Defenders of Wildlife

Global Warming & Wildlife

PROVIDING CRITICAL INVESTMENT IN WILDLIFE'S SURVIVAL

For years, scientists have recognized that global warming poses unprecedented risks to wildlife. The changing, shrinking and destruction of habitat caused by global warming requires wildlife to migrate or adapt and threatens their very existence.

Global warming is – and will continue to be – one of the greatest threats to ecosystem integrity, individual fish and wildlife species, coastal human settlements and world economic development throughout the 21st century.

Today, we have the opportunity to begin to address the impacts of global warming on wildlife and habitat. The **Lieberman-Warner Climate Security Act (S. 3036)*** requires a significant commitment to reduce U.S. greenhouse gas emissions through a national cap and trade system. The bill also provides a critical investment in natural resource conservation to address the devastating impacts climate change is already having, and will continue to have, on fish, wildlife, and their habitat. Estimates project this investment in conservation will average over $7 billion annually over the first two decades of this law's implementation. While aspects of this bill could be strengthened, S. 3036 is a good and necessary step on our road to addressing this urgent, challenge before us.

Devastating Impacts for Natural World

Climate change poses the most significant threat the natural world has ever faced. Scientists warn global warming is already causing serious damage and disruptions to wildlife and ecosystems and reliable future predictions call for such harmful disturbances to accelerate and deepen. These include habitat shifts northward and upward in elevation, changes in seasonal events that disrupt wildlife populations and ecological communities, melting of polar ice caps, acidification of the oceans, declining snowpack, increased drought, warming of rivers, steams, lakes and estuaries, increased threat from invasive species, and more frequent catastrophic fires.

The Role of Wildlife Managers

Climate change will have profound impacts on how wildlife managers at the state and federal levels manage our nation's wildlife populations. However, federal agencies have been slow to include climate change's impacts in their management planning and decision-making. A report released by the Government Accountability Office, *Climate Change: Agencies Should Develop Guidance for Addressing the Effects on Federal Land and Water Resources* found that federal land and wildlife management agencies currently lack the capacity and guidance to effectively respond to the impacts of global warming on our federal lands and wildlife. There is a clear need to develop climate change adaptation strategies at the federal and state level and to provide resources to implement these strategies.

A Substantial Investment to Address the Impacts of Climate Change on Fish, Wildlife, and Habitat

The Adaptation Program for Natural Resources provisions (Title VI, Subtitle D & Title XII, Subtitles C and D) within the bill address the challenges faced by land managers by requiring an unprecedented new investment in critical activities that enhance the resiliency and sustainability of fish and wildlife and their habitats to climate change. Additionally, the provisions call for:

- **Robust National and State Strategies** – The bill requires the development of national and state wildlife adaptation plans and includes a strong definition of the adaptation activities that will be funded. The definition makes clear that to qualify for funds, federal and state agencies must design activities that help with survival of fish and wildlife, fish and wildlife habitats, plants, and associated ecological processes threatened by climate change or ocean acidification.

- **Central Role for Science** – The bill establishes a science advisory board to inform the development of the national strategy and then to advise and consult with the federal agencies responsible for implementing the national strategy. The bill also creates a Science Center at the U.S. Geological Survey to coordinate, disseminate, and augment research on climate change's impacts on fish, wildlife, their habitats and associated ecological processes. These two measures ensure that that the national adaptation strategy and its implementation are grounded in the best available science.

- **Accountability in Expenditure of Federal Funds** – The bill allocates funds through existing programs with a proven track record of success in on the ground conservation of both species and habitats. It also requires that all funds be spent in accordance with federal and state wildlife adaptation strategies to ensure that federal funds are appropriately committed to serve the national interest in protecting wildlife and ecosystems impacted by global warming.

Funding Allocation – Natural Resources Adaptation Provisions (S. 3036)

Funds to protect fish, wildlife, and natural resources at the federal, state, and tribal levels could average as much as $7 billion annually during the law's first two decades. A breakdown of that spending includes:

- Land and Water Conservation Fund (*Land acquisitions*) – 12 percent
- State and territorial fish and wildlife agencies – 42 percent
- Tribal fish and wildlife agencies – 1 percent
- Department of the Interior (*Wildlife, lands, and waters programs*) – 16 percent
- Department of the Interior (*Cooperative grant programs*) – 5 percent
- Forest Service *(National forests, grasslands, and a cooperative grant program)* – 5 percent
- EPA *(Large-scale freshwater aquatic and estuarine ecosystems)* – 6 percent
- Corps of Engineers *(Large-scale freshwater aquatic and estuarine ecosystems)* – 7 percent
- Department of Commerce *(National Oceanic and Atmospheric Administration)* – 8 percent

**The Climate Security Act, formerly S. 2191, has been revised since it passed out of committee in December and has been assigned a new bill number, S. 3036.*

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