An Overview

Climate Change Strategic Plan

September 2010

Accelerating climate change will affect our nation's fish, wildlife, and plant resources in profound ways. While many species will continue to thrive, some populations may decline and in some instances, go extinct. Others will survive in the wild only through direct and continuous intervention by wildlife and fisheries managers. This defining challenge for the conservation community requires the U.S. Fish and Wildlife Service and its partners to apply the skill, determination, creativity and commitment to conserving the nation's natural resources that have defined the American conservation movement since its inception more than 160 years ago. The Service's Climate Change Strategic Plan establishes a basic framework within which the agency will work as part of the larger conservation community to help ensure the sustainability of fish, wildlife, plants and habitats in the face of accelerating climate change. The plan is also an integral part of the Department of the Interior's strategy for addressing climate change, and will enable the Service to play a key role in achieving Departmental objectives related to climate change.

Our Principles

The Service will follow six guiding principles in responding to climate change:

- We will continually evaluate our priorities and approaches, make difficult choices, take calculated risks and adapt to climate change.
- We will commit to a new spirit of coordination, collaboration and interdependence with others.
- We will reflect scientific excellence, professionalism, and integrity in all our work.
- We will emphasize the conservation of habitats within sustainable landscapes, applying our Strategic Habitat Conservation framework.
- We will assemble and use state-of-the-art technical capacity to meet the climate change challenge.
- We will be a leader in national and international efforts to address climate change.

Seedskadee NWR by J and K Hollingsworth

Our Strategy

The result of more than 18 months of intensive work and thorough discourse within the agency and input from the public, the Service's Climate Change Strategic Plan employs three key strategies to address climate change: **Adaptation**, **Mitigation**, and **Engagement**.

Adaptation is defined by the Intergovernmental Panel on Climate Change (IPCC) as an *adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.* For the Service, adaptation is planned, science-based management actions that we take to help reduce the impacts of climate change on fish, wildlife, and their habitats. Adaptation forms the core of the Service's response to climate change and is the centerpiece of our Strategic Plan. This adaptive response to climate change will involve strategic conservation of terrestrial, freshwater, and marine habitats within sustainable landscapes.

Mitigation is defined by the IPCC as *human intervention to reduce the sources or enhance the sinks of greenhouse gases*. Mitigation involves reducing our "carbon footprint" by using less energy, consuming fewer materials, and appropriately altering our land management practices. Mitigation is also achieved through biological carbon sequestration, the process in which CO_2 from the atmosphere is taken up by plants through photosynthesis and stored as carbon in tree trunks, branches and roots. Sequestering carbon in vegetation such as bottomland hardwood forests or native prairie grasses can often restore or improve habitat and directly benefit fish and wildlife.

Engagement involves reaching out to Service employees; local, national and international partners in the public and private sectors; key constituencies and stakeholders; and everyday citizens to join forces and seek solutions to the challenges to fish and wildlife conservation posed by climate change.

By building knowledge and sharing information in a comprehensive and integrated way, the Service and its partners and stakeholders will increase our understanding of global climate change impacts on species and their habitats and use our combined expertise and creativity to help wildlife resources adapt in a climate-impacted world.

U.S. Fish & Wildlife Service

Adaptation

The Service will:

- Work with the Interior Department and conservation partners to develop a *National Fish and Wildlife Climate Adaptation Strategy* to be the conservation community's shared blueprint to guide wildlife adaptation partnerships over the next 50-100 years.

- Help create a *National Biological Inventory and Monitoring Partnership* that facilitates a more strategic and cohesive use of the conservation community's monitoring resources. The Partnership will generate empirical data needed to track climate change effects on the distribution and abundance of fish, wildlife and their habitats; model predicted population and habitat change; and help us determine if we are achieving our goals.

- Build regional and field technical capacity by working with partners to provide cutting edge science and information through partnerships called Landscape Conservation Cooperatives (LCCs). LCCs will be the primary vehicle through which the Service, other federal bureaus, and our partners acquire and apply the best climate change science to biological planning and conservation design for fish and wildlife management.

- Deliver conservation to the most climate-vulnerable species through various activities, including but not limited to identifying priority water needs, addressing habitat fragmentation, managing genetic resources, reducing non-climate stressors, and other resource management actions.

- Inform stakeholders on wildlife conservation issues related to energy development and energy policy and help facilitate development of renewable energy sources in a manner that helps conserve species and avoids or minimizes significant impacts to sensitive fish, wildlife, and plant species.

UL Bend National Wildlife Refuge by J and K Hollingsworth

Mitigation

The Service will:

- Reduce the carbon footprint of its facilities, vehicles and workforce and become carbon neutral by 2020.

- Develop expertise in biological carbon sequestration — sequestering greenhouse gases in plant biomass, while also creating or restoring priority native fish and wildlife habitats — and foster efforts to sequester carbon on lands it manages.

- Facilitate habitat conservation through carbon sequestration at the international level. By working with international partners and stakeholders to help reduce deforestation rates in key areas, such as tropical forests, the Service will help preserve areas critical to biodiversity conservation and support greenhouse gas mitigation.

Engagement

The Service will:

- In conjunction with conservation partners, develop useful and accessible information resources to help Americans fully appreciate the significant implications of climate change on species and their habitats, and to engage these constituencies in seeking solutions.

- Inspire key stakeholders and the broad public to join in a national effort to address accelerating climate change and ensure a natural resource legacy for future generations.

The Service's Strategic Plan for Climate Change is a blueprint for action in a time of uncertainty. It calls for the Service to rise to the challenges at hand, lay the foundation for wise decisions in the future and take steps right now to ensure our nation's fish and wildlife resources will thrive in the years to come.

For more information on how the U.S. Fish and Wildlife Service is working with others to conserve the nature of America in a changing climate, visit http://www.fws.gov/home/climatechange.