

Tennessee State Technical Advisory Committee Meeting

(TEAMS)

May 13, 2025

Members and Guest Present:

Sheldon Hightower, Natural Resources Conservation Service
Arthur Hawkins, Natural Resources Conservation Service
Chris Wolkonowski, Natural Resources Conservation Service
Trevor Hunt, Natural Resources Conservation Service
Garret Morris, Natural Resources Conservation Service
Linda Ortiz, Natural Resources Conservation Service
Kelly Gupton, Natural Resources Conservation Service
Robin Mayberry, Natural Resources Conservation Service
Hannah Goff, Natural Resources Conservation Service
Jake Watson, Natural Resources Conservation Service
Benjamin Shamblin, Natural Resources Conservation Service
Andrew Quintana, Natural Resources Conservation Service
Nathaniel Hicklin, Natural Resources Conservation Service
Garrett McFall, Natural Resources Conservation Service
Sam Marshall, Tennessee Department of Agriculture
Sarah Smith, Farm Service Agency
Christina Bowles, Farm Service Agency
Bill Sutton, Tennessee State University
Sarah Neumann, Tennessee State University
Angela Warden, Angela Warden Consulting LLC
Renee Williams, Moore Family Century Farm
Jeff Powelson, American Bird Conservancy
Brad Miller, Tennessee Wildlife Resources Agency

Welcome – Trevor Hunt Assistant State Conservationist - Partnerships

Good morning. Thank you all for being on the call this morning. Today's meeting will be recorded.

- There are several attendees that received duplicative meeting invites and some that have the quarterly invite sent by Tina Rappaport. We are working to delete the 9:30 am invite to avoid confusion for future meetings. We will follow the agenda as presented. Next, we'll have opening remarks from State Conservationist, Sheldon Hightower.

Opening Remarks – Sheldon Hightower - State Conservationist

- Good morning. Thank you all for being on the call this morning.
- I would like to welcome our new State Technical Committee Members to the call.
- This meeting will be recorded today.

The Direction of NRCS Under the Current Administration

- With the new administration and Congress, we are adapting to new priorities, challenges, and opportunities.
- We are working to streamline processes, improve program delivery, and ensure conservation programs remain farmer friendly.

Key Priorities

- **Enhancing farm productivity** while protecting our natural resources through effective conservation solutions.
- **Expanding program accessibility to ensure that all farmers**—regardless of operation size or background—get the support they need.
- **Strengthening partnerships** with conservation districts, state agencies, and local leaders to drive results for Tennessee agriculture.
- **Supporting producers in disaster recovery** to help them rebuild and sustain their operations.

Tennessee State Technical Committee

- State Technical Committees (STC) have been and continue to be a vital part of Farm Bill implementation. NRCS depends on their knowledge and expertise to implement Farm Bill programs that are locally led.

Farm Bill Programs

- Our focus over these past few months has been on the delivery and implementation of our conservation programs to producers in Tennessee.
 - As of April 18, 2025, we have made 3,758 Farm Bill conservation payments totaling nearly \$44 million.

- We also processed 3,800 Environmental Quality Incentives Program (EQIP) applications and are obligating approved applications. We requested additional funds from our National Office.
- We have a total of 848 FY25 Conservation Stewardship Program Classic applications that field staff will be working through. We received an additional \$11.5 million from our National Office.
- Garrett will provide more information about our EQIP obligations and additional funding during his presentation.

NRCS Programs Update - Garrett Morris – Assistant State Conservationist - Programs

Farm Bill Programs

- Would like to revisit the financial assistance allocation provided to TN NRCS for the year and where we are on contracting these dollars in fiscal year 2025. This is all with the intention of providing some information that can fuel the recommendations of the State Technical Committee for Mr. Hightower as we move through the rest of the fiscal year and prepare for FY 26 and beyond.
- The Environmental Quality Incentives Program, the Conservation Stewardship Program, and the Regional Conservation Partnership Program were collectively allocated almost \$139 million in FY 2025.
- The original \$138.8 million put TN over 10% higher than what was obligated during FY 2024 which was around \$126 million.
- Inflation Reduction Act (IRA) funding actions are still under review or paused. Until NRCS receives updated information on the use of IRA funds, we are only looking at using Farm Bill funding.
- Total Farm Bill dollars are right at \$66.5 million. The Environmental Quality Incentives Program is \$26.9 plus an additional \$6 million provided by national headquarters in December of 2024. The Conservation Stewardship Program is \$14.2 million plus \$11.5 million from national headquarters. The Regional Conservation Partnership Program is \$1.8 million, and the Agricultural Conservation Easement Program is \$5.9 million.
- We want to keep in mind that the information provided today can be used by NRCS and the State Technical Committee to help steer some decision making and your recommendations to the State Conservationist on how we handle programs and other items throughout the rest of this year and next year.

- With \$30 million in Farm Bill preapprovals, we can address nearly 18% of the demand. I will say that the pools with the highest demand this year are in the areas of forest management plans and high tunnels. We have a significant amount of demand for our socially disadvantaged farmers and ranchers, beginning farmers and ranchers, and wildlife.
- If framing thoughts for next year and subsequent years, I think additional funding directed towards those pools would likely be a benefit. Also, like Mr. Hightower said, additional funds have been requested by Tennessee from the National Headquarters.
- We have offered additional program signups for hurricane Helene in East Tennessee, which includes the following counties: Carter, Claiborne, Cocke, Grainger, Green, Hamlin, Hancock, Hawkins, Jefferson, Johnson, Sevier, Sullivan, Unicoi, and Washington.
- Over \$2 million have been budgeted over 2 sign-ups for those affected counties to assist with conservation practices. More funds have been requested from national headquarters for this need.

Conservation Stewardship Program (CSP)

- 14.3 million in Farm Bill Funding.
- Over \$6 million in funds preapproved through ACT Now funding.
- Nearly \$7.8 million obligated towards CSP renewals.
- \$18 million preapproved towards CSP classic.
- Inflation Reduction Act funds are under review and are paused at this time. We will keep you all informed of what happens with IRA funding this fiscal year. At this time, we are concentrating on projects that were funded through the Farm Bill.

Regional Conservation Partnership Program (RCPP)

- \$1.5 million has been approved for the Ridges to River partnership.
- 34 applications have been preapproved.
- 55% of preapproved funds have been obligated.

Agricultural Conservation Easement Program (ACEP)

- We have had 11 applications that were accepted for fiscal year 2025. Right now, we're moving forward with 7 of those applications.
- All these applications may not move forward because of ownership difficulties, title search issues, and anything dealing with due diligence or eligibility.
- \$5.8 million in Farm Bill funding.
- 11 Wetland Reserve Easement (WRE) applications and 1 Agricultural Land Easement (ALE) application.

Farm Bill Program Payments

- Field offices across the state have been doing great work in getting payments processed for those conservation practices that have been completed.
- Tennessee NRCS has paid out approximately \$46 million in financial assistance payments for fiscal year 2025.
- Aside from preapproving some additional applications for small remaining amounts, the NRCS programs staff has turned their attention towards tracking obligation progress across the state.

Local Working Group (LWG)

This is a chance for the public to weigh in, like Mr. Hightower said, our conservation efforts and our program efforts are locally led. We want feedback on what practices that NRCS should be cost sharing on and our payment rates. Restructuring our budget and allocations, changes or recommendations that are made for our practice standards, and how we implement our practices, are things taken into consideration. Our local working groups can bring a lot of those items to the attention of the State Technical Committee.

Linda Ortiz - State Resource Conservationist

- I'm going to take a few minutes this morning to go over the process that we have established here in Tennessee and for the adoption of conservation practices. Your input and knowledge as part of the State Technical Committee is important to us, especially when we are implementing new practices or updating existing practices.
- At the national level, we have a national handbook for conservation practices. That handbook gets updated twice a year between July and November, and once those practices get released, we as a state have one year to adopt those practices into our Field Office Technical Guide. During that year, we have an internal committee that leads the review and adoption process. The Committee includes field office staff

from all 4 areas, along with state technical leads from the ecological team, and members from the engineering staff.

- The internal committee has 15 days to present the changes or updates to state technical leads. Once the internal review is complete, a draft is sent to the State Technical Committee for your input and recommendations.
- In the past, many of you have received emails from Tina Rapaport or Roger Daniels regarding updates to our standards and specifications. We like to have input from this committee. If something doesn't make sense, please let us know. We will allow you 30 days to review, and to provide input. Once we receive your input then we will implement those changes that are permitted.
- New practices are released in Tennessee on October 1st of each year because this is the beginning of the fiscal year and practices are being preapproved.
- In the future, you will be getting emails from either Trevor Hunt or myself asking for your input on seven practices soon:
 - Conservation Cover-327
 - Cover Crops-340
 - Hedgerow Planting-422
 - Tree/Shrub Establishment-612
 - Seasonal Water Management for Wildlife-646
 - Forest Trails and Landings-655
 - Wetland Restoration-657
- We are really excited about the recently released Tennessee Top 50 Practices Handbook. There you will see the most commonly used practices in Tennessee. These handbooks have been made available to our field offices.

Sarah Smith – State Conservation Specialist- Farm Service Agency

- We are still waiting on guidance for the Conservation Reserve Program (CRP). However, sign-up announcements for continuous sign up 63 and General sign up 64 have been made.
- Counties started taking offers for new or re-enrolled offers or with a combination of new and re-enrolled offers starting yesterday. The general sign up is going to run

until June 6th and the continuous sign-up is going to be accepted in batches until July 31st. If more acres are available past this date, then more offers will be accepted. The first batch will be June 6th, and they are not expected to be batched until June 27th. This is the time they would be sent over to NRCS for technical assistance.

Sam Marshall - Tennessee Department of Agriculture Land and Water Stewardship Division

- John McClurkan is working part time. Susan Primm and Sam Lemmons recently retired. Heidi McIntyre-Wilkinson has rejoined the Tennessee Department of Agriculture in my old position.
- Leslie Bradley is the new Watershed Coordinator in the Knoxville area. She has 13 counties of responsibilities.

Tennessee Department of Agriculture (TDA) Programs offered:

- 319 grant program are funds through the Environmental Protection Agency (EPA).
- Agricultural Resources Conservation Fund (ARCF) is our state funded cost share program.
- Last year, the ARCF fund delivered \$11 million throughout the state for cost share practices on farms with expectations of similar figures this fiscal year. There are two application windows for this program. One in the spring and one in the fall.
- Conservation Districts can submit their applications to Katie Gibby.
- In May, Katie will begin writing our contract amendments for conservation districts.
- There's a red line edition of that new guidance posted on our website if you would like to view our new incentives.
- Some of you have been around a while and remember two or three years ago when we updated the way we calculate our cost share rates to align ourselves with NRCS and their payment format.
- We provide a 15% increase to about 15 or so practices that we feel give us more bang for our buck.
- An incentive is being provided if your property is listed in a distressed county. This incentive is possible because of Governor Lee's initiative to support all rural counties and stimulate economic activity.

- A second list of at-risk counties are also available for an incentive of a 5% increase.
- There are 31 counties listed as at-risk, and 9 counties as distressed for a total of 40 counties benefiting from Governor Lee's initiative.
- On the 319-grant side of things there has been some delays, but I am happy to say that on last Monday we received our FY 2024 319 grant of \$2.6 million. We have a couple of projects lined up. Participants are excited to get things started and have 3 years to complete the projects.
- The Tennessee Riparian Incentives Program started approximately three years ago with support from the Tennessee Valley Authority. Producers interested in putting in riparian forest buffer should visit their local USDA service center.
- I'm happy to say that as of about two weeks ago, we have signed off on a new contract with our sister agency, the Tennessee Department of Environment and Conservation for the Tennessee Riparian Incentives Program. They are providing \$1 million for this program.

Lastly, we look forward to getting back into to our offices at the Ellington Agricultural Center after being displaced during renovations. It is anticipated that we will be back in July of 2025.

Sarah Neumann, Ph.D.- Tennessee State University – Professor

- The objective of today's presentation is to discuss underground influences specifically soil microbes and the future of oak forests.
- We will also discuss how light availability and soil microbial communities interact to shape seedling performance of arbuscular-mycorrhizal (AM) verses that of ectomycorrhizal (EM) tree species.
- Experimental Design: Seedlings grown under three light levels (low, medium, high) in soils sourced from conspecific and heterospecific adult trees; microbial vs. sterilized controls used to isolate plant–soil feedback (PSF) effects.
- Light-Dependent PSF Patterns.
- Negative PSF strongest in low light across species.
- Positive PSF for EM species (e.g., northern red oak) also amplified in low light—an unexpected result.

Species-Specific Outcomes

Red Maple (AM)

- Experiences negative PSF in low light.
- PSF switches to positive as light increases.
- Negative PSF largely unaffected by mycorrhizal type except possibly at high light.

Northern Red Oak (EM)

- Maintains consistently positive PSF regardless of light level or soil source.

Role of Microbes

- Soil microbes drive the observed negative PSF for maple only under low light.
- Soil microbes drive positive PSF for oak across all light conditions.

Ecological Implications:

Maple Establishment

- Thrives in heterospecific EM soils under shade or in its own soils where light is abundant.

Oak Establishment

- Highest success only in conspecific EM soils, independent of light level.

Forest-Composition Shift

- Shade-tolerant, mesophytic AM species (maple) avoid their own pathogens by germinating in oak-dominated soils, then out-compete oak seedlings under low light.
- As maple dominance increases, oak seedlings struggle to find suitable EM-rich soil, accelerating oak decline and driving the regional shift from oak–hickory to maple-dominated forests.
- Mycorrhizal “mismatches” between seedlings and available soils are a critical but under-recognized mechanism behind long-term changes in canopy composition.
- Management aimed at oak regeneration must consider both light manipulation (e.g., gap creation) and restoration or preservation of EM-compatible soil communities.

Acknowledgements and Next Steps

- Dr. Neumann thanked collaborators and funding agencies supporting the research.
- Q & A (time expired): Attendees invited to submit questions to Dr. Neumann via email for follow-up discussions on management applications and future experiments.

Bill Sutton, Ph.D. – Tennessee State University (TSU), Department of Agriculture and Environmental Sciences

- Would like to thank everyone for the chance to speak and will discuss two specific study animals. This will tie in nicely to some of the NRCS habitat incentive objectives.
- I am an assistant professor in wildlife ecology. At TSU, I work in the Department of Environmental Sciences in the Wildlife Ecology Lab and rare wildlife species are a focus to keep them more common across Tennessee landscapes.
- Two rare species are amphibians and reptiles which are two of the most rapidly declining and diverse species groups globally.
- We need to identify what the primary roles that lead to the decline of them globally, regionally and locally.
- Emerging pathogens are one of the main causes of the decline of amphibians, reptiles, and native bats along with viruses, and funguses.
- On a larger landscape things like global climate change, decreased rainfall, increased flooding, and urbanization of green spaces are leading to declines of these species.
- One animal to discuss will be the Eastern Hellbender where it is North America's largest salamander, and it is fully aquatic.
- Hellbenders are of the Family Cryptobranchidae - *Crypto* means hidden, *branch* means gill, and *idae* means family. I'm big on scientific names.
- Different names for Hellbenders are Old Lasagna Sides, Grampus, Water Dawg, Allegheny Alligator, Thunder Lizard, and Snot Otter. They have a broad distribution throughout the Eastern U.S., covering 14-15 states.

- Causes of Hellbender declines are habitat degradation, pathogens, persecution/harvest, introduced predators, dam, and climate change.
- Jeronimo da Silva Neto, private lands biologist with Fish and Wildlife Service in Knoxville completed a project on Hellbenders.
- Work with the Nashville Zoo and Tennessee Wildlife Resources Agency (TWRA) on Hellbender Conservation. Head Start in Middle Tennessee and Translocation in East Tennessee.
- We have a 50% survival rate on released Hellbenders.
- Partners include NRCS, public land management organizations, and private landowners.
- The Southeastern Hellbender Conservation Initiative (SEHCI) is a collaboration between Defenders of Wildlife, NRCS and other conservation partners to support farmers using conservation practices on their lands that help restore Hellbender habitat.
- We completed a study on Black Pine Snakes to document their presence and all wildlife. 25 camera traps were set for the study. 11 black pine snakes were detected across 8 sites. 16 species of snakes, 8 Species of lizards, 5 species of anurans, and 2 species of chelonians were detected with the 25 camera traps during the study. Other wildlife species were also detected.

Closing remarks - Trevor Hunt, Assistant State Conservationist – Partnerships

- Currently the floor is open for partners or any other participants to provide updates or feedback.
- Seeing that we have none at this time, we will conclude the meeting. I would like to thank you all again for your participation in today's State Technical Committee meeting.
- I would encourage you all to participate in our state Urban Agriculture subcommittee meeting today if that is something of your interest. There will be both in person and virtual options for participation. Those links have been sent out, but if you need access to them, please feel free to email me and I will provide you with that information.

- I'll allow us to adjourn if there are no further comments and yield back about 28 minutes of your time. The next State Technical Committee meeting is scheduled for August 12, 2025, at 9:00 am. Thank you all for your participation.