



“The Changing Climate of Wildlife Management”

Association of Fish and Wildlife Agencies General Session Summary and Next Steps

State fish and wildlife agencies are responsible for the management of the fish and wildlife in our nation and have a critical interest in the potential impacts associated with climate change. Since climate change will either impact or have the potential to impact the wildlife resources for which they are responsible, state resource management agencies, tribes, and the federal agencies will all be challenged to manage populations and ecosystems in the face of these changes and uncertainties about how ecological systems will adapt. The 2007 general session highlighted approaches and strategies that state fish and wildlife agencies are taking to address potential impacts and challenges associated with climate change on a variety of natural resource issues. The general session was sponsored by the Association of Fish and Wildlife Agencies, the U.S. National Park Service, U.S. Geological Survey, and U.S. Fish and Wildlife Service.

The challenge before all natural resource agencies and organizations concerned with fish and wildlife conservation is how to make relevant to both managers and the public the impacts of climate change on the ability to manage resources. The intent of the presentations was to provide an overview of the science as well as presenting the state wildlife agency perspective on climate change and the ways in which the states are starting to act on this issue. Regardless of whether the discussions focused on specific taxa, a state agency perspective, or opportunities for collaboration, all the presentations and discussions identified common themes necessary to address the uncertainties climate change effects may impose on natural resources.

- There is a need for strong leadership from the natural resource agencies and a commitment to improving coordination and collaboration. When it comes to fish and wildlife conservation we need to be proactive now because it will be harder to make a case for fish and wildlife when other impacts are directly affecting human livelihood (e.g., loss of homes or damage due to flooding caused by sea level rise). State fish and wildlife agencies should begin **drafting adaptation strategies** now in **coordination** with the other state natural resources agencies and environmental quality agencies through their **governor’s office**.

- Climate change may present new policy opportunities and federal funding for fish and wildlife management. **Regulatory and policy support** is critical and the states need to be pursuing **funding** for comprehensive state responses.
- **Inventory and monitoring** is needed to determine which resources are particularly vulnerable and will allow managers to reassess their efforts in light of potential climate change impacts at national and regional scales.
- **Technical support** to improve coordinated and targeted monitoring, create impact summaries, and provide workshops and trainings on modeling and adaptive management. This might also include **information clearinghouse** on impacts, research, and mitigation/adaptation programs.
- When it comes to mitigating impacts we need to **improve resiliency of habitats and communities** to prepare for unknown, **unpredicted, and synergistic impacts**. As one example, as distribution ranges of plant and animal species change and move into areas where they are not currently considered to be native, we will need to be adaptive in our management strategies and assess whether to treat these as invasive species, or to protect them if their natural range is now compromised.
- We need to find ways to build uncertainty into planning in order to address changing priorities. Managers may need to reassign land conservation policies and the focus of land acquisition based on emerging climate science data.
- We need **better tools to speak with the public**. We need to develop common messages to help build inertia around action in order to avoid skepticism. Through the creation of talking points we can be sure that the state agencies are sending a clear and unified message that will help drive public policy.
- We need to **build on existing collaborative frameworks** such as State Wildlife Action Plans, National Fish Habitat Actions Plans, North American Waterfowl Management Plan, and others to meet common goals for species and habitat conservation.

If we are going to build support for conservation we need to be working together to educate the public and engage constituents. To achieve this we will need state agency leaders to champion the cause and experts to help make the science more accessible. Even within our own organizations we need to be working to make climate change a priority in agency activities and foster a change in the culture of fish and wildlife management to allow for the opportunity to think long term. With so many management challenges before us it is critical that we work together to address these challenges with respect to climate change.