APPALACHIAN LANDSCAPE CONSERVATION COOPERATIVE

Appalachia is in an era of monumental conservation challenges. These include the wholesale loss and fragmentation of natural habitats; genetic isolation of species and populations; increasing threats associated with change in natural disturbance regimes, such as wildfires that restore fire-reliant ecosystems; dramatic changes in the water cycle with an increased risk of flooding in some areas yet water scarcity in others; and the expansion of harmful insect pests and invasive species. The effects of these threats will be exacerbated by expanding and emerging land-use changes and the changing climate. It is imperative that natural resource management agencies, science providers, conservation organizations and other industries and communities work together to understand the impacts of these stressors and determine how best to address these challenges within the Appalachian region.

Background

In 2011, the Appalachian LCC made significant progress building the cooperative in several areas. The cooperative has articulated its mission and vision, convened technical workshops to support planning and prioritized science needs. It is building its partner network, identifying organizational capacity across its landscape and expanding its communications and information exchange.

The Appalachian LCC was formed as a conservation partnership consisting of federal agencies, states, tribes, universities and private organizations across Appalachia, an area that extends from southern New York to northern Alabama. It is part of a network of LCCs across the United States and adjacent areas of Canada and Mexico that is supported and facilitated by the U.S. Fish and Wildlife Service and the Department of the Interior.

Mission Statement

The mission of the Appalachian LCC is to achieve sustainable landscape-level conservation through partnerships, shared resources, enhanced science-based management capacity, landscape-level planning, and supporting conservation actions and research as part of a national network.

The Appalachian LCC



Vision Statement

The Appalachian LCC is a science and management partnership to protect the valued resources and biological diversity of the Appalachian region, sustain the benefits provided by healthy and resilient ecosystems to human communities, and help natural systems adapt to large landscape-level stressors and those stressors that may be magnified by the changing climate.

For more information, visit the Appalachian LCC website at http://applcc.org.

Establishing the Governance Structure

Year One

Year one of the Appalachian LCC was devoted to building the organizational capacity of the LCC in terms of identifying the membership, decision-making body, and governance structure; articulating the vision and mission; and defining a comprehensive portfolio of science needs to support conservation priorities as presented by field-based experts working across the region and within the partner organizations.

Governance and Structure

In 2011, the Appalachian LCC established the interim steering committee, which approved the interim governance and structure for the LCC. The steering committee made the commitment to retain the interim designation for a period of two years to lend the partnership the flexibility in governance structure that may be required as the cooperative develops. The Appalachian LCC governance structure has four levels:

- **Interim steering committee level** is the decisionmaking and oversight body. An executive subcommittee provides decision-making support;
- **Staff and team level** includes LCC staff, partners' staff assigned to support the Appalachian LCC, or other leading experts to serve in support of the work of the Appalachian LCC;
- **Group level** identifies the working or advisory groups established over time to address specific topics or issues;
- Stakeholder level is the broad group of individuals or partner organizations that may not be actively engaged in the work of the Appalachian LCC and may include stakeholders and community members who influence the lands or resources across the Appalachian region.



For more information, visit the interim steering committee at http://applcc.org/page/steering-committee.

The Appalachian Interim Steering Committee Members



Developing a Planning Foundation and Setting Science Priorities

November Workshop

The Conservation Priorities Science Needs Workshop was conducted in November 2011, and based on project descriptions that had been previously shared with LCC staff by members of the cooperative, field offices, and partner organizations through meetings and listening sessions held during the course of the year. More than 130 field biologists, resource managers, and community member attended the workshop in Blacksburg, Virginia.

During the workshop, attendees identified a portfolio of science information and research needs required for conservation managers and partners to work together more effectively. The outcome of the workshop was a list of top-ranked science needs that were recommended to the interim steering committee for immediate funding.

Science Needs

The interim steering committee met after the workshop and approved the topranked science needs. Expert scientists were nominated and assigned to workgroups. Each workgroup was tasked with developing one to three detailed project descriptions for each of the approved top-ranked science needs.

The Appalachian LCC used these project descriptions to put out a request for applications (RFA) to solicit interested experts to seek available contract funding for projects that meet the approved, top-ranked science needs. Details on the RFA process are available on the website at

http://applcc.org/page/project-support.

Workshop Attendees' Science Expertise and Profession

Areas Expertise /Profession	North	South
Aquatic - Manager	11	15
Aquatic - Researcher	11	7
Terrestrial - Manager	13	10
Terrestrial - Researcher	8	11
Climate Change – Manager	3	3
Climate Change - Researcher	4	4
Human Dimensions – Manager	7	5
Human Dimensions – Researcher	10	3
IT & Info. Management-Manager	3	2
IT & Info. Management-Researcher	4	5
TOTALS	74	65
Sector Representation	Managers	Scientists
Federal 43% State 28% Other 28%	52%	48%

Experts were invited from both the northern and southern regions of Appalachia.

2011 Top-Ranked Science Needs

- 1. Inventory and review of ecological flow models and monitoring networks with applicability to Appalachian watersheds.
- 2. Development of a stream classification system compatible throughout the Appalachian LCC as a platform to study ecological flow issues.
- 3. Forecast of future spatial footprint of energy production across the Appalachian LCC region.
- 4. Landscape-scale maps of terrestrial habitat and ecosystems based on a common mid-level classification framework for the Appalachian LCC region.
- 5. Survey inventory and distribution mapping of rare, threatened and endangered species across the Appalachian LCC.
- 6. Understanding land use and climate change in the Appalachian landscape.

For more information, visit the workshop website at http://applcc.org/page/workshop2011.

Building the Cooperative

The expanding and accelerating impacts of climate and land-use changes seen across Appalachia present significant conservation challenges and opportunities. The formation of the Appalachian LCC will support the conservation community and help increase the scope of vision, both geographically and temporally, in order to maximize the potential for long-term successes.

Action Items

In the coming year, the Appalachian LCC will work to continue building the cooperative throughout the region. Relying on the wealth of scientific and management expertise in Appalachia, the LCC will work to define and implement a work plan for the cooperative. Next steps for the Appalachian LCC include:

- Pursuing non-traditional partnerships; •
- Selecting projects to meet top-ranked science needs; •
- Pursuing data integration with partners;
- Sharing and supporting climate change monitoring and research, and coordinating with the Department of the Interior Climate Science Centers to identify climate change research needs and tools;
- Reaching out to engage non-traditional organizations and partnerships; and
- Participating at the national LCC network level.



Biologists conducting a fish survey.

Working Together



Department of the Interior through the U.S. Fish and Wildlife Service *is providing project support and staff to facilitate this partnership.*

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For more information, please visit the Appalachian LCC website http://applcc.org/.