Handout 9

North Atlantic LCC
North Atlantic Landscape Conservation Cooperative

***October 2014 Update for the North Atlantic LCC Steering Committee***

# Connecticut River Watershed Landscape Conservation Design Pilot

U.S. FISH & WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR

In January 2014, the North Atlantic LCC launched the Connecticut River Watershed Landscape Conservation Design Pilot. Building on four years of conservation science tool development by the North Atlantic LCC and partners, the Pilot marks a new phase in the evolution of the cooperative. Through the Pilot, partners are testing and demonstrating LCC-sponsored tools in a collaborative process intended to enhance and catalyze conservation activities across the 7.2 million acre watershed.

**Objectives of the Pilot**

1) Bring partners together to prioritize places, and identify the strategies and actions, necessary to conserve ecosystems, and the fish, wildlife, and plants they support, into the future.
2) Deliver information, maps, and tools with design options at scales and in formats needed by partners to guide conservation decisions and inform planning (e.g. National Wildlife Refuge Comprehensive Conservation Plans, National Forest Plans, State Wildlife Action Plans).
3) Establish a process for conducting landscape conservation design that can be applied and adopted elsewhere in the region.

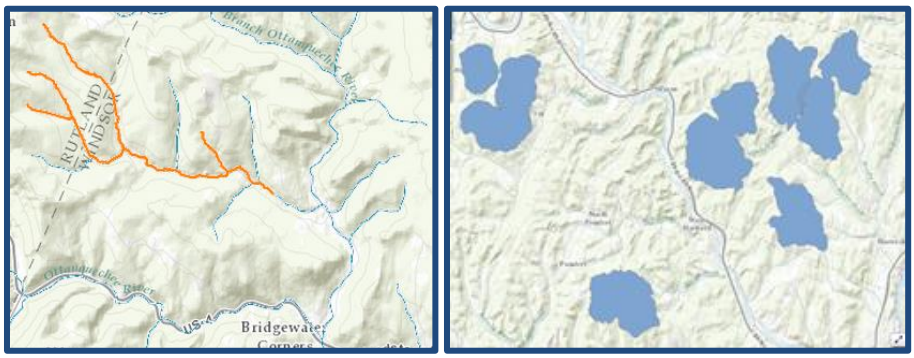
**Accomplishments to Date (as of October 28, 2014)**

1) **Partnership development and process accomplishments**
   - Assembled a leadership team comprised of North Atlantic LCC staff, U.S. Fish and Wildlife Service staff from the Northeast Region (Randy Dettmers, Jeff Horan, Nancy McGarigal, David Perkins, and John Warner), and Principal Investigator for the North Atlantic LCC-sponsored *Designing Sustainable Landscapes* project (Kevin McGarigal, UMass Amherst).
   - Convened a "core team" of partners, including more than 30 representatives of all of the four state fish and wildlife agencies with jurisdiction in the watershed (CT, MA, NH, and VT); additional U.S. Fish and Wildlife Service staff (including from the Conte Refuge); other federal agencies (including EPA and USGS); and NGOs (including Audubon, the Connecticut River Watershed Council, Highstead, and The Nature Conservancy).
   - Conducted eight monthly, in-person meetings of the core team plus multiple meetings involving the aquatic ecosystems and terrestrial/wetlands ecosystems subteams of the core team.

2) **Technical progress and accomplishments of the design team**
   - Agreed to two overarching goals to guide the conservation design, one for fish and wildlife species and one for ecosystems.
   - Developed objectives, including population objectives for representative species, needed to achieve the conservation design goals.
   - Identified the major elements to be incorporated into the design: 1) a network of core areas of high conservation importance for species and ecosystems, 2) prioritized connections among core areas to facilitate species movement and adaptation to climate change; 3) high priority locations for restoration and management (e.g., sites for improving aquatic passage and wildlife road crossings), 4) a depiction of relative ecological value outside of core areas, recognizing that core areas alone are insufficient to achieve conservation goals, and 5) datasets that are inputs into the final design (e.g., representative species habitat models) that will also have value on their own to partners.

- Reached a series of collaborative decisions that are shaping the development of ecosystem-based and species-based core areas for both aquatic and terrestrial ecosystems.
- Begun deliberations on how to address major drivers of future change – urban growth (development) and climate change – in the design.

Examples of ecosystem-based aquatic (left, orange) and terrestrial (right, blue) core areas.




3) **Communications accomplishments**
   - Project webpage with extensive documentation of meetings, presentations, and decisions on LCC website (http://northatlanticlcc.org/groups/connecticut-river-watershed-pilot).
   - Group workspace and preliminary design options for team review on LCC Conservation Planning Atlas (http://nalcc.databasin.org).
   - Presentations and poster on the Pilot for additional partners within and outside of the Connecticut River watershed (regional land trusts; Northeast-Southeast Partners in Flight conference; National Workshop on Large Landscape Conservation; regional USFWS leadership team).
   - Articles in the North Atlantic LCC newsletter and features for USFWS regional employees.
   - Survey of core team participants on Pilot progress as well as informal consultations.

**Next Steps**

- Finalize designs, including integration of ecosystem and species results, consideration of future change (i.e., climate, development, and forest change), and restoration priorities.
- Communicate and distribute results and tools.
- Foster implementation in the watershed.
- Help partners apply approach and tools to new landscapes in the region and develop initial Northeast regional tools and designs.

**Lessons Learned – Preliminary Assessment**

- LCC-sponsored products can be integrated with additional datasets (e.g., those developed by states and NGOs) using LCC-sponsored conservation design tools to create sophisticated, comprehensive, spatially explicit conservation design products.
- To achieve this level of design, substantial staff capacity and investment of time by partners are required to understand and collectively reach decisions needed to complete design steps.
- Learning and decisions made in the Pilot may expedite applications elsewhere; nevertheless, consensus-building processes like the Pilot require appreciable time, dedication, and trust-building.
- Many of the approaches developed for aquatic conservation design are novel and will require testing and experience to fully evaluate their effectiveness and degree of adoption.
- Quality and availability of underlying ecological data (e.g., limitations in sampling data for fish and wildlife species) pose continuing challenges in effective design.