

Upper Susquehanna Conservation Alliance

September 29, 2015

Meeting Highlights

Objectives of the meeting:

1. To update the USCA members on the progress each workgroup has made since the last meeting in January 2015.
2. To provide opportunities to work in your respective groups and discuss priorities.
3. To identify priority projects, partners, funding, and outreach needs for 2016 and 2017.
4. Report out to the group what your priorities will be for the upcoming year, the partners you identified, and what you can contribute.

Welcome, Introductions, and Updates – David Stilwell:

Project Proposals for the U.S. Fish and Wildlife Service (FWS) – In 2014, the FWS provided \$49K to the USCA members to be used for seed money for projects. This year (2015), the FWS will be able to provide \$50K to the USCA group for the upcoming year (2016). The funding is intended to provide seed money for projects. We look for other agencies, organizations, and non-governmental groups to provide a match. The projects should focus on conservation strategies and project implementation.

The USCA model is a unique example that is being noticed outside the Susquehanna watershed. For example, people from Pennsylvania and Maryland are in attendance today and part of the USCA organization. Please encourage others to join the USCA and help us out.

Presentations:

Supporting Tools and Databases: TNC Climate Adaptation Toolkit presented by Kristin France and Landscape Conservation Cooperatives presented by Steve Fuller, FWS. Kristin France – The Natural Resource Navigator software will facilitate climate-smart decision-making for management of terrestrial and freshwater natural resources by: (1) making spatial data accessible; (2) identifying projects and locations; and (3) delivering resources for implementing adaptation. This tool allows you to develop a basic conservation strategy for an area in need of management. This tool is funded by New York State Energy Research and Development Agency (NYSERDA). The software is proposed to be released in January. Training workshops will be available. TNC is interested in obtaining feedback on the use of the tool.

The data will include a natural resource layer (i.e., forests, streams, and wetlands) and comprised of four different categories: (1) current conditions; (2) future land use; (3) information on climate change exposure (i.e., precipitation, temperature); and (4) species sensitivity to climate change.

Questions to Kristin from the members included the following:

1. Is there an interactive operability with other platforms?
Response: The code is open source so that people can build on it.
2. In regards to green infrastructure (hubs and corridors), are the layers provided?
Response: Yes. Linkages include large contiguous areas of forests. Some wetlands layers are available. Kristin wants to coordinate with more wetland scientists in the development of Version 2.
3. Will the tool provide recommendations on how to make wetlands more sustainable?
Response: Yes, in the tactics toolbox. See guidance documents.
4. Datasets have been collected for 80 different wetland sites including soil temperatures and hydrologic gradients that might be potentially useful in the database. What about reconciling data resolution problems?
Response: The program handles data resolution problems. You are able to see the different grid sizes in the data. See guidance documents.

Kristin gave an example of an application that shows how “slider scales” can adjust priorities and variables to see how it will look on the overall landscape. Sliders could be added in Version 2 to allow you to select different riparian buffer widths.

Summary: TNC is finishing the web mapper and the guidance document. Training workshops will be made available. TNC is developing a “train-the-trainer” model; they are looking for people to take it back to their organizations and use as a demo.

Presentation: How Landscape Conservation Cooperative's (LCC) Support Strategic Conservation – Steve Fuller (FWS).

LCC's are partnerships funded by Department of the Interior (DOI) to accomplish landscape-scale conservation. They are set up by geographic units (i.e., North Atlantic LCC, Appalachian LCC). Partners include states, federal agencies, non-governmental organizations (NGO's), and tribes who work together to develop and implement conservation strategies.

Website: <http://northatlanticlcc.org/>

Conservation planning atlas: <http://nalcc.databasin.org/>

Ecological Watersheds – watershed planning tool <http://ecosheds.org/home>

The idea of Strategic Conservation is to have the whole team supporting this cooperative system (maintains longevity). There are close to 200 regional-scale datasets on the web mapper (i.e., the Northeast terrestrial habitat classification, the Index of Ecological Integrity, TNC's resilience work and landscape permeability, the Eastern Joint Venture (EJV) brook trout assessment, and other decision support tools).

LCC's support strategic conservation by conserving large networks of connected habitats. To map out Regional Conservation Opportunity Areas (RCOA), this tool will identify connected networks of resiliency and ecologically intact habitats that support high biodiversity. The RCOA identifies core areas, species, and habitats (including regional Species of Greatest Conservation Need (SGCN) and habitat types), potential restoration areas that are supportive of core areas, provides connectivity and builds on investments of the last decade to make them available to those working on wildlife action plans (i.e., University of Massachusetts (UMASS), Index of Ecological Integrity, resiliency models that help prepare us for climate change). It includes forest gain/loss/conditions (Hansen *et al.*), uses bedrock, geology, and landforms – the basis for LCC climate change work. It targets areas that restore unique ecological systems like early successional habitats that support woodcock, New England cottontail rabbits. Steve explained further that a regional analysis can be relevant to restore areas locally. The dataset includes forest cover and forest gain/loss.

Questions for Steve included the following:

1. How much is geology is involved in planning?

Response: Geology is used a lot in planning. Underlining habitat classification drives geomorphic classification.

Comment: Mike Slattery added that The Open Space Institute is developing guidance documents for land trusts. The point of contact is Abigail Weinburg, Director of Research. Website: www.osiny.org. Email: webmaster@osiny.org

Summary: Steve offered to conduct webinars or come back and meet with work groups individually to explain how these tools can help work groups decide on conservation strategies, identify projects, and prioritize projects for funding and implementation.

Presentations are on the USCA FTP – for instructions please contact andy_lowell@fws.gov.

Address name: server www.u-s-c.org

The username is exchange@u-s-c.org

The password is susqdataex2010

Work Group Breakout sessions:

Objective: To identify priorities, partners and proposals for 2016, including challenges and outreach needs.

Eastern Hellbender Work Group

Priority: Investigate avenues to bring the species back to population levels.

Partners: Universities, tribes, federal and state agencies.

Project Goals:

1. Conduct field work to investigate current status and the remaining hellbender population.
2. Head starting program: Plan to start a rearing center. Supplies are being purchased this year.

2014-15 Accomplishments:

- a. eDNA work – looked at eDNA to expand samples in the Upper Susquehanna. Samples are all collected and most of the samples are completed, with approximately 15-20 more to go. Preliminary results show some positive hits of eDNA. Field work will be conducted in 2016 to follow up.
- b. Monitoring: A hellbender nest was found in one of the creeks. Also found nest boxes with eggs in them.
- c. Collected macroinvertebrate data and are currently processing that.
- d. Genotyping and parentage analysis – nest collected, samples died. Animals are being genotyped.
- e. Stream restoration component – looked at hellbender reach to look at using a watershed approach to develop good stream habitat for hellbenders.

Funding Needs: To be determined (TBD).

Brook Trout Work Group

Priorities: Conduct barrier assessments to identify crossings and culverts; looking to find a unified database. Use some of the decision-support tools presented today to identify high priority projects.

Partners: NGOs, TU, USC, Wetland Trust, universities, federal, state, local, new partners. Group is looking to incorporate partners for funding large, high profile projects.

Funding Needs: None identified at this time. TBD.

Accomplishments: FWS purchased the culvert for a replacement project in a high priority stream.

Outreach Needs: Reach out to practitioners. There are a lot of people doing a lot of work. The group identified the need for a concerted effort to train people how to add in-stream habitat for brook trout, without taking away from the ultimate goal of the project.

Next Steps: Eastern Brook Trout Joint Venture meeting this week in Hadley. Work on funding proposal.

Landscape Conservation Planning Work Group

Priorities: Review web tools that were provided here today. Schedule a meeting in December 2015/January 2016 to discuss tools and request tutorial. Hold the training at a common meeting place.

Lauren at NYSDEC has funds to restore wetlands through the “Trees for Tribs” grant that has been extended to 2020. This funding is designed to protect green infrastructure by providing free native trees and shrubs for qualifying riparian buffer planting/restoration projects, for drought and flood mitigation, and for expanding existing buffers.

Partners: TNC, NYSDEC, FLLT, OLT, FWS, NRCS.

Funding Needs: There are 80 acres of land located in south Cortland, NY, for sale. The group is looking at a joint purchase to use the land for better purposes. \$12,000 option.

The Northeastern bulrush (NEBR) is a federally endangered plant located in the Upper Susquehanna watershed. NEBR is a vernal pool obligate plant species that relies on habitat that has been significantly lost in NYS. Finger Lakes Land Trust (FLLT) is working with partners to try to protect a site that supports a very robust population. Seeds were collected and used in a test plot. 1,400 plants at a cost of \$1,500 are needed to monitor the experimental population.

Group priorities are based on land-use. We have to go where the work is. We will continue to map and revisit studies like the one that Kris West and Andy Lowell did a couple of years ago.

Outreach Need: Reach out to the general public and explain why protection of property is important. Media could include social media and a pamphlet/brochure.

Pearly Mussel Work Group

Priorities: Work on a common database to serve all the pearly mussel researchers, natural resource agencies so that we understand where the mussel beds are, identify threats, and identify data gaps. It will help us see the “big picture” as it relates to mussel conservation. We are grateful to NYNHP for the SGCN, but we have other species that need to be included in the database. We would request funding for NHP to come up with a collective dataset in ARCGIS format including extensive metadata

(including access to the researcher's field notes) to understand what is going on with mussels in the Upper Susquehanna watershed.

Funding Needs: An NHP intern would cost about \$400/week for a period of about 6 months to a year.

Partners: NYSDEC, NYNHP, FWS, USC, SUNY-Oneonta, ESF, and NYSDOT.
Potential Project – proposed by Dan Gefell (FWS): Look at how Contaminants of Emerging Concern (CEC) affects fish populations and pearly mussels in the Upper Susquehanna.

Potential Project – Eels are important hosts for pearly mussel reproduction, particularly in *Elliptio complanata*. SUNY Oswego has been working identifying the best areas in the Upper Susquehanna for eel stocking. They have identified suitable sites including Mud Creek, Butternut Creek, and the Otselic River. Need to raise and release eels and then monitor them. Also need to resurvey sites where eels were released in 2009 and 2010.

Outreach Need: Pearly mussels are protected in NYS, so outreach needs are in that regard. Work with Ben Roosa to add information to the USCA's Pearly Mussel web page.

Early Successional/Woodcock Work Group – changed to *Fields to Young Forest Work Group* (working title)

The goal of this group is to work with open agricultural lands as well as forested lands to protect early successional habitat.

Priorities: Protect and restore early successional habitats on public and private lands. They are working on project implementation to get projects “on the ground”. The group is working on where to protect and restore and when. The group identified the need to establish a conservation strategy and develop partners such as NRCS, FWS, NYSDEC, DOT, land trusts.

Funding Needs: TBD. It is too early for the group to identify specific funding needs, as the group was recently formed. Funding needs will be identified when they establish a strategy which may include a demonstration site. A conference call will be scheduled within the next 2 weeks to discuss strategic plan (on-going), potential project locations, funding needs, and a potential demo site location.

Flood Work Group

Priorities: Continue with goals and objectives from last year (2014) including networking and providing training.

2016: Need to identifying high priority areas and develop guidance on culvert sizing (work with Brook Trout group). Training needs: Would like to see the USC emergency stream intervention training continued. Identified a need for mapping assistance in roadside drainage systems and roadside quality

Partners: Municipal and county level organizations.

Outreach Needs: The group identified outreach needs. They will fill out Outreach form and give to Ben Roosa. Conservation needs and interests are closely identified with flooding issues. Need to develop funding amounts for culvert prioritization, mapping of roadside ditches, and “marry” the stream crossings where best management practices (BMP’s) could improve flood resiliency and provide fish passage.

Outreach Work Group

Ben Roosa is now the Outreach Coordinator for the FWS and leader of this group.

Priorities: To accomplish the mission of the USCA by facilitating internal and external communication.

Projects: Work on subpages of the USCA website. Ben asked group to please complete the sheets and provide them to Ben.

Partners: USCA and the work groups.

Funding Needs: Dependent on outreach needs of the USCA.

Funding Needs Identified:

David asked groups to provide rough estimates on funding needs:

Hellbender Work Group

- Pit tag reading monitoring array – 2 antennas, SW, data logger - \$7500.
- Immune physio study – \$5800 – blood samples analyzed, misc equip. PVC-coated wire for soft-release enclosures, small amount of pit tags.
- Primers for sexing – \$1500

Brook Trout Work Group

- Culverts already purchased.

No funding identified.

Landscape Conservation Work Group

- \$1500 on status of northeastern bulrush populations (1400 plants)

- \$12,000 – parcel near Lime Hollow – the money keeps land from selling for one year. (11/4/15 provisions for this have already been made at this point)

Mussel Work Group

- \$9600 to NHP to provide a pearly mussel GIS data/metadata database. Estimated \$400/wk (\$1600/mo) for 6 months (\$9600).
- CEC study by Dan Gefell – amount TBD.
- \$6000 for future mussels/eel studies – see Paul Lord's ppt
- \$200,000 eel stocking. Need to find partners.
- TBD – funding to monitor pearly mussels after the first eel stocking. TBD

Fields to Young Forest Work Group

Funding TBD.

Flood Work Group

TBD. They will put together preliminary funding needs on the identified priorities: culvert prioritization and field work, mapping roadside ditches at the sub watershed level, alleviate shunting of sediments from ditch network, and training needs.

Outreach Work Group

TBD. The group will collect the Outreach needs forms from the work groups and address and prioritize group needs. Please send Ben the Outreach forms.

Wrap Up and Action Items:

Action Item: To improve communication between work groups, David Stilwell offered to set up monthly conference calls with the team leaders.

Action Item: FWS USCA group members to prepare meeting minutes and a Request for Proposals template to send out with follow up email.

Meeting Wrap Up:

David asked the group if they thought that a follow up meeting in the spring (March) would be beneficial. The USCA members thought that this was a good time to hold a meeting, weather dependent, of course.

The presentations and other meeting materials will be provided on the FTP site.

Thank you everyone for attending today's USCA meeting. If you have any comments, concerns, or ideas on how to improve this meeting, please contact David or Sandie at: david_stilwell@fws.gov (note underscore between first and last names) sandra_doran@fws.gov

Meeting adjourned 4:00 pm