

EXECUTIVE SUMMARY

Since 2001, when Congress first funded the State and Tribal Wildlife Grants Program (SWG Program), states have been required to develop comprehensive plans to guide the conservation of nongame species. The SWG Program addresses important wildlife issues that have traditionally been underfunded, and it is now the nation's core program for preventing endangered species listings. To receive funds, each state and territory is required to develop a "Comprehensive Wildlife Conservation Strategy," popularly known as a State Wildlife Action Plan or SWAP. At a minimum, SWAPs must be updated every 10 years. This report represents the first revision of Tennessee's SWAP, originally issued in 2005. This revision has 7 chapters, outlined below, organized along the lines of the "8 Required Elements" that must be addressed in all SWAPs according to Congressional mandate.

The TN-SWAP was developed based upon two key assumptions: (1) that although the focus is conservation of nongame wildlife species, many nongame conservation strategies and actions are habitat based and therefore benefit a wide range of species, including those that are common or hunted recreationally, and (2) that the TN-SWAP serves to promote common understanding of problems facing species and habitats across the state to encourage and prioritize collective action among a wide range of conservation partners.

The Introduction provides a history of the SWG program and SWAPs and describes the guidance materials used during the Plan revision, including several Association of Fish and Wildlife Agencies (AFWA) publications.

Chapter 1 provides an overview of the state and describes the Tennessee Wildlife Resources Agency's (TWRA) approach in revising the Plan. It describes the revision timeline and the planning team structure, which included TWRA staff and leadership, The Nature Conservancy, and technical consultants. It summarizes planning areas of emphasis for the 2015 revision, which include updates to the GIS database since 2005, the addition of Conservation Opportunity Areas (COAs), and the more in-depth consideration of climate change vulnerabilities. It also describes the 2015 revision processes for engaging technical and conservation partners and soliciting public comment (#7 and #8 of the 8 Required Elements).

Chapter 2 illustrates how the 2005 SWAP has guided conservation in Tennessee over the past decade. It provides multiple examples of how SWG funding has supported habitat and species population restoration, has helped leverage the conservation expenditures of other organizations, and has supported research and monitoring for a wide variety of species and the status of emerging threats such as White-nose Syndrome in bats.

Chapter 3 focuses on the identification, distribution, and abundance of species of Greatest Conservation Need (GCN) as well as the identification of priority habitats for the conservation of those species (#1 and #2 of the required 8 Elements). Since 2005, more than 300,000 species occurrence records have been added to Tennessee's SWAP GIS database and the prioritization scoring process has been updated to include information on state and federal listing status and the age of an occurrence observation in the field. Also for the first time, plants have been included in the GCN species assessment. With 568 plant species designated as "Tier 4" GCNs, Tennessee now has identified 1,499 total GCN species. The 2015 SWAP focuses on habitat prioritization using a process that includes the 2001 Southeast Gap Analysis Project landcover mapping and a revised methodology for mapping habitats and species that increases the resolution of the data and the flexibility of analyses possible at different spatial scales.

Chapter 4 describes problems that may adversely affect species and their habitats (#3 of the required 8 Required Elements). The planning team determined that the problems identified in the 2005 SWAP are still largely representative of current problems for GCN species and habitats, including for newly designated GCN species. The focus in this chapter is on (1) providing a crosswalk of the 2005 problems to the most recent standardized threats classification from the Conservation Measures Partnership and (2) providing in-depth treatment of the major sources of stress to terrestrial, aquatic, and subterranean species and habitats in Tennessee. Two additional problems were added during this process: recreational area development and renewable energy development. Where possible, a spatial assessment was used to help identify the location of problems relative to priority GCN habitats. In 2015, climate change vulnerabilities are evaluated as a major new source of stress. The National Wildlife Federation and The Nature Conservancy prepared a separate climate change vulnerability assessment for Tennessee in support of the 2015 revision, expanding on a SWAP update report on climate change issued by TWRA in 2009.

Chapter 5 focuses on conservation strategies and actions that can address identified problems (#4 of the 8 Required Elements). The SWAP planning team determined that the 2005 strategy hierarchy, including all the General and Specific Actions, remained applicable to GCN statewide conservation efforts, and this chapter focuses on a subset of the most important actions for addressing the major problems identified in Chapter 4. As recommended by AFWA, a new strategy for prioritizing conservation activities is the identification of Conservation Opportunity Areas (COAs). The planning team considered three major attributes in designing COAs: GCN

habitat priority, the problems affecting the habitats, and on-the-ground opportunities to implement conservation actions. However, COAs are not intended to artificially constrain decisions about what strategic actions are needed and where they apply. To address climate change, the team also identified which goals and strategies of the National Fish, Wildlife, and Plants Conservation Adaptation Strategy best align with TWRA's mission and expertise. They then worked with the National Wildlife Federation to begin the process of identifying adaptation options for addressing anticipated problems highlighted in the "Climate Smart" Vulnerability Assessment.

Chapter 6 focuses on improving effectiveness monitoring in Tennessee (#5 of the 8 Required Elements). The plan outlines how metrics for SWAP-specific conservation actions have been cross-walked to the U.S. Fish and Wildlife Service's Wildlife/TRACS Reporting System hierarchy in preparation for the adoption of this system for tracking accomplishments in 2015. TRACS reporting units have also been assigned to each set of desired changes articulated for Tennessee's COAs. Another recommendation is to participate in collaborative efforts to improve monitoring capabilities at state and regional scales.

Chapter 7 addresses SWAP review procedures, coordination with both government and non-government partners, and processes for partner participation in the development and review of projects undertaken in accordance with the SWAP (# 6, 7, and 8 of the 8 Required Elements). Specifically, future SWAP reviews will be integrated with TWRA's cycles for strategic planning, operational planning, and annual planning. Partner engagement will be fostered through inclusion in SWAP-related planning cycles (such as those focusing on COAs), through expanded data-sharing, and through collaborative identification of emerging issues and lessons learned.

Highlights of appendices to this SWAP include:

- ◆ The revised 2015 list of GCN species
- ◆ A set of factsheets about each of Tennessee's 28 COAs, which include descriptions of habitats, issues, conservation and monitoring priorities, and partners as well as COA maps and detailed lists of GCN species occurrences within each COA.
- ◆ A factsheet on Climate Change and Potential Impacts to Wildlife in Tennessee
- ◆ Preliminary climate adaptation options for different sets of priority species and habitats