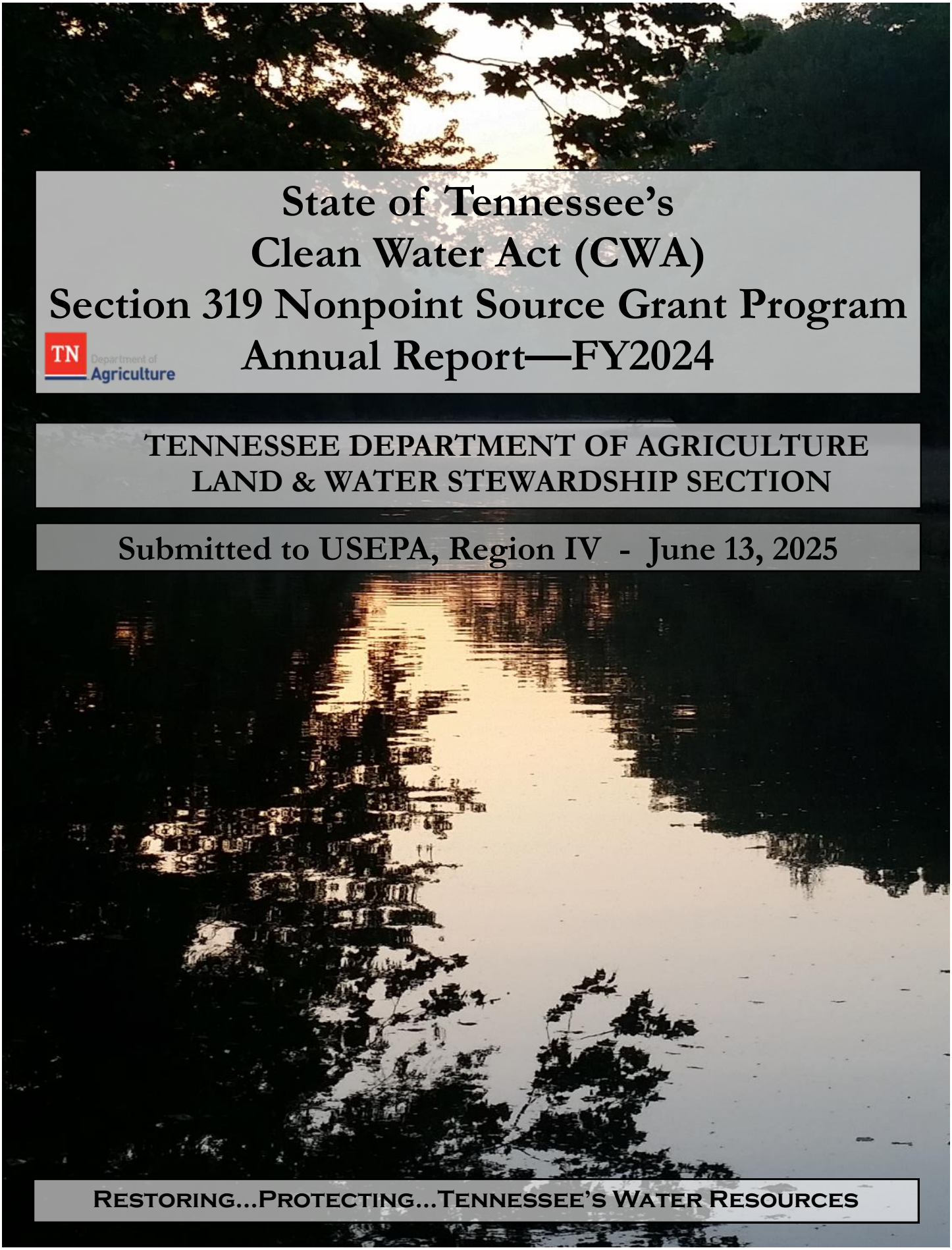

State of Tennessee's Clean Water Act (CWA) Section 319 Nonpoint Source Grant Program Annual Report—FY2024

TN Department of Agriculture

TENNESSEE DEPARTMENT OF AGRICULTURE
LAND & WATER STEWARDSHIP SECTION

Submitted to USEPA, Region IV - June 13, 2025

RESTORING...PROTECTING...TENNESSEE'S WATER RESOURCES

Coffee County Before Streambank Stabilization

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Coffee County After Streambank Stabilization

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Bridges at Wolf River Greenway

Acronyms

Ac	Acre
AMD	Abandoned Mineland Drainage
ARCF	Agricultural Resources Conservation Fund
ARP	American Rescue Plan
BFEC	Brushy Fork Environmental Consulting, Inc.
BMP	Best Management Practice
CRC	Cumberland River Compact
CRP	Conservation Reserve Program
CWA	Clean Water Act
E. coli	Escherichia coli
EQIP	Environmental Quality Incentives Program
FFY	Federal Fiscal Year
FSA	Farm Services Agency
FTE	Full Time Equivalent
GHP	Gulf Hypoxia Cover Crop Incentive Program
GIS	Geographic Information System
GRTS	Grants Reporting and Tracking System
HOA	Home Owners Association
HUAP	Heavy Use Area Protection
HUC	Hydrologic Unit Code
lbs	Pounds
MOU	Memorandum of Understanding
NPS	Nonpoint Source
NRCS	Natural Resources Conservation Service
NWQI	National Water Quality Initiative
Ph	Phase
PLET	Pollutant Loat Estimation Tool
RC&D	Resource Conservation and Development Council
SETN RC&D	Southeast Tennessee Resource Conservation & Development
SFY	State Fiscal Year
SWCD	Soil and Water Conservation District
TDA	Tennessee Department of Agriculture
TDEC	Tennessee Department of Environment and Conservation
TEC	Tennessee Environmental Council
TMDL	Total Maximum Daily Load
TRIP	Tennessee Riparian Incentives Program
TN	Tennessee
TN-NPS	Tennessee Nonpoint Source Program
TSU	Tennessee State University
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
UT	University of Tennessee
yr	Year

Executive Summary

Introduction

The Tennessee Department of Agriculture (TDA) manages the Nonpoint Source Program (aka, 319 Program) in Tennessee with approval and oversight of the US Environmental Protection Agency (USEPA). This federal program provides funds to states, territories and Indian tribes for installing Best Management Practices (BMPs) to stop NPS pollution; providing training, education, and demonstrations; and monitoring water quality.

The Tennessee Nonpoint Source Program (TN-NPS) is non-regulatory and promotes voluntary, incentive-based solutions. The program is a cost-share program, meaning that it pays for 60% of the cost of a project. It is the responsibility of the grantee to provide the remaining 40%, usually in cash and "in-kind" services. While the 319 Grant is the primary focus of this Annual Report, it is important to note that the TN-NPS extends beyond the USEPA grant; Tennessee funds additional projects under State-funded programs such as the Agricultural Resources Conservation Fund (ARCF). Together, the goal of the TN-NPS program is restore impaired waterbodies, prevent decline of high-quality waterbodies, and promote education of non-point source issues.

Notable Accomplishments

In federal fiscal year (FFY) 2024, 94 practices were installed by grantees with the assistance of Section 319 funds. The most common practices installed by TDA partners in FFY2024 include septic system repairs, heavy use areas, watering facilities, fences, and pipelines. In FFY2024, $1,309,073 was projected to be awarded to watershed projects, and $78,020 was awarded to education/outreach projects.

The overall estimated load reduction for nitrogen, phosphorus, and sediment decreased in FFY2024 from FFY2023. Nitrogen, phosphorus, and sediment loads were reduced by an estimated 7,537.1 pounds, 1,314.5 pounds, and 1,094.3 tons, respectively.

Additional TN-NPS incentive programs, the Gulf Hypoxia Cover Crop Incentive Program (GHP) and the Tennessee Riparian Incentives Program (TRIP) were implemented in FFY2024. The programs combined provide over $1 million in additional funds to protect water quality.

East Tennessee counties and farms suffered heavily from Hurricane Helene damage in September 2023, and are still recovering to this date.

The TN-NPS Program experienced significant staffing shortages that impacted the administration and implementation of projects funded through the Land & Water Stewardship Section (LWSS). Efforts are underway to fill the remaining vacancies.

Richland Creek in Grainger County

Overview and Authority

The Tennessee Department of Agriculture (TDA) manages the 319 Nonpoint Source Program with approval and oversight of the US Environmental Protection Agency (USEPA). The Tennessee—Nonpoint Source Program (TN-NPS) applies for and is awarded a grant from the USEPA each year in order to implement this program. This Annual Report is required under a provision of each year's grant award. Specifically, the report fulfills the requirements of Section 319(h)(11) of the federal Clean Water Act. This report is written each year to inform the public, the USEPA, and ultimately the U.S. Congress of the state's progress in the area of reducing nonpoint source pollution in Tennessee. While this report should not be construed to be a complete description of all TN-NPS program activities, it does describe the most important features of the program within the federal fiscal year (FFY) 2024 (i.e., October 1, 2023– September 30, 2024).

Today, nonpoint source (NPS) pollution is the nation's largest source of water quality problems. It's the main reason that approximately 40 percent of our surveyed rivers, lakes, and estuaries are not clean enough to meet basic uses such as fishing or swimming. NPS pollution occurs when water runs over land or through the ground, picks up pollutants, and deposits them into rivers, lakes, and coastal waters or introduces them into ground water. NPS pollution is widespread because it can occur any time activities disturb the land or water.

To address this diffuse type of pollution, congress established the Nonpoint Source Program, funded by the USEPA through Section 319 of the Clean Water Act. The Tennessee Department of Agriculture administers the Nonpoint Source Program in Tennessee on behalf of USEPA. This program provides funds to states, territories and Indian tribes for installing Best Management Practices (BMPs) to stop NPS pollution; providing training, education, and demonstrations; and monitoring water quality.

The TN-NPS is non-regulatory and promotes voluntary, incentive-based solutions. The program is a cost-share program, meaning that it pays for 60% of the cost of a project. It is the responsibility of the grantee to provide the remaining 40%, usually in cash and "in-kind" services. It primarily funds two types of projects:

1. **Watershed Restoration Projects** improve an impaired waterbody, or prevent a non-impaired water from becoming placed on the *Lists of Impaired and Threatened Waters* (formerly the 303(d) List). Projects of this type receive highest priority for funding. All projects involving BMPs must be based on an approved "Watershed Based Plan".

2. **Educational Projects** funded through TN-NPS raise awareness of practical steps that can be taken to eliminate NPS pollution. Projects funded can either have a statewide, general public aim or can focus in on local, targeted audiences with specific messages.

No funds from the TN-NPS are given directly to individual landowners. All grant money is awarded to organizations/entities that administer and oversee the local project. Eligible applicants include non-profit organizations, local governments, state agencies, soil conservation districts, and universities. These organizations then can enter into work agreements with individual landowners to reimburse them for work done on their land. All payments made with grant funds are on a reimbursement basis.

Enhanced swale in Rutherford County

Program Highlights from FFY2024

The Tennessee Depart of Agriculture (TDA) relies on the cooperation of stakeholders, partnerships, and local landowner support to implement many components of the Tennessee Nonpoint Source Program (TN-NPS) statewide. The information contained in this Annual Report highlights many of the accomplishments that have been collectively achieved by these collaborative efforts during FFY2024.

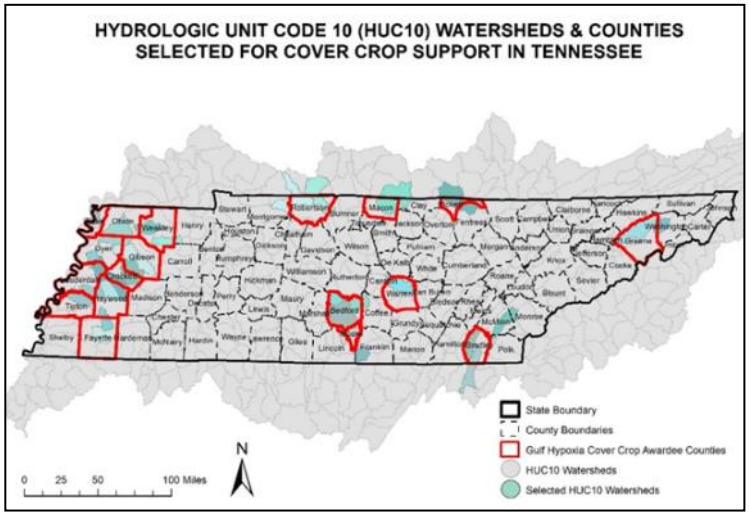
SIGNIFICANT PROGRAM MILESTONES IN FISCAL YEAR 2024:

Best Management Practices Installation for FFY2024

In FFY2024, 94 BMPs were installed by our partners with assistance from CWA Section 319 grant funds (from all open grants). The most common BMPs installed, from most to least, were septic system repairs, heavy use areas, access roads, and fences (livestock exclusion and cross fencing for rotational grazing). The number of practices and pollutant load reduction rates decreased from FFY2023. The Agriculture Resources Conservation Fund (ARCF), Tennessee's State-funded nonpoint source grant program, also saw a slight decrease in trends, from the previous year. Possible factors include a scarcity of labor and increase in costs for supplies.

Expansion of the TN-NPS

The menu of cost-share programs protective of Tennessee's water quality that the TN-NPS offers was expanded in FFY2024 with the Gulf Hypoxia Cover Crop Incentive Program (GHP) and the Tennessee Riparian Incentives Program (TRIP). Combined, the new programs represent approximately $1.6 million in additional funds for control of NPS pollution.



The GHP leverages funding supplied by the Tennessee Department of Environment and Conservation (TDEC) to assist producers with the implementation of cover crops. In 2023, TDEC performed a State-wide analysis using a SPAtially Referenced Regressions On Watershed (SPARROW) model, and identified priority hydrologic unit code (HUC) 10 watersheds. Fifteen counties that encompassed the greatest portions of the priority HUC10 watersheds, and their respective Soil and Water Conservation Districts were awarded $38,500 each to implement additional cover crop practices for the winter of 2023—2024.

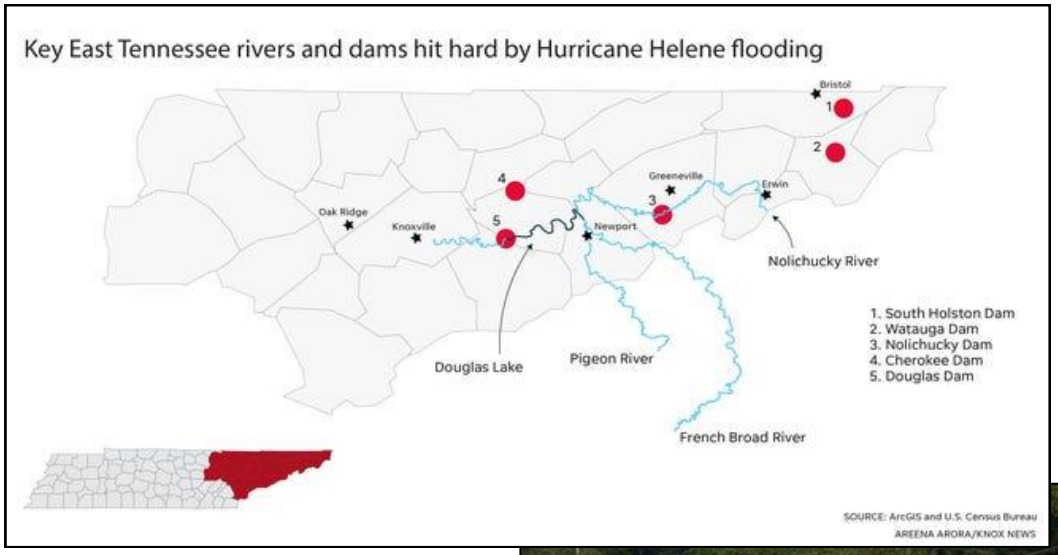
Left: Counties selected for GHP assistance

The TRIP, administered with the assistance of the USDA's Farm Service Agency (FSA) Conservation Reserve Program (CRP) provides additional incentives for producers to take riparian areas out of production (row crops or livestock grazing) and transitioned to forested buffers. The program provides a one-time $3,000 per acre incentive to plant the riparian buffer and maintain it for at least 14 years. The assistance is provided to producers in the Clinch, Powell, Elk, and Duck River Watersheds, with plans in subsequent years to open the program statewide (as determined by demand / subscription).

Right: Riparian planting in Lawrence County

East Tennessee Suffers from Hurricane Helene Damage

During the week of September 23rd, Eastern Tennessee was subjected to heavy rain and flood damage from Hurricane Helene. Helene produced substantial and historic rainfall that resulted in record-breaking river flooding causing severe damage to communities and infrastructure. Major disaster declarations were issued in Carter, Cocke, Greene, Hamblen, Hawkins, Johnson, Unicoi, and Washington counties. Floods from Hurricane Helene tore through cities and caused destruction including breached dams and left thousands without essential utilities for days. East Tennessee is still recovering.



Left: Map of Tennessee counties impacted by Hurricane Helene

Right: Infrastructure damage from Hurricane Helene in Carter County

TN-NPS Program Staffing Challenges

The TN-NPS Program experienced significant staffing challenges in FFY2024 due to the retirement of three long-term employees and the transition of an additional employee to TDEC. As the program typically employs 13—14 full-time employees, the loss of four staff members caused disruptions to the TN-NPS Program's ability to meet some reporting requirements for the Section 319 grant. Efforts are underway to bring the staff back to full strength to prevent further interference with program administration and operations.

Attendance at National and Regional Nonpoint Source Meetings

- Heidi McIntyre-Wilkinson presented at the Tennessee Conservation District Employee Association Fall Workshop in Knoxville, Tennessee on October 10-12th 2023.
- Clark Hollis attended the Tennessee Association of Conservation Districts fall meeting on October 24th,2023.
- John McClurkan presented at the Tennessee Association of Conservation Districts Convention on March 3-5th, 2024, in Murfreesboro, Tennessee.
- Wayne Pressler attended the Tennessee Association of Conservation Districts 2024 Convention on March 4th, 2024.
- John McClurkan attended the Tennessee Nutrient Reduction Taskforce Meeting on April 2nd, 2024, at Montgomery Bell State Park.
- Macee Fredlake attended the Annual Water Resources Association (AWRA) symposium on April 2-3rd, 2024, at Montgomery Bell State Park.
- Macee Fredlake attended the State Envirothon Competition on May 7-8th, 2024 in Crossville, Tennessee.
- Doug Taylor attended the Milan No-Till Field Day on July 25th, 2024 In Milan, Tennessee.
- Sam Marshall attended the Governors Conservation Sumit on August 7th, 2024, in Nashville, Tennessee.
- Sam Marshall attended the Tennessee River Basin Network Conference on August 20-21st, 2024, in Chattanooga, Tennessee.

Downstream Right Bank Bull Run Creek, Knox County

FFY2020 Grant Closeout

The FFY2020 was closed-out in FFY2024. $274,311.44 of the awarded funds were left unspent from the FFY2020 grant at end of the contract term as of December 6th, 2024. As of May 2025 the final close-out report is pending and has not been turned into EPA.

FFY2024 Grant Awarded

The TN-NPS released an RFP in September 2023, to solicit applicants for the 319 Grant award for FFY2024. Proposals (with accompanying watershed based plans, as applicable) were due by December 1, 2024, and eleven applications were received. Including TDEC's $600,000 monitoring funding request, applicants requested a total of $2,077,333.93 in grant funding. Funding was provided for nine project proposals submitted in FFY2024. The FFY2024 grant, totaling $2,564,000, was awarded on April 30, 2025. The following table provides a list of projects awarded from the FFY2024 grant ,as well as the amount of grant funding each project was awarded.

Table 1: FFY2024 Grant Awards

Name of Applicant	Name of Project	319 Grant Money Allocated	Funding Type
Cumberland River Compact	Brown's Creek Restoration—Phase 2	$142,000	Watershed
Cumberland River Compact	River Friendly Farm Certification Program—Phase 2	$58,020	Program
Giles County SWCD	Buchanan Creek Project	$274,000	Watershed
Grainger County SWCD	Richland Creek Watershed Improvement Project—Phase 2	$186,251	Watershed
Jefferson County SWCD	Lost Creek Watershed Restoration Project	$111,000	Watershed
Monroe County SWCD	Bat Creel Restoration Project—Phase 2	$360,000	Watershed
TDEC	TDEC Water Quality Monitoring of NPS-Impaired Streams	$152,000	Watershed
Tennessee Environmental Council	Donelson Creek Restoration—Phase 1	$83,822	Watershed
Tennessee RC&D	Tennessee Envirothon	$20,000	Program
	TOTAL	$1,387,093	

Total NPS Spending in FFY2024

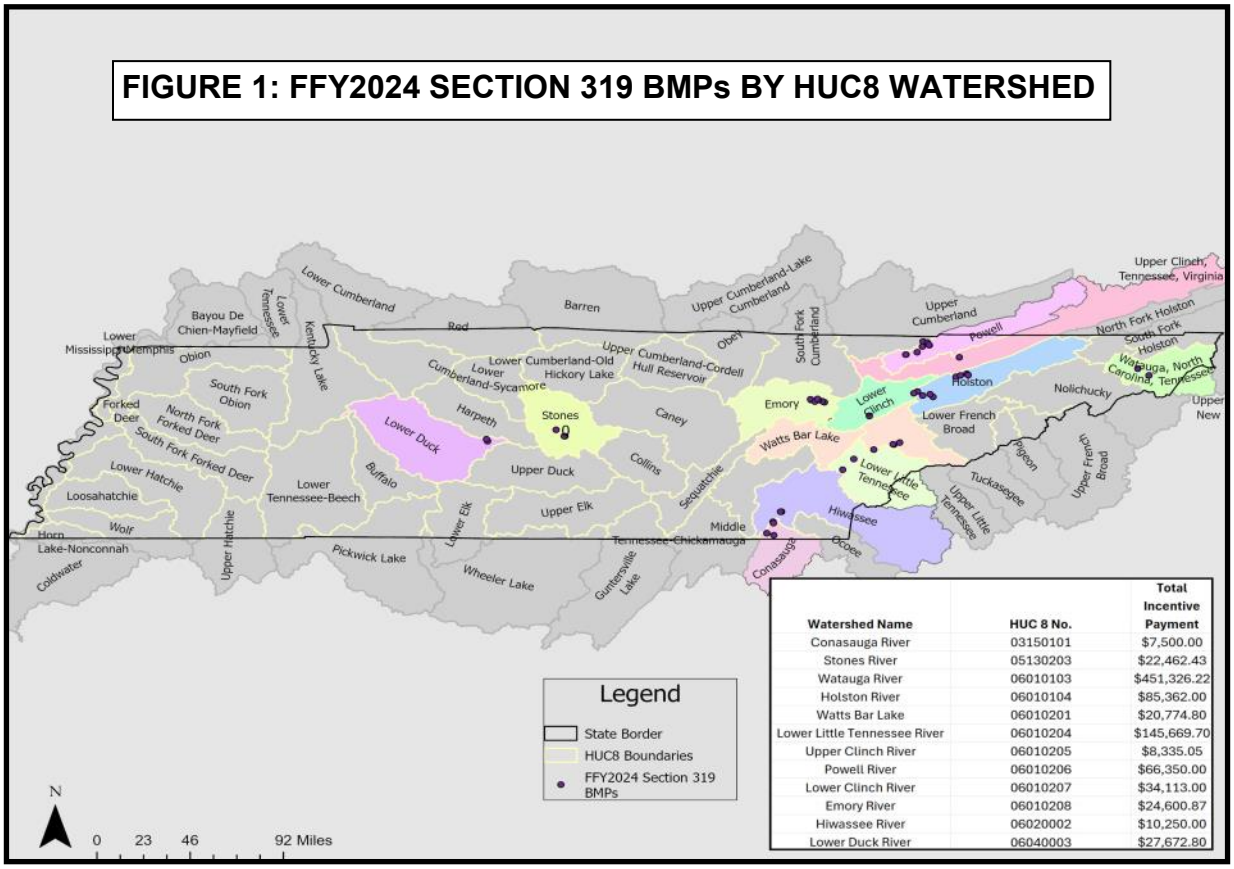
The spending in FFY2024 increased slightly from FFY2023. Watershed restoration spending increased by over $200,000. Management costs increased in FFY2024 as compared to FY2023. Education project spending decreased in FFY2024 compared to FFY2023 by roughly $20,000. The total amount of 319 grant funds spent in FFY2024 was $2,611,060.70, which was an overall increase of .approximately $300,000 (FFY2022 total spending was $2,356,576.55).

Program Management expenditures consist of salaries and benefits for 13.21 Full-Time Equivalents (FTEs), travel, supplies, and indirect costs originating from the TN-NPS program. The personnel costs for 1.10 FTE is matched by the State.

Nature of Expense	Amount of 319 Dollars Spent
NPS Program Management	$1,444,977.76
Watershed Restoration Projects	$1,128,663.57
Educational Projects	$37,419.37
TOTAL:	$2,611.060.70

The following two figures illustrate the spending from FFY2024. Figure 1 is a geographical representation of where Section 319 grant funds were spent in FFY2024 across the state on best management practices from watershed restoration projects by watershed (8-digit hydraulic unit code). Please note that each marker may represent more than one BMP on a particular site. Information about BMPs installed in National Water Quality Initiative (NWQI) watersheds can be located in Appendix C.

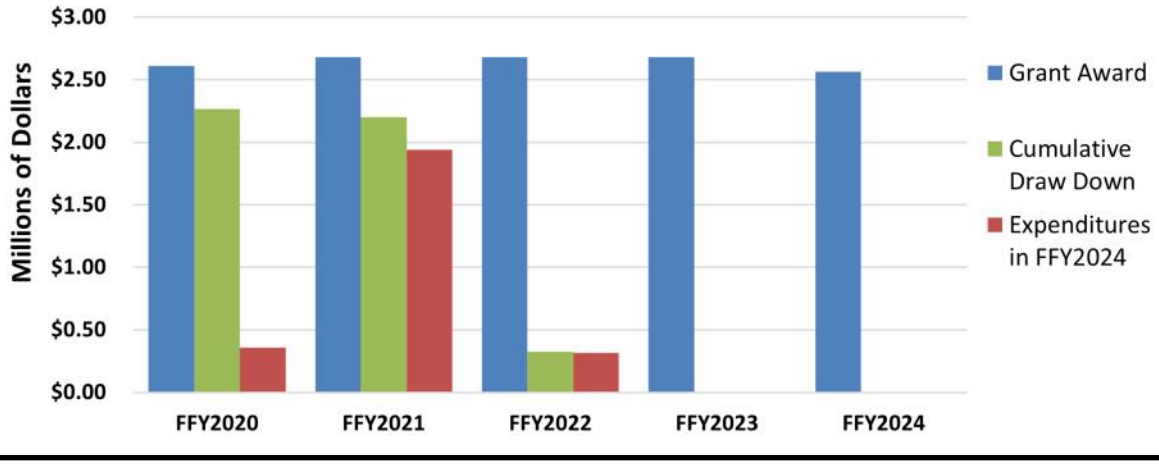
FIGURE 1: FFY2024 SECTION 319 BMPs BY HUC8 WATERSHED



Watershed Name	HUC 8 No.	Total Incentive Payment
Conasauga River	03150101	$7,500.00
Stones River	05130203	$22,462.43
Watauga River	06010103	$451,326.22
Holston River	06010104	$85,362.00
Watts Bar Lake	06010201	$20,774.80
Lower Little Tennessee River	06010204	$145,669.70
Upper Clinch River	06010205	$8,335.05
Powell River	06010206	$66,350.00
Lower Clinch River	06010207	$34,113.00
Emory River	06010208	$24,600.87
Hiwassee River	06020002	$10,250.00
Lower Duck River	06040003	$27,672.80

Figure 2 below provides a breakdown of CWA 319 spending, by grant year. The red bars show the amount of grant money spent in FFY2024 from each of our active grants. The green bars show the cumulative amount spent or drawn-down from each of our active grants. Each subsequent grant year has less and less money spent as each year is more and more recent, but the TN-NPS program has a strong history of spending all of the money from each grant before it is closed out. Blue bars represent the original amount of each grant award.

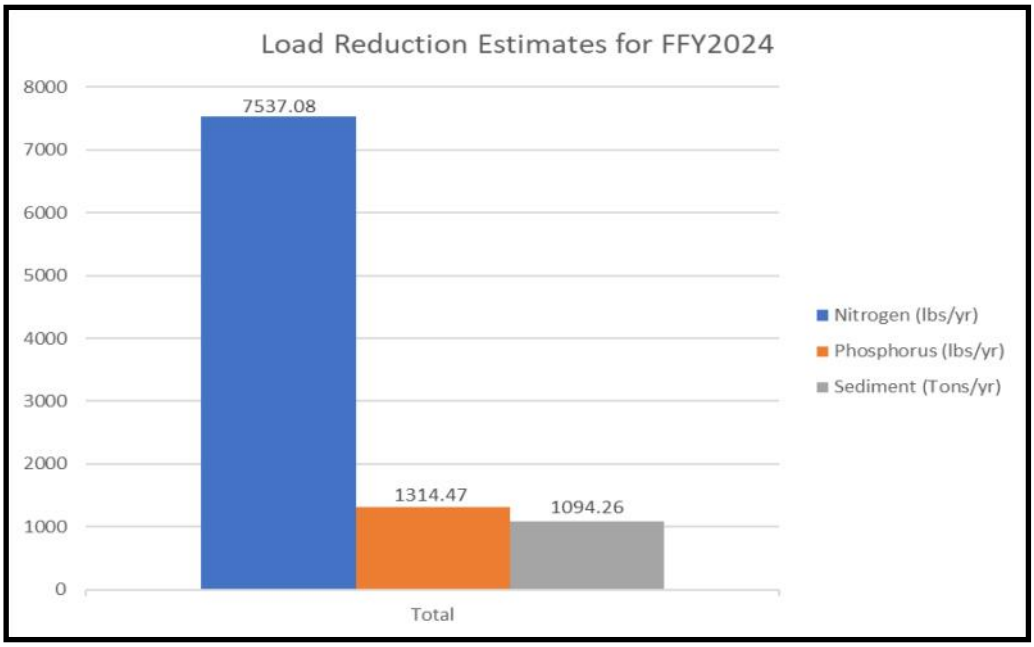
FIGURE 2: EXPENDITURE HISTORY OF CWA SECTION 319(h) GRANTS FROM FFY2020 TO FFY2024 FOR THE STATE OF TENNESSEE



Nitrogen, phosphorus, and sediment are three of the most common impairments for Tennessee; thus, pollutant load reductions are key to removing stream reaches and bodies of water from the *Lists of Impaired and Threatened Waters*. Since delisting streams is the top priority of the Tennessee NPS program, these estimates help track interim progress towards that goal. Overall success is determined by the number of stream miles or lake acreage that is removed from the *Lists of Impaired and Threatened Waters* as they again meet the State standards for their designated uses. Figure 3 shows our estimated load reductions for nitrogen, phosphorus, and sediment from all projects with BMPs for FFY2024, based on the 107 practices installed by partners. Estimates were derived using the Spreadsheet Tool for Estimating Pollutant Loads (STEPL) Model or the Pollutant Load Estimation Tool (PLET). In FFY2024, estimated load reduction (especially nitrogen) was lower than the previous year, partly due to fewer practices being implemented by grantees. The load reduction estimates for FFY2024 are 7,537.08 pounds of nitrogen, 1,314.47 pounds of phosphorus, and 1,094.26 tons of sediment.

The data was derived from Grants Reporting and Tracking System (GRTS) entries and the State of Tennessee's, Land & Water Stewardship database query, based on the date of payment, dating from October 1, 2023 to September 30, 2024. **NOTE: Data units for sediment are in tons/year (yr)**

FIGURE 3: LOAD REDUCTION ESTIMATES FOR FFY2024 FOR NUTRIENTS AND SEDIMENT



GUIDING PRINCIPLES

The successful administration of any program requires some level of planning and the establishment of goals. The TN-NPS's new Management Program Document is part of that process, and one significant aspect of that plan is the goals that have been set. Both long term goals and annual goals have been identified, all of which correspond to the four elements of TN-NPSs overriding mission statement.

TN-NPS Program Mission Statement

The mission of the TN-NPS is to: measurably reduce nonpoint source pollution in Tennessee, measurably improve Tennessee's water quality, continuously strengthen and expand partnerships, and increase the water resources stewardship of Tennessee's citizens.

The specific long and short term goals will be the basis of all future NPS program projects in Tennessee. The TN-NPS will tie each future project to specific long term goals and annual milestones. These goals are fully described in Section 3 (*Strategy for Addressing Nonpoint Source Pollution Issues*) of the new Management Program Document.

2020 - 2024 TN-NPS Long Term Goals

Long Term Goal No. 1:
Restore impaired water bodies (i.e., those on the *Lists of Impaired and Threatened Waters**) by implementing best management practices (BMPs) that address nonpoint source pollution.

Long Term Goal No. 2:
Build citizen awareness of problems and solutions related to nonpoint source pollution through local and statewide education efforts targeting various audiences.

Long Term Goal No. 3:
Build capacity for future TN-NPS projects in local watersheds by engaging stakeholders and potential partners through outreach and personal contact.

Long Term Goal No. 4:
Track interim progress towards restoration of impaired water bodies.

Long Term Goal No. 5:
Protect unimpaired/high quality waters (i.e., those not on the list of impaired waters) by implementing appropriate BMPs where warranted.

Long Term Goal No. 6
Fulfill all obligations under grant award agreement with USEPA annually.

* *The State of Tennessee's* List of Impaired and Threatened Waters *is now used in lieu of the 303(d) list, as it includes all impaired waters, not only those waters for which a Total Maximum Daily Load (TMDL) still requires development.*

Status of All Projects Active in FFY2024

Grantee Name - Project Name	Amount Awarded ($)	Balance ($)	Expiration Date
Appalachian RC&D - *Gap Creek - Watauga River Restoration Project*	$475,000.00	$25,254.71	7/31/2025
Blount Co. SWCD - *Baker & Centenary Cr., Ph.IV*	$172,000.00	$130,103.95	8/31/2026
Blount Co. SWCD - *Pistol Creek Restoration, Ph. II*	$462,000.00	$417,154.28	8/31/2026
Blount Co. SWCD - *Watershed Learning Laboratory*	$15,090.00	$4,490.63	7/31/2025
Claiborne Co. SWCD - *Davis Creek/Cawood Branch*	$124,650.00	$9,806.00	7/31/2025
CRC - Harpeth Rv. - *Spencer Cr., Watershed Restoration Ph. I*	$163,000.00	$162,529.68	7/31/2025
Goodlettsville - *Madison Creek/Pattons Branch Stream Bank Stabilization*	$160,341.00	$160,341.00	7/31/2027
Green Interchange - *Spring Creek Restoration Plan Implementation*	$104,000.00	$93,776.76	8/31/2026
Knox Co. - *Turkey Creek Watershed Ph 1*	$205,500.00	$205,500.00	7/31/2027
Morgan Co. SWCD—*Crooked Fork Ph 2*	$225,000.00	$218,728.21	7/31/2027
SE TN RC&D - *Conasauga River, Ph. 3*	$165,000.00	$115,750.00	8/31/2026
SETN RC&D - *Hiwassee Rv. Tributaries, Ph.II*	$200,000.00	$120,537.16	7/31/2025
TDEC - *Water Quality Monitoring 2023*	$150,000.00	$150,000.00	7/31/2027
TDEC/WPC—*NPS Watershed Monitoring 2021*	$180,000.00	$10,620.35	7/31/2025
TDEC/WPC— *NPS Watershed Monitoring 2022*	$165,000.00	$165,000.00	8/31/2026
TEC - *Lytle Creek Restoration, Ph. II*	$63,100.00	$6,455.29	7/31/2025
TEC - *Rutherford Creek Restoration V*	$145,000.00	$81,850.27	7/31/2025
TN Aquarium - *Enhancing Tennessee Aquarium Galleries: Watershed Education*	$65,500.00	$48,637.87	7/31/2026
TN RC&D - *TN Envirothon 2024*	$20,500.00	$0.00	9/30/2024
TN Wildlife Federation - *Bull Run Creek Stabilization Project*	$311,589.00	$311,589.00	7/31/2027
TTU - *Watershed Based Environmental Justice*	$92,273.00	$69,125.06	8/31/2026
UTK - *Innovative Stormwater Management*	$27,763.00	$27,763.00	7/31/2027
WaterWays - *Mountain Creek Watershed Ph 3*	$312,000.00	$312,000.00	7/31/2027
Wolf River Conservancy - *Educational Signage*	$26,000.00	$26,000.00	7/31/2025

GRANTEE: Appalachian RC&D Council
PROJECT NAME: Gap Creek—Watauga River Restoration
GRANT YEAR: FY2021
WEBSITE: www.arcd.org


Gap Creek—Downtown stabilization and riparian planting


Doe River—Stream restoration

Brushy Fork Environmental Consulting, Inc. (BFES) finished restoration projects on Gap Creek at Gap Creek Park and the Doe River at Roan Mountain Park in April of 2024. The *Gap Creek Park* project involved approximately 1,118 linear feet of natural channel restoration. The *Doe River at Roan Mountain Park* project involved approximately 1,250 linear feet of Doe River. Natural channel structure was added to this section as well as native riparian plantings. Both Sites were showing improved stability and vegetative cover. Gap Creek Site has been assessed post Helene and is performing as designed with minor scour around the ford. The Doe River site saw some impacts to its flood plain, however, structures and most of the vegetation are in place and functioning as designed.
Planning is underway for upcoming workshops this spring focused around farmers and non point source pollution (NPS). Farms hosts have been identified and programs are scheduled for March – May. Five farm consults have taken place at farms in Greene, Washington, Sullivan and Carter Counties.

GRANTEE: Blount County Soil and Water Conservation District
PROJECT NAME: Pistol Creek Watershed Restoration Initiative—Phase II
GRANT YEAR: FY2022
WEBSITE: http://www.blounttn.org/soil/

Progress was made in 4 of the 6 milestones outlined in the program.

Stormwater Infrastructure: A large vegetated basin was installed and stormwater related erosion issues were addressed in the Maryville College woods. *These practices impacted 25 acres*.

Septic Assistance: The septic assistance goals of this program were met with *two systems being replaced* within a 7 month time frame.

Community Outreach/Education: *Two educational events* were held in which volunteers from two schools and at least two other organizations assisted with stormwater infrastructure enhancements, native plant establishment, or invasive species control. Events provided training with respect to green infrastructure to address stormwater issues.

Outdoor Learning Areas: *Two outdoors learning areas were enhanced* through service learning activities with Master Gardeners and students from Maryville College.

Before & After Photo; Sediment laden runoff & stormwater pulses were flowing into Ducan Branch prior to project completion

this group assisted w/stormwater feature installations, Vegetated basin & rain garden, Some attendees were grounds -keepers that obtained professional development training

GRANTEE: Blount County Soil and Water Conservation District
PROJECT NAME: Watershed Learning Laboratory
GRANT YEAR: FY2021
WEBSITE: http://www.blounttn.org/soil/

This past year Blount County Soil and Water Conservation District was able to achieve its programming goals as a result of the resources, materials, and the lab that was built. In total, ten formal events were conducted. Of the ten events, 4 were educational, 2 were outreach efforts, 2 were workshops to build technical skills for young professionals and community groups, and 2 events were lab and/or field based training events for college students and young professionals. The data collected from at least two of the event contributed to ongoing monitoring projects that are informing local decision-making and management efforts.

As a result of these events, were able to directly reach, work with, and/or provide training to children and adults. In addition to formal events, Blount County SWCD was able to reach more people and provide education at a broader scale through informal meetings, discussions, activities, and interactions at other events.

Above: Watershed Learning Laboratory (Field & Lab Training/Education) Water Quality & Soil Properties, Students from Maryville College learning how to process water and soil samples using the lab

Left: Community Outreach & Education
Water Quality – Maryville College Little Scots & Keep Blount Beautiful

Right: Watershed Learning Laboratory (Technical Workshop/Training)
Teaching young professionals how to survey different habitats for water runoff & erosion.

Table of Formal Events Conducted by BCSWCD with Watershed Learning Laboratory Resources

Event Name	Topic	Collaborators	Event Type	# off Kids	# of Adults	
Barefoot Forest Homeschool Group	Watersheds & Water Quality	Keep Blount Beautiful	Education	17	8	25
Maryville College Little Scots	Watershed Erosion Table	Maryville College	Outreach & Education	15	3	18
Watershed Learning Laboratory: Little River	Student science—Water Quality in Little River	Maryville College & City of Townsend	Lab & Field Training	0	4	4
Watershed Learning Laboratory: Water & Soil Quality	Measuring soil properties, and water quality	Maryville College	Lab & Field Training	0	15	15
Watershed Learning Laboratory: Elevation Surveys	Topographic Survey & Mapping Training	Maryville College & other Professionals	Technical Workshop	0	12	12
Watershed Erosion Table	Watersheds, Stormwater & Erosion	Perpetual Motion	Education	38	13	51
Watershed Day	Watershed, Erosion, Conservation	Montvale Nature Camp	Education	24	3	27
Green Infrasture Suttree Land Tour	Stormwater Management & Urban Green Infrastructure	Tellico Village Garden Club	Outreach & Education	1	44	45
Rain Garden Workshop	Rain Gardens, Native Plants, Stormwater	Blount County Master Gardeners, Maryville College, Community	Technical Workshop	0	23	23
Pistol Creek Day	Watersheds, Stormwater & Erosion	Clayton-Bradley Academy	Education	49	9	58
			Total Reached	144	134	278

GRANTEE: Claiborne County Soil and Water Conservation District
PROJECT NAME: Davis Creek/Cawood Branch Watershed Restoration Project
GRANT YEAR: FY2021
WEBSITE: http://tnacd.org/

Claiborne County SWCD obligated the remaining funding balance this year for upcoming projects.

2024 Installed Practices:

- 1 Watering System
- 1 Well
- 1 Pumping Plant
- 500’ of Livestock Pipeline
- 1,998’ of Fencing
- 3,784 SQ’ Heavy Use Area Protection

Above (all): Fencing and Heavy Use Areas Installed in 2024

GRANTEE: Cumberland River Compact
PROJECT NAME: Oak Grove / West Fork Red River Restoration: Phase One
GRANT YEAR: FY2020
WEBSITE: http://cumberlandrivercompact.org/

CUMBERLAND RIVER COMPACT
OUR WATER. OUR FUTURE.

During this past year, the Compact conducted outreach across the watershed to locate willing landowners interested in implementing best management practices (BMPs). After outreach to many churches, apartment complexes, veterinarians, and other businesses in the project area, the Compact spoke with the Clarksville Parks and Recreation Department regarding siting and installing BMPs. The previous construction of the major bank stabilization project was completed in the summer of 2023, and the final plantings were completed in December 2023. After several site visits and meetings, the Compact worked with the Clarksville Parks and Recreation Department to plant one acre of riparian forest at Billy Dunlop Park, extending the buffer along 1,450 linear feet of the river. This planting engaged 80 volunteers to plant 110 large caliper trees on February 17th. To protect the newly planted trees and bank stabilization project from park goers, the Compact worked with the Parks Department to install 400 linear feet of access control measures by installing bollards to prevent vehicle disturbance. Three educational signs were installed along the riparian area to educate park goers about the restoration project, riparian buffers, water quality, and activities they can do at home to help improve water quality. On April 25th, the Compact also constructed a 600 sq ft rain garden near the Billy Dunlop Park Pavilion to capture runoff from a road and pavilion. The rain garden was completed by the CRC field team and 6 volunteers who helped plant and mulch the garden. Finally, the Compact installed two pet waste stations in the park where many park users walk their dogs.

Filter Strip Prairie at the Pollard Rd Greenway Trailhead

On April 27th, the Compact also installed a 4,700 sq ft filter strip and native prairie with the help of 15 volunteers at the Pollard Road Greenway Trailhead to capture sheet flow from an adjacent parking lot and filter contaminated runoff. The Compact stripped the area of sod, installed ground cover with 3 inches of mulch, planted native forb and grass plugs, and installed wattles to prevent rill and gully formation. Another popular dog walking destination, the Compact worked with the Parks Department to install a pet waste station adjacent to the prairie. Community engagement included multiple educational activities regarding streams, green infrastructure, water quality, and ways people can help improve water quality at home. Volunteers were educated about the installed BMPs and their impact on water quality and nonpoint source pollution mitigation. The Compact hosted a community talk for 10 attendees on April 4th and discussed the 319 program, water quality, BMPs, How's My Waterway, and the watershed in general. A rain barrel workshop was hosted on June 1st, 2024 at the Billy Dunlop Park Pavilion, where 14 barrels were distributed and 14 people were educated about nonpoint source pollution, stormwater runoff, and rain barrel maintenance and installation. The Compact educated 1,071 people and reached an estimated 43,000 people in the area through online media.

GRANTEE: Cumberland River Compact
PROJECT NAME: Harpeth River—Spencer Creek Watershed Restoration, Ph. 1
GRANT YEAR: FY2021
WEBSITE: http://cumberlandrivercompact.org/

CUMBERLAND RIVER COMPACT
OUR WATER. OUR FUTURE.

In the late summer of 2023, the Compact met with the City of Franklin and discussed the potential timeline for approval of the Pinkerton Park Project, with tentative approval for the project after January 2024. That fall, the Compact and the City of Franklin met to discuss the MOU and Ralston Branch restoration project, and the MOU was signed on November 16th. Shortly thereafter, the Compact reached out to Franklin-approved contractors to solicit bids for the restoration work. The Compact and CEC met at Pinkerton Park on January 9th, 2024, to assess the scope and cost of the restoration project. The Compact also met with Stantec on February 22nd, 2024 to discuss their proposal questions after their site visit the week prior. On April 1st, the Compact ended the bidding period for the proposed work at Ralston Branch, and both the City and the Compact reviewed ,ranked, and scored each bid to determine

which should be selected for the restoration work. On May 3rd, 2024, the City and the Compact selected Stantec as the designer for Ralston Branch restoration project with the intent to bid out the construction separately in late 2024/ early 2025. The Compact hosted a kickoff meeting in June between the Compact, the City, and Stantec about the restoration project scope and timeline.

With the bidding and contractor selection complete, the Compact began potential site identification for BMPs in the project area. This step was primarily conducted through geospatial analysis of the project area, locating businesses, churches, apartment complexes, HOAs, and others that currently lack stormwater control measures or have streams with poor or nonexistent riparian areas. During the summer, the Compact began reaching out to these landowners to gauge interest in installing and maintaining BMPs.

The Compact has also coordinated with the City of Franklin to find suitable BMP locations on city-owned property. Over the year, the Compact conducted more general outreach at events like Welcome to Your Watershed and Dickens of a Christmas, and general information about the grant, the project area, and eligible stormwater projects was shared with members of the public. These two events provided an excellent opportunity to start engaging with landowners and potential partners.

Left: Potential Planting Site
Above Right: Potential Bank Stabilization Site Along Intermittent Stream
Below Right: Outreach at Dickens of a Christmas

GRANTEE: Green Interchange
PROJECT NAME: Spring Creek/ Black Branch Implementation
GRANT YEAR: FY20
WEBSITE: https://www.greeninterchange.org/

Green Interchange has identified two sites for restoration of riparian habitat and streambank stabilization.

Site 1: Moriah Drive located on Black Branch:
Stream restoration Corridor and bank treatment:

- The channel originally identified to be restored is approximately 500 ft in length. The landowner on the lower section decided to clear the channel of all soil/substrate instead of creating a meandering channel. Plans placed to replant at least part of this landowners stream side zone.
- Installation of a rain garden approximately 10ftx25ft is planend. The willow tree will be removed and working with MTE to address the power pole support wires. Green Interchange proposed creating an "overflow" pipe under the driveway to relieve pressure on the existing stream channel and discharge directly to the rain garden.
- The upper section is about 100 ft and includes an overstocked riparian zone, and approximately 60% bank instability. Green Interchange planned to treat this section with cedar revetments and release healthy/desirable trees in the overstocked areas. Additionally, Green Interchange will plant native ornamentals along the edge of the riparian zone.

Moriah Drive site. Note "new stream corridor" (lower right) was fully excaveted by the landowner.

Old Hartsville Pike site:

- Stream bank stabilization included cedar revetment to protect/stabilize the streambank in areas first that have exposed tree roots/mature trees in an effort to maintain existing canopy. Additional revetments may be placed in other highly erosive locations, including up and down stream of gabion baskets.
- Stream bank Stabilization included the use of approximately 100 feet of rock gabion baskets. The site has at least two areas that are vertical and subject to highly erosive flow as they exist at right angles in stream direction.
- Plant approximately 200 trees along both banks to increase stability and maintain canopy. In addition, trees will be planted to increase the overall width of the riparian zone.
- Sloped streambanks will be matter with biodegradable erosion control matting, live stacked with native cuttings and planted with hydrophilic understory and shrub species.
- All areas to be stabilized with trees and native vegetation will be watered until established.

Site specific restoration locations.

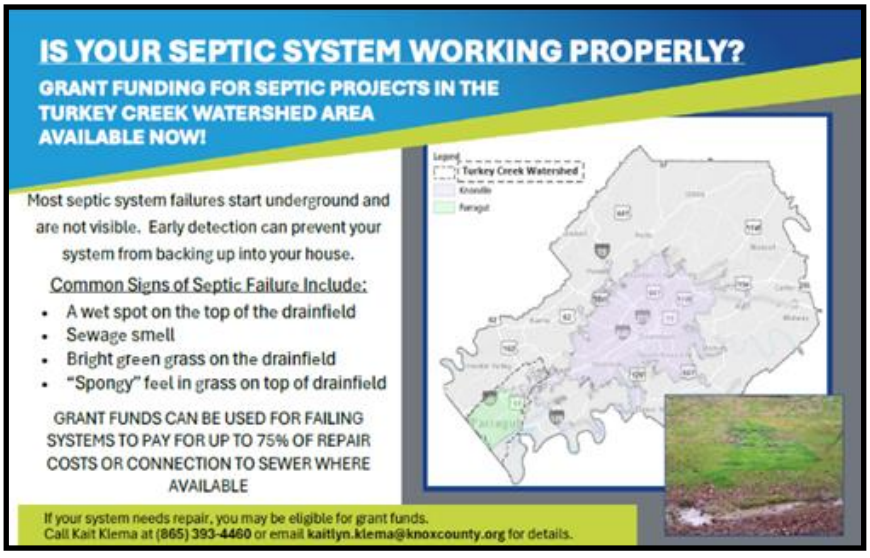
GRANTEE: Knox County Soil and Water Conservation District
PROJECT NAME: Turkey Creek Watershed Initiative—Ph. 1
GRANT YEAR: FY
WEBSITE: http://www.knoxcounty.org/

Knox County Soil and Water Conservation District booth at the TN Valley Fair with Turkey Creek Grant fliers.

Knox Stormwater educational booth with fliers advertising the Turkey Creek Grant at the TN Smart Yards Festival

The focus for the first three months of the Turkey Creek Phase 1 grant term was spreading the word about the grant funds to solicit projects from the community and refining the project selection processes. The grant committee conducted a kickoff meeting with all partners to discuss expectations for implementation, outreach, and reporting. Then, Knox County, the City of Knoxville, and the Town of Farragut advertised the grant through press releases, fliers posted at tabling events and libraries, and on partner websites and social media. Tabling events included the TN Valley Fair, a City of Knoxville neighborhood resource fair, and the TN Smart Yards Festival.

Five property owners reached out about urban Stormwater Control Measure (SCM) projects during the first grant quarter. Although only one stormwater pond project was chosen for grant funding, another might fit a community volunteer planting event in the future. A mailer was also sent to over 600 properties presumed to be on septic systems, and several property owners have reached out expressing interest. watershed and identified 2-3 that might be feasible.



Flier advertising urban SCM and septic repair cost share, and education-outreach opportunities in Turkey Creek

Septic Mailer

GRANTEE: Tennessee Aquarium
PROJECT NAME: Watershed Education
GRANT YEAR: FY2022
WEBSITE: https://tnaqua.org/

The education, graphics, and facilities teams at the Tennessee Aquarium planned a new interactive display that will feature three mini-games and multiple "Easter Egg" touch prompts that teach about the ecological make-up of waterways, causes of nonpoint source pollution, and strategies to keep waterways clean.

The curriculum and designs for the mini-games were finalized and communicated to Tennessee Tech, the project partner who will develop the technology behind the pop-up and mini-games. Each mini-game will encourage guests to join "The Stream Team" to keep waterways clean. By helping a river chub build a nest and using mussels to filter water, guests will learn the ecological significance of stream critters. Through "Easter Egg" glowing touch prompts, guests will learn about sources of and solutions for nonpoint source pollutants including sediment, fertilizer, bacteria such as *E. coli*, and oil from cars. Guests will virtually pick up trash, plant trees in riparian zones, repair cattle fencing, plant pollinator-loving flowers in lawns, and take alternate forms of transportation as they respond to touch-prompts and increase the health of the on- screen environment. As guests complete tasks, the health level of the waterway, shown by a video game style heart meter, will increase and more wildlife will appear on the screen.

The installation for the exhibit is scheduled to occur in December 2024.

Above: The Aquarium's current projected display in the Rivers to Ridges exhibit. This projected display will be replaced with three large interactive touch screens.

Right: *Mock-up of Panel 2 of the interactive screens focusing on methods to minimize E. coli and nutrient pollution in rural to suburban areas.*

GRANTEE: TN RC&D
PROJECT NAME: Envirothon
GRANT YEAR: FY2022
WEBSITE: https://tnrcd.org/

This year's competitions involved 82 teams represented by 334 students. 252 advisors, teachers, and volunteers participated. Each local TN RC&D Council had a team represent it at the Tennessee State Envirothon. These include Appalachian RC&D Council, Buffalo & Duck River RC&D Council, Cumberland Mountain RC&D Council, Five Rivers RC&D Council, Hull-York Lakeland RC&D Council, Smoky Mountain RC&D Council, Southeast TN RC&D Council, as well as an At-Large team. At-Large teams are those that are not located in an area represented by a TN RC&D Council. The generosity of our partnership allowed for an additional two high scoring 'Wild Card' teams to attend the Tennessee State Envirothon competition for a total of 10 teams competing at the Tennessee State Envirothon.

The winning team this year was Montgomery Bell Academy representing the Five Rivers RC&D Council. Montgomery Bell advanced to the 2024 North American Contest hosted by Hobart and William Smith Colleges, in Geneva, New York in July. The second ranking team was William Blount High School from the Smokey Mountain RC&D Council. Placing third was Van Buren High School Team B, from the Hull-York Lakeland RC&D Council.

1st Place Team State Contest – Montgomery Bell Academy

2nd Place Team State Contest- William Blount

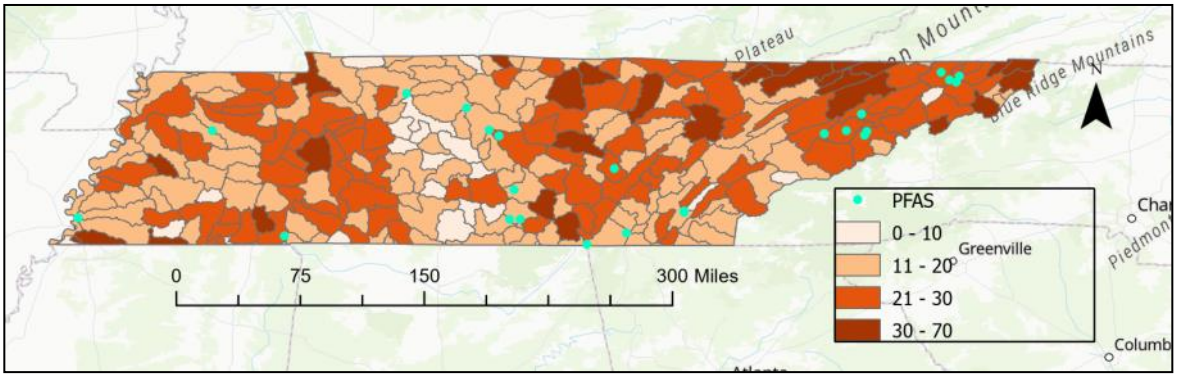
Montgomery Bell Academy 1st Place Winners (left and right)

GRANTEE: Tennessee Tech University
PROJECT NAME: Watershed Based Environmental Justice
GRANT YEAR: FY2022
WEBSITE: https://www.tntech.edu/

Analysis of Fish Tissue Contamination and Impaired Waters in Tennessee:

This year, Tennessee Tech began analyzing fish tissue contamination data from the Tennessee Department of Environment and Conservation (TDEC). In 2022, TDEC collected 405 fish tissue samples from 21 monitoring stations. Of these, 260 samples (64%) showed detectable levels of Per- and Polyfluoroalkyl Substances (PFAS). Notably, while seventeen states have issued fish consumption advisories for PFAS, Tennessee has not yet implemented such measures. However, neighboring state, Alabama, has issued a fish consumption restriction for Fox Creek in Tennessee due to elevated PFAS levels. Unfortunately, TDEC's data did not currently include records from this specific site. Spatial analysis revealed that median poverty rates are higher in HUC-10 watersheds with detected PFAS compared to the statewide average. However, due to the limited number of sampling sites, this finding required further investigation. Aroclor 1260, a polychlorinated biphenyl (PCB) with widespread industrial applications, is also monitored by TDEC's Water Quality program.

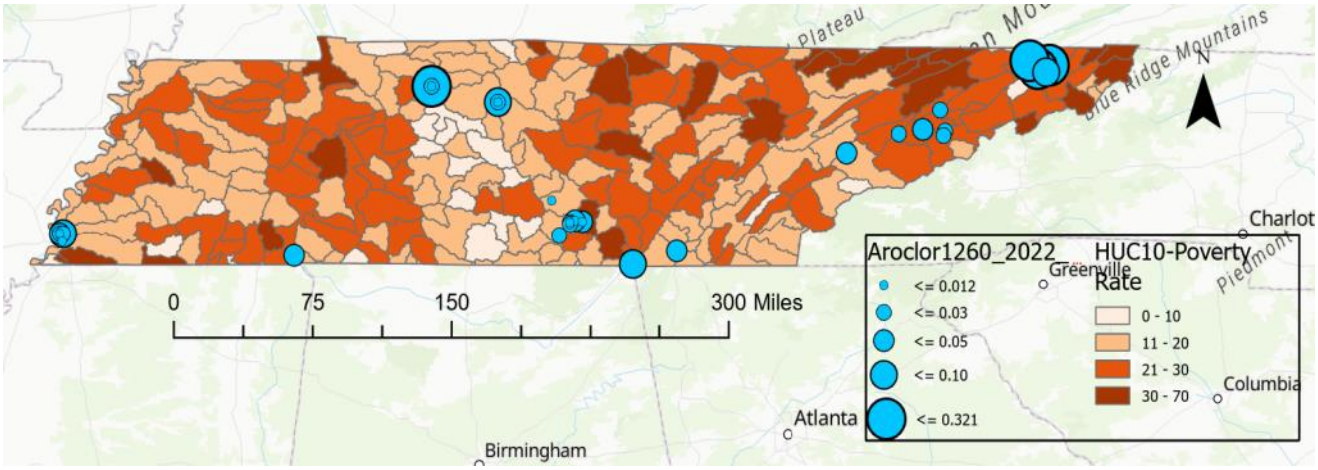
Analysis of Impaired Waters and Application of Machine Learning Algorithms:
In the second half of the year, Tennessee Tech analyzed the most recent 303(d) list published by TDEC. Using ArcGIS Pro and Python, TTU processed the data and generated a normalized map depicting HUC-10 watersheds with impaired stream miles. Three prominent clusters of impaired watersheds were identified: western Tennessee, the central Nashville Basin, and the Appalachian region. TTU employed machine learning algorithms to identify clusters of HUC-12 watersheds based on impaired stream conditions in relation to socio-economic factors such as education attainment, poverty rates, and median household income. Further analysis will incorporate other environmental factors to draw more robust scientific conclusions.



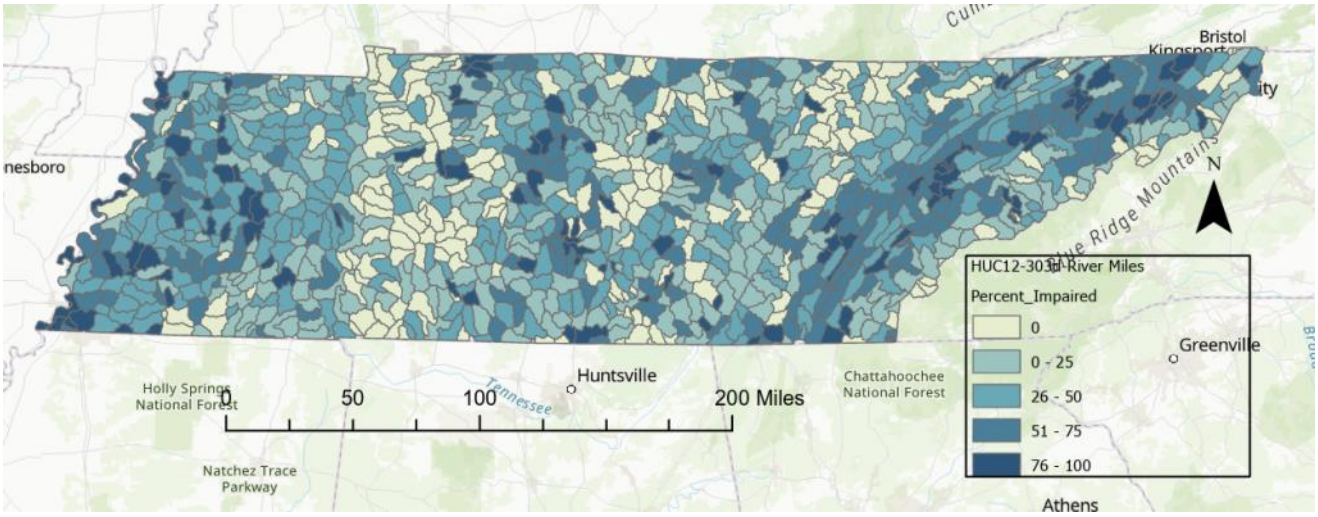
HUC-10 Watersheds in Tennessee with Poverty Rates and Positive PFAS sampled Sties.

Medium Poverty Rates in Positive PFAS HUC-12 Watersheds vs. TN HUC-10 Watersheds.

HUC-10 Watersheds	Number	Medium Poverty Rates
PFAS Positive Watersheds	32	19.65 %
TN HUC-10 Watersheds	259	18.85 %



Aroclor detection in HUC-10 Watersheds in Tennessee. These stations are the same as the stations in PFAS map.



Normalized Impaired Streams in HUC-12 Watershed, 303d-2024

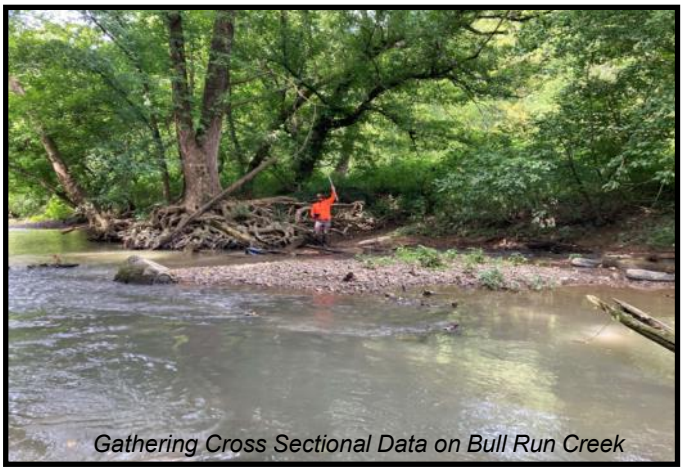
GRANTEE: Tennessee Wildlife Federation
PROJECT NAME: Bull Run Creek Streambank Stabilization
GRANT YEAR: FY2023
WEBSITE: https://tnwf.org


Upstream Right Bank Bull Run Creek


Downstream Right Bank Bull Run Creek

In summer/fall 2024, topographic/survey data was collected for approximately 11.5 acres along the right bank of Bull Run Creek and its associated floodplain. In conjunction with the topography data collection, seven representative stream channel cross sections were assessed to assist with preparing the design plans and associated no-rise analysis. The construction plans are 85% complete and are being reviewed internally for accuracy and completeness.

A data request for the Bull Run Creek effective model was submitted to FEMA in summer 2024, and the project partners only received an excel sheet containing model data that match the Flood Insurance Study (FIS). Since a FEMA effective model no longer exists, a 1D HEC-RAS Existing Conditions Model (ECM) was created by the design team for a portion of Bull Run Creek using FEMA cross sections, publicly available LiDAR, and topographic data obtained from the project site. A Proposed Conditions Model (PCM) was created using the proposed bank stabilization design grading and the ECM. Preliminary analysis of the water surface elevations from the ECM and PCM for the 100-year flows indicate a no-rise (0.00 feet increase in elevation between the ECM and PCM). Currently, the no-rise analysis data and summary are being reviewed internally prior to submission to Knox County for review and approval.


Gathering Cross Sectional Data on Bull Run Creek


Left Bank Bull Run Creek

GRANTEE: University of Tennessee—Knoxville
PROJECT NAME: Innovative Stormwater Management for Tennessee: A training Program
GRANT YEAR: FY2023
WEBSITE: www.utk.edu

During this project year, a presentation was performed at the Tennessee AWRA conference at Montgomery Bell State Park. Approximately 46 individuals attended the event. During this training, the project team began to refine the presentations regarding the description, performance, and design of Regenerative Stormwater Conveyances (RSC). Further, student progress continued to assess the performance of a demonstration RSC in Knox County, TN. This evaluation will be added into training to provide more local context to the presentations. The student's research also contains information about microplastics, which will be an additional water quality training element that can be added.

Below: Training event during TN AWRA conference
Right: Undergraduate student assisting with data collection at RSC

Over the next project year, initial training materials will be finalized. Additional trainings will be planned and delivered. UTK planned to advertise through the Tennessee Stormwater Association and Tennessee Water Resources Research Center to reach a broad audience. At least one of these trainings will be performed online to allow attendees from across Tennessee. Continued refinement will take place to increase the value and uptake up the information.

APPENDIX A

LONG TERM GOALS—
CURRENT PROGRESS SUMMARY

LONG TERM GOALS - CURRENT PROGRESS SUMMARY

Introduction

The table below summarizes the long term goals set for the Tennessee Nonpoint Source Program (TN-NPS). The table was adapted from the *Tennessee Department of Agriculture Nonpoint Source Program Management Document* as approved by the U.S. Environmental Protection Agency (EPA) in 2014, and updated in 2019. The intent of the table below is to be evaluated and populated annually during the preparation of the Annual Report, in order to determine if the long term goals set forth in 2014 are on-track to be completed by the end of this second 5-year Planning Period (2020 – 2024). The overall progress of the program, as well as the sector-specific goals, will be monitored; and, management of the program and/or specific sectors will be adapted as needed if adequate progress is not being made. The annual evaluation will assist with making necessary changes to the program as soon as issues are identified, as opposed to only discovering challenges towards the end of the Planning Period (when too little time remains to correct the program's path). The progress for each aggregate and sector-specific goal is provided as:

- **On track to achieve outcomes** - adequate progress has been made towards the long term goal such that there is a high likelihood of being reached by the end of the Planning Period.
- **Exceeded expectations** - exceptional progress has been made towards reaching the long term goal such that there is a high likelihood of being reached prior ahead of schedule.
- **Insufficient progress** - the pace of output achieved must improve in order to ensure that the long term goal can be reached by the end of the 5-year Planning Period.

While many of the annual goals are quantitative in nature, the outcomes are somewhat qualitative. TN-NPS staff used their best judgment while populating the table in order to gauge the overall progress of the program. Additional, detailed information about the Measures of Success used (in part) to determine the annual progress of the long term goals can be found on the Measures of Success Checklists in Appendix B.

LONG TERM GOALS, ANNUAL GOALS, and OUTCOMES								
Long Term Goal (5 year)	**Sector**	**Annual Goals (outputs; Annual Goal x 5 = Long Term Goal measure)**	**Outcomes**	**Progress Made in Year 1 (FFY2020)**	**Progress Made in Year 2 (FFY2021)**	**Progress Made in Year 3 (FFY2022)**	**Progress Made in Year 4 (FFY2023)**	**Progress Made in Year 5 (FFY2024)**
Long Term Goal No. 1: Restore impaired water bodies (i.e., those on the 303(d) list) by implementing best management practices (BMPs) that address nonpoint source pollution.	Aggregate	• Restore 2 water bodies every other year, on average. • Reduce N load by 5,000 lbs/year; P_2O_5 load by 5,000 lbs/year; and sediment load by 200 tons/year (minimum reductions)	• Improve water quality by reducing water quality impacts from nonpoint sources.	**Exceeded expectations.** *All aggregate goals were met or exceeded.*	**Exceeded expectations.** *All aggregate goals were met or exceeded.*	**Exceeded expectations.** *All aggregate goals were met or exceeded.*	**Exceeded expectations.** *All aggregate goals were met or exceeded.*	**Exceeded expectations.** *All aggregate goals were met or exceeded.*
	Agriculture	• Fund no less than 3 projects each year that address agricultural sources of NPS pollution, depending on the number and quality of proposals received. • Fund the implementation of no less than 65 agricultural BMPs per year. • Staff Watershed Coordinators will perform no less than 200 site visits each year to inspect BMPs pre-, during-, and post-construction.		**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*
	Forestry	• Fund no less than 1 forestry-based project each year, depending on the number and quality of proposals received. • Fund the implementation of no less than 5 forestry BMPs each year, depending on the number of active forestry restoration projects.		**Insufficient progress.** *No BMP-related forestry proposals were received; 1 forestry BMP was installed.*	**Insufficient progress.** *No BMP-related forestry proposals were received; three forestry BMPs were installed.*	**Insufficient progress.** *No BMP-related forestry proposals were received; only two forestry BMPs were installed.*	**Insufficient progress.** *No BMP-related forestry proposals were received; only three forestry BMPs were installed.*	**Insufficient progress.** *No BMP-related forestry proposals were received; no forestry practices were installed.*

LONG TERM GOALS, ANNUAL GOALS, and OUTCOMES								
Long Term Goal (5 year)	**Sector**	**Annual Goals (outputs; Annual Goal x 5 = Long Term Goal measure)**	**Outcomes**	**Progress Made in Year 1 (FFY2020)**	**Progress Made in Year 2 (FFY2021)**	**Progress Made in Year 3 (FFY2022)**	**Progress Made in Year 4 (FFY2023)**	**Progress Made in Year 5 (FFY2024)**
	Urban	• Fund no less than 2 projects focused on stormwater issues in developed areas each year, depending on the number and quality proposals received. • Fund no less than 12 stormwater BMPs each year, depending on the number of active urban/suburban restoration projects. • Staff Watershed Coordinators will perform no less than 15 site visits each year to inspect various stormwater BMPs pre-, during-, and post-construction.		**On track to achieve outcomes.** *While the BMP was exceeded, additional site visits to urban project areas need to be made.*	**On track to achieve outcomes.** *While the number of BMPs and projects funded was exceeded, additional site visits to urban project areas need to be made.*	**On track to achieve outcomes.** *The number of urban BMPs increased sharply, but additional site visits to urban project areas need to be made.*	**Insufficient progress.** *Too few BMPs were installed, and too few staff site visits were conducted.*	**On track to achieve outcomes.** *All short term goals were met.*
	Failing Septic	• Fund the repair/replacement of no less than 20 failing septic systems each year, depending on the number of active projects that address failing septic systems. • Staff Watershed Coordinators will perform no less than 20 site visits each year to inspect work on repair/replacement of failing septic systems.		**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Insufficient progress.** *Only 14 septic system repair/replacements were made in FFY2022.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*
	Legacy Mining	• Fund no less than 1 project addressing legacy mining concerns each year, depending on the number and quality of proposals received. • Fund no less than 1 BMP addressing legacy mining concerns each year, depending on the number of active legacy mining projects. • Staff Watershed Coordinators will perform no less than 1 site visit each year to inspect legacy mining BMPs pre-, during-, and post-construction, depending on the number of active legacy mining projects.		**Insufficient progress.** *No legacy mining-related proposals were received, and no BMPs were completed this fiscal year.*	**Insufficient progress.** *No legacy mining-related proposals were received, no BMPs were completed this fiscal year, and no site visits were conducted for this sector.*	**Insufficient progress.** *No legacy mining-related proposals were received, no BMPs were completed this fiscal year, and no site visits were conducted for this sector.*	**On track to achieve outcomes.** *Four legacy mining practices were funded; however, no staff site visits were conducted for this sector.*	**Insufficient progress.** *No legacy mining-related proposals were received, no BMPs were completed this fiscal year, and no site visits were conducted for this sector.*
Long Term Goal No. 2: Build citizen awareness of problems and solutions related to nonpoint source pollution through local and statewide education efforts targeting various	Aggregate	• TN-NPS staff will attend/participate in at least 10 educational events each year. • Fund at least 20 educational events each year, depending on the number of active NPS pollution educational projects funded. • Document at least 2,000 citizens	• Improve relations with stakeholders, potential applicants, and partners. • Increase awareness of nonpoint source impacts.	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*

LONG TERM GOALS, ANNUAL GOALS, and OUTCOMES								
Long Term Goal (5 year)	**Sector**	**Annual Goals (outputs; Annual Goal x 5 = Long Term Goal measure)**	**Outcomes**	**Progress Made in Year 1 (FFY2020)**	**Progress Made in Year 2 (FFY2021)**	**Progress Made in Year 3 (FFY2022)**	**Progress Made in Year 4 (FFY2023)**	**Progress Made in Year 5 (FFY2024)**
audiences.		presented with messages addressing NPS pollution sources, problems, and solutions each year. • Develop a general evaluation form to be completed by all participants at the conclusion of each educational event.						
	Agriculture	• TN-NPS staff will attend/participate in at least 4 educational events each year targeting an agricultural audience. • Fund at least 5 educational events targeting an agricultural audience. • Document at least 600 citizens presented with messages addressing NPS pollution sources, problems, and solutions. • Respond to 100% of Animal Feeding Operations complaints . • Direct AFO owner/operators to NRCS for mitigation, as necessary.		**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*
	Forestry	• TN-NPS staff will attend/participate in at least 1 educational event each year targeting a forestry audience. • Fund at least 1 educational events each year targeting a forestry audience, depending on the number of active projects aimed at forestry issues. • Document at least 200 citizens presented with messages addressing NPS pollution concerns stemming from forestry-related activities.		**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*
	Urban	• TN-NPS staff will attend/participate in at least 3 educational events each year targeting an urban/suburban audience. • Fund at least 10 educational events each year targeting an urban/suburban audience, depending on the number of active projects aimed at urban/suburban issues. • Document at least 1,000 citizens presented with messages addressing NPS pollution concerns stemming from stormwater in urban/suburban areas.		**On track to achieve outcomes.** *While the goal of 1,000 citizens reached with urban NPS messaging was exceeded, more educational events are needed.*	**On track to achieve outcomes.** *The number of educational events funded was exceeded; however, the total number of citizens reached failed to reach our goal.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**On track to achieve outcomes.** *The number of citizens reached exceeded the goal; however, too few events were funded.*	**On track to achieve outcomes.** *All short term goals for this segment were met.*

LONG TERM GOALS, ANNUAL GOALS, and OUTCOMES								
Long Term Goal (5 year)	**Sector**	**Annual Goals (outputs; Annual Goal x 5 = Long Term Goal measure)**	**Outcomes**	**Progress Made in Year 1 (FFY2020)**	**Progress Made in Year 2 (FFY2021)**	**Progress Made in Year 3 (FFY2022)**	**Progress Made in Year 4 (FFY2023)**	**Progress Made in Year 5 (FFY2024)**
	Failing Septic	• TN-NPS staff will attend/participate in at least 1 educational event each year targeting an audience with failing septic concerns. • Fund at least 1 educational event each year targeting an audience concerned with NPS pollution from failing septic systems. • Document at least 100 citizens presented with messages addressing NPS pollution concerns stemming from failing septic systems.		**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*
	Legacy Mining	• TN-NPS staff will attend/participate in at least 1 educational event each year targeting an audience dealing with legacy mining concerns. • Fund at least 1 educational event each year targeting an audience concerned with NPS pollution from legacy mining activities. • Document at least 100 citizens presented with messages addressing NPS pollution concerns stemming from legacy mining activities.		**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All short term goals for this segment were met or exceeded.*
Long Term Goal No. 3: Build capacity for future TN-NPS projects in local watersheds by engaging stakeholders and potential partners through outreach and personal contact.	Aggregate	• TN-NPS staff will attend at least 8 stakeholder meetings each year to promote the TN-NPS program and recruit and cultivate new partners for future projects. • TN-NPS program will conduct an annual survey of partners, seeking their input for ways our program can improve and better meet existing needs. • TN-NPS staff will provide assistance (as requested) in writing Watershed Based Plans; particularly map-making and load reduction estimates. • TN-NPS program will improve information and tools available on our website to aid in the writing of Watershed Based Plans. • TN-NPS staff will attend at least 3 workshops to promote the 319 program	• Improve relations with stakeholders, potential applicants, and partners. • Increase awareness of nonpoint source impacts. • Educate citizens regarding management practices to prevent or minimize nonpoint source pollution.	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector except for the development of online Watershed Based Planning tools.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *Most goals were met or exceeded; however, additional work to make watershed based planning tools available online needs to be completed.*	**Insufficient progress.** *Success forFFY2024 was mixed – some goals were exceeded while others were not adequately met. More focus on training needs to be prioritized moving forward.*

LONG TERM GOALS, ANNUAL GOALS, and OUTCOMES								
Long Term Goal (5 year)	**Sector**	**Annual Goals (outputs; Annual Goal x 5 = Long Term Goal measure)**	**Outcomes**	**Progress Made in Year 1 (FFY2020)**	**Progress Made in Year 2 (FFY2021)**	**Progress Made in Year 3 (FFY2022)**	**Progress Made in Year 4 (FFY2023)**	**Progress Made in Year 5 (FFY2024)**
		each year.						
	Agriculture	• TN-NPS staff will attend at least 3 stakeholder meetings or workshops to promote the 319 program each year.		**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*
	Forestry	• TN-NPS staff will attend at least 1 stakeholder meeting (e.g., TN Forestry Association or the TN Urban Forestry Council) each year to promote the TN-NPS program.		**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*
	Urban	• TDA-NPS staff will attend at least 2 stakeholder meetings each year to promote the TN-NPS program. • TN-NPS staff will attend the annual meeting of the Tennessee Stormwater Association (TNSA) each year.		**Exceeded expectations.** *All applicable short term goals for this segment were exceeded.*	**On track to achieve goals.** *Although the number of stakeholder meeting attended was exceeded, no urban-specific regional meetings were attended.*	**Exceeded expectations.** *All applicable short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All applicable short term goals for this segment were met or exceeded.*	**Exceeded expectations.** *All applicable short term goals for this segment were met or exceeded.*
	Failing Septic	• TN-NPS staff will attend at least 1 stakeholder meeting each year to promote the TN-NPS program.		**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*
	Legacy Mining	• TN-NPS staff will attend at least 1 stakeholder meeting each year to promote the TN-NPS program.		**Insufficient progress.** *No legacy mining stakeholder meetings were attended by staff.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Exceeded expectations.** *All short term goals for this segment were exceeded.*	**Insufficient progress.** *No legacy mining stakeholder meetings were attended by staff.*
Long Term Goal No. 4: Track interim progress towards restoration of impaired water bodies.	Aggregate	• Continue the implementation of a sector-based tracking mechanism for BMP implementation, educational activities, pollutant load reductions, and capacity building efforts.	• Increase knowledge of effective and efficient sector-specific BMPs and improve measures of success tracking.	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*
	Agriculture	• Continue the implementation of a sector-based tracking mechanism for BMP implementation, educational activities,		**On track to achieve goals**. *All goals met for*	**On track to achieve goals**. *All goals met for*	**On track to achieve goals**. *All goals met for this*	**On track to achieve goals**. *All goals met for*	**On track to achieve goals**. *All goals met for*

LONG TERM GOALS, ANNUAL GOALS, and OUTCOMES								
Long Term Goal (5 year)	**Sector**	**Annual Goals (outputs; Annual Goal x 5 = Long Term Goal measure)**	**Outcomes**	**Progress Made in Year 1 (FFY2020)**	**Progress Made in Year 2 (FFY2021)**	**Progress Made in Year 3 (FFY2022)**	**Progress Made in Year 4 (FFY2023)**	**Progress Made in Year 5 (FFY2024)**
		pollutant load reductions, and capacity building efforts.		*this sector.*	*this sector.*	*sector.*	*this sector.*	*this sector.*
	Forestry	• Continue the implementation of a sector-based tracking mechanism for BMP implementation, educational activities, pollutant load reductions, and capacity building efforts.		**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*
	Urban	• Continue the implementation of a sector-based tracking mechanism for BMP implementation, educational activities, pollutant load reductions, and capacity building efforts.		**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*
	Failing Septic	• Continue the implementation of a sector-based tracking mechanism for BMP implementation, educational activities, pollutant load reductions, and capacity building efforts.		**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*
	Legacy Mining	• Continue the implementation of a sector-based tracking mechanism for BMP implementation, educational activities, pollutant load reductions, and capacity building efforts.		**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*	**On track to achieve goals**. *All goals met for this sector.*
Long Term Goal No. 5: Protect unimpaired/high quality waters (i.e., those not on the 303(d) list) by implementing appropriate BMPs where warranted.	Aggregate	• Consider funding at least 1 project proposal aimed at protection of unimpaired water body each year, dependent upon nature of proposals received.	• Research possible avenues to increase the funding of protective projects.	**On track to achieve goals**. *All goals met for this sector.*	**Not applicable.** *No protection-based proposals were received this fiscal year.*	**Not applicable.** *No protection-based proposals were received this fiscal year.*	**Not applicable.** *No protection-based proposals were received this fiscal year.*	**Not applicable.** *No protection-based proposals were received this fiscal year.*
	Agriculture	• Not applicable - projects to protect unimpaired waters by definition will not be assigned to any pollutant source.		**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*
	Forestry	• Not applicable - projects to protect unimpaired waters by definition will not be assigned to any pollutant source.		**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*
	Urban	• Not applicable - projects to protect unimpaired waters by definition will not be assigned to any pollutant source.		**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*
	Failing Septic	• Not applicable - projects to protect unimpaired waters by definition will not be assigned to any pollutant source.		**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*
	Legacy Mining	• Not applicable - projects to protect unimpaired waters by definition will not be assigned to any pollutant source.		**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*

LONG TERM GOALS, ANNUAL GOALS, and OUTCOMES								
Long Term Goal (5 year)	**Sector**	**Annual Goals (outputs; Annual Goal x 5 = Long Term Goal measure)**	**Outcomes**	**Progress Made in Year 1 (FFY2020)**	**Progress Made in Year 2 (FFY2021)**	**Progress Made in Year 3 (FFY2022)**	**Progress Made in Year 4 (FFY2023)**	**Progress Made in Year 5 (FFY2024)**
Long Term Goal No. 6: Fulfill all obligations under grant award agreement with USEPA annually.	Aggregate	• TN-NPS program will do everything necessary to achieve "Satisfactory Progress" determination by USEPA each year. • TN-NPS program will submit an Annual Report by December 31 each year. • TN-NPS program will submit a Grant Application by September 30 each year. • TN-NPS program will submit an Annual Workplan by May 31 each year. • All grant data will be entered in the Grants Reporting and Tracking System (GRTS) by the various deadlines given each year. • All grant funds received will be obligated within one year of the date the grant is received. • Each grant received from USEPA will be matched my no less than 40% by a combination of state and local funds. • TN-NPS staff will attend the annual GRTS users meeting each year. • TN-NPS staff will attend the National Nonpoint Source Managers meeting as often as it is held. • TN-NPS staff will attend the Regional Nonoint Source Managers meeting as often as it is held. • TN-NPS program will revise the Management Program Document every 5 years, or as required by USEPA.	• Continue to receive 319 grant funds for statewide disbursement.	**On track to achieve goals**. *Most goals were met for this sector; however, the revisions to the Management Program Document still need to be finalized and the FFY21 Grant Application is currently pending.*	**Insufficient progress.** *The Management Program Document is still pending, and two deadlines were not met.*	**Insufficient progress.** *The Management Program Document is still pending, and one contract from FFY2021 was pending (as of the date of this document.*	**Insufficient progress.** *Several key program deadlines were missed in FFY2023, including the allocation of funds and the grant application.*	**Insufficient progress.** *Several key program deadlines were missed in FFY2024, due largely to staffing shortages.*
	Agriculture	• Not Applicable - grant award obligations are not defined by pollutant sector.		**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*
	Forestry	• Not Applicable - grant award obligations are not defined by pollutant sector.		**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*
	Urban	• Not Applicable - grant award obligations are not defined by pollutant sector.		**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*
	Failing Septic	• Not Applicable - grant award obligations are not defined by pollutant sector.		**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*

LONG TERM GOALS, ANNUAL GOALS, and OUTCOMES								
Long Term Goal (5 year)	**Sector**	**Annual Goals (outputs; Annual Goal x 5 = Long Term Goal measure)**	**Outcomes**	**Progress Made in Year 1 (FFY2020)**	**Progress Made in Year 2 (FFY2021)**	**Progress Made in Year 3 (FFY2022)**	**Progress Made in Year 4 (FFY2023)**	**Progress Made in Year 5 (FFY2024)**
	Legacy Mining	• Not Applicable - grant award obligations are not defined by pollutant sector.		**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*	**Not applicable.** *This goal does not apply.*

Note: The table above will be populated each year as the program is evaluated. Annual tracking will assist with adaptive management measures needed for keeping the TN-NPS program moving in the right direction.

Conclusion

In FFY2024, the TN-NPS program struggled with short-staffing which led to several key program deadlines being missed. In addition, subrecipients experienced a wide variety of challenges including supply chain disturbances, inflation of costs for key projects elements (e.g. steel components, riprap), and multiple major weather disasters (e.g. tornado outbreaks, Hurricane Helene). During the update of the new Program Management Document, the TN-NPS program will be recalibrating goals and expectations – both for the Tennessee's program and for our partners – to better represent manageable goals. With decreasing funding availability projected for FFY2025 combined with increasing costs, the amount of support TN-NPS will be capable of providing to our partners will likely result in fewer BMPs and outreach events.

APPENDIX B

MEASURES OF SUCCESS CHECKLISTS

Measures of Success Checklist

Aggregate/Statewide Goals

Prepared for FFY2024 Annual Report

Measures of Success			
Long Term Goal	**Short Term Measure(s) of Success**	**Status**	**Comments**
Long Term Goal No. 1: Restore impaired water bodies (i.e., those on the 303(d) list) by implementing best management practices (BMPs) that address nonpoint source pollution.	• Restore 2 water bodies per year, on average.	□ Met □ Exceeded ☒ Needs improvement	As of the date of this report, no Success Stories were completed for FFY2024.
	• Reduce N load by 5,000 lbs/year; P_2O_5 load by 5,000 lbs/year; and sediment load by 100 ton/year (minimum reductions)	□ Met ☒ Exceeded □ Needs improvement	All load reduction goals for nitrogen, phosphorus, and sediment were exceeded.
Long Term Goal No. 2: Build citizen awareness of problems and solutions related to nonpoint source pollution through local and statewide education efforts targeting various audiences.	• TDA-NPS staff will attend/participate in at least 10 educational events each year.	□ Met ☒ Exceeded □ Needs improvement	TN-NPS staff participated in 17 educational workshops in FFY2024.
	• Fund at least 20 educational events each year, depending on the number of active NPS pollution educational projects funded.	☒ Met □ Exceeded □ Needs improvement	
	• Document at least 2,000 citizens presented with messages addressing NPS pollution sources, problems, and solutions each year.	□ Met ☒ Exceeded □ Needs improvement	TN-NPS Staff reached over 3,300 citizens during presentations in FFY2024.
	• Implement a general evaluation form to be completed by all participants and the conclusion of each educational event.	☒ Met □ Exceeded □ Needs improvement	

Long Term Goal	Short Term Measure(s) of Success	Status	Comments
Long Term Goal No. 3: Build capacity for future TDA-NPS projects in local watersheds by engaging stakeholders and potential partners through outreach and personal contact.	• TDA-NPS staff will attend at least 8 stakeholder meetings each year to promote the TDA-NPS program and recruit and cultivate new partners for future projects.	□ Met ☒ Exceeded □ Needs improvement	Staff presented at 52 stakeholder meetings in FFY2024.
	• TDA-NPS program will conduct an annual survey of partners, seeking their input for ways our program can improve and better meet existing needs.	□ Met □ Exceeded ☒ Needs improvement	Survey was not conducted in FFY2024.
	• TDA-NPS staff will provide assistance (as requested) in writing Watershed Based Plans; particularly map-making and load reduction estimates.	□ Met □ Exceeded ☒ Needs improvement	No training for watershed based planning and proposal development was held.
	• TDA-NPS program will improve information and tools available on our website to aid in the writing of Watershed Based Plans.	☒ Met □ Exceeded □ Needs improvement	
	• TDA-NPS staff will attend at least 3 stakeholder meetings or workshops to promote the 319 program each year.	□ Met ☒ Exceeded □ Needs improvement	Staff attended 41 stakeholder meetings and 11 workshops/ outreach events in FFY024.
Long Term Goal No. 4: Track interim progress towards restoration of impaired water bodies via adaptive management process.	• Continue implementation of sector-based tracking mechanism for BMP implementation, educational activities, pollutant load reductions, and capacity building efforts.	☒ Met □ Exceeded □ Needs improvement	

Long Term Goal	Short Term Measure(s) of Success	Status	Comments
Long Term Goal No. 5: Protect unimpaired/ high quality waters (i.e., those not on the 303(d) list) by implementing appropriate BMPs where warranted.	• Consider funding at least 1 project proposal aimed at protection of unimpaired water body each year, dependent upon nature of proposals received.	□ Met □ Exceeded □ Needs improvement	N/A no protection project proposals were received for funding this fiscal year.
Long Term Goal No. 6: Fulfill all obligations under grant award agreement with USEPA annually.	• TN-NPS program will do everything necessary to achieve "Satisfactory Progress" determination by USEPA each year.	☒ Met □ Exceeded □ Needs improvement	
	• TN-NPS program will submit an Annual Report by December 31 each year.	☒ Met □ Exceeded □ Needs improvement	
	• TN-NPS program will submit a Grant Application by September 30 each year.	□ Met □ Exceeded ☒ Needs improvement	
	• TN-NPS program will submit an Annual Workplan by May 31 each year.	□ Met □ Exceeded ☒ Needs improvement	The submittal of the FY24 workplan was delayed.
	• All grant data will be entered in the Grants Reporting and Tracking System (GRTS) by the various deadlines given each year.	□ Met ☒ Exceeded □ Needs improvement	GRTS data is updated continuously.
	• All grant funds received will be obligated within one year of the date the grant is received.	□ Met □ Exceeded ☒ Needs improvement	
	• Each grant received from USEPA will be matched my no less than 40% by a combination of state and local funds.	☒ Met □ Exceeded □ Needs improvement	

Long Term Goal	Short Term Measure(s) of Success	Status	Comments
Long Term Goal 6, cont.	• TN-NPS staff will attend the annual GRTS users meeting each year	□ Met □ Exceeded □ Needs improvement	N/A no GRTS meeting was held this year.
	• TN-NPS staff will attend the National Nonpoint Source Managers meeting as often as it is held.	□ Met □ Exceeded □ Needs improvement	N/A no national meeting held
	• TN-NPS staff will attend the Regional Nonpoint Source Managers meeting as often as it is held.	□ Met □ Exceeded □ Needs improvement	N/A no regional meeting
	• TN-NPS program will revise the Management Program Document every 5 years, or as required by USEPA.	□ Met □ Exceeded ☒ Needs improvement	Revisions for the most recent version of the Management Program Document are currently pending.

If the short term has been met or exceeded, please provide an explanation of how this was determined (i.e. list of objectives completed, activities performed, etc.):

Staff met or exceeded the goals set for outreach, education, and community involvement.

If the short term has not been met, please provide an explanation of the variance:

Staff changes in FFY24 created missed deadlines, and the survey was not sent out due to changes.

Measures of Success Checklist

Agricultural Sector Short Term Goals

Prepared for FFY2024 Annual Report

Measures of Success			
Long Term Goal	**Short Term Measure(s) of Success**	**Status**	**Comments**
Long Term Goal No. 1: Restore impaired water bodies (i.e., those on the 303(d) list) by implementing best management practices (BMPs) that address nonpoint source pollution.	• Fund no less than 3 projects each year that address agricultural sources of NPS pollution, depending on the number and quality of proposals received. • Fund the implementation of no less than 65 agricultural BMPs per year. • Staff Watershed Coordinators will perform no less than 200 site visits each year to inspect BMPs pre-, during-, and post-construction.	□ Met ☒ Exceeded □ Needs improvement □ Met □ Exceeded ☒ Needs improvement □ Met ☒ Exceeded □ Needs improvement	Four of the implementation project selected for funding in FFY2024 include agricultural BMPs. Only 22 agricultural practices were installed in FFY2024. TN-NPS staff recorded approximately 800 agricultural site visits.
Long Term Goal No. 2: Build citizen awareness of problems and solutions related to nonpoint source pollution through local and statewide education efforts targeting various audiences.	• TDA-NPS staff will attend/participate in at least 4 educational events each year targeting an agricultural audience. • Fund at least 5 educational events targeting an agricultural audience. • Document at least 600 citizens presented with messages addressing NPS pollution sources, problems, and solutions. • Respond to 100% of Animal Feeding Operations complaints. • Direct AFO owner/operators to NRCS for mitigation, as necessary.	□ Met ☒ Exceeded □ Needs improvement ☒ Met □ Exceeded □ Needs improvement □ Met ☒ Exceeded □ Needs improvement ☒ Met □ Exceeded □ Needs improvement ☒ Met □ Exceeded □ Needs Improvement	In FFY2024, TN-NPS staff attended 11 educational workshops about agricultural topics. In FFY2024, approximately 1,500 citizens were reached about all sectors of NPS through partner's efforts.

Long Term Goal	Short Term Measure(s) of Success	Status	Comments
Long Term Goal No. 3: Build capacity for future TDA-NPS projects in local watersheds by engaging stakeholders	• TDA-NPS staff will attend at least 3 stakeholder meetings each year to promote the TDA-NPS program and recruit and cultivate new partners for future projects.	□ Met ☒ Exceeded □ Needs improvement	Staff attended over 90 stakeholder meetings in FFY2024.
Long Term Goal No. 4: Track interim progress towards restoration of impaired water bodies via adaptive management process.	• Continue the implementation of sector-based tracking mechanism for BMP implementation, educational activities, pollutant load reductions, and capacity building efforts.	☒ Met □ Exceeded □ Needs improvement	
Long Term Goal No. 5: Protect unimpaired/ high quality waters (i.e., those not on the 303(d) list) by implementing appropriate BMPs where warranted.	• Not applicable - projects to protect unimpaired waters by definition will not be assigned to any pollutant source.	N/A	
Long Term Goal No. 6: Fulfill all obligations under grant award agreement with USEPA annually.	• Not Applicable - grant award obligations are not defined by pollutant sector.	N/A	

If the short term has been met or exceeded, please provide an explanation of how this was determined (i.e. list of objectives completed, activities performed, etc.):

All but one goal for this sector was met or exceeded in FFY2024 based on tracked attendance by TN-NPS Staff.

If the short term has not been met, please provide an explanation of the variance:

Only 22 agricultural BMPs were installed this year, likely due to cost of labor and supplies.

Measures of Success Checklist

Forestry Sector Short Term Goals

Prepared for FFY2024 Annual Report

Measures of Success			
Long Term Goal	**Short Term Measure(s) of Success**	**Status**	**Comments**
Long Term Goal No. 1: Restore impaired water bodies (i.e., those on the 303(d) list) by implementing best management practices (BMPs) that address nonpoint source pollution.	• Fund no less than 1 forestry-based project each year, depending on the number and quality of proposals received.	□ Met □ Exceeded ☒ Needs improvement	N/A no proposals were received in FFY2024.
	• Fund the implementation of no less than 5 forestry BMPs each year, depending on the number of active forestry restoration projects.	□ Met □ Exceeded ☒ Needs improvement	No forestry practices were funded in FFY2024.
Long Term Goal No. 2: Build citizen awareness of problems and solutions related to nonpoint source pollution through local and statewide education efforts targeting various audiences.	• TDA-NPS staff will attend/participate in at least 1 educational event each year targeting a forestry audience.	□ Met ☒ Exceeded □ Needs improvement	TN-NPS staff presented at 3 workshops and 24 stakeholder meetings that addressed forestry issues in FFY2024.
	• Fund at least 1 educational event each year targeting a forestry audience, depending on the number of active projects aimed at forestry issues.	☒ Met □ Exceeded □ Needs improvement	
	• Document at least 200 citizens presented with messages addressing NPS pollution concerns stemming from forestry-related activities.	□ Met ☒ Exceeded □ Needs improvement	In FFY2024, approximately 1,500 citizens were reached about all sectors of NPS through partner's efforts.

Long Term Goal	Short Term Measure(s) of Success	Status	Comments
Long Term Goal No. 3: Build capacity for future TDA-NPS projects in local watersheds by engaging stakeholders and potential partners through outreach and personal contact.	• TDA-NPS staff will attend at least 1 stakeholder meeting (e.g., TN Forestry Association or the TN Urban Forestry Council) each year to promote the TDA-NPS.	□ Met ☒ Exceeded □ Needs improvement	Staff attended 14 stakeholder meetings that addressed forestry-related issues.
Long Term Goal No. 4: Track interim progress towards restoration of impaired water bodies via adaptive process.	• Continue the implementation of a sector-based tracking mechanism for BMP implementation, educational activities, pollutant load reductions, and capacity building efforts.	☒ Met □ Exceeded □ Needs improvement	
Long Term Goal No. 5: Protect unimpaired/ high quality waters (i.e., those not on the 303(d) list) by implementing appropriate BMPs where warranted.	• Not applicable - projects to protect unimpaired waters by definition will not be assigned to any pollutant source.	N/A	
Long Term Goal No. 6: Fulfill all obligations under grant award agreement with USEPA annually.	• Not Applicable - grant award obligations are not defined by pollutant sector.	N/A	

If the short term has been met or exceeded, please provide an explanation of how this was determined (i.e. list of objectives completed, activities performed, etc.):

Forestry education continues to be a strong metric for TN-NPS staff, as well as partnerships with the Division of Forestry for additional outreach efforts.

If the short term has not been met, please provide an explanation of the variance:

Interest in forestry related 319-funding is still low. Due to this implementation of forestry BMPs is low.

Measures of Success Checklist

Urban Sector Short Term Goals

Prepared for FFY2024 Annual Report

Measures of Success			
Long Term Goal	**Short Term Measure(s) of Success**	**Status**	**Comments**
Long Term Goal No. 1: Restore impaired water bodies (i.e., those on the 303(d) list) by implementing best management practices (BMPs) that address nonpoint source pollution.	• Fund no less than 2 projects focused on stormwater issues in developed areas each year, depending on the number and quality proposals received. • Fund no less than 12 stormwater BMPs each year, depending on the number of active urban/suburban restoration projects. • Staff Watershed Coordinators will perform no less than 15 site visits each year to inspect various stormwater BMPs pre-, during-, and post-construction.	☒ Met □ Exceeded □ Needs improvement □ Met ☒ Exceeded □ Needs improvement □ Met ☒ Exceeded □ Needs improvement	Brown's Creek, Ph. II and Donelson Creek, Ph I, selected for funding in FFY2024, both focus on urban stormwater issues. 14 urban practices were funded in FFY2024. Staff conducted 20 urban-based site visits in FFY2024.
Long Term Goal No. 2: Build citizen awareness of problems and solutions related to nonpoint source pollution through local and statewide education efforts targeting various audiences.	• TDA-NPS staff will attend/participate in at least 3 educational events each year targeting an urban/suburban audience. • Fund at least 10 educational events each year targeting an urban/suburban audience, depending on the number of active projects aimed at urban/suburban. • Document at least 1,000 citizens presented with messages addressing NPS pollution concerns stemming from stormwater in urban/suburban areas.	☒ Met □ Exceeded □ Needs improvement ☒ Met □ Exceeded □ Needs improvement ☒ Met □ Exceeded □ Needs improvement	TN-NPS staff participated in 3 educational workshops that addressed urban issues.

Long Term Goal	Short Term Measure(s) of Success	Status	Comments
Long Term Goal No. 3: Build capacity for future TDA-NPS projects in local watersheds by engaging stakeholders and potential partners through outreach and personal contact.	• TDA-NPS staff will attend at least 2 stakeholder meetings each year to promote the TDA-NPS program. • TDA-NPS staff will attend the annual meeting of the Tennessee Stormwater Association (TNSA) each year.	□ Met ☒ Exceeded □ Needs improvement ☒ Met □ Exceeded □ Needs improvement	TN-NPS staff attended 9 meetings that addressed urban NPS pollution in FFY2024. Macee Fredlake attended the American Water Resources Association on April 2-3rd 2024.
Long Term Goal No. 4: Track interim progress towards restoration of impaired water bodies via adaptive process.	• Continue implementation of a sector-based tracking mechanism for BMP implementation, educational activities, pollutant load reductions, and capacity building efforts.	☒ Met □ Exceeded □ Needs improvement	
Long Term Goal No. 5: Protect unimpaired/ high quality waters (i.e., those not on the 303(d) list) by implementing appropriate BMPs where warranted.	• Not applicable - projects to protect unimpaired waters by definition will not be assigned to any pollutant source.	N/A	
Long Term Goal No. 6: Fulfill all obligations under grant award agreement with USEPA annually.	• Not Applicable - grant award obligations are not defined by pollutant sector.	N/A	

If the short term has been met or exceeded, please provide an explanation of how this was determined (i.e. list of objectives completed, activities performed, etc.):

Goals for staff outreach were met or exceeded in FFY2024 (based on self-reported logs). In addition

Partners reported reaching more citizens in FFY2024 with urban-based information.

If the short term has not been met, please provide an explanation of the variance:

Measures of Success Checklist

Failing Septic Sector Short Term Goals

Prepared for FFY2024 Annual Report

Measures of Success			
Long Term Goal	**Short Term Measure(s) of Success**	**Status**	**Comments**
Long Term Goal No. 1: Restore impaired water bodies (i.e., those on the 303(d) list) by implementing best management practices (BMPs) that address nonpoint source pollution.	• Fund the repair/replacement of no less than 20 failing septic systems each year, depending on the number of active projects that address failing septic systems.	□ Met □ Exceeded ☒ Needs improvement	In FFY2024 only 14 failing septic systems were repaired or replaced.
	• Staff Watershed Coordinators will perform no less than 20 site visits each year to inspect work on repair/replacement of failing septic systems.	□ Met ☒ Exceeded □ Needs improvement	Staff reported over 80 site visits related to septic system repairs this FFY.
Long Term Goal No. 2: Build citizen awareness of problems and solutions related to nonpoint source pollution through local and statewide education efforts targeting various audiences.	• TDA-NPS staff will attend/participate in at least 1 educational event each year targeting an audience with failing septic concerns.	☒ Met □ Exceeded □ Needs improvement	Staff participated in only one workshop that addressed septic issues in FFY2024.
	• Fund at least 1 educational event each year targeting an audience concerned with NPS pollution from failing septic systems.	☒ Met □ Exceeded □ Needs improvement	
	• Document at least 100 citizens presented with messages addressing NPS pollution concerns stemming from failing septic systems.	□ Met ☒ Exceeded □ Needs improvement	

Long Term Goal	Short Term Measure(s) of Success	Status	Comments
Long Term Goal No. 3: Build capacity for future TDA-NPS projects in local watersheds by engaging stakeholders and potential partners through outreach and personal contact.	• TDA-NPS staff will attend at least 1 stakeholder meeting each year to promote the TDA-NPS program.	□ Met ☒ Exceeded □ Needs improvement	TN-NPS staff attended six stakeholder meetings in FFY2024 that addressed septic.
Long Term Goal No. 4: Track interim progress towards restoration of impaired water bodies via adaptive process.	• Continue implementation of a sector-based tracking mechanism for BMP implementation, educational activities, pollutant load reductions, and capacity building efforts.	☒ Met □ Exceeded □ Needs improvement	
Long Term Goal No. 5: Protect unimpaired/ high quality waters (i.e., those not on the 303(d) list) by implementing appropriate BMPs where warranted.	• Not applicable - projects to protect unimpaired waters by definition will not be assigned to any pollutant source.	N/A	
Long Term Goal No. 6: Fulfill all obligations under grant award agreement with USEPA annually.	• Not Applicable - grant award obligations are not defined by pollutant sector.	N/A	

If the short term has been met or exceeded, please provide an explanation of how this was determined (i.e. list of objectives completed, activities performed, etc.):

TDA-NPS staff met all education and outreach goals for this sector in FFY2024.

If the short term has not been met, please provide an explanation of the variance:

Additional failing septic repairs are needed in the future to meet this goal. Possible 319 interest needs to be gauged in the upcoming FFY.

Measures of Success Checklist

Legacy Mining Sector Short Term Goals

Prepared for FFY2024 Annual Report

Measures of Success			
Long Term Goal	**Short Term Measure(s) of Success**	**Status**	**Comments**
Long Term Goal No. 1: Restore impaired water bodies (i.e., those on the 303(d) list) by implementing best management practices (BMPs) that address nonpoint source pollution.	• Fund no less than 1 project addressing legacy mining concerns each year, depending on the number and quality of proposals received.	□ Met □ Exceeded ☒ Needs improvement	No projects were funded in FFY2024 that address legacy mining.
	• Fund no less than 5 BMPs addressing legacy mining concerns each year, depending on the number of active legacy mining projects.	□ Met □ Exceeded ☒ Needs improvement	No practices to mitigate legacy mining were installed in FFY2024.
	• Staff Watershed Coordinators will perform no less than 5 site visits each year to inspect legacy mining BMPs pre-, during-, and post-construction, depending on the number of active legacy mining projects	□ Met □ Exceeded ☒ Needs improvement	No site visits were performed this fiscal year for legacy mining.
Long Term Goal No. 2: Build citizen awareness of problems and solutions related to nonpoint source pollution through local and statewide education efforts targeting various audiences.	• TDA-NPS staff will attend/participate in at least 1 educational event each year targeting an audience dealing with legacy mining concerns.	☒ Met □ Exceeded □ Needs improvement	
	• Fund at least 1 educational event each year targeting an audience concerned with NPS pollution from legacy mining activities.	□ Met ☒ Exceeded □ Needs improvement	
	• Document at least 100 citizens presented with messages addressing NPS pollution concerns stemming from legacy mining activities.	□ Met ☒ Exceeded □ Needs improvement	

Long Term Goal	Short Term Measure(s) of Success	Status	Comments
Long Term Goal No. 3: Build capacity for future TDA-NPS projects in local watersheds by engaging stakeholders and potential partners through outreach and personal contact.	• TDA-NPS staff will attend at least 1 stakeholder meeting each year to promote the TDA-NPS program.	□ Met □ Exceeded ☒ Needs improvement	TDA-NPS staff did not attend any stakeholder meetings this year that addressed legacy mining in FFY2024.
Long Term Goal No. 4: Track interim progress towards restoration of impaired water bodies via adaptive process.	• Continue implementation of a sector-based tracking mechanism for BMP implementation, educational activities, pollutant load reductions, and capacity building efforts.	☒ Met □ Exceeded □ Needs improvement	
Long Term Goal No. 5: Protect unimpaired/ high quality waters (i.e., those not on the 303(d) list) by implementing appropriate BMPs where warranted.	• Not applicable - projects to protect unimpaired waters by definition will not be assigned to any pollutant source.	N/A	
Long Term Goal No. 6: Fulfill all obligations under grant award agreement with USEPA annually.	• Not Applicable - grant award obligations are not defined by pollutant sector.	N/A	

If the short term has been met or exceeded, please provide an explanation of how this was determined (i.e. list of objectives completed, activities performed, etc.):

TN-NPS staff met or exceeded outreach and education goals for this sector.

If the short term has not been met, please provide an explanation of the variance:

There appears to be a lack of interest in legacy mining projects and issues. More outreach and education to the public may help mitigate this and increase interesting in funding for legacy mining projects.

APPENDIX C

NATIONAL WATER QUALITY INITIATIVE (NWQI) STATUS UPDATE

NATIONAL WATER QUALITY INITIATIVE (NWQI) STATUS UPDATE

Introduction

Initiative Overview
The National Water Quality Initiative (NWQI), launched in 2012, is a collaborative effort between the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), the Environmental Protection Agency (EPA), and state agencies to reduce nonpoint source pollution to high-priority watersheds identified in each state. The high-priority watersheds are chosen by NRCS with input from state water quality agencies. The program is designed to focus efforts and funding to provide maximum impacts on the chosen watersheds.

The NWQI requires in-stream water quality monitoring of at least one priority watershed per year. The monitoring assesses water quality and biological conditions related to nutrients, sediments, or livestock-related pathogens. The objective is to determine if any of the parameters have changes throughout the monitoring period, and whether these changes (positive or negative) can be attributed to agriculture-based best management practices (BMPs) that have been installed in the watershed.

In the State of Tennessee, NRCS prioritizes watersheds for nomination that are located in counties included in the USDA StrikeForce Initiative. The USDA StrikeForce Initiative was established in 2010 with the objective of combatting the specific challenges associated with rural poverty, as well as growing rural communities and improving opportunities. In addition, NRCS utilizes EPA's Recovery Potential Screening Tool to further pare down the number of watersheds nominated for NWQI inclusion.

Tennessee Nonpoint Source (TN-NPS) Program Roles Assisting NWQI
The TN-NPS has several minor roles with regards to the NWQI. When asked, TN-NPS provides input on eligible watersheds through knowledge obtained by the Watershed Coordinators, who are in various watersheds every year. TN-NPS also provides funding, in the form of 319 Grant monies, to the Tennessee Department of Environment and Conservation (TDEC) for in-stream water quality monitoring.

Annual Updates

FFY2020
In FFY2020, USDA and EPA identified 22 active NWQI watersheds. As Tennessee begins a new five-year program management cycle, this update has been reorganized in order to provide a "snapshot" of each watershed including the number of impaired streams, number of practices installed through all the TN-NPS programs, etc. In FFY20, no Section 319 BMPs and 62 Agricultural Resources Conservation Fund (ARCF) practices were installed in NWQI watersheds. Specific information about the number of BMPs in individual watersheds can be found in the following snapshot section.

FFY2021
The watersheds identified as NWQI priority watersheds in FFY2020 were carried forward into FFY2021. In FFY2021, no Section 319 BMPs and 67 ARCF practices were installed in NWQI watersheds. Specific information about the number of BMPs in individual watersheds can be found in the following snapshot section. Note: Each marker may indicate more than one practice at a location.

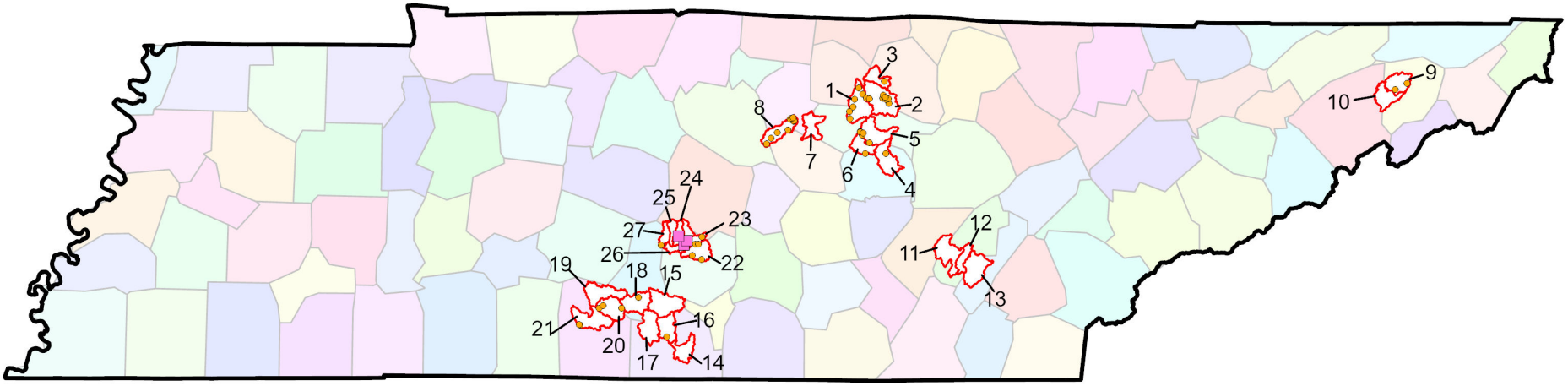
FFY2022
Similar to the previous two years, the NWQI priority watersheds from FFY2020 and FFY2021 were identified as the priority watersheds for FFY2022 (see Figure 1). No Section 319 practices were installed in NWQI priority watersheds in FFY2022; however, 72 ARCF BMPs, which equate to approximately $158,355 in incentives payments to cooperators were constructed in these watersheds in the past year. Note: Each marker may indicate more than one practice at a location.

FFY2023
In FFY2023, the number of NWQI priority watersheds chosen as implementation watersheds was double that of the highest previous year. A total of 44 watersheds located wholly or partially in Tennessee were identified as priority watersheds. During FFY2023, a total of 38 practices were installed with the assistance of Section 319 grant funds, and 187 practices were installed with ARCF assistance. Please refer to Figure 1 for the location of priority watersheds, as well as a summary table indicating the amount of work performed in each watershed.

FFY2024
Limited work was performed in NWQI priority watersheds for Tennessee in FFY2024. No Section 319 BMPs were installed in priority watershed; however, 99 practices were implemented with assistance from the ARCF program and an additional 3 cover crops were sowed in NWQI watersheds with assistance from the Gulf Hypoxia Cover Crop Incentive Program (GHP). Figure 1 illustrated the location of the FFY2024 NWQI priority watersheds for Tennessee, as well as the location of the BMPs. Each marker may indicate more than one practice at a location.

Moving Forward

Additional recruitment, specific to NWQI priority watersheds, will be examined in the future. Historically, TN-NPS has seen little-to-no subscription of 319 projects in NWQI areas. Proposal score sheets for the Section 319 grant were modified several years prior to give additional credit for projects proposed in priority watersheds – it may be advantageous to increase the number of points awarded to promote more work in these areas.



Watershed ID	Watershed HUC12 No.	Watershed Name	No. 319 Practices	No. of ARCF Practices	No. of GHP Practices
1	051301060204	Spring Creek	0	15	0
2	051301060205	Blackburn Fork	0	26	0
3	051301060206	Dry Hollow Branch-Roaring River	0	1	0
4	051301080404	Calfkiller River Middle	0	1	0
5	051301080702	Falling Water River Upper	0	3	0
6	051301080705	Falling Water River Middle	0	3	0
7	051301080905	Center Hill Lake	0	0	0
8	051301080906	Hickman Creek	0	13	0
9	060101080501	Muddy Fork	0	2	0
10	060101080502	Big Limestone Creek	0	0	0
11	060200010201	Richland Creek	0	6	0
12	060200010202	Little Richland Creek-Richland Creek	0	0	0
13	060200010603	Brown Branch-Chickamauga Lake	0	0	0
14	060300030706	Lees Creek-Elk River	0	0	0
15	060300030801	Upper Cane Creek	0	0	0
16	060300030802	Lower Cane Creek	0	1	0
17	060300030902	Swan Creek	0	0	0
18	060300040201	Headwaters Richland Creek	0	0	0
19	060300040202	Lynn Creek	0	0	0
20	060300040203	Blue Creek-Richland Creek	0	7	0
21	060300040205	Dry Creek-Richland Creek	0	2	0
22	060400020306	Fall Creek	0	15	0
23	060400020401	Alexander Creek	0	0	1
24	060400020402	Weakly Creek	0	0	1
25	060400020403	Clem Creek	0	0	0
26	060400020404	North Fork Creek	0	5	1
27	060400020701	Wilson Creek	0	1	0

FIGURE 1: FFY2024 TENNESSEE NWQI PRIORITY IMPLEMENTATION WATERSHEDS and NPS BMPs

LEGEND

- County Boundary
- NWQI Watershed Boundary
- ARCF BMP(s)
- GHP Cover Crop

N

0 100 200 Miles