North Atlantic LCC Steering Committee Meeting, Fall 2014 Notes from Tuesday, October 28th (Day 1)

Action Items

All Steering committee members need to fill out and sign a conflict of interest disclosure statement and provide it to Scot Williamson.

LCC staff will assign a staff member as point of contact for help in understanding and using each project or product and include that contact information on project web pages and in Conservation Planning Atlas.

LCC staff will work with contractors to develop one-page handouts for each LCC project, outlining project goal, objectives, P.I.s, products, and links to spatial data and other products. The fact sheets will include socioeconomic issues addressed by project if relevant.

LCC staff will add information to the LCC website that shows how projects fit together and support LCC goals and objectives.

Steering Committee members should contact Pete Murdoch (USGS) if they are interested in being part of a peer review of the Department of the Interior Hurricane Sandy Common Metrics document. Pete will provide the final metrics document when available.

Steering Committee members and partners should contact LCC Data Manager Renee Farnsworth if they are aware of other relevant regionally or nationally consistent spatial data that should be added to the LCC Conservation Planning Atlas

The Connecticut River Pilot Core team will evaluate the implementation of the tools developed through the Connecticut River Pilot and include that as part of lessons learned for future applications.

LCC staff will work with the Northeast Fish and Wildlife Diversity Technical Committee to ensure that tools developed and lessons learned from the Connecticut River Watershed Pilot are incorporated in the methodology for Regional Conservation Opportunity Areas.

LCC staff will work with contractors to develop demonstrations of regional products and designs based on approaches piloted and decisions made in the Connecticut River Watershed and provide those products to the technical and steering committees for review before and at the April Steering Committee meeting.

Steering Committee members can provide written input on LCC strategic direction to Andrew Milliken by December 15 if they were not able to provide that input at the Steering Committee meeting using the form provided or an informal email.

LCC Steering Committee members and partners with additional input on the draft communications toolkit and/or interest in participating in a LCC communications work group should contact David Eisenhauer or Bridget Macdonald.

LCC staff will work with Sharri Venno and EPA to participate in Northeast Tribal Forum as an opportunity to reach more tribes.

LCC staff will continue to provide in-person training opportunities and will also develop online training modules describing products and showing how to access use them.

Steering Committee members will provide suggestions to Steve Fuller on extension agents within their agencies or jurisdictions that they think would be able to provide LCC information to others if trained.

LCC Steering Committee members should contact Ken Elowe or Andrew Milliken to set up opportunities to visit with staff in their state or organization to provide information on the LCC including existing meetings that the LCC can tag onto.

LCC Technical Teams and Science Delivery Team will meet this winter to draft revisions and additions to the strategic plan and to recommend science and science delivery needs for 2015 to be presented to Steering Committee at April meeting. LCC Steering Committee members interested in participating in this process should contact Scott Schwenk.

LCC Steering Committee will meet in person on Wednesday April 22, immediately following the Northeast Fish and Wildlife Conference in Newport, R.I. A steering committee conference call will be set up in February if needed to provide guidance to technical committees.

I. WELCOME AND INTRODUCTIONS

- Ken Elowe (FWS), Bill Hyatt (CT): Reviewed agenda and goals
- Scot Williamson (WMI) reviewed changes to procurement policy compliance. Given decisions you are making, we need to have a statement that you do not have a conflict of interest, of if you do, we need to have a record of it. We need to make sure in terms of governance that we are in concert with federal rules. Sign today, or bring back for review.
- Minutes from conference call in July were approved unanimously.

II. ACTION ITEMS FROM LAST STEERINC COMMITTEE CALL

Andrew Milliken (LCC): Reviewed Action Items Status from July call (Handout 4). No additional comments were received.

III. REVIEW AND DISCUSSION OF PROGRESS UNDER NORTHEAST CONSERVATION FRAMEWORK & LCC CONSERVATION SCIENCE STRATEGIC PLAN

(a) Science projects update, products available and next steps

Scott Schwenk (LCC): Provided updates on science projects, products, and next steps (Handouts 5a and 5b)

Foundational Mapping

- Migratory land bird stopover
- Regional vernal pool

Vulnerability Assessments

- Habitat vulnerability to climate change
- Designing sustainable landscapes
- Aquatic and coastal decision support tool
- Forecasting streams and brook trout

Bill Hyatt: This project has really engaged people first hand across the region, staff are saying this has great management potential for at least southern new England, if not beyond.

Becky Gwynn (VA): I am hearing the same thing in Virginia

Conservation design

- PARCAs
- Marine bird mapping and assessment

Guiding questions for discussion on North Atlantic LCC products:

- Are you familiar with North Atlantic LCC products?
- Are they useful or potentially useful?
- How should we communicate about them?
- How should we be tracking the use of LCC products?
- How would you like us to document the success and challenges of LCC projects?

Handout 3a

Zoe Smith (WCS): I think the terrestrial habitat model extension to Canada is very exciting in terms of cross-border partnerships. As for questions about tracking success, that is a science delivery project in and of itself: How do you measure that? It would be pretty powerful information to have, and there is a lot to learn.

Kevin Kalasz (DE): As products/projects are finalized, it would be helpful to have a review process: How do we build upon projects and outline "next steps"? For example, how to proceed after a pilot project?

Ellen Mecray (NOAA): Who do I contact with questions about data access? As in, weather data?

Andrew Milliken: Start with the LCC staff. Almost all projects have an oversight committee and are designed to be transparent and open to input, so let us know if you want to be part of oversight committees.

Pete Murdoch (USGS): Visibility is important. These projects all have great, discrete products, but they are all pieces of a bigger puzzle. Maybe something on the web that shows how these pieces fit in terms of addressing some bigger questions, which would also help other agencies see where they fit in terms of sharing data.

Ken Elowe: Good point. When we start thinking about conservation design, we talk about specific impacts, but hopefully the glue that holds us together is a conservation design that takes everything into account.

Pete Murdoch: Right, but illustrating that is the challenge. By looking at a diagram, visualize how all projects fit together. Helping people visualize a system level response is important challenges.

Ken: When you look at projects, feedback, on Connecticut River pilot for example, we want to figure out how can we bring you up to speed on all of the behind the scenes work. There is a lot of complexity built into design, but that's not everything.

Katie Kennedy (TNC): The thoughts I have are based on my experience in science management, and I'm interested in what Pete said. My background is in understanding how aspects of science management fit together. The way I see it: Science helps us answer questions about how management actions influence conservation objectives, or helps us prioritize where to go. That's the big frame. These hexagons, I think are those pieces that link to specific conservation objectives. How are these actions reaching those objectives? I see the word "relevancy" and I think one thing that would help would be to really being explicit about the goals of the LCC, and to identify alignment with other goals in order to have real transparency about how tools can be used. Every tool should link to a specific conservation objective or objectives. If we can see that link, we can understand how it fits with our objectives to make links visible. Mike Rasser (BOEM): I think it's amazing how much you leverage existing studies. For example, "Marine Birds". But I want to connect the dots to foundational work that was done four years ago, compiling data across the North Atlantic. We have report on our website, and I want to make sure we connect those dots.

Scott Schwenk: That project does use the seabird database - that's a key part. We welcome your suggestions on how to connect those dots.

Steve Fuller (LCC): The question is: How do we illustrate these connections?

Pete Murdoch: Well, it's a bigger communication problem that includes illustrations.

Steve Fuller: But maybe we need actual illustrators to help us with that problem. Even showing people how to use these tools is overwhelming, given the demand, and the depth that you can go down to. We are scratching the surface.

Becky Gwynn: A lot of these products that you mention are going to be tremendously valuable in Virginia. I was at a meeting of Coastal Zone Management Program two months ago, and they are exactly trying to address the kinds of things that these projects address, and absolutely need this kind of information. I need something straightforward: One page handout, outlining project goal, PI, products, and where they are located, so I can distribute to coastal policy team, and we can share with colleagues on Northeast Fish and Wildlife Diversity Technical Team. I forget about all of the projects and quite frankly they are quite relevant. A crib sheet to work from would be really helpful.

Ken Elowe: Organized in reverse, talking about big issues and how these projects fit?

Becky Gwynn: Yes, our project is trying to describe ecologically valuable areas, and marine bird data would illuminate that process. That would be huge.

Roselle Henn (ACOE): We may have input on these products, so I have just a generic ask to be part of review process.

Scott Schwenk: Come to Andrew or me, and we will put you in touch.

Andrew Milliken: There is more to come in the communications session

(b) Updates on DOI and partner Hurricane Sandy resiliency projects, coordination, and common metrics

Andrew Milliken: Hurricane Sandy resiliency projects summary (Handouts 6a and 6b)

• Increasing aquatic connectivity and flood resilience

Handout 3a

- Increasing beach resilience
- Increasing tidal marsh resilience

Ellen Mecray: Can we give credit to Keith Robinson? He did all sorts of work in NH.

Anne Kuhn (EPA): Any thought on tying in flood plain restoration, so floods do not affect road-stream crossing to begin with, in addition to culvert improvement?

Andrew Milliken: Not part of this project directly, but that's a really good point.

Sharri Venno (Houlton Band of the Maliseets): In terms of modeled versus survey data: Will they be distinguished on a map?

Andrew Milliken: Yes you will know whether a mapped data point for a road stream crossing was modeled or survey.

Andrew Milliken: We are unlikely to have another opportunity to have this many science projects focusing on one problem in the coastal zone. We need to frame this as a scientific problem, learn about the effectiveness of restoration approaches, and apply lessons learned across the region.

Anne Kuhn: Some projects that were not Sandy-related in Rhode Island – such as fine scale elevation models done by Save the Bay at smaller marshes - should be part of assessment.

Mike Rasser: Tagging piping plovers using nano-tags might be a possible way of tracking whether birds come back to restored beaches. This approach has been very successful with terns.

Andrew Milliken: We are hosting a marsh resiliency workshop on December 8th and 9th to get all PIs working on Hurricane Sandy marsh projects exchanging information, and choosing the best study sites.

Marc Matsil (TPL): Given the hundreds of other projects that don't have good protocols, and might not succeed, how do we help those? How do we incorporate lessons learned?

Roselle Henn: This is a great opportunity for further coordination and it would be great to do that across the board for Hurricane Sandy. We want to get input from the LCC, we have an MOU and broader participation would be welcome

Peter Murdoch: DOI Metrics Expert Group Briefing (Handout 6c)

Pete Murdoch: How do we measure success of DOI projects? What do we measure for resilience? We put a team together to tackle this issue, fitting with the goal of

quantifying resilience. Team of socio-economists and scientists to figure out core metrics for success or failure of 140 resilience projects, and in general

<u>Goals</u>

- 1. Scope strategy for DOI assessments
- 2. Select core metrics
- 3. Find data gaps
- 4. Recommend post-assessment measurements
- 5. Evaluate each project on these terms

Boundary conditions

- Needing to fill in baseline quickly
- Seamless measurements with other agencies so we can determine trends quickly, beyond just two years, but assimilate into long-term monitoring system, tracking system
- Needed current or historical, that allow comparison among projects with similar goals, strive for integrated systems-level assessment
- Hoping to expand partnership, broaden base of conversation

First draft (will share soon, but still will need peer review)

- Group by feature type (beach, marsh, socio-economic)
- Assessment strategy
- Strategy for detecting earliest change

Conclusions

- Possible to develop core metrics for multiple groups to assess coastal resilience changes
- 15 different integrated databases
- We need common, collaborative data management and sharing strategy

<u>Next steps</u>

- Refine report and metrics
- Put out to peer review any takers?
- Formally establishing DOI metrics groups as advisory to department, developing MOU among agencies for that
- Define standard methods for core metrics to establish regional and project-scale parameters

Primary recommendation

Need post-project monitoring, encourage federal agencies to think in long-term: Are these projects measuring what they should measure?

Getting our heads around 140 projects is enormous, so it is a challenge to incorporate all of the others out there, but an important aspect.

Let Pete know if interested in being a peer reviewer.

(c) Update and next steps for science delivery on available data layers

Steve Fuller: Summary of demonstration and science delivery projects and trainings (Handout 7a)

Putting conservation design products into hands of people on the ground:

- Science delivery grants
- Science delivery workshops
- Training for grantees
 - 1. Envision the Susquehanna, Chesapeake Conservancy
 - 2. Enhanced stewardship of priority habits and species on private lands using NALCC science across four Northeast states, Wildlife Conservation Society
 - 3. Science to practice, Highstead Foundation
 - 4. Catalyzing land trust capacity for data and science integration, Open Space Institute

Zoe Smith: I see great application for state and regional planning efforts, in which we can select target communities in four-state region, municipalities that have great potential for success because of existing land-use planning frameworks. It is a great opportunity to work with other grant recipients to integrate science and leverage work across broader audiences in determining how best to deliver science (Handout 7a). We are working to develop land trust guidance documents.

Sharri Venno: How do we look at science delivery and capacity in terms of where there is a need?

Steve Fuller: Zoe has been analyzing towns for ordinances that are receptive to conservation, which helps get at the question of where are good places to conserve

Zoe Smith: I want to add: The challenge is to look at each audience, community, land trust, for where the opportunity exists to build capacity, but also to look at where priorities are for LCC support. The more ready the communities are, the easier to achieve success, especially at such a large scale

Steve Fuller: A similar approach is to analyze at the parcel level, to screen for some of the factors that might limit your ability to implement. The Trust for Public Land has done exactly that – intersected science and practice at the parcel level. It's not about developing information management systems, but about getting people to use them.

Renee Farnsworth (LCC): Reviewed the spatial data layers available (Handout 5c)

Pete Murdoch: Are you actually housing these layers or just the metadata?

Renee Farnsworth: Both! ScienceBase catalogues everything we have web services for. The web services can be accessed via Data Basin on the North Atlantic Conservation Planning Atlas. Data Basin enables exploration, and download. On the data processing end – we get it in a bulk drive from UMass, TNC and other sources, make sure all of the metadata is built in, and any other relevant information, create logical symbology, and make sure it looks consistent.

Katie Kennedy: Is this all of spatial layers available for the region?

Renee Farnsworth: Everything that we are aware of and that has web services.

Katie: If there are others out there, do you want to include them?

Renee Farnsworth: Yes, Data Basin allows you to pull in other data sets that have been shared by others such as Two Countries, One Forest

Mike Rasser: I appreciate work in processing, but what about data archiving?

Renee Farnsworth: ScienceBase is closest thing we have; we use it as a catalogue.

Ken Elowe: Stepping back to the LCC purpose, there is a huge amount of work and data available across the region. When I look at all of this, I appreciate the work, but don't know how to use it. But I know there are folks who do, and can dive right in. But part of what I want from this discussion is: How do we get this into a format that you can use? How can we use this for multi-resource conservation design? We are looking for balance of high resolution, lots of data, sourcing, as well as compiled products.

Steve Fuller: Regarding archiving, USGS has exactly that in ScienceBase. Think of it as the back room of library, and the front room is Data Basin – with pleasing displays and web services, such as creating a customized tool.

Pete: Does ScienceBase at this point in time have the capacity to integrate data from different sources into one with common standards? For example: Taking soil calcium data from two different places, and combining them on one map.

Steve Fuller: It can put two things together on a map, but it requires processing first.

IV. DISCUSSION ON LANDSCAPE CONSERVATION DESIGN

(a) Regional Conservation Opportunity Areas: review of purpose and process agreed to by Northeast Fish and Wildlife Diversity Program Managers

Steve Fuller: Process for RCOAs (Handout 8)

Handout 3a

Ken Elowe: When we were a new LCC, thinking about what did we want to accomplish, we came up with a combined vision for the Northeast, regardless of state and organizational boundaries. You gave us marching orders to come up with two definite products.

- 1. Wildlife action plans Providing regional context, and communicating laterally about wildlife
- 2. Landscape conservation design Combining understanding of species and ecosystem needs into a landscape design focused on how to conserve for multiple responsibilities

Steve: The RCOAs project has evolved, and there have been lots of lessons learned. Lesson 1: It's easy to get multiple jurisdictions to agree to do something; it's harder to agree on what to do.

Kevin Kalasz: There has been lots of discussion within the Wildlife Diversity Technical Committee regarding what are RCOAs, and what do they mean to states: definitions and purposes that will allow for utility without superseding states' capacities. We've come up with something we hope will add value. Lots of states already have planning efforts informed by their own data for good conservation planning. We hope to add value to that to provide regional context to those areas already identified through state efforts. Where those initiatives intersect, we can add value.

Steve Fuller: So what's the relationship between design at the regional scale and state scale? State plans have their own objectives and priorities, so how do these interact? For example, without looking at full distribution of species, how can we distinguish between fringe and core area? Does it mean I have to shift priorities in my state? No, but it might inform your decisions. We have the data; it is the consensus that is the challenge.

John O'Leary (MA): There is a North Atlantic Shrublands protection plan across a number of states. To me, that smacks of being an RCOA, and Bill Brumback should be part of that.

Bill Hyatt: What is difference between the RCOA concept and core area concept? I saw them as evolving into the other, but I may be wrong.

Steve: RCOAs are core areas that are focused on RSGCN, which are the focus of state wildlife action plans. What we've done with RCOAs, because of timing with State Wildlife Action Plan Updates, is make sure we are addressing their needs now.

Ken Elowe: In Albany, we heard, "Make SWAPs talk to each other." But there was also a call to look at all species, and make it something that works for all fish and wildlife. And that is partially what is behind the Connecticut River Pilot. The RCOAs was developed to be a specific product for SWAPs and RSGCN. We have capability to do regional conservation design for all species now: Is that what you want?

John O'Leary: Not to put words in Bill Brumback's mouth, but he lobbied for inclusion of plants. Shrublands is about habitat conservation with the idea that species will come with it. The RSGCN are wildlife focused, not plants. That's why shrubland had virtue – it was a habitat focus, species will follow. The Diversity Technical Committee has done a great job, but is constrained by the exclusion of plants. It is not a bad place to start, but it's not perfect.

Ken Elowe: Shrubland is about, how much habitat do you need of that type to support species? New England Cottontail is the same thing for same purpose – it's focused on habitat type, but the outcome is to support species that use it.

John O'Leary: But it's fundamentally different.

Scot Williamson: The Diversity Technical Committee adopted seven topics several years ago, and topic four is the identification of regional focal areas for conservation of RSGCN. Do RCOAs do that? Are you yet tackling the idea of conservation and corridors?

Steve Fuller: Yes RCOAS are designed to do that. To John's point about habitats: out of RCOA came the classification of habitats, which created the basis for the Designing Sustainable Landscapes approach. In the RCOA approach, one of the ways of thinking is to use habitats to address needs, so you are addressing all species that use them. We are not at a point of saying "this is what's in" and "this is what's out", we are in consensus building process – we are demonstrating what's possible, and agreeing on what to do. We will disseminate a draft methodology, which will be a starting point for a conversation with the advisory team.

Bill Hyatt: Forest blocks and HUCs are areas on a map. When looking a CT River Pilot map, it shows core areas that are connected, presumably based (in part) on SGCN. Seems like the same thing? Would you expect the Connecticut River watershed would have a lot of RCOAs as well as Core Areas?

Steve Fuller: If you asked the question at Connecticut River scale versus regional scale, you will get different results.

Zoe Smith: The purpose is to guide land protection and habitat restoration, but I think about how some stakeholders might feel about seeing their property on a map. Not sure about elsewhere, but that's a sensitive issue in New York. Are we being upfront about whether this is land protection or wildlife management?

Steve Fuller: That has been discussed at length; what do maps mean to private landowners. This is entirely voluntary. There is no policy associated with these

maps. It's just data to inform decisions. But that group did prioritize protection over restoration, because it is easier to identify the best of the best.

(b) Updates on and lessons learned from the CT River Pilot

Scott Schwenk: Summary of CT River Watershed Pilot (Handout 9)

- Making Landscape Conservation Design applicable:
 - 1. Make data available
 - 2. Science delivery
 - 3. Bring partners together to use tools, create something better, integrate and utilize
- Participation of FWS leadership crucial support
 - 1. Collaboratively prioritize,
 - 2. Deliver information
 - 3. Establish process
- Examples of collaborative decisions, weighting species, aquatic areas, core area size and distribution
- Upcoming: Integrating surrogate species, rare and unique, ecological integrity and resilience
- Working on finalizing design, communicating results, fostering implementations
- Lessons learned:
 - 1. LCC products and other datasets can be integrated into sophisticated conservation design
 - 2. Substantial work required
 - 3. Novel aquatics component
 - 4. Limitations in data quality

(c) Needs for Landscape Conservation Design at multiple scales in the LCC

Andrew Milliken: Approach for addressing multiple scales of conservation design in the LCC (Handout 10). Key points of white paper reviewed including focus of LCC in facilitating conservation design at regional and landscape scales and reaching local partners through science delivery. Initial conservation design effort is at landscape scale in Connecticut River Pilot, initial effort at regional scale is with states on RCOAs.

Andrew Milliken: There is a tremendous amount of technical detail that we can explain to your staff if interested, and we should also recognize the dedicated team at UMass that helped develop much of the foundational conservation design information, and the support of the Northeast Climate Science Center. Pete Murdoch: You talk about "sentinel species", but are there sentinel physical and chemical measurements, or certain physical elements that are used to define cores?

Scott Schwenk: There are landscape settings and metrics that have to do with soil types that are built in.

John O'Leary : Is this a sustainable approach that can be applied across the LCC to identify areas?

Andrew: Part of what we are learning as a pilot is the amount and set of decisions and collaboration required. There is a fair amount you would not have to redo for subsequent applications, but some you would. We know that to be sustainable, some simplification of tools and process might be necessary. We are starting at a high resolution because we can do a lot, but we may not choose to do it all in the end.

Mike Rasser: In terms of the challenges of data, do you include some measure of uncertainty where you need more data?

Scott Schwenk: We are trying to build that in through climate components that include multiple scenarios. Given complexity of system, we cannot take into account all uncertainty. Identified data gaps can also be addressed through science projects.

Scot Williamson: The UMass models for 13 species: Can you describe how those were developed? My observation, when you go to the UMass website, it is difficult to figure out what that model is using to make predictions.

Scott Schwenk: We have asked UMass for a one-page fact sheet for each species about how that is done. There is very extensive documentation, probably about 100 pages. There is also a plan for a longer documentation for each species in additional to the fact sheet. We can offer briefings by the folks at UMass.

Andrew Milliken: Note that Curt Griffin helped with associating species with suite of habitat types in the region.

Ken Elowe: Back to John's question: I want to thank partners who contributed the real guts. I didn't understand until Scott put together a spreadsheet of all decisions the groups made, many related to modeling approaches, how to depict stream reaches, buffers, etc. Practical, justified decisions, but ones we won't have to make everywhere. We cannot replicate that everywhere in the Northeast, but we want to get to a conservation design that gets at the work. We need to expand species, but there is a huge swath of work that does not need to be repeated everywhere. Does the desire to have a regional LCD lead us to streamline the process?

Anne Kuhn: I'm on the Aquatic Core Team, and we ended up changing the scale because we started with HUC 6, and then went to HUC 12, then asked if we could do the entire watershed in one HUC 4. We were seeing things like this whole prioritization. So I think there are ways you can automate factors through GIS, or a web viewer. I wouldn't say all the decisions are made, because we struggled with a lot of them. If people are going to use it, they will want to have informed the process.

Andrew Milliken: The funding the Steering Committee approved for Designing Sustainable Landscapes in our July conference call was for better documentation, and streamlining of the process.

Sharri Venno: The list of decisions made, and why they were made, could help inform others going through the process. Is there any plan to use this to look at a watershed that is international in scope?

Andrew Milliken: The first step is international data consistency, and the extension of the terrestrial habitat into Canada will be done in six months, and will let us do that.

Curt Griffin: Being part of Climate Science Center, stretching across six LCCs, I have a broader perspective. This work is revolutionary, compared to other LCCs. This is a remarkable contribution. Much credit to the NALCC for having the courage to undertake this true revolution in terms of what is possible. It's very bold!

(d) Next steps

- How do we make all of these decisions fit together?
- We need to match our scales to the scales at which people are making decisions.
- How do we facilitate collaborative conservation process at large scales, and support process at small scales through networks, training, and regional context?
- Given what we have done, and what we can do, what should we do next?
- So do we take the next step at regional scale, and demonstrate landscape conservation design based on CT River Pilot? To be clear: This would be a demonstration of the capability, which would need to be guided by regional team to apply.

Bill Hyatt: Do you have any feel at this point on how the regional approach would differ in terms of final product? You've got a watershed scale product – what would you lose or gain at the regional scale? People would want sense of the loss of resolution when scaling.

Andrew Milliken: You could look at units of analysis (such as HUC 6 or 8 watersheds) across the region. The Connecticut River Pilot can inform a set of decisions that could be applied at the regional scale.

Pete Murdoch: If the Connecticut River basin has the same range of environmental conditions as the region, then the maps should be the same – are all of the same conditions and species represented?

Andrew: Conditions are not quite the same across the region. Just for ecosystems, we have 140 mapped across the region, many with geographically specific regions.

Katie Kennedy: I liked how you said, "Think about the scale at which you make decisions, or assess your conditions." If you make decisions at a regional scale, you need to look at the whole region.

Glenn Normandeau (NH): When I look at this, to me it's about where money is going to go on the ground. Otherwise it's nothing but an intellectual exercise. We need to scale to spending. Sometimes you get lucky, but conservation is done mostly in small pieces. If this is not built to help managers buy those small pieces, then it's a great map, but for the ultimate question, which is, "Do I want to buy this piece of ground or another?" That's where the rubber meets the road.

Steve Fuller: There've been a few comments related to scale: Will you do other watersheds? Crossing Canadian border? Difference between Connecticut River and region? Those questions are simple to execute in GIS; it's a matter of organizing the results in way that says: Where is best patch of spruce forest in the watershed, versus in the region? These are different questions with potentially different answers. But that's valuable to know. We should be asking those kinds of questions.

Kevin Kalasz: It is about where we are going to spend money, and we are at a unique and novel point where we have always made these decisions based on economic opportunities: a willing land owner and a budget. But if we can move beyond decisions based on that opportunity, and go beyond those opportunities for something better, areas that are important both locally and regionally. Ultimately, we are trying to make good, long-term decisions.

Andrew Milliken: Also, we don't have to choose a certain scale. You will just be informed by different scales.

Amanda Babson (NPS): In looking at next steps, we need to think about the implementation step. What we can learn from the pilot? We should ask stakeholders about the implementation, and whether they would use this if they were not part of that process. What is essential to someone trusting this map, this design?

Sharri Venno: It's also a question of money: Who would be interested in a regional approach? States? Federal government? Will it involve federal money? As a tribal representative, we live on federal dollars, so redirection of those dollars spent on land that is not included in the "ultimate" plan has a big impact. If we prioritize regional over state and watershed and local, then that would be a really big deal to us. That's been my concern since I sat down at this table. I see money getting

reduced, budgets going down, I see prioritization as a way to direct limited dollars, and this is a way to direct federal dollars. This is scary for me. It's also scary that I am the only tribal representative at this table. I don't know where we are going, and it is hard to talk about this, but I worry that a lot of decisions will be made without tribes' input, and without their understanding of impacts. I don't want to be the tribal representative, but tribes are about access to natural resources to sustain their resources.

Ken Elowe: Every organization that is here has responsibility and interest, and the solution has to support every organization. So every tribal piece of ground has desired outcomes, just like a state. So in terms of what we need in the FWS over a large region, we might look at where we put regional dollars, but it does not lessen what you are trying to do. This needs to support multiple scales. I don't think this will affect tribal dollars. I think there is a prioritization of one refuge versus another, and land acquisition from a federal standpoint. Again, this is a tool to inform, not to dictate.

Sharri Venno: For some of us, it's not about managing our own land base, because we don't have one. Depending on where we are in the landscape, or on a watershed, the management of those systems impacts us. The agriculture, the removal of dams, we really exist in the bigger scale, so we do the best we can to manage the resources we have, but we cannot do it without every other level of geography also doing what needs to be done. If this map keeps money from a certain watershed because of the priorities it assigns, we are out of luck.

Marc Matsil: Looking at both the holistic and micro level, you cannot use the CT Pilot as a surrogate. You need to look holistically: contiguous versus non-contiguous, agriculture, marsh, integrated resilience, storm predictions, that will dictate where the funding goes, and you can tell that story about your key conservation areas. It's about trying to cross-pollinate infrastructure and landscape/habitat protection.

Andrew Milliken: It's hard to know by looking at this integrated map, but you could look at just floodplain forest habitat types, and show relative value of those across the region. If that was your job, you could look at just that.

John O'Leary: To the question: Will people use this? Trying to think of an example. Mount Grace Land Trust was given the opportunity to be provided resiliency data layers, and they picked it up just like that. I think it is because it was from a trusted source of information, and it was relevant to what they do. So if you have certain qualities that people are looking for, they will use the tool. You could survey people to find out what would be relevant. You could go to a Land Trust Alliance meeting and survey them. It would be up and down, but it is absolutely local. It's another evaluation thing, and they are trying to promote the idea of actionable science. It's hard for LCCs to do actionable science at the scale you are trying to, but as far as the information you create being used, in a conservation framework, there is no element in there integrating producer and user or science. You need to try to find users. Andrew Milliken: We are reaching those audiences (including land trusts) through our science delivery grants.

Glenn Normandeau: One of the things that drive usable scale is funding. For example: New England Cottontail. All states pitched in because it was in their selfinterests, or New Hampshire putting money into water quality in Canada because it will benefit us. But a lot of the money we spend on land, that money itself is opportunistic. For example, with Wildlife and Sport Fish Restoration, you only have two years to spend the money.

Katie Kennedy: In response to Sharri: Maps are powerful, and maps communicate "value". Every map tells a different story, and you have to decide what that value is. It needs to be explicit. You don't need to agree, but to know what the values are that the decisions were based upon. It should be an expression of values, not just colors.

Zoe: The implications of implementation are of real interest, and we did not hear a lot from the Connecticut River Pilot example, and I know you are relying on partners on the ground, but perhaps you could speak to response of partner about how to scale and apply.

Ken Elowe: One of questions for the CT river team is: will this be used? They will be taking products back to their agencies and organizations.

I want to leave you with these questions to consider and dig into tomorrow. Where you spend money is important, and we want to provide information to help you make good decisions.

Cathy Sparks (RI): This is a great tool, but it's not the only basis for decisions in anybody's neighborhood, and the opportunity that comes up and may not fit in the polygons, it still may be very valuable locally. Rhode Island is very small, and not regionally important to conservation, but very important for people who live there. But it is valuable to see where you fit in the larger conservation picture, or how your local decisions can contribute to something bigger.

Ken Elowe: This is about context. Is there a regional context that you would like to consider? It's another tool for your decision making table. Success means making local efforts stich up to something bigger on the landscape, not to negate what happens locally.

North Atlantic LCC Steering Committee Meeting, Fall 2014 Notes from Wednesday, October 29th (Day 2)

Reflections on Day 1 Discussion:

Sharri Venno: Lack of communication between agencies. Are there unintended consequences of these tools?

Glenn Normandeau: Need science at the scale of where dollars are spent.

Cathy Sparks: NRCS is looking nationally, regionally at docs and information. Dots have to be connected to a framework for prioritizing decisions, and I can see how looking at mapped priorities can drive funding in that way. Not bad, unless it is at the expense of core programs - important to think of it as a tool, not as a mandate.

Sharri Venno: We are struggling today with a good way to say it – need to come up with the right language to describe the purpose of these products.

Mike Rasser: Real value of this tool is you can work across multiple scales. Don't want that to get lost.

Ellen Mecray: Back to unintended consequences: Wondering what the peer review for applicability of these tools at different scales. Are data vetted/relevant at various scales? This is what we call scientific translation: in development of tool, need to be sure that climate projections etc. are applied in the right way.

Scott Schwenk: For Designing Sustainable Landscapes, there is a scientific oversight team and is now a core partner team. No in depth review of all components, but will have another oversight team meeting this winter to go over the tools and their development.

Ken Elowe: Challenge is to help partners understand how they can use this information, and give it credibility it needs for people to use it.

Becky Gwynn: What are the tools? How do they get used? How can practitioners apply them and for what purpose?

Steve Fuller: In RCOA conversations, there have been discussions about end use of these tools, concerns about misinterpreting results. To do conservation process for land protection is not equal to that for restoration. The more focused your question, the more specific the design process.

V. Communication

Dave Eisenhauer (FWS): We want to hear from you about what your needs are and how the LCC staff can help meet that need, as well as how we can step-down our communications for the uses to which you need it applied.

John O'Leary: How *are* you tackling the internal communications? Disseminating information back to my home agency is challenging for me as well, so I'd be curious what you are doing in case that helps me with my work.

Dave Eisenhauer: We're hoping to create dialogue about how, for example, the Connecticut River Pilot, will be useful to other people. We're trying to be more proactive and show how we'll support this in other FWS programs. I'll let Ken say more.

Ken Elowe: Internally within the FWS, the conversation is the same as what we're talking about today. With the Pilot, we're coming together to do something new. We're incorporating a ton of complex information and trying to achieve a landscape context that we never had before. So in many ways, this project represents a shift culturally within in the agency as well as scientifically. Our challenge is to communicate this to the people who spend the dollars. People want something tangible. With the Pilot, we've had participation from some FWS employees, which we hope spreads understanding of the Pilot. But disseminating that information more widely is still a challenge. Some of the outcomes will depend on how our Regional Director, Wendi Weber, sees this being implemented on the ground. We don't know if the participants in the pilot are going back to their home agencies and talking about the work being done. That's certainly key to our success. We're wrestling with how to make this relevant.

Roselle Henn: We could use priorities that you've identified to link up to our ecosystem restoration program and see where there's an overlap, and use that to focus on the sweet spot, where everyone agrees. But, for me to bring this back to my organization, I need to be able to explain how the priorities were identified, and that they were based on a scientific process that was established, and how the review was conducted.

Ken Elowe: Ok, you need to know how the science was created and compiled.

Sharri Venno: What you're saying is exactly what scares me. We have a project with the Corps. We want it to continue for many years. If the ACOE looks at the design and says that our project is not a priority anymore.

Roselle Henn: That's a good question. When we do our budget process, we look for opportunities to direct federal funding. I don't anticipate that we would take money away from your project; the goal would be to give a project a boost. But it is a competitive process.

Sharri Venno: That's exactly the concern I have.

Katie Kennedy: If there's a sense from the group that there's something missing, then there is something missing – we should trust that. We need to be able to articulate what the Tribes' project has that's valuable that's not being represented by ecological integrity. We can have additional layers that are incorporated into the prioritization.

Glenn Normandeau: I think we have to realize that this is a tool, or really a system, to put a grade on the conservation value of whatever project you're talking about. But for most projects, the conservation value is just one aspect of what you're looking at. If it were up to the staff and only based on conservation, there are a lot of projects my agency wouldn't undertake. So I think there is precedent for incorporating social and economic factors. If this tool is designed to grade projects on a *conservation* scale, then we should remember that we have and do take into account other factors in the decision-making process.

Ken Elowe: We need to make sure that the project has information that makes sense at whatever scale you're working at. We take into account opportunity, leverage, social needs, etc. that affect our conservation work.

Katie Kennedy: I think we're talking about 2 different things. 1) tools for decisionmakers, and 2) impacts of the decisions on others.

Sharri Venno: I think my concern is a little unique because of the situation in which the tribes find themselves. There is an outsize impact on the decisions of federal agencies on us because we don't have a way to make up for big changes in how federal dollars are directed. We are beginning a process of trying to bring together all the agencies with which we work – the Northeast Tribal Forum – so we'll all be together a few times a year. It would be helpful to have this conversation at that forum.

Katie Kennedy: Another scale that could be relevant is the scale of tribal interest. We talk a lot about states, but we don't have a layer incorporating the scale of tribal interest.

Sharri Venno: Just to respond to that, we have local concerns, but we're at the downstream end of the watershed, so our scales extend up and around us. We have a regional connection in terms of our funding, and we have an international concern because we're right on the border. So we certainly have multiple scales of interest.

Ken Elowe: I want to bring this back around. I think the issue we're talking about is – are we really asking one entity – that they can't prioritize what they're doing. I think you stated it right, that there's an implication of trying to be strategic in our work that may have implications on the ground. We should consider them, but also

separate them from what we are trying to do in a conservation sense. What kinds of decisions do you want to be able to make? We want to make this work better for you.

Ellen Mecray: I think that the likelihood that all of this work will end up bolstering local decisions is very good, rather than having it work against local decisions. I think this work will feed into support for a local decision. I have a question about the Pilot. I don't know that much about it. My question is what now? What's the commitment to track the outcomes of how that information is used? Has there been any thought – is there a public component to this? Have there been focus groups in the communities included in this Pilot? Are we going to share after action reviews, success stories, etc.?

Ken Elowe: We're working with Highstead to take the CT River Pilot information to the ground. We are asking pilot core team to review with their agencies.

David Eisenhauer: From a communications standpoint, I think she raises a very good point. An organization like this should look at the greatest resource needs across your full landscape. If you do a test piece, then one of the important communications need is for all the partners to understand how that fits in to a larger-level landscape priority, how it's progressing, and how it can be applied on other parts of the landscape. This is especially important if you choose a subregion for your Pilot landscape.

Zoe Smith: I think there are lots of examples of other organizations that are doing these Pilots. We have numerous tools online at our website that are examples of how we've done that.

Ken Elowe: Ultimately, what I would love, is that any of you, if asked, could speak about what the LCC can do for you.

Ellen Mecray: I wanted to come back to David and the work you've done. I like the partner testimonials, and the fact sheets. I think John asked how to bring it back to my own agency. It's really hard to get our heads around hundreds of projects. It's very difficult to measure the reachback to our own agency. I just found out someone is doing some marsh work, but there are 15,000 people in my agency and so I can't keep track of everything. I think we tend to digress into specifics, but we do want everyone to see themselves in the Pilot, so maybe that's your next step.

Ken Elowe: What would you like to talk about?

Marc Matsil: I would like to hear more about public involvement.

Ken Elowe: Well, we're relying on others to assist with that, and this is the purpose of the Science Delivery grants. We don't have the capacity to go to the public.

Zoe Smith: I think that was the purpose all along, to take that down to the local level as relevant.

Ken Elowe: One thing I keep hearing is that this kind of information is that it's not going to drive local decisions, but it's a contextual piece that they can consider. It's not meant to tell people what to do, but it is meant to be a tool.

Marc Matsil: I think a lot of the argument needs to be framed in economic contexts. Species concerns are really secondary to flood abatement. People want to see the rate of return on their investments from using the LCC tools. I think we can do that. We just bought 700 acres of habitat, but we didn't mention wildlife until the 5th paragraph of the press release. Instead we focus on economic and social issues like flood abatement.

Ken Elowe: We haven't delved into that very much. It could be helpful to build in justifications for conservation work that focuses more on what people are interested in.

Marc Matsil: That's exactly the kind of thing that resonates with leadership. Things need to be translated into dollars.

Ken Elowe: What we could do is offer up a forum for all of us to share those stories. In the New England Cottontail conversation, the Boston Globe had an article talking about how much money was spent on a rabbit, which was the wrong rabbit. We see that in Chesapeake Bay all the time – water quality vs. fish and wildlife issues. So maybe what we should do is have a place where you can share good communications that you see.

Cathy Sparks: I think that's an excellent idea. I would up the ante a little bit and consider adopting an approach that when a fact sheet on a project is written, it includes the socioeconomic issues.

Zoe Smith: I'm going to up the ante even more. Looking at the projects at a glance and other brief documents, that discusses the outcome. I think that communications should talk to the scientists and reframe it in a way that's palatable to the public.

Ken Elowe: We're having a shift in our conservation bent here. We need to be more effective in communicating to society.

Cathy Sparks: We depend on ordinary citizens to support our work. It's not our mission to protect communities from floods; it just so happens that restoring floodplains for fish and wildlife is good for flood management. So it's not about eliminating our actual focus, but describing multiple goals, and how a conservation goal and an economic goal can both be met with one action or suite of actions.

Handout 3a

Becky Gwynn: I like the fact sheets, but again I would like a link to the data sets associated with them.

Andrew Milliken: When we started as an LCC, it was about science needs and projects, but we need to shift our focus to products.

Becky Gwynn: It comes back to the discussions that others mentioned. It's not about how much money you spent on cottontails, it's about the benefits to society of the work being done to restore cottontails.

Kevin Kalasz: It's useful to connect the dots or show the flow between projects.

Anne Kuhn: What we're required to do at EPA, we have to have right up front, an impact statement about what this product contributes.

Ken Elowe: All of this so far is kind of about communication, but we're sliding into the next discussion, which is what do we need next. I don't want to cut off this discussion, but I think we can keep bringing it up as we move along.

David Eisenhauer: Maybe we need an action item to get a group together to talk about communications.

VI. Strategic Direction

How to make the LCC more relevant - Bill Hyatt

I would like to focus the discussion on this topic, although we've already made some progress on this front. The folks in the field just notice time passing, and the tools are not available to them or they don't know that tools are available. When I talk to staff biologists, they don't see it as something available to them. Other people roll their eyes. These are people we've been trying to keep informed, and I see this as a significant problem. The LCC has a lot of products and tools.

I suggest that we say 'sell' instead of 'communications', and think of the LCC partners as 'customers.' So I'm going to talk about my agency and give some examples of solutions I think would be helpful.

We have a 'Green Plan' that is supposed to guide our expenditures. But, it doesn't prioritize. It simply identifies areas that are important. I want to look at the core areas and connections, and say we need those for the state. So that would provide a tool that would add to those existing tools, and would be powerful in influencing decisions. We also need to reach out to key practitioners. I see the need for some sort of LCC helpline, so that people can and will regularly go to the LCCs for guidance on using LCC tools.

Handout 3a

What are your thoughts?

Ellen Mecray: Stop talking about projects and start talking about products and service. In order to be a trusted source, you have to build up that trust, through what we call engagement. We can't just build projects and products for their own sake, but build them according to the idea that people will use them. So your boots on the ground will be talking all the time about bringing that ground-up information. My entire job is basically being a door-to-door salesman to different agencies to get them to use the products that NOAA makes. Everyone is talking about tools for decision-making. That's because that's a buzzword. Regardless of what wildlife species you're interested in, you have to frame your work in the context of its overall economic value and use. I'm excited about this, because we have an opportunity to build in communications from the beginning. I think a lot of it is this training. If we're going to argue for LCC commitments in the coming year, it's going to be less about projects and more about bringing information and training out.

Sharri Venno: For many people, peer-to-peer outreach is the most important. There are always early adopters. You can do that by conferences, webinars, training, train-the-trainer. There's a thing called the circuit riders in EPA where they have some people who go out and provide 1-on-1 technical assistance. The best teachers are people who have already used it and understand the challenges.

Cathy Sparks: I'm thinking about whether or not consulting foresters should be brought in. They write a lot of stewardship plans with NRCS. If there's a tool that's relevant to them they will likely use it.

Bill Hyatt: I've been impressed with how much guidance they offer. Do you see any of the LCC tools as being particularly relevant to the foresters?

Cathy Sparks: I think foresters are very strategic. I think if they can offer that up to the landowner – their land is in a core area, they'd be making a contribution to the greater good – it might skew their decisions. We can't predict it. I don't know how accessible it is to a consulting forester it is at this point, or if any of them know about it. I think it would have value in many cases, not all.

Louis Porter (VT): I wanted to second that. I think you're picking up on a distinction between state foresters and consulting foresters. I think state foresters are a lot more sophisticated in their approach than the consulting forests. Something designed for consulting foresters would be valuable, but it would have to be specifically for them and not require a lot of effort on their part. This is based on my experience in conversation with them.

Bill Hyatt: That's an important distinction between the two types of foresters, and the types of land they work with (conserved vs. unrestricted).

Jim Connolly (ME): We all know that in our region we're not going to make it on public land alone.

Louis Porter: NRCS has conservation money they distribute through grants. There's an Audubon project that's trying to do things similar to what we're trying to do. These are examples of programs that already exist, that we could try to get our programs into.

Ken Elowe: I'm hearing about audiences that need to interface with what we're producing. If you have specific ideas about how we could interface, or a route that we could develop training to, please let us know.

Bill Hyatt: We want to know what would make the LCC more relevant.

Anne Kuhn: I think something missing is bringing in the developers and the planners. States like Massachusetts already have priority development areas designated.

Cathy Sparks: The State Technical teams would be a good place to start with NRCS. That's the group that would have to buy in and support and identify what's needed in different areas.

Glenn Normandeau: In NH, it would helpful to set up a few visits to the agency. We have a few people who have been doing a lot of work with the LCC, but outside of that half dozen, there are 180 other employees that don't have a clue and are so busy that they're not going to pay attention to you. But most divisions have a quarterly meeting where everyone meets centrally and discusses what's going on for the next quarter, plus a lands team meeting every few months. Any of those meetings would be good opportunities for trainings.

Ken Elowe: We had a conversation with some people at the state level. It's something I'd like to offer.

Bill Hyatt: What we'd like to hear from the Steering Committee, is who should receive the training. In the past we've focused on directors and the top-down approach has not been particularly effective.

Ellen Mecray: One of the things that – we just brought Jim Connelly in – one of my biggest hot buttons is duplication of federal government services to states. And you have 10 different meetings where each agency brings in their tools. I think it would be effective if we had one day with everyone from the state, we brought in all the fed agencies and everyone gets to hear about the tools available for their top three questions. I think it's a good example of what we could do as a federal partnership.

Pete Murdoch: I think that's a great idea. Our resource managers out there are experts in resource management, but not experts in the complexities that go into

these tools. What you guys are talking about is a major paradigm shift. I think we need a cooperative extension person who is going out on the ground showing people how to use these tools. FWS can't afford to hire a bunch of those agents, so I think the gorilla in the room is how to come together to make this happen. I actually don't want resource managers to be messing around with these tools under the hood, because I think they'll make mistakes and make the wrong decisions.

Ken Elowe: We could take this capacity money for projects, which we've shifted to science delivery, and keep directing our funds in this direction.

Ellen Mecray: NOAA went to Lafayette, LA and had this discussion with several LCCs. We wanted to find out what capacities we already had, and one answer was extension agents. What I'm hearing is that many agencies already have extension agents. So maybe the LCCs need to get all the extension people together and say: these are the messages we want delivered. The hardest thing to do is build an audience, but extension people already have done that.

Sharri Venno: We are working on our 4th or 5th plan for the watershed we live in. I think it's ridiculous to be doing this over and over again. Not only should we bring tools to the table, but we should try not to duplicate conservation efforts as much. We should have more collaborative conservation efforts. We would get more bang for the buck if we did so.

Jim Connolly: I think the challenge is to find a way to integrate this with existing programs in the states. We need to present this information in a non-threatening manner. It can't be seen as a competing effort. I think the data is great; it strengthens the information we have, it enriches SWAPS and existing plans. We already do outreach to the consulting foresters and NRCS. So we should add this information to that. We don't need a separate effort. Maybe some states don't have a program like that, but would be interested. I think we should use an adaptive management approach to our outreach. We should present the tool not as something new or threatening, but as an enrichment tool. I don't think we can apply one strategy to all agencies or all states or all areas. But I agree that our focus should be on training-the-trainer, rather than on training all the users.

Zoe Smith: I would like the NGOs to come to these meetings because I think we can bring some capacity. A lot of us are already thinking about this – how this kind of science can be used to inform management. In New York, probably 5 NGOs are already thinking about this.

Scott Schwenk: I think this has been helpful, but I want to caution that while it's important to talk about outreach, there are still unmet needs for data collection and science. At the Diversity Technical committee meeting, many needs were brought up.

Bill Hyatt: I agree that the need for research is ongoing.

Bernie Marczyk (DU): My concern about bringing in more people to this meeting, which is already a bit unwieldy. There is probably a better forum for bringing in NGOs. How many people can we have at this table and still function? For example, we have 1 TNC person here, not 1 TNC person from every state in the NALCC.

Becky Gwynn: A lot of what we're talking about is related to the NALCC specifically, but in VA we have 3 LCCs. It would be helpful if the LCCs made sure to coordinate.

Steve Fuller: I wanted to report back from a Science Delivery training over the summer that was geared to GIS folks. That group is very efficient for a lot of delivery, and they are nested within the agencies, as long as managers know to go to the GIS people.

VII. Science Needs and Science Delivery

Getting tools in hands of those who need them: Wrap up Discussion

Ken and Andrew Milliken: We have noted that in addition to in-person training, we should be developing modules to be hosted online, in partnership with NCTC.

Bill Hyatt: As long as there is a human contact for each module

Ken and Andrew Milliken: What's missing?

John O'Leary: Climate change element, Hurricane Sandy was a disaster, but you used it as an opportunity, took advantage of developing.

Andrew Milliken: As we reorganize the LCC strategic plan for science, I want to make it a strategic plan for everything. Ok, I'm getting head nods that we like this idea. The handout for this section details what we've done so far and a lot of the ideas that we've talked about. We clearly don't have time today to go through this handout in detail. I'd like to think about what process we're in, and what we need to do. One example is cross-border relationships. What conversations do we need to have to move forward? I'm looking for some direction from you. How do you want to see it go forward? Who do you want to be involved?

Ellen Mecray: Do you want volunteers for certain things? I would certainly sign up for a committee to work on Canada.

Andrew Milliken: Process question – should we go through this handout and see if there are people interested in each of the bullets.

Ken Elowe: There's a short and long term thing here. What you folks have risen to the surface are the things that are a high priority for you. On the flip charts are things we can do starting tomorrow, but we can form a subteam to create

recommendations to the full steering committee. Maybe what we could do in a couple of minutes is establish whether there is anything missing from this list, or that you want us to emphasize.

Bill Hyatt: My comment is that we might start going in too many directions and get too diverse and spread resources too thin. I think you'll need to seriously prioritize.

Bernie Marczyk: What is the future of the LCCs? Is there an expansion, a consolidation? Can you give the national perspective on this?

Andrew Milliken: A couple of things. There is an LCC strategic plan. There is a network and a network council. Jed Daley from TPL is on the council, and so is David Whitehurst from Virginia. I think we're at the point in the evolution of LCCs is that they have enough capacity in their own geographies, that they can now work across geographies. Where that has become a major focus is in conservation design work. We need these conservation designs to work across LCC boundaries. I think Virginia is a good case study for testing how LCCs work past their own boundaries. We have staff, such as Lori Pelech, who is working on this concept as well. So we're having those discussions. If we work across the FWS region, we're working across 4 LCCs already. I'll point out one thing that got a lot of attention at the Large Landscape Workshop – there was a big emphasis on urban conservation. Is there an LCC that has more urban areas than ours? Probably not, and it's not an area we've given a lot of attention to. Should we do that more? Or does it mean spreading ourselves too thin? I think that's a decision the Steering Committee should consider now and in the future.

Ken Elowe: These discussions about relevancy and what you need to take the ground. We need communications relevancy and tool relevancy. I think we need to come to each of your geographies in each state with whatever staff you want present and talk about what we have that's available and get your feedback on what needs to be tweaked. We'll need your help to get the right people in the room.

Zoe Smith: Science delivery and partnerships could be folded in. Maybe some involvement with tribes. Work with Canada. Work with urban areas could be one group. But we don't want to put everyone in silos. It could help people communicate not just about Canada but about broader partnerships.

Bernie Marczyk: I feel strongly about some kind of standardized monitoring protocols. And it could be slightly customized for different geographies. It's easy enough to do with what's there. We should have a 10-year monitoring program. 10 years is a surrogate number, but it's a fair one. Each grant that's been given...each grantee should have to put 10% down for monitoring, and they should use standardized protocols. And it should definitely be tied to whatever people decided the project was supposed to accomplish, whether it's sediment capture or habitat conservation.

Handout 3a

Pete Murdoch: But the LCC, in its charter, is not responsible for long-term monitoring.

Ken Elowe: It's in our framework. And monitoring really needs to be part of our efforts.

Pete Murdoch: But there's no money for monitoring.

Bernie Marczyk: But if you standardize it, you can make the case for forcing part of a grant to be reserved for monitoring.

Pete Murdoch: It's hard to do monitoring for 10 years on a project.

Katie Kennedy: And so much monitoring is for the sake of monitoring. But what we need to do is to monitor in order to find out whether projects accomplish what they're supposed to. It should be standardized and science-based. It should be done such that adaptive management is possible based on the information gained from it.

Andrew Milliken: I know we're neglecting the partners on the phone.

David Whitehurst (VA): The fact that we have two models, in the northeast and southeast, that could either be a model for landscape approaches, is very attractive.

Karel Allard (CWS): There are opportunities to make sense of existing products that cross the border.

Andrew Milliken: The one product we're developing across the border (terrestrial habitat map) is already generating interest and connections that we can build on.

Ken Elowe: Anything else that didn't come up this morning that you want to put on the table for us to consider?

Gwen Brewer (MD): You should consider who the best person or best organization to do science delivery. A lot of people rely on personal connections or established relationships, and we need to direct our outreach to those people. We should avoid reinventing the wheel. A lot of this relationship-building has already happened effectively through other means. So we should think about what LCCs can do in order to help those people do this job for us.

Ken Elowe: You've described for us a real shift in emphasis on this LCC's work. That segues nicely into the next item, which is what would you like the science technical team to address over the next few months. And the science delivery team.

Ellen Mecray: Are you curious about rejiggering these? One is about the technical committee subgroups, and one is science delivery. Are you looking at changing their focus, or thinking of new projects for them?

Andrew Milliken: Our initial thought was to engage both of those teams.

Scott Schwenk: The feedback has been really helpful. Scot Williamson has identified the fact that the Northeast Diversity Technical committee has identified some science needs they still have. We want to continue to get direction from you as to whether you want to expand that out. Do we want to broaden RCOAs or the Connecticut River Conservation Design Pilot? That would feed into our direction for where we'd go to in the spring.

Andrew Milliken: There are several things we need to resolve. Do we need to revise the strategic plan? What are the next steps for conservation design? We have project funding – where do we direct it? To which science needs? To which science delivery projects? We need to develop RFPs after the April meeting. One thought is to get those subteams together and have conversations around the strategic plan. Relative to conservation design next steps, it would be helpful to get feedback from this Steering Committee, and then we can work with contractors to work on that.

Bill Hyatt: As far as expanding the conservation design of the Pilot, there are definitely concerns about the level of detail. If you can quickly expand it, then it's fine. But if it requires more decisions, that sounds like a longer-term project.

Ken Elowe: Some decisions don't need to be repeated, but some do. I think what we could do is use the technical teams to pull together the questions that you posed. I haven't heard from anybody that it's a bad idea to run the whole region. It gives us a level playing field.

Andrew Milliken: It's one thing to develop products like climate suitability and species habitat capability. We can do that for the region. But that's different from doing an analysis of core areas and connections, which in the Connecticut River has offered a tremendous amount of partner inputs. So the Connecticut River could lead to a demonstration core area network. The alternative is to create a regional design team to inform those decisions.

Bill Hyatt: I thought the Pilot is the demonstration.

Katie Kennedy: For the CT River Pilot, just to reiterate, it's going to be very important to explicitly communicate what the decisions were. There are some decisions that we disagree with, for example, the incorrect floodplain mapping was included. But it's a Pilot so it's ok. But we need to evaluate lessons learned from this Pilot before we apply it to other areas.

Kevin Kalasz: I wanted to put a plug in for how LCCs and their tools can be used for SWAPS. I think it is incumbent upon us as SWAP coordinators to make the LCC projects more explicitly used in our products. We're all doing lots of work to make connections, have stakeholder meetings, etc., and it's our responsibility to facilitate that was well. The Pilot is an example of how we can do work in our respective states, and we can point that out and put that example in the plan as a way to move forward in conservation.

Andrew Milliken: My thought on this is that we could do some demonstrations on what certain aspects of the Connecticut River Pilot could be used to do a design at the regional level. But it would have to be clear that it was just a demonstration. For Regional Conservation Opportunity Areas, it will be up to the Northeast Diversity Technical Committee as to the direction they want to go.

Patty Riexinger (NY): I have continuing concerns about what we're doing in the marine area. So much of our focus is sand-to-mountain, and almost nothing is sand-to-coral. Most states in the NALCC have coastal resources, but unfortunately the state fish and wildlife agencies are not necessarily very focused on coastal and marine resources. We are the North *Atlantic* LCC, after all. I think we should do more in the long term about marine resources.

Andrew Milliken: We are developing relationships with NROC and MARCO. As part of the Hurricane Sandy resiliency work, those agencies are going to take those products and data and deliver it through their networks. We now have a regular representative from NROC sitting on this committee.

Patty Riexinger: Yes, but coastal stuff and marine stuff are not the same.

Sharri Venno: I don't think we should wait and see. I think we should engage. I'm afraid we will miss that opportunity.

Andrew Milliken: I want to bring it back to the process that we should go through between then and now.

Steve Fuller: I would like to bring together the Science Delivery team, which hasn't met since last spring.

Ellen Mecray: Are those teams also going to flesh out more detail as far as what the teams will be doing?

Amanda Babson: I wanted to clarify. It seems like we're moving forward on conservation design next steps. I think it's a big investment to do a demonstration of the Pilot at the regional scale. I think there is disagreement about the best next step being scaling it up versus doing another design at a smaller scale.

Andrew Milliken: We need to decide how to allocate resources. I will tell you that the work that you approved with UMass-Amherst last July included providing some support for applying the tools at the regional scale and for having another watershed do a design, led by partners other than LCC staff. Scott Schwenk: It would be very challenging to try and do both of those things. It might be wise to try and choose one to focus on, knowing what we know about the time required to do the Pilot.

Ken Elowe: I don't think we should go watershed-by-watershed. Instead we should look at the core decisions made, then look at a demonstration, then refine and tweak the process. But at least we'll have something to go off of. As large as the Connecticut River is, it doesn't encompass all of what you need. So what's the best use of the information you have right now?

Andrew Milliken: Also, there are other partnerships doing conservation design now. So how do we support them? For example, the Chesapeake Conservancy is doing a design related to the Envision the Susquehanna project that we funded. I think with a little effort we can get them to utilize the tools from the pilot on their own. This way we're backing off that level of involvement, and investing more of our time at the regional scale. I want to echo what Katie said – to talk about lessons learned.

Bill Hyatt: By the April Steering Committee meeting, will we have something on which to base a decision point? You could pull together enough to provide an example of what a product is likely to look like, that we can use to make a decision?

Andrew Milliken: Yes we will be able to do that.

X. Other business, next meeting

Ken Elowe and Bill Hyatt: Thank you for the great input. Next meeting is scheduled on April 22, 2015 in Newport, RI after the NEAFWA Conference. We will schedule a Steering Committee all in February if needed.

Meeting Adjourned.

Meeting Attendees:

Organization	Representatives	
States/Districts		
Connecticut		
Connecticut Department of Energy and Environmental	Bill Hyatt	
Protection		
Delaware		
Delaware Division of Fish and Wildlife	Kevin Kalasz	
Maine		
Maine Department of Inland Fisheries and Wildlife	Jim Connolly	
Maine Department of Inland Fisheries and Wildlife	Andrea Erskine	
Maryland		
Maryland Department of Natural Resources	Gwen Brewer	
Massachusetts		
Massachusetts Division of Fisheries and Wildlife	John O'Leary	
New Hampshire		
New Hampshire Fish and Game Department	Glenn Normandeau	
New Jersey		
New Jersey Division of Fish and Wildlife	Dave Chanda	
New York		
New York Department of Environmental Conservation	Patty Riexinger	
Rhode Island		
Rhode Island Department of Environmental Management	Cathy Sparks	
Rhode Island Coastal Resources Management Council	Jeff Willis	
Vermont		
Vermont Department of Fish and Wildlife	Louis Porter	
Vermont Department of Fish and Wildlife	Kim Royar	
Virginia		
Virginia Department of Game and Inland Fisheries	Becky Gwynn	
Virginia Department of Game and Inland Fisheries	David Whitehurst	
Native American Tribes		
Houlton Band of the Maliseets	Sharri Venno	
Federal Agencies		
U.S. Fish and Wildlife Service	Ken Elowe	
U.S. Geological Survey	Pete Murdoch	
Department of the Interior Northeast Climate Science	Curt Griffin	
Center		
National Park Service	Amanda Babson	
Bureau of Ocean Energy Management, Regulation and Enforcement	Mike Rasser	
National Oceanic and Atmospheric Administration	Ellen Mecray	

Organization	Representatives	
U.S. Army Corps of Engineers	Roselle Henn	
U.S. Environmental Protection Agency	Anne Kuhn	
U.S. Forest Service	David Hollinger	
Canadian Partners		
Environment Canada Canadian Wildlife Service	Karel Allard	
Nova Scotia Department of Natural Resources	Mike O'Brien	
Non-governmental Organizations		
Ducks Unlimited	Bernie Marcyzk	
Manomet Center for Conservation Sciences	Eric Walberg	
National Wildlife Federation	Chris Hilke	
The Nature Conservancy	Katie Kennedy	
New England Wild Flower Society	Bill Brumback	
Trust for Public Land	Marc Matsil	
Wildlife Management Institute	Scot Williamson	
Wildlife Conservation Society	Zoe Smith	
Staff		
U.S. Fish and Wildlife Service	Andrew Milliken	
U.S. Fish and Wildlife Service	David Eisenhauer	
U.S. Fish and Wildlife Service	Maritza Mallek	
North Atlantic LCC	Scott Schwenk	
North Atlantic LCC	Steve Fuller	
North Atlantic LCC	Bridget Macdonald	