



Duck River Planning Partnership

Conservation and Recreation Subgroup Update

July 13, 2026
Quarterly meeting

Subgroup Members

DRWPP Members:

- **Brian Alford** — Tennessee Wildlife Federation
- **Josh Campbell** — Tennessee Wildlife Resources Agency
- **Dan Elbert** — U.S. Fish & Wildlife Service
- **Justin Murdock** — Tennessee Tech University
- **Grace Stranch** — Harpeth Conservancy
- **Mark Thurman** — The Nature Conservancy

External Experts:

- **Rob Bullard** — The Nature Conservancy
- **Geoff Call** — BluewaysTN
- **Justine Cucchiara** — TDEC
- **Ryan Jackwood** — Harpeth Conservancy
- **Bridget Jones** — Jones-Bridget Consulting, TWF
- **Roger McCoy** — TDEC
- **Shaun Rinone** — Tennessee State Parks
- **Amanda Rosenberger** — Tennessee Tech Univ
- **Ben West** — Risora Consulting
- **Joey Wisby** — The Nature Conservancy

Meeting Schedule

- February 24
- March 19
- April 7
- April 28
- May 12
- May 26
- June 9
- June 23
- July 7



Subgroup Approach Overview

1. Evaluate **RECOMMENDATIONS** for Conservation and Recreation provided in the Year 1 draft report. Recommendations focus on **WATERSHED SCALE** water quantity and quality improvement (Conservation), and improving river community access, education, and stewardship (Recreation)
2. Identify desired **OUTCOMES** of each recommendation.
3. Identify potential **ACTIONS, INFORMATION NEEDS**, and **PARTNERS** to get to desired outcomes.
4. Identify **EXISTING** resources, programs, and activities that align with recommendation outcomes and DRWPP goals.
5. Create a plan specific to the Duck River Watershed, but identify plan components that are **TRANSFERABLE** to other Tennessee watersheds.

Conservation

Increase conservation easements and sustainable agriculture practices through collaboration, partnerships, and incentives.

Encourage local governments to consider overlays and permanent development buffers on riverbanks and tributaries.

Invest in green infrastructure to enhance runoff retention, water quality, and groundwater recharge.

Develop a watershed-wide stormwater and impervious surface growth plan.

Create a wetland restoration fund to restore and expand wetlands in the watershed.

Recreation

Improve River Access Points: Enhance existing river access points and add new sites in strategic areas to minimize overuse, support responsible outdoor recreation activities, and protect ecological resources, including state and federally listed species.

Promote Responsible Recreation and River Safety: Develop outreach, education, and communication efforts to encourage responsible outdoor recreation and river safety.

Collaborate with Tennessee State Parks: Design and install river interpretive centers in state parks within priority watersheds to educate communities about major rivers and watersheds to promote and advance their protection.

Integrate Water Quality Monitoring Community Science Programs: Engage communities in water quality monitoring to support broader data collection and promote awareness of watershed health.

The recommendations are not ranked, but each has high potential to improve Duck River habitat, biodiversity, water quality and quantity, and improve user and community interactions with the river. Also are attainable based on current conservation and recreation groups, programs, and activities.

Foundational Programs

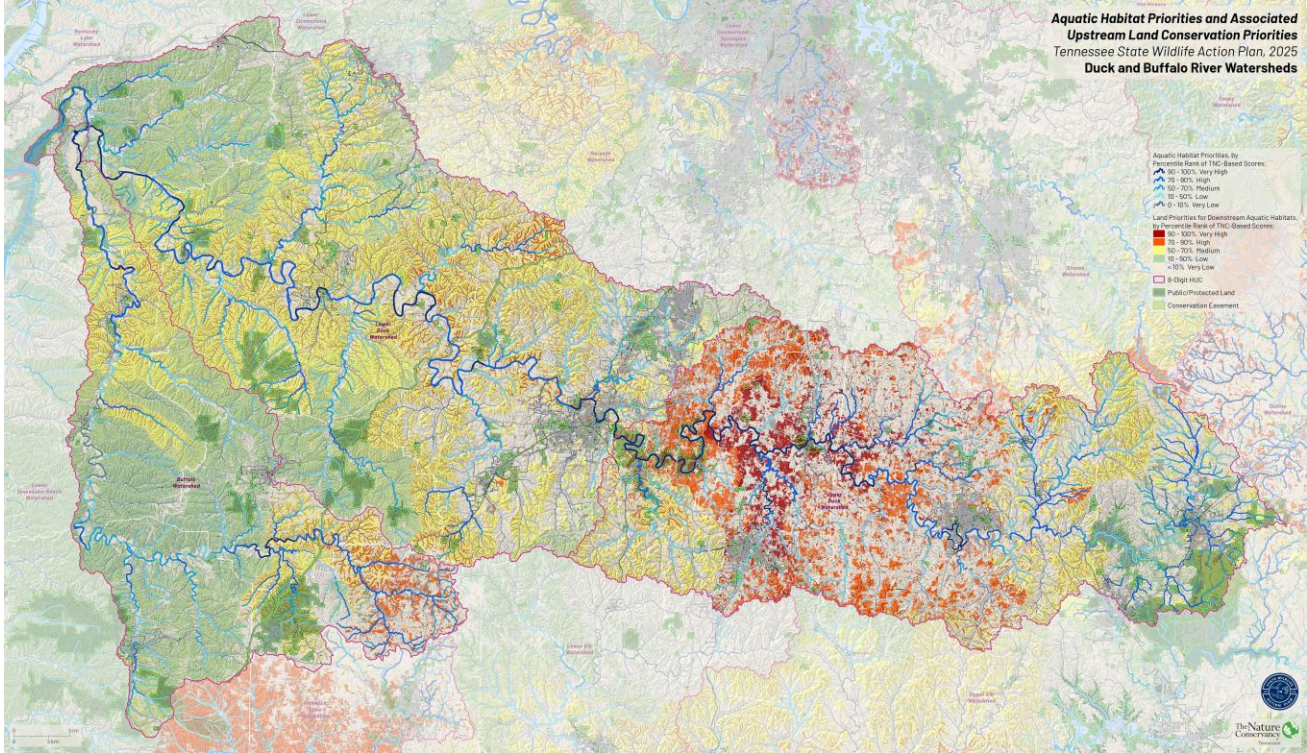
Two statewide programs anchor the subgroup report

Conservation: State Wildlife Action Plan (SWAP)

2025 SWAP developed by TWRA and TNC is used as the conservation basis because it is the current watershed-level threat assessment for the Duck River.

Recreation: BluewaysTN

BluewaysTN is an ongoing statewide planning program to improve river user experience, access, education, conservation, and economic growth.



Additional Programs and Focal Areas

Ongoing plans for future incorporation

(1) Habitat Conservation Plan being developed in partnership with TDEC, TWRA, and USFWS

(2) Duck River watershed Green Infrastructure Plan being developed by the South Central Tennessee Development District.

Both plans will provide additional information on conservation priorities considering watershed development and land use change, economic growth, and population increase.

Rivers are tightly linked to their watershed landscape through runoff.

- Subgroup recommendations to improve biodiversity and habitat conservation within the river channel are centered around watershed actions.

- Actions involve increasing **land acquisition** and identifying and implementation of **incentive programs** to protect water quality, development of instream flow regimes standards, and continued propagation of critically endangered and threatened species of mussels and other aquatic species

RECOMMENDATION: Increase the number of conservation easements and implementation of sustainable agriculture practices within the Duck River watershed through collaboration, partnership development, and incentivization

Outcomes: Protect Duck River habitat and water quality by reducing agricultural pollutant transport into the river and its tributaries.

Threats Addressed:

- Altered Flow Regimes and the Primacy of Drought
- Increasing Water Withdrawals
- Water Quality Impairment

Actions:

1. Identify targeted priority areas for incentive programs using
 - State Wildlife Action Plan (SWAP) conservation priority maps
 - Including wetlands, riparian buffers, floodways, priority soils, headwater streams, Duck River watershed species distribution data, karst areas, and parcel-level data
 - Source water protection designation status of areas in the watershed
2. Develop a strategy to match priority locations with willing landowners by expanding technical assistance capacity (community-embedded technical service providers) as a prerequisite for scaling incentive uptake. Identify incentive program funding estimates for the Duck River Watershed
3. Consider a tiered payment / incentive structure based on conservation value; quantify financial needs for program design.
4. Identify existing easement programs that could be used in the Duck River Watershed and streamline access to programs
5. Make the process easier for participants to access and utilize incentives and technical services.
6. Explore embedding community-based technical assistance providers to support landowner enrollment and implementation
7. Develop a landowner outreach strategy and systematic approach for identifying and engaging willing participants (including restoration + easements).
8. Establish a state-based fund to provide the landowner cost share of federal conservation programs supporting an increase in the number of conservation projects being implemented throughout the Duck River watershed and state.

Information and Data:

Data Sources:

- SWAP conservation priority maps
- SCTDD DRW Green Infrastructure Plan
- TDEC Wetlands Tools
- NRCS easement maps

Available Data:

- Current watershed easement locations
- Priority areas for protection
- Landowner parcel information
- Easement Programs (Wetlands, Floodplain, Wildlife Habitat)

Study Needs and Information Gaps:

- Stream channel data
- BluewaysTN erosion hotspot model (channel stream banks)
- Trutta channel survey
- Species distribution data
- Updated land-cover / cropland layers and any needed local updates to reflect recent land-use changes
- Runoff and tributary water quality data
- Economic impact/economic valuation inputs relevant to incentives and outreach (including wetland value work)

Partners:

USDA NRCS; Farm Bureau County Committees; Land Trust for Tennessee; TennGreen; Quail Forever; Tennessee Farmland Legacy Partnership; Duck River Conservancy; Duck River Society; Friends of the Duck; Friends of the Piney; church groups; corporate and local business partners; South Central Tennessee Development District. Tennessee Wildlife Federation, Harpeth Conservancy, USFWS, The Nature Conservancy, Universities and Technical Colleges

Transfer Potential:

High. The critical information for easement selection and prioritization is available for watersheds across the state. This approach should be particularly successful in West Tennessee watersheds as much of the funds for easement purchase, restoration, and management are associated with USDA NRCS, and this region has the largest number of agricultural wetlands and conservation opportunities.

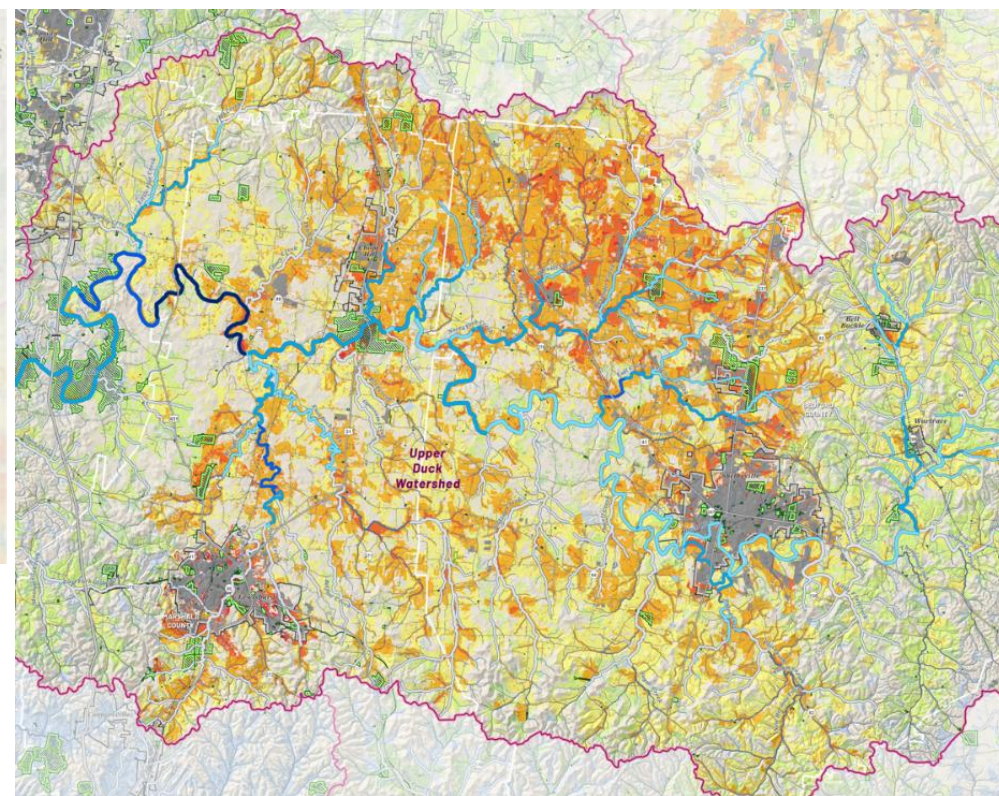
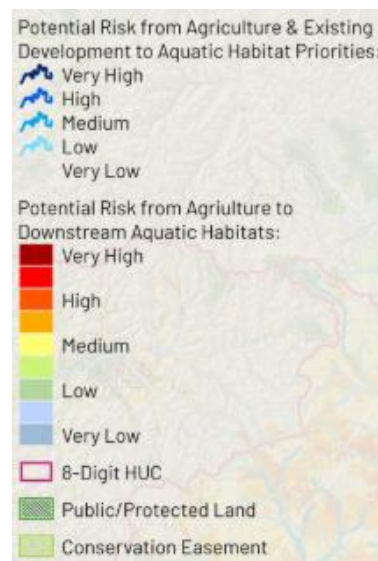


Figure. Potential risk from agriculture to downstream aquatic habitat priority areas.. Subset of SWAP map of agricultural threats.

RECOMMENDATION: Improve River Access Points: Enhance existing river access points and add new sites in strategic areas to minimize overuse, support responsible outdoor recreation activities, and protect ecological resources, including state and federally listed species.

Outcomes: Optimize user access to the river, mitigate any single site overuse and crowding to provide a safe environment for both users and the river habitat and inhabitants, particularly listed species.

Threats Addressed:

- River access site crowding
- Unsafe access points
- River degradation by users

Actions:

1.Upgrade and standardize existing access points

Utilize BluewaysTN Access Design Manual (in development) to evaluate existing access and recommend enhancements to broaden recreation opportunities and improve safety, durability, ADA accessibility, and erosion control.

2.Add new access points in targeted gap locations

Reduce long float distances and improve safety while avoiding sensitive areas.

3.Distribute use across the river system

Develop a network of sites to reduce pressure on high-use reaches.

4.Integrate resource protection into access siting and design

Avoid impacts to mussel beds, biodiversity hotspots, and cultural resources; align with streambank restoration investments, where possible; coordinate early with agencies.

5.Establish a Duck River Blueway Council to coordinate access development and management with landowners, public entities, and outfitters, working across communities.

Prioritize public land and willing partners for new access; establish durable agreements for portage and limited access; promote consistent management of access sites through coordination among agencies, local municipalities, counties, outfitters, and NGOs.

Information and Data:

Data Sources:

- BluewaysTN database
- Henry Horton State Park
- River outfitters

Available Data:

- Mapping of **sensitive ecological and cultural resource areas**
- Inventory and condition assessment of **existing access sites**
- Identification of **public vs. private ownership along priority reaches**
- Data on **use levels by reach and access point**
- Database of **relevant funding opportunities for conservation, recreation, and healthy communities.**

Study Needs and Information Gaps:

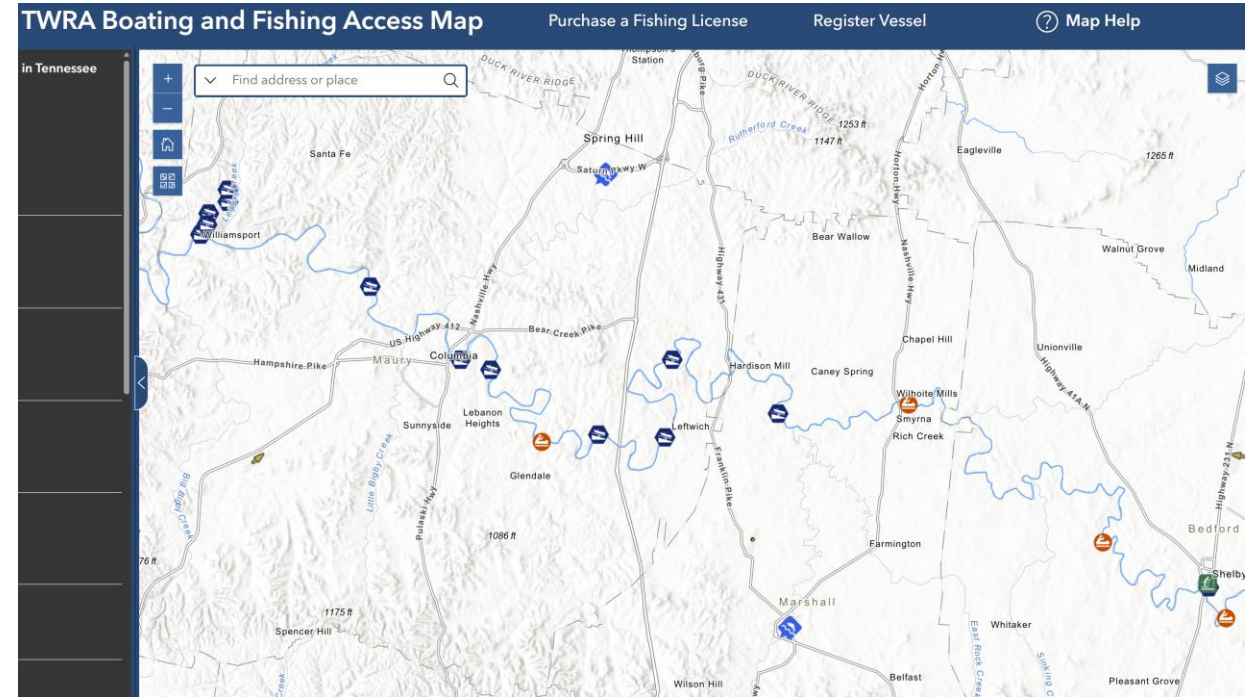
- Species impact analyses for sensitive areas (especially mussel beds) and identification of where additional studies are needed.
- Spatial analysis of **access gaps and float distances**

Partners:

- Tennessee Wildlife Resources Agency – access management, fisheries considerations, State Wildlife Action Plan
- Tennessee Valley Authority – riverfront land ownership and access coordination
- Tennessee Department of Environment and Conservation – BluewaysTN, Water Resources, Natural Areas, Division of Archaeology (cultural resource review and protection)
- South Central Tennessee Development District - planning, coordination, and funding
- Local governments (counties, municipalities) – site ownership, maintenance, EMS coordination
- Private landowners along priority reaches – access agreements and conflict avoidance
- Local outfitter, Regional conservation organizations (e.g., land trusts) – land protection and access partnerships

Transfer Potential:

Medium to High. Transferability of actions to other BluewaysTN rivers is high, and similar actions will already be deployed in the other 14 rivers as part of the BluewaysTN program. These rivers have been included in the program as they have been identified as having heavy recreational use.



Next Steps

- Put remaining recommendations into consistent format structure
- Further define action items for each recommendation
- Draft Final Report

