**North Atlantic LCC Role in Selecting Conservation Targets: background information for discussion and initiation of a conservation targets team and strategy**

The North Atlantic LCC has in various written documents and discussions articulated the need to agree on common goals and objectives in order to prioritize and guide conservation planning, design and delivery in the LCC including a handout prepared for the Steering Committee on *Setting Conservation Targets/Population-Based Objectives for Representative Species* and a motion passed by the Steering Committee in April 2012 to form a conservation targets team.

The initial purpose of that team is to work with LCC staff to review completed and ongoing regional and national efforts and guidance related to conservation targets including population-based objectives for representative species and to provide recommendations on the best role and strategy for the North Atlantic LCC in the development, integration and use of these targets. After recommendations are approved by the Steering Committee, the conservation targets team can guide the implementation of these recommendations by staff, technical committees and contractors.

This document excerpts and summarizes relevant regional and national background information in order to help the Steering Committee and Technical Committee assess the need, LCC role and direction for conservation targets and to assemble an appropriate team.

The excerpted information that follows in this document shows the convergence of efforts within the North Atlantic LCC, National LCC Network, NEAFWA, and the U.S. Fish and Wildlife Service toward an approach that integrates priorities and selects commontargets to be used to help define, design and help partners deliver landscapes that will sustain natural and cultural resources.

Recent developments that are particularly relevant are the release of a draft white paper by a team of LCC Coordinators and Science Coordinators entitled: *Importance and Application of Conservation Targets in an Era of Rapid Environmental Change* and the U.S. Fish and Wildlife Service’s recent efforts related to a surrogate (representative) species approach as part of Strategic Habitat Conservation including the recent release of the *Draft Technical Guidance for Selecting Surrogate Species.*

A proposed timeline for the North Atlantic LCC is to establish a small conservation targets team in September that includes both Steering Committee and Technical Committee members and their designees and ask this team to review background information and prepare initial recommendations for the Steering Committee to consider at the October meeting. With the Steering Committee’s approval, this team will then work with partners and partnerships (including the Atlantic Coast Joint Venture) to compile initial conservation targets for discussion at the April, 2013 Steering Committee meeting.

**Background Information**

Relevant information excerpted and summarized here include:

* North Atlantic LCC documents and discussions
  + Mission Statement
  + Northeast Conservation Framework
  + North Atlantic LCC Conservation Science Strategic Plan
  + North Atlantic LCC Initial Representative Species Selection Process
  + North Atlantic LCC Steering Committee Discussions
* National LCC white paper on conservation targets
* National LCC Benchmarks
* Northeast Association of Fish and Wildlife Agencies documents and efforts related to conservation targets
  + Northeast Monitoring and Performance Reporting Framework
  + [Conservation Status of Fish, Wildlife, and Natural Habitats in the Northeast Landscape](http://www.rcngrants.org/sites/default/files/final_reports/Conservation-Status-of-Fish-Wildlife-and-Natural-Habitats_0.pdf)
  + Northeast Regional Conservation Synthesis for SWAPS
* Atlantic Coast Joint Venture Population Objectives
* U.S. Fish and Wildlife Service Strategic Habitat Conservation and Surrogate Species Guidance

***North Atlantic LCC documents and discussions***

Conservation goals and targets are referenced in several LCC documents including the excerpts below with emphasis added for relevant sections.

Mission Statement

The North Atlantic Landscape Conservation Cooperative provides a partnership in which the private, state, tribal and federal conservation community works together to address increasing land use pressures and widespread resource threats and uncertainties amplified by a rapidly changing climate. The partners and partnerships in the cooperative address these regional threats and uncertainties by **agreeing on common goals for land, water, fish, wildlife, plant and cultural resources** and jointly developing the scientific information and tools needed to prioritize and guide more effective conservation actions by partners toward those goals.

Northeast Conservation Framework Executive Summary excerpts:

The Northeast Regional Conservation Framework Workshop (“Albany II”) was held in Albany, New York on June 14-16, 2011 with eighty-six (86) participants, representing a cross-section of 13 state agencies, six federal agencies and 12 nongovernmental organizations or universities. The workshop was convened and sponsored jointly by the Northeast Association of Fish and Wildlife Agencies (NEAFWA) and the Landscape Conservation Cooperatives (LCCs) in the Northeast Region.

Elements of a proposed regional conservation framework, presented at the beginning of the workshop, formed the foundation of the discussions. The framework was based on RCN priority topic areas and the elements of Strategic Habitat Conservation, and included the following components:

Priorities

Biological Assessment

**Goal-Setting**

Conservation Design

Science Translation Tools

Conservation Adoption

Conservation Delivery

Monitoring, Evaluation and Research

Information Management

The highest-ranked projects are listed below, organized by framework element.

Biological Assessment:

* In the new SWAPs recommend adopting a consistent format/template which will allow for a region wide roll up (**including population targets**) for establishing goals, perhaps a consistent summary or appendix.
* Create distribution maps for regional responsibility/high concern species - overlay on NE habitat maps.
* Development of habitat focus areas and corridors.
* **Develop a process to develop regional representative species goals (numbers and distribution) to allow development of landscape-scale habitat design and conservation.**
* In the new SWAPs recommend adopting a consistent format/template which will allow for a region wide roll up (including population targets) for establishing goals, perhaps a consistent summary or appendix.

North Atlantic LCC Conservation Science Strategic Plan excerpts:

Ecological Planning (Priorities, Biological Assessment and Goal Setting**)**

Through the process of ecological planning, the LCC systematically assesses needs for sustaining fish, wildlife, plants and cultural resources. In order to determine these needs, partners assess existing status and distribution of populations and resources; **articulate measurable objectives for sustaining priority species**; consider what may be limiting populations to less than objective levels; and determine if there are immediate priorities for action.

Objective:Compile, organize and provide information from existing partners and partnerships on status, trends, current and emerging threats and limiting factors for priority fish, wildlife and plant species and cultural resources; **agree on regional objectives for these species and resources**; and assess their relationship to limiting factors, habitats and landscapes to provide a scientific basis for conservation actions.

* Ecological Planning Steps: Conduct ecological planning steps at landscape and regional scales to provide a scientific basis for conservation actions
  + Strategy 1: Develop and maintain lists of priority fish, wildlife and plant species for the North Atlantic LCC
  + Strategy 2: Identify representative subsets of priority species (representative species) representing guilds, habitat types and response to management;
  + Strategy 3: **Compile and step down population objectives where available from existing plans and partnerships; work with partners to develop additional or refine existing population objectives**;
  + Strategy 4: Compile best available information on threats and limiting factors constraining population size and distribution and management options to address these factors;
  + Strategy 5: Conduct regional climate change vulnerability assessments for species, habitats and cultural resources;
  + Strategy 6: Develop and apply models that relate populations to habitat and other limiting factors;
  + Strategy 7: Determine immediate priorities based on emerging threats (triage).

North Atlantic LCC initial representative species selection and use Executive Summary   
excerpts:

The U.S. Fish and Wildlife Service completed a year-long effort to **identify representative species** with support from the University of Massachusetts Amherst and U.S. Forest Service and input from partners. The process included the development of species-habitat databases, cluster and indicator species analyses to group species based on habitat systems and use, and application of filtering criteria. Species experts provided extensive input throughout the process including selecting representative species during three workshops held in May and June, 2011.

The goal was to i**dentify a list of representative species for designing conservation and management strategies that will most effectively sustain fish and wildlife populations at desired levels in the face of land use change, climate change, and other stressors occurring within the North Atlantic LCC.**

Eighty-seven terrestrial species were selected as representative species for the three subregions of the LCC, and an initial 13 aquatic representative species were selected.

Species –habitat models for 30 of these species will be developed as part of the LCC Designing Sustainable Landscapes project.

North Atlantic LCC Steering Committee Discussion excerpts:

*April 2011Steering Committee Meeting*

Goal-setting discussion led by Ken Elowe included the following points and questions:

* a representative species is one that can bring along a number of other species that have similar habitat needs and are assumed to respond similarly to habitat conservation actions.
* one way to evaluate options for conservation is to evaluate whether a conservation action will contribute towards a population goal (or population-based habitat goal) for a representative species.
* initial species have been picked through a process begun in the U.S. Fish and Wildlife Species working with partners and the University of Massachusetts for federal trust and SGCN species.
* a next step is to use this approach is developing species-habitat models in three pilot areas in the Northeast in the northern, middle and southern parts of the LCC.
* representative species *will not* take care of every species out there; some will still need to be looked at individually.
* after we pick these species we have to figure out how much conservation is needed and where; for representative species you can ask the question have you met your goal.
* goals may come from existing plans; LCC needs to take these species range-wide goals and make them local; he goals have to be able to roll up and roll down.
* population goals are driven by both science and public input.
* goals process depends a lot on what species group we are talking about (e.g. are they game species); one process will not fit all species.
* Massachusetts and New Jersey State Wildlife Action Plan based off habitat goals.
* EPA looks at what kind of population should be in a healthy stream and bases its models off of that.
* should consider more ecological process goals rather than species goals.
* have to be clear about what are those goals are for.
* need to understand the regional context for state and local conservation action; a really important role for the LCC is helping to determine this regional context.
* maintaining the system is more important than maintaining the species; in designing a landscape to sustain species, we are sustaining these ecological processes as well.
* use the language “conservation target” rather than population goals because it is less restrictive.
* Need to think about goals in the context of climate change.

*April 2012 Steering Committee Meeting*

Ken Elowe led a discussion on conservation targets. He requested that the LCC form a subcommittee to address conservation targets initially compiling a list of existing population targets for representative species and deciding whether they are adequate or need further development.

The following points and questions were raised:

* group at the Albany II meeting developed a northeast conservation framework that included identification of conservation targets including representative species.
* one of the questions that needs to get answered is how do you create a landscape that protects multiple species while taking into account future changes and current conditions.
* targets are going to conflict with each other and have varying levels of supporting information.
* what authority does LCC have to set targets?
* LCC can design tools to help states and other partners resolve their conflicts.
* is it more practical to create a functional habitat that would be used rather than a certain number of species?
* ecosystem and functionality are sometimes best represented by the way species use it so the goal of setting targets is not a goal of representation but seeing how much is enough.
* these species can also be used to define habitat associated with them and then not only will numbers of species need be looked at but also how much of a specific habitat is needed.
* species are what people get excited about and what they like to see.
* setting a population goal that sounds good but may not realistically be possible; population trends are something that could be realistically monitored.
* nexus between management goals and societal goals is really important.
* need an adaptive management loop to prioritize conservation.
* LCC includes many different institutions with different goals and ways to define conservation targets; Service and other state agencies have a responsibility to focus on a species-based approach and that creates a clear logic for going forward with this; however, we need to keep in mind the other ways to view the world when doing things this way and create a crosscheck with the other measures of conservation success.
* LCC’s responsibility to come up with what the shared responsibilities are to individual organizations, etc and build them into the landscape this group is trying to design.

***National LCC draft white paper on conservation targets***

*Importance and Application of Conservation Targets in an Era of Rapid Environmental Change: A White Paper for the LCC Community* excerpts:

Individuals within agencies and organizations participating as members of Landscape Conservation Cooperatives continue to have rich and lively discussions about **goals, objectives, performance measures, and other indicators of “success”**. With literally over 100 different agencies and organizations in three nations contributing “time, talent, and treasure” to the establishment of the National Network of Landscape Conservation Cooperatives (LCC), conversations often revolve around the context –the “science for what” questions, the relative importance of one project over another, and how to measure the progress, cumulative effect, and success. This white paper offers the extended and extensive Landscape Conservation Cooperative community with some “common language” and conceptual ideas to help form a more coherent foundation on which to promote conversations that advance and strengthen conservation of natural and cultural resources; while also promoting and respecting the individual agencies and organizations responsible for establishing conservation targets and managing their respective resources.

* The following bullets are recommendations for LCCs as they consider conservation targets:
* **Conservation targets should be easy to understand and communicate**. They should be tailored for use by a variety of audiences from scientists to policy makers to conservation practitioners.
* C**onservation targets should not be used to usurp or reduce the authority or authorities of any organization** with a legal mandate to manage or conserve habitats or the species that depend on those habitats.
* **Conservation targets should be used to strengthen the accountability and transparency of LCCs**, through an adaptive management conservation framework, which should be used to establish explicit and transparent conservation objectives for the LCC.
* **Conservation targets should be based on the best available scientific foundations, they should be explicit, measurable, and achievable, and easy to understand and communicate.**
* **Conservation targets should be imbedded into an appropriate adaptive conservation management framework**, which includes monitoring and evaluation as primary feedback loops to evaluate progress towards objectives.
* **Conservation targets should also be reviewed as new information and new assessment tools are available**. Remember that conservation targets are unlikely to remain static as ecological systems change.
* It is fine to have multiple conservation targets that may overlap, or even conflict. In that scenario, the **LCC can serve a role in facilitating opportunities to maximize benefits from the array of conservation targets**.

***National LCC Benchmarks***

Essential benchmarks for the FWS’s Cooperative Landscape Conservation and Adaptive Science funding for FY 2012 including conservation targets were established to measure progress of each LCC to help make funding allocation decisions. Similar benchmarks are expected for FY 2013.

LEVEL 3: The **LCC Steering Committee is establishing explicit conservation targets**.

LEVEL 4: The LCC Steering Committee has adopted or developed **explicit conservation targets for the LCC’s priority resources.**

LEVEL 5: The LCC Steering Committee has used the results and products of research, monitoring, and modeling activities to **improve and revise the conservation targets**, biological plans, conservation design tools , monitoring protocols, and research priorities for the LCC’s highest priority resources.

***Northeast Association of Fish and Wildlife Agencies documents and efforts related to conservation targets***

*Northeast Monitoring and Performance Reporting Framework description*

The Regional Monitoring and Performance Reporting Framework is a collaborative effort of Northeastern states, federal land management agencies, non-governmental organizations and academics. The Framework was designed to help Northeastern states meet the **monitoring and performance reporting requirements** of [State Wildlife Action Plans](http://www.wildlifeactionplans.org/) (SWAPs). Action Plans assess the condition of each state's wildlife, identify the problems they face, and prescribe actions to conserve wildlife and vital wildlife habitat before they become more rare and costly to protect.

[*Conservation Status of Fish, Wildlife, and Natural Habitats in the Northeast Landscape*](http://www.rcngrants.org/sites/default/files/final_reports/Conservation-Status-of-Fish-Wildlife-and-Natural-Habitats_0.pdf)

This project, in collaboration with another RCN Project, [Conservation Status of Fish, Wildlife and Natural Habitats in the Northeast Landscape](http://www.rcngrants.org/content/conservation-status-fish-wildlife-and-natural-habitats-northeast-landscape), reported on the status of approximately 30 key indicators and measures specific to eight habitats and two regional species groups in the northeast.  The final report, provided below, will help the Northeast Association of Fish and Wildlife Agencies (NEAFWA) states broadly assess the status of key habitats and Species of Greatest Conservation Need. Additionally, this work enables The Nature Conservancy (TNC) to meet its own standards for measuring progress on conserving it portfolio of critical conservation sites and meet congressional expectations for monitoring and performance reporting for Wildlife Action Plans and the State Wildlife Grants Program. This project effectively implemented 75% of the NEAFWA’s [Northeast Monitoring and Performance Reporting Framework](http://www.rcngrants.org/content/regional-monitoring-and-performance-framework) developed with funding from the National Fish and Wildlife Foundation. A steering committee of scientists representing Fish and Wildlife agencies, private organizations and others, directed the work.

*Northeast Regional Conservation Synthesis for SWAPs*

This synthesis project will produce a synthesis of the growing volumes of regional conservation data and information produced through the Regional Conservation Needs (RCN) program and

Landscape Conservation Cooperatives (LCCs). The synthesis will include regional SGCN species of conservation concern, habitat condition and assessments and a synthesis of regional focus areas that can inform the selection of conservation targets.

***Atlantic Coast Joint Venture Population Objectives***

The Atlantic Coast Joint Venture is stepping down continental population objectives for migratory birds by Bird Conservation Region and State within the Atlantic Coast Joint Venture Area including the North Atlantic LCC area for representative species and other priority species. Since many of the LCC representative species are migratory birds, this effort will be an important first step in setting population objectives for the LCC and learning through that process for other taxonomic groups.

***U.S. Fish and Wildlife Service Strategic Habitat Conservation and Surrogate Species Guidance***

*Draft Guidance on Selecting Species for Design of Landscape-scale Conservation (*[*http://www.fws.gov/northeast/science/pdf/DraftTechnicalGuidanceJuly2012.pdf*](http://www.fws.gov/northeast/science/pdf/DraftTechnicalGuidanceJuly2012.pdf)*)*

Excerpts

If we are to succeed in ensuring sustainable populations of fish and wildlife in viable ecosystems now and for the future we must anticipate, plan for, and address these challenges and uncertainties. Now, more than ever before, it is critical that the Service joins with our partners in making bold but thoughtful choices to focus our work and our resources where they will have the greatest conservation benefit. We must work collaboratively and with the American public, across landscapes, leveraging our collective resources.

Our path forward in achieving this vision is to focus our resources on **landscape-scale biological**

**outcomes to maximize conservation results**. As a Service, we will do this by:

* **Establishing conservation objectives, identified with partners, that are relevant to**

**priority species and their habitats; and**

* **Targeting our conservation actions to achieve these objectives.**

The Service, through its representatives on LCC steering committees, shouldprovide our agency’s priority conservation targets (landscape-scale biological outcomes) to theLCCs and then engage **with the LCC partnership to integrate priorities and select commontargets to be used for designing the conservation of sustainable landscapes.**

Including partners’ priorities– The Service can only achieve its desired biological outcomes

by working with states, Tribes and other stakeholders, so **consideration of partners’ priorities**

**is paramount for success**. Furthermore, the Service can learn from other systematic conservation models our conservation partners are using. It is expected that **each region will engage the conservation community, where willing, in identifying a suite of partner conservation priorities (including non-trust species or resources) in each of the LCC geographies** (See the section, Role of the Landscape Conservation Cooperatives, below). Often these priorities can be found in the State Wildlife Action Plans and game management plans developed by state fish and wildlife agencies and in other strategic planning and implementation documents produced by Joint Ventures, Fish Habitat Partnerships, and Landscape Conservation Cooperatives. When compiled, priority conservation targets of partners can be merged with the Service’s targets to form the broad suite of species that will be represented by the selected surrogates.

Other considerations for the conservation of functional landscapes- Previous sections focus on the selection of species and population objectives for landscape conservation planning, the first steps of the SHC framework (FWS 2008). Subsequent steps and elements of SHC should be familiar among Service staff and have been successfully applied to various species and landscapes in recent years. They are incorporated by reference and are not reiterated in this document. Using the species and population objectives selected for LCCs/landscapes, the Service and willing partners will apply the SHC framework (or other systematic conservation model) to identify limiting factors, design and implement conservation strategies, and monitor and assess results. **Where our partners have identified non-species based conservation targets, these may be included with species-based targets in future efforts to design conservation strategies for functional landscapes.** While the SHC framework does not explicitly incorporate these types of elements, they can be factored into the assumptions and strategies used to address population and habitat objectives. Thus, such an approach may consider a combination of:

* Species-habitat based approach

-species-habitat models for surrogate species

-estimates of types, amounts, and locations of habitats needed to support

surrogate species population objectives -Plus-

* Rare species locations and habitat for species with unique requirements -Plus-
* Coarse Filter Approaches

-ecological and geophysical features

-spatial and connectivity patterns