

# Questions & Answers

## Climate Change Strategic Plan

### The Fish and Wildlife Service has released a draft strategic plan to address climate change. Can you summarize what is in this plan?

The Service's draft Climate Change Strategic Plan emphasizes three concepts: 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 our Strategic Plan, adaptation refers to planned management actions we 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. Our 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, 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** is reaching out to Service employees; our local, national and international partners in the public and private sectors; our 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 our 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.

### What is being done now to address climate change?

During the current fiscal year, the Service has taken key first steps in our efforts to address climate change impacts. These 13 "climate change action priorities" build on the Service's commitment to implement landscape conservation using the Strategic Habitat Conservation framework and support our Fiscal Year 2010 climate change budget proposal. In some regions, many of these actions are underway and will prove valuable foundations and models for broader efforts going forward. For a summary of priority actions in FY2009, visit <http://www.fws.gov/home/climatechange/>



Banks Lake National Wildlife Refuge by Ryan Hagerty

### Why is the Service committing to action before finalizing a long-term strategy?

The Service is moving forward with both short- and long-term approaches to climate change. While the complex and sweeping nature of the problem requires a thoughtful, comprehensive approach (the long term), we must start now in order to establish a foundation for all future work, because we strongly believe that climate change:

- Is the single greatest conservation challenge of the 21st century;
- Is increasingly a determinant of mission success for the Service and our partners;
- Reinforces our current direction of change and efforts to build partnership-based capacities for landscape-level conservation; and,
- Requires immediate reevaluation of near-term conservation priorities and approaches, and an alignment of our work to ensure we are investing limited resources wisely to achieve the most important conservation outcomes on landscapes impacted by climate change.



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*Harris Neck National Wildlife Refuge by J & K Hollingsworth*

### What factors are driving the Service's approach to climate change?

We are already witnessing and documenting the effects of climate change on trust resources and their habitats, and we know that accelerated climate change is magnifying impacts on water and land resources, agriculture, and biological diversity. Accordingly, we must lay a foundation and prepare a comprehensive and long-term response to issues such as:

- Changes in the timing, location, and intensity of wildfires;
- Changes in rain and snowfall patterns;
- Increases in temperature in many locations;
- Changes in access to water resources;
- Altered hydrology in rivers and wetlands;
- Increased frequency of extreme weather events; and,
- Rising sea levels at the Service's coastal and island refuges.

Climate change will amplify existing management challenges involving habitat fragmentation, urbanization, invasive species, disease, parasites, and water management, all of which require an emphasis on large areas with interconnected and ecologically functional habitats capable of sustaining many species—landscapes—rather than single species or isolated or remnant habitats.

### How does the Service's Strategic Plan align with the Department of the Interior's overall strategy for climate change?

The Fish and Wildlife Service's Climate Change Strategic Plan is an integral part

of the Department of the Interior's strategy for addressing climate change. In his September 14 order, Secretary of the Interior Ken Salazar called for the development of a network of Landscape Conservation Cooperatives that will engage federal agencies, private landowners and all of our partners to coordinate adaptation efforts beyond the borders of federal lands. The cooperatives will be guided by the newly created Climate Response Council, which is comprised of top DOI officials including Fish and Wildlife Service Director Sam Hamilton.

The cooperatives will work closely with the nation's eight Regional Climate Change Response Centers. The USGS-led centers are tasked with providing climate change impact data and analysis geared to the needs of fish and wildlife managers

as they develop adaptation strategies. The order also creates the DOI Carbon Storage Project to develop biological and geological carbon storage and the DOI Carbon Footprint Project to develop a Department-wide greenhouse gas reduction program. The Service is already engaged in both projects.

### Is the Service headed in a dramatically new direction that will make the work of past decades irrelevant and obsolete?

To the contrary, the Strategic Plan represents a concerted effort on the part of the career professionals of the Service to keep the agency's conservation legacy relevant. Climate change threatens to undo much of what the men and women of this agency have accomplished over the past 70 years by altering ecosystems and pushing species to the brink of extinction. The plan builds upon our proud history and demonstrated success as the nation's conservation agency and harnesses all our knowledge, expertise, and sheer love of mission to confront the defining challenge of our time.

For more information or to comment on these proposed actions or the draft Strategic Plan, visit the Service's climate change Web site at <http://www.fws.gov/home/climatechange/>



*Bombay Hook National Wildlife Refuge by Jamie Richie*