**North Atlantic LCC Science Delivery Team**

**June 17, 2013 Meeting Summary**

On June 17, 2013 the North Atlantic LCC convened a webinar to organize the Science Delivery Team. The call was attended by roughly 30 representatives of partner agencies and organizations. LCC staff provided brief summaries of Northeast and LCC science products. Partners provided case studies of approaches to using landscape conservation science to guide on the ground conservation action.

Attendees at the June 17th call included: Amanda Babson (NPS), Emily Preston (NH F&G), Catherine Callahan (NHDOIT), Jad Daley (TPL), Hector Galbraith (NWF), George Gay (NWF), Jeff Allenby (Chesapeake Conservancy), Jeff Horan (FWS), Phil Huffman (TNC), Kevin Kalasz (DE F&W), Heidi Kretser(WCS), Bill Labich (Highstead), Thomas LaPointe (FWS), Peter Murdoch (USGS), Robyn Niver (FWS), John O’Leary (MA DFW), Tom O’Shea (MA DFW), Jim Oehler (NH F&G), Michael Pruss (PA F&G), Michael Sawyers (MA DFW), Michael Slattery (FWS), Zoe Smith (WCS), Karen Terwilliger (Terwillinger Associates), Anthony Tur (FWS), Steve Walker (Maine Coast Heritage Trust), Tai-Ming Chang (EPA), Darlene Finch (NOAA), Lindsey Goodwin (NOAA), Andrew Milliken (FWS), BJ Richardson (FWS), Steve Fuller (NALCC).

Participants engaged actively in a lively and positive discussion about the context, meaning, and scope of Science Delivery, and requested further discussion to define it as an area of conservation practice with clear concepts and stepwise processes leading from science to measurable conservation. With a common understanding of the *Practice of Science Delivery*, the team will then develop a structured approach to identify needs and develop projects to advance Science Delivery in the LCC.

The team provided additional comments by email and requested immediate follow-up:

* Circulate draft notes on call and discussion of the *Practice of Science Delivery* (below)
* Schedule next call

Next Steps:

* Compile input on *Practice of Science Delivery*
* Need a prioritized matrix of datasets & audiences, relevant scales, barriers and opportunities
* Reconvene to develop as structured approach to identify needs and develop projects

**The Practice of Science Delivery:**

A summary of notes and comments generated by the June 17 organizational call.

**Who is the Science Delivery Team?**

We need to be clear about distinguishing science delivery from conservation delivery.

“Science Delivery” is the process of transferring the best available landscape conservation science to the people who perform on-the-ground conservation (conservation “deliverers”). Science delivery is about translating and transferring science in ways that make the science easy to interpret and applicable to tangible conservation decisions, helping to achieve better outcomes more efficiently.

As a partnership driven by partner interests in landscape conservation science, the North Atlantic LCC is poised to convene discussions about making regional science most useful. The creation and application of landscape conservation science across very large scales is a relatively new phenomenon made possible by advances in computing power, GIS accessibility, the internet, and additional capacity including LCCs. The LCC convened the Science Delivery Team to meet the need of diverse partners to access the best available landscape conservation science in forms that are current, consistent, and relevant across boundaries and scales. While this process may ultimately use traditional education and communication tools, it first involves highly technical work, such as processing, managing, and interpreting large datasets.

The Science Delivery Team is comprised of partner representatives who are engaged in conservation delivery—people doing on-the-ground conservation activities—such as land and water resource management, land acquisition, monitoring, population management, and species recovery. The team also includes people engaged in providing science to others—in the form of data, maps, and technical assistance—in support of conservation actions.

**What are some examples of the science we need to deliver?**

* environmental data layers organized consistently for the Northeast
* landscape analyses, such as habitat suitability, connectivity, resiliency, and integrity
* risk and vulnerability assessments
* data on the relative condition of species, populations, and habitats
* data to provide regional context for local decisions
* landscapes prioritized for conservation of multiple resources

**What are some examples of science delivery approaches?**

* Teaching people how to apply existing data in their own landscapes
* Providing access to consistent regional data layers scaled at regional and sub-regional (e.g. watershed) scales.
* Providing and helping partners use decision support tools to prioritize conservation areas and actions for habitat suitability, ecological integrity and resiliency under current and projected future conditions
* Using regional connectivity models to direct technical assistance to places where specific actions can be taken to maintain or restore connectivity
* Using brook trout habitat suitability models to identify managers in catchments with restoration potential
* Developing interactive web and desk top tools to weight data layers and prioritize landscapes
* Networking practitioners in landscapes in need of conservation
* Identifying landscapes most likely to adopt conservation

**Who is the audience for landscape science products?**

* we need to bridge the gap from Northeast or LCC scale to local scale
* managers working in states and middle-scale federal programs, organizations or partnerships
* practitioners and NGOs working in major watershed, ecoregion and multi-state initiatives
* specific towns, parcels, individuals are not our direct audience but are an important audience through others
* regional data needs to be available in forms relevant to towns, parcels, and individual practitioners so that they can consider regional context
* do not lose regional context in step-down process
* reach the most people by targeting the middle scale
* teach the teachers
* interpretation of multiple scales is state role
* need to reach state or multi-state partnerships to translate to local scales

**Why do *we* need to address science delivery?**

* LCCs are uniquely positioned to convene a diversity of partners at the regional scale
* need to address challenge of multiple focus areas for multiple purposes and scales
* How do states compare, how do ecoregions compare, how do towns or parcels compare?
* data are too big and complex to interpret locally without help
* need to ensure that local scale projects add up to regional significance
* pooling resources and technology is better leveraged at LCC level
* scalability is critical considering potential cost of information technology
* it is efficient to manage information at the regional scale
* regionally consistent data is foundational to scalability and efficiency
* need for efficiency extends to prioritizing and focusing conservation—can’t do it all
* mismatch between capacity and scale—those with capacity to use regional scale datasets may work at a fine scale and already have finer scale data
* key partners, such as foundations, do not know about the available landscape conservation science tools
* products need to be as accessible as possible to as many as possible
* tools need to be more easily applied
* someone needs to go out and seek the users
* managers have never had the ability to compare at regional scales, so don’t know what they need
* need access to distribution-wide information on species in order to plan and prioritize
* need a landscape scale approach to address landscape scale threats

**What barriers do we need to address?**

* lack of GIS knowledge
* limitations of scale/resolution
* distrust of models and model validation standards
* need concrete examples of how decision support tools have been used
* not enough guidance on use/application of data
* lack of GIS capacity/infrastructure
* datasets to big to transfer
* clarify which layers relevant to specific users (such as habitat managers)
* resolution, accuracy, acceptability, 30 m pixel cell resolution—note: where parcel sizes are large enough the resolution is not an issue.

**What are some things we need to work on?**

* need to articulate finer resolution of process than Northeast Conservation Framework—more detail on stepwise science delivery
* flesh out process, e.g.: 1) translate data to logically scaled units of application (towns for land use planning, parcels for landowner outreach); 2) identify key partners/adopters in key landscapes; 3) build a learning and adoption network via media and communications; 4) develop and deploy an adoption strategy; 5) track adoption;
* need to translate data to a practical currency of implementation, such as catchments for brook trout, parcels technical assistance, towns for planning—what are the most practical units to reach the people we want to adopt conservation?
* translate data to human scales
* translate data to specific applications
* need to leverage SWAPs a tool for delivering science
* need to convey limitations of scale/resolution as we deliver
* data accessible to prioritize surveys, model species distributions, improve recovery planning
* strategy to reach many people at middle scales
* technical assistance and training is an important way to reach these users
* need to improve awareness of projects—example PIF, SWAPs
* need a matrix of datasets & audiences, relevant scales, hurdles
* identify and prioritize regional datasets available now at the regional level
* demonstration projects—testing up-scaling and downscaling
* need to discover underserved topics such as recovery planning and cultural resources
* identify barriers, needs, & process at regional, state, & local scales
* need an approach that is less passive – go out and seek the users
* interactive weighting tools useful as a learning tool
* find out stakeholder priorities & ask if they fit with LCC
* need experts to go to towns—tech support teams
* really important to have regional scales then drill down to finer scale—but even that has limitations but can prioritize field work
* need to convey what information offers and what its limitations are
* regionally consistent data sets, work on complementary focus of partners and scales