

LCC Introduction for National Academy of Sciences Review

The last century has seen great changes in the landscapes and seascapes across North America, the Pacific Islands, and the Caribbean. Our natural areas face increasing pressure to meet the demands of a growing, more urban human population. Global and national conservation challenges like development pressure, resource extraction, wildfire, pollution, invasive species, hypoxia, and other impacts to our land, water, and wildlife are magnified by a rapidly changing climate. These challenges are greater than any one organization can meet alone.

In spite of past successes in conservation, a change is needed in our stewardship of oceans, lands, and waters and the ecological processes that support the wildlife, peoples, and cultures of North America. These challenges demand innovative approaches to resource management and conservation based on collaboration and requires a longer-term view than traditional decision making. Further, these challenges demand an unprecedented collective effort to better understand the specifics of threats we face, and inspire coordinated action to address them.

Acknowledgement of these emerging challenges was framed by the state wildlife agencies as early as 1993 at the 58th North American Wildlife and Natural Resources Conference. At the same time, Federal resource management agencies were recognizing project or issue level actions were not effective in addressing the scale and scope of changes across the landscape. The US Fish and Wildlife Service first conceived the concept of the Landscape Conservation Cooperative (LCC) network building on examples of large-scale conservation partnerships. For example, sustainable populations of waterfowl have been achieved by a broad coalition of partners who share a common goal through the Migratory Bird Joint Ventures. Another example is the large scale restoration efforts in biologically rich areas such as the Everglades. This has been successful because they included a diverse array of partners who identified shared priorities and committed to a sustained effort over decades to achieve the collective vision.

Like large-scale conservation successes of the past, LCCs establish a forum to identify shared goals with a host of influential partners thereby leveraging capacity in a sustained effort over the long-term and increasing the likelihood of on-the-ground success. The LCC concept was adopted by Former Department of Interior (DOI) Secretary Ken Salazar who recognized many of the DOI's essential functions were being impacted by climate change and managers needed more information, rigorous science, and new decision-making tools in order to plan for the future and implement adaptation strategies. He issued Secretarial Order 3289 in September 2009, establishing the first-ever coordinated, Department-wide strategy for addressing climate change impacts on the resources the DOI manages. The order recognized the value LCCs provide in coordination and specifically states: "A network of Landscape Conservation Cooperatives will engage DOI and federal agencies, states, tribal and local governments and the public to craft practical, landscape-level strategies for managing climate change impacts..." The mandate for LCCs is broader than just climate change including additional stressors LCCs deem important to their geography.

Today LCCs provide a forum where entities with statutory authorities and responsibilities, and land management interests can come together to consider a larger landscape perspective and collectively find conservation solutions. Commitment to this forum is demonstrated by diverse

consortia of federal and state agencies, NGOs, tribes and other partners engaged in LCCs and providing support through financial, staffing, and other resources.

Initially nine LCCs were established in 2010 and 13 more were stood up in 2011 and 2012. While the US Fish and Wildlife Service has administrative responsibility for most of the LCCs, five are managed or co-managed by other federal agencies or bureaus (Bureau of Land Management, Bureau of Reclamation, National Park Service and US Forest Service). Some LCCs have staff from state fish and wildlife agencies and LCCs with geographies crossing international borders have steering committees that include international organizations/agencies. Each LCC has a volunteer steering committee typically containing senior representatives from States, federal agencies, tribes, NGOS, universities, and other conservation partners.

As individual LCCs were established, there was recognition of a need for inter-LCC coordination. Much like individual LCCs bring together management partners with common interests at regional scales, a *Network of LCCs* offered a similar opportunity at national and international scales. The Network fosters collaboration and partnerships among the LCCs and established a collective vision of “Landscapes and seascapes capable of sustaining natural and cultural resources for current and future generations.” As the LCC Network developed, it was also apparent a coordinating body would be vital for long-term success. The LCC Council was established in 2014 as a representative body of executive-level leaders from LCC partner organizations including states, federal agencies, tribes, international representatives, NGOs, and indigenous peoples. Together, they support the cooperative conservation and sustainable resource management efforts of the LCC Network. They are working to help the LCC Network achieve its goals and sustain a broad constituency of partners.

Through its diversity of partners and organizational structure, the LCC Network is designed to change the way the partners think about, plan, and act upon conservation issues across large landscapes. While respecting individual organizations’ authorities and mandates, LCCs provide a “shared table” where partners identify and act upon common interests in conservation and information needs. Of equal importance, the LCCs help to build trust between and among partners even when individual organizational interests may conflict. Though individual LCCs predominantly focus on the priority needs for their geographies there are also frequent collaborations between neighboring LCCs on issues that span broader geographies. The LCC Network seeks to make significant positive conservation differences on issues spanning even larger geographies across the continent and the associated island systems.

The LCC Network vision is compelling for each of the 22 LCCs and they see themselves as making progress towards this vision. Yet, by design, the LCCs are as diverse as the ecosystems they cover. From the largely undeveloped, but rapidly changing landscapes of Alaska, to the highly fragmented landscapes of the eastern United States, or the islands and ocean systems of the Caribbean, Pacific Islands or Aleutians, the individual LCCs have defined priorities most relevant to the managers within their geographies. They have done this by convening partners, identifying where the diverse partnerships share priorities to take the process as far as possible to identify a shared vision of conservation. The conservation needs and socio-political environment shape how the individual LCCs determine their priorities with some focusing on addressing science and information needs while others are invested in recommending strategies for

conservation across their geographies. As the LCC Network matures, it is anticipated many individual LCC actions will become scalable to benefit conservation at large geographic scales.

Although the first LCCs are only five years old, there are already many success stories that indicate they are a worthwhile endeavor. LCCs are taking action on shared needs, whether it is a scientific study to resolve a key question, or developing a landscape plan to highlight the best available conservation corridors, the collaborative approach is effective and is already reducing duplication across the partners. For example the South Atlantic LCC has developed a “Conservation Blueprint” identifying shared conservation priorities with many state partners and other stakeholders across the region. Now, all LCC members have a shared vision they can use to target their conservation investments and achieve greater results than any individual organization could have accomplished alone.

The fifteen southeastern state fish and wildlife agency directors asked the five LCCs in the southeast to create a Southeastern Conservation Adaptation Strategy (SECAS) and the South Atlantic LCC blueprint is the first step in the completion of SECAS, due to be finalized in fall 2016. LCCs are also working with broad coalitions of partners to conserve imperiled species before protection under the Endangered Species Act is needed. For example, LCC investments supported a five state partnership to conserve the lesser prairie chicken and joined an unprecedented 11-state coalition to conserve the greater sage grouse. In the Great Lakes, LCCs are helping prioritize the removal of barriers to fish passage and control the spread of invasive species. Each LCC has a growing list of accomplishments that stem directly from the shared priorities identified by the conservation collaborative. Decreasing budgets in nearly every sector have created an added incentive to collaborate with partners to achieve shared goals and the LCCs have been a useful forum for those collaborations to begin. Already, LCC investments have been significantly leveraged by partner resources and leveraging will expand in the future as the individual organizations invest to achieve the common vision.

Collaborative conservation has been fostered in the past but never on the scale and with the commitment associated with the LCCs. The LCCs are building an integrated conservation community unlike any that has previously existed. The LCC model was derived from other important partnerships such as the Migratory Bird Joint Ventures and the Fish Habitat Partnerships but LCCs encompass all natural and cultural resources the LCC partnership prioritizes. In the grand vision, the steps taken now will make it easier for decision-makers to collectively know where actions are most beneficial or where they can do the most harm. This type of change doesn't happen quickly and requires breaking down institutional barriers across many sectors and the LCCs are building the momentum to accomplish this transformation. The platform is now in place to affect change at both the individual LCC level and across the LCC Network. The potential conservation benefits of the LCC Network are enormous as the LCCs become even more cohesive and work together to achieve a shared vision.



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