


TEAM

TDEC

ONETN

2019

REPORT



“Tennesseans, we stand in one of the great states in all of America. But our greatness has never come from what any one individual did. Our greatness has always come from the collective lives, service, commitment and sacrifice of those who came before us—

because of what we have always done as a people together, in community with each other, in service to our state and to our neighbors.”

— Bill Lee
Tennessee Governor

Team TDEC – How We Serve



56 Tennessee State Parks



85 State Natural Areas



99.7% Permit application decisions made
within regulatory time limits



36,553,000 visits to Tennessee State Parks



\$96,600,000 Loaned for clean water
and drinking water projects

Dear Fellow Tennessean:

This annual report provides insight into how our department pursues and makes progress on our mission. We fulfill our mission by working well as a team within TDEC and also being effective partners with other state agencies so we can best serve the citizens of Tennessee.

Since my appointment as TDEC Commissioner in January 2019, it has been my privilege to work alongside the talented, dedicated professionals in our department that work hard every day to protect our environment, conserve important natural resources and manage a well-run state park system. While we have tremendously talented individuals, I have noticed our impact is greatest when we harness the whole as Team TDEC. It is evident by the teamwork required to develop, fund and deploy a revitalization of our statewide air monitoring network through Project Restore. It is employees from our field offices joining community volunteers to participate in innovative projects like recycled Tires to Trails at T.O. Fuller State Park and numerous cleanups along rivers, lakes and streams across the state. It's our procurement staff as they teamed up with state parks to pioneer an expedited way to install bridges along the challenging topography of the 300-mile Cumberland Trail State Park. It is our environmental professionals across divisions and sections that coordinate and communicate in a manner responsive to the regulated community while safeguarding the environment to further progress, prosperity and a healthy environment in Tennessee.

I am also energized by our department's partnerships within state government that advance the vision of One Tennessee. TDEC has embraced Governor Bill Lee's priority outreach to rural communities. We are working across the

Governor's Cabinet to listen and provide meaningful support to distressed areas, including coordination with The Department of Economic & Community Development to increase resources for crucial water system infrastructure investments. TDEC has also been an active supporter of First Lady Maria Lee's Tennessee Serves initiative, organizing service opportunities at each state park. Our prototype "Health Parks Healthy Person" application was so effective when launched at Henry Horton State Park, the Department of Health stepped up to provide grant resources to expand this platform so it could reach thousands more Tennesseans through the app and with participation of all state parks. We have worked with our partners at the Department of Agriculture to rebalance management responsibilities for the state's Cedars of Lebanon complex in Wilson County to provide for improved resource management and recreational access with no new funds required. Now that is a mark of good government, and we're just getting started.

I am inspired by what we are accomplishing for Tennessee. I am confident TDEC can apply Governor Lee's belief that Tennessee will lead, and the best way for us to achieve his vision is to continue forward as Team TDEC for One Tennessee. I hope all Tennesseans will join us on this path.

Sincerely,
David W. Salyers, P.E.





“We are pleased to assist local communities with important infrastructure resources. SRF loans directly meet vital needs and will bolster quality of life for citizens across Tennessee.”

Tennessee Governor Bill Lee

Teaming Up on Data Serves Rural Areas

When Governor Bill Lee issued his first executive order requiring state departments to submit a statement of rural impact and provide recommendations for better serving rural Tennessee, the Department of Environment and Conservation began to develop a plan to better identify communities that need help in affording drinking water and wastewater improvements. In the State Revolving Fund program, communities, utility districts and wastewater authorities can obtain loans with lower interest rates than most can obtain through private financing. Interest rates for loans in the program can vary from zero to market rate, and loans that use EPA grant funding can include a component of principal forgiveness.

The foundation of the plan is an enhanced Ability to Pay Index (ATPI), a first-of-its-kind initiative in the state, developed by the University of Tennessee through an intergovernmental grant between TDEC and the Tennessee Department of Economic and Community Development.

The index is based on multi-year trends in economic, social, and environmental data that help evaluate any county or community in the state. The 95 counties and 425 cities and municipalities are scored from 0-100 based on their ability to afford loans, grants, or other forms of incurred debt.

TDEC will use the ATPI to help make better decisions regarding State Revolving Fund loan interest rates and allocation of subsidies. ECD will also use the ATPI to inform its water infrastructure grant process.



14
COMMUNITIES
RECEIVED LOANS
IN FY19



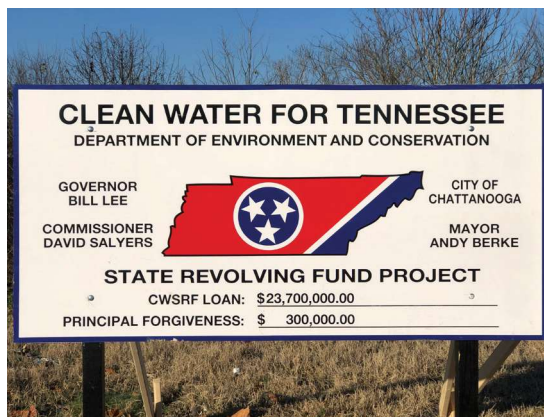
1.38%
AVERAGE INTEREST
RATE FOR LOANS
IN FY19



\$2.5
MILLION PRINCIPAL
FORGIVENESS
AWARDED IN FY19



\$96.7
MILLION CLEAN
WATER AND
DRINKING WATER
LOAN AMOUNT
IN FY19



Tires Make Way for Trail at T.O. Fuller State Park

On January 21, TDEC and local officials gathered with volunteers at T.O. Fuller State Park in Memphis to collect waste tires to be recycled into material for a new pedestrian trail – part of Tennessee State Parks’ Tires to Trails program.

More than 800 volunteers registered, and the day’s activity resulted in the collection of more than 15,000 tires. The event was on Martin Luther King Jr. Day, and the partners included Shelby County, the City of Memphis, Memphis City Beautiful, Leadership Memphis, Refurban, Clean Memphis and the Friends of T.O. Fuller State Park.

The cleanup was deemed a day of service, a way to clean up the community and kick off the Tires for Trails program. Eventually, roughly 36,000 tires will be collected from predetermined locations in the Memphis metro area.

The tires are turned into pavement-like surfacing for an approximately three-mile trail for pedestrians and cyclists at the park. The Tires to Trails program is supported by a litter pickup grant from the Tennessee Department of Transportation, and two additional grants from TDEC go toward construction of the trail, totaling \$750,000 from all three grants.



800
VOLUNTEERS



1,500
TIRES




\$750,000
IN GRANTS



3
MILES

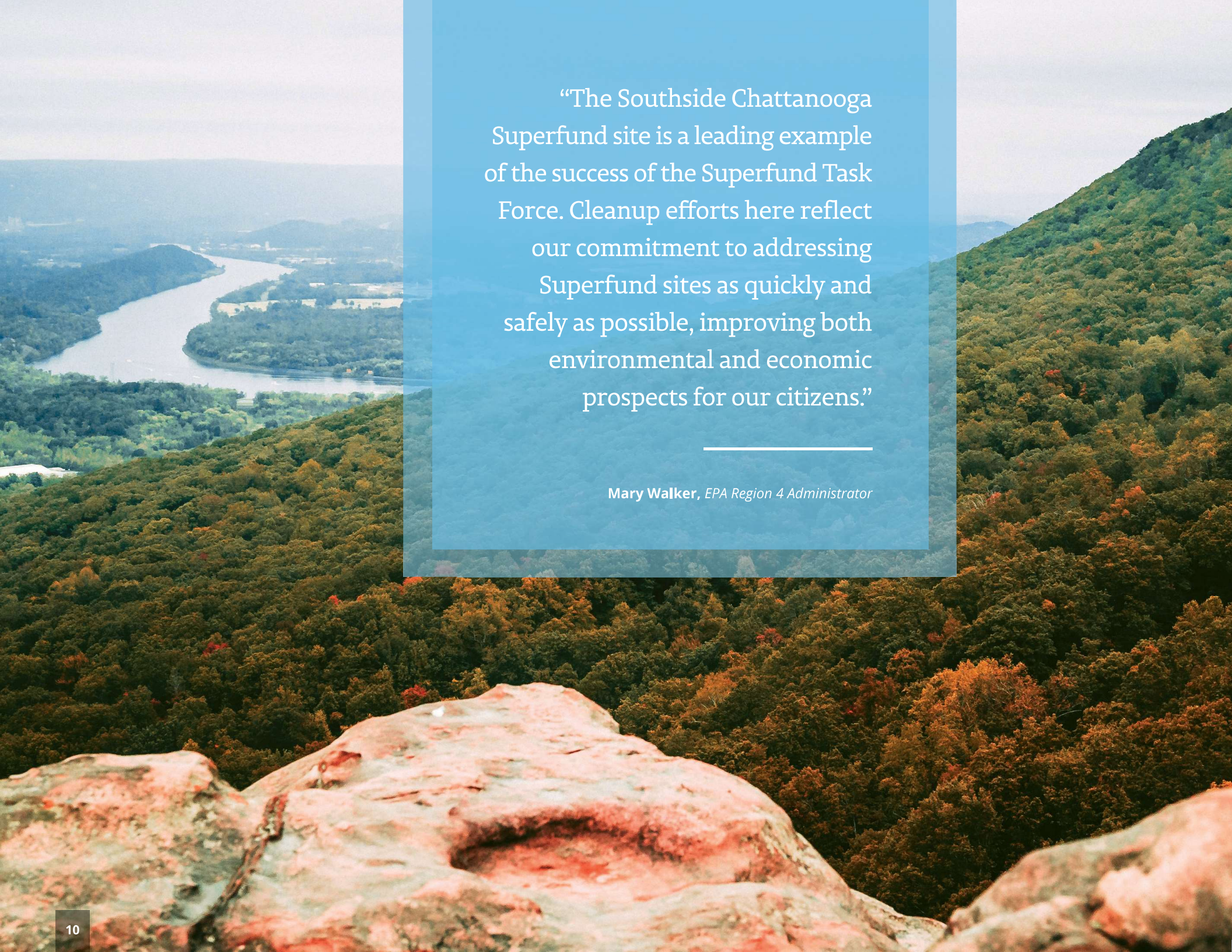


6
PARTNERS



“Any time we can get members of the community together to help us clean up our city, I’m 100% on board. Not only are we doing that with this project, but we’re reusing those old tires for new trails that our citizens can use for years to come.”

Jim Strickland, *Mayor of Memphis*



“The Southside Chattanooga Superfund site is a leading example of the success of the Superfund Task Force. Cleanup efforts here reflect our commitment to addressing Superfund sites as quickly and safely as possible, improving both environmental and economic prospects for our citizens.”

Mary Walker, EPA Region 4 Administrator

Remediation Improves the Southside Chattanooga Lead Site

The Southside Chattanooga Lead Site has been an example of cooperation between the Tennessee Department of Environment and Conservation and the Environmental Protection Agency going back to 2011.

TDEC received word of lead exposure illness in the Chattanooga community and contacted the EPA, which began removal of contaminated soil from properties, backfilling excavated areas with clean soil. In 2016, along with the Tennessee Department of Health, the agencies began a soil study. Extensive soil sampling was done and contamination was found.

These are residential neighborhoods, along with communal areas such as schools, parks and playgrounds. Large amounts of waste byproducts from foundry operations had been provided to residents for fill and topsoil, going back to the early 20th century. As contaminated land was found, cleanup ensued and continued into 2019.

EPA added the site to the National Priorities List in September 2018, which allowed for more funding. As of September 2019, EPA had removed and disposed of contaminated soil and replaced soil at more than 130 properties.

EPA Administrator Andrew Wheeler appeared at a new park at the Southside Chattanooga Lead Site in September to release a report of the national Superfund Task Force, detailing plans to remediate toxic locations throughout the country.



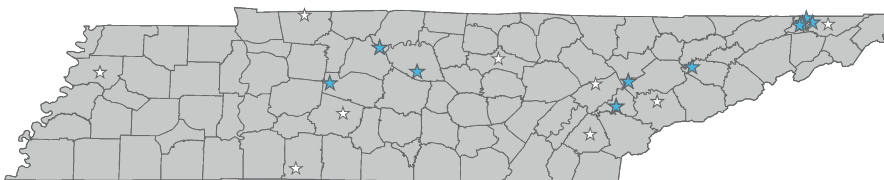
Project Restore Replaces Equipment, Ensures Clean Air

Tennesseans rely on the Department of Environment and Conservation

to ensure clean air across the state, and that responsibility includes an effective, reliable ambient air monitoring program. TDEC's Division of Air Pollution Control operates and maintains 23 monitoring sites across the state.

Project Restore was created after a 2016 audit found serious shortcomings and a need to update the air monitoring system. Equipment was obsolete and unreliable. Old monitoring shelters were leaking, poorly insulated, and deteriorating. The project scope outlined various upgrades, including the installation of new ambient air monitoring laboratories, new equipment, upgraded cellular communications, and an internet-based air monitoring documentation center.

The Tennessee General Assembly provided a budget supplement of \$1.55 million to complete the necessary updates to the air monitoring network. With no additional staffing, the division designed, purchased, and installed 10 new safe, energy-efficient ambient air monitoring shelters. The result was an effective network that ensured the performance and reliability that Tennesseans deserve.



10 NEW MONITORING LABORATORIES INSTALLED



2 NEW SITES ESTABLISHED



3 ADDITIONAL SITES MOVED TO NEW LOCATIONS



\$1.55M PROJECT



3 POLLUTANTS MONITORED ARE SULFUR DIOXIDE - SO₂, OZONE - O₃, & PM_{2.5} PARTICULATE



29 PROJECT PARTNERS



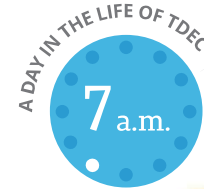
A Day in the Life of



TDEC is a part of your day in many ways you may not have considered. This page explains how TDEC is there for Tennesseans all day, every day.

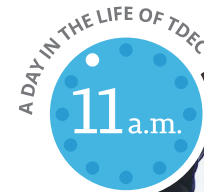
DIVISION OF Air Pollution Control

Wake up and take a deep breath of clean, safe air.



DIVISION OF Underground Storage Tanks

You fill up your car with gasoline stored in underground tanks. The tanks do not leak and contaminate the groundwater.



DIVISION OF
Water Resources

Clean water comes out of your tap for a refreshing shower.

A DAY IN THE LIFE OF TDEC
8 a.m.



DIVISION OF
Solid Waste Management

You compost your coffee filters and breakfast leftovers, and toss whatever can't be repurposed.

A DAY IN THE LIFE OF TDEC
9 a.m.



DIVISION OF
Radiological Health

Your dentist performs x-rays during your check up; you are safe from the radiation.

A DAY IN THE LIFE OF TDEC
10 a.m.



DIVISION OF
Remediation

You grab a drink in a brewery that used to be a gas station, the site is safe.

A DAY IN THE LIFE OF TDEC
5 p.m.



Tennessee State Parks

You take the family on a hike at your nearby Tennessee State Park.

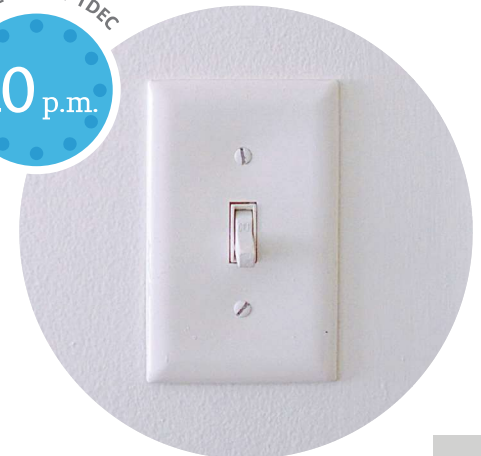
A DAY IN THE LIFE OF TDEC
6 p.m.



OFFICE OF
Energy Programs

You switch off your energy efficient LED lights before bed.

A DAY IN THE LIFE OF TDEC
10 p.m.



Healthy Parks Healthy Person – a Healthy Partnership

Tennessee State Parks and the Tennessee Department of Health partnered to develop a website and phone app called **Healthy Parks Healthy Person**, which allows Tennesseans to log their activities at Tennessee State Parks in exchange for points that can be redeemed for rewards.

The program includes a Park Prescription feature, where health-care providers can prescribe outdoor activity as part of a health-care regimen for patients. People are urged to talk to their providers about options for engaging in outdoor activities to further their health goals.

Being active outdoors is not only good for your health but can earn you rewards in the form of Tennessee State Parks merchandise or experiences like rounds of golf, camping or even cabin stays. Tennessee State Parks offer thousands of miles of walkways, trails and waterways for visitors to engage in healthy exercise at no cost.



**Healthy Parks
HEALTHY PERSON**



56
PARTICIPATING
STATE PARKS



115+
PARTICIPATING
HEALTHCARE PROVIDERS,
LOCAL GOVERNMENTS,
LOCAL & COUNTY PARKS



4,776
REGISTERED
APP USERS



73,428
STATEWIDE PARK
CHECK IN'S VIA
THE APP



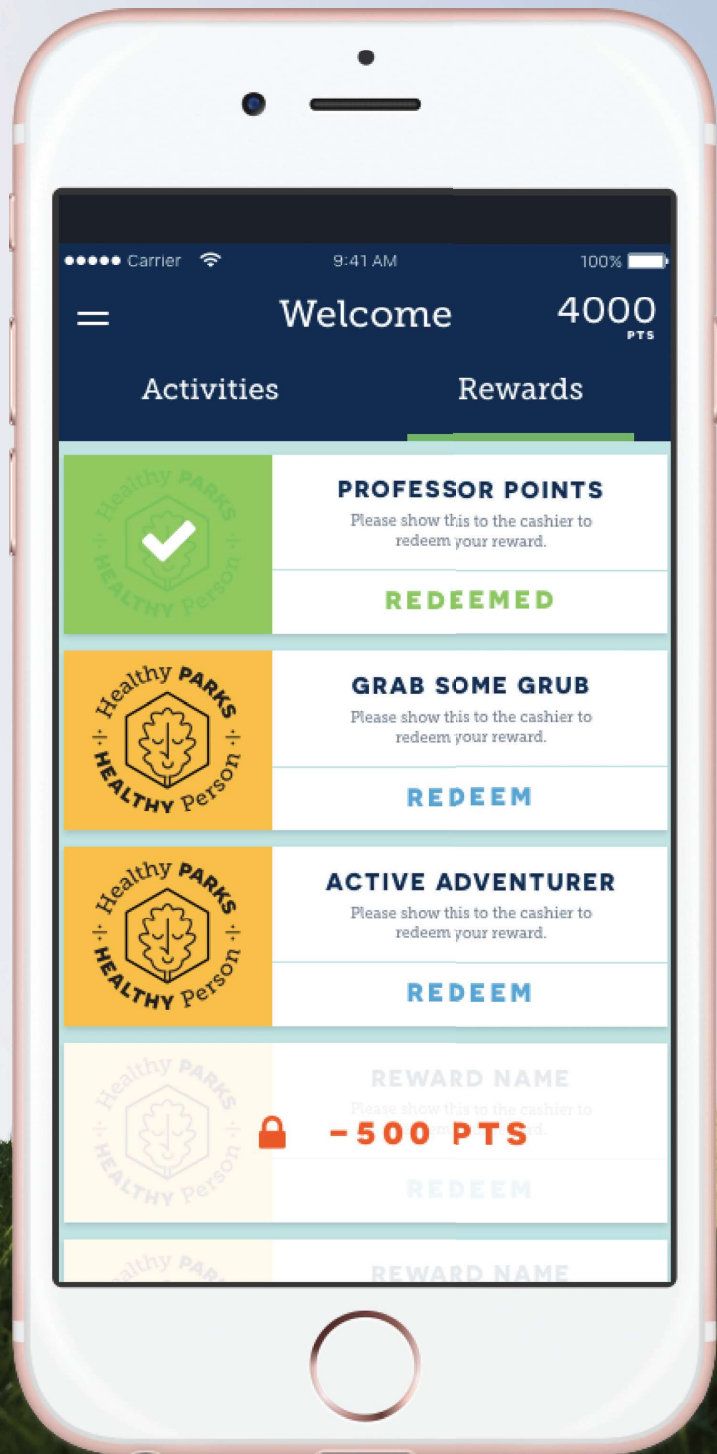
1
NATIONAL
SHIFT AWARD



1
OUTSTANDING SERVICE
TO POPULATION HEALTH
AWARD FROM THE TN
DEPT. OF HEALTH



1
FEATURED ARTICLE
IN OUTSIDE
MAGAZINE



“Many clinicians are recommending the great outdoors as a way for people of all ages to get their dose of physical activity, and clinicians across the country are advocating for improved access to safe and natural environments where people live, learn, heal, work and play. Healthy Parks Healthy Person is a terrific partnership to address this important need.”

Patti Scott, Clinical Director, TN Department of Health



TDEC Grant Dollars Serving Tennessee Communities

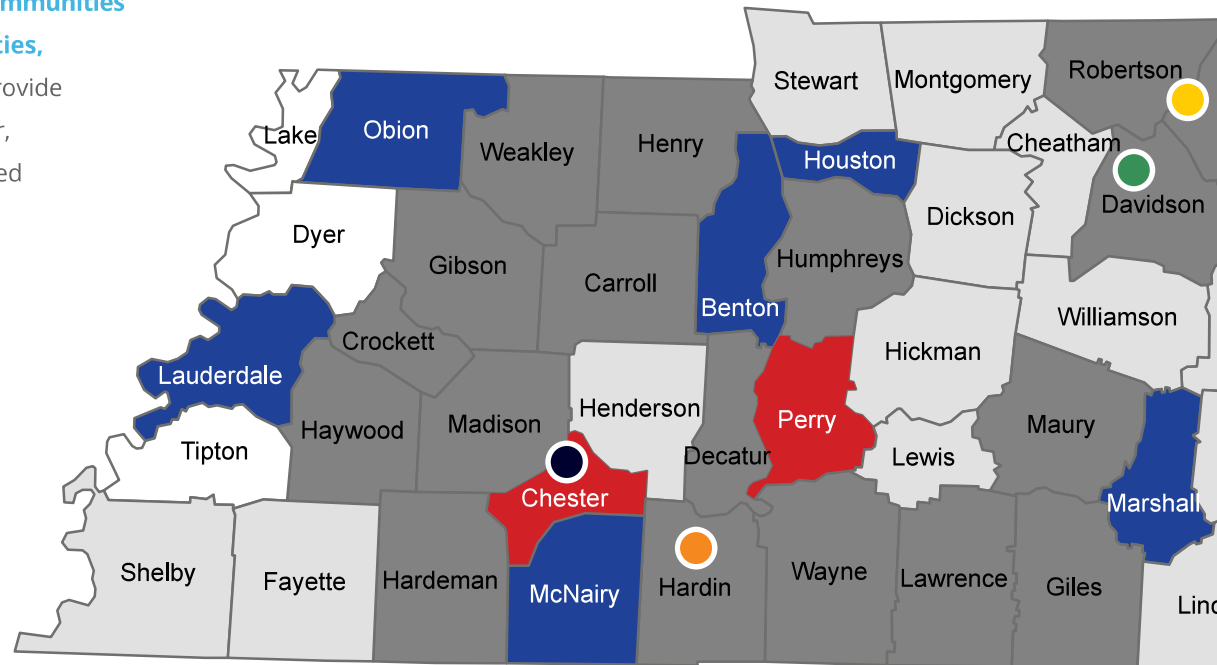
TDEC is proud to serve Tennesseans and support the work of communities across the state in their efforts to recycle valuable commodities, safely dispose of problem wastes, enhance waters of the state, provide outstanding recreational facilities and transport children in newer, cleaner school buses. In FY 2019, TDEC granting programs awarded just over **\$23.2 million**.

Additionally, the State Revolving Loan Fund (SRF) Program awarded \$96 million in low-interest loans for wastewater and drinking water projects. These loans came with more than \$2.5 million in principal forgiveness that does not have to be repaid.



Metro Nashville/ Davidson County

TDEC partnered with the Recycling Coalition and Love Beauty and Planet to award Metro Nashville a combined \$2.8 million grant to double their recycling collection frequency from once a month to every-other-week.



Chester County

Chester County received more than \$1 million in TDEC grants including funds for Used Oil, Education and Outreach, and Planning to update the Shiloh Planning Region's 10-year plan.



City of Savannah/ Hardin County

The City of Savannah received a \$500,000 Local Parks and Recreation Fund grant to make improvements to multiple city parks, including the construction of a new multi-use pavilion for the Savannah Market located in its historic downtown district.





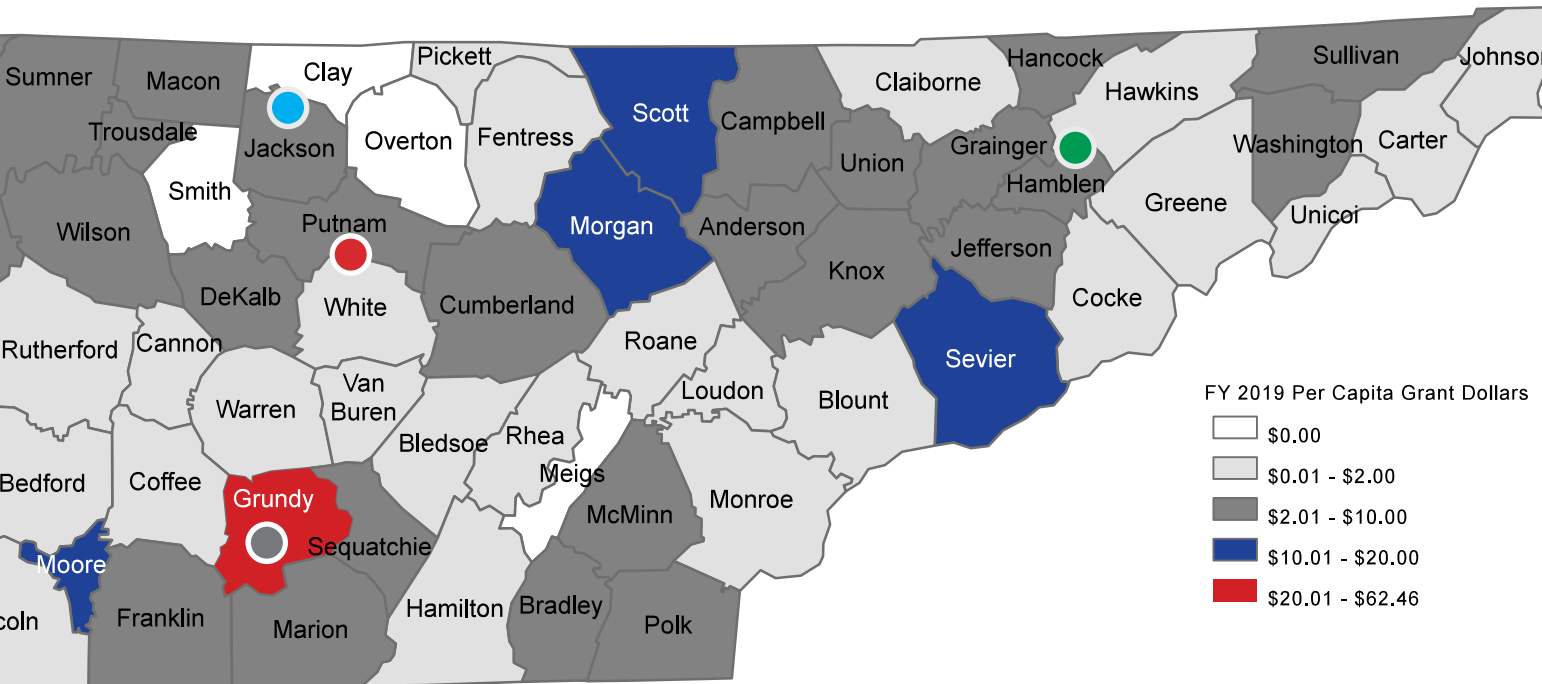
City of White House (Robertson and Sumner Counties)

The City of White House added a large playground and amphitheater to the Farris H. Bibb Municipal Recreation Complex with a \$500,000 Local Parks and Recreation Fund grant. These two new assets adjoin the City's popular splash pad.



Jackson County

Jackson County received a \$51,858 grant from Materials Management for new antifreeze and used oil collection tanks at their convenience centers.



Grundy County

Grundy County received a \$657,000 grant to improve recycling at its Convenience Centers. These county operated solid waste collection sites were constructed the 1990s and desperately needed new recycling containers.



City of Cookeville/ Putnam County

The City of Cookeville's new 10,000 square foot Skate Park opened on June 20, 2019. The Park was funded in part by a \$400,000 Local Parks and Recreation Grant. It is the only concrete skate park in the region and includes accessible restrooms and support areas.



Hamblen County

A \$486,000 Materials Management grant funded the purchase of 400 "bear-safe" recycling containers that were placed in all 56 Tennessee State Parks, including Panther Creek State Park. Recycling has been offered at all State Parks since 2015 as part of the "Go Green With Us" program. In FY 2019 State Parks diverted more than 1 million pounds of recyclables from landfills!

Trail Innovation at Justin P. Wilson Cumberland Trail State Park

The Justin P. Wilson Cumberland Trail State Park, a Tennessee scenic hiking trail, is Tennessee's first linear park, cutting through 11 counties, stretching from the Tennessee/Kentucky border to Chattanooga.

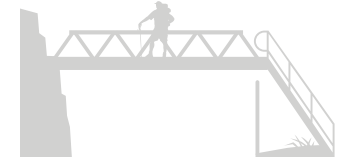
Navigating the park was daunting for hikers. It included obstacles that called for more than a dirt trail. Before bridges, water crossings could be difficult and intimidating. Just as daunting was the challenge of installing bridges into remote, rugged areas.

So the staff at Cumberland Train partnered with Gator Bridge, a division of Crane Materials Inc., and worked to develop a modular aluminum bridge that could be carried into backcountry areas in pieces and assembled on site.

Pieces were small enough to be carried in by hand. But many bridge sites were too remote even for that approach, so bridges were installed in partnership with the Tennessee Army National Guard. With the assistance of the engineering battalion, several bridges were transported via helicopter.

The bridge system was designed to be cost-effective and functional far into the future. It means the park has solved remote placement issues, connected the trail to local communities along its route, and used resources responsibly on structures that will not become maintenance issues in the future.

The system was so innovative the Tennessee Department of Environment and Conservation honored the park with the 2018 Excellence in Innovation Award. Further, as a result of the park's success with the new structure, Gator Bridge has named the new bridge design the Cumberland Trail Bridge System.



11
COUNTIES THE TRAIL PASSES THROUGH

237
MILES OF THE TRAIL

10
FOOT MODULAR BRIDGE SECTIONS

9
DAYS TO ASSEMBLE BRIDGE

20
APPROX STAFF/VOLUNTEERS BUILT IT

9
NUMBER OF GATOR BRIDGES*

*Creek Names
(with counties in parentheses)

Double Bridges (Sequatchie)	Laurel (Rhea)
McGill (Hamilton)	Cave Branch (Cumberland)
Cane Creek (Hamilton)	Smoky Creek (Scott)
Gilbreath (Rhea)	Green's Branch (Scott)
	Montgomery Creek (Scott)

“From its inception, the Cumberland Trail has been blazed by the cost efficient work of state and federal agencies, private companies and numerous volunteers to make a truly unique and memorable hiking experience. The modular bridge system is not only an impressive engineering feat, it is a true testament to the thoughtful partnerships and solutions-oriented approach that is creating this one-of-a-kind state park for Tennessee.”

Justin Wilson, TN Comptroller





Tennessee State Parks Teams up with “Tennessee Serves”

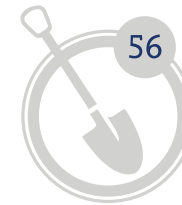
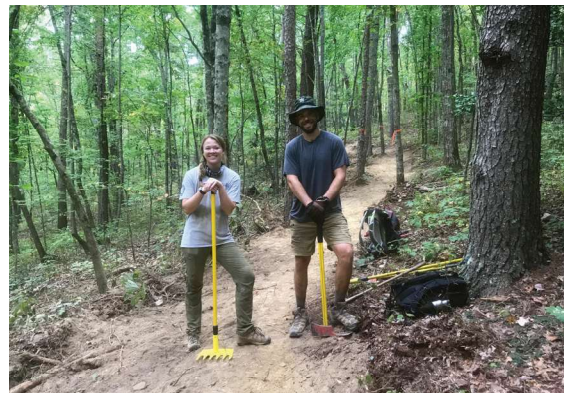
Tennessee State Parks hosted volunteer events as part of First Lady Maria Lee’s Monthly Service Challenge through her Tennessee Serves initiative.

“There are many ways to serve, and our parks are providing great ways to participate in this effort,” First Lady Lee said. “We are grateful to all Tennesseans who are putting their time and energy into serving others.”

“We appreciate the first lady’s commitment to service and we are eager to do our part,” Jim Bryson, Deputy Commissioner for the Department of Environment and Conservation, said. “Tennessee is the Volunteer State, and there are a lot of opportunities to volunteer in Tennessee State Parks.”

Individual parks hosted service opportunities for all ages and skill levels. Those may include activities such as landscaping, invasive plant removal, litter pickup, and trail maintenance.

In 2019, the first lady launched Tennessee Serves to encourage Tennesseans to serve one another and volunteer in their communities. The three-part initiative includes serving Tennesseans across the state with a special focus on distressed counties; highlighting people and organizations already making a difference; and mobilizing Tennesseans to meet community needs.



56

PROJECTS
COMPLETED



783

783

VOLUNTEERS
ENGAGED



\$

\$59,591.50

ECONOMIC
IMPACT



54

54

PARTICIPATING
PARKS



hrs.

2,628.65

HOURS
SERVED

Independent Sector value of a volunteer hour is \$22.67 as of 4/2019

Efficiency Drives Collaboration at Cedars of Lebanon

In an example of responsible land management and more efficient use of state resources, the Department of Environment and Conservation received jurisdiction over a portion of the Cedars of Lebanon complex.

The Cedars of Lebanon complex includes the Cedars of Lebanon State Forest with three natural areas and the Cedars of Lebanon State Park. The complex totals approximately 9,424 acres entirely within Wilson County. The transfer of approximately 2,690 acres from the Department of Agriculture to TDEC shows the strong partnership between the two state departments.

Much of the section of the state forest has been designated a state natural area and had been recognized as a national natural landmark.



“The solid relationship between TDA and TDEC continues to benefit our woodland areas and those who appreciate them. This transfer of property comes after thoughtful conversations and extensive research and planning to determine what would be best for the complex and community.”

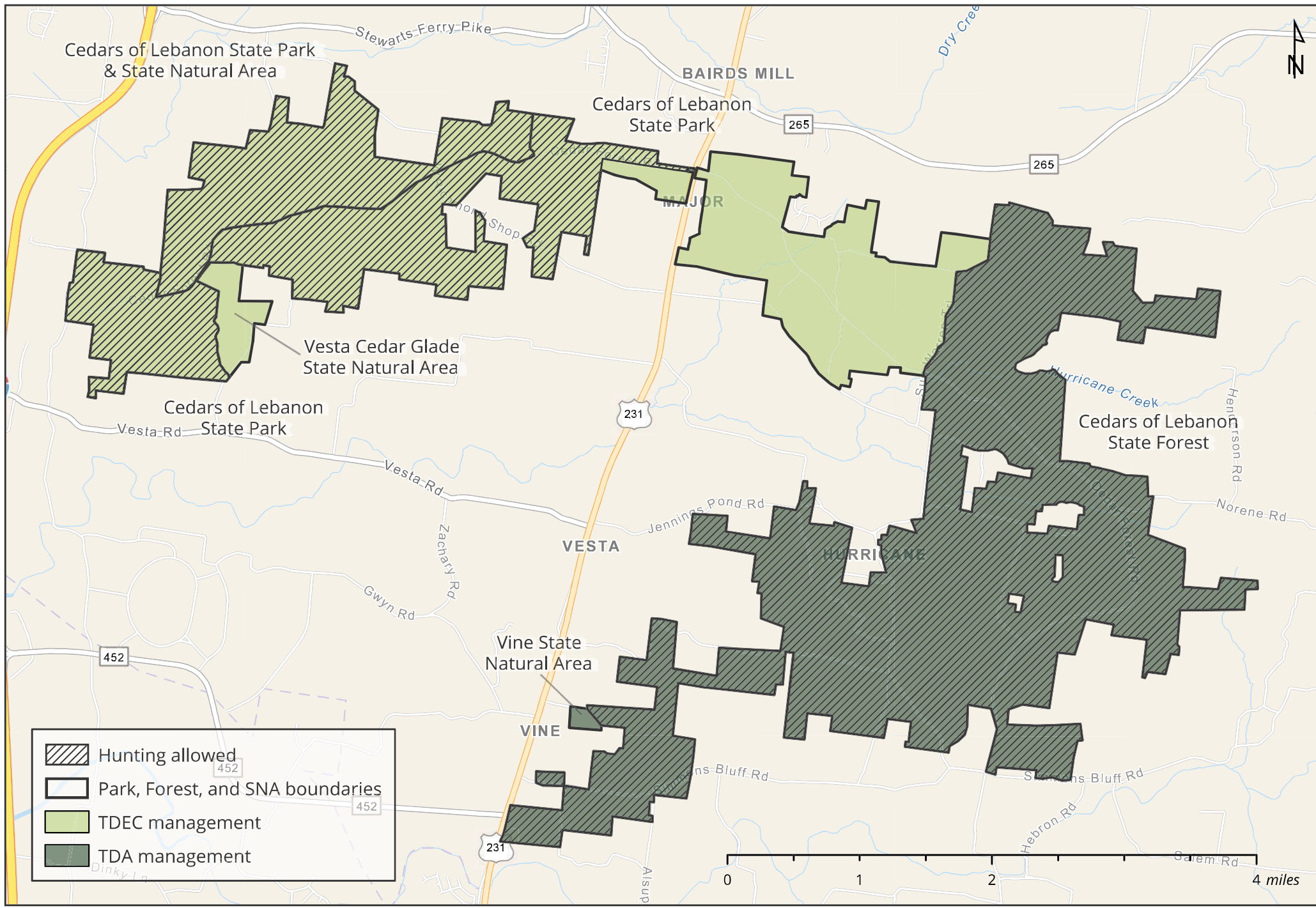
Charlie Hatcher, D.V.M., *Agriculture Commissioner*



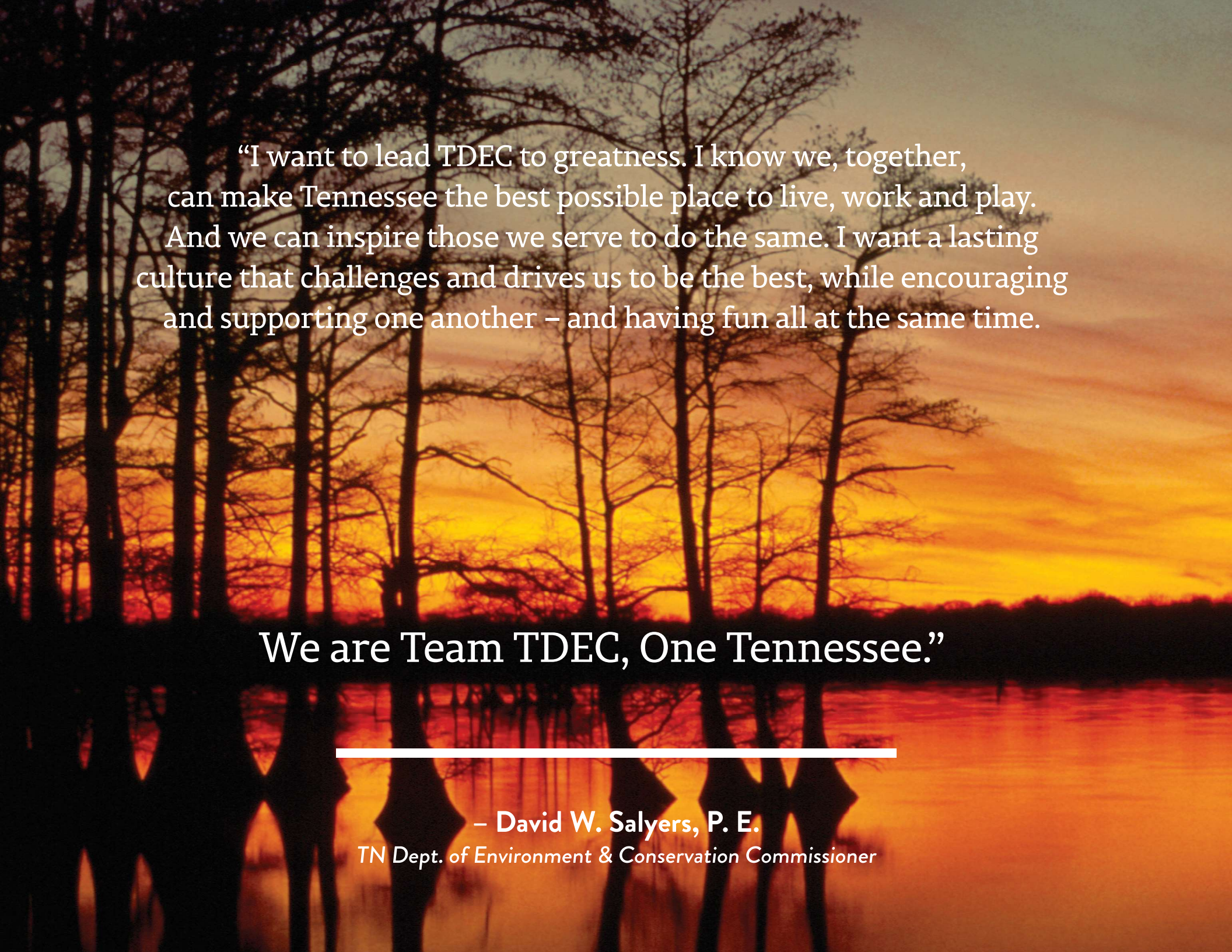
9,424 ACRES
OF THE TOTAL
COMPLEX



2,690 ACRES FROM THE DEPARTMENT
OF AGRICULTURE TO TDEC SHOWS THE
STRONG PARTNERSHIP BETWEEN THE
TWO STATE DEPARTMENTS



Produced July 2019 by TDEC/TN State Parks. The information on this map has been compiled by TDEC/TN State Parks from a variety of sources and is subject to change without notice. TDEC/TN State Parks makes no claims as to the accuracy or completeness of this information. This document is intended to be used for discussion only and is not a survey product.



“I want to lead TDEC to greatness. I know we, together, can make Tennessee the best possible place to live, work and play. And we can inspire those we serve to do the same. I want a lasting culture that challenges and drives us to be the best, while encouraging and supporting one another – and having fun all at the same time.

We are Team TDEC, One Tennessee.”

– David W. Salyers, P. E.

TN Dept. of Environment & Conservation Commissioner

The Tennessee Department of Environment and Conservation exists to enhance the quality of life for citizens of Tennessee and to be stewards of our natural environment by:

- Protecting and improving the quality of Tennessee's air, land, and water through a responsible regulatory system;
- Protecting and promoting human health and safety;
- Conserving and promoting natural, cultural and historic resources;
- Providing a variety of quality outdoor recreational experiences.



Tennessee Department of Environment and Conservation,
Authorization No. 327400, 500 copies, November 2018. "This
public document was promulgated at a cost of \$2.10 per copy."

