Chapter 4: Integration and Implementation

4.1. How Federal Agencies, States, Tribes, and Other Partners Can Use this *Strategy*

As noted earlier, this *Strategy* is the first national-scale effort across all levels of government with authorities for fish, wildlife, and plants to jointly identify the major strategies and initial actions needed to help our valuable living resources and the communities that depend on them deal with the challenges of climate change. Although the *Strategy* identifies some of the essential actions that can be taken or initiated in the next five to ten years, this is not a comprehensive action plan. Additional planning and action by federal, tribal, state, and local governments and many partners is essential to realize the goals laid out here.

4.1 Strategy Integration

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The *Strategy* builds upon and complements many existing climate adaptation efforts. Continuation and expansion of these efforts is critical to achieving the goals of this *Strategy*. First, many local governments and states have already begun to develop plans and adapt to climate change, either through their local land-use planning efforts, within their state fish and wildlife agencies, or more broadly across state government. For example, Washington State released the Washington State Integrated Climate Change Response Strategy in December 2011, which explains the climate change adaptation priorities and potential strategies and actions to address those concerns. Many other states have developed similar efforts, such as Alaska's Climate Change Strategy released in 2010, and the California Climate Adaptation Strategy released in 2009. The number of state resource agencies with climate vulnerability and adaptation efforts underway is increasing, and this *Strategy* can serve as a resource for states as well as local governments, tribes, federal agencies, and others.

Second, many multi-governmental and non-governmental partnerships already conduct sophisticated resource management planning that can incorporate climate change. Two examples are JVs² and the NFHAP,³ two partnerships of federal agencies, states, tribes, conservation organizations, and industry working to protect priority bird and fish habitats respectively. These efforts offer ideal opportunities to bring climate change information into existing resource management planning to ensure management actions advance adaptation in a changing climate. Such efforts can also draw upon a growing number of important tools and approaches for adaptation planning and action. For example, the non-profit organization Climate Adaptation Knowledge Exchange (CAKE)⁴ provides detailed information and access to information, tools, and case studies on adaptation to climate.

Many tribal governments and organizations are already experiencing the impacts of climate change on species, habitats, and ecosystems that are vital to their cultures and economies. They understand the need to adapt. For example, the Swinomish Tribe in the Pacific Northwest, which depends on salmon and shellfish, has developed the Swinomish Climate Change Initiative. This effort seeks to assess local impacts, identify vulnerabilities, and prioritize planning areas and actions to address the impacts of climate change, and can serve as an example for other tribal governments.

² http://www.fws.gov/birdhabitat/JointVentures/index.shtm

³ http://fishhabitat.org/

⁴ http://www.cakex.org

A number of climate adaptation efforts are underway at the federal level. Many federal agencies have initiated efforts to assess risks and impacts of climate change, and design adaptation efforts to reduce these risks. Federal agencies with natural resource management responsibilities like the DOI, NOAA, USDA, EPA, and others have initiated a wide variety of efforts to better understand, monitor, prepare for, and respond to climate change impacts in their mission areas, including targeted science, the application of new tools and assessments, and training for natural resource decision makers and partners (CEQ 2010, 2011, Pew Center 2010, 2012). Many of the strategies and actions in this Strategy are based in part on efforts identified, planned, or implemented by one or more other agencies (federal, state, or tribal).

The USGCRP⁵ is responsible for publishing an NCA every four years describing the extent of climate change in the United States and its impacts. The most recent national assessment was published in 2009, and provides the scientific foundation for this *Strategy*. The next assessment in 2013 will provide new information about impacts, opportunities, and vulnerabilities. It will also provide a basis for evaluating the effectiveness of the adaptation actions in this *Strategy* and determining next steps. In addition, the USGCRP has produced a series of 21 Synthesis and Assessment Products (SAPs)⁶ on the current information regarding the sensitivity and adaptability of different natural and managed ecosystems and human systems to climate and related global changes. These reports address topics such as sea-level rise (SAP 4-1), ecosystem change (SAP 4-2), agriculture, biodiversity, land and water resources (SAP 4-3), adaptation options for climate-sensitive systems and resources (SAP 4-4), energy production (SAP 4-5), human health (SAP 4-6), and transportation (SAP 4-7).

Another important entity is the ICCATF, which was established in 2009 to help the federal government and partners understand, prepare for, and adapt to the impacts of climate change. The development of this Strategy was called for in the Task Force's 2010 Report to the President. The ICCATF has also launched other efforts to advance climate adaptation that both inform this *Strategy* and provide opportunities for the Strategy's implementation. One of these is the National Action Plan: Priorities for Managing Freshwater Resources in a Changing Climate (Freshwater Action Plan). Released in October of 2011, the Freshwater Action Plan describes the challenges that a changing climate presents for the management of the nation's freshwater resources, and recommends a set of actions federal agencies can take to help freshwater resource managers reduce the risks of climate change. In addition, the National Ocean Council (NOC) is developing a series of actions to address the Resiliency and Adaptation to Climate Change and Ocean Acidification priority objective, one of nine priority objectives identified by the National Ocean Policy (NOP). These actions will address how the NOC will implement the NOP to respond to the challenges posed by climate change and ocean acidification. A Draft Strategic Action Plan outline was released for public comment in June 2011, and a draft Implementation plan for the National Ocean Policy was released for comment in January 2012. A final Implementation Plan is expected in Spring 2012. This Implementation Plan has been developed in coordination with both the Freshwater Action Plan and the Ocean Strategic Action Plan, so that the three strategies support and reinforce each other.

In addition, following direction from Presidential Executive Order 13514 and the ICCATF, the CEQ issued Implementing Instructions to all federal agencies to launch climate change adaptation planning with the first agency plans due in June 2012. This presents many opportunities for the resource management agencies involved in the development of this *Strategy* to develop their own agency-specific plans (if they have not already done so) and to interact with other agencies whose programs may influence their prospects for success. Many federal agencies have already conducted assessments of their

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⁵ http://www.globalchange.gov

⁶ http://www.globalchange.gov/publications/reports

⁷ http://www.whitehouse.gov/administration/eop/ceq/initiatives/adaptation

vulnerability to climate change and are developing adaptation plans to reduce risks, respond to impacts, and take advantage of possible beneficial changes of a changing climate. This *Strategy* can serve as a useful resource to all these efforts.

4.2 Strategy Implementation

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This *Strategy* is a call to action and blueprint to meet the challenges of safeguarding the nation's fish, wildlife, and plants and the communities and economies that depend on them in a changing climate. To position the nation for action, this *Strategy* identifies seven major goals, then offers strategies and actions that government and conservation partners can implement or initiate over the next five to ten years.

Federal, state, and tribal governments and conservation partners are encouraged to read the document in its entirety to identify areas of overlap between the *Strategy* and their mission areas and activities. These entities are encouraged to identify existing and new efforts that help advance the goals and strategies in this document. Successful implementation of this *Strategy* will take commitment and resources by government and non-government entities, and must include steps to evaluate, learn, and adjust our course of action as needed to achieve our goals in a changing world. To ensure effective coordination, implementation, tracking, and updating of the *Strategy*, this report proposes the following steps:

- 95 1. Federal, state, and tribal governments and conservation partners should incorporate appropriate elements of the *Strategy* (goals, strategies, and actions) into their plans and actions at national to local levels (e.g., development of implementation plans by federal, state, and tribal governments).
 - LCCs, CSCs, and RISAs and other regional collaborative efforts should incorporate appropriate elements
 of this Strategy as a resource for guiding their future science and assessment agendas and adaptation
 strategies.
 - State wildlife action plans should incorporate appropriate elements of this *Strategy*, AFWA's publication, *Voluntary Guidance for States to Incorporate Climate Change into State Wildlife Action Plans and Other Management Plans*, and other appropriate resources to design and deliver programs and actions that advance adaptation of fish and wildlife resources in a changing climate.
- 2. Federal agencies with programs that affect fish, wildlife, and plants and the habitats they depend on should incorporate appropriate elements of the *Strategy* into the agency adaptation plans they are developing under Executive Order 13514.
 - Federal members of the Strategy Steering Committee will assign lead roles and implementation timelines for implementation of the *Strategy* across the federal sector. Once these activities are determined, they should be incorporated into each agency's climate adaptation plan.
 - 3. An inter-jurisdictional coordinating body with representation and staff support from federal, state, and tribal governments will be established by June 30, 2012. This body will meet biannually to evaluate implementation of the *Strategy* and will report progress to Congress, CEQ, and federal, state, and tribal fish and wildlife agencies on an annual basis, with the first report due in June 2013.
 - This coordinating body will be tasked with promoting awareness, understanding, and use of the *Strategy* as a key tool in addressing climate change.
 - Starting in June 2014, the coordinating body, with support from DOI and CEQ, will start a revision of the Strategy, to be completed by June 2015. This revision will incorporate information produced by the 2013 NCA.
- The coordinating body will establish a mechanism to engage representatives of conservation partners, natural resource industries, and private landowners to assist with *Strategy* implementation and revision.

This *Strategy* is the beginning of a significant and collective effort to safeguard the nation's fish, wildlife, plants, and the communities and economies that depend on them in a changing climate. Lying ahead is an immense and challenging task, and much remains to be learned about the specific impacts of climate change and the responses of plants, wildlife, and ecosystems. New climate change and adaptation science is coming out almost daily and will help guide the way. But we know enough now to begin taking effective action to reduce risks and increase resiliency of these valuable natural resources—and we cannot afford to wait to respond to the changes we are already seeing or to prepare for those yet to come. Unless the nation begins a serious effort to undertake this task now, we risk losing priceless living systems—and the countless benefits and services they provide—as the climate inexorably changes. This *Strategy* offers a common framework for action to start the nation down the path to a meaningful adaptation response, and will help ensure that the nation's valuable fish, wildlife, plants, and ecosystems continue to provide important products and services to communities all across the country.

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