There are a variety of standard and newly developed salt marsh restoration techniques that can be applied to increase resilience to climate change stressors such as accelerated sea level rise. Because climate-adapted restoration is a relatively new concept, these restoration techniques have yet to be evaluated in field demonstrations for actual resilience conferred or calibrated in a meaningful way to different starting points (e.g. different "marsh capital" levels, tidal ranges, salinities, nutrient inputs) commonly found in salt marshes along the North Atlantic coast. In order for restoration to be successful in the long term, project designs need to plan for future accelerated sea level rise and a range of other climate-induced changes. Determining adjustments required to quantifiably increase marsh resilience given different starting conditions will greatly benefit practitioners and resource managers in raising the quality and longevity of our coastal salt marshes. Partnering with existing or proposed restoration efforts would provide an opportunity to develop, implement, monitor and evaluate techniques that increase a salt marsh's resilience to climate change stressors. The field demonstration would be for a restoration technique that is already part of a management portfolio (e.g. removing tidal restrictions, adding sediment to a degrading marsh surface, restoring tidal channel hydrology) and the choice of technique would depend on the opportunity to collaborate with a partner project, as well as the transferability of the proposed experimental methods. While field implementation is the optimal test, proposals that combine detailed modeling with mesocosm hypothesis testing constitute acceptable submissions for funding consideration.

Project Outcomes: This project will result in specific quantifiable recommendations on how salt marsh restoration technique(s) can be implemented to increase resilience to climate change stressors in the North Atlantic LCC area. These specific recommendations will be based on monitoring and evaluating the implementation of in-the-field restoration projects or modeling

and mesocosm hypothesis testing. Addressing the science need should include the following components:

1. A research framework for evaluating salt marsh restoration techniques under different salt marsh state conditions (such as tidal range, status of marsh capital etc.);
   For a chosen technique, the successful project will create an experimental design and monitoring protocol to evaluate specific variations on appropriate restoration technique(s) that will improve marsh resilience to climate change stressors (including, but not limited to sea level rise);
2. Implementation criteria for a specific restoration technique.
   What are the best practices for project design within that technique, considering a range of state conditions?
3. Quantitative evaluation of changes to ecosystem health as a result of implementing each design and projected climate and sea level conditions; this may be compatible with one of the variety of marsh condition assessment techniques that would be broadly applicable (e.g. Salt Marsh Integrity (SMI) score, Recovery Potential Indicators, habitat suitability for representative salt marsh fish wildlife or plant species) although other appropriate and easily implemented assessment measures will be considered.

Recommendations from this project will be in the form of a final report and website that articulate the specific findings under the above components and broader applicability to sites in the North Atlantic LCC no later than three years after the initiation of the project. Proposals that include the ability to continue monitoring beyond the initial three-year period using matching funds are preferred.

Funding: A maximum of $180,000 is available to fund Theme 2 projects.

Technical Coordinator responsible for project oversight and for more information contact:

Scott Schwenk
Science Coordinator
North Atlantic Landscape Conservation Cooperative
413-253-8647
William_Schwenk@fws.gov
http://northatlanticlcc.org/

Proposal Deadline: **August 17, 2012**. Proposals received after this deadline will not be considered. The complete program funding schedule is available at

http://northatlanticlcc.org/rfp.html

Submission Procedures: Please read carefully and follow all of the guidance listed in

the “Instructions on Submittal of Proposals” included herein. Instructions are also available at http://northatlanticlcc.org/ rfp.html

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Instructions on Submittal of Proposals:

Please read these instructions carefully as well as all of the information provided above.

1. Proposals must be submitted as email attachments in MS Word to wmisw@together.net no later than August 17, 2012 at 5:00 PM Eastern Standard Time.

2. The proposal is limited to a total of 6 pages:

    - Page 1 is a single cover page with contact information (see details in section #3 below) and a concise description of the proposed project.
    - Pages 2-5 are four pages of text about the proposed project, including budget (see details in section #4, #5 and #6 below).
    - Page 6 is a single page outlining the qualifications of the individuals and organizations involved.

3. The cover page should provide the following information:

    - Title of Project
    - Name of Project Director and Job Title
    - Name of Institution
    - Email Address
    - Physical Mailing Address
    - Telephone and Fax Numbers
    - Other Principal Investigators Involved (name, title, institution, email address)
    - NALCC Funds Requested
    - A Concise Description of the Proposed Project. The description should not exceed 250 words and include primary objectives, a brief summary of methods, expected outcomes and a timeline. **THIS ABSTRACT WILL BE WIDELY DISTRIBUTED SO PLEASE FOLLOW THE INSTRUCTIONS PROVIDED ON CONTENT CAREFULLY.**

4. Four pages of explanatory text are the principal component of the proposal and should be written as clearly and concisely as possible, address the following questions, and provide the following information (note that tables, graphs and photos can be included in the proposal but they must be contained within the four pages of text):

    a. What is the geographic scope of your project?
    b. What is the start date of the project and the projected end date?

c. What is the goal of your project and what major objectives or tasks will you undertake to achieve that goal?
d. What are the methods by which you propose to carry out your work?
e. What measurable products or outcomes will result from your project?
f. What is the schedule for key events and tasks?
g. What is the proposed total budget of your project? Separate the budget into the following categories: Personnel Service, Fringe Benefits, Indirect Overhead, Supplies and Materials, Travel, Contractual Service, and In-kind Services. **Please note that indirect overhead (F&A) cannot exceed 15% of direct costs.** Clearly indicate which activities will be supported by NALCC grant funds and which will be supported by other funds. For any matching funds or contributed partner funds committed to the project, specify whether those funds are direct or indirect and clearly designate the source of the funds.

Frequently Asked Questions:

How does the grant proposal process work?

The NALCC Steering Committee annually establishes priority science needs within the NALCC region. Proposals are solicited for projects that deliver science products that contribute to the understanding of, resolution of, or advancement of conservation actions addressing highest priority conservation science needs.

Who developed the Priority Project Topics?

Priority science needs were developed by federal, state and NGO scientists within NALCC Technical Committees.

Who may apply?

Eligible applicants include individuals, non-governmental organizations, state and federal agency employees, members of academia, and for-profit corporations.

What is the schedule of review and approval of proposals?

Proposals are due by August 17, 2012. Proposals will be reviewed by WMI for scientific merit, clarity and completeness. WMI may contact applicants for clarification or to allow for amendments to remove disqualifying elements. Eligible applications will be forwarded to Technical Review Committees by August 31, 2012. Highest ranking proposals will be submitted by the Technical Committee to the NALCC Steering Committee. Funding decisions will be made by the NALCC Steering Committee at their fall meeting and funds will be available no earlier than December 1, 2012.

What is the duration of a project?

Projects must be completed within three years of the award date. Significant milestones/deliverables must be achieved within 12 months of the award date, and completion of Theme 1 projects within two years is encouraged.

How will applications be evaluated?

All applications received by the due date will be reviewed by WMI for scientific merit, completeness and eligibility. All projects that are deemed complete and eligible by WMI will be forwarded to the NALCC science staff who will coordinate evaluation by NALCC Technical Review Teams, using the following criteria:

1. Degree to which the project addresses the priority themes and products described previously.
2. Scientific and technical merit.
3. Programmatic capability and feasibility. Are project objectives/goals clearly defined, measurable, and connected to specific milestones/deliverables and timelines? Will/can proposed methods accomplish/produce the project's objectives/goals, deliverables, and timelines?
4. Engagement of partners.
5. Demonstration that products will be accessible and useful in conservation and resource management decision-making.
6. Degree to which project builds upon, rather than duplicates, existing efforts.
7. Geographic scope.
8. Leveraging of other resources (not required but encouraged).

What is the source of funding for NALCC grants?

The primary source of funding for NALCC grants is from federal funds apportioned to the U.S. Fish and Wildlife Service. Other partner funds may be pooled in the grant award.

Are matching funds required?

No, but matching funds are encouraged. In-kind match is allowed.

How will I receive payments?

The NALCC Grants Program is a reimbursement program. Applicants must be prepared to fully fund their projects in the first instance and submit payment requests to WMI for reimbursement. Grant recipients will be required to enter into a grant agreement with WMI in order to receive payment. Payment requests may be submitted to WMI on a quarterly basis. No advance payments will be

provided. WMI will retain 20% of the grant amount pending receipt of all grant agreement deliverables. Upon the NALCC's approval of said deliverables, the final 20% retainage will be released to the grantee.

Where should proposals be submitted?

Proposals should be emailed in MS Word format to wmisw@together.net

Can a single organization submit multiple proposals?

Yes, single organizations can submit multiple proposals within one priority topic area, or may submit proposals to more than one priority topic area.

Are partnerships encouraged?

Yes, partnerships in funding and/or delivery of project products are encouraged.

What are some applicant responsibilities?

Grantees must meet federal eligibility requirements under this grant program. All funds awarded through this RFP are contingent upon the applicant meeting all federal permitting requirements. The NALCC reserves the right to reallocate grant awards in the event that the project applicant cannot meet the federal or state grant and/or permitting requirements. Applicants selected to receive a grant may also have their proposed budgets revised pending federal review of eligibility of costs and matching funds. It is the applicant's responsibility to investigate the permits that may be required to carry out their proposal, and obtain all applicable federal or state permits, data use agreements, or similar permissions.

What are eligible costs?

Grant reimbursement payments will be based on actual expenditures incurred by the grantee that are necessary and reasonable to the accomplishment of the work. Grantees will be required to provide documentation of project-related costs, including submission of copies of invoices and cancelled checks, with each payment request. Applicant budgets may include billable expenses related to the project in the following categories:

- Personal services: includes salary of project staff employed by the applicant organization.
- Fringe Benefits: The fringe benefits such as health care and retirement provided to permanent employees of the applicant organization. State employees must use the approved federal rates for their agency. Fringe benefits are normally calculated as a percentage of an employee's salary.
- Indirect/Overhead: The costs of maintaining the offices for project personnel such as utilities, support services, rent, etc. This is normally

calculated as a percentage added to the salary and fringe benefits of an employee. Indirect/Overhead cannot exceed 15% of direct costs.

- Travel and Equipment Usage: Vehicle mileage at the federal rate, fuel costs, commercial carrier costs, and other similar expenses. Equipment usage covers the equivalent cost of the use of equipment such as tractors, brush clearing equipment, research vessels, etc.
- Supplies and Materials: Office supplies, consumable field gear such as flagging tape and stakes, non-retrievable animal tags, nets, software, etc.
- Contractual Services: If you are a not-for-profit organization and you subcontract out for services such as data entry or laboratory analysis, you must be able to provide proof that those costs are necessary and reasonable to the accomplishment of the work.

What are some ineligible costs?

Costs related to the preparation of this application or any other costs incurred prior to notification from the NALCC acknowledging final approval of the grant award, are NOT eligible for reimbursement and cannot be used as match. Costs related to land acquisition, purchase of development rights, and purchases of easements are not eligible for reimbursement under this program. These costs are not eligible as matching costs, either. Generally speaking, education and law enforcement activities are not eligible for funding or match under this program. Funds cannot be used to support political lobbying or capacity building of organizations. Indirect costs in excess of 15% of direct costs are ineligible.

How will I be notified of an award?

Applications that score high enough to be selected to receive an award will receive written notification from WMI.

When may I start work?

You may begin work once federal compliance is met, and you have received written notification from WMI of your final grant award. However, WMI advises grantees NOT to begin work until all required and necessary permits are obtained for the activities identified in their project proposal. Please note that grantees may not request or receive any reimbursement payments prior to completion of federal compliance.

What are the requirements for sharing and managing data related to this project?

The NALCC is committed to distributing information needed by managers and scientists to make informed decisions and of interest to a wide variety of partners. Raw data, derived data products, and other supporting information created or gathered in the course of LCC-sponsored projects will be made available to the NALCC, and data are expected to be made publicly available except where

protected by state or federal laws. Principal investigators must preserve and transfer data according to commonly accepted standards, including standards for metadata.

To Apply, Submit Proposals via Email to:

Scot Williamson
Wildlife Management Institute
wmisw@together.net

For Technical Questions, Contact:

Scott Schwenk
Science Coordinator
North Atlantic Landscape Conservation Cooperative
300 Westgate Center Drive
Hadley, MA 01035
phone 413-253-8647
fax 413-253-8424
william_schwenk@fws.gov
http://www.northatlanticlcc.org

Appendix. Priority Aquatic and Coastal Species for RFP Topic 1

Scientific Name	Common Name	NE Fisheries Species of Conservation and Management Concern*	ACFHP - Species-Habitat Matrix**	Regionally Significant SGCN†
Freshwater and Diadromous Fish				
Alosa pseudoharengus	Alewife	X	X	WC, LR
Anguilla rostrata	American Eel	X	X	
Dorosoma cepedianum	American Gizzard Shad		X	
Alosa sapidissima	American Shad	X	X	
Percina/Etheostoma gymnocephala	Appalachia Darter			LD, HR
Salmo salar	Atlantic Salmon‡	X	X	
Acipenser oxyrhynchus	Atlantic Sturgeon	X	X	WC, HR
Nocomis platyrhynchus	Bigmouth Chub			LD, HR
Enneacanthus chaetodon	Blackbanded Sunfish			WC, HR
Notropis heterodon	Blackchin Shiner			WC, LR
Phoxinus cumberlandensis	Blackside Dace	X		
Alosa aestivalis	Blueback Herring	X	X	
Etheostoma camurum	Bluebreast Darter			WC, LR
Salvelinus fontinalis	Brook Trout	X	X	
Etheostoma osburni	Candy Darter			LD, HR
Percina copelandi	Channel Darter			WC, LR
Pararhinichthys bowersi	Cheat Minnow			LD, HR
Cottus sp7	Checkered Sculpin			LD, HR
Tautogolabrus adspersus	Cunner		X	
Etheostoma percnurum	Duskytail Darter‡	X		
Ammocrypta/Etheostoma pellucida	Eastern Sand Darter			WC, LR
Etheostoma vitreum	Glassy Darter			LD, HR
Alosa mediocris	Hickory Shad	X	X	
Notropis chalybaeus	Ironcolor Shiner			WC, LR
Phenacobius teretulus	Kanawha Minnow			LD, HR
Acipenser fulvescens	Lake Sturgeon	X		
Salvelinus namaycush	Lake Trout	X		
Percina macrocephala	Longhead Darter			LD, HR
Etheostoma sellare	Maryland Darter‡	X		
Hiodon tergisus	Mooneye			WC, LR
Ichthyomyzon greeleyi	Mountain Brook Lamprey			WC, LR
Phoxinus oreas	Mountain Redbelly Dace			LD, HR
Acantharcus pomotis	Mud Sunfish			WC, HR

Notropis scabriceps	New River Shiner			LD, HR
Ichthyomyzon fossor	Northern Brook Lamprey			WC, LR
Ichthyomyzon bdellium	Ohio Lamprey			WC, LR
Cottus girardi	Potomac Sculpin			MC, HR
Osmerus mordax	Rainbow Smelt		X	
Moxostoma carinatum	River Redhorse			WC, LR
Percina rex	Roanoke Logperch‡	X		
Prosopium cylindraceum	Round Whitefish			WC, HR
Petromyzon marinus	Sea Lamprey		X	
Acipenser brevirostrum	Shortnose Sturgeon‡	X	X	WC, HR
Erimystax cahni	Slender Chub‡	X		
Erimonax monachus	Spotfin Chub‡	X		
Etheostoma maculatum	Spotted Darter			LD, HR
Erimystax dissimilis	Streamline Chub			WC, LR
Percina notogramma	Stripeback Darter			LD, HR
Exoglossum laurae	Tonguetied Minnow			HC, HR
Thoburnia rhothoeca	Torrent Sucker			LD, HR
Etheostoma variatum	Variegate Darter			MC, HR
Lepomis gulosus	Warmouth			WC, LR
Noturus flavipinnis	Yellowfin Madtom‡	X		
Marine & Estuarine Fish				
Ammodytes americanus	American Sand Lance		X	
Gadus morhua	Atlantic Cod		X	
Micropogonias undulatus	Atlantic Croaker		X	
Clupea harengus	Atlantic Herring		X	
Scomber scombrus	Atlantic Mackerel		X	
Strongylura marina	Atlantic Needlefish		X	
Menidia menidia	Atlantic Silverside		X	
Microgadus tomcod	Atlantic Tomcod		X	
Anchoa mitchilli	Bay Anchovy		X	
Centropristis striata	Black sea bass	X	X	
Pomatomus saltatrix	Bluefish		X	
Albula vulpes	Bonefish		X	
Peprilus triacanthus	Butterfish		X	
Brevoortia tyrannus	Menhaden	X	X	
Sphoeroides maculatus	Northern Puffer		X	
Macrozoarces americanus	Ocean Pout		X	
Opsanus tau	Oyster Toadfish		X	
Pollachius virens	Pollock		X	
Urophycis chuss	Red Hake		X	
Stenotomus chrysops	Scup	X	X	
Scomberomorus maculatus	Spanish Mackerel		X	

Leiostomus xanthurus	Spot		X	
Cynoscion nebulosus	Spotted Sea Trout		X	
Morone saxatilis	Striped Bass	X		
Paralichthys dentatus	Summer flounder	X	X	
Megalops atlanticus	Tarpon		X	
Tautoga onitis	Tautog	X	X	
Cynoscion regalis	Weakfish	X	X	
Scophthalmus aquosus	Windowpane Flounder		X	
Pseudopleuronectes americanus	Winter Flounder	X	X	
Sharks, skates, and rays				
Raja eglanteria	Clearnose Skate		X	
Carcharhinus obscurus	Dusky Shark		X	
Leucoraja erinacea	Little Skate		X	
Carcharhinus plumbeus	Sandbar Shark		X	
Squalus acanthias	Spiny Dogfish	X	X	
Crustaceans				
Homarus americanus	American Lobster		X	
Callinectes sapidus	Blue Crab		X	
Limulus polyphemus	Horseshoe Crab	X	X	
Pandalus borealis	Northern Shrimp		X	
Marine Mollusks				
Loligo pealeii	Long Finned Squid		X	
Crassostrea virginica	Oyster	X		
Freshwater Mussels				
Quadrula sparsa	Appalachian Monkeyface‡	X		
Lemiox/ Conradilla caelata	Birdwing Pearlymussel‡	X		
Ligumia recta	Black Sandshell			WC, LR
Alasmidonta varicosa	Brook Floater			WC, HR
Pleurobema clava	Clubshell‡	X		
Hemistena lata	Cracking Pearlymussel‡	X		
Villosa trabalis	Cumberland Bean‡	X		
Epioblasma brevidens	Cumberland Combshell‡	X		
Quadrula intermedia	Cumberland Monkeyface‡	X		
Truncilla truncata	Deertoe			WC, LR
Dromus dromus	Dromedary Pearlymussel	X		
Alasmidonta heterodon	Dwarf Wedgemussel‡	X		WC, HR
Margaritifera margaritifera	Eastern Pearlshell			HC, HR
Ligumia nasuta	Eastern Pond Mussel			WC, HR

Alasmidonta marginata	Elktoe		WC, LR
Cyprogenia stegaria	Fanshell	X	
Fusconaia cuneolus	Fine-rayed Pigtoe‡	X	
Ptychobranchus subtentum	Fluted Kidneyshell	X	
Epioblasma torulosa gubernaculum	Green Blossom Pearlymussel	X	
Lasmigona subviridis	Green Floater		WC, HR
Pleurobema collina	James Spinymussel‡	X	LD, HR
Pegias fabula	Little-winged Pearlymussel‡	X	
Elliptio fisheriana	Northern Lance Mussel		WC, HR
Epioblasma torulosa rangiana	Northern Riffleshell	X	
Plethobasus cooperianus	Orangefoot pimpleback	X	
Lampsilis abrupta	Pink Mucket‡	X	
Lampsilis ovata	Pocketbook Mussel		WC, LR
Villosa perpurpurea	Purple Bean‡	X	
Villosa fabalis	Rayed Bean	X	
Pleurobema plenum	Rough Pigtoe‡	X	
Quadrula cylindrica strigillata	Rough Rabbits Foot‡	X	
Plethobasus cyphyus	Sheepnose	X	
Fusconaia cor	Shiny Pigtoe‡	X	
Lexingtonia dolabelloides	Slabside Pearlymussel	X	
Cumberlandia monodonta	Spectaclecase	X	
Epioblasma florentina walkeri	Tan Riffleshell	X	
Leptodea ochracea	Tidewater Mucket		WC, HR
Alasmidonta undulata	Triangle Floater		HC, HR
Epioblasma torulosa torulosa	Tubercled Blossom		
Lampsilis cariosa	Yellow Lampmussel		WC, HR
Elliptio lanceolata	Yellow Lance		LD, HR

*As identified in *U.S. Fish and Wildlife Service Northeast Fisheries Strategic Plan Fiscal Years 2009-2013.*

**Species analyzed in the Atlantic Coastal Fish Habitat Partnership's *Species-Habitat Matrix Project.*

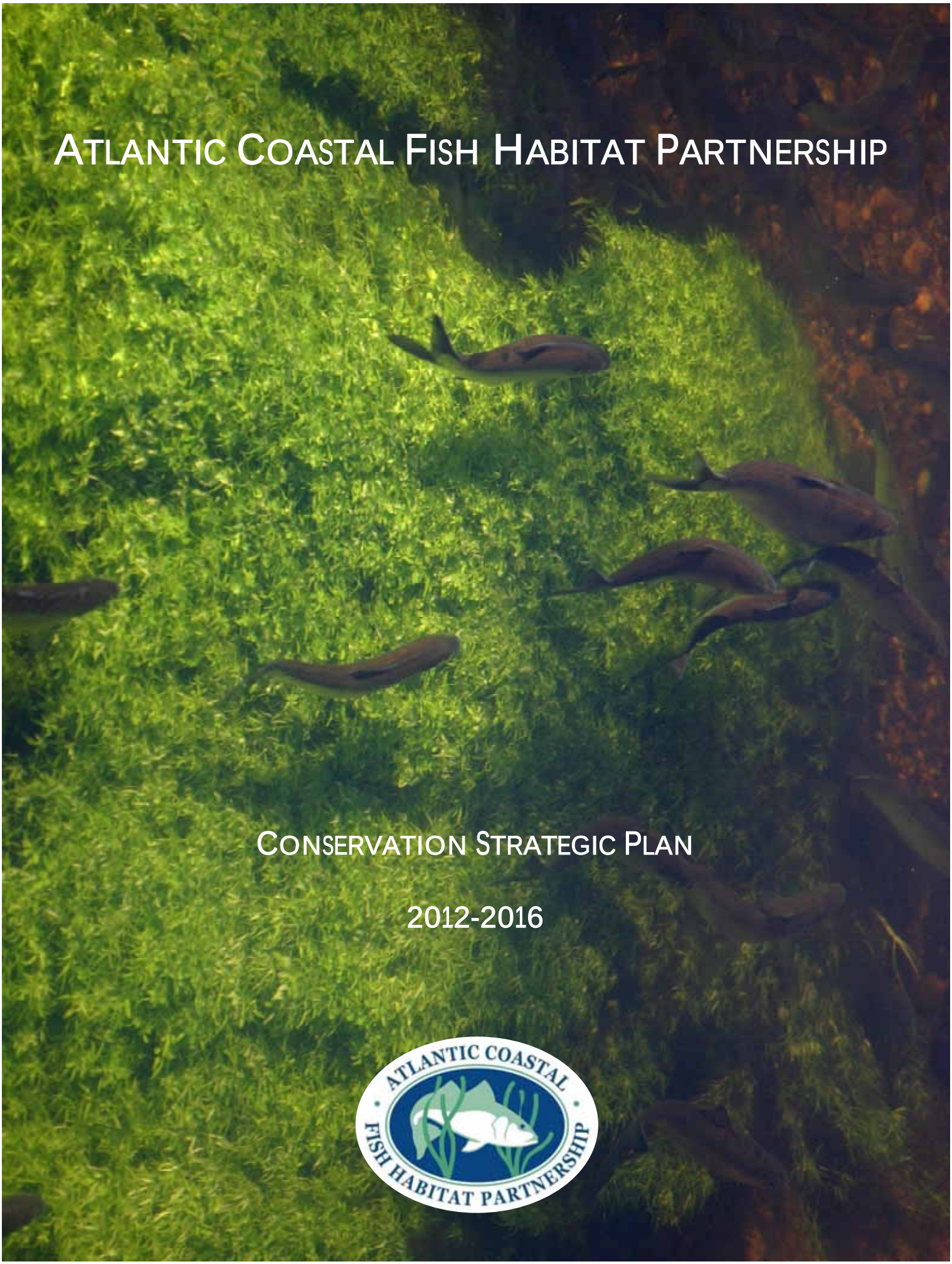
‡ Federally listed as Endangered or Threatened.

†Regionally significant Species of Greatest Conservation Need (SCGN), based on an analysis by The Nature Conservancy of state wildlife action plans, published in the report *Conservation Status of Fish, Wildlife, and Natural Habitats in the Northeast Landscape. Only includes species with sufficient data for the TNC analysis.*

Concern levels: WC = widespread, HC = high, MC = moderate, LC = low

Responsibility level: HR = high (>50% distribution is in Northeast), LR = low

LD, HR = limited distribution (only found in 2-3 states) and high responsibility



Atlantic Coastal Fish Habitat Partnership

Conservation Strategic Plan

2012-2016

For More Information

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Front cover photograph of alewifes is courtesy of Jake Kritzer, Environmental Defense Fund.
Back cover photograph of a flounder in submerged aquatic vegetation is courtesy of
Chris Pickerell, Cornell Cooperative Extension.

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Atlantic Coastal Fish Habitat Partnership

Conservation Strategic Plan 2012-2016

Executive Summary

The Atlantic Coastal Fish Habitat Partnership (ACFHP) is an assembly of groups interested in the conservation of habitat for Atlantic coast diadromous, estuarine-dependent, and coastal fish species. It was formed in 2006 under the auspices of the National Fish Habitat Action Plan. Numerous human-derived threats are impacting Atlantic coastal drainages. ACFHP will work to address these threats with a broad coordinated approach, and to leverage resources from many agencies, organizations, and others to make a difference for fish habitat along the Atlantic coast.

The ACFHP Conservation Strategic Plan proposes key conservation strategies to confront pervasive threats to fish habitat along the Atlantic coast. While ACFHP is taking a collaborative coast-wide approach to addressing fish habitat needs, we realize that sub-regional prioritization may be needed to attend to more localized issues. Therefore, sub-regional Priority Habitats are identified in the Plan as well. These prioritizations were designed to focus the efforts of the Partnership in areas where ACFHP, together with our partners, can make a measurable difference for fish habitat.

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Photo of tautog by Paul Caruso, MA DMF

Introduction

> *Healthy waterways and robust fish populations are vital to the well-being of our society. They provide clean water and sustainable fisheries. They also are vital for less tangible reasons, as anyone who has fished wild waters or canoed a tranquil stream can attest. Unfortunately, in many waters around the country, fish and the habitats on which they depend are in decline…A tremendous amount of work has been undertaken to protect, restore and enhance these aquatic habitats…Although significant gains have been made, they have not kept pace with impacts resulting from population growth and land-use changes…Given the diverse array of federal, state, tribal, local, and private jurisdictions, the need has never been greater for increased action and improved coordination of fisheries conservation measures across boundaries and jurisdictions. (AFWA, 2006)*

Developed by a coalition of anglers, conservationists, scientists, state and federal agencies, and industry leaders, and established in 2006, the National Fish Habitat Action Plan (NFHAP) seeks to protect, restore and enhance the nation's fish and aquatic communities through partnerships that foster fish habitat conservation and improve the quality of life for the American people (AFWA, 2006). NFHAP is currently composed of 17 Fish Habitat Partnerships, including the Atlantic Coastal Fish Habitat Partnership (ACFHP), and four 'candidate' Partnerships, across the United States.

From 2007-2009, the average annual value of all US marine fisheries landings was $4 billion dollars (NMFS, 2010) and in 2006, saltwater anglers spent $31 billion dollars (NMFS, 2008) however, the sustainability of these fisheries is at risk due to aquatic habitat damage and loss (NMFS, 2009). Many recreationally and commercially caught species use Atlantic coastal habitats for some portion of their life history.

Human use of aquatic habitats can potentially impact those habitats (NMFS, 2009) and 53% of our nation's total population currently lives in coastal counties (Woods & Poole and NOAA, 2010). ACFHP's boundary includes two of the five fastest growing coastal counties in the nation, from 1970-2011: Flagler and Osceola counties, located on the east coast of Florida (Woods & Poole and NOAA, 2010).

The issues that ACFHP will address are broad-based, and tackling them is important for the conservation of Atlantic coastal habitats. This Partnership is designed to bring diverse groups together to identify the causes of habitat declines, implement strategic corrective action, and measure and communicate progress. The end result will benefit not only a great number of species, from diadromous to marine, but a large population of human users as well.

History

In 2006, the Atlantic States Marine Fisheries Commission (ASMFC) was approached by the U.S. Fish and Wildlife Service (USFWS) to consider initiating a partnership under NFHAP. At that time, the existing NFHAP partners were primarily focused on freshwater habitats. ASMFC, with its existing infrastructure and administrative processes, seemed to be a logical organization to catalyze a partnership focused on coastal fish habitat. ASMFC agreed and subsequently charged its Habitat Committee with developing a coastal fish habitat partnership.

The Habitat Committee's charge led to a series of conference calls in the summer of 2006 between the Habitat Committee and NFHAP staff. In the fall, two letters indicating the ASMFC's interest and involvement with the partnership development process, and outlining efforts to date, were submitted to the NFHAP Board. In 2007, the NFHAP Board granted ACFHP 'candidate partnership' status.

Also in the fall of 2006, letters were sent to potential partners identified by the Habitat Committee, informing them of the partnership development and requesting their involvement.

Mission

To accelerate the conservation, protection, restoration, and enhancement of habitat for native Atlantic coastal, estuarine-dependent, and diadromous fishes through partnerships between federal, tribal, state, local, and other entities.

In the winter of 2007, a series of informational sessions were held along the Atlantic coast, with the aim of gathering potential ACFHP partners and disseminating information on NFHAP and ACFHP activities to date. These 'Listening Sessions' were held in Florida, South Carolina, Virginia, New Jersey, and New Hampshire.

In May 2007, a coast-wide workshop was held in Baltimore, Maryland, to engage stakeholders and partners in developing and implementing ACFHP, including establishing its focus and administrative structure , as well as discussing strategies for addressing next steps. Approximately 80 participants attended, including representatives from state, federal, and non-governmental organizations. Among the many outcomes, preliminary target species and habitats were determined, and the major committees of the Partnership were created: the Interim Steering Committee, the Science & Data Working Group, and the Communications Working Group.

Vision

Healthy, thriving habitats of sufficient quantity and quality to support all life stages of Atlantic coastal, estuarine-dependent, and diadromous fishes

In 2008, the ACFHP Charter and Bylaws were approved by the Interim Steering Committee and an ACFHP Coordinator was hired to assume coordination of the Partnership's activities. In March 2009, the ACFHP Memorandum of Understanding (MOU) took effect, formalizing the Partnership. In October 2009, ACFHP was approved by the National Fish Habitat Board as an official Fish Habitat Partnership under NFHAP.

As of September 2011, ACFHP has supported four on-the-ground fish habitat conservation projects, one in Maine, one in New York and two in South Carolina.

Governance and Organization

The ACFHP MOU (available on the ACFHP web page at: www.atlanticfishhabitat.org/2008-ACFHP-MOU.pdf) is made up of 30 signatories including 16 states responsible for managing Atlantic coastal river drainage systems (see sidebar to the right for a complete list of ACFHP Partners). The Partnership hopes to bring in additional organizations committed to conserving fish habitat along the Atlantic coast in the future.

The Steering Committee is the decision-making body of ACFHP and has oversight responsibility for all ACFHP activities. It is self-directed, volunteer, and has no authority beyond that of its individual members. Each partner organization is allowed one voting member on the Steering Committee, with a cap of 25 voting members.

Working groups are organized by the Steering Committee, and members are appointed by Steering Committee members or they are volunteers. Working group chairs are not required to be current Steering Committee members. This is to facilitate as much involvement from the Partnership as possible and to share leadership opportunities. Established working groups include the Science and Data Working Group and the Communications Working Group. The Steering Committee also creates ad-hoc working groups and subcommittees in order to address issues identified by the Partnership as they arise.

The ACFHP Charter and By-Laws define the overall function, organization, and membership of the Steering Committee and working groups. This document includes guidance for meeting management and a decision structure (available on the ACFHP web page at: www.atlanticfishhabitat.org/ACFHP-Charter-and-Bylaws.pdf).

PARTNERS

Albemarle-Pamlico National Estuary Program

American Littoral Society

American Rivers

Atlantic States Marine Fisheries Commission

Chesapeake Bay Foundation

Connecticut Dept of Energy & Environmental Protection

Delaware Dept of Natural Resources & Environmental Control

Environmental Defense Fund

Florida Fish & Wildlife Conservation Commission

Georgia Dept of Natural Resources

Houlton Band of Maliseet Indians

Maine Dept of Marine Resources

Maryland Dept of Natural Resources

Massachusetts Division of Marine Fisheries

National Oceanic and Atmospheric Administration

New Hampshire Fish & Game Dept

New Jersey Division of Fish & Wildlife

New York State Dept of Environmental Conservation

North Carolina Dept of Environment & Natural Resources

Oyster Recovery Partnership

Partnership for the Delaware Estuary

Pennsylvania Fish & Boat Commission

Rhode Island Division of Fish & Wildlife

South Carolina Dept of Natural Resources

The Nature Conservancy

United States Fish and Wildlife Service

United States Geological Survey

Vermont Fish and Wildlife Department

Virginia Marine Resources Commission

Wells National Estuarine Research Reserve

Science and Data

The Partnership has completed two science projects to date: A Species-Habitat Matrix (ACFHP, 2009) and Assessment of Existing Information on Atlantic Coastal Habitats (hereinafter referred to as 'the Assessment') (Nelson et al., 2010). These projects were completed to inform or verify the development of conservation objectives and priorities. The Partnership expects to further develop, analyze, or refine the outcomes of these projects primarily through the efforts of its Science and Data Working Group, as defined in Section C of this report.

The Species-Habitat Matrix is an assessment of the relative importance of specific estuarine and freshwater habitat types in terms of their value to the major life stages of over 100 fish species. The development, review, and analysis of the Species-Habitat Matrix was spearheaded by members of the ACFHP Science and Data Working Group, however it involved contributions from over 50 people, coast-wide to which scientists from state, federal, non-governmental, and academic entities contributed. It represents a coast-wide cooperative effort. The Species-Habitat Matrix Project Summary Report is available on the ACFHP web page at: www.atlanticfishhabitat.org/Species Habitat Matrix Summary Report.pdf

The Assessment was conducted through a contract supervised by NOAA's National Ocean Service. It is a database of over 500 documents, datasets, and information portals on Atlantic coastal fish species and habitats which were collected and analyzed for indicator, threat, and action information. A web-based queryable database allowing resource managers access to this information is available at http://www8.nos.noaa.gov/bhv/spatbibindex.html. Results are summarized in a final report available at http://ccma.nos.noaa.gov/publications/nccostechmemo103.pdf

Communications and Outreach

The Partnership has developed fact sheets, posters, and a website (www.atlanticfishhabitat.org) in order to engage its partners and the broader fish habitat conservation community. The Partnership plans to continue its communications and outreach program, primarily through its Communications and Outreach Working Group, as defined in Section D of this report.

Finances

In 2007, the Partnership received $10,000, through a cooperative agreement with USFWS, for use towards communications related activities and materials. In 2008, the Partnership was awarded a grant under the Multistate Conservation Grant Program which has provided funding for its development and operations. In FY10 $70,000 in USFWS-NFHAP funding was directed towards ACFHP on-the-ground projects. And in FY11, $74,603 was directed towards ACFHP on-the-ground projects. The Partnership plans to continue its financial capabilities primarily through its Finance Subcommittee, as defined in Section E of this report.

Geographic Profile

Partnership Boundary

Geographic Range
Maine to the Florida Keys

Inland Extent
Headwaters of coastal rivers

Marine Extent
Offshore to the edge of the continental shelf

Subregion Boundaries

ACFHP utilizes subregional boundaries for the purposes of habitat prioritization. Subregions represent ecologically distinct units and were derived from Marine Ecoregions of the World (as established by the World Wildlife Fund and The Nature Conservancy). These include the Gulf of Maine, Virginian, Carolinian, and Floridian ecoregions which correspond to ACFHP subregions North Atlantic, Mid-Atlantic, South Atlantic, and South Florida, respectively. While these subregions are unique to ACFHP, the Partnership will work collaboratively with the appropriate partners to ensure optimal success.

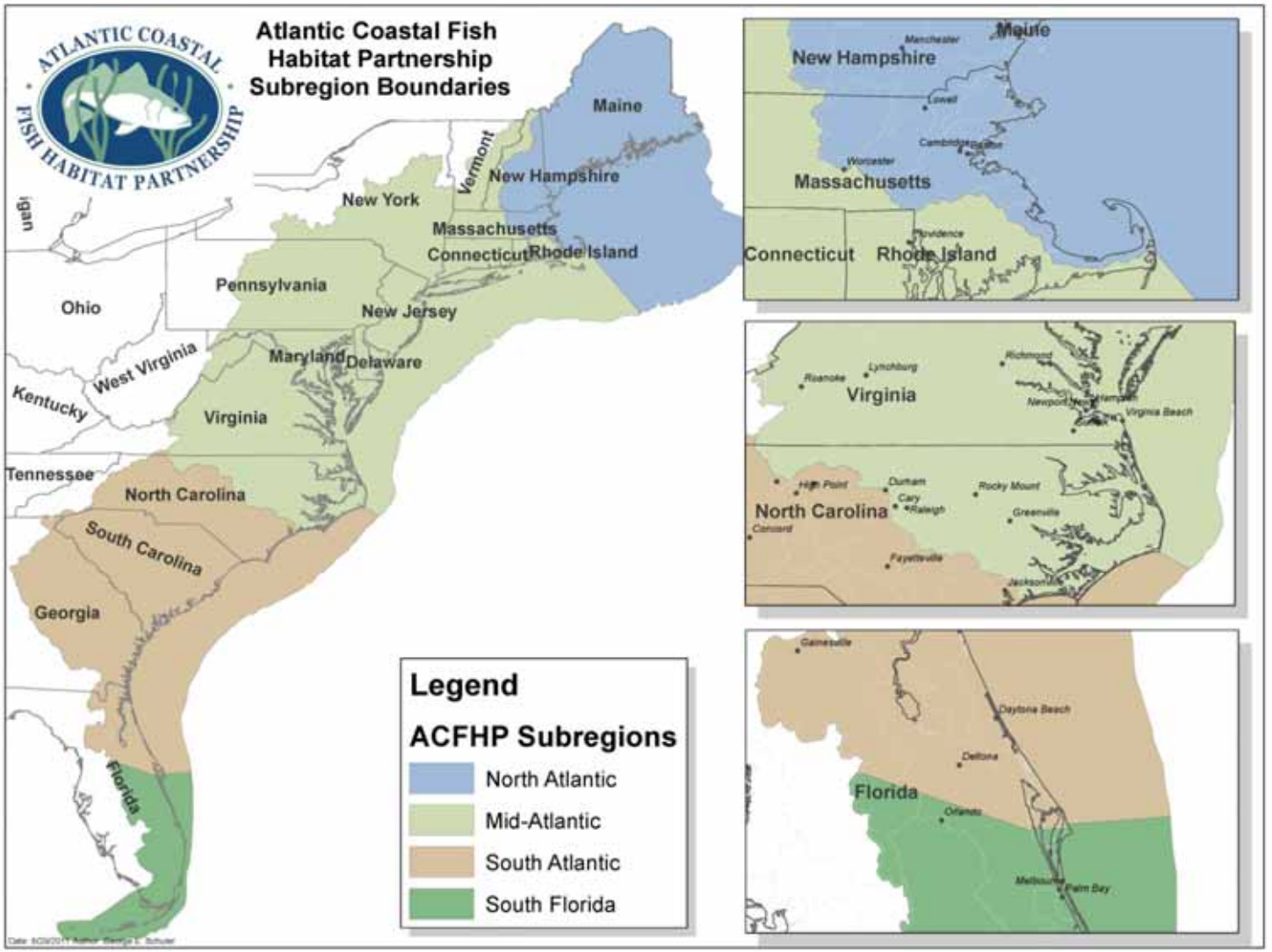

Figure 1. Atlantic Coastal Fish Habitat Partnership and Subregion Boundaries

Effort Profile

With its mission statement in mind, ACFHP plans to work throughout the region outlined in Figure 1. However, ACFHP will place less emphasis on upstream headwaters and offshore marine ecosystems and more on coastal/estuarine environments.

ACFHP will seek to ensure contiguous watershed coverage with adjacent fish habitat partnerships while seeking to minimize overlap. As ACFHP develops on-the-ground projects, it will work with these partnerships to identify where cooperation should occur and to identify new avenues for collaboration. This will ensure that ACFHP is not working in competition, but in concert with existing partnerships towards fish habitat conservation. Figure 2 demonstrates the relative effort that will be dedicated to Atlantic coastal areas on a continuum from white water to blue water.

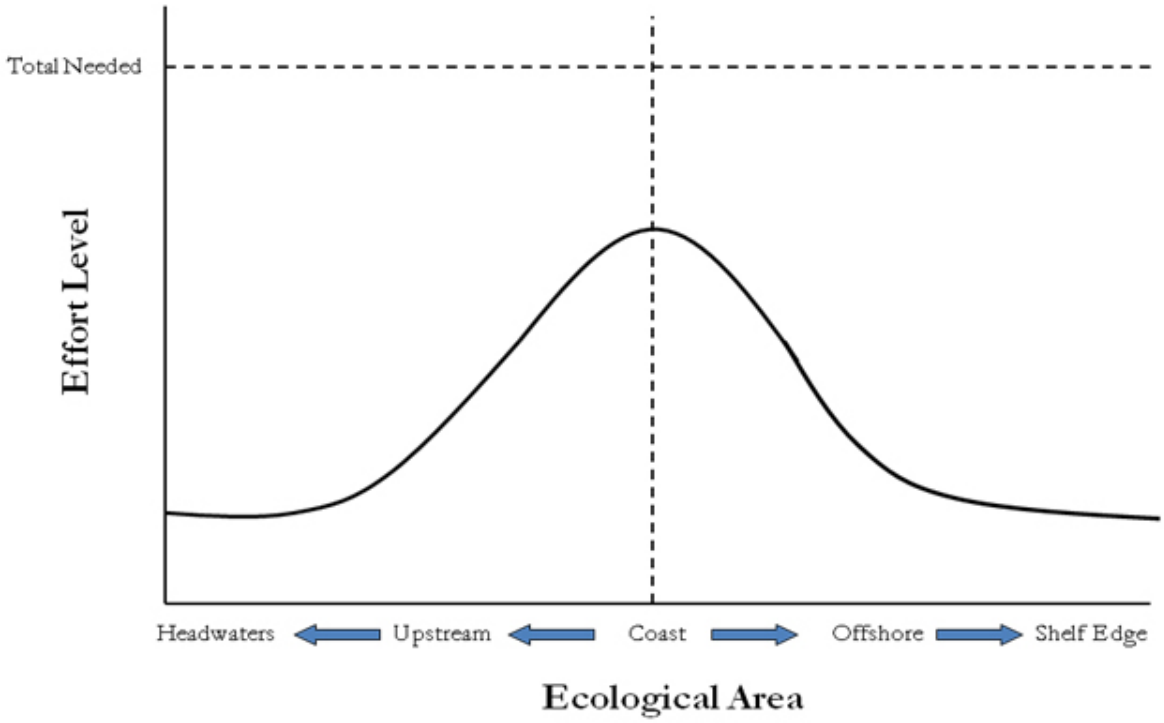

Figure 2. ACFHP Relative Effort Level in Relation to Distance from the Coast

Purpose

The ACFHP Conservation Strategic Plan is a broad coast-wide strategy for determining and addressing the threats affecting habitats important for all life stages of Atlantic coast diadromous, estuarine-dependent, and coastal species. The Plan is designed to address actions that the Partnership can take to improve the condition of Atlantic coast fish habitat over the next five years, with re-examination after three years of implementation.

The Plan was developed by the ACFHP Steering Committee and others and was reviewed by members of the ACFHP Science and Data Working Group. It will be provided to the Partnership-At-Large with a request for comment that will be considered during the development of future ACFHP Conservation Strategic Plans.

Implementation Plans will include steps towards achieving action items identified in this Conservation Strategic Plan and will be developed every one to two years.

Subregional action plans, with specific, time-bound, quantifiable action items will be considered in the future. Suggestions will be solicited from the ACFHP Science and Data Working Group and other regional experts.

Aerial photo of coral reef on Sand Key, FL by Craig Quirolo, Reef Relief/Marine Photobank

Habitats

The full list of ACFHP Habitats (Table 1) is based on the list determined by members of the ACFHP Science Data Working Group for consideration in the ACFHP Species-Habitat Matrix. This list should not be considered a comprehensive index of all habitats along the Atlantic coast; however, these habitats were determined to best represent the range of habitats supporting Atlantic coastal, estuarine-dependent, and diadromous fishes at a coast-wide level.

Table 1 illustrates the 25 habitat types nested within seven habitat categories (see *Appendix A. Habitat Characterizations* for more detailed descriptions). Table 1 has a hierarchical design where the habitat **types** are listed under a particular habitat **category**. The habitat types are examples of particular habitat characterizations that fall within a broader habitat category.

Table 1. ACFHP Habitats by Category and Type

Habitat Category	Habitat Type
Marine and Estuarine Shellfish Beds	Oyster aggregations/reef
	Scallop beds
	Hard clam beds
	Shell accumulations
Coral and Live/Hard Bottom	Coral reefs
	Patch reef, soft corals, or anemones
	Live rock
Macroalgae	*Fucus* spp., *Laminaria* spp., *Ulva lactuca*
Submerged Aquatic Vegetation	Tidal fresh & oligohaline plant species
	Mesohaline & polyhaline plant species
Tidal Vegetation	Estuarine emergent marsh
	Tidal freshwater marsh
	Mangrove
Unvegetated Coastal Bottom	Loose fine bottom
	Loose coarse bottom
	Firm hard bottom
	Structured sand habitat
Riverine Bottom	Higher gradient headwater tributaries
	Lower gradient tributaries
	Higher gradient large mainstem river
	Lower gradient large mainstem river
	Low order coastal streams
	Non-tidal freshwater mussel beds
	Coastal headwater pond
	Non-tidal freshwater marsh

Subregional Priority Habitats

ACFHP has selected three priority habitats within each subregion using the results of the Species-Habitat Matrix as a guide, and professional judgment to factor in other considerations (such as habitat rarity or high potential for conservation). The matrix was used as a tool in developing the list of Subregional Priority Habitats, but it was not the sole factor in selecting Subregional Priority Habitats. In some cases, ACFHP specifically selected other habitats because although a habitat that ranked high in the Matrix results may be important and used by many species, it may not necessarily be threatened or in need of protection. Summary results of the Species-Habitat Matrix can be found in *Appendix B*.

ACFHP will support efforts to accelerate the conservation, protection, restoration, and enhancement of all habitats listed in Table 1. The Subregional Priority Habitats will not be the only habitats to which ACFHP will target its strategic actions. However, given limited resources, projects addressing the Priority Habitats appropriate for the given subregion will receive heightened consideration during the next five years (2012-2016).

ACFHP Priority Habitats by Subregion

North Atlantic
- Riverine Bottom
- Submerged Aquatic Vegetation (meso- to polyhaline)
- Marine and Estuarine Shellfish Beds

Mid-Atlantic
- Riverine Bottom
- Submerged Aquatic Vegetation
- Tidal Vegetation

South Atlantic
- Marine and Estuarine Shellfish Beds
- Riverine Bottom
- Tidal Vegetation

South Florida
- Coral and live/hardbottom
- Submerged Aquatic Vegetation (meso- to polyhaline)
- Mangrove

In some instances a habitat **category** was identified as a Subregional Priority Habitat, whereas in other cases a specific habitat **type**, falling within a habitat category, was selected as a Subregional Priority Habitat. The three priority habitats selected for each subregion are not ranked or prioritized within the subregion.

Priority Threats

Habitat degradation and persistent declines in Atlantic slope coastal drainage systems, which provide critical habitats for diadromous, estuarine-dependent, and coastal fish species, must be reversed. **Threats that impact important spawning and nursery habitats are of particular concern.** The Partnership has identified Priority Threats that are currently impacting habitats along the Atlantic coast. ACFHP Priority Threats are verified by the results of the Assessment. A table which relates the results of this project with ACFHP Priority Threats identified in this Plan can be found in *Appendix C*. The Assessment Technical Memorandum NOS NCCOS 103 is available at the following location: http://ccma.nos.noaa.gov/publications/nccostechmemo103.pdf.

List of Priority Threats Impacting ACFHP Habitats at a Coast-wide Scale:

- **Obstructions to Fish Movement/Habitat Connectivity**
  - **Includes:** Dams; hydropower facilities; road crossings and culverts; thermal barriers; reduced stream flow and low flow areas caused by diversions, withdrawals, legacy effects, and reduced base flow; jetties and breakwater; tidal turbines; and beaver dams or debris jams.
  - **Importance:** This threat is a concern in estuaries as well as riverine and tidal systems, as hydrokinetic energy generation is further explored. Dams, culverts, sedimentation and other impediments to fish movement can impact and limit the survivability of fish populations and lead to local extinctions in rivers, streams, and estuaries along the Atlantic coast. Obstructions to fish movement can adversely affect populations of diadromous species as well as important estuarine fish populations and life history stages.

Goose Creek Dam, SC by Prescott Brownell, National Marine Fisheries Service

- **Dredging and Coastal Maintenance**
  - **Includes:** Dredging; blasting; port expansion and maintenance; dredge spoil disposal; and beach maintenance (including beach fill, mining of sand, bulldozing, sand bypass, sand bags, and shoreline stabilization).
  - **Importance:** Human activities around marinas, ports, and residential docks can have major impacts on fish habitat. The direct impacts of this threat are the removal, degradation, or smothering of habitat. Indirect impacts involve the blockage of sunlight or are linked with other threats noted in this section. This threat is serious and persistent given its on-going and reoccurring nature. Once

habitat is allowed to re-establish in impacted areas, it is impacted again. The areas of greatest impact are nursery and spawning areas; protection of these areas is vitally important to ensure sustainability of critical life stages of many species.

- **Water Quality Degradation and Eutrophication**
  - **Includes:** Surface water and groundwater quality and quantity; point/non-point source pollution; nutrient loading; atmospheric deposition; and dissolved oxygen concerns.
  - **Importance:** This threat can occur in all aquatic habitats. Water quality decline and eutrophication are among the most common causes of aquatic habitat degradation. For example, nutrients promoting excessive algal blooms, such as nitrogen and phosphorus, can decrease oxygen levels in the water column and cause die off of fish and other marine species. This threat is one of the most pervasive and difficult to target and reverse. Often this threat must be addressed in order for habitat restoration to be successful over the long-term.

- **Consumptive Water Withdrawal**
  - **Includes:** Withdrawals for industrial, agricultural, residential, and recreational uses, such as irrigation, desalinization, and energy generation; flow concerns; and freshwater withdrawal in the salt front.
  - **Importance:** Consumptive water withdrawal can lead to inadequate abundance of water quantity or flow for fish and their habitats, degraded water quality, and alter the location of the interface and salt water wedges. This is a particularly challenging threat to address because of the inherent difficulties of balancing conflicting water needs of fish and humans from a particular water body. Impacts to habitat can result from groundwater as well as surface water removals. These competing needs must be considered when decisions are made on consumptive water withdrawals.

Photo of dredge sediment dumping, Boynton Beach, FL by Steve Spring, Palm Beach County Reef Rescue/Marine Photobank

- **Sedimentation**
  - **Includes:** Suspended and deposited solids; construction of impervious surfaces in the watershed (e.g. parking lots, roads, buildings); point and non-point source runoff; and development of shorelines and riparian areas.
  - **Importance:** Sedimentation is a particularly important threat to consider when dealing with riverine or estuarine habitats. Watersheds with a high percentage of impervious surfaces and erosion often have sedimentation impacts on aquatic habitats. Sediment runoff can smother fish eggs, impact physiological and behavioral responses in fish, vegetation, shellfish beds, submerged aquatic vegetation (SAV), dislodge plants, decrease light penetration, and increase susceptibility to disease.

- **Vessel Operation Impacts**
  - **Includes:** Recreational and commercial vessel operation; prop washing; anchoring; grounding; and discharge.
  - **Importance:** Vessel impacts are most prevalent in shallow water estuarine and marine habitats. Vessel operation can lead to propeller scarring, shoreline erosion due to wakes and grounding, and shading from boats and associated docks.

- **Contamination of Water (ground and surface) and Sediments**
  - **Includes:** Heavy metal accumulation; acid precipitation; pesticides and herbicides; petrochemical spills; and pharmaceuticals.
  - **Importance:** Contamination can degrade the health of both habitats and species, especially for elements that easily bioaccumulate in tissues and sediments. Identifying the sources of and avenues to address contamination issues can be particularly challenging. An emerging concern involves the prevalence of pharmaceuticals in water supplies that affect humans and fish alike. Contamination is a major concern because it can cause lethal and sub-lethal effects, disease, locomotor impairment, abnormal mating and other behaviors, incomplete or abnormal development, inadequate nutrient balance, susceptibility to parasites, and other problems.

- **Invasive Species**
  - **Includes:** Introduction of invasive species, including plants, invertebrates, and vertebrates, and lack of invasive species eradication.
  - **Importance:** Demonstrated many times over, invasive species can have a major impact on fish and their habitats. Native habitat types may be outcompeted, smothered, or displaced by invasive plants (such as common reed *Phragmites australis* or water lettuce *Pistia stratiotes*) and animals (such as zebra mussel *Dreissena polymorpha,* mitten crab *Eriocheir sinensis*, and pink barnacle *Tetraclita rubescens*). The best way to address this threat is to try to prevent introductions through public education and encouraging the use of best management practices (BMPs) (e.g. in vessel transport). Once an invasive species is introduced, it is difficult or impossible to eradicate.

- **Climate Change**
  - **Includes:** Sea level rise; ocean acidification; increased water temperatures; increased storm frequency and severity; habitat expansion, contraction, and fragmentation due to climate change; species geographic shifts, and eutrophication.
  - **Importance:** The full impacts and timeline of impacts are still being debated. However, climate change is likely to influence all habitats and species along the Atlantic coast in some way. Climate change has the potential to strongly influence how we plan and execute habitat protection and restoration projects. The ways in which climate change influences projects will likely evolve over time as we learn more about how the atmosphere and oceans are changing.

- **Other Threats**
  - Other threats to Atlantic coast fish habitat were identified. However, those threats were determined not to be as high of a priority for ACFHP, or were of a nature that could not be effectively addressed by ACFHP. Those threats included: 1) **fishing gear impacts** (including hydraulic clamming, bottom-tending gears, and recreational and commercial fishing impacts on habitat); 2) **energy development** (including tidal, wave, wind, and hydropower); 3) **aquaculture** (including pathogen transfer, entanglement, nutrient issues, and genetic sustainability); 4) **inadequate implementation of existing regulatory systems** (including permitting, zoning, land-use planning, sewage treatment, floodplain management, and fishery management); and 5) **physical impacts to fish** (including entrainment, impingement, propeller strikes, prop wash, turbines).

All of these threats can be cumulative, which can possibly cause irreversible changes to the ecosystem.

Photo of invasive lionfish: Chip Baumberger/Marine Photobank

Goals

ACFHP goals are modeled after the goals outlined in the National Plan, which highlight the protection, prevention, restoration, and enhancement of fish habitat.

Goal 1: Protect and maintain intact and healthy aquatic systems for native Atlantic coastal, estuarine-dependent, and diadromous fishes.

Goal 2: Prevent further degradation of fish habitats that have been adversely affected.

Goal 3: Restore the quality and quantity of aquatic habitats to improve the overall health of fish and other aquatic organisms (especially those habitats that play an important role in critical life history stages of fish species, e.g. nursery and spawning areas).

Goal 4: Restore aquatic habitats to aid in recovery of threatened or endangered species (state and federal).

Goal 5: Enhance the quality and quantity of aquatic habitats that support a broad natural diversity of fish and other aquatic species.

Objectives and Strategic Actions

To achieve its goals ACFHP has developed a series of objectives encompassing protection, restoration, science and data, communications and outreach, and financial needs and activities. Strategic actions were identified to achieve those objectives. The Partnership has considered the human drivers (indirect and direct) and the key opportunities to address Priority Threats. It has also assessed the constraints it must work within as well as its operational needs in developing the objectives and strategies in this Plan. The strategic actions are intended to guide the Partnership's activities towards achieving an overarching objective of protecting and restoring aquatic habitat, on a coast-wide scale. They focus on activities that ACFHP can reasonably work toward achieving over the next five years.

The **protection objectives** are proactive initiatives that highlight the need to address priority threats that are adversely impacting aquatic habitats along the Atlantic coast before the habitats are in need of restoration. The **restoration objectives** highlight the need to restore aquatic habitats along the Atlantic coast that have already been impacted by various human activities.

While each strategic action has a specified time frame to achieve that strategic action, many of the strategic actions (or portions of) should be considered ongoing. Once said actions have been accomplished, ACFHP will continue to carry out these actions according to the life of the Plan (five years), with an opportunity for review after three years. At the conclusion of three and again at five years, these strategic actions will be considered by ACFHP for continuation into the future, or for their conclusion.

Section A: Habitat Protection Objectives

Protection Objective 1: Ensure adequate and effective fish movement past existing or potential barriers to maintain connectivity within Subregional Priority Habitats.

Threat: Obstructions to Fish Movement/Habitat Connectivity; Consumptive Water Withdrawal

Impacted Habitat Categories: Marine and Estuarine Shellfish Beds; Tidal Vegetation; Riverine Bottom; Coral and Live/Hard Bottom; SAV

- ✓ **A.1.1 Strategic Action:** Coordinate with partners to synthesize existing information in order to identify and prioritize watersheds for conservation where fragmentation of, or barriers to, fish dispersal are a potentially critical threat to be addressed. *Short-term*
- ✓ **A.1.2 Strategic Action:** Coordinate with partners to develop and disseminate a "standardized toolbox" of fish passage technologies (techniques and methodologies) and guidance to assist ACFHP partners in the development and implementation of effective fish passage protocols designed to alleviate this threat for new projects. *Long-term*

Protection Objective 2: Maintain or improve water quality and hydrology in Subregional Priority Habitats that are currently functioning, through incorporation of BMPs and/or technological controls.

Threat: Water Quality Degradation and Eutrophication; Contamination of Water (ground and surface) and Sediments

Impacted Habitat Categories: Marine and Estuarine Shellfish Beds; Coral and Live/Hard Bottom; Submerged Aquatic Vegetation; Tidal Vegetation; Riverine Bottom

- ✓ **A.2.1 Strategic Action:** Define the critical water quality variables and hydrology needed to protect Subregional Priority Habitats. *Short-term*
- ✓ **A.2.2 Strategic Action:** Coordinate with partners to develop and disseminate a toolbox or guidance document of non-structural BMPs that will assist ACFHP partners in improving or protecting water quality for fish habitat. *Long-term*
- ✓ **A.2.3 Strategic Action:** Coordinate with partners to synthesize existing information in order to identify and prioritize watersheds for water quality improvement for fish habitat. *Short-term*
- ✓ **A.2.4 Strategic Action:** Encourage the use of BMPs designed to improve point/non-point discharge management that addresses the impacts of inorganic and organic contaminants, including emerging contaminants of concern for Subregional Priority Habitats. *Long-term*

Protection Objective 3: Define the water flows and volumes needed to sustain the structure and function of healthy aquatic ecosystems (including groundwater and surface water interactions, maintaining appropriate salinity regimes) and ameliorate consumptive water usage where detrimental to Subregional Priority Habitats.

Threat: Consumptive Water Withdrawal

Impacted Habitat Categories: Riverine Bottom; Coral and Live/Hard Bottom; Submerged Aquatic Vegetation; Marine and Estuarine Shellfish Beds; Tidal Vegetation

- ✓ **A.3.1 Strategic Action:** Identify current work being done on this objective (e.g. Southeast Aquatic Resources Partnership and Southern Instream Flow Network, instream flow work at Federal and state agencies) and determine how ACFHP can best partner with these efforts. *Short-term*

Protection Objective 4: Minimize or reduce adverse impacts to Subregional Priority Habitats associated with coastal development and water dependent activities (e.g. recreational boating, and marine transportation).

Threat: Vessel Operation Impacts; Dredging and Coastal Maintenance; Sedimentation

Impacted Habitat Categories: Marine and Estuarine Shellfish Beds; Coral and Live/Hard Bottom; Submerged Aquatic Vegetation; Tidal Vegetation; Riverine Bottom

- ✓ **A.4.1. Strategic Action:** Identify current work being doneon this objective (e.g. guidance on dredgingand low impact development) and determine how ACFHP can best partner with these efforts. *Mid-term*

Protection Objective 5: Maintain or increase the resiliency of Subregional Priority Habitats to the impacts of climate change.

Threat: Climate Change

Impacted Habitat Categories: Marine and Estuarine Shellfish Beds; Coral and Live/Hard Bottom; Submerged Aquatic Vegetation; Tidal Vegetation; Riverine Bottom

- ✓ **A.5.1 Strategic Action:** Work with partners to identify techniques and guidance documents that can be helpful in maintaining the priority habitats within each subregion against the adverse affects of climate change. *Short-term*
- ✓ **A.5.2 Strategic Action:** Encourage all institutions responsible for aquatic habitat management to include impacts to fish habitat in their climate change planning and modeling efforts. *Long-term*

Protection Objective 6: Increase public awareness of the threats facing Subregional Priority Habitats and the protection measures available to avoid and minimize those threats.

Threat: Obstructions to Fish Movement/Habitat Connectivity; Dredging and Coastal Maintenance; Water Quality Degradation and Eutrophication; Consumptive Water Withdrawal; Sedimentation; Climate Change; Vessel Operation Impacts; Contamination of Water (ground and surface) and Sediments; Invasive Species

Impacted Habitat Categories: Marine and Estuarine Shellfish Beds; Coral and Live/Hard Bottom; Submerged Aquatic Vegetation; Tidal Vegetation; Riverine Bottom

- ✓ A.6.1 Strategic Action: Develop and disseminate public outreach materials on the adverse impacts of human activities on fish and fish habitat as well as ways to avoid and minimize those impacts. *Long-term*

Section B: Habitat Restoration Objectives

Restoration Objective 1: Restore and enhance hydrological or physical connections between Subregional Priority Habitats to promote fish utilization and improve overall aquatic health.

Threat: Obstructions to Fish Movement/Habitat Connectivity; Consumptive Water Withdrawal

Impacted Habitat Categories: Marine and Estuarine Shellfish Beds; Tidal Vegetation; Riverine Bottom

- ✓ B.1.1 Strategic Action: Remove dams and other physical barriers in areas identified as a priority for fish movement restoration. *Mid-term*
- ✓ B.1.2 Strategic Action: Restore tidal hydrology in priority wetland areas (e.g. repairing or removing culverts or berms restricting flow or separating wetlands). *Mid-term*
- ✓ B.1.3 Strategic Action: Identify priority areas in each subregion where Priority Habitats have been degraded or eliminated by past alterations to hydrology, and where conditions for restoration of habitats exist. *Mid-term*
- ✓ B.1.4 Strategic Action: Compile information to identify barriers where fragmentation of habitats or barriers to fish movement exist. *Short-term*

Photo of culvert on Shoreys Brook, ME by Great Works Regional Land Trust

- ✓ B.1.5 Strategic Action: Coordinate with partners to compile fish movement/habitat restoration techniques and guidance documents to aid partners in the planning, design, implementation, and monitoring of effective fish movement improvement projects. *Long-term*

Photo of oyster sill fringe marsh, NC, by North Carolina Coastal Federation

Restoration Objective 2: Restore Subregional Priority Habitats, such as replanting eelgrass beds or restoring oyster beds, in locations where threats have been minimized or removed (does not include dam or other barrier removal).

Threat: Dredging and Coastal Maintenance; Water Quality Degradation and Eutrophication; Sedimentation; Climate Change; Vessel Operation Impacts; Contamination of Water (ground and surface) and Sediments; Invasive Species

Impacted Habitat Categories: Marine and Estuarine Shellfish Beds; Coral and Live/Hard Bottom; Submerged Aquatic Vegetation; Tidal Vegetation; Riverine Bottom

- ✓ **B.2.1 Strategic Action:** Restore Subregional Priority Habitats in each subregion where: (a) they have been damaged or destroyed by past declines in water quality or human activities, such as dredging, filling, development, or vessel operation; AND (b) conditions for restoration of habitats exist; AND (c) goal(s) of habitat restoration can be maintained. *Mid-term*
- ✓ **B.2.2 Strategic Action:** Prevent and attempt to control invasion of non-indigenous species, where feasible. *Long-term*

Restoration Objective 3: Restore water quality in areas where it has degraded or eliminated Subregional Priority Habitats.

Threat: Water Quality Degradation and Eutrophication

Impacted Habitat Categories: Marine and Estuarine Shellfish Beds; Tidal Vegetation; Riverine Bottom; Coral and Live/Hard Bottom; SAV

- ✓ **B.3.1 Strategic Action:** Coordinate with partners to compile a list of areas where Subregional Priority Habitats have been degraded or eliminated due to poor water quality. *Mid-term*
- ✓ **B.3.2 Strategic Action:** Support local projects that address water quality improvements that are associated with Subregional Priority Habitat improvement. *Short-term*

Restoration Objective 4: Maintain or increase the resiliency of Subregional Priority Habitats to the impacts of climate change through restoration activities.

Threat: Climate Change

Impacted Habitat Categories: Marine and Estuarine Shellfish Beds; Coral and Live/Hard Bottom; Submerged Aquatic Vegetation; Tidal Vegetation; Riverine Bottom

- ✓ **B.4.1 Strategic Action:** Encourage all ACFHP-supported restoration projects address projected climate change impacts to Subregional Priority Habitats during project planning and implementation. *Long-term*

Section C: Science and Data Objectives

Science and Data Objective 1: Support ongoing research related to identifying or assessing fish habitat conservation activities and the threats to fish habitats.

- ✓ **C.1.1 Strategic Action:** Support the funding or endorsement of applied science/research projects aimed at (1) monitoring and reducing the impacts of Priority Threats on ACFHP habitats, (2) evaluating the effectiveness of fish habitat conservation techniques or methodologies, and (3) answering management questions. *Long-term*
- ✓ **C.1.2 Strategic Action:** Support research dedicated to identifying additional causes of habitat loss and the resulting effects on ACFHP species. *Long-term*

Science and Data Objective 2: Work to achieve ACFHP Science and Data Needs (ACFHP, 2011) and fulfill science and data responsibilities established by NFHAP.

- ✓ **C.2.1 Strategic Action:** Develop additional products and conduct continuing analysis of the Species-habitat Matrix. *Short-term*
- ✓ **C.2.2 Strategic Action:** Continue to synthesize, update, and fill in information gaps in the Assessment, and identify new applications. *Mid-term*
- ✓ **C.2.3 Strategic Action:** Beginning with the results of the Assessment and the work conducted by the National Fish Habitat Science and Data Committee, refine data and associated GIS layers to produce maps and other products that can be used to inform the goals and objectives laid out in this plan and to develop time-bound, spatially-explicit, and quantitative conservation objectives in future Plans or revisions to the Strategic Conservation Plan. *Short-term*
- ✓ **C.2.4 Strategic Action:** Develop Fish Habitat Occupancy Models[1] and the information needed to support them. *Mid-term*
- ✓ **C.2.5 Strategic Action:** Develop project tracking and evaluation capabilities for the purpose of capturing, assessing, and reporting conservation results to stakeholders. *Long-term*

Photo of scientists collecting data on a coral reef, Key Largo, FL by (c) Wolcott Henry 2005/Marine Photobank

[1] "Occupancy models that identify and delineate current habitats of priority fish species and can project habitat occupancy needs in the future are a useful tool for targeting conservation actions. Such models utilize scenarios of climate change, land use alteration, fish harvest, and other potential impacts to identify habitat types of greatest importance for conservation planning." (ACFHP, 2011)

Section D: Communications and Outreach Objectives

Communications and Outreach Objective 1: Develop or maintain physical or virtual information or avenues for communicating information to partners and the broader conservation community.

- ✓ **D.1.1 Strategic Action:** Maintain a website that meets the needs of partners and the broader conservation community. *Short-term*
- ✓ **D.1.2 Strategic Action:** Develop/use outreach materials (e.g. display, fact sheets) that meet the needs of partners and the broader conservation community. *Short-term*
- ✓ **D.1.3 Strategic Action:** Attend events such as conferences or meetings to promote ACFHP's mission and activities and encourage new partners to join. *Short-term*

Communications and Outreach Objective 2: Develop or maintain relationships with partners and the broader conservation community.

- ✓ **D.2.1 Strategic Action:** Develop a protocol for identifying and bringing in new partners. *Short-term*
- ✓ **D.2.2 Strategic Action:** Cooperate and exchange lessons learned with other landscape or regional partnerships and the National Fish Habitat Board. *Mid-term*
- ✓ **D.2.3 Strategic Action:** Promote the missions of ACFHP and NFHAP by participating in NFHAP's legislative strategy to further the objectives of all fish habitat partnerships and coordinate such activities with the legislative staff in each partner organization. *Long-term*

Section E: Finance Objectives

Finance Objective 1: Develop a mechanism and infrastructure within ACFHP for managing finances.

- ✓ **E.1.1 Strategic Action:** Establish a financial infrastructure to receive and disburse grant funds, operational funds, and other finances. *Short-term*

Finance Objective 2: Leverage conservation dollars.

- ✓ **E.2.1 Strategic Action:** Secure operational funding. *Short-term*
- ✓ **E.2.2 Strategic Action:** Secure project funding opportunities. *Short-term*
- ✓ **E.2.3 Strategic Action:** Identify private partners who can assist in providing matching funds to support operational and on-the-ground project activities. *Short-term*

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Appendix A.

Habitat Characterizations

Note that the habitat **category** into which a habitat **type** falls is underlined.

Marine and Estuarine Shellfish Beds

Oyster aggregations/reef

Structures formed by the Eastern oyster (*Crassostrea virginica)* that provide the dominant structural component of the benthos, and whose accumulated mass provides significant vertical relief (> 0.5 m).

Scallop beds

Areas of dense aggregations of scallops on the ocean floor. Common Atlantic coast species include: (1) the large Atlantic sea scallop (*Placopecten magellanicus*), which ranges from Newfoundland to North Carolina; (2) the medium-sized Atlantic calico scallop (*Argopecten gibbus*), which is found in waters south of Delaware; and (3) the bay scallop (*Argopecten irradians)*, which occurs from Cape Cod to Florida, as well as in the Gulf of Mexico.

Hard clam beds

Dense aggregations of the hard clam (*Mercenaria mercenaria)* found in the subtidal regions of bays and estuaries to approximately 15 m in depth. Clams are generally found in mud flats and firm bottom areas consisting of sand or shell fragments.

Shell accumulations

Shells of dead mollusks sometimes accumulate in sufficient quantities to provide important habitat. Accumulations of Eastern oyster shells are a common feature in the intertidal zone of many southern estuaries.

Coral and Live/Hard Bottom

Coral reefs

Reef-building corals are of the order Scleractinia, in the class Anthozoa, of the phylum Cnidaria. Coral accumulations are restricted to warmer water regions, where the average monthly temperature exceeds 18°C (64°F) throughout the year. Through symbiosis with unicellular algae, reef-building corals are the source of primary production in reef communities.

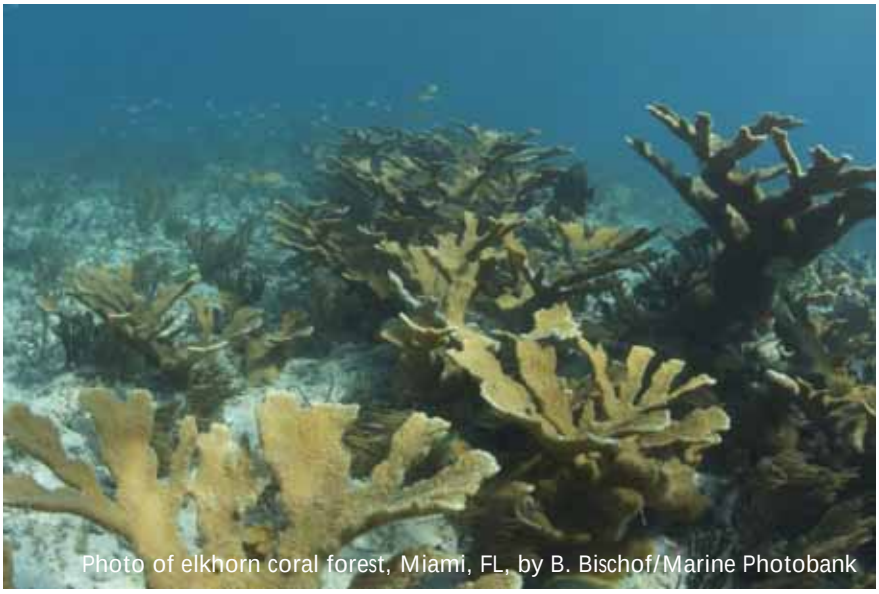

Photo of elkhorn coral forest, Miami, FL, by B. Bischof/Marine Photobank

Patch reef, soft corals, or anemones

A patch reef is an isolated, often circular, coral reef usually found within a lagoon or embayment.

Soft corals are species of the anthozoan order Alcyonacea, of the subclass Octocorallia. In contrast to the hard or stony corals, most soft corals do not possess a massive external skeleton (e.g. sea pens and sea fans). Anemones are cnidarians of the class Anthozoa that possess a flexible cylindrical body and a central mouth surrounded by tentacles found in soft sediments.

Live rock

Calcareous rock that is removed from the vicinity of a coral reef with some of the life forms still living on it. These may include bacteria, coralline algae, sponges, worms, crustaceans, and other invertebrates.

Macroalgae

Large marine multi-cellular macroscopic algae (seaweeds). There are three types of macroalgae: green, brown, and red. Examples of macroalgae species found along the Atlantic coast include:

Chlorophyta (green algae)

Ulva lactuca, sea lettuce

Phaeophyta (brown algae)

Fucus vesiculosus, bladderwrack; *Laminaria* spp.; *Sargassum* spp.

Rhodophyta (red algae)

Chondrus crispus, Irish moss

Submerged Aquatic Vegetation (SAV)

SAV refers to rooted, vascular plants that live below the water surface in large meadows or small patches in coastal and estuarine waters. SAV can be further classified by the range of salinity of the waters in which they are found.

Tidal fresh and oligohaline plant species

Generally found in areas where salinity ranges from 0.5 to 5.0 ppt. Examples include:
Vallisneria americana, wild celery
Ceratophyllum demersum, coontail

Mesohaline and polyhaline plant species

Generally found in areas where salinity ranges from 5 ppt up to 30 ppt. Examples include:
Zostera marina, eelgrass
Ruppia maritime, widgeon grass

Tidal Vegetation

Estuarine emergent marsh

Salt marsh is an environment in the coastal intertidal zone between land and brackish water. The low marsh zone floods twice daily, while the high marsh floods only during storms and unusually high tides. Smooth cordgrass (*Spartina alterniflora*) dominates the regularly flooded low marsh along much of the Atlantic coast. In addition, salt meadow cordgrass (*Spartina patens*), saltgrass (*Distichlis spicata*), and needle rush (*Juncus* sp.) species comprise much of the vegetative community of the mid to upper salt marsh and brackish marsh.

Tidal freshwater marsh

Tidal freshwater marsh occurs where the average annual salinity is below 0.5 ppt. It is found along free-flowing coastal rivers, and is influenced twice daily by the incoming tides. Tidal freshwater marsh can be located just upstream of the salt front, where the river essentially backs up as it meets resistance from high tides. Tidal freshwater marsh is characterized by salt intolerant plant species. These include: giant cordgrass (*Spartina cynosuroides*), sawgrass (*Cladium jamaicense*), cattails (*Typha* sp.), arrow arum (*Peltandra virginica*), pickerelweed (*Pontedaria cordata*), blue flag (*Iris virginica*), and soft stem bulrush (*Scirpus validus*).

Mangrove

The mangrove ecological community includes four tree species collectively called mangroves. This swamp system occurs along intertidal and supratidal shorelines in southern Florida. The four species found in Florida mangrove swamps are:

Rhizophora mangle, red mangrove
Avicennia germinans, black mangrove
Laguncularia racemosa, white mangrove
Conocarpus erectus, buttonwood

Unvegetated Coastal Bottom

Loose fine bottom

Submerged underwater bottom habitat in estuaries and oceans where the dominant sediment type is mud, silt, or sand.

Loose coarse bottom

Submerged underwater bottom habitat in estuaries and oceans where the dominant sediment type ranges from gravel to cobble.

Firm hard bottom

Submerged underwater bottom habitat in estuaries and oceans where embedded rock or boulders are the dominate sediment types.

Structured sand habitat

Linear, narrow sand features that develop where a stream or ocean current promotes deposition of sand.

Riverine Bottom

Higher gradient headwater tributaries

Streams in which the dominant substrate is comprised of gravel and cobble. The stream slope is greater than 2%. This characterization includes 1st to 3rd order streams[2].

Lower gradient tributaries

Streams in which the dominant substrate is comprised of sand, gravel, and small cobble. The stream slope is between 0.51% and 2.0%. This characterization includes 1st to 3rd order streams.

[2] "Stream order is a simple and common classification system for river and stream size. The Strahler stream ordering system uses a technique where "first" order streams are the smallest streams. Two first order streams combine to form second order streams, two second order streams combine to form a third order stream, and so on." (NBII, 2008)

Higher gradient large mainstem river

Rivers in which the dominant substrate is sand, gravel, and cobble. The stream slope is between 0.51% and 2%. This characterization includes 4th order rivers and above.

Lower gradient large mainstem river

Rivers in which the dominant substrate is fine sediments (silt, mud, sand). The stream slope is between 0.51% and 2%. This characterization includes 4th order rivers and above.

Low order coastal streams

Generally low gradient 0% to 0.05% in slope. This characterization includes 1st to 3rd order streams located along the coast.

Non-tidal freshwater mussel beds

Freshwater mussel beds, located above tidal influence.

Coastal headwater pond

A pond connected to coastal streams and rivers, generally located near the headwaters.

Non-tidal freshwater marsh

A marsh that occurs in the non-tidal section along a river. The main feature of a freshwater marsh is its openness, with only low-growing or "emergent" plants. It may include grasses, rushes, reeds, typhas, sedges, and other herbaceous plants (possibly with low-growing woody plants) in a context of shallow water.

Photo of alewifes by Jake Kritzer, Environmental Defense Fund

Appendix B.

Summary Results of the Species-Habitat Matrix by Subregion

The Species-Habitat Matrix is a tool to evaluate the relative importance of different coastal, estuarine, and freshwater habitats in terms of their value to selected fish and invertebrate species. In the tables below, "Habitat Type with Highest Overall Score" represents the sum of scores across all fish species and life stages within a habitat type. "Habitat Type with Highest Nursery Score" represents the sum of scores for the juvenile/young-of-year life stage across all fish species within a habitat type. Note that the habitat category in which a habitat type falls is shown in brackets. Raw analysis scores are shown in parentheses. To read the Species-Habitat Matrix Report Summary Report please visit the ACFHP web page at: www.atlanticfishhabitat.org/Species Habitat Matrix Summary Report.pdf.

Please note that the names of some habitat categories and types in Table 1 and Appendix A are modified versions of the names used in the Species-Habitat Matrix, however their descriptions are the same (with the exception of a clarifying footnote that was added in Appendix A of this Plan).

North Atlantic	Highest Score	2nd Highest Score	3rd Highest Score	4th Highest Score	5th Highest Score
Habitat Type with Highest Overall Score [Habitat Category]	Loose Fine Bottom (154.5) [Coastal Inert Substrate]	Loose Coarse Bottom (123) [Coastal Inert Substrate]	Structured Sand (108.5) [Coastal Inert Substrate]	Firm Hard Bottom and Mesohaline-Polyhaline (105) [Coastal Inert Substrate and SAV]	
Habitat Type with Highest Nursery (juv/yoy) Score [Habitat Category]	Loose Fine Bottom (52) [Coastal Inert Substrate]	Meso-Polyhaline spp. (48.5) [SAV]	Loose Coarse Bottom (38.5), Structured Sand (38), and Firm Hard Bottom (37.5) [Coastal Inert Substrate]		

Mid-Atlantic	Highest Score	2nd Highest Score	3rd Highest Score	4th Highest Score	5th Highest Score
Habitat Type with Highest Overall Score [Habitat Category]	Loose Fine Bottom (260) [Coastal Inert Substrate]	Mesohaline-Polyhaline spp. (175.5) [SAV]	Lower Gradient Large Mainstem River (147) [Riverine]	Loose Coarse Bottom (134.5) [Coastal Inert Substrate]	Structured Sand Habitat (124.5) [Coastal Inert Substrate]
Habitat Type with Highest Nursery (juv/yoy) Score [Habitat Category]	Loose Fine Bottom (93.5) [Coastal Inert Substrate]	Mesohaline-Polyhaline spp. (70.5) [SAV]	Lower Gradient Large Mainstem River (53) [Riverine]	Loose Coarse Bottom (50.5) [Coastal Inert Substrate]	Structured Sand Habitat (49) [Coastal Inert Substrate]

South Atlantic	Highest Score	2nd Highest Score	3rd Highest Score	4th Highest Score	5th Highest Score
Habitat Type with Highest Overall Score [Habitat Category]	Saltwater/ Brackish Marsh (353.5) [Tidal Vegetation]	Loose Fine Bottom (295.5) [Coastal Inert Substrate]	Mesohaline-Polyhaline spp. (151.5) [SAV]	Lower Gradient Large Mainstem River (126) [Riverine]	Tidal FW Marsh (125.5) [Tidal Vegetation]
Habitat Type with Highest Nursery (juv/yoy) Score [Habitat Category]	Saltwater/ Brackish Marsh (154.5) [Tidal Vegetation]	Loose Fine Bottom (109.5) [Coastal Inert Substrate]	Meso-Polyhaline spp. (79) [SAV]	Oyster Reef (55.5) [Marine & Estuarine Shellfish Beds]	Lower Gradient Large Mainstem River (53) [Riverine]

South Florida	Highest Score	2nd Highest Score	3rd Highest Score	4th Highest Score	5th Highest Score
Habitat Type with Highest Overall Score [Habitat Category]	Patch Reef, Soft Coral or Anemones Amidst Soft Sediment (322) [Other Sessile Fauna]	Primary Coral Reef Architecture (312.5) [Other Sessile Fauna]	Live Rock (303) [Other Sessile Fauna]	Firm Hard Bottom (241.5) [Coastal Inert Substrate]	Loose Fine Bottom (185.5) [Coastal Inert Substrate]
Habitat Type with Highest Nursery (juv/yoy) Score [Habitat Category]	Mesohaline-Polyhaline (139) [SAV]	Patch Reef, Soft Coral or Anemones Amidst Soft Sediment (110) [Other Sessile Fauna]	Live Rock (108.5) [Other Sessile Fauna]	Primary Coral Reef Architecture (97.5) [Other Sessile Fauna]	Mangrove (92) [Tidal Vegetation]

Appendix C.

The Assessment is a database of 527 documents, datasets, and information portals on Atlantic coastal habitats which were collected and analyzed for indicator, threat, and action information[3]. The full report, *Assessment of Existing Information on Atlantic Coastal Fish Habitats: Development of a web-based spatial bibliography, assessment query tools, and data summaries* (NOAA Technical Memorandum NOS NCCOS 103) can be found at http://ccma.nos.noaa.gov/publications/nccostechmemo103.pdf.

In the table below, the information presented in the Number of Instances column and the Assessment Classified Threat Column are pulled from **Table 9. Classification of Threats as Recorded in the Assessment**, from the NOAA Technical Memorandum. Table 9 from this report groups the number of threats (instances) reported (n=1260) into threat categories. The ACFHP Priority Threat column illustrates the category(ies) (as discussed in the *Identification of Critical Threats* section of this Plan) that an Assessment Classified Threat could fall into. Other threat categories displayed in Table 9 of the NOAA Technical Memo that do not fall into an ACFHP Priority Threat category are not included here.

Assessment Classified Threat	Number of Instances	ACFHP Priority Threat
Water Quality	225	Water Quality Degradation and Eutrophication; Climate Change; Consumptive Water Withdrawal
Dams and Passage	106	Obstructions to Fish Movement/Habitat Connectivity
Climate Change	97	Climate Change
Dredging Issues	89	Dredging and Coastal Maintenance
Contaminants	84	Contamination of Water (ground and surface) and Sediments
Impervious Surfaces	64	Sedimentation

[3] "**Indicator** – any measurement or assessment of a relevant parameter"; "**Threat** - anything adversely affecting quality of fish habitat"; "**Action** – any conservation action recommended or already occurring." (Nelson et al., 2010)

Invasive Species	54	Invasive Species
Water Withdrawals	25	Consumptive Water Withdrawal
Boating issues	15	Vessel Operation Impacts; Water Quality Degradation and Eutrophication
Temperature	8	Obstructions to Fish Movement/Habitat Connectivity
Other - Stormwater Issues	22	Sedimentation; Water Quality Degradation and Eutrophication
Other - Agricultural Runoff	20	Sedimentation; Water Quality Degradation and Eutrophication
Other - Agricultural Practices	17	Consumptive Water Withdrawal
Other - Tidal Restriction	17	Obstructions to Fish Movement/Habitat Connectivity; Consumptive Water Withdrawal
Other - Riparian Buffers	14	Sedimentation
Other - Sedimentation	14	Sedimentation
Other - Shoreline Erosion	10	Sedimentation; Vessel Operation Impacts
Other - Sewage and Septic Issues	9	Water Quality Degradation and Eutrophication; Contamination of Water (ground and surface) and Sediments
Other - Marine Infrastructure	5	Dredging and Coastal Maintenance
Other - Storm Events	3	Climate Change
Other - Shoreline Hardening	1	Dredging and Coastal Maintenance; Sedimentation

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