

## An Overview

# Climate Change Strategic Plan

### Our Challenge

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 managers. This defining challenge for the conservation community requires the U.S. Fish and Wildlife Service and its employees and 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 130 years ago.

The Service will channel its resources, innovation and leadership into an unprecedented effort to promote the persistence of a wide range of species in the face of accelerating climate change. The Service's draft Climate Change Strategic 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 be a leader in national and international efforts to address climate change.
- We will commit to a new spirit of coordination, collaboration and interdependence with others.
- We will leverage our resources by building coalitions that emphasize the shared conservation of habitats and species within sustainable landscapes.
- We will continually evaluate our priorities and approaches, make difficult choices, take calculated risks and adapt to climate change.

- We will assemble and use state-of-the-art technical capacity to meet the climate change challenge.
- We will reflect scientific excellence, professionalism, and integrity in all our work.

### Our Strategy

The result of more than a year of intensive work and thorough discourse within the agency, the U.S. Fish and Wildlife Service's draft Climate Change Strategic Plan establishes a basic framework within which the Service and its employees will work as part of the larger conservation community to help ensure the sustainability of fish, wildlife, and habitats in the face of accelerating climate change.

The plan employs three key strategies to address climate change: **Adaptation**, **Mitigation**, and **Engagement**.

**Adaptation** is defined by the 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*. In the Strategic Plan, adaptation refers to planned management actions the Service will 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.



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**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, which is a process in which CO<sub>2</sub> from the atmosphere is taken up by plants through photosynthesis and stored as carbon in biomass (e.g., tree trunks 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 the broader citizenry of this country 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.

### Adaptation

The Service will:

- Facilitate development of a *National Fish and Wildlife Adaptation Strategy*, as outlined in pending climate change legislation in the U.S. Congress, 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 strategically deploys the conservation community's monitoring resources. Working with the Regional Climate Change Response Centers, 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 determine if goals are being met.
- Build regional and field technical capacity by working with partners to provide cutting edge science and information through partnerships called Landscape Conservation Cooperatives. These Cooperatives will be guided by the DOI's newly created Climate Change Response Council. They will be the primary vehicle through which the Service, other federal bureaus and agencies, 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 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.

### 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.



*UL Bend National Wildlife Refuge by J and K Hollingsworth*

- 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 draft 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>