

**North Atlantic LCC Steering Committee Meeting  
April 6, 2016  
Annapolis, Maryland**

**Minutes**

***Highlights***

The North Atlantic LCC Steering Committee met in Annapolis, Maryland on April 6 to review LCC progress on partnerships, science, conservation design and science delivery and provide input on next steps to more effectively integrate LCC information to support conservation decisions in their agencies and organizations. There were 58 steering committee partners, LCC staff and guests present in person or on the phone representing 29 steering committee agencies and organizations.

The steering committee discussed the LCC Network and result of the National Academy of Sciences Report with national LCC staff and agreed to provide feedback needed to inform next steps.

LCC staff and partners provided updates including:

- Status and next steps for projects and resulting products;
- Initial results from conservation designs at watershed and regional scales through Connect the Connecticut and Regional Conservation Opportunity Areas;
- Ongoing efforts, lessons learned and next steps for science delivery and communications; and
- Examples of applying LCC information and delivering science with land trusts, towns, partners in the Chesapeake Bay region, states, and federal agencies.

State and other steering committee members discussed how member agencies could help implement priority actions identified in each State Wildlife Action Plan.

The steering committee discussed how to best work with LCC staff to organize and target science delivery in their agencies and organizations and agreed to follow up with specific staff contacts, ideas and opportunities. They also reiterated the importance of ongoing science delivery for the LCC.

Federal agency steering committee members presented information on the landscape conservation resources they can provide to LCC partners.

## *Action items*

### ***Steering Committee Members and Partner Action Items***

Steering committee members interested in being considered for future Chair or Vice Chair of the Steering Committee or assisting in developing a process for future chair nominations should contact Vice Chair [Bill Hyatt](#) from Connecticut DEEP.

LCC partners are asked to provide real-world examples that demonstrate the utility of the work the LCC supports to [Bridget Macdonald](#) who will compile them for the LCC website and provide to Jad Daley to assist with Congressional outreach. We featured a handful of these "Conservation in Action" case studies in our Annual report:

#### **Example Case studies:**

- [Partners use Connect the Connecticut to identify conservation projects to benefit Long Island Sound](#) - Highstead Foundation and partners
- [Prioritizing road-stream crossings in the Taunton River watershed](#) - Mass Audubon and partners
- [Sandy beach inventory fills information gaps along Maine's coast](#) - Maine Geological Survey
- [Identifying resilient sites in New Hampshire](#) - New Hampshire Fish and Game

Bridget will be reaching out to those of you who volunteered to share success stories from your organizations during our meeting. But the more examples we have from different partners, the better: If you or your staff have been using any of our products, please contact Bridget for a straightforward three-question template to share your story.

Steering committee members will provide input on questions asked by LCC Network related to the [National Academy of Sciences Report](#) and next steps. LCC staff will send out a brief survey, collect and summarize the information and send out to the Steering Committee for review by May 14. Our responses are due to national LCC office by May 21.

Steering committee members are to consider which staff and programs in their agency and organization need communication, training or assistance with LCC information and tools and/or the development of specific applications using this information. Please review and pass on any needs and ideas to [Andrew Milliken](#).

State and other steering committee members will review State LCC Fact Sheets from their state(s) and provide feedback to Bridget Macdonald on utility and changes needed so that you can use these fact sheets. Link to fact sheets: [North Atlantic LCC science in your state](#)

LCC partners will review the [Massachusetts Climate Action Tool](#) to assess interest in broader application of this approach in the Northeast Region.

### ***LCC Staff Action Items***

- Andrew Milliken will outline proposed next steps and opportunities for engagement in a strategic plan update.
- LCC staff will develop and distribute a short survey to gather input needed to inform next steps as a result of the National Academy of Sciences Report. The compiled results of the survey will be provided to the steering committee and to the National LCC office.
- LCC staff will develop two fact sheets, one on how the North Atlantic LCC relates to and complements the Northeast Climate Science Center and one on how the LCC relates to and complements the joint ventures and fish habitat partnerships in the LCC region.
- Bridget Macdonald will be reaching out to meeting attendees who volunteered to share success stories and case studies from your organizations during our meeting.
- LCC staff will work with the RCOA team to compare initial RCOA results with individual state COA results and analyze differences and reason for those differences.
- LCC staff will work with Northeast Climate Science Center, NOAA and others to explore existing websites or opportunities for a new or revised website that describes available climate adaptation tools and provides links.
- LCC staff will work with New York State DEC and other interested agencies and organizations to schedule workshops on available information and tools from the North Atlantic LCC based on input and requests from steering committee members.
- LCC staff will attend the Chesapeake Bay Habitat Goal implementation Team in May to contribute to discussions on conservation design using available information and tools and be available to attend a monthly Chesapeake Bay Science Team Meeting.
- LCC staff will work with the North Atlantic Aquatic Connectivity Collaborative to assess the feasibility and options for including a terrestrial passage module into the existing aquatic connectivity assessments, database and prioritizations.
- LCC staff will post files from federal agency presentations given at the meeting to the LCC website. [Link to posted files.](#)

## 1. Welcome

**Approval of minutes** from October 2015 minutes: Motion to approved, and voice vote to confirm. Andrew Milliken noted one reported error on page 20, which will be fixed in the record.

### **Discussion on whether to consider a new LCC Steering Committee Chair**

**Patty Riexinger:** The North Atlantic LCC has enjoyed continuity and success on a level that exceeds many of the other LCCs in the country, and I think that is due in an important way to the steady leadership by Ken, Andrew, and others. What we have now works very well, and I think we are happy to continue to have Ken serve as the chair. That said, I do think it could send an important message that this is not just an FWS thing if there were a chair or co-chair from a different agency or organization. So if anyone was interested in serving as the chair, I think we

could benefit from a new perspective. However, the status quo is working very well for us right now.

## 2. Review of Action Items

**John Wright:** Can you share any feedback about the Connecticut project?

**Andrew:** It's overall been positive. Most questions have been about the aquatic connectivity; it's not necessarily that intuitive.

**Bill Labich:** I'll be talking about how we're implementing the design later, but in general the reaction has been very positive. People like that the feds, states, and NGOs all got together and agreed on an overall approach, and we have this seamless product.

**John Wright:** For NFWF, we're thinking the design will be a core part of our strategy if we can sell the whole CT river as an opportunity for restoration. We'd like to identify core projects that are the best bang for the buck.

**Becky Gwynn:** I attended the workshop on Sunday [hands-on LCC workshop at NEAFWA conference], and thought it was very powerful. Last fall the three LCCs whose geography overlaps Virginia came to Virginia to meet up and discuss all the data and tools that are now available. One outcome of that meeting was an affirmation that we needed a hands-on workshop. I thought the workshop was really powerful. I'd love to see a team from the LCC come down to Virginia and do something analogous.

## 3. LCC Network Updates

Thanks to everyone for their support of LCCs and our budget during the last budget cycle, especially last fall. We have not yet seen and do not expect to see a 2017 budget from either chamber for several months.

**Elsa Haubbold:** presented questions for steering committees (available in the presentation from the Agenda page) that will be used to revise the LCC Network Strategic Plan.

1. What is important to this SC that we want to measure progress towards measuring
2. Ask SC if they have experience with other collaborative partnership of performance measures applicable for measuring conservation outcomes at the landscape scale?

All LCC SC webinar in May proposed, performance measures workshop with NAS to happen, have all hands LCC Network meeting in June, Fall LCC network workshop on performance measures (staff, partners)

**Jad Daley:** I was on another, similar review of the Forest Legacy many years ago. I think it was a similar situation to the NAS review, where those who called for the study were anticipating that it would reveal waste and problems, but instead the study affirmed the importance of the work we were doing. There is a palpable tailwind behind LCCs now, in part because of the NAS review. Examples of this are in the budget numbers. Capturing this momentum is best done when science is put to action (e.g. LCD being translated to decision support for better than business as usual approach). Information is being used to make better decisions, realigning priorities,

heading in better direction for work. Also, if anyone has any examples of how LCCs are improving conservation, I'd like to hear from you so that we can package it into communications. In addition, I am leading a workgroup for non-federal members of the LCC Steering Committee to work on our communications items for people on the Hill who may not be as informed about the work that LCCs do. We want to again have a strong presence during the budget cycle that's coming up.

**Ken Elowe:** The NAS report is humbling. Affirmation that our mission is needed but that it is also a huge responsibility. Analogy -Lightbulb as an idea but took 1000 tries to get it right. Association of Fish and Wildlife Agencies is helping LCCs figure out how to be better for their needs. Please let us know what the LCC can do to make our work better for your organization.

**Andrew Milliken:** Maybe we can set up an online place to share our thoughts and ideas.

**Bill Labich:** Will the performance measures be available for others to use?

**Elsa Haubold:** That's a great question and something I didn't say - I hope so! I hope it can be broadly used and not overly LCC focused. Everyone is struggling with the question of what is the value added of these collaborative processes. I would love this to be a collaborative effort by the conservation community. Joint Ventures, Fish Habitat Partnerships, etc. want the same information.

#### 4. State of the LCC [see slides]

**Andrew Milliken:** We are at a transition point where we are pivoting to a greater emphasis on science delivery and implementing conservation on the ground, using the data and tools developed over the past several years.

Conservation design is also a mechanism for science delivery, as we integrate and deliver the information and products in format and trainings that best facilitate use by the partners. Technical team members provide help with project oversight, proposal review, and peer review (less visible). RCOAs will take the Connecticut River pilot (*Connect the Connecticut*) of connected core networks and apply it across the region.

Interactive Catchment Explorer (ICE) - maps cold water species such as brook trout, displaying the area available currently and projected probability of occurrence at the subwatershed scale

We need to think more about how to tie our work to our objectives. We also need to tie our work to South Atlantic, Midwest & Great Lakes, Appalachian LCCs, especially with respect to conservation design.

The Appalachian LCC has set up [www.scienceapplications.org](http://www.scienceapplications.org) as a training platform.

**Cathy Sparks:** I am really happy to see the future steps you plan to take, especially those geared toward addressing the NAS recommendations. The content of the final 3 NAS recommendations are familiar because we've known about those issues since the LCC was formed. A real obstacle to success is the lack of clarity with respect to how the JVs, CSCs, and LCCs differ and yet need to work together is a distraction. I wouldn't underestimate the importance of cracking those nuts.

The state capacity issue is big, and I don't know how we'll address it. We need an economy of words and a clarity of thought.

**Andrew Milliken:** We've done that more at the national level, so maybe our LCC should have a conversation about how we fit in with those other efforts. Andrew can write up his thoughts on this and work with Mary Ratnaswamy to coordinate a message. We may not advertise it well, but we work with the CSCs a lot.

**Cathy Sparks:** I think many people do understand the differences, but we need everyone to understand them.

**Patty Reixinger:** The North Atlantic LCC is a leader in other areas so let's not wait for the national level to catch up with how we relate to the Joint Ventures. I really appreciate that the North Atlantic included all of the state of New York in their generation of datasets. We feel more kinship with the North Atlantic LCC than the Upper Midwest & Great Lakes LCC, although both do great work. You're coloring outside the lines and I appreciate that. It is a demonstration of your focus on relationships as well as the ecology. I find it challenging to keep track of all the ways in which the LCC data and tools are being used within my state. I've started mocking up a list of participants and I'd love to have the LCC come out and give an in-person training that is also a webinar to review these. With regards to training, we have done polling to understand what people need. We try to make things broadly available. We have to make it easy for people to find out about our projects, what's new, and how to use them. We need to support our products and revisit them, not just document how they have been used, to help other folks see applications they hadn't realized. Revisiting is an adaptive management idea, we need to continue to figure out how to make our tools more useable and more broadly applicable. So don't just focus on the next new science need, but keep circling back to the existing tools.

**Eric Palmer:** I think one thing that hamstring us at larger spatial and temporal scales is that the amount of uncertainty can be overwhelming. A lot of the tools are designed to get at this uncertainty - we talk about prioritization. I think we should be more explicit about the fact that our goal is to make better decisions in the face of uncertainty. It will lead to better outcomes.

**Eric Walberg:** I wanted to follow up with what Elsa said. I am interested in identifying some regional projects where we could bring in funding from different watersheds and think about how a particular watershed sits in a regional context, and integrate that. I'm working on the EPA-funded Taunton, Mass. watershed. I'd love to brainstorm with anyone who has any thoughts.

## 5. Science Project and Product Updates

**Scot Williamson:** The LCC has received about \$5.3 million since it began, and we've spent about \$4.1 million. About \$300k is already allocated to specific projects.

**Brief welcome by Paul Peditto, Director of the Maryland Department of Natural Resources**

## 6. Landscape Conservation Design Updates

Updates provided by North Atlantic LCC staff Scott Schwenk and Steve Fuller.

## 7. Implementing State Wildlife Action Plans (11:08-11:35)

**Cathy Sparks:** To quote the seminal film *Ghostbusters*, ‘We have the tools. We have the talent. What are we going to do now?’ States and LCCs are well positioned to take a lot of data and tools and organization that have been developed and take action. I’d like to echo Becky that what’s paying dividends now is the rollout of the tools, the products, having trainings, getting people in a room with a computer to look at the information. It’s incredibly valuable to state agencies and I hope that that is not seen as an intermittent effort to just get people up to speed and then it goes away. I would propose that that should be adopted as an ongoing effort with no sunset at this point. That is an incredibly valuable role of the LCC. So who’s got some other ideas?

**Becky Gwynn:** I am not in a technical position, but I was able to easily use the aquatic connectivity tool to look at an area I know well and think about opportunities for conservation. It’s really important to put people in front of a computer. The most valuable training is hands-on. It’s also critical to be clear about what the tool should and should not be used for. Also, we have a gap in tracking implementation of SWAPs (beyond TRACs). Many partners here probably don’t know that, but they will be leveraging the information in there. We need a tool to capture that and leverage it over time. It’s one of our most significant challenges. Regarding research priorities, maybe we can take lessons learned from the SWAPs and the RCOA and convene next summer to evaluate science needs again.

**Mary Ratnaswamy:** What is the timeline for the rollout of next steps and the Terwilliger report?

**Cathy Sparks:** The directors will be presented with something that will be largely complete in the fall. The level of completeness will be related to whether the states finish their SWAPs and submit their data.

**Patty Riexinger:** Two states haven’t submitted. So far revisions have been small. I’d like to build on what Cathy said about RCOAs. I am interested not just in places that are of high integrity - I’d like us to think about places that are degraded, but could be restored. Also ecological justice perspectives - areas that are degraded by succession, water quality impairments, etc. Could be a companion to places that are high value now. Identify areas that are still salvageable, may contain species that we can’t give up on; restoration there will also give us good return on investment. Translating SWAPs to on-the-ground may take us to places that need restoration.

**Rick Jacobson:** I’m excited about starting the implementation phase. I’m intrigued by how the RCOAs can inform the state RCN programs. I’m also interested in how it will inform partner strategies such as the ACJV. But I’m very curious to see how the conservation priorities identified by the states and the LCCs line up, and how differences will be discussed and rectified if needed. If this is not done, it could frustrate landscape conservation efforts.

**Gwen Brewer:** We need to be clear about the prioritized conservation actions connected to threats that are in the SWAPs, since we worked so hard to do this. When we work with partners,

we should try to share strategies and knowledge. I'd like to see the LCC facilitate conversations between states and other partners in order to broadly influence the landscape.

**Cathy Sparks:** Assuming other states operate like Rhode Island, the SWAP was formulated with many partners (TNC, Audubon). Similar efforts but at different scales are needed to make the connection; it may be challenging but it is a good idea.

**Steve Fuller:** How do RCOAs relate to COAs - that's a good question. The intention of the Diversity Technical Committee is that there may be species that are a high priority in your state, but the best opportunities to pre-empt listing are in another state. The New England Cottontail efforts are an example.

**Andrew Milliken:** As states implement their SWAPs, that in itself is an opportunity not just for the LCC partnership, but also for the organizations that sit around this table. We should continue to discuss this. We have an opportunity to flesh out a wildlife action plan for the northeast region. Think of the LCC as a forum where implementation actions can be discussed with many partners.

**Patty Riexinger:** I think the conversation is stifled a bit by not having something to react to. I have seen 4 SWAPs through regional review, but I don't know what's in the ones I haven't seen yet. So it's hard to offer suggestions now. I think this could be a much more fertile conversation after we see the rollup and the shared priorities identified within the northeast region.

**Ken Elowe:** In order to have this be a forum, we need guidance on whether you want us to look for opportunities where we can help. The Diversity Technical Committee has developed a database to organize threats, species, habitats. Is having the database housed in the LCC with our capabilities of large datasets useful? We have that capability.

**Rick Jacobson:** Some committees have come together to refocus the direction of the RCN program. We could invite some members of the LCC Steering Committee to those discussions. We plan to have a few meetings this summer and finalize our plan in October. We will revise, potentially, how the directors select grant awardees. We could then report back to how that test of the template is working.

**Kristin Saunders:** I'm wondering how much thinking goes on with trying to see where the SWAP priorities overlap with others'. Maybe the LCC steering committee members could talk more amongst ourselves about how to leverage funds, including those "outside the box," to achieve shared goals. For example, bringing environmental justice money to implement urban conservation.

**Cathy Sparks:** Again, we have those conversations at the state level, but maybe we're missing the regional component.

**Ken Elowe:** NRCS has a lot of money that they want to direct to implementation. Anything we can do to inform processes where money flows that will allow us to accomplish things, then we need to look for those opportunities, and involve those people, perhaps in this forum.

**Andrew Milliken** I think this should be an ongoing conversation at all steering committee meetings.

## 8. Applying Conservation Designs (11:35-11:55)

*Bill Labich presented on Wildlands and Woodlands [see slides]*

This initiative has as a goal that by 2060 New England forest permanently free from development pressures. Privately led initiative, thinks this goal is going to happen. Provides admin pass through for RCP raised funds.

44 Regional Conservation Partnerships (RCPs) in New England that want to impact land management and conservation. Work with North Atlantic LCC on engaging our help in developing a training format that really works: instruction isn't retained just through lecture. Only with hands-on work in Data Basin did people retain the information on what our products are. Examples of RCPs whose leaders, staffs attended the trainings and now want to use the datasets.

The MassConn Sustainable Forest Partnership wanted to find out if they can use our new datasets (e.g. IEI, NHESP, TNC resilience to climate change, regional flow [movement thru region] from TNC). Data were used to drive landowner engagement in this 1 million dollar program..

Hudson to Housatonic RCP in Fairfield Country, CT: strategic conservation planning process. Used 11 layers to find areas of highest regional significance (used IEI, Wood Thrush habitat capacity map, TNC resiliency). Mapping showed them to focus landowner outreach.

Long Island Sound watershed: TNC, Highstead, Connecticut River Watershed Council applied for \$10 million from NRCS to reduce nitrogen loading in Long Island Sound. Within that application was a forest land protection program (3.25 million dollar). Developed a pre-screening process to develop applications for the healthy forest reserve program. Biodiversity conservation was a high priority for federally listed species. Pre-screening process to include the habitat capability datasets for 7 species that use these habitats (waterthrush, wood thrush). Bill served on the core team for the Connect the CT and now is glad to be seeing the design as a ranking criterion for the application process.

### Chesapeake Bay program discussion (11:55-12:05)

**Gwen Brewer:** A functional network of cores and connectors is something the Chesapeake partners are very interested in, something that will support a range of fish, wildlife, and plants, plus humans that live in the region. I think the timing is great. We have support from a range of partners at multiple scales, and we can bring in these new resources, models, and ideas to advance that shared vision. We look forward to self-evaluation and reporting back on our successes and lessons learned.

**Christine Conn:** We are having a meeting in early May where we hope to learn about the SWAPs, LCCs, and Chesapeake Conservancy. We hope it will be a good partnership-forming opportunity.

**Mike Slattery:** A lot of work to lay a foundation that will allow all these entities to work across organizations and spatial scales and we're very excited to bring everyone together, to convene these resources and use this science. In the past the partnership was guided by water quality improvement teams and wildlife/plant folks weren't always at the table. With the landscape design from the LCC, the track record of convening from JVs, the operational capacity of state

partners that work together under AFWA and NEAFWA we can create the landscape scale habitat connectedness - that has been lacking thus far - and move beyond water quality. Through Christine and David's leadership, there is a convergence of interests across the Bay watershed to develop a Chesapeake LCD.

**Ken Elowe:** We're excited about the new focus on fish and wildlife in the Chesapeake Bay program, since it historically focused on water.

## 9. Science Delivery Updates

Review of progress on major categories of science delivery and science delivery projects (Steve Fuller and Bridget Macdonald, North Atlantic LCC)

## 10. Science Delivery to Towns - Presentation on Delivering LCC Science to Towns (Michale Glennon, Wildlife Conservation Society Adirondacks Program)

Wildlife Conservation Society Adirondacks Program Director of Science Michale Glennon described her organization's effort to enhance the stewardship of priority habitats and species on private lands by using North Atlantic LCC regional datasets and information about local land-use policies to identify communities that would welcome wildlife-friendly improvements to planning tools.

**BJ Richardson:** If there are tools you'd like to see in the Conservation Planning Atlas, please share them with us and we can work with DataBasin to get them implemented.

## 11. Delivering Climate Science in a State - Update on the [Massachusetts Wildlife Climate Action Tool](#) (Jack Buckley, Massachusetts Division of Fisheries and Wildlife, and Mary Ratnaswamy, USGS-Northeast Climate Science Center)

**Bill Labich:** How long has the site been live? Are you using Google analytics? What are the most popular areas?

**Jack Buckley:** The site has been live for several months. We're not sure what is most popular, but will find out.

**BJ Richardson:** How can we work together to expand this toolkit across the region?

**Mary Ratnaswamy:** There is a lot of in-kind money behind this in terms of staff time. As a Climate Science Center, we need to produce actionable science. We need more capacity and resources. Massachusetts is such a leader in climate science that partnering with them was a good place to start, to ensure delivery of their science to folks trying to learn about climate change as an issue.

**Jack Buckley:** We thought of it as an investment in which we wanted to increase our footprint. It wasn't just to try something. We had an expectation of what would result.

## 12. Steering Committee Roundtable

Each Steering Committee member to provide input on how we can help support who (staff, programs, partners) with information and tools to guide conservation on the ground from the perspective of their agency or organization.

**Patty Riexinger:** I'll start with two items that I'd like to see. First, there is a website called [wildlifehelp.org](http://wildlifehelp.org) that has resources for how to deal with nuisance wildlife, and includes subsections for each state. I'd like everyone to go tinker with the MA Climate Action Tool and think about whether scaling that up to the region to include more states make sense. This is something the steering committee could decide the LCC should do.

The other thing I want to talk to you about is the North Atlantic Aquatic Connectivity Collaborative (NAACC). I am smitten. It provides consistency across the landscape and therefore provides comparability at any scale. It is a tool that incorporates both resiliency (for communities) and connectivity (for organisms). It includes a standard lexicon, set of requirements for replacements after disasters, a rigorous scientific underpinning, etc. It's structured and it has a name and is highly collaborative - it's really building momentum. As a result, compelling arguments can be made for replacement. New York has invested \$177,000 in the Allegheny drainage just to do the culvert assessment. \$200,000 is also going toward assessment work. Some research is being done to show that road-stream crossings can also function as terrestrial road-passage crossings. So I would like to see the assessment of road stream crossings to also consider the connectivity and corridor potential of these routes for terrestrial species as well.

**Ellen Mecray:** There are some other states that have newish state-specific climate data portals. For example, New Jersey has one called [NJadapt.org](http://NJadapt.org), which is now live and pretty cool. For New York, the New York Climate Change Clearinghouse *just* went live. Vermont is building one, as is Maine. A lot of people are using the NOAA observational data with additional information added on.

**Patty Riexinger:** So is there a website where everyone can park links so that everyone else can see all these things?

**Ken Elowe:** What I would love, and maybe what the NECSC was designed to do, is help us understand the different models and their applicability so we can apply each one to the right situation. And the LCC may have a delivery role.

**Mary Ratnaswamy:** We've been working on how to get to that. I know our headquarters folks also want us to try and tackle that. A postdoc is working on it.

**Patty Riexinger:** I'm interested in an annotated description of what each thing does.

**Ellen Mecray:** We are working on that through the Climate Resilience Toolkit. All the portals from the states will be up there.

**Bill Labich:** Mass Audubon is developing a toolkit as well.

**BJ Richardson:** For all parcels, or just protected ones?

**Bill Labich:** For all parcels. You talk about wanting to know for when is the appropriate time to apply these spatial datasets, and when is not. Essentially, understanding the scale it each tool is intended for. Regarding dollar value, I worry you would vastly underestimate value of habitat. We want to capture the non economic value too. I'd like each parcel to have attributes. Conservation finance is a developing field: How do we raise money for conservation? How do these landscape datasets play a role? What is the North Atlantic LCC's role in figuring all of this out?

**Jae Chung:** We need to make sure we are aware that monetary value is just *part* of the picture.

**Ken Elowe:** In the context of fish passage funding, it requires that people use aquatic connectivity tools as part of their proposals, and also look at criteria for ecological benefit (stream miles, etc). Fisheries folks are just learning how to use these tools. Maybe we should have a nexus between National Fish and Wildlife grants and the tools that are out there, to create quick incentives to learn how to use our tools.

**Scott Phillips:** The USGS Chesapeake Bay program has us present at their science meetings so their staff can see what we have, and we can see what they do.

**Gwen Brewer:** Can we have a tab on the NALCC that addresses FAQ's for local communities, that focuses on answering questions about the proper applicability of the tools and the uncertainty in each model, insuring the language is appropriate for general audiences?

**Pete Murdoch:** In terms of discussing ecosystem services, how do we explain how the public benefits from having a non-event? Saying that we protected a site from erosion from a major storm is hard to value if the storm never happens. It's a standards issue: Getting consistent information so you can do site-to-site vulnerability comparisons.

**Rick Bennett:** You have to be able to link benefits back to the action, to show return on investment.

**Patty Riexinger:** I want these asks to focus on what will help them meet their goals.

**Andrew Milliken:** What are the specific programs or staff at your organization who would be a good first contact for science delivery?

**Patty Riexinger:** OK, so what do you want the LCC to do for you? Who do you want to include? You are all going to send Andrew your needs. I think everyone needs to commit to doing that.

**Zoe Smith:** I'd like to reiterate what Mark said. Creating new networks or building on existing networks, where we can draw from the LCC to bring priorities from other organizations into our bigger vision. This will help us have a bigger impact or leverage funds. Some of us have more flexibility. All of this can help us fulfill our goals. The networks are out there and the 45 of us in this room can focus on our role in the LCC as conveners. I think a theme or geography is the best thing to organize around.

**Becky Gwynn:** I spent an hour with the NAACC tool on Sunday and have a ton of notes about bringing it back to the people in my organization. We have a lot of data in-house, but I want us to marry that with the information in the tool. We're also looking at culvert replacement or prioritization. I actually think I can take that tool back and deliver it. So the folks like us in the room need that short introduction, and then we have the responsibility to share it within our organizations.

**Amanda Babson:** The National Park Service is also really interested in integrating climate change tools and information into our stewardship. I think I need to start even with explaining what the LCC is. But now is a really good time to make use of all the things we've been building toward.

**Patty Riexinger:** So we need to deliver what we already have.

**Ken Elowe:** We're also trying to raise awareness inside the Fish and Wildlife Service. We're coming up with incentives to get people to use these tools in their prioritization and decision-making.

**Bill Labich:** The Regional Conservation Partnership (RCP) network recognizes levels of investment. We can facilitate greater innovation and collaboration. If we use *Connect the Connecticut* as a framework, we can use the training and workshops we've already designed, and push the tools out there. There is a lot of partnering going on already. There are many different values to land.

**Scot Williamson:** We've been working with partners on young forest recently. It seems overlooked. We need to communicate its importance to biodiversity. What the LCC has done for us in our 17-state partnership is use the data layers and decide where is the best place to put young forest, and where should you not put it. Woodcock and brook trout are overlapping considerations.

**Mary Ratnaswamy:** I want to add how important the LCC is to our group. We're working to deliver the right kind of actionable science. The help from LCCs is really important. We face many similar challenges. We're being charged by our advisory groups to stay close to natural and cultural resources.

**Mike Slattery:** The Chesapeake is also working to integrate goals and priorities from a wide range of organizations, mostly but not exclusively oriented towards conservation, in ways that will have the biggest impacts. We want to make sure that the LCC tools are built into the SOPs for funding organizations.

**Patty Riexinger:** I'm hearing less about things we want the LCC to do -- connectivity, socioeconomic links -- and more what sounds like testimonials. Ask not what the LCC can do for you, but what you can do for the LCC. Who among you have an experience with the tools that the LCC has produced, that you could write a small testimonial -- a couple sentences, or even half a page -- for the LCC to use to get the word out so when other people look at the website and tools can see how it's been used. Translating this stuff into landscape-level conservation means a lot of people are using it. If you can get the LCC staff this information, they can package it. And then I really ask that you write down who in your organization needs to hear about this kind of stuff, and then have a shindig and tell them about it. My staff has done a great

job running with the technical tools. So please put together your action plan for outreach in your organization or state. I'm giving you a month! Mine is going to be a webinar, I'll invite federal partners.

**Zoe Smith:** Okay now I know who to call when I need to get stuff done! My idea is to have an "Agency Day" at one of our big zoos where we can tell people about our products.

**Scott Phillips:** I really see some opportunities. The Bay program has been very focused on water quality, and with the science that is being done, we can expand our mission. We have a monthly science team get-together - maybe Andrew could present at this meeting. And that would be a forum for you to learn about what we're working on as well.

**Gwen Brewer:** I assume we have a different organization of the science products. I wonder if a tab for local communities would be helpful.

**Steve Fuller:** To Gwen's comment, we do have some allocations to improve Data Basin. What we need are people to be engaged and help us with that web development process. So that's an ask I have: We need people to come to the table to help us get that done.

### 13. Communications Updates

Review progress on communications and alternatives for Steering Committee consideration (Bridget Macdonald and David Eisenhauer, U.S. Fish and Wildlife Service), including a new monthly email news digest to replace the quarterly newsletter.

**Dave Eisenhauer:** I would like to underline that we want to hear your stories. Tell us about how you are using LCC tools and information, and we can create content and share it back so that you can use it also. Please continue to share the ideas you have about how to communicate better.

**Andrew Milliken:** We want you to keep giving us feedback. The state fact sheet that's included in your folder was created for you, as a member of the steering committee. Please let us know if you find it useful or if want something changed.

**Zoe Smith:** I also wanted to share that the latest Annual Report is really great. Earlier, you asked if we could demonstrate how the LCC helps us do our work. We, at least at WCS, want to know how we are helping you. It will help us know we are valued within this larger landscape network. We also value your perspective about how our individual efforts fit into the regional LCC effort.

### 14. Forum on Sharing and Leveraging Resources

Hearing from federal and other Steering Committee members on what resources partner agencies and organizations can offer to assist other LCC agencies and organizations (Steve Faulke, USGS, and Mary Ratnaswamy, USGS-Northeast Climate Science Center; Bill Jenkins, U.S. EPA; Katrina Krause, USFS/Northeast Climate Hub; Ellen Mecray, NOAA; and Michael Rasser, BOEM)

**Presentations on resources federal partner agencies can offer to the LCC partners:**

**Ellen Mecray:** We all do our best to listen to what is happening with the needs of this specific audience; it's all defined in my head by the sector. When I work with Massachusetts, I work with the Department of Transportation, fish and wildlife, coastal managers. All of you work with that same burden: We are FWS agencies, but how well do we work with others? This session is about what are you guys doing; each of the folks coming to the table today are coming to talk about what we have.

We'll give you a little smattering, hopefully you'll leave with a thirst for more.

**Steve Faulkner** - US Geological Survey Science Capabilities (Link to presentation: [USGS Science Capabilities](#))

USGS is about providing science for the earth. We don't have management or regulatory responsibilities, so we can be honest brokers of the science. Our charter is to provide science for DOI agencies, but we are doing more than that. We would like to be more involved in goal setting and science translation.

USGS provides science for DOI agencies, now in seven mission areas. We have long-term data collection such as the Breeding Bird Survey and the National Water Information Service, which has water science centers in each state. We also provide decision analysis and support tools, such as Structured Decision Making and species status assessments under the ESA. We also have research applications; for example, groundwater inputs are really important for coldwater species such as Eastern brook trout, so we are mapping groundwater. Environmental genomics data collection is another application. USGS would like to get more involved in goal setting and in science translation tools. If we are involved early, it's easier to produce science products that are useful to us.

**Mary Ratnaswamy** - Climate Science Center Science Capabilities (Link to presentation: [Climate Science Center Capabilities](#))

Climate Science Centers are federal/university partnerships. There is a bid at five-year cycles to host the CSC. They each have a stakeholder advisory committee. All federal, state or tribal partners, but no NGO's. Four LCC coordinators are on the committee, and the area includes two complete USGS regions. They have a five-year strategic science plan, but identify science needs on an annual basis, within seven science themes. They have competitive RFP or directed proposals, and interact with LCCs and resource managers. Their theme is "Actionable Science".

**Mike Rasser** - Bureau of Ocean Energy Management: Responsible Development in Offshore Waters (Link to website: [www.marinecadastre.gov](http://www.marinecadastre.gov))

We work closely with the LCC on marine bird studies. As far as tools go, our online location ESPIS is where all data are available. We have a year-long studies process, so usually in late summer/early fall we put a call out for study ideas.

**Steve Faulkner:** It's also important to note you are doing a lot of work on offshore sand resources, and a lot of data generation in the Northeast is in partnership with BOEM.

**Mike Rasser:** There was a large need for beach nourishment after Sandy, and people may find they don't have the sand they need in state waters. A good chunk of Sandy money went to working with state geologists to find offshore sand resources, to map them, collect data, etc.

**Bill Jenkins** - EPA Office of Research and Development: Protecting Human Health and Safeguarding the Environment (Link to presentation: [EPA Science Center Capabilities](#))

A number of programs provide information. Every EPA region is working in five communities, and the work is driven by the needs of the community. For example, in Newport News, we are focusing on sea-level rise and human health implications. Our Healthy Watersheds Initiative reflects a new shift toward keeping the good stuff good.

The EPA field office freshwater biology team in Wheeling, W.V., is particularly relevant to the LCC. We also do National Aquatic Resource Surveys, which document the status of changes in coastal waters, lakes, wetlands.

- *EnviroAtlas*: interactive tool for exploring the benefits of ecosystem goods and services (HUC12s), 11-12 communities where indicators .....(Making a visible difference work in communities) Newport News, Norfolk/VA (SLR, stormwater mgmt.)
- *Regional Geographic programs* (e.g. National Estuary Program), do lots of project impact review for cumulative impact analyses: for NEPA, section 404 permits, NPDES permits
- *Multi-criteria Integrated Resource Assessment tool*- facilitates stakeholder engagement in making decisions
- Opportunities for collaboration-unconventional oil and gas resources (shale, fracking)
- *Healthy Watersheds Initiative-focus* on keeping good areas good and not letting them slip to where they need restoration
- Enhancing resilience/climate adaptation planning

**Katrina Krause** - USFS/NE Climate Hub (Link to presentation: [USDA Climate Hubs](#))

We provide regional and local resources designed to help the agricultural community deal with challenges associated with climate change. An area of common interest with the North Atlantic LCC relates to best conservation practices to manage forests and woodlands for resiliency.

**Zoe Smith:** You are listed as a social science analyst. Can you talk about that?

**Katrina Krause:** I come from a background in social science, and have a lot of experience in science delivery program assessments.

**Andrew Milliken:** I like your ideas, and USDA has more extension on the ground than any other agency, so maybe we can learn from you. One question: Are the climate hubs interacting with any USDA NRCS grant programs to build climate consideration in how they implement those programs?

**Katrina Krause:** How do we start working in USDA and with our partners to be more nimble? The conversation is just starting. We still haven't had the conversation with local agricultural community of practice, producers, and the LCC.

**Scott Schwenk:** You mentioned one of four building blocks was the conservation of sensitive forest. Can you say more about that? Does it involve identifying areas for carbon sequestration?

**Katrina Krause:** We haven't had that conversation and we're just getting started on it now. When you have sensitive lands in those environments, FSA and other agencies have funds to help the people there. We're still trying to identify the challenges with having landowners take on those conservation challenges.

USDA Climate Hub runs from Maine to West Virginia (not Virginia). They are under the Forest Service administratively, collaborate with 16 land grant universities, work with the extension community. They wanted to look at vulnerability assessments for their region to identify similar goals for riparian corridors through agricultural fields, scalable conservation practices, land-use conversion with climate change, USDA greenhouse-gas building blocks (forestry, conservation of sensitive lands, helping farms), Northern Institute of Applied Climate Science (NIACS), at county level, the USDA service centers may be key liaisons with LCC.

**Ellen Mecray** - NOAA Partners, Customers, and Interagency Resources (Link to presentation: [\*NOAA Science Capabilities\*](#))

If nothing else, it is important to focus on the last slides, which focus on areas of overlap, and opportunities to collaborate. We have to start thinking really big when it comes to what each agency is doing on these major topics. We have tons of different audiences that we're each responding to, but we're responding to them with some similar tools. We all have tools that may be designed for one audience, but have applications to other audiences, including those here today. I think a lot of the tools and analyses that the SWAPs are looking for are already in existence, but we have to figure out who has what, and then figure out how to deliver it to a slightly different audience.

This meeting is happening in Annapolis, and there are a lot of representatives here from the Chesapeake Bay, so hopefully now that the Connecticut River project is done we will have a landscape conservation design in the Chesapeake Bay.

The methods by which the LCC makes decisions has similarities in process to what NOAA is doing with marine ecosystem assessments. The Northeast shelf, managed by fisheries for migratory fisheries, the idea was to take the science and apply it to the management of fisheries. It's exactly what you are doing here: It's a new era of fish and wildlife management on landscape scale. The process is similar, so it would be interesting to pull in a fisheries person here and have that discussion.

In fisheries, I mentioned the restoration program: looking at culvert design and how those are restored for the purpose of anadromous and diadromous fish species. That's an interesting place for NOAA to partner with this group, for one, with multi species vulnerability assessment: 82 species.

We need to think about place-based stewardship: How we manage places? The overarching thing to think about: As the LCC moves into oceanic realm, there are areas of overlap.

Then there's the climate stuff, which I'll continue to raise my hand about because it's my day job. Information Dashboards are where we're trying to think about how to deliver this

information to different sectors. So an interesting question is: Should we build one for fish and wildlife managers?

Coastal resources: LCC has been doing a huge job in reaching out, and NOAA has been reaching back to have conversation about all the resources that are available: All served through Digital Coast, and we are a huge investor in the marine cadastre.

You come to these meetings and get debriefed on all the tools funded by the LCC. But what about all the tools that were paid for by everyone else that's sitting at the table? The extension program at the USDA is wonderful, and we also have extension program, and the huge Sea Grant program. They are NOAA supported, based at universities, wonderful resource that know the communities they are in. They know how to approach communities and what their sensitivities are.

Examples from other LCCs include:

- Alaska: How and where storm tracks are coming into Alaska
- California: Adapting to sea level rise along the Pacific Coast
- Gulf and SE: Vulnerability assessments, another way that all of our data can come together in that regard.
- National Ocean Service - Potential to work with us as we extend 200 miles out to sea.
- Fisheries Habitat Restoration group - Focus on redesigning culverts (James Turek et al.), coastal managers, foresters, public health managers. Are there some potential shared audiences for LCCs and NOAA? What do state F&W directors need from SWAPs that NOAA might be able to help with?
- NOAA Habitat Focus Area - Wetland and nearshore habitat loss driven by SLR, focus on oyster reefs and fish passage in Chesapeake Bay.
- NOAA Sentinel Sites - Baseline information and monitoring for change, done by interagency partners.
- Integrated Ecosystem Assessments - Lots of parallel with Fisheries for landscape conservation design. Northeast Shelf tried to take the science and apply to fisheries. It would be interesting to pull in a fisheries person to have the discussion of the parallels between efforts.
- Culvert design and restoration - Anadromous and diadromous species (NOAA/LCC partnership).
- 182 species vulnerability assessment based on temp, salinity sensitivities
- Place Based Stewardship - Sanctuaries and National Estuarine Research Reserves
- Climate Info - Climate at a glance, Climate Resilience Toolkit (White House directed that someone provide guidance on Climate Change science).
- Information Dashboards - Available by state and sector (health vs natural resource). Should we build one for the LCC (climate services for Fish and Wildlife managers)?
- Coastal Resources - NOAA coastal program crossreach, Digital Coast serves most of this information, huge investor in marine cadastre
- Overlap in other federal tools - Need to just hear from fish and wildlife managers on what their needs are.

**Sean Corson:** (NOAA Chesapeake Bay Office) I want to expand upon Habitat Focus Areas, it has a close connection with the LCC. The area we are talking about in the Chesapeake Bay is in the central Delmarva peninsula, so this is an area where many of you have been working for years. This is an important geography for this LCC because it spans many different types of environments and socioeconomic sectors. There is a real revitalization of interest by state and NGO community in this area. One of specific opportunities is to take advantage of Chesapeake Bay program and leaders -- Mike, Scott, Kristin, Jennifer -- and following Patty's example of holding a jamboree. We've been talking about this casually throughout the day, but we should capitalize on the structure of the Program, the goals of the HGI teams, to create a Venn Diagram of watershed applications. "What are the science applications we're using to meet those objectives" and the LCC can be the mouthpiece

**Ken Elowe:** One of the major aspects and benefits of this forum is to take the mass of tools and information and distill it to what we need to achieve our conservation objectives.

What information do we still need to achieve a common conservation objective? I see a huge benefit in coming up with conservation designs that articulate common outcomes, as a nexus to SWAPS. So what tools are applicable to helping us achieve objectives in that plan?

**Jonathan Doherty:** That is a perfect segue to what I wanted to say. I am speaking for Chesapeake Conservation Partnership, which is a coalition of scores of NGOs, states, and federal agencies. We're in the place that you're getting at -- the long term -- but interestingly, from the landscape side of the Chesapeake, not the Bay side, that hasn't been articulated very clearly. And now there are a set of mappable narrative goals that begin to get at that. So now you can drill down with the tools, but also scale up and illustrate those patterns on the broader landscape, and at the higher level set the tenor of the conservation conversation and determine what is needed to meet those objectives. We're working with BJ, Mike, Kristin, and others.

**Chris Hilke:** In the last couple of years, this has been the question to the group writ large, we have also supported development of new tools: Have we been doing so without knowing the full extent of what's out there?

**Ken Elowe:** When Andrew put up his slide about the State of the LCC with all the technical committees, we have been relying on technical folks from agencies to help us know what's out there. We need to know that in order not to be redundant. This coalition of folks, the strength is knowing how to prevent redundancies.

The other thing: Just creating tools does not help us get to our conservation objectives.

**Kristin Krause:** I'll take a swing at your question, since I'm not a member of the Steering Committee. There are a lot of parallels between what this group is struggling with and what the Chesapeake Bay program is struggling with. One way to move from tools to work on the ground is to think strategically about the priorities. I'm not sure if you go through such a prioritization exercise, but it might be helpful to take that approach with this group to drive the priorities you identify toward the tools, or vice versa. We are offering within the Chesapeake Bay program, whether in the Choptank River complex or elsewhere, we are inviting the opportunity within that context.

**Ken Elowe:** You can't do conservation design without setting objectives and priorities, and we saw that in *Connect the Connecticut* where team wrestled with goals. The wildlife action plan with RCOAs is hopefully a distillation of the resources that need a certain level of conservation.

To your challenge about the Chesapeake: Yes. We also have invitations from the Gulf of Maine and the Susquehanna.

RCOAs gives you something to look at wherever you are, so people can at least have a way to start tackling things in their geographies

**Brady Phillips:** There are a lot of tools out there, and every organization makes them. The other way of making them - it's the back end kind of communications. NOAA develops a lot of tools and it's not clear who can use it. A lot of tools require a lot of education. Perhaps the LCC should consider focusing on how to use the tools. Maybe it's the tool of the week/month, but think about how you're using social media and ultimately who is the end audience? Do they know about the tools and how to use them? So I think a big part of it is integrating your communications.

**Chris Hilke:** No doubt it's important to know what the problem is so we're using the right tool for the job, but we need to know what's out there before we invest in more. There can be a problem with "tool fatigue." Maybe we need a less-than-comprehensive but still broader census of what's out there.

**Andrew Milliken:** One of the things we are striving for is to do things consistently across Northeast region, and to do it at multiple scales, and if you put that filter on it things, it limits what is out there pretty quickly. It takes a long time to catalog all of this stuff, so we should think carefully about the purpose of doing so before we do.

One of Ellen's slides said: "The LCC and its partner". But you *are* the LCC. It is all of us, and one of the things we want to provide is for you to have a place to exchange information. It's a forum, so what you are doing is useful to the partnership. With that I want to thank Ellen and the Feds...

**Ellen Mecray:** We have two federal interagency groups that meet within the scope of the LCC. We have the New England Federal Partners, which has this kind of meeting all the time. And there is a Climate Partners for the Mid-Atlantic. We also want to not bombard people at levels below the federal government.

**Ken Elowe:** We have taken a big step forward toward getting work done on the ground. We are always interested in your feedback on these meetings.