

**COLORADO'S COMPREHENSIVE WILDLIFE CONSERVATION STRATEGY**  
**Including References to Wildlife Action Plans**  
**September 29, 2005**

**Executive Summary**

Colorado's Comprehensive Wildlife Conservation Strategy (CWCS) catalogs the status of our knowledge about many wildlife species, most of which are not hunted or fished, the threats to the habitats upon which they depend, and an articulation of strategies that can be employed to lessen those threats. It is based upon the best science available at this time, the collective judgment of many of Colorado's scientists, and also reflects the interests and concerns of citizens with a stake in Colorado wildlife conservation. It reflects the fundamental goal of the Colorado Division of Wildlife and the state as a whole, which is to secure wildlife populations such that they do not require protection *via* federal or state listing regulations. Further, it fulfills the requirements of the State Wildlife Grants program (*Title IX, Public Law 106-553 and Title 1, Public Law 107-63*) by addressing the eight elements stipulated in that legislation.

Information on the distribution and abundance of species of wildlife – 205 species met the criteria for inclusion as Species of Greatest Conservation Need or, in a few cases, were included for specific reasons as noted in the document. Those criteria were based upon status under the federal ESA, state classification, level of imperilment according to generally accepted evaluation systems or broad status assessments. Evaluations of additional species suggested for inclusion through the public comment processes are included for informational purposes. Although knowledge about many species has increased substantially in recent years, there are no data or other bases for science-based opinion about the population status for 33 (16%) of those species, or the population trend for 81 (40%) of the 205 species.

Locations and relative condition of key habitats – A total of 41 land cover types comprise the Colorado landscape. Although species – land cover type associations (i.e., habitat) are well documented in Colorado by CDOW, Colorado Natural Heritage Program, U.S. Forest Service and others, only in relatively few cases do data exist that adequately describe their ability to support native wildlife (i.e., "condition"). To bridge that gap, the CWCS relied heavily upon the judgment of the panels of scientists to assess those relative habitat conditions. Those panels as well as interested publics encouraged a more integrative, landscape-level view of those 41 types to address their interrelatedness. Following this approach, and pooling across all taxonomic groupings demonstrated that the landscape of eastern Colorado - eastern plains river and stream systems (including riparian), tallgrass and midgrass prairie – and sagebrush were judged as being among those in the poorest condition to support native species, while most other types were considered adequate or good for at least some taxonomic groupings. The greatest proportion of land cover types assessed as "poor" occurred for birds, with roughly one-quarter of the land cover types receiving that assessment. Perhaps of even greater concern, given the longer-range perspective of the Strategy, was that trends in habitat conditions were

judged to be declining in most land cover types across all taxa, with the notable exceptions (“stable”) tending to be in the higher elevation streams and forested lands and in agricultural croplands.

Issues that may adversely affect species of greatest conservation need or their habitats and priority research and survey efforts needed – The key issues identified during the CWCS development process included habitat conversion, infrastructure and other resource demands from a growing Colorado population, recreational demands, invasive, exotic species, and organizational capacity (coordination, funding, and information gaps). A listing of threats and potential actions are provided for specific taxa and their affiliated habitats. The many “unknowns” discussed (e.g., 16% species of unknown status, 40% species of unknown trends) indicates priority research and survey needs for the subject species or habitats. A more overarching need, repeatedly stressed during conversations among contributors to the CWCS, is an efficient, streamlined system, including a common data repository, for rapid data integration and sharing among all entities conducting species and habitat surveys.

Conservation actions necessary to conserve the identified species and habitats and priorities for implementing – Drawing upon the species and habitat-specific actions referenced previously, the CWCS categorizes 33 major types of conservation actions in 5 strategic areas that should be considered when actions affecting wildlife are undertaken in the state. The strategic areas include representing wildlife values in multi-purpose planning or other decision-making processes, public education and law enforcement, wildlife management (including expansion of partnerships with private interests), conservation of habitats, and maintaining and re-establishing landscapes and landscape connectivity. A guide to general priorities for all partners to consider in proposing and implementing specific projects is presented. In many cases, as in the dozens of action plans (recovery or other conservation plans and agreements) referenced in and accessible through the CWCS, specific operational priorities already have been established, frequently using similar science-and-stakeholder processes that were used in the development of the CWCS. This Comprehensive Strategy is intended to complement, not replace, the operational planning and prioritization processes that are in place for the Division of Wildlife or other conservation agencies and organizations in Colorado. To facilitate the integration of action plans with the Conservation Strategy, the Division of Wildlife has initiated a central location on its web site to provide access to all conservation, recovery, or other action plans for Colorado’s wildlife species.

Strategies for monitoring identified species, their habitats, and the effectiveness of conservation actions – Beyond monitoring needs for species, species assemblages, and habitats listed in the CWCS, utmost in priority is the ability to monitor progress toward benchmark measures of success and population security thresholds. Input clearly reflected the need for a comprehensive system that allows information from past and future inventories, surveys, research, and management actions to be accumulated from all entities, consolidated at multiple scales, and easily and rapidly distributed and compared to benchmarks. A recent governor’s initiative in Colorado to consolidate data on protected lands in the state, the Colorado Ownership,

Management, and Protection project (COMaP) may provide a conceptual model or pilot for such an undertaking.

Procedures to review the Comprehensive Wildlife Conservation Strategy – In the near term, CWCS review and incorporation of new information will be performed in traditional fashion using similar procedures to this initial effort, at an interval of not less than 5, and no more than 10 years. This will allow the effects of the Strategy and the operational or action plans and activities that flow from it to be adequately expressed and evaluated before modification. The preferred option over the longer term, however, is to follow a more aggressive adaptive management strategy, with the CWCS residing on a database platform (vs. a fixed text document), allowing ongoing updates to reflect changes in species and habitat status, conservation accomplishments as they occur, and to allow continuous, instead of punctuated, public involvement and feedback (i.e., a “living” strategy). Oversight and maintenance of such a systems approach would be accomplished *via* pooled resources of collaborating entities, including an oversight committee of those collaborators. Given current fiscal, logistical, and technological constraints, contributors to the CWCS who recommended this approach typically acknowledged it as a longer-term vision rather than an initiative to be undertaken in the immediate future.

Coordination with federal, state, and local agencies and Native American tribes – The CWCS calls for a transparent and participatory approach to coordination with partners and the integration of the priorities identified in this CWCS into the substantial wildlife management infrastructure that already exists in Colorado (an extensive listing of current multi-agency plans and agreements is provided). The recommendations repeatedly heard during the development of the CWCS for improved and streamlined information and data-sharing systems will work to improve this coordination.

Ensure public participation – Public participation in the development of the CWCS was encouraged and accomplished through multiple means, including direct mailings (2 mailings to about 1,000 individuals and organizations), publicity and posting of the draft document and mechanisms to provide input *via* CDOW’s web site, additional publicity through periodic news releases and media interviews, 2 sets of public meetings around the state (4 locations each), and other meetings with groups of conservation organization representatives (e.g., the CDOW-sponsored Environmental Round Table, Partners in Flight). The final round of public input resulted in formal comments and suggestions from 91 members of the public, organizational representatives, and agency personnel. There were over 1,600 visits to the CWCS postings on CDOW’s CWCS web site during the period of public input. For the most part, those suggestions regarding style (editorial) and those that were strategic in nature have been addressed in the CWCS. Future public involvement will, at a minimum, mimic this initial

process, although the preferred option is to allow continuous public contributions as part of the review process previously described.