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STATE WILDLIFE ACTION PLANS: A RESOURCE FOR STATE WILDLIFE AGENCIES AND STATE TRANSPORTATION AGENCIES TO WORK TOGETHER TO PREVENT WILDLIFE FROM BECOMING ENDANGERED

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Abstract: As a requirement of the federal Wildlife Conservation and Restoration Program and State Wildlife Grants program, each state fish and wildlife agency has developed a wildlife action plan, known technically as a "comprehensive wildlife conservation strategy." The wildlife action plans identify the actions that are needed to prevent wildlife from becoming endangered in each state, including habitat conservation, management, restoration, and research and monitoring. Every state has completed an action plan, presenting an historic opportunity to improve the conservation of at-risk wildlife across the nation.

Since the wildlife action plans draw together the best scientific data, input from a broad array of experts and stakeholders, and recommendations from prior planning efforts, they present the most comprehensive assessment of what needs to be done in each state to conserve declining and imperiled wildlife. The wildlife action plans complement existing fish and wildlife management activities focused on recreationally harvested game and sportfish species. Because the action plans are focused on preventing wildlife from becoming endangered, they can be a powerful platform for a range of collaborative, preventive conservation planning and restoration activities.

Introduction

The United States has reached another milestone in our nation's long history of conservation success: every state fish and wildlife agency has recently completed a *wildlife action plan*. These comprehensive strategic plans outline the actions that are needed to prevent wildlife from becoming endangered in each state. Taken as a whole, the wildlife action plans present a nationwide platform for protecting at-risk fish and wildlife through aggressive, preventive action in every state. By focusing on preventive conservation for at-risk or imperiled species, the action plans complements existing programs aimed at game species conservation and endangered species conservation, advancing our collective ability to undertake landscape-scale, habitat-based conservation. They also present a powerful resource for transportation planners and managers to work collaboratively with state wildlife agencies.

Background

Wildlife conservation in the United States is a partnership effort between state fish and wildlife agencies and the federal government. State governments have primary responsibility for managing and conserving fish and wildlife as a public trust resource, a responsibility dating back to the American Revolution and the development of our nation's core political principles. The federal government plays a critical role in funding state-level wildlife conservation activities, managing migratory species, conserving habitat on federally-owned public lands, and protecting endangered and threatened species.

Our nation's approach to funding fish and wildlife conservation has been predominantly a user-pays/user-benefits model in which fees are collected from hunters and anglers and reinvested primarily in the conservation of species that are hunted and fished. At the state level, fish and wildlife agencies have been funded largely by user fees and taxes paid by directly hunters and anglers: relatively little funding comes from general legislative appropriations. Federal funds for wildlife conservation have come through two major programs: the Federal Aid in Wildlife Restoration Program (commonly called "Pittman-Robertson") and the Federal Aid in Sportfish Restoration ("Dingell-Johnson/Wallop-Breaux"). These programs dedicate the receipts from federal excise taxes on hunting and fishing equipment and motorboat fuels back to state fish and wildlife agencies.

The user-pays/user-benefits model has been tremendously successful, resulting in the recovery of many of America's most treasured fish and wildlife species. Landscape-scale habitat conservation has ensured strong waterfowl populations at the continental scale. Reintroduction, habitat management and harvest regulation have helped bring species like wild turkey, striped bass, and elk back from the brink of extinction.

Unfortunately, this very successful model has not provided the resources needed to keep up with the pressures faced by *all* wildlife species. In fact, the vast majority of fish and wildlife – from songbirds to reptiles to invertebrates – have been left largely without reliable funding for conservation. The results have been clear: facing accelerating habitat loss and other threats, a large portion of our nation's native fauna face declines and the threat of eventual extinction.

Teaming With Wildlife: Broadening the Model

The Teaming with Wildlife initiative was launched in the early 1990s to expand the funding base for wildlife conservation and provide the resources needed to support a more comprehensive approach to wildlife conservation. A core principle of the Teaming with Wildlife effort has been that *all citizens* should contribute to the conservation of fish and wildlife and that *all species* should concurrently benefit from conservation attention. Over time, the initiative has grown to include more than 5000 organizations and agencies, including hunters and anglers, environmentalists, professional biologists, wildlife managers, and nature-related businesses.

During the late 1990s, the efforts of the Teaming with Wildlife coalition helped advance the Conservation and Reinvestment Act, a broad proposal to increase dramatically federal funding for a variety of land, water, and wildlife conservation programs. Despite strong bipartisan support, the Conservation and Reinvestment Act did not pass.

However, Congress did enact two new programs in 2000 to support wildlife conservation: the Wildlife Conservation and Restoration Program (WCRP) and State Wildlife Grants (SWG).

The Wildlife Conservation and Restoration Program and State Wildlife Grants Program

The Wildlife Conservation and Restoration Program and State Wildlife Grants provide funding to state wildlife agencies for on-the-ground conservation projects and wildlife conservation planning. Both programs are administered by the US Fish and Wildlife Service through the Division of Federal Aid. Under both programs, funds are distributed to states according to a formula based on each state's population and land area. The federal funds distributed by the programs require matching funds from state or other non-federal sources. The Wildlife Conservation and Restoration Program require a 25% non-federal match for all activities. Funds under the State Wildlife Grants program require a 50% match rate (although a 25% rate was applied during the development of the state wildlife action plans).

Although the Wildlife Conservation and Restoration Program was authorized as a permanent program, funding was only provided for the first year. However, federal funding has continued to flow to State Wildlife Grants. Over the last six years, the two programs have meant a total of nearly \$500 million in new federal funds for wildlife conservation, matched with several hundred million more in state and private dollars. In a relatively short time, these programs have become the federal government's core programs for preventing wildlife from becoming endangered, with strong on the ground actions implemented in every state. This dramatic growth in a very tough budget climate has been the result of the strong bipartisan support built by the Teaming with Wildlife coalition.

State Wildlife Action Plans: Proactive, Flexible Conservation

As a condition of both the Wildlife Conservation and Restoration Program and State Wildlife Grants, each state fish and wildlife agency committed to developing a wildlife action plan, know technically as a "comprehensive wildlife conservation strategy." These statewide action plans draw together all available information to evaluate the condition of each state's wildlife species and habitats, identify species in need of conservation attention, outline the conservation issues that need to be addressed, and identify the actions needed to address those issues.

The wildlife action plans represent a balance between structure and flexibility. In the legislation defining the wildlife action plans, Congress outlined eight core planning requirements. Beyond those requirements, Congress and the Fish and Wildlife Service gave states substantial flexibility to develop approaches that fit each state's unique wildlife and habitat resources, management context, and local issues. At the same time, the wildlife agencies worked together to share information and priorities across jurisdictions. This diversity of planning approaches represents the essential strength of this effort. While focused on the same set of core elements, the state wildlife agencies had the flexibility to develop structures that address their own unique needs, translating conservation goals into on-the-ground results for wildlife in each state.

Table 1: Summary of Required Elements for Wildlife Action Plans

Box 1. Eight Required Elements for Wildlife Action Plans

Congress outlined eight core requirements that are contained in every wildlife action plan. Within this framework, state wildlife agencies developed planning approaches that fit their local management issues and needs.

- (1) Information on the distribution and abundance of wildlife, including low and declining populations, that are indicative of the diversity and health of the state's wildlife
- (2) Descriptions of locations and relative condition of **habitats** essential to species in need of conservation
- (3) Descriptions of **problems** which may adversely affect species or their habitats, and priority research and survey efforts
- (4) Descriptions of **conservation actions** proposed to conserve the identified species and habitats
- (5) Plans for monitoring species and habitat, and plans for monitoring the effectiveness of the conservation actions and for adapting these conservation actions to respond to new information,
- (6) Descriptions of procedures to **review** the plan at intervals not to exceed ten years
- (7) **Coordination** with federal, state, and local agencies and Indian tribes in developing and implementing the wildlife action plan.
- (8) Broad **public participation** in developing and implementing the wildlife action plan.

The core goal of the wildlife action plans is to prevent fish and wildlife from becoming endangered. Thus, the first step in the development of the wildlife action plans was the identification of those fish and wildlife species with low or declining populations, or that were otherwise in need of conservation. Most of the wildlife action plans refer to these targets as "species of greatest conservation need." States used various sources and techniques to identify these species, including natural heritage programs and other wildlife occurrence databases, data from other planning efforts and assessments, and input from agency biologists, academics, and other experts. While the selection process included species under formal protection of the federal Endangered Species Act or other state-level programs, the effort placed a major emphasis on identifying a broader set of species of concern that would include at-risk species not yet identified by other protection efforts.

The flexibility of the planning process resulted in substantial variation across the states in the definition of "species of greatest conservation need." For example, Utah's wildlife action plan identifies 196 such species, grouped in three tiers of relative priority. In contrast, Pennsylvania's wildlife action plan identifies 572 species of conservation concern, and Virginia identified more than 925.

The variability from state to state means that the concept of "species of greatest conservation need" is best understood as a broad set of priority species rather than a formal status. In fact, "species of greatest conservation need" should ideally define the broader set of fish and wildlife species that do *not* necessarily fall into a specific legal or regulatory category or status. The focus on species of greatest conservation need also provide an essential complement to existing fish and wildlife management activities aimed at maintaining harvestable populations.

Habitat-Focused Conservation Strategies

Many of our great wildlife restoration stories tell the return of one species at a time, from the bald eagle to the striped bass to the wild turkey. However, a species-by-species approach is not practical when dealing with the complete breadth of each state's fish and wildlife species. In even the smallest states, the full array of native fauna can encompass several thousand species, while in Texas, California, and Florida, the number of species reaches into the tens of thousands. In addition, because many of the species targeted in the action plans have received little prior conservation attention, conservation planning faces serious information gaps about even the basic habitat needs and life history.

To comprehensively and efficiently address the needs of each state's full array of wildlife, the wildlife action plans are broadly built around a "coarse-filter/fine-filter" approach to conservation planning. This planning approach combines broad, habitat-focused conservation actions (the "coarse filter") with specific interventions that are needed by individual species or ecological communities whose needs are not completely addressed by habitat-focused actions (the "fine filter").

As a first step in identifying effective habitat conservation and management recommendations, wildlife agencies had to develop a clearer understanding of the habitat needs of their species of concern as well as the basic availability and condition of those habitats in each state. To that end, the wildlife action plans used and refined a variety of existing habitat definition/classification systems, ranging from the ecological systems defined by NatureServe/state heritage programs to the definitions used by Gap Analysis Programs. In some cases, states were developing new systems of classifying habitats where none had even existed before in others, the development of the action plan offered an excellent opportunity to devise ingenious ways to crosswalk and link different systems.

The wildlife action plans took a variety of approaches to identifying habitat conservation priorities and management actions, reflecting decisions about the planning process and existing agency resources as well as biological and social considerations. Several states identified a subset of priority habitat types, ranking them based on criteria such as relative value for species of conservation need or relative threat level. For instance, the Utah wildlife action plan defines a subset of 10 habitats of relative priority for species of greatest conservation need, out of 25 habitats found in the state. Similarly, Mississippi's wildlife action plan identifies a targeted set of 15 habitats from a broader set of 69 habitats.

States also took a variety of approaches to identifying the relative value of different georgraphic locations and/or occurrences of important habitats. Some states identified broad geographic focal areas that encompass a variety of habitat types or landscape features. For instance, the Nebraska Natural Legacy Project identifies 40 "biologically unique landscapes," with priority ecological communities identified in each landscape. Other states focus on the identification of priority occurrences of habitats across different planning units. Minnesota, for instance, identifies the relative value of different occurrences of priority habitat types across the state's ecological subsections. Similarly, the Idaho wildlife action plan identifies priority habitats in each of the state's subsections as well as identifying priority subsections for the conservation of targeted habitat types.

The relationship between the definition of habitat types, the assessment of habitat priorities, and the identification of specific conservation opportunities or priorities plays out in complex ways across the wildlife action plans. Some states identify priority habitats without prioritizing different occurrences or geographic areas, while others might identify priority occurrences without defining relative priority among habitat types. Finally, some states emphasize a landscape/ecosystem approach that identifies priority actions that should be applied in whatever habitat types are present, without imposing relative priority among habitat types or locations.

The diversity of approaches taken by the states to identifying and describing habitat priorities presents challenges to meaningful generalization about how the information can be used. At the most basic level, however, every wildlife action plans contains rich information on what habitats occur in the state, what those habitats mean for imperiled species in need of conservation, and how those habitats need to be managed and conserved.

Turning the Action Plans Into Action

The strong commitment of the fish and wildlife agencies to the development of the wildlife action plans resulted in the completion of all 56 action plans by October 2005. After an exhaustive review process by a team of federal and state officials, every wildlife action plan ultimately received final approval by January 2007.

The state wildlife agencies are now in the process of translating the wildlife action plans into on-the-ground conservation successes. A core priority for the wildlife agencies is securing reliable and increased funding to implement the wildlife action plans. At the federal level, this effort includes enhanced annual appropriations for the State Wildlife Grants program and reliable funding for the Wildlife Conservation and Restoration Program. At the state level, several initiatives are underway to expand funding for fish and wildlife agencies beyond traditional fee-based systems.

Partnerships remain a core element of implementing the wildlife action plans. While the state fish and wildlife agencies had the formal responsibility for developing the wildlife action plans, the process hinged on strong on input from various partners, including other state, federal, and local government agencies, private landowners and businesses, and conservation groups. From the outset, the wildlife agencies committed to implementing the wildlife action plans as plans for wildlife not plans for wildlife agencies. States are working together and with partners to share information, identify shared priorities, and translate the action plans to local and regional planning scales. Implementation activities range from collaborative on-the-ground conservation and restoration projects to research and inventory.

A Resource for Transportation Planning and Management

Transportation infrastructure is widely recognized in the wildlife action plans as a key factor in the decline of many fish and wildlife species through habitat fragmentation, outright habitat destruction, and loss of connectivity among declining populations of wildlife. At the same time, the wildlife action plans are not just about assessing and identifying problems: they are about identifying the positive action steps that need to be taken to protect declining fish and wildlife. To that end, the action plans present an historic opportunity for improving transportation planning and mitigation activities. By identifying habitat needs for species that are at risk of becoming endangered, the action plans can help guide planning decisions to minimize wildlife impacts. In addition, the action plans can provide invaluable guidance for targeting mitigation activities at high value conservation targets.

Biographical Sketches: David Chadwick is a Senior Program Associate at the Association of Fish and Wildlife Agencies, where he works to support state fish and wildlife agencies in the development of strong programs for the conservation of declining species and habitats. For the last three years, Dave has served as the association's lead staffperson on the development and implementation of state wildlife action plans, providing assistance and support to wildlife agencies and leading outreach efforts to other agencies and nongovernmental organizations. Dave also works on outreach and policy advocacy associated with the Teaming with Wildlife campaign.

Dave's professional background blends experience in public policy and politics with experience in natural resource planning and management. His policy experience includes several years on the Capitol Hill staff of Senator Dianne Feinstein (D-California) and work for the Citizens League of Minnesota, a nonpartisan civic engagement organization. On the natural resources side, Dave has worked as a field technician for the US Forest Service in northwest Colorado and as a planner and GIS analyst in the Colorado Office of the Natural Conservancy. Dave has a B.A. in Politics from Pomona College and an M.S. in Natural Resources from the University of Michigan's School of Natural Resources and Environment.

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