TDEC

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

2014 ANNUAL REPORT

Citizens of Tennessee: **October 2014**

I am pleased to share the TDEC Annual Report for the 2013-14 fiscal year that reflects how the Department of Environment and Conservation is contributing to a better Tennessee. It provides a snapshot into how we invest our time, resources and priorities to achieve a variety of benefits for all Tennesseans, including a cleaner environment, healthier lives and a stronger economy.

The Department of Environment and Conservation took specific steps as outlined in this report to deliver on Governor Haslam's vision for Tennessee being the best run state government in the nation. We began by advancing the Governor's belief that environmental protection and economic growth are not mutually exclusive; it's a false choice to say Tennessee can either grow its economy or protect its environment. It's not one or the other – it's both.

With Gov. Haslam's emphasis on Customer-Focused Government, TDEC is using the customer's perspective to create a more customer-friendly, efficient agency. By streamlining processes and systems, increasing online capabilities, exploring innovative solutions, flattening management, reallocating resources to produce better outcomes and promot-ing a culture of accountability, we improved TDEC's efficiency, effectiveness and customer service.

TDEC leaders and Rep. Ryan Williams recognize Stormwater Qualifying Local Programs in Knoxville.

While our strategies, goals and tactics aim to be agile and innovative, the department remains true to "who we are" and our mission. TDEC 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; and**
- **Providing a variety of quality outdoor recreational experiences.**

With our mission at the forefront, TDEC is a leader in the collaborative collective effort to make Tennessee a national model of environmental stewardship and a better place to live, work and play. Our department remains committed to protecting the environment through outreach and education to help stakeholders achieve compliance and improved partnerships with local communities to stay engaged and ahead of important issues.

I'm proud to work alongside TDEC's dedicated professionals and staff who contribute to the healthy, vibrant environment and quality of life that we enjoy in Tennessee. As you read through this report, look around your community or travel across our state, I trust you will see real evidence of meaningful progress TDEC is producing for current and future generations of Tennesseans.

Bob

Bob Martineau, Commissioner
Tennessee Department of Environment & Conservation

TDEC is comprised of the following offices, bureaus, programs, boards, commissions and councils:

Department Wide Offices:

- Commissioner's Office
- Fiscal Services
- Human Resources
- Information Systems
- Office of Energy Programs
- Office of External Affairs
- Office of General Counsel
- Office of Policy and Planning
- Office of Sustainable Practices
- Office of Talent Management

Bureau of Environment:

- Air Pollution Control
- Department of Energy Oversight
- Geology
- Radiological Health
- Remediation
- Solid/Hazardous Waste Management
- Underground Storage Tanks
- Water Resources
- West Tennessee River Basin Authority

Bureau of Conservation:

- Archaeology
- Natural Areas Program
- Recreation Educational Services
- Tennessee State Parks

Gov. Haslam is joined by Natural Areas' Stephanie Whitaker and Andrea Bishop to celebrate addition to Virgin Falls SNA

Rep. Jimmy Eldridge joins TN Healthy Watershed Initiative partners to mark flood plain improvements along Sandy Creek in Jackson.

Shelby County Mayor Mark Luttrell and TDEC staff celebrate wetlands enhancements at Shelby Farms.

Boards, Commissions and Councils:

- Air Pollution Control Board
- Commissioner's Council on Greenways and Trails
- Compliance Advisory Panel
- Great Smoky Mountains Park Commission
- Ground Water Management Board
- Heritage Conservation Trust Fund Board
- State Review Board
- Tennessee Archaeological Advisory Council
- Tennessee Board of Water Quality, Oil and Gas
- Tennessee Historical Commission
- Underground Storage Tank and Solid Waste Disposal Board
- Water and Wastewater Operators Certification Board

Whether in the Central Office in downtown Nashville, in one of our eight field offices across the state, our DOE Oversight office at Oak Ridge or in one of our 55 state parks, TDEC staff perform a variety of daily activities to protect our natural resources and improve our quality of life.

RESPOND TO CITIZEN CONCERNS

TDEC counts on citizens to help locate problems and identify issues related to their local environment. Citizens can reach TDEC by calling 1-888-891-TDEC (8332) or by emailing ask.tdec@tn.gov. In FY 2013-2014, TDEC responded to more than 8700 calls from our hotline and 1231 e-mails from ask.tdec.

MONITOR AIR, LAND AND WATER

TDEC scientists measure parameters in air, water and soil to assess Tennessee's environmental health. The information collected enables TDEC and other stakeholders to set priorities and address opportunities for environmental improvements in a timely manner.

Division of Air Pollution Control's Brandi Stimson examines air monitors.

ISSUE PERMITS

Environmental permits help TDEC ensure that entities comply with state and federal laws, while protecting the environment and public. TDEC issues more than 50 different permits. Permits are an environmental blueprint, describing how permitted entities minimize pollution.

INSPECT FACILITIES

To help ensure that entities comply with their permits, TDEC conducts announced and unannounced inspections of underground storage tanks, x-ray machines, water and wastewater treatment facilities, construction sites, industries emitting air pollution, landfills and other regulated sites. If inspectors identify a potential violation, TDEC works to bring the facility into compliance through education, technical assistance or corrective action.

TAKE ENFORCEMENT ACTIONS

Along with education and technical assistance, enforcement is a vital part of ensuring individuals and entities comply with environmental regulations. Enforcement helps return violators to compliance, prevent misconduct, eliminate environmental harm and preserve a level playing field for those that abide by the law.

TDEC Timeline 2011

January

Gov. Haslam appoints Bob Martineau to be 7th Commissioner of TDEC.

March

Brock Hill named Deputy Commissioner for Parks and Conservation.

April

Tennessee receives more than $26 million to administer Clean Air Act projects as the result of an agreement between TVA, EPA, and four states.

Shari Meghreblian named Deputy Commissioner for Environment.

CONSERVE CULTURAL, NATURAL AND HISTORIC PLACES

TDEC's Bureau of Conservation manages approximately 200,000 acres in 55 Tennessee State Parks and 85 State Natural Areas. From archaeologically significant locations to historic places, TDEC protects and interprets a rich tapestry of authentic Tennessee stories and sites.

PROVIDE RECREATION ACTIVITIES

TDEC offers diverse outdoor recreational experiences across our state parks. More than 200 trails provide almost 1,200 miles of hik-ing, biking and horseback riding opportunities. TDEC actively sup-ports and enhances local community parks, greenways and trails through extensive grant programs and consultative services.

Visitors from across the nation come to view bald eagles at Reelfoot Lake.

ATTRACT TOURISTS AND VISITORS

As prime tourist attractions, TDEC draws citizens from nearby and visitors from across the nation to our parks. Overnight guests enjoy a range of accommodations from environmentally-friendly cabins and renovated campgrounds to lakeside inns and restaurants at our resort parks. Park rangers and hospitality services staff work to ensure each guest receives an exceptional recreational, dining and overnight experience.

ENGAGE CITIZENS IN ENVIRONMENTAL DECISIONS

TDEC engages individuals and organizations interested in envi-ronmental policy and procedures in the agency's decision-making process. Through public hearings, meetings and other types of public information sessions, the public provides input on proposed actions that TDEC takes to protect the environment.

Deputy Commissioner Brock Hill presents a Recreation Trail Program grant to McNairy County and City of Selmer.

ADMINISTER GRANT PROGRAMS

TDEC helps local governments by giving out millions of dollars in grants each year to support projects that protect the environment and conserve resources. In FY 2013-2014, TDEC grants provided approxi-mately $24 million to more than 170 entities.

May

TDEC celebrates the 40th anniversary of Tennessee's Natural Areas Preservation Act.

July

Gov. Haslam opens a New Visitor Center at Tims Ford State Park.

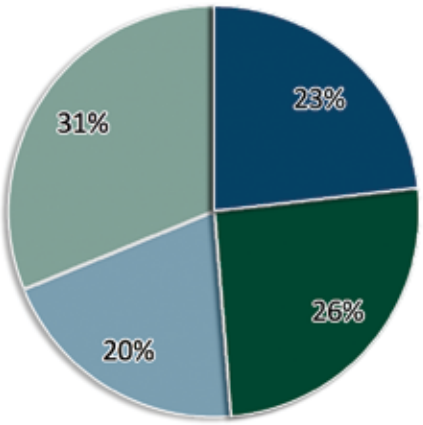
August

The Tennessee Coneflower is delisted from the federal Endangered Species List.

October

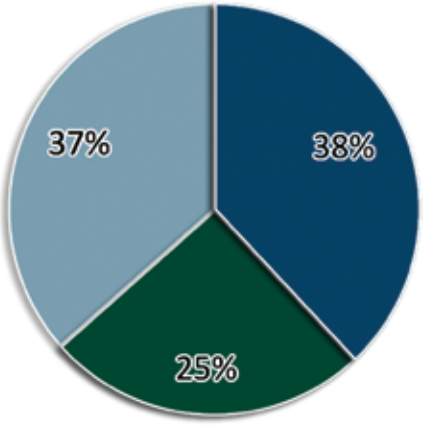
TDEC's State Employee Recycling Program inducted into EPA's WasteWise Hall of Fame.

Revenues



- General Fund State Appropriations **$89,638,000**
- Dedicated State Appropriations **$98,569,000**
- Federal Revenue **$77,624,000**
- Operational Revenue **$120,514,000**

Expenses



- Personnel Expenses **$146,997,000**
- Grants **$98,119,000**
- Operational Expenses **$141,230,000**

In FY 2013-2014, TDEC's state appropriation was approximately $188 million. The State Parks operations and maintenance budget makes up 55 percent of the department's total general fund state appropriations. Another 8 percent is required to match the federal Clean Water and Drinking Water State Revolving Fund grants, another 20 percent is required to meet our statutory Environmental Protection Fund requirements and another 6 percent is for commissions and authorities that are administratively attached to our department (Tennessee Historical Commission, West Tennessee River Basin Authority, etc.). The remaining 11 percent of our general fund state dollars are appropriated for programs such as Recreation Education Services, Archaeology, Geology, Hazardous Waste Remedial Action Fund, Office of Sustainable Practices and overall administration of the department.

Almost a third of TDEC's revenue is money generated by TDEC programs. These operational revenues include permit-ting fees, professional licenses, enforcement penalties, cabin and inn rentals, restaurant and gift shop income, etc. Several of the categories within State Parks saw revenue increases over the prior fiscal year, including a 15 percent increase in gift shop and cabin revenues, and a significant increase in campgrounds revenue.

Since 2011, federal government appropriations to TDEC declined by more than $25 million. Over the last four years, TDEC reduced state appropriations in our base budget by $20 million and eliminated close to 500 positions. Despite these reductions, TDEC issued over 98 percent of permits within the regulatory timelines, completed 107.2 percent of required facility inspections within regulatory timelines, and more than 90 percent of TDEC customers who responded to our customer service surveys were satisfied or extremely satisfied with TDEC's customer service this fiscal year.

2012

February

Reelfoot Lake celebrates its 200th Anniversary.

TDEC's Top to Bottom Report published; sets roadmap for organizational and programmatic development.

May

New Visitor Center opens at Johnsonville State Historic Park.

Cummins Falls becomes the 54th Tennessee State Park.

June

TDEC's Office of Sustainable Practices is established.

July

TDEC's Office of External Affairs is established.

TDEC partners with the West TN River Basin Authority, Nature Conservancy, TVA and Department of Agriculture to launch the TN Healthy Watershed Initiative.

TDEC's Bureau of Environment serves Tennesseans by safeguarding their health and safety from environmental hazards and protecting and improving the quality of Tennessee's land, air and water. TDEC is the chief environmental and natural resource regulatory agency, having delegated responsibility from the U.S. EPA to regulate:

- air pollution
- solid and hazardous waste
- radiological health
- underground storage tanks
- water pollution, water supply & groundwater
- remediation of contaminated sites

The environmental staff works out of the Nashville Central Office, an Oak Ridge office and in eight field offices across the state. We promote both front-end environmental education and strong, effective enforcement.

Bureau of Environment by the Numbers*

15 Number of outreach events hosted by the Toxics Substances Program, reaching more than 248,750 people at an average cost of $0.02/person.
17 Number of sites at which remediation was completed.
45 Number of Mobile Household Hazardous Waste events, directly assisting 6,224 households to remove 344,321 pounds of toxic substances at no cost to the individuals.
60 Number of Memphis police officers trained by TDEC's Office of General Counsel on investigating environmental crimes.
97.5% Percentage of cleanup cases completed by the Division of Underground Storage Tanks, putting them in the top three states for completing such clean ups.
110.2% Percentage of inspections completed across BOE as committed to per regulatory grants.
4,700 Number of oil and gas well records, geothermal test reports, rock core data, depth to bedrock maps, and geologic maps that the Tennessee Geological Survey contributed to the National Geothermal Data System Project.
11,988 Number of permit applications received.
$300,000 Amount of recycling rebates awarded to the counties that generate the most waste.
$84,913,000 Amount of funds provided in low-interest loans to cities, counties, utility districts, and water/wastewater authorities for the planning, design, and construction of water and wastewater facilities.

*Unless otherwise noted, all numbers are for the 2013-2014 fiscal year

September

Pickett State Park unveils "Iron Mike," a CCC Legacy statue, to honor the 70,000 Tennesseans that served in the CCC from 1933 to 1942

October

TDEC announces five pilot programs for the Stormwater Qualifying Local Program (QLP).

Gov. Haslam announces Rocky Fork acquisition is complete and plans for Rocky Fork to become a State Park.

December

Jimmy Smith, Division of Water Resources, receives the David Draughon Excellence Award.

Bureau of Environment in Action:
Building Stronger Communities through a Better Environment

New Digs for Dugouts

TDEC's Divisions of Remediation, Solid Waste Management and Archaeology worked cooperatively with Metro Nashville, Gobble Hays Partners, EnSafe and Warren & Associates to provide technical guidance and regulatory oversight in the development of the new Nashville Sounds AAA ballpark.

TDEC staff from Remediation and Solid Waste Management reviewed environmental data and assisted with the development of a Soil Management Plan to safely and appropriately handle contaminated soil at the site, including disposal under a Special Waste Permit. During excavation, TDEC staff visited the site to observe the progress of the excavation and compliance with the Soil Management Plan.

The Archaeology Division became involved when the construction exposed a late prehistoric Native American industrial area. Dating back to roughly AD 1250, the site was dedicated to the production and distribution of salt. TDEC archaeologists found numerous fragments of large ceramic pans that were manufactured at the site to extract salt from evaporated water.

TDEC's collaboration internally and externally helped protect the past while providing a path for the future.

Leveraging Technology, Leading the Nation

The Division of Underground Storage Tanks (UST) is a national leader in fuel release cleanup. Since UST's inception, 14,738 fuel releases have been reported to EPA. To date, 97.5 percent of the release response projects are complete.

When a fuel release occurs, mechanical remediation systems remove the fuel from the environment. By purchasing and taking ownership of 206 remediation systems instead of renting them like most other states do, Tennessee reuses this equipment at multiple sites after refurbishment. This practice saves about 15 percent from the consultant mark-up on the system purchase and provides the Division with a volume discount. This process saved approximately $14 million to the UST Fund in the last five years.

By leveraging the use of the remediation systems, TDEC's clean up percentage is the 3rd highest in the nation and 1st among peer states in the region.

Making an Impact

When an Oak Ridge based radioactive waste processing facility, IMPACT Services, Inc., declared bankruptcy in May 2012, they abandoned over one million pounds of materials containing low-level radioactive wastes in approximately 1,200 containers. Executing on the $1,223,460 financial assurance instrument required as part of IMPACT Services' licensing with TDEC Radiological Health and their contractor, Scientific Applications International Corporation (SAIC), removed 1,812,400 pounds of waste and equipment that was returned to the original waste generators. The financial assurance covered the cleanup cost and no taxpayer dollars were used. If the financial assurance mechanism had not been in place, the waste could have been left on site and the packaging would have deteriorated, causing environmental contamination and possible radiation exposure to citizens.

2013

January

Gov. Haslam transfers State Energy Office from Department of Economic and Community Development to TDEC.

March

Online State Park campsite reservation systems launches.

April

TDEC's Mobile Household Hazardous Waste (HHW) collection program celebrates 20 years serving 300,000 households and disposing of 20 million pounds of material.

Inaugural Bicycle Ride Across Tennessee's (BRAT) Spring Ride starts.

Leading by Example
Energy Efficient Government Buildings

TDEC's Offices of Policy and Planning, Sustainable Practices and Energy Programs collected energy usage and cost data from approximately 66 percent of the State of Tennessee real estate portfolio. This inventory serves as the first step in assessing how state buildings consume energy and how this energy consumption impacts both the environment and the state budget. Initial information indicates that state government facilities spend approximately $150 million annually on energy. Using this data, decisions can be made about improving government building energy efficiency. Energy efficiency leadership at the state level will lessen financial and environmental impacts from state government operations while providing an effective foundation for encouraging Tennessee citizens, businesses, and communities to do the same, enhancing Tennessee as an attractive state for private industry and residents to live, work and play.

Gov. Haslam and Rep. Ron Travis present Pikeville Mayor Phil Cagle with $250,000 Clean TN Energy Grant

TDEC supports energy efficiency initiatives for government buildings through the Office of Sustainable Practice's Clean Tennessee Energy Grants. A TVA Clean Air settlement funds a five-year grant program to support renewable energy, energy conservation, and air quality improvement projects for local and state government. In addition to improving air quality, these projects support sustainable housing options and locally sourced power, while providing new community development opportunities. In FY13/14, nineteen projects were awarded a total of $2,263,709. Projected annual savings include reduced annual kilowatt hour (kWh) consumption by more than 10.5 million kWh, equating to approximately 16.9 million pounds less of greenhouse gas emissions (carbon dioxide, nitrous oxide, methane), tons of other pollutants reduced and more than $600,000 in cost savings.

Protecting the Environment . . . and Your Wallet

The Tennessee Water and Wastewater Energy Efficiency Partnership helps reduce Tennessee's water and wastewater utilities' energy costs and pollution to benefit both the environment and Tennessee ratepayers. Founded in 2011, TDEC convened EPA Region 4, the Tennessee Valley Authority, the University of Memphis, the University of Tennessee's Municipal Technical Advisory Service, the Environmental Finance Center (University of North Carolina) and Schneider Electric to provide utilities with energy efficiency tools, expertise and support.

Seven utilities participated in workshops and conducted energy assessments to determine how best to reduce energy use at their respective plants. The utilities made operational improvements such as adding solar panel arrays and adjusting collection and disinfection processes to realize energy savings. As of the beginning of 2014, total documented savings for the participating utilities were more than 5 million kWh per year and $400,000 annually in energy costs, with more than 4,800 tons of carbon dioxide already reduced. The second round of this initiative is currently underway and other states in the Southeast are looking to replicate Tennessee's program.

May

Office of Energy Programs launches the TN Energy Education Initiative and new website at tnenergy.org.

TDEC and local officials lift the 13-year water contact advisory on Little Fiery Gizzard Creek in Tracy City.

Bear Trace at Harrison Bay wins Golf Digest's Green Star Award.

June

New Interpretive Center opens at Sycamore Shoals State Historic Park in Elizabethton.

Employees from across the department use the Lean approach to examine work processes from customer perspectives, eliminate unnecessary steps, improve outcomes and enhance the overall service experience.

Lean Initiatives: TDEC leads the state in using the Lean process improvement method to identify value to customers, eliminate waste and reduce steps in department processes. Since 2011, TDEC has undertaken 49 Lean events for permitting, grants and state park activities.

A Lean event for Air Pollution Control targeted administrative chang-es to Title V permits, like changes in contact name or phone number. These changes received a lower priority and resulted in a backlog of 47 applications that had not been processed within the targeted 60-day timeframe. Using Lean, the team focused on streamlining the process and making better use of electronic instead of paper records. Seven months later, the backlog was reduced from 47 to six applications and all 25 new amendments received within that seven months were processed within the 60-day target.

TDEC also used a Lean event to determine why it took 45 days to process an application and issue an asbestos remediation certification. A Lean team redesigned the process to provide a more timely application review and issuance of the certifications. Seven months later, TDEC averaged application processing and certificate issuance within 15 days.

Tennessee Healthy Watershed Initiative: The Tennessee Healthy Watershed Initiative (THWI) is a collaboration of federal, state and nonprofit organizations that are coordinating watershed protection and improvement efforts. THWI was launched in August 2011 under a Memorandum of Understanding executed by the Tennessee Department of Environment and Conservation, Tennessee Valley Authority, the Tennessee Chapter of The Nature Conservancy and West Tennessee River Basin Authority. Since November 2012, THWI has awarded approximately $1,391,400 for 16 watershed improvement and protection projects spread across the state.

One of the initial THWI projects established an education, demonstration and research site at the James E. Ward Agriculture Center in Lebanon, Tennessee. The project improves water quality at the site by implementing innovative green infrastructure Best Management Practices. In 2013, this project received an award for innovation and excellence in the stormwater category from the Greater Nashville Regional Council.

2013 continued

July

TDEC Central Office employees move to the Tennessee Tower from the L&C Building, resulting in close to a $1 million in annual savings to TDEC's budget.

August

TDEC kicks off Workplace Wellness for Gov. Haslam's *Healthier Tennessee* initiative.

September

Commissioner Martineau elected Vice President for the Environmental Council of the States.

TDEC's Office of Talent Management established to focus on employee professional development and succession planning.

October

TDEC, TN Department of Agriculture and Metro Water hosts first Urban Runoff 5K in downtown Nashville.

The Bureau of Conservation oversees and manages 55 Tennessee State Parks and 85 State Natural Areas encompassing approximately 200,000 acres. A focus on preservation of natural, scenic, historic and cultural assets is balanced with a wide range of guest services that include rustic to resort type facilities and accompanying recreational amenities. These include 366 cabins, 36 campgrounds, six inns, eight restaurants, four marinas, nine golf courses and 200 hiking/biking/horse riding trails encompassing over 1,200 miles. State Parks counted more than 35 million visits this fiscal year.

Rep. Cameron Sexton and TN State Park leaders celebrate campground upgrades at Cumberland Mountain State Park in Crossville.

Members of the General Assembly visit the McAdow Cabin during their tour of Montgomery Bell State Park.

The Bureau of Conservation includes the Division of Archaeology. Many state lands, including State Parks, contain archaeological resources. Proper and legal preservation technique, responsible scientific research and conservation through interpretation and education are critical components of this division's work.

The Bureau of Conservation also provides technical support and assistance to local governments for local parks and recreation planning and grant programs through the Division of Recreation Education Services. Working with just over 80 percent of local governments in Tennessee, parks and recreation grants totaled over $8 million in 2013.

Gov. Haslam and state legislators present a $101,000 Local Park and Recreation Fund grant to the City of Lawrenceburg and Mayor Keith Durham.

November

State Parks' Legislative Tour introduces legislators to four state parks.

December

Gov. Haslam celebrates the state's acquisition of Virgin Falls State Natural Area.

Ed King, Solid & Hazardous Waste Management, receives the David Draughon Excellence Award.

Bureau of Conservation By the Numbers

36 Active volunteer Friends Groups supporting state parks
55 State Parks as of July 2014
48 Junior ranger camps hosted by State Park's Division of Interpretative Programs and Education
75 Pounds that State Parks Mascot, Ramble the Raccoon, lost to celebrate state parks 75th anniversary in 2013
85 State Natural Areas as of July 2014
180 Species of birds that can be seen at Seven Islands State Birding Park
300 Species of plants and wildflowers at May Prairie State Natural Area
14,437 Acres added to state parks or natural areas from 2011-2014
$30,000 Annual reduction in expenses by implementing electric mowers at Harrison Bay State Park
$1.9 million Recreation Trail Program (RTP) grant funding provided
$3.5 million Estimated funding leveraged for land acquisition and development and/or renovation that is dedicated to public recreation
$8 million Total local parks and recreation grants for Tennessee communities
35,000,000 Visits to Tennessee State Parks in FY2013-2014

Bureau of Conservation in Action:
Stronger Communities through Conservation and Recreation

TDEC Adds More Than 1,500 Acres to State Lands

Since 2011, more than 14,347 acres of additional lands have been conserved by TDEC, with more than 1,500 acres at six park sites in nine counties being conserved in FY2013-2014. TDEC, with the support of the Land Trust of Tennessee, secured two notable segments of the Justin P. Wilson Cumberland Trail State Park – Soak Creek and the Wilson Tract. In partnership with the General Assembly, two new natural areas, Window Cliffs in Putnam County and Lost Creek in White County, were established to protect endangered species and enhance accessibility to panoramic vistas, caves, limestone arches and waterfalls. Additionally, Virgin Falls State Natural Area was brought into public ownership.

In September 2013, Gov. Haslam announced Seven Islands State Birding Park in eastern Knox County will become the next Tennessee State Park.

On July 1, 2014, Seven Islands State Birding Park opened as Tennessee's newest state park. The first state birding park of its kind, State Parks will manage this site as a wildlife sanctuary, an educational facility for schools and other groups, a demonstration area for land use and habitat management techniques and a recreation area for hiking, canoeing and kayaking. More than 180 species of birds have been identified for viewing by park visitors.

2014

February
Bear Trace at Harrison Bay wins National Public and Overall Winner of the Environmental Leaders in Golf Award.

March
TDEC begins development of the 2015-2025 Statewide Comprehensive Integrated Solid Waste Management Plan.

April
Josh Walsh of Montgomery Bell State Park named TPRA Ranger of the Year.

June
TDEC provides a $575,000 grant to the City of Bristol to support an Energy Efficency Assistance Program for area homeowners.

ZIP Stream Aerial Adventure opens at Fall Creek Falls State Park.

Seeing Green, Going Green

This fiscal year saw an increase in State Parks' revenue as well as an increased commitment to sustainability. State Parks revenue went from approximately $34 million in FY2012-2013 to approximately $36.5 million in FY2013-2014, reflecting around a 7 percent revenue increase. One contributor to the revenue increase was expanding online reservations for campgrounds and cabins, so that citizens can more easily access places to stay. This online system helped State Parks generate over $1 million in new revenue.

To realize energy efficiencies and cost savings, State Parks partnered with the Office of Sustainable Practices to replace gasoline powered golf carts with electric golf carts at Fall Creek Falls State Park and Montgomery Bell State Park. Additionally electric mowers replaced gasoline powered mowers at Harrison Bay and Seven Islands State Parks. These changes will result in reduced operational expenses and reduced emissions, ensuring that these treasures of the state parks system will be enjoyed for years to come.

Electric golf course equipment helped the Bear Trace at Harrison Bay State Park receive Golf Digest's 2013 Green Star Award and be named the National Public and Overall Winner of the 2013 Environmental Leaders in Golf Award.

The environmental improvements at State Parks received national recognition this year. The Bear Trace at Harrison Bay State Park won Golf Digest's Green Star Award in November 2013, the first time a public golf course received the honor. The award recognizes golf facilities that demonstrate the best in sustainable, efficient and innovative environmental practices that every golf facility could emulate. The practices used at The Bear Trace include the following: use of electric mowers that resulted in 175 days of emission-free operations and saved 9,000 gallons of fuel preventing over 180,000 pounds of carbon emissions; nesting houses attract a variety of birds; more than 200 native plants have been introduced; vegetation buffers filter any runoff from reaching the local lake. Additionally, 50 acres of previously mowed land were returned to a native state, saving 7.39 million gallons of water a year annually.

Expanding Opportunities for Resource-Based Economic Development

While conserving Tennessee's cultural and natural resources, State Parks are drivers of tourism and economic development in local communities. Several business partnerships developed during this fiscal year are attracting tourists and providing financial benefits to local economies in new ways.

TENNESSEE
State Parks

TDEC Commissioner Martineau, Rep. Tim Wirgau, Henry County Mayor Brent Greer and Agriculture Commissioner Julius Johnson celebrate the "Farm to Table" pilot program at Paris Landing State Park.

ZIPStream Fall Creek Falls provides a self-guided adventure with 70+ aerial obstacles including ladders, wobbly bridges, rope swings, cargo nets, balance beams and zip lines at Fall Creek Falls State Park. Participants spend 2.5 hours experiencing the park at various altitudes up to 40 feet. Participants of all ages and abilities can participate in the vari-ety of elements that vary from beginner to extreme.

In an effort to be both environmentally sustainable and economically supportive, State Parks is procuring locally-grown foods for park restaurants. Staff from the Tennessee Department of Agriculture and State Parks located and visited farmers around Paris Landing State Park who could supply the restaurant. Visitors can choose the locally grown products on the Paris Landing menu, an option State Parks looks to expand to its other restaurants.

With a farmers market, community garden and a garden to table program, Henry Horton State Park provides a service to the community and an economic outlet for local farmers. Vendors at the farmers market sell a variety of locally grown and produced vegetables, fruits, herbs, flowers, jams and honey, as well as produce from Henry Horton State Park's own garden to table garden. The produce grown on park grounds is sold through the Friends of Henry Horton and the funds support the park's garden operations. Unsold produce is transferred to the Governors Table Restaurant inside Henry Horton State Park to give restaurant patrons more fresh and healthy options.

What's Ahead for TDEC and Tennessee

Here in Tennessee, we are blessed with abundant water resources, a multitude of outdoor recreation opportunities and high quality parks from local greenways to our 55 State Parks and the Great Smoky Mountains. Combine this rich natural heritage with our robust economic climate and workforce capacity, and it is no wonder Tennessee continues to attract new residents and companies. With more than 6.5 million citizens, the Volunteer State has grown nearly 15 percent since 2000, and all indicators point to continued growth.

As Tennessee and our communities prepare to prosper in the global economy, technology-driven, innovation-dependent 21st century marketplace, we are also keenly aware of the stewardship responsibility we have for the natural resources, scenic vistas, outdoor recreational opportunities and green spaces that make our state such a special place.

For more than 40 years, our state and nation have developed plans and programs that addressed targeted point sources, like smokestacks and outfalls, to reduce pollution impacts on our air, land and water. Overall, government and industry have been largely successful in controlling pollution coming from those point source locations, but environmental challenges emerging today are more diffuse than one source, bigger than just industry, and cut across traditional boundaries.

At all levels of government, we are grappling with these issues. While TDEC will remain vigilant in our effective management of critical programs, many current and emerging environmental challenges do not fall under any single regulation. Instead, a significant portion of effective resource stewardship remains with the voluntary choices individuals, organizations and communities make each day.

This emerging reality has made us aware of the need for TDEC to expand our success forging public-private partnerships, like ones noted in this Annual Report, that promote energy efficiency and conservation, improve air quality, waste reduction and recycling, green infrastructure, and protecting water quality in our rivers and streams. We look forward to amplifying individual, corporate or community-wide strategies that eliminate waste streams, cut emissions, reduce power consumption and restore wetlands and aquatic resources to improved conditions. We salute individuals, organizations and companies that see pollution as waste and endeavor to reduce it. Almost always, this means those efforts have reduced full costs and lessened overall environmental impact.

Across Tennessee, the spirit of volunteerism is showing that innovation, determination and partnerships are producing real and lasting improvements. From community revitalization that created Founders Park in Johnson City to Knoxville's model unwanted pharmaceutical takeback program to a host of "first in the world" recognitions for Chattanooga, including the world's first Leadership in Energy and Environmental Design or LEED Platinum Certified automotive facility at Volkwagen Chattanooga, the world's first LEED Platinum Certified aviation facility at the Chattanooga Airport and the world's first LEED Platinum Certified hostel at The Crash Pad on Johnson Street, we are benefiting from many thoughtful actions that both protect the environment and meet the needs of our communities. No doubt, Tennessee is advancing from the work of many stakeholders – public and private, large and small, urban and rural.

Our department is encouraged by these accomplishments, and we look forward to working with more partners in the days ahead as we continue to protect our environment for future generations and make Tennessee an even better place to live, work, play and raise a family.

Bob

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Bill Haslam
Governor

Robert J. Martineau Jr.
Commissioner

Brock Hill
Deputy Commissioner
for Parks and Conservation

David Owenby
Assistant Commissioner
for External Affairs

Shari Meghreblian, Ph.D.
Deputy Commissioner
for Environment

Tom Eck
Assistant Commissioner
for Administrative Services

Joe Sanders
General Counsel

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Top left **- TDEC Cookeville field office staff build a rain garden at Cummins Falls State Park.** ***Top right*** **- David Crockett State Park in Lawrenceburg opens new museum.** ***Bottom left*** **- Recycling Hub Grant for Chester County expands regional recycling to promote a healthy, safe, clean environment in rural Tennessee.** ***Bottom right*** **- Water quality improvements enable TDEC to "depost" a water contact advisory for the West Prong of the Little Pigeon River in Sevierville.**