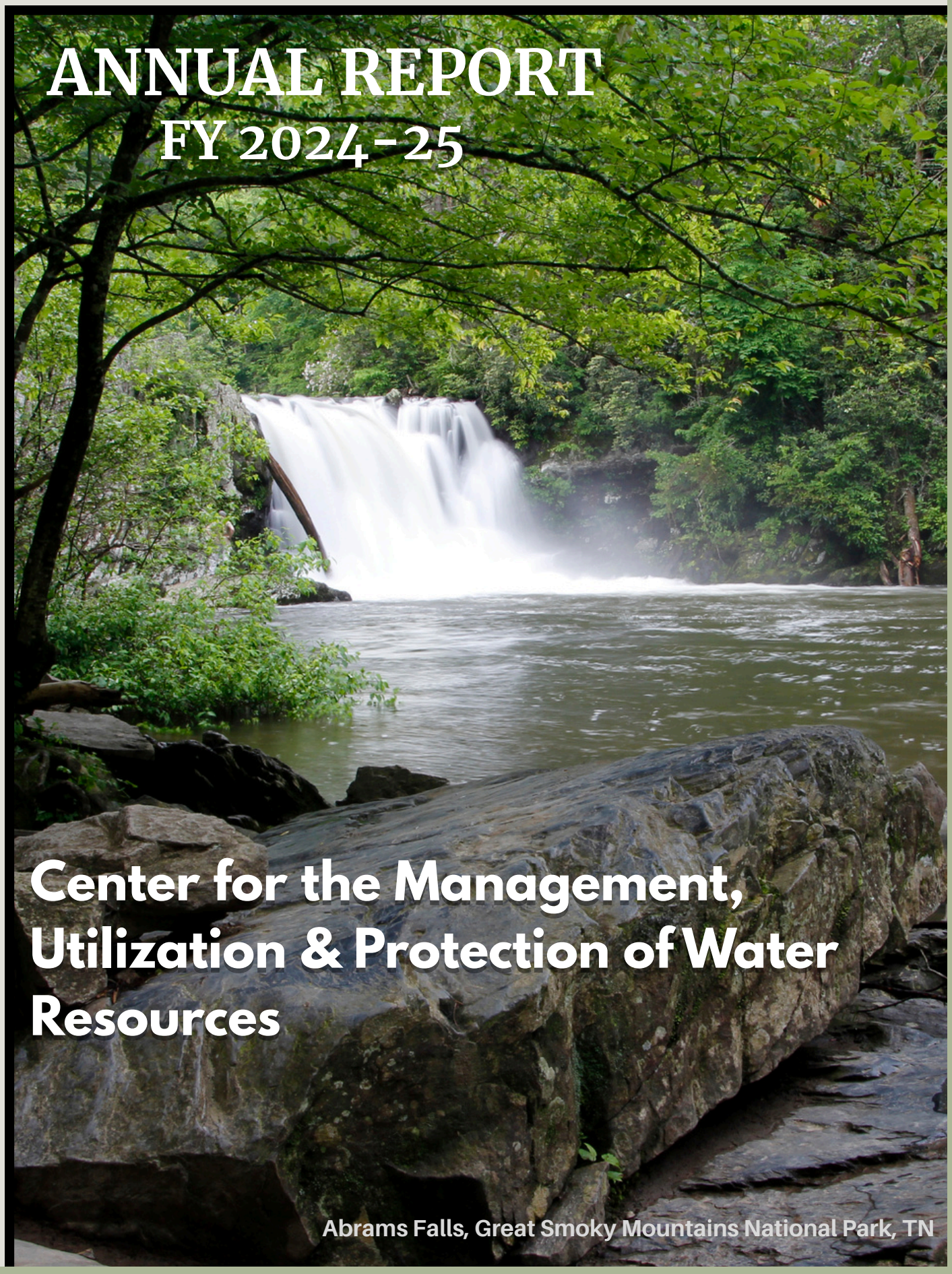
ANNUAL REPORT
FY 2024-25



Center for the Management, Utilization & Protection of Water Resources

Abrams Falls, Great Smoky Mountains National Park, TN

Tennessee Tech University

Table of Contents

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Letter to Stakeholders

This has been a year of transition, continued productivity and service, and celebration at the Water Center. This past year, the Water Center celebrated its 40th anniversary of providing research, education, and service to the communities in Tennessee. We have received a record amount of externally funded research, started several new research projects in areas of emerging concern, and hired a new permanent director. Although I am just finishing up my first year as director, I have been very involved in the Water Center since I began my career at Tennessee Tech in 2012 as faculty in the Department of Biology and have served as interim director two times over the years. I plan to continue the Water Center's excellence in research, and grow our footprint through the state, region, and country to meet the ever-changing needs in water resource conservation, management and utilization, while also focusing on training future water professionals.

Over the past year, the Center associated faculty, staff, and students have made substantial accomplishments to not only maintain our activities in natural resource and biological conservation and management in light of funding priority changes, but also expand our reach to emerging needs including improving water quality, advancing flood detection practices, and studying emerging contaminants in Tennessee surface waters.

Our faculty have been heavily involved in many of the state's pressing resource issues including wetlands and Duck River conservation research and activities

A noteworthy accomplishment this year was the activation of more than $3.9 million in external grant award funding, representing a record high return on investment of the Center's State Appropriation. This further demonstrates the dedication of the team of faculty, staff, and students to serve the residents of Tennessee in water-related research.

The Water Center's mission encompasses advancing the scientific understanding of all aspects of water science and engineering through basic and applied research. In addition to maintaining our core excellence in biodiversity and fisheries management, water utility processes, and hydrology modeling, our immediate future includes growing our collaborations and interdisciplinary approach to water resource management, integrating researchers with expertise in cybersecurity, large data centers, genetics, and emerging contaminants. We also aim to grow our outreach component to be more involved in community education and service. We look forward to another 40 years of serving Tennessee and beyond.

-- Dr. Justin Murdock, Director of the Water Center and Professor of Biology

Seth Haston kayaking the Calfkiller River collecting longitudinal water quality data.

Center at a Glance

FY 2024-2025

- State appropriation: $1,380,000
- External grants (total includes direct and indirect costs): $3,930,382
- Commercial Laboratory Revenue: $140,802
- Return per state dollar: $2.95
- 7 staff members
- 3 faculty focus area leaders
- 14 faculty principal investigators
- 56 graduate students
- 51 undergraduate students
- 39 peer-reviewed publications
- 128 professional presentations

WATER CENTER STAFF

Research Focus Leaders

Dr. Justin Murdock
Director

Dr. Tania Datta
Professor

Dr. Alfred Kalyanapu
Professor

Staff

Michelle Holm
Office Manager

Karin Kopinski-Gilbert, MPS
Specialist

Suzanne Meyer
Grant Analyst

Sandy Dodson
Administrative Associate

Water Quality Lab

Dr. Grace Tinker
Research Lab Manager

Phillip Burr
Commercial Lab Manager

Alex O'Neal
Analytical Chemist

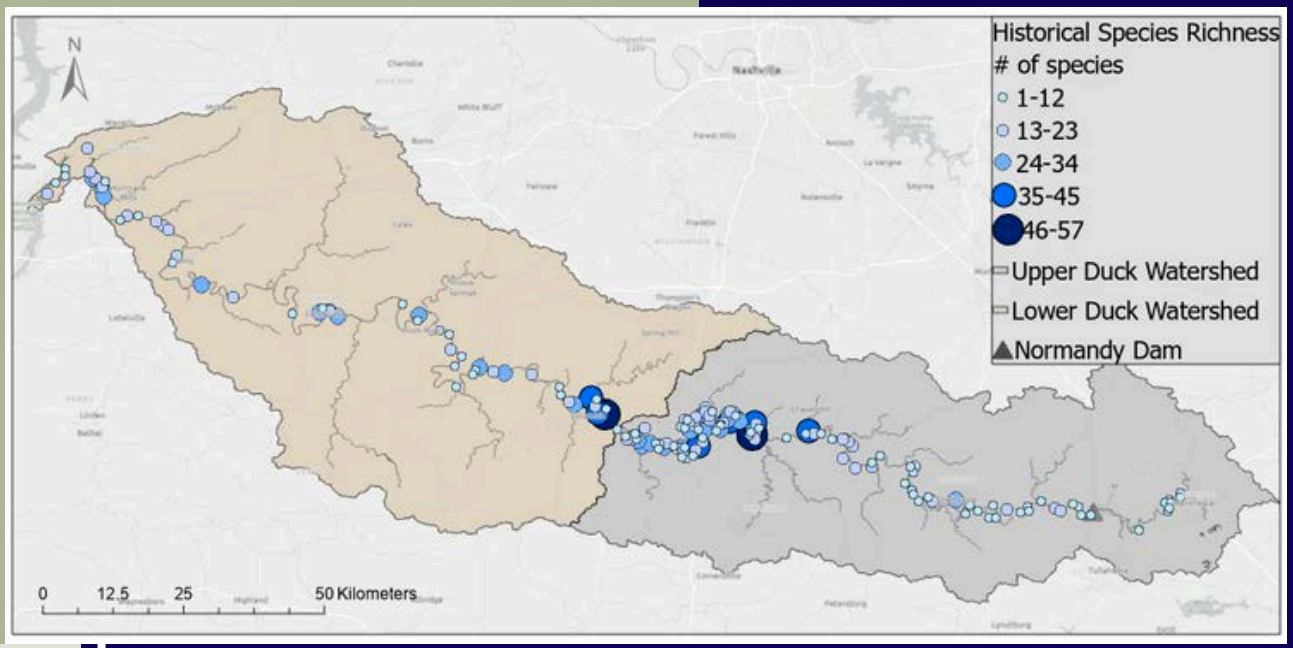
RESEARCH SPOTLIGHTS

Duck River

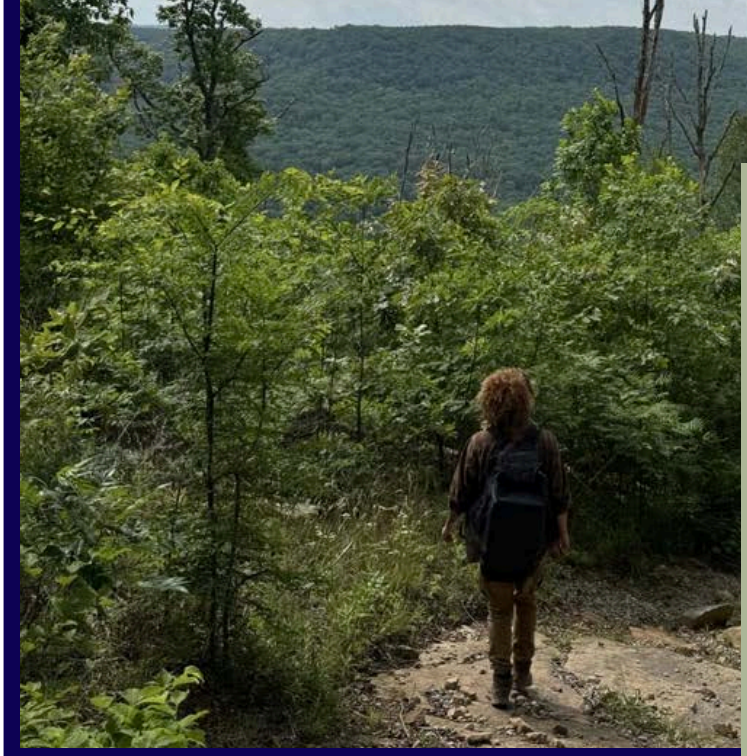
Mussel diversity database in one of the most biodiverse rivers in the world

Kristin Womble presenting her poster at the bi-annual meeting of the Freshwater Mollusk Conservation Society meeting Ann Arbor-Ypsilanti, Michigan, USA

Kristen Womble and Amanda Rosenberger have developed a comprehensive database for freshwater mussels for the Duck River drainage in Tennessee, including its largest tributary, the Buffalo River. This database is intended to serve as an expandable template that could be applied statewide. The Duck River is one of the most biologically diverse rivers in the world, with historically over 70 mussel species, and it has been selected as a priority watershed by multiple management and conservation entities. The database for this system compiles over 7,000 mussel records, spanning 200 years, from multiple federal, state, academic, and private entities, representing 77 native species. The database is spatially explicit and includes temporal and methodological data for each record, and notes of negative survey data were made when possible. The database can facilitate the creation of distribution maps for each species and temporal maps of species richness to show watershed-wide trends. This project addresses the present lack of a centralized mussel database in Tennessee for a critical system. It will be available to facilitate species status assessments, inform conservation planning, and serve as a model for similar databases for other Tennessee watersheds.



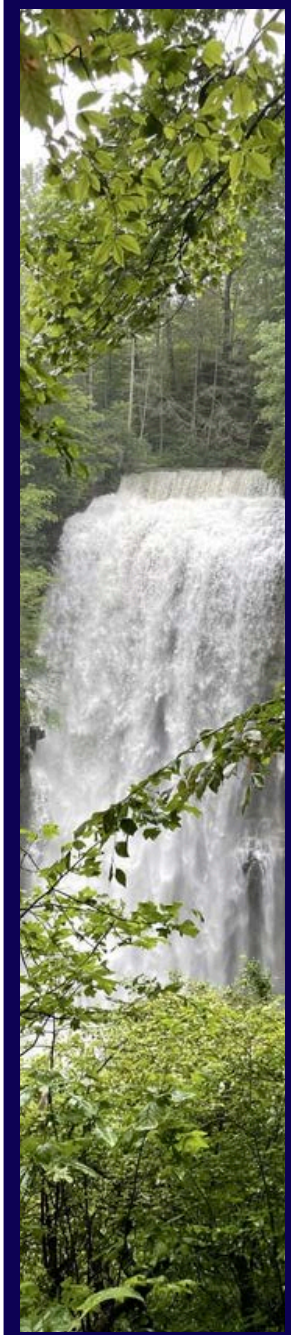
Womble, K.I. and A.E. Rosenberger. 2025. A comprehensive freshwater mussel database for the Duck River Drainage, Tennessee. U.S. Department of Interior, Fish and Wildlife Service, Cooperator Science Series FWS/CSS-166-2025, Washington, D.C. https://doi.org/10.3996/css36499787



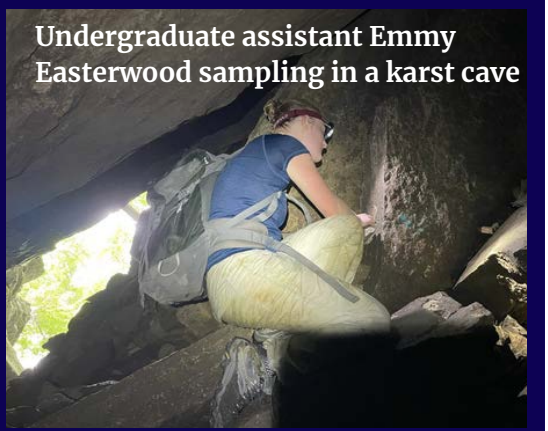
Species Diversity

Biodiversity of Karst Caves using eDNA Metabarcoding

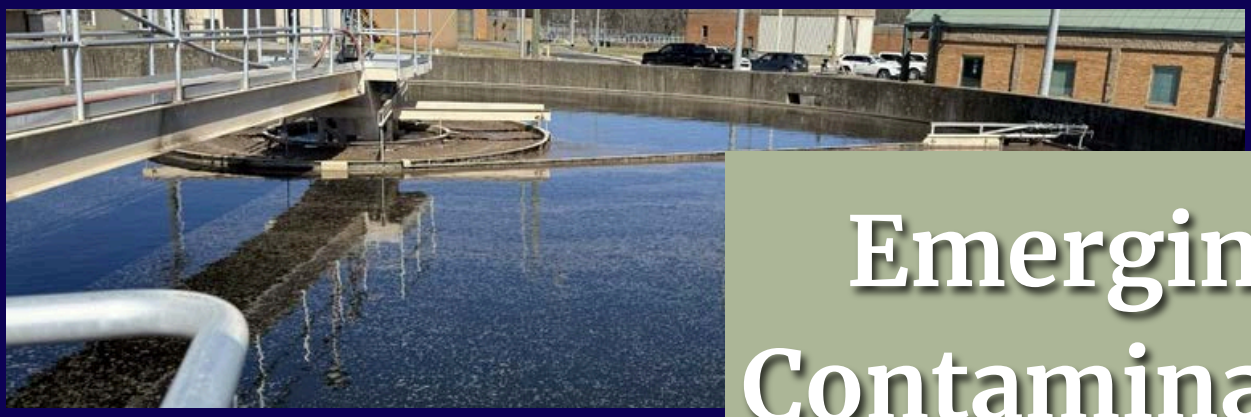
Zoe Wills, graduate student researcher with Dr. Carla Hurt.



Zoe Wills is an M.S. student working under Dr. Carla Hurt to assess the biodiversity within karst caves and connected aquifers using environmental DNA (eDNA) metabarcoding in the Bridgestone Firestone Wildlife Management Area. Zoe accomplishes this by eDNA sampling, traditional sampling, and collection of arthropods at these sites to create an arthropod database. This will help to examine the effects water quality and nutrients may have on cave community composition. The project will also help determine whether certain caves harbor unique fauna, providing insight into site-specific ecological differences and potential conservation priorities. Zoe's team is composed of herself and undergraduate research assistant Emmy Easterwood. This project is funded by the Water Center and the Tennessee Cave Survey and has also been presented at the Sparta Series.



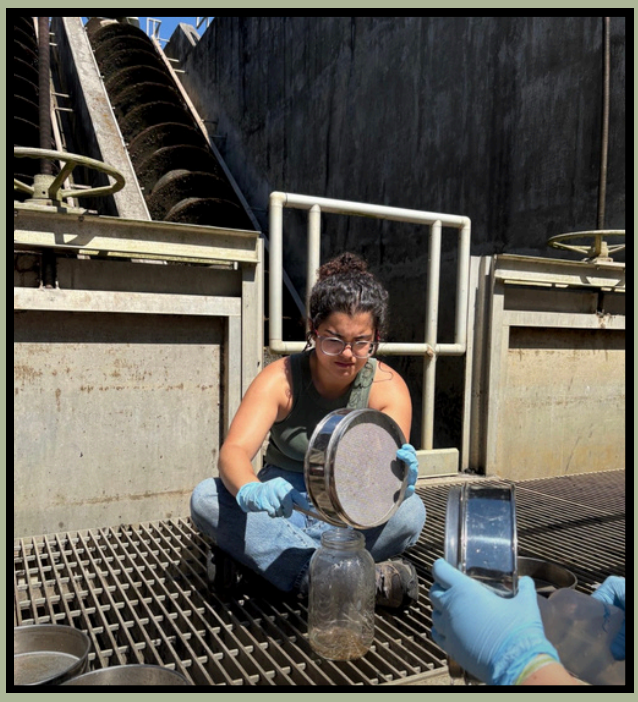
Undergraduate assistant Emmy Easterwood sampling in a karst cave



Emerging Contaminants

An Evaluation of Microplastics in Tennessee's Wastewater Treatment Plants

Gabriela De Almeida, an M.S. student under the mentorship of Dr. Tania Datta, is conducting research on the presence and behavior of microplastics in wastewater treatment plants (WWTPs) across Middle Tennessee. The study aims to assess microplastic in both influent and effluent streams, as well as in upstream and downstream sections of the receiving rivers. A key objective is to compare the quantities of microplastics received and discharged by WWTPs with varying design capacities, treatment processes, and operational capabilities, and understand their impact on received rivers. In parallel, the team is developing a customized methodology for the collection, processing, and analysis of microplastics in wastewater systems. Gabriela is supported by a team of undergraduate research assistants, including Kayti Gleckler, Braden Waldorf, Krishi Patel, Renae Moore, and others. This project is funded by the Tennessee Department of Environment and Conservation (TDEC). The team's work was recently presented at the 2025 Water Professionals Conference in Knoxville, where their poster earned third place in the student competition.



Gabriela De Almeida, graduate student researcher with Dr. Tania Datta.

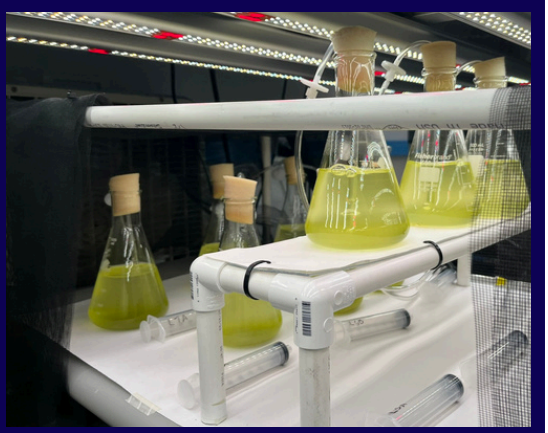
Gabriela's team sampling at a wastewater treatment plant.

Harmful Algal Blooms

Predicting Toxic Cyanobacterial Blooms in Large Rivers

Harmful algal blooms (HABs) are rapid increases in the growth of phytoplankton that can produce harmful toxins or worsen water quality, posing risks to drinking water supplies, recreational use, and ecological stability. HABs have increased in both occurrence and intensity in large rivers, including the Ohio River. These blooms are most prevalent in late summer when discharge decreases leading to clearer and warmer waters, suggesting light and temperature may be important drivers in bloom formation. Our knowledge of how environmental conditions, such as light and temperature, affect algal growth in large rivers is insufficient for predicting and preventing blooms. This project examined the effects of light and temperature on harmful algal growth, community composition, and toxin production across seasons through incubation bioassays of algal communities from the Greenup Pool of the Ohio River near Huntington, West Virginia. Key findings of this research include: cyanobacteria outcompeted eukaryotic algae under extreme light and temperature conditions, cyanotoxin production was highest under lower light and temperatures conditions, and maximum photosynthetic rates and dark respiration were dependent on both light and temperature, but seasonal differences occurred. Interactive effects between light and temperature contributing to community composition and growth response were also present. This project has improved our understanding of how light and temperature conditions unique to large rivers promote HABs while contributing towards improving prediction methods for HABs in rivers.

Dalton Tryba, graduate student researcher with Dr. Justin Murdock.



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Water Center Faculty Publications

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Water Center Faculty Publications

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Water Center Faculty Publications

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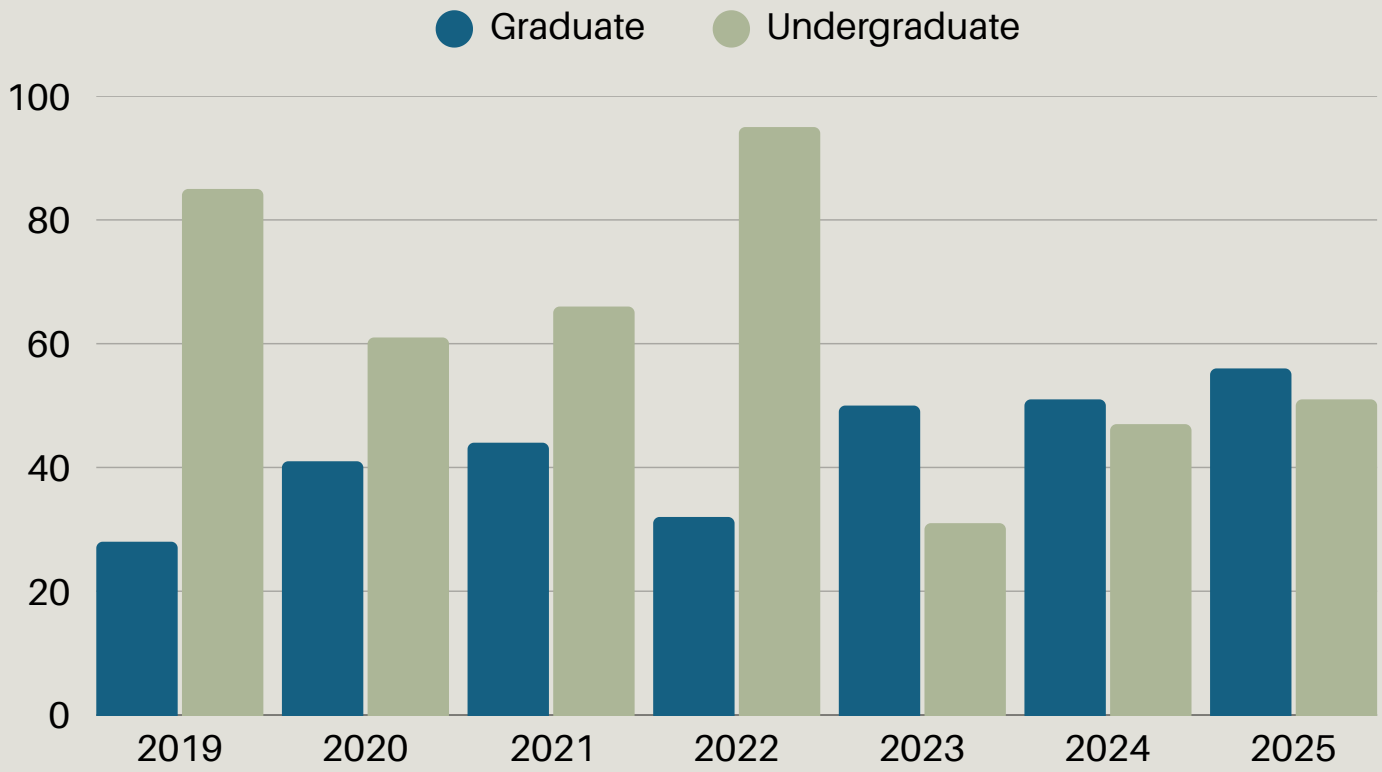
STUDENTS AT A GLANCE



Undergraduate Students Supported

51

Masters Students Supported

41

PhD Students Supported

15

Zoe Porter, Dalton Tryba, and Abby Clagg collecting samples in a west Tennessee wetland.

Gabi De Almeida measuring water quality in Woods Reservoir, TN

Enhancing Education and Research

Graduate Students Supported

Master's Students

Name	Department	Advisor
Ademola Adeoye	Chemistry	Tammy Boles
Kwesi Ahene	Civil & Env Eng	Alfred Kalyanapu
Priyanka Bajracharya	Civil & Env Eng	Alfred Kalyanapu
Christian Cole	Biology	Brad Cohen
Bruce Cunningham	Civil & Env Eng	Tania Datta
Grace Dadzie	Electrical Eng	Alfred Kalyanapu
Avery Davis	Environmental Sci	Kit Wheeler
Gabriela De Almeida	Civil & Env Eng	Tania Datta
Eli Harris	Biology	Shawn Krosnick
Seth Haston	Biology	Justin Murdock
Brandon Hein	Biology	Mostafa Rahnama
Caroline Hitchcock	Civil & Env Eng	Tania Datta
Isaac Hollingsworth	Environmental Sci	Tania Datta

Enhancing Education and Research

Graduate Students Supported

Master's Students

Name	Department	Advisor
Lydia Holmes	Biology	Brad Cohen
Kirsten Humphries	Biology	Kit Wheeler
Rachael Irby	Biology	Mark Rogers
Tony Kumetis	Biology	Kit Wheeler
Gage Lineberry	Environmental Sci	Peter Li
Joshua Loiacono	Environmental Sci	Samantha Allen
Astha Mishra	Biology	Mostafa Rahnama
Ari Mortensen	Biology	Mostafa Rahnama
Jemima Obeng	Civil & Env Eng	Tania Datta
Stephanie Oliphant	Biology	Carla Hurt
Alex O'Neal	Environmental Sci	Justin Murdock
Katherine Pabody	Biology	Kinmonth-Schultz
Timothy Radtke	Biology	Brad Cohen
John-Kaarli Rentof	Biology	Carla Hurt

Enhancing Education and Research

Graduate Students Supported

Master's Students

Name	Department	Advisor
Abigail Riggs	Biology	Brad Cohen
Mark Rine	Biology	Mark Rogers
Katelynn Sallack	Biology	Amanda Rosenberger
Cindy Scruggs	Biology	Joshua Hall
Nathan Steelman	Biology	Brad Cohen
Hannah Swain	Biology	Amanda Rosenberger
Hunter Teal	Biology	Brian Carver
Jared Thompson	Biology	Carla Hurt
Dalta Tryba	Biology	Justin Murdock
Ahmad Tulsi	Environmental Sci	Abdul Momin
Grace (Effie) White	Civil & Env Eng	Tania Datta
Nolan White	Chemistry	Wilson Gichuhi
Zoe Wills	Biology	Carla Hurt
Jo Ting Wong	Environmental Sci	Peter Li

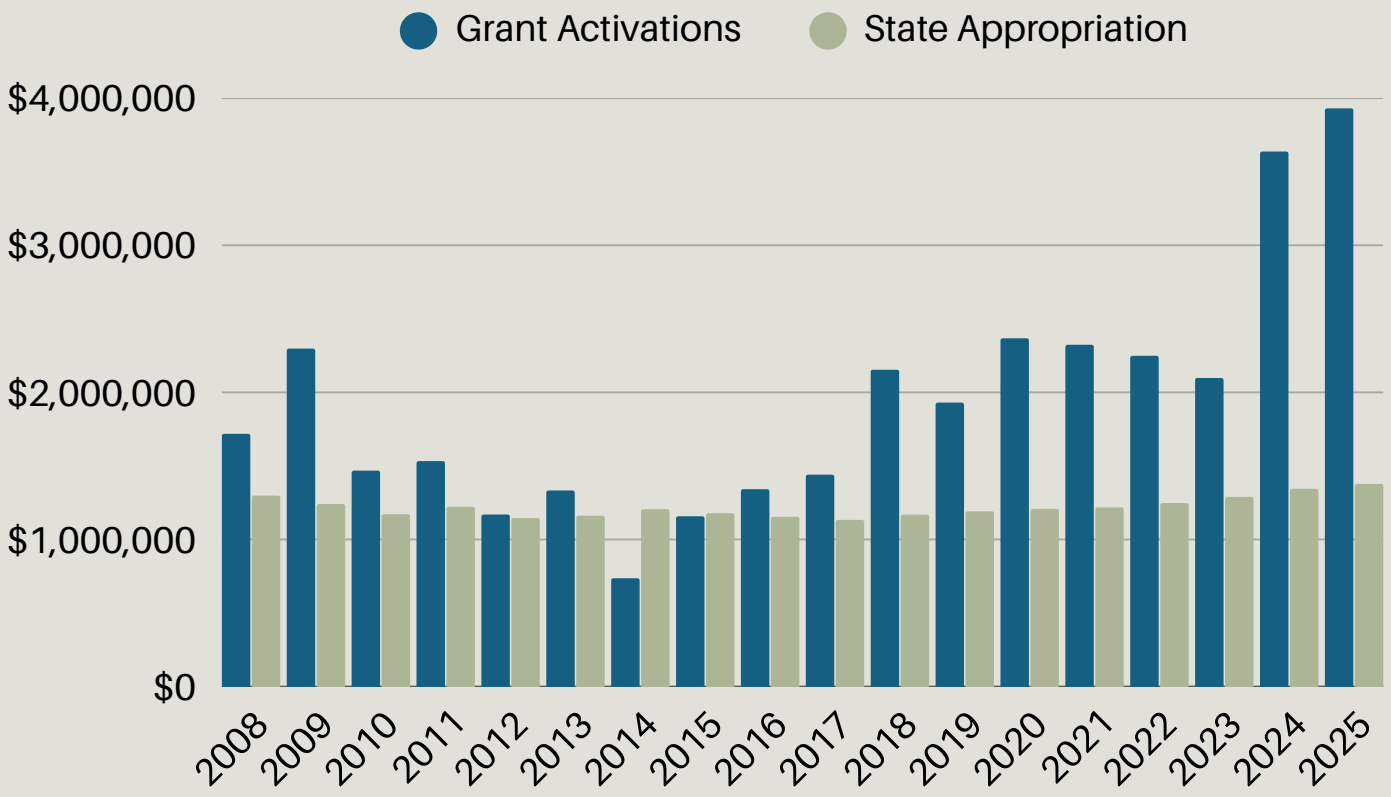
Enhancing Education and Research

Graduate Students Supported

Ph.D. Students

Name	Department	Advisor
Namal Abeysooriya	Environmental Sci	Tammy Boles
Sahera Abumariam	Engineering	Robby Sanders
Mary Adepoju	Environmental Sci	Jeannette Luna
Tong Chen	Environmental Sci	John Liu
Bryant Davis	Environmental Sci	Andrew Callender
Miranda Gaupp	Environmental Sci	Carla Hurt
Hoda Ghassab	Engineering	Robby Sanders
Brooke Grubb	Environmental Sci	Hayden Mattingly
Cory Highway	Environmental Sci	Brad Cohen
Tanya Khan	Environmental Sci	Hayden Mattingly
Justin Medley	Environmental Sci	Peter Li
Thomas Miles	Environmental Sci	Mark Rogers
Zoe Porter	Environmental Sci	Justin Murdock
Sahar Salimi	Environmental Sci	Mostafa Rahnama
Sara Watkins	Environmental Sci	Brad Cohen

FUNDING AT A GLANCE



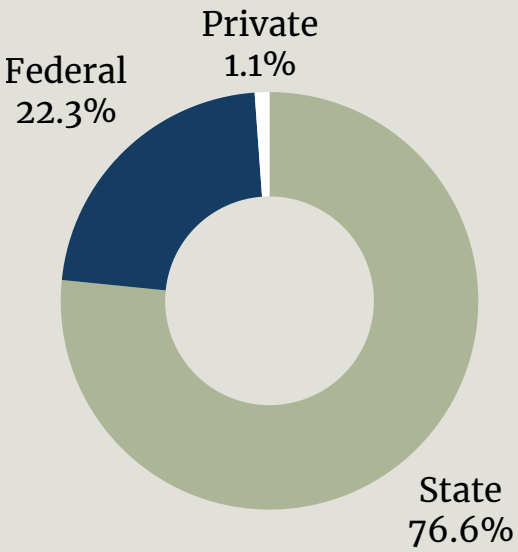
FY 2025 External Funding

$3,930,382

FY 2025 State Appropriation

$1,380,000

External Funding Sources



External Awards

41

FY 2025 Laboratory Revenue

$140,802

FY 2024-2025 Grant Activations

Title of Project	Principal Investigator	Department	Funding Agency	Amount Activated FY24-25
Development of Bipolar Complexants for Minor Actinide Separations	Jesse Carrick	Chemistry	US Dept of Energy	$73,710
Status Survey of Eastern & Western Harvest Mice ad Southern Bog Lemming in the Mississippi Plain of Arkansas	Brian Carver	Biology	Arkansas Game & Fish Commission	$38,611
Banding Project to Investigate Factors Affecting Gobbler Harvest Rates	Brad Cohen	Biology	Tennessee Wildlife Resources Agency	$64,129
Effects of off-highway vehicle disturbance on breeding behaviors and distributions of ruffed grouse and wild turkeys	Brad Cohen	Biology	Tennessee Wildlife Resources Agency	$169,000
Understanding how Waterfowl Rest areas Affect Wintering Waterfowl Distributions, Landscape Connectivity & Hunter OP in TN	Brad Cohen	Biology	Tennessee Wildlife Resources Agency	$616,000
Adaptive Harvest Management for Deer and Turkeys in TN	Brad Cohen	Biology	Tennessee Wildlife Resources Agency	$119,977
A Multi-State Banding Project to Investigate Factors Affecting Gobbler Harvest	Brad Cohen	Biology	Kentucky Dept of Fish & Wildlife Resources	$42,000
TN Tech University - Wild Reproductive Study FY25	Brad Cohen	Biology	Kentucky Dept of Fish & Wildlife Resources	$239,000
Habitat Suitability Modeling for Wild Turkeys in East Texas	Brad Cohen	Biology	National Wild Turkey Federation	$32,388
Optimizing wintering waterfowl distribution and hunter opportunities through strategic wetland design	Brad Cohen	Biology	Ducks Unlimited	$8,280
Statewide University- Utility Partnership for Technical, Managerial, and Financial Assistance to Wastewater Systems in Rural TN	Tania Datta	Civil & Environmental Eng	US Environmental protection Agency	$46,271
Assist TDEC with nutrient reduction strategy and nutrient reduction taskforce (State funds)	Tania Datta	Civil & Environmental Eng	Tennessee Dept of Environment & Conservation	$25,000

FY 2024-2025 Grant Activations

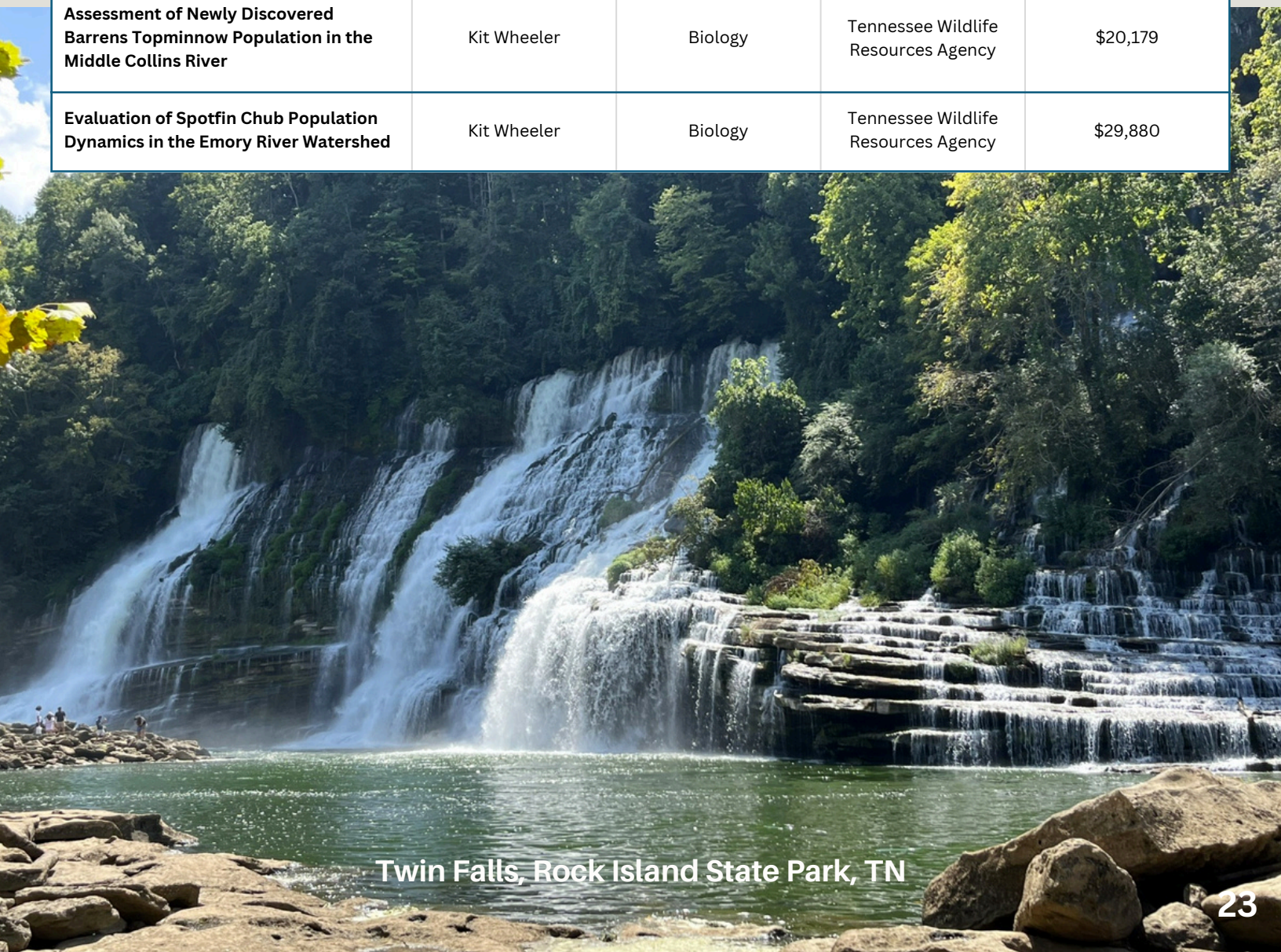
Title of Project	Principal Investigator	Department	Funding Agency	Amount Activated FY24-25
Assist TDEC with nutrient reduction strategy and nutrient reduction taskforce (Federal funds)	Tania Datta	Civil & Environmental Eng	Tennessee Dept of Environment & Conservation	$96,664
Microplastics from TN Wastewater Treatment Plants into Receiving Streams: An Infrastructural and Operational Perspective	Tania Datta	Civil & Environmental Eng	Tennessee Dept of Environment & Conservation	$328,440
Watershed-wide Stormwater Management for the Town of Gainesboro	Tania Datta	Civil & Environmental Eng	City of Gainesboro, TN	$31,454
Impacts of Urbanization and Genetic Diversity to Streamside Salamanders	Carla Hurt	Biology	Tennessee Wildlife Resources Agency	$11,750
Cave Bat Biodiversity	Carla Hurt	Biology	CCF	$5,000
Identifying Aquatic Invasive Plants in TN Rivers	Carla Hurt/Shawn Krosnick	Biology	Tennessee Wildlife Resources Agency	$102,625
Modeling & Simulation of Cascading Dam Failures using HEC-RAS	Alfred Kalyanapu	Civil & Environmental Eng	Tennessee Dept of Environment & Conservation	$73,945
Tennessee Water Resources Research Center Program	Alfred Kalyanapu	Civil & Environmental Eng	US Geological Survey	$34,955
Short's Bladderpod	Shawn Krosnick	Biology	Tennessee Dept of Environment & Conservation	$3,800
Short's Bladderpod Summer 2025	Shawn Krosnick	Biology	Tennessee Dept of Environment & Conservation	$4,847
GIS and Water Quality and Watershed Restoration	Peter Li	Earth Sciences	Tennessee Dept of Environment & Conservation	$30,000
2025 Lunar Geologic Map Campaign Participation	Jeannette Luna	Earth Sciences	NASA	$42,431

FY 2024-2025 Grant Activations

Title of Project	Principal Investigator	Department	Funding Agency	Amount Activated FY24-25
Potential Bioaccumulated Contaminants in T&E Bat Food Sources	Justin Murdock	Water Center	US Army Corps of Engineers	$20,186
Environmental Contaminants-T&E Bat Vulnerability at Arnold Air Base	Justin Murdock	Water Center	US Army Corps of Engineers	$177,291
Determining Environmental Triggers of Harmful Algal Blooms and Toxin Production for the Purposes of HAB Protection, Detection	Justin Murdock	Water Center	US Army Corps of Engineers	$141,810
Development of a Rapid and Cost-Efficient Procedure for Monitoring Toxic Cyanobacteria in TN Surface Waters	Justin Murdock	Water Center	Tennessee Dept of Environment & Conservation	$406,253
Detecting locations and potential causes of low oxygen zones in the Calfkiller River, Tennessee	Justin Murdock	Water Center	Tennessee Valley Authority	$62,846
Identifying tradeoffs in ecosystem services in restored agricultural wetlands in the Agricultural Conservation Easements Program-Wetlands Restoration	Justin Murdock	Water Center	US Dept of agriculture	$100,917
Prediction and Early Identification of Harmful Algal Bloom (HABs) in Riverine Systems.	Justin Murdock	Water Center	US Army Corps of Engineers	$78,840
Aquatic Research-Sport Fish Restoration	Mark Rogers	USGS Coop Fisheries	Tennessee Wildlife Resources Agency	$126,000
Evaluation of Invasive Carp Populations in the Tennessee and Cumberland Rivers	Mark Rogers	USGS Coop Fisheries	Tennessee Wildlife Resources Agency	$372,750
Bass Genetics Introgression of Invasive Fisheries in TN	Mark Rogers	USGS Coop Fisheries	Tennessee Wildlife Resources Agency	$60,000
Bighead & Silver Carp	Mark Rogers	USGS Coop Fisheries	Tennessee Wildlife Resources Agency	$25,000
Expansion of State of Tennessee's Freshwater Mussel Database into West Tennessee Drainages	Amanda Rosenberger	USGS Coop Fisheries	Tennessee Dept of Environment & Conservation	$21,660

FY 2024-2025 Grant Activations

Title of Project	Principal Investigator	Department	Funding Agency	Amount Activated FY24-25
Study to Characterize the Current Fish Community and Available Habitat in Cub Creek Phase 2	Amanda Rosenberger	USGS Coop Fisheries	Tennessee Dept of Environment & Conservation	$9,948
Environmental DNA (eDNA) Surveillance of the Roughhead Shiner in the James River Watershed, Virginia	Amanda Rosenberger	USGS Coop Fisheries	Virginia Dept of Wildlife Resources	$35,599
Environmental DNA Surveillance of the Duskytail Darter in Virginia Watersheds - Year 3	Amanda Rosenberger	USGS Coop Fisheries	Virginia Dept of Wildlife Resources	$10,000
Assessment of Newly Discovered Barrens Topminnow Population in the Middle Collins River	Kit Wheeler	Biology	Tennessee Wildlife Resources Agency	$20,179
Evaluation of Spotfin Chub Population Dynamics in the Emory River Watershed	Kit Wheeler	Biology	Tennessee Wildlife Resources Agency	$29,880



Twin Falls, Rock Island State Park, TN

Lab Capabilities

The Water Center offers unique analytical capabilities through its state-certified water quality lab, which has served homeowners, businesses and the research community in Tennessee and specifically the Upper Cumberland region for over 40 years.

Services:

- Drinking water, wastewater, and stormwater sampling, characterization studies and treatability studies
- Flow and water quality analysis for streams and watersheds
- Chlorophyll analysis
- Microbial source tracking
- Microplastics characterization and quantification
- Geospatial analysis

Analytical Capabilities:

- Trace/heavy metals, anions, and solids
- BOD, COD, TOC
- Bacteria (E. coli and total coliform)
- Dissolved oxygen, conductivity, and pH
- Cyanide
- Oil and grease
- Nutrients
- Chlorophyll
- Algal toxins

About the Lab:

- State-certified for drinking water parameters
- Enforces a quality control program that conforms to EPA standards
- Offers in-depth assistance when more than just analytical test results are needed
- Supported by the expertise of the Tennessee Tech research community

Field Sampling & Monitoring Capabilities:

- SonTek ADP: stream velocity measurements, stream bed profiles and total flow
- Datasondes: log of water quality including DO, pH, temperature, conductivity, ORP
- GIS capabilities
- Discrete and composite autosampling
- Assistance with developing sampling strategies, including identifying appropriate analyses

The lab currently staffs Phillip Burr as the Commercial Lab Manager, Dr. Grace Tinker as the Research/Projects Lab Manager, Alex O'Neal as a Lab Analyst, and Macey Warren as a Lab Technician.

Lab Outreach

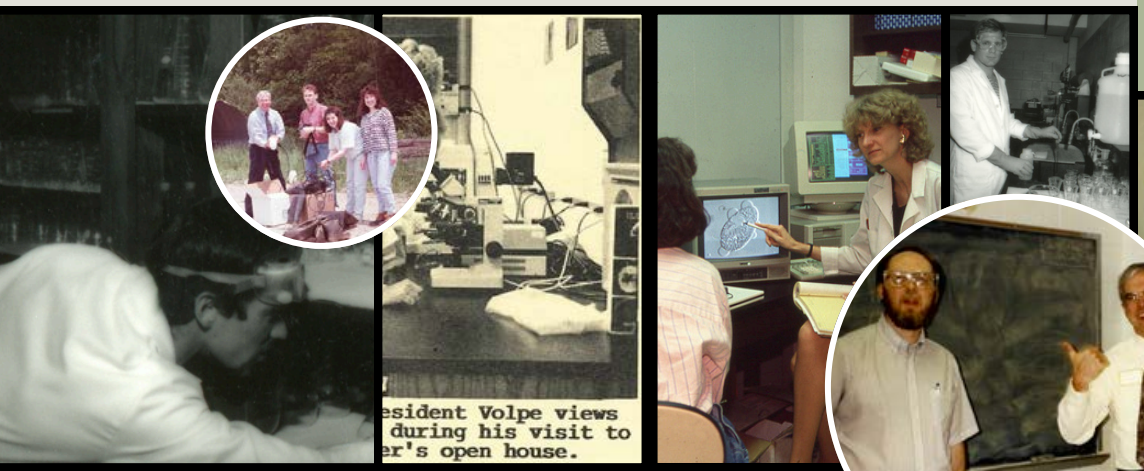
The Water Center participated in various outreach events and conferences this year. Through these events, the Center taught students of all ages about nutrient pollution and storm water run-off. The Center was also able to exhibit highlights of the lab at various conferences across Tennessee and Kentucky. The events that the Water Center participated in this fiscal year were:

1. **KY/TN Water Professionals Conference 2024, Exhibitor Booth**
2. **Tn Tech Sustainability Day 2024, Outreach Event**
3. **Appalachian Studies Association Rural Reimagined Conference 2025, Exhibitor/Outreach Booth and Tour**
4. **TN Section American Water Resources Association Conference 2025, Exhibitor Booth**
5. **TN Tech Earth Day 2025, Outreach Event**
6. **Freedom School 2025, Outreach Event**
7. **Cumberland River Compact Water Fest 2025, Outreach Event**

The Water Center Celebrates Its 40th Anniversary

The Water Center celebrated its 40th anniversary this fiscal year. A celebration was held in October of 2024 to commemorate the hard work of everyone: past, present, and future.

The Water Center Through the Years



SCHEDULE 7

	FY 2024-25 Actual			FY 2025-26 Proposed			FY 2026-27 Requested		
	Matching	Appropr.	Total	Matching	Appropr.	Total	Matching	Appropr.	Total
Expenditures									
Salaries									
Faculty	$280,096	$10,557	**$290,653**	$114,409		**$114,409**	$116,697		**$116,697**
Other Professional	$601,083	$431,797	**$1,032,880**	$309,641	$487,769	**$797,410**	$497,524	$506,176	**$1,003,700**
Clerical/ Supporting	$164,655	$54,600	**$219,255**	$173,632	$45,852	**$219,484**	$46,769	$47,868	**$94,637**
Assistantships	$489,653	$340,013	**$829,666**	$374,720	$326,620	**$701,340**	$382,215	$321,912	**$704,127**
Total Salaries	**$1,535,487**	**$836,967**	**$2,372,454**	**$972,402**	**$860,241**	**$1,832,643**	**$1,043,205**	**$875,956**	**$1,919,161**
Fringe Benefits	$521,873	$398,659	**$920,532**	$335,616	$398,718	**$734,334**	$342,329	$389,512	**$731,841**
Total Personnel	**$2,057,360**	**$1,235,626**	**$3,292,986**	**$1,308,018**	**$1,258,959**	**$2,566,977**	**$1,385,534**	**$1,265,468**	**$2,651,002**
Non-Personnel									
Travel	$223,760	$10,460	**$234,220**	$115,877	$33,945	**$149,822**	$118,195	$25,000	**$143,195**
Software		$5,175	**$5,175**					$5,000	**$5,000**
Books & Journals									
Other Supplies	$818,709	$59,624	**$878,333**	$166,142	$218,304	**$384,446**	$169,465	$180,806	**$350,271**
Equipment	$64,000	$42,926	**$106,926**						
Maintenance		$21,642	**$21,642**					$5,000	**$5,000**
Scholarships	$8,280		**$8,280**						
Consultants	$280,642		**$280,642**	$165,000		**$165,000**	$80,000		**$80,000**
Renovation									
Other (Specify): Seminars		$505	**$505**						
Total Non-Personnel	**$1,395,391**	**$140,332**	**$1,535,723**	**$447,019**	**$252,249**	**$699,268**	**$367,660**	**$215,806**	**$583,466**
GRAND TOTAL	**$3,452,751**	**$1,375,958**	**$4,828,709**	**$1,755,037**	**$1,511,208**	**$3,266,245**	**$1,753,194**	**$1,481,274**	**$3,234,468**
Revenue									
New State Appropriation		$1,378,000	**$1,378,000**		$1,400,700	**$1,400,700**		$1,481,274	**$1,481,274**
Carryover State Appropriation		$310,199	**$310,199**		$312,241	**$312,241**			
New Matching Funds	$3,452,751		**$3,452,751**	$1,755,037		**$1,755,037**	$1,753,194		**$1,753,194**
Carryover from Previous Matching									
Total Revenue	**$3,452,751**	**$1,688,199**	**$5,140,950**	**$1,755,037**	**$1,712,941**	**$3,467,978**	**$1,753,194**	**$1,481,274**	**$3,234,468**

Budget Note: The Center for the Management, Utilization and Protection of Water Resources requests a 5.75% budget increase for the 2025-2026 fiscal year to accommodate potential increases in salaries and other supplies and equipment expenses.

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Designer: Dr. Grace Tinker and Macey Warren
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