Connecticut River Pilot Core Team Meeting

US FWS Regional Office in Hadley, Massachusetts

October 1, 2015, 10:00 a.m. to 3:00 p.m.

Attendees (phone): Bill Jenkins, BJ Richardson, Bob Houston, Catherine Doyle-Capitman, Chad Rittenhouse, Jed Wright, Mitch Hartley, Rachel Cliche

Attendees (in person): Nancy McGarigal, Maritza Mallek, Scott Schwenk, Jeff Horan, Kim Lutz, Andy Fisk, Wendi Weber, Kevin McGarigal, Joanna Grand, Ethan Plunkett, Bill Hyatt, Ken Elowe, Pete Murdoch, Eric Sorenson, Georgia Basso, Bill Labich, Patrick Comins, Dave Eisenhauer, Bridget MacDonald, Dave Paulson

Action Items:

- 1. Develop system for coordinating updates to GIS data between UMass DSL Team and North Atlantic LCC staff.
- 2. Several ideas were shared regarding how to improve the information and display of spatial data within the Data Basin environment. For example, LCC staff will add a link to DSL team technical documents to individual data layers and the Connect the Connecticut gallery on data basin.
- 3. Refine high-level messaging points.
- 4. LCC staff will develop additional outreach and training materials related to the project and its tools. This could include a user guide.
- 5. Follow up with folks that are both on the core team and part of the Friends of the Conte organization regarding nature of a leadership role that the Friends could take.
- 6. North Atlantic LCC staff will continue to provide technical and outreach support, including maintaining Data Basin, the Connect the Connecticut website, and serving in a coordinating role.

Webinar Time: 0:00

Wendi Weber: It's nice to see all of you, and thank you for being here today – I know you're all very busy and I appreciate you taking time out of your day.

Nancy McGarigal: We're going to move right to the first topic. Scott?

Scott Schwenk: We've been invited several places to talk about the lessons we've learned from this project. In fact, I'll be traveling to Delaware next week to speak on this topic. Today I'm going to give you a recap of where we've been over the past few months. I'm excited to say we have the completed project and everything uploaded. As of this week we have everything, and you can see it on our publicly-accessible Conservation Planning Atlas. We haven't done a formal rollout yet, but you can all access the design now.

In June we agree to add a second tier of cores and a third level, defined as the "supporting landscape". The second tier of cores is created using the same methodology as the Tier 1 cores. The supporting landscapes include the land surrounding core areas to the nearest roads – these are often forest blocks, but can include agriculture and low intensity development. The intent behind this was to support a more practical approach to conservation that is tied to parcels and road networks. So we are now calling the original core areas Tier 1 cores. Connectors still connect Tier 1 cores. In addition, working with Randy Dettmers from Migratory Birds and Mitch Hartley from the Joint Venture, we developed an alternative strategy for creating core areas for the eastern meadowlark. These new cores comprise about 1.15% of the landscape and capture the top 50% of the "landscape capability" for Eastern Meadowlark. These cores don't grow out the way the others do; they are just a clip from the underlying rasters. Also, connectors don't exist for them. These grassland core areas are also considered Tier 1 cores and part of the fundamental design.

Scott used some maps created in Data basin to review the symbology that will be used for the core areas and connectors.

Data Basin

Webinar Time: 14:30

Renee walked us through accessing the Connect the Connecticut gallery on Data Basin.

Renee Farnsworth: It is now a public gallery, so anyone can access it and you don't have to log in to view the maps. She has started making some maps that pre-select groups of layers. Contact Renee if you find any bugs, have trouble getting things to load, or want to request a map be created with a specific set of layers. You can also create and save your own maps, and share them with the core team group. You do have to be logged in to perform such tasks.

Jeff Horan: The CSVs [comma-delimited files, viewable in access] available for download when you click on an individual core area— do they just have the information for an individual core? But you can also download all the data?

Renee Farnsworth: Yes, if you want the full CSV data for all the cores you need to download the full package.

Kevin McGarigal: Is the zip file that you provide the same as the file on my website?

Renee Farnsworth: No, there are a couple of differences. One is that I created layer files for each layer so that the colors used across all layers match exactly between data basin and the package. We spent a lot of time developing specific colors to demarcate the core area network, so we encourage using this. In addition, we added the metadata for all of the spatial data to the data layer itself, so you don't have to look at a separate file to access the metadata.

Jeff Horan: What about downloading additional layers? If we wanted to download the terrestrial habitat map, it sounds like that is now the modified DSL ecosystem type map. Is that just for the Connecticut or for the full 13 states?

Renee Farnsworth: We now have the DSL ecosystem type map. For the region, we do not have any edits made for this project, so what is available is the regular Ecological Systems Map.

Jeff Horan: Similarly, where is the most updated IEI for the Connecticut and for the whole region?

Renee Farnsworth: The IEI scaled and weighted according to the Connecticut parameters is in the Connect the Connecticut gallery. The region-wide and state-stratified versions of IEI are currently on Data Basin. However, I will update the state-stratified version shortly. They are also available from the DSL website.

Kevin McGarigal: That's a good point that Jeff makes about making sure the versions of the design are consistent across. So the package for this Connecticut project differs on our website. We have more versions of layers like IEI stratified to different scales. These are all phase 2 versions, last updated about 6 months ago. We are in the process of updating all of these layers. We'll have to somehow stay in sync Renee – we'll have to talk about it.

Renee Farnsworth: Any other questions or comments? Please feel free to contact me.

Ken Elowe: Renee, can you tell us what is available to those without a password?

Renee Farnsworth: Everything.

Ken Elowe: Regional and Connecticut River?

Renee Farnsworth: Yes. I do recommend logging in because you can save maps and export maps to a presentation, which is what Scott did to make the slides he used today.

Nancy McGarigal: Thanks Renee. I encourage everyone to check out the design on Data Basin and take advantage of Renee's offer to help. Scott, I am hoping that you can clarify what exactly we mean by Tier 1 – we've got some new lingo here.

Scott Schwenk: Tier 1 cores are the original cores we built as a group. We are also considering the eastern meadowlark cores as Tier 1. We include the option of pulling them out separately since they were created using a separate process.

Kevin McGarigal: Did Renee mention a link to the Landscape Conservation Design technical document? This document describes the whole design process that we went through with graphs and tables, and the appendix of that document are the technical abstracts for all of the products. It isn't written for lay users, but there should be a link to it.

Scott Schwenk: Yes, that is a very helpful tool, and we've got links to that up on Data Basin. It's also on the meeting page for today.

Renee Farnsworth: Currently the text on data basin is a simplified description. Also worth noting that the landscape capability layers for the species data do not have the abstracts for them attached yet, but it will be done soon.

Kevin McGarigal: I want to emphasize that all the data products themselves are documented, but the context for all of them is important to read and that's what they will get from reading the larger technical document. I want to ensure it's easy for people to find that.

Renee Farnsworth: Yes, I can make sure that it's right up front and linked to.

Communications Update

Webinar Time: 37:20

Dave Eisenhauer: Bridget and I are going to give you an overview of outreach and communications work that's been done during the design, and what we'll be working on going forward. We'll cover messaging, our audiences, some of the tools to assist with communicating about the design

Ken Elowe: I'd like to have a conversation about the title – is that final? I want to be sure that people aren't feeling acronym or buzzword overload with respect to the Connecticut River.

Dave Eisenhauer Yes. And I'd like to point out that a lot of this update is based on work by the communications subteam, and most of the main core team hasn't heard this.

Andy Fisk: I think this works for us. It doesn't feel like an extra layer. I'm surprised no one has used it before. Maybe we should trademark it. It works for us.

Kim Lutz: I was surprised that you brought it up. It sounds good to me. I don't think of it as being in competition with anything else. I think it's clear, catchy...alliterative.

Ken Elowe: I just didn't want this to feel like another federal acronym.

Eric Sorenson: I think it's really catchy too. I like it. We do this all the time in VT, come up with names for new products. I like something that at least has a subtitle to say what it is, like "Connecticut River Watershed Landscape Conservation Design."

Dave Eisenhauer: We discussed a lot of that on our team. There was a lot of conversation around the word "design." We felt that if we did a good job explaining what it is, that there wouldn't be too much of an issue.

Patrick Comins: I love it, especially with Eric's caveat. I think a subtitle is important. I also want to say that the product as it stands now, from the last meeting to this. It's great! It's so much improved. I love the tiers. It's looking really awesome.

Key Messages

Dave Eisenhauer: We have more messages. There's a fact sheet for you to take on the table. We have 5 top messages for all audiences.

- 1. Based on collaboration
- 2. Reflects needs of human and natural communities
- 3. Free resource offering tools to inform conservation at multiple scales
- 4. Complements other information and efforts
- 5. Transferable to other geographies.

Kevin McGarigal: The first thing that struck me is the use of humans. We didn't incorporate sociopolitical or economic considerations into the process. I know why you put it there, but I wonder if that sets us up for criticism since we don't address human needs not explicitly associated with biodiversity.

Ken Elowe: One thing I'm wondering in this strategy is the difference between "what is it" and "what is it used for". One of our early aspirations was a compilation and consensus on natural resource needs that then need to be melded with human needs as part of the next step. I think the acceptance of this depends on what people think it is. Maybe a bullet should be about what it is used for.

Dave Eisenhauer: These connections are made in the fact sheet, but maybe we can refine the second bullet point.

Ken Elowe: Change the third bullet to add info about human needs.

Scott Schwenk: I do think the design reflects what people care about in the watershed, even if it's not a socioeconomic analysis.

Jeff Horan: In some ways the human needs compete with the natural communities' needs. We also based this on a design that addresses the needs of natural communities in the face of human development and climate change.

Patrick Comins: Transferable to other geographies seems strong. I think it lays the foundation, or something like that, but it's not as simple.

Kevin McGarigal: Or you could say the process was transferable.

Bill Labich: The people who might most use this are implementers. Within the context of other processes like this, in which collaborative partnerships get together to develop a strategic conservation plan. So, is this a public map or a private map? If private, we can focus on what the implementers need and target it to them. If it's a public map, then it's more about storytelling and branding. You're combining both, so it's challenging. To jump on what Ken was saying – "a free resource offering tools" – just throwing that out there, we already know that it's not enough to offer a free resource. Others are going to be challenged in how to use it. How to use it and know if they are using it correctly, am I asking the right questions, am I using the right dataset? Yeah we're offering a free resource, but do we want to say anything beyond that? Maybe you're not ready to commit to more.

Dave Eisenhauer: Yes, it's a bit of a balancing act. You want to give people a sense of its availability and how it might be used. We don't want to imply it's for the general public to use necessarily. I think the language in the fact sheet is more explicit and direct. I agree that it's important for these messages reflect this.

Ken Elowe: I would like to pick up on what Bill said. Public reaction to maps is generally very negative to start with. So we want to get them to look at it from the right perspective. So we need to lead with what we hope this will do. The "what it is" is not as important to the public.

Dave Eisenhauer: Right, and I think that goes to the goals of what the outreach strategy are. In some cases, this might be a simplification.

Ken Elowe: What you've done is incredibly useful here. If someone only has a 15 second exposure to this, what's the impression we want them to leave with.

Eric Sorenson: What level of detail is available when someone goes on Data Basin and looks at a Tier 1 or Tier 2 core? Is there anything more than saying what it is? I'm asking because I think it goes to Bill's question about how to use this. I think we need for every core and connector, statements that go with them: a definition of what it is, the values that led to its classification, and what conservation and management actions should be taken for that core.

Kevin McGarigal: I think what Renee showed us quickly is that you can get a suite of metrics when you click on a core. So there is a quantitative summary available. Then there is also a detailed table that you can download, which gives the complete ecosystems and species composition, and the corresponding metrics that say why that core was created.

Eric Sorenson: I think that detail from your document is critical. I think there needs to be an in-between level of detail; a short 1-2 sentence description of what it means to be a core, what you do to manage a core, etc. Not a specific core, but generally. What values does a core provide? And then, how do you manage a core in order to maintain a value of the core?

Kevin McGarigal: The technical document does include a broader description of what it means to be a core and why a core was selected. Management is only weakly and loosely included. You're right though, it's not in the spatial data anywhere, and I don't know how you'd do that.

Pete Murdoch: Ken you were hitting on this idea that maps are initially viewed negatively. My sense of that is that there is a community of people that will ask "How is this thing you created going to limit what I want to do?" So the tool could be seen as way to visualize what they want to do and put it in a context where they aren't damaging other things. So it could be a tool for them too. They want their road and they want their bird. But this tool could help them find a way to accommodate both desires. This could be a tool for sensible development, for sensible maintenance of the economy of the CT River basin. Kevin said that management isn't in here yet, but it seems that management can't be in here yet until we start playing scenario games. What happens if we wipe out some core areas? What happens if we fragment something? Does it cost me the entire population, or only 3%, in which case maybe I can

put that road in. I think the skeptics will begin to see this as a way to try and get what they want. They know a lot of people will be upset if they propose a development somewhere ecologically important. So another bullet could be addressing this idea.

Kim Lutz: I was going to go back to what Ken said. When I saw you put the bullets up, I immediately thought these were the talking points for a spokesperson with the press. They strike me as good for that level. We want to speak positively. What we're talking about now seems like a different set of talking points for our partners. Even the fact sheet seems like not quite enough for people who would actually use the tool. So what are these talking points for? Is there another level of communication?

Dave Eisenhauer: I'm so glad you said that. Yes. We were thinking about how do you begin to talk about this to the totally uninitiated. That's who these 5 points are targeted toward. Within the partnership, we'd like to have much more detailed talking points. At the same time we want the people on the core team to feel confident that they can talk to the lay person. But in general I'd say this is oriented more as a way to talk to the public.

Jeff Horan: I'm sure you have slides after this one. I think you have really captured everything, but I keep looking at the third bullet. I think the negative reaction is that they see their property on a map then they want to know if it'll negatively impact their property values. Maybe it's a tool for better understanding the importance of natural communities, rather than informing conservation, which could be interpreted as code for something else, like a land grab. I would also reverse the order of the scales, because this is much more of a design for the regional scale than the local. Maybe folks disagree with me on that. We want this used at the local scale. Maybe that needs a discussion.

Kim Lutz: I just thought of one thing that might add to Jeff's comment. We often try to frame things as "this will allow you to make your own decisions". So we could either change that bullet or another one that talks about giving individuals the ability to chart their own future.

Kevin McGarigal: I think either order works. I'm waffling on which is better, since we model from the pixel up and from the region down.

Jeff Horan: I think the next step is taking it more local, and having the scenarios that allow local land trusts or county commissioners to really engage and see how this impacts them. I think we've given them the larger context and are providing an invitation to them to look at the design.

Bill Labich: So this is not iPhone 7. This is not going to capture a huge following of people. And in fact in some cases I think if we went for that it would bite us. So what are the outcomes we want? I don't think we expect that everyone is going to turn to this in every conservation commission instead of the maps they have on the wall. Not right away, at least. If some people use it, have success with it, talk about it, and it'll grow organically. They'll need a little instruction and advice. So I think we should put something out there that's as innocuous as possible. I'm just throwing that out there.

Target Audiences

Dave Eisenhauer: I'm going to go to the next slide. We're not targeting a big media announcement. We want to announce it broadly but the best time to do a big media push will be after we have some success/implementation stories. So we have Tier One and Tier Two Audiences. Within these there will be a list of users, which need to be defined. These are audiences we'd target for an initial rollout of the information.

Tier 1 audiences are internal: core team organizations, FWS programs/offices, DOI, partners in the watershed not on the core team, and the LCC network.

Tier 2 audiences are general: Congress, media, public

Andrew Milliken: When you say LCC network, do you mean the NALCC network, or the network of national LCCs?

Dave Eisenhauer: I mean the first one.

Andrew Milliken: I would clarify that. I think the national LCC network would be a good Tier Two audience.

Bill Labich: I have two examples where I communicate about the LCD in terms of bird conservation. I talk about the landscape capability dataset for wood thrush. Next week in Maine at the Acadia Science Symposium I'll be talking about the LCD process and how we are using it to address climate change. So there are audiences that the core team organizations can connect with that aren't local. I think there will be growing interest by others outside the watershed too.

Dave Eisenhauer: So I look at you as an audience, and we want to provide you tools to be able to carry the message forward.

Jeff Horan: I would bring in the public a bit by saying partners and communities in the watershed. You might want to call it primary and secondary audiences just to avoid confusion with Tier 1 and Tier 2 cores.

Approaches

Bridget Macdonald: I'm going to go through a few products here. I want to preface that by saying that our overall approach is that we want to communicate consistent messages, use consistent imagery, focus on the partnership aspect of this, focus on applicability, and above all tell the story of this project. Not so much the story of the past year and a half, but the story of how this can impact conservation in this region. Hopefully that's a story that people see not as limiting, but as connecting partners and projects and conservation efforts throughout the region. Our new website provides an effective way to provide that approach. In keeping with the rest of the pilot, the website is a little behind schedule. This picture we got from a photographer through the CTR watershed council. We want this website to be a storefront for the project to introduce people to it through imagery, stories, and partners. We also want it to be an introduction to all the products. One of the other things we'll feature are highlights on certain partners and their organizations. I've been speaking with several of you. Hopefully in the future this will

morph into a storytelling platform where we provide updates and info on the way the design is being used. We'll send that website out to all of you to look at it before we publicly launch it. We plan on this website being the focus of our communications strategy into the future.

Bill Labich: With the website, is this a long-term strategy?

Bridget Macdonald: We have pre-paid for three years, and yes the plan is for this to be maintained over the long-term. We didn't want it to have a particular owner. We want people to see it as a collaborative, independent thing not owned by one organization or agency. The website will also have info for you to use and distribute, and include the fact sheet, a set of slides that other people can use, and a report aimed at more of the land trust level that provides an executive summary of the entire project.

Scott gave an overview of the planned executive summary document/report, which is in progress.

Mitch Hartley: The trained conservation professionals could refer to Kevin's longer document. I think everything that is up on the outline screen should be summarized in 2-3 pages. I think more than something 4 pages long, those people should refer to Kevin's document.

Bill Labich: I'm in the process of developing a how-to guide for conservation. I've learned that if something is 2 pages that can help people get started. I think a how-to guide might be useful. Then something longer is fine, if people can flip around within it.

Kim Lutz: This would require another step, but most of us in the room are at the level where we're going to go to Kevin's document. I wonder if there's a small group we could go to, like the Friends of Conte, and ask what they would like to see. I'm confident that an in-between is necessary, but I think we need to go to the intended user.

Mitch Hartley: I think a user guide is a compelling idea.

Bill Labich: Yes, examples of how to use it specifically are very helpful.

Bridget Macdonald: Moving on, we plan to have a public announcement in mid to late October to the Tier Two audiences.

Tracking Publicity

Dave Eisenhauer: So far, we've been published in FWS news, mentioned at the Conte CCP public meetings, used as a case study in a journal article on LCD, and visits to field offices and state agencies. We need to continue conversations with everyone on the core team to track how the LCD is being used, how it's being shared with partners, and what kinds of decisions are being made or actions taken because the LCD was used and available. We want the website to be the home for this information. We can also help make connections for any partners looking to collaborate.

Bill Labich: When I was watching some of the messaging, I was thinking about brands and about long-term strategies that involve a particular region and engaging people. I know there's the CTRW council, and I know there's Friends of the Conte, and I know there's a CCP. I know there's various infrastructure

in place and investments in place. I know we're going to move into an implementation discussion, but how we communicate about this thing versus other things is really important in that we respect the social infrastructure that's already present. Efforts have been put into building that over time. I think we need to discuss it openly, because if we don't then at the next Friends of the Conte meeting we'll talk about it, and wish we'd talked about it in this meeting.

Dave Eisenhauer: And I think communication is an ongoing part of implementation.

Nancy McGarigal: We're going to take a 30 minute break. Those of you on the phone, please return at 12:30.

Data Basin Redux

Webinar Time: 1:46:15

Nancy McGarigal: Some questions came up during the lunch break about Data Basin.

Renee Farnsworth: One question was about getting more information on the core-connector network. One thing that I glossed over is that the first page you go to when you're looking at a dataset is what I call the preview page. On the right-hand side is a description section. It includes the product abstract from Kevin's longer document for each spatial data. The first paragraph provides the context for the product and links back to the gallery of all the products. Then there is a link to the full package. We could also add a link to Kevin's guidance document here.

Kevin McGarigal: This doesn't include the uses and limitations or the metadata from the product page.

Renee Farnsworth: Correct. Right now, in order to get that, you would need to go to the main page for the gallery and follow the link under the gallery description to the guidance document. If we think it'd be best, we can add links to it other places.

Kevin McGarigal: I think it would be best to have the full technical document, and not just the appendix. Also, here you have the description, but I think it would be nice to get the full description, but not have to go to the full description. For example, to a PDF that only includes the part of the full documentation pertinent to the spatial data product of concern.

Eric Sorenson: The other thing is that when you zoom into a core and click on one, something would pop up and tell you generic information about all cores, and that could say how you manage a core and what its definition is ecologically. Not so data-oriented, but more application-oriented.

Scott Schwenk: Is it possible to make links like that, or would Renee have to make a bunch of PDFs?

Kevin McGarigal: Yeah, I can probably do this. The different elements represented here are the components of the core area network. So there is a description more or less of those in the general description of the layer, but it probably doesn't accomplish what Eric is after. So I'll write up a relatively concise (less than 1 page) description of those 5 elements of the core area network, and then we could add that to Data Basin.

Renee Farnsworth: I could add that to the data table the same as the CSVs. Currently that'd be the only way to do that in Data Basin.

Eric Sorenson: It would need to be clearly a generic description of all cores.

Renee Farnsworth: We would need to do that through labeling, but putting it in the attribute table is our only option to attach a document to a layer. I can talk to them and see if there is something that could be developed, but this is our current option.

Andy Fisk: Perhaps what Eric is proposing would work well in the Connect the Connecticut website? And people could hover over a core and be presented with that info at the basic level?

---: And this would be a very simple introduction for someone who isn't familiar with this design, right?

Eric Sorenson: I would ask Bill what level is a good place to start people out? Where will they want to see this information? How will they know how to handle a given core? How does this tell them what to do?

Bill Labich: In the species url table, if you click on it you get an excel table. It gives you a lot of info. Just to Eric's point, what I mentioned earlier is that there is a Regional Conservation Partnership in Fairfield County, CT. People are excited about wood thrush and so we looked at the landscape capability map, and it had some small cores related to wood thrush. That kind of thing is fine, but the table that you get now is hard to interpret. So somewhere we have to explain what we show people.

Kevin McGarigal: So that stuff is explained in the documents, both the technical document and in the technical abstract. It tells you what each attribute is. But it's not easily accessible here.

Bill Labich: So part of the implementation/how-to guide would explain to someone the recommended information they may want to read before they use it, if they are interested in understanding the value of Species 1, 2, etc. We recommend that you read this document. If you read it then you'll understand the names of the variables, the value of these cores, etc.

Kevin McGarigal: From my perspective, no one should look at one of these layers without reading the abstract. To me the steps are that if you want to understand what a layer is and understand it, then you should read the abstract. If you want to understand the context in which it fits, then you need to read the full technical document. But you can't go in and start clicking and expect to understand it. I don't know how you make that information more accessible.

Renee Farnsworth: I'm not sure how to deal with the CSVs, but I did remember that the Details/Data Layers tab may be helpful. The Data Layers tab gives more details about what's in that map service, but it is possible for me or someone else to write out a longer description of the attribute field names.

Bill Labich: I think what Kevin said before is really instructive – before you use the tools, when you're ready to go beyond looking at them, they have to understand and read the metadata on it. So that needs to be up front. Even I need to sit down and read all of this stuff.

Renee Farnsworth: Yes, we can do more to facilitate people finding the documentation that they need to read. The catch is that we're not sure exactly what page people will land on, so we want to have the critical information redundant across multiple pages.

Kevin McGarigal: I recommend adding the full content of the abstract instead of just the description.

Eric Sorenson: I read a lot of the full documentation. It's excellent but it's long. It may be treated like the manual to a blender or a chainsaw. So it'll be easy to set aside and we'll have to be aggressive. But to be honest, I think most people won't read it.

Kevin McGarigal: I'm also working on descriptions associated with the regional DSL data products. But they're not ready now.

Implementation Discussion

Part 1 - Partners' Stories

Webinar Start time: 2:12:30

Georgia Basso: There are few ways to use the tool within the Long Island Sound estuary program. I will talk about 3. There are 33 stewardship sites that ring the sound, and include all refuges in the area. Other lands are selected based on ecological significance. The stewardship team is always talking about how to expand and connect the network. So the Connect the Connecticut tools are directly applicable to this. A colleague of mine with the Connecticut DEEP wanted to develop a tool very similar to this one, so I know he's interested. Secondly, within the Urban Wildlife Refuge partnership in New Haven we're always thinking about where to put new sites or connect existing sites, and where to do restoration. This tool can serve to highlight and identify the most valuable lands in urban areas is a key use of this tool in that area. The Connect the Connecticut tool is the most sophisticated option available. The last area is the Long Island Future fund goes to projects around the sound. About \$1.2 million per year is allocated to different projects. 20 people decide on the projects, which include dam removal and terrestrial restoration. Tools like those in the Connect the Connecticut have been used to justify why or why not a project should be funded. This is used by both the applicants and reviewers. Being able to show ecological linkages in a project really emphasizes the value of doing conservation work in a particular area.

Rachel Cliche: First, I'll give a little background. The Nulhegan Basin division has 40+ miles of gravel roads that were logging roads in the past. In 2010 Trout Unlimited and VT Fish & Wildlife assessed nursery streams in the Nulhegan River Watershed for fish. This was part of a much larger initiative called the Upper Connecticut River Home Initiative (work being done in NH as well). They looked at culverts, instream habitat, and riparian health. This info aided in prioritizing habitat enhancement and fish passage projects in the Nulhegan watershed. Since then, the refuge has replaced 3 culverts and plan to replace more. TU and VTF&W have restored 3 miles of stream within the Nulhegan Basin Division. They are also working in the whole watershed where other work has been done. On October 15 we are hosting a meeting with a variety of partners. The focus of the meeting is to discuss how the Connect the

Connecticut tools can be used to complement or add to the aquatic connectivity efforts that are occurring in the whole Nulhegan watershed. Because there's so much work going on in the basin, this would potentially provide ways to validate the model or validate the work already occurring in the watershed. Also, the regional biology team has been discussing using the Connect the Connecticut tools to inform refuge habitat management plans, which are required step-down plans from CCPs that provide detailed management for refuge lands. We will be testing the tools to see how they might inform the HMP process. The first one to come out will be the Nulhegan Basin Division.

Patrick Comins: I plan to use the Connect the Connecticut products in a variety of way. First and foremost Audubon CT administers a program for the Army Corps of Engineers. Projects pay into a fund to pay for mitigation to wetlands. We help decide where and how to spend that funding to create or improve wetlands in other places. We plan to use the Connect the Connecticut tools as a direct prioritization tool. Where the data are available, project location in a core area or connector would be worth more points. Secondly, as opportunities arise for land protection, this could be something that could be added to grant applications or an application for a forest legacy program. I am often approached by land trusts who want to put in an application to try and protect a parcel. They want to and need to define the ecological value of that parcel. We can use specific data layers, like the wood thrush landscape capability layer, to say that an area is good for a specific species. Also being able to say that something is in Tier 1 or a connector will help make the case. The third way I'll use the products are to refine focal areas that I may have. I probably won't eliminate a focal area that I've identified as important, but I do envision taking a look at our focal area and Important Area boundaries, and consider expanding our boundaries to include, for example, and adjacent Tier 1 core.

Andrew Fisk: The CT River Watershed Council staff are just starting to engage with the data. It will largely help with our work on connectivity in VT and NH, especially connectivity (e.g. culvert) projects. It will be an additional tool to evaluate project locations. A lot of where we go for funding point to existing datasets. For example, the Mitigation Enhancement Fund has funded a number of studies that have prioritized connectivity projects. We've been directed to use already-established prioritizations, so we plan to compare those to the Connect the Connecticut data layers, and engage with grantmaking boards to talk about using the Connect the Connecticut LCD. The Council is part of the Long Island Sound Regional Conservation Partnership program. We'll be using this dataset to guide work in deployment by the watershed council of resiliency projects for aquatic areas. That work is being guided by further refinement of the Long Island Sound TMDL for the upstream states. Current aquatic quality data are being collected, and the relative state obligations for the TMDL are being created. The Long Island Sound Regional Conservation Partnership program is funding a project to track environmental data along with the ambient water quality. This project will allow us to see what other ancillary benefits come from doing restoration and improving water quality.

Nancy McGarigal: Andy French could not be here, but I have some comments from him for you. Most of you know we derived potential refuge acquisition areas prior to finalizing the LCD, but we're interested in how well they overlap. There is actually about 80% overlap between our identified areas and the Tier 1 cores and connectors. The public is proposing to tweak some lines or create new areas, and we'll be looking to the design as we consider how to incorporate those comments. We also have a private lands

program, and want to use some of the restoration tools to help guide that work. Usually we have more willing sellers than money for, so we intend to use the design to help prioritize parcels for purchase and restoration.

Bill Labich: I am representing Highstead and RCPs in New England. I think there are a lot of applications. One strategy is to use the species models. Many partnerships are multi-state, and each state has their own data, so having seamless datasets is an exciting resource for these partnerships. A group of NGOs and a couple of Universities got together to apply for funding to do work related to the Health Forests Reserve Program. Through this process we're proposing to use that funding as a 25% match fund to encourage the protection of land that has high biodiversity values, particularly those indicated by the representative species landscape capability data. This is a program that represents some innovation; at the same time we're asking NRCS to have some flexibility and take a multi-partner approach to biodiversity conservation. We have a pot of \$2.8 million and want to spread it out. We also want to look at candidate and listed species, which is why I'm very interested in maintaining and strengthening our relationship with US FWS.

Dave Paulson: We plan to use this to complement existing conservation toolkit like BioMap. We also have structured decision making processes, our land committee (which purchases the land), our ecological restoration specialists and our habitat managers, and couple that with our finer scale data will hopefully drive and plan conservation in the Commonwealth. This particular toolkit will be useful when we lack fine-scale data. We hope there is a phase 2 in this that brings digital partnerships and funding. The ultimate goal here is to have on the ground actual conservation. I think we have a good sense of where the priorities are in the CTR valley. One thing I hope to do more of are multi-state and multi-partner restoration projects. We have one project on the MA-CT border that is a huge grassland restoration. I'm looking forward to the outreach tools. I've briefed my administrators and they are excited about it, and I think once we get the website up and running that will help us share this information with more partners.

Andrew Milliken: I want to also talk about how this is starting to be looked at and used beyond the CTR watershed. I'll mention one effort that some may know about, which is the Northeast state Regional Conservation Opportunity Area program. This round of State Wildlife Action Plans just came in. There is a group of state partners and NGOs working to consider regional scale information and find ways to incorporate that in each individual state's action plan. They also developed core areas, which is heavily inspired by the work done by this core team. In addition to that, they are looking at very specific ways to look at RSGCN. I just want to point out that this work is being used at the regional scale and is catching attention at the national scale.

Part 2 – Next Steps

Webinar Start time: 2:39:35

Andrew Milliken: With this part of the agenda what we want to talk about is how to move forward as a core team, a group of partners. How do we want to maintain our connections? FWS isn't going

anywhere. The North Atlantic LCC isn't going anywhere. But I think it will be most effective if this group or a subset of this group helps to drive implementation forward, rather than it being an FWS initiative. So we intend to maintain and provide data management, communications, information and outreach, the LCC workspace if desired. Beyond that we wanted to get a sense of how people want to move forward. One of the reasons we started an LCD in this watershed was because of the strength of the partners. Now, how do all these partners help to carry this forward? Maybe we can start with the folks involved in Friends of the Conte.

Kim Lutz: This idea came from Marvin, who's out of town right now. We think it would be great to have a period workshop (annual, every 6 months, every 3 months) hosted by the Friends. One of the workshops could focus on the products. And a service the Friends could provide is to talk about the products that are out there. One of the things we discussed on the communications subcommittee was the need to address the other modeling approaches out there and put all of that info together in one place. So the CTR LCD would be one of these. I would not that something like that would be good to include in a user guide. With the Friends' strategic plan in flux, I can tell you I will advocate for this to the subgroup that does planning workshops. The other piece of that is the reporting back. One of the things I have always envisioned is that you do your first iteration – and this is an amazing first iteration – but now we'll all use it and see things it's useful for or changes we might want made. We should have a standard way to report back. We could reconvene a while from now – perhaps a year or 18 months, where we can meet and discuss which ideas should go back into version 2.0.

Bill Labich: Originally I was thinking the scale for this implementation group would be at the watershed, but the question is does the North Atlantic LCC expect to have other partners using this same model and same datasets and working with it, so that your universe of partners engaged is larger than even the watershed. On that scale, it would make sense to bring people together on a regular basis to wrestle with implementation. I myself would like something like that; I think there are a lot of ways to implement these tools. I'm not as aware of other models. I would like some kind of vehicle that would allow me to check back in on a regular basis. Originally I was thinking Friends of the Conte could contain or wholly support it, but now I'm not sure about that, what is the best vehicle. I think of it as which organization is the host partner. For RCPs, the host partner provides coordination, planning, fiscal coordination, and is the entity that pledges to keep it going. I think the North Atlantic LCC would be better suited than the Friends if there is going to be the potential for collaboration outside of the watershed.

Pete Murdoch: I'm a little uncertain. What happens to the brain trust that built this model? I'm a little concerned. Is there a "there" there to send lessons to and build Version 2.0? This goes back to an issue I've raised over the last few years, that I don't think we should be building decision support tools when what we really need are decision support relationship. The tools, if they are just passed to another group that isn't trained in the phenomenal number of nuances in this model, then they are going to be ineffectively used. I'm looking at IOS, which has one of the best integrated datasets. One of the reasons it works so well is that they have a technical support team that helps people use their model. That's along the lines of a cooperative extension agent. I'm worried about this model being used without Kevin's team, frankly. Ecosystems are complex. I don't apologize for that. To dumb them down to make

a decision without the team there to let you know when you can make certain assumptions about a given number is a concern. That worries me about any decision support tool. If it's a handoff, then I think it's a mistake. If it's a partnership, then I think that's good. Management has many subtleties to it that I think science sometimes doesn't understand.

Andrew Milliken: Maybe I should have framed this discussion better. The NALCC fully intends to provide the technical support to follow up the development of science to deliver it. We don't think of it as handoff; we think of it as an ongoing technical support relationship that does involve some of the PIs that developed the information. I agree with you. Over the last six months we've had the chance to think about how to deliver this science. We've done some workshops and now know it takes a full day to provide an introduction to the products. There's another piece to this though. As partners begin to deliver this within the watershed, how do we support information sharing about implementation strategies and ideas for improvement?

Patrick Comins: I think Friends of Conte would like to use this as a guide for implementation. Planning is great but we're really interested protecting acres on the ground.

Scott Schwenk: Why wouldn't the Friends group be the appropriate host, Bill?

Bill Labich: What I've learned is that the capacity of the organization working as the host partner is key to the success of a collaboration. Friends of the Conte is a pretty diverse group that uses a lot of different kinds of models, so there may be less interest in them having a focus on this LCD. To get more state agency involvement, for example, is going to take more power and focus. It doesn't mean that Friends of the Conte couldn't over time be that host, or the main subteam, but I think in the beginning I don't see that group being the home of the implementation team of the LCD. If you look at all the members, they're not seeped in science. Our larger stakeholder group would not have enjoyed going through this intense, data-driven, statistically-focused process. We need people who want to think about this stuff.

Ken Elowe: This is a really interesting discussion because it's getting into that idea that you can produce a plan, and it's only 2-3% of conservation – the rest is implementation. That's what I'm struggling with, is the role of the next group. As Andrew said, the LCC is here to provide technical capacity to whatever group needs it. No matter what kind of organization you are, the LCC is there to be additional capacity that individual organizations don't have. The point of this project was to create a design that none of us could have produced by ourselves. But this gets at, what are the hopes and dreams of the Friends group, and of other partners, in terms of conservation in the watershed. What do we hope to implement? There will always be some people who will provide feedback on the usefulness of the technical tools that this process has provided. One thing that is critical is that this model needs a home. We need a home for implementation momentum. We need to create a home where this kind of information will be disseminated, challenged, used for conservation, and feedback is provided. We need people to try this out on the ground over time. If we all go our separate ways – let me back up – why does the Conte refuge exist? Its mission is to implement landscape conservation. Friends of the Conte are the groups interested in that outcome. So you already have two entities that have a stated purpose of looking at

the state of the watershed. What we've done here is create a tool to augment existing information and help these groups make implementation decisions. What we're looking for is a home to share experiences. It doesn't necessarily need to be as technical as this group was. Maybe a few of us will provide feedback. My hope is that the work that was done by the core team will be able to be transferred to the region. I hope we can provide this kind of information region-wide as a starting point for conservation in other geographies. I'm envisioning some separation between the technical aspect and the implementation.

Jeff Horan: Ken, I would ask you then, do you see – the beauty of a conservation design should be that it's something we all want to get behind. But as you point out, that means everyone needs a role. If you use a military analogy, then you want to attack on multiple flanks. How do we decide among ourselves what our particular organizations are most interested in and most capable of moving forward? Is the \$2.8 million pot that Bill talked about appropriate for doling out resources. How do we begin to deliver the resources to try to pull it together? It's still an "ad-hocracy". It's only going to be the folks that really want to play that come to play. But how do we make that happen?

Ken Elowe: That's the reason the Conte refuge exists, that's the reason the Friends exist. You're looking for opportunities, opportunities for leverage, and opportunities for conservation. The FWS is already starting to use this. Rachel talked about how it will be used to inform the connectivity projects going on in the Nulhegan Division. And look at how it will augment how they prioritize road-stream crossing work already. So that's already going to happen, and that's an example of what you're talking about Jeff. And the fisheries program here in the region has committed for the next two years that these tools will be the primary criteria that they put in the mix for fish passage projects funded by FWS. They want to use strategic information to the best ability they have. There are other examples that are happening. This is about how you put together conservation efforts. I think the idea we're struggling with is whether we need a different structure, or some commitment to a structure, or that we're going to get together periodically and see how's it going. We don't have to get too technically structured here. We just have to say, we've got some built coalitions already. How do you want to continue to work together and bounce around the use of this tool? The Conte refuge, if you folks would like them to, they have a role too. So it's up to you folks, to decide how you want to continue. You're already organized. How do you want to continue?

Nancy McGarigal: Kim, can you elaborate what the idea is that Marvin had.

Kim Lutz: Some context is that the Friends of Conte has historically been primarily focused on land acquisition, but we are expanding our focus and now there are a lot of partners and work centered around recreation and environmental education. So that's background. One of our objectives is to be an educational resource for people in the region. So we could have workshops on dam removal, on modeling tools, etc. That was one idea. Another idea would be quarterly objectives. I think what Marvin was thinking is that we could have a session on modeling tools that could be used by the membership. The second part of what I had to say is related to how do we solicit and organize feedback from product users.

Dave Eisenhauer: I like the idea of an annual meeting or call to share what is happening. It's helpful to me to have success stories that I can share with people I work with. That's what we need to sell the tool.

Andrew Milliken: We can think more about how to allow people to give feedback. Maybe Friends of Conte is well situated to distribute information to all the partners. In our experience so far we have been most effective when we get people to set aside a full day, bring their laptops, and attend an intensive workshop on the products and how to use them.

Patrick Comins: Bill and I were just talking about the Friends serving as an implementation home. Maybe the stewardship committee could function in this way. We have many of the key players in that committee from the core team. And then it wouldn't distract from the other goals of the group as a whole. It could also be useful to bring in the advocacy committee.

Dave Eisenhauer: Our long-term goal is to build a network of communicators. We have a platform with a website, but we need help to know where the actions are happening, where the stories are taking place, before we can write a story or highlight a project. Bridget and I could convene/help to organize such a group.

Bridget Macdonald: I see it as part of my job to regularly reach out to all of you on some kind of regular schedule, see if anything is happening, see if you need support. Sometimes that's easier than asking people to remember to contact us when they are working on a project.

Andrew Milliken: To summarize. We can help to continue to provide the platforms, the technical support, the training. But we need your networks of networks to continue sharing information, distributing it more widely.

Andrew Fisk: Dave I like what you said. I think it's important to think about the watershed, not just the products. I think what we're all saying is that there's a unique opportunity: the LCD is here, the CCP is here. We don't want to create something new; we just need to figure out how to plug in. Clearly it makes sense for the Friends to be a lead organization. We're with ya!

Bill Labich: To make an analogy to the story of Stone Soup, we're looking for a cauldron. I don't know if the LCC was hoping that the Friends group would take this over. What exactly are the core team leaders looking for? What exactly are the roles and responsibilities of the group that would serve as the cauldron?

Kim Lutz: I have a question about capacity. I think the workshop you describe is on the right track. But what's the capacity of the LCC if we found 50 people who wanted an intensive training?

Andrew Milliken: That's exactly what the LCC is focused on in terms of Science Delivery. Having you cohost and help convene is exactly what we're looking for. I'm sure FWS would be happy to host.

Patrick Comins: I also think FWS has to be key in any implementation. Of course there are funding constraints to consider. I'm hoping that FWS would lead the charge in implementation of this plan as

well. Obviously other partners would have to roll up our sleeves to envision an implementation of this plan as well.

Andrew Milliken: I wish Ken was in here, because he's taking that very seriously, and working with all FWS programs to make sure they are aware of the products from this effort and will be using them. The FWS is definitely intending to lead by example in that.

Patrick Comins: I hope it attracts federal resources. It would be awful if it turned out that there wasn't federal funding for implementation.

Andrew Milliken: I hope we can build momentum. I spent time with NFWF recently and they are very interested in what we're doing here – just as an example. I think that's part of the momentum-building. Making this RCPP thing go really well potentially leads to future phases. I think that's part of it. It's not really a part of what LCCs were designed to do, but it's the mission of the LCC partners at the table.

Nancy McGarigal: We understand that the Friends of Conte is actively in the middle of restructuring their Strategic Plan.

Kim Lutz: Many things are in flux with Friends of Conte. The only thing that's set is our vision and our four goals. But it's all good. We'll see what the structure is that will support what we talked about today, so we don't know yet the exact committees, chairs, etc.

Nancy McGarigal: So another action item is to follow up with Conte in a month or so to see what the structure looks like.

Andrew Milliken: Another question is, do we still have a core group? I hope so, because I think we need to share a lot more. I think we need to have formal and informal communication that needs to happen.

Bill Labich: I like the idea of the core team continuing with a focus on implementation. For someone like myself who doesn't have strong working relationships with government agency/fish and wildlife people, having the core team enables relationships to form. So having a core team focused on implementation can really help. An annual phone call won't do it.

Andrew Milliken: One more thing. I wanted to thank you all so much. February 2014 we were at the Discovery Center talking about goals. I want to extend my appreciation to the UMass team. We asked for more than anticipated. I also want to thank the LCC staff team. This is a small part of their jobs. I want to thank all of you for putting in a huge amount of time and effort, again, more than anticipated. I'm really excited that we're going to hang together and work together. And lastly I want to thank Nancy, and we're so grateful that she stepped up to facilitate this.

Nancy McGarigal: Thanks Andrew and thanks to everyone for their participation during this process. It has been very rewarding and in today's discussion I find it very validating about our process to hear that everyone wants to stay together.

I just wanted to close with mention that myself and the Conte Refuge staff completed the 13 public information meetings on the Conte Refuge draft comprehensive conservation plan (CCP). Attendance ranged from 75 people in Keene, NH to about 5 people in Beckett, MA. Lots of interesting discussion about the proposed refuge expansion. Hearings on the draft plan are scheduled for early November. The Conte Refuge website is the best place to stay tuned on where we are in the process.