**Northeast Landscape Conservation Design**

**Background:**

In June 2011, at the Northeast Conservation Framework (“Albany 2”) Workshop, priority landscape conservation science needs were assessed and prioritized by northeast conservation partners. A clear consensus out of that workshop was the need for better communications, science translation and adoption for completed, ongoing and future projects. Among the top priorities were:

1. immediate organization of existing data to make information more available;
2. synthesis of existing data to develop/compile landscape designs that will allow partners to map and prioritize focus areas for conservation;
3. translation of maps and other tools to make landscape design data useful at various scales and in various formats; and
4. assistance to ensure that science and tools are understood and consistently adopted and implemented in support of on-the-ground conservation.

At their November, 2011 meeting, the North Atlantic LCC Steering Committee requested that LCC staff draft a proposal for the LCC to provide immediate support for conservation design, translation and adoption activities in coordination with the northeast states and other partners. The following day, the Northeast Directors approved an allocation of funding through the Regional Conservation Needs (RCN) program to support several complementary steps related to Albany II recommendations for communicating, organizing and translating existing RCN products including regional habitat maps.

LCC Fundamental Vision:

To define, design, and deliver landscapes that can sustain natural and cultural resources at desired levels nation-wide.

RCN Goal/Vision:

To address regional wildlife conservation issues with the input and involvement of multiple parties involved in the creation and implementation of the State Wildlife Action Plans.

**Northeast Landscape Conservation Design Goal:**

Establish cooperative means to make existing and future conservation design information and tools more available and accessible to conservation partners; to produce composite maps depicting landscape conservation designs; and to develop spatial data layers summarizing environmental conditions affecting a suite of important ecological and cultural resource elements in the Northeast.

**Expected Operational Outcome:**

Baseline landscape conservation designs, without which past, present, and future investments in landscape analysis will remain unrealized, underutilized, or ungrounded:

* Identification of landscape elements important to diverse partners, including cultural elements, rare species, ecological systems, landscapes, or watersheds;
* Data layers summarizing present and predicted future environmental conditions that describe the status of each landscape element;
* Data layers summarized at multiple scales to describe the collective status of all the landscape elements within important geographies or jurisdictions.

**Operational Approach and Capacity:**

Development of a multi-organization technical “commons”, without which the vision of LCCs is not possible:

* A ‘brain trust’ of landscape ecologists and conservation planners, coupled with key conservation leaders;
* Cooperative development, testing and evolution of file-sharing systems, and other information management components;
* Data compilation, cataloguing, synthesis, and evaluation of data sharing issues;
* Standardization of technical terms and process, so that diverse projects may be integrated;
* A structured process to facilitate difficult cooperative decisions about Northeast landscape conservation.

**Leveraging existing and completed projects:**

The intent of the Northeast Landscape Conservation Design effort is to leverage past and future investments in landscape conservation design by organizing, synthesizing, and sharing information and relevant products from completed, ongoing and future regional projects, and to facilitate their integration with on-the-ground delivery mechanisms. The FY 2010 and FY 2011 LCC projects related to conservation design will be built into this synthesis, as will many completed and ongoing RCN, State Wildlife Grant and Nature Conservancy projects (see additional detail document for a list of these projects and data).

**Relationship to State Wildlife Action Plan updates:**

The Northeast Landscape Conservation Design will provide regional information and maps in support of the inclusion of regional information in State Wildlife Action Plan updates in the northeast.

**Proposed Charges (these will be reviewed, revised and fully developed by a conservation design team):**

1. Convene a Conservation Design team to coordinate the outputs of inter-related projects, steer technical analyses, and frame key technical questions for a broader decision-making forum.
2. Develop and implement an interim Information Management system to acquire, catalogue, and manage spatial data in support of the project and provide input into the design of a long-term information management system for the LCC.

1. Identify the ecological and cultural landscape elements to be assessed in through Northeast landscape conservation designs and conduct a rapid assessment of data available on the condition/integrity/vulnerability of each.
2. Compile environmental datasets relevant to the target ecological and cultural landscape elements, including environmental stressors, climate change, landscape analyses, connectivity, human infrastructure, or any other natural resource or environmental data.
3. Develop or implement existing methodologies to summarize current and predicted future environmental conditions across the full distribution of target ecological and cultural landscape elements.
4. Develop a proposed landscape conservation analysis approach to combine and refine environmental condition indices, allowing non-technical decision-makers to set threshold levels and prioritize conservation actions.
5. Work with northeast states to synthesize regional information for use in State Wildlife Action Plan updates.
6. Host a Conservation Design structured decision-making (SDM) workshop to demonstrate alternative parameter levels for meta-analysis and engage decision-makers to set threshold levels and make prioritizing decisions.
7. Implement prioritization schemes indicated by Conservation Design SDM workshop, resulting in Northeast Landscape Conservation Design datasets.
8. Building upon NE Landscape Conservation Design datasets, translate data to provide tools that reflect the specific values, scales, media, and decisions required by conservation practitioners, and develop a strategy to facilitate adoption of those tools.

**Resources Needed to Initiate Effort:**

In addition to the staff time of the LCC Conservation Design Specialist, there will be a need for at least one full time GIS technician working for the LCC to organize and synthesize existing spatial data and support for travel and coordination for meetings. Additional technician support will also be needed within organizations (e.g. The Nature Conservancy) that have developed the major data sets. Estimated budget:

Description FY 2011 project funds

1. LCC GIS Technician at the GS-7 level $ 50,000
2. GIS Technical support for partners $ 50,000

3. Travel support and facilitation $ 20,000

 for workshops and meetings

Total estimate for initial LCC funds $120,000

**Budget Notes:** Line 1 is intended to be a contract or temporary FWS position under LCC staff oversight. Line 2 will provide part or full time support for dedicated GIS technicians within partner agencies, organizations and universities maintaining and translating foundational GIS products. Line 3 will provide support for travel and participation and facilitation in workshops and meetings to develop conservation design approaches and provide technical support on data products and decision-making.

Operational support for data management, synthesis, and adoption of current and future LCC projects is anticipated to be a continuing need. Part of that annual cost could be built into the LCC operational budget and part could be built into the projects budget. The approach and annual cost will be determined as part of the initial effort outlined here.

**Timeline:**

Objectives 1-4 6 months from start of project

Objectives 5-6 9 months from start of project

Objectives 7-9 12 months from start of project

**Request to LCC Steering Committee:**

Approve the initial Northeast Landscape Conservation Design proposal and funding to support technicians and travel using the balance of FY 2011 LCC project funds.

As the conservation design work progresses, more detailed proposals will be developed with the conservation design team and presented to the technical committee and steering committee for additional discussion, refinement and consideration of future funding.