

April 10, 2014

To: Management Team Co-Chairs  
National Fish, Wildlife, & Plants Climate Adaptation Strategy  
on behalf of:  
From: Noreen Walsh, Chair  
Tammy Whittington, Co-chair  
Great Northern Landscape Conservation Cooperative  
Subject: Great Northern LCC role in Climate Adaptation Strategy

The Steering Committee of the Great Northern Landscape Conservation Cooperative (GNLCC) has reviewed the recently released National Fish, Wildlife, & Plant Climate Adaptation Strategy (NFWP CAS) as requested in the letter from the NFWP CAS Management Team, sent June 6, 2013.

The GNLCC commends the partners involved in a well-crafted document that lays out a clear roadmap for action to reduce risks and to increase the resiliency of our valuable natural resources. It is abundantly clear that many of the goals within the strategy will require a high level of integration across organizations, jurisdictions and geographies.

It is with this in mind that the Steering Committee of the Great Northern LCC would like to acknowledge their commitment to work to support the NFWP CAS within the Great Northern geography.

The Great Northern LCC operation goal or mission strongly aligns with the NFWP CAS purpose to: *Inspire and enable natural resource professionals and other decision makers to take action to conserve the nation's fish, wildlife, plants and ecosystem functions, as well as the human uses and values these natural systems provide, in a changing climate.*

The operational goal or mission of the GNLCC is to: *Coordinate, facilitate, promote, and add value to large landscape conservation to build resource resilience and inform sustainable resource management in the face of climate change and other landscape stressors through the following:*

- *Support Science Development.—Identify and facilitate the development, integration, and application of social and natural scientific information needed to inform conservation actions and sustainable resource management decisions to conserve water, land, fish, wildlife, and cultural heritage.;*
- *Effect Coordination.—Support coordination and integration of conservation science and actions across ecosystems at the landscape scale, leveraging the capabilities of respective agencies/organizations/partnerships, and provide real-time situational awareness of on-going conservation efforts.*

## Attachment

- *Inform Conservation Action and Sustainable Resource Management.*—Provide scientific information and decision support tools informing conservation action and sustainable resource management that conserve water, land, fish, wildlife, and cultural heritage.
- *Monitor and Evaluate.*—Support efforts to monitor landscape-scale indicators, test scientific assumptions, and evaluate effectiveness of conservation actions and sustainable resource management to inform adaptive management decision making.
- *Communicate and Educate.*—Communicate relevant science information and GNLCC activities and opportunities to partners and users. Facilitate collaborative conservation and seek to leverage capabilities and support..

Similarly, the Great Northern Vision aligns very well with that of the NFWP CAS:

*Great Northern LCC Vision: A landscape that sustains its diverse natural systems to support healthy and connected populations of fish, wildlife, and plants; sustains traditional land uses and cultural history; and supports robust communities.*

*NFWP CAS Vision: Ecological systems will sustain healthy, diverse, and abundant populations of fish, wildlife, and plants. These systems will provide valuable cultural, economic, and environmental benefits in a world impacted by global climate change.*

The Great Northern LCC Vision, Goals, and Conservation Targets, are outlined in the Great Northern Strategic Framework, adopted September 2012 ([http://greatnorthernlcc.org/sites/default/files/documents/gnlcc\\_framework\\_final\\_small.pdf](http://greatnorthernlcc.org/sites/default/files/documents/gnlcc_framework_final_small.pdf)).

This Framework is being supplemented and supported by a Science Plan which describes implementation, science needs and monitoring towards desired outcomes is under development and will be available within the next 12 months.

We have attached a summary which highlights on how the Great Northern LCC vision, mission and goals compare to relevant sections of the NFWP CAS. We see NFWP CAS as an excellent framework for coordinating climate adaptation actions among Great Northern LCC partners as feasibility and capacity allow.

As per this letter, the Great Northern LCC and its partners commit to the following:

- 1) Support relevant goals of the NFWP CAS (as described in the attached summary) through implementation of the GNLCC Strategic Framework
- 2) Over the next six months, work with GNLCC partners to describe how their organization's efforts can tier to the NFWP CAS to support its implementation
- 3) Compile this analysis and identify possible next steps, leveraging and collaborative opportunities for implementation, as well as progress made.

In closing, the Great Northern LCC is strongly committed to achieving collaborative landscape goals and we believe that the broadly supported Strategy gives further support and relevance to our work.



*Vision: A landscape that sustains its diverse natural systems to support healthy and connected populations of fish, wildlife, and plants; sustains traditional land uses and cultural history; and supports robust communities.*

**Mission:** Coordinate, facilitate, promote, and add value to large landscape conservation to build resource resilience and inform sustainable resource management in the face of climate change and other landscape stressors through the following:

- SUPPORT SCIENCE DEVELOPMENT.—Identify and facilitate the development, integration, and application of social and natural scientific information needed to inform conservation actions and sustainable resource management decisions to conserve water, land, fish, wildlife, and cultural heritage.;
- EFFECT COORDINATION.—Support coordination and integration of conservation science and actions across ecosystems at the landscape scale, leveraging the capabilities of respective agencies/organizations/partnerships, and provide real-time situational awareness of on-going conservation efforts.
- INFORM CONSERVATION ACTION AND SUSTAINABLE RESOURCE MANAGEMENT.—Provide scientific information and decision support tools informing conservation action and sustainable resource management that conserve water, land, fish, wildlife, and cultural heritage.
- MONITOR AND EVALUATE.—Support efforts to monitor landscape-scale indicators, test scientific assumptions, and evaluate effectiveness of conservation actions and sustainable resource management to inform adaptive management decision making.
- COMMUNICATE AND EDUCATE.—Communicate relevant science information and GNLCC activities and opportunities to partners and users. Facilitate collaborative conservation and seek to leverage capabilities and support.

## GOALS



*Vision: Ecological systems will sustain healthy, diverse, and abundant populations of fish, wildlife, and plants. These systems will provide valuable cultural, economic, and environmental benefits in a world impacted by global climate change.*

**Purpose:** Inspire and enable natural resource professionals and other decision makers to take action to conserve the nation’s fish, wildlife, plants and ecosystem functions, as well as the human uses and values these natural systems provide, in a changing climate.

STRATEGY 1.1: IDENTIFY AREAS FOR AN ECOLOGICALLY-CONNECTED NETWORK of terrestrial, freshwater, coastal, and marine conservation areas that are likely to be resilient to climate change and to support a broad range of fish, wildlife, and plants under changed conditions.

STRATEGY 1.2: SECURE APPROPRIATE CONSERVATION STATUS ON AREAS IDENTIFIED IN ACTION 1.1.1 to complete an ecologically connected network of public and private conservation areas that will be resilient to climate change and support a broad range of species under changed conditions.

STRATEGY 1.4: CONSERVE, RESTORE, AND AS APPROPRIATE AND PRACTICABLE, ESTABLISH NEW ECOLOGICAL CONNECTIONS AMONG CONSERVATION areas to facilitate fish, wildlife, and plant migration, range shifts, and other transitions caused by climate change.

STRATEGY 3.2: FACILITATE A COORDINATED RESPONSE TO CLIMATE CHANGE at landscape, regional, national, and international scales across state, federal, and tribal natural resource agencies and private conservation organizations.

3.2.1 Use regional venues, such as LCCs, to collaborate across jurisdictions and develop conservation goals and landscape/ seascape scale plans capable of sustaining fish, wildlife, and plants.

3.2.3 Integrate individual agency and state climate change adaptation programs and State Wildlife action Plans with other regional conservation efforts, such as LCCs, to foster collaboration.

STRATEGY 4.1: SUPPORT, COORDINATE, AND WHERE NECESSARY DEVELOP DISTRIBUTED BUT INTEGRATED INVENTORY, MONITORING, OBSERVATION, and information systems at multiple scales to detect and describe climate

**Goal 1:** Maintain large, intact landscapes of naturally functioning terrestrial and aquatic community assemblages.

**Goal 2:** Conserve a permeable landscape with connectivity across aquatic and terrestrial ecosystems, including species movement, genetic connectivity, migration, dispersal, life history, and biophysical processes (recognizing this is species dependent, and recognizing in some circumstances connectivity is not desired)

**Goal 3:** Maintain hydrologic regimes that support native or desirable aquatic plant and animal communities in still and moving water systems.

**Goal 4:** Promote landscape-scale disturbance regimes that operate within a future range of variability and sustain ecological integrity.

impacts on fish, wildlife, plants, and ecosystems.

*4.1.7: Use existing or define new indicators at appropriate scales that can be used to monitor the response of fish, wildlife, plants, and ecosystems to climate change.*

STRATEGY 4.2: IDENTIFY, DEVELOP, AND EMPLOY DECISION SUPPORT TOOLS FOR MANAGING UNDER UNCERTAINTY via dialogue with scientists, managers, economists, and stakeholders.

*4.2.3: Conduct vulnerability and risk assessments for habitats and priority species (threatened and endangered species, species of greatest conservation need, and species of socioeconomic and cultural significance).*

*4.2.6: Engage scientists, resource managers, economists, and stakeholders in climate change scenario planning processes, including identification of a set of plausible future scenarios associated with climate phenomena and socio-economics likely to significantly impact fish, wildlife, and plants.*

*4.2.7 Ensure the availability of and provide guidance for decision support tools (e.g., NOAA's Digital Coast, Sea Level Affecting Marshes Model (SLAMM), etc.) that assist federal, state, local, and tribal resource managers and planners in effectively managing fish, wildlife, and plants in a changing climate.*

*4.2.8 Use observation and monitoring systems in an adaptive management framework to evaluate the effectiveness of specific management actions and adapt management approaches appropriately.*

STRATEGY 5.1: IDENTIFY KNOWLEDGE GAPS AND DEFINE RESEARCH PRIORITIES via a collaborative process among federal, state, tribal, private conservation organization, and academic resource managers and research scientists.