



2023 Governor's Award Winners



The Governor's Environmental Stewardship Award
for
Agriculture and Forestry

Lick Skillet Farm

New Market, Tennessee



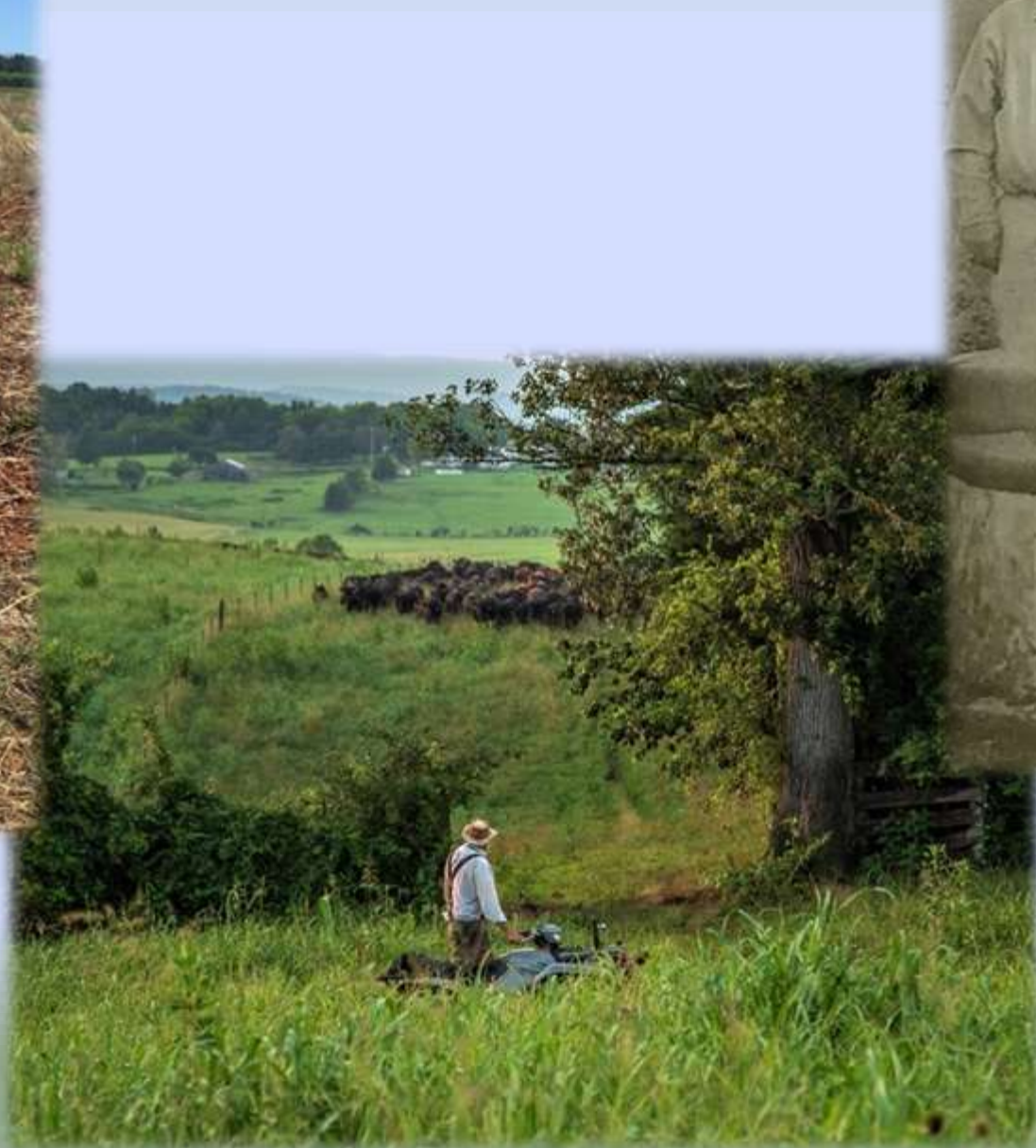


L to R: David Salyers, Commissioner of the Department of Environment and Conservation; Governor Bill Lee; Killian Snyder, Future farmer ; Shannon Miller, Owner of Lick Skillet Farm; Alex Miller, Owner of Lick Skillet Farms; Maggie Snyder, Director of Poultry Production

The Lick Skillet Farm in Jefferson County has been in operation since 1919. Early farming practices at Lick Skillet were harsh and destructive, and the farm was badly eroded right down to clay and rocks, but it was all George Miller could afford. Neighbors warned that if he tried to feed his family from that land, his hungry children would be forced to “lick the skillet.” Today, Lick Skillet Farm is a Tennessee Century Farm operating on more than 1,000 acres of highly productive farmland and provides food to hundreds of Tennessee families. That transformation has been driven by four generations of farmers committed to environmental stewardship.

The first generation focused on healing the scarred and washed-out fields. With advice from experts, they worked to help reverse the rampant erosion by placing large tracts of land in the “soil bank” to recover, managed woodlands, and planted thousands of new trees. By the 21st Century, they were instructed to create riparian buffers to protect waterways and maintain healthy wildlife ecosystems along streams. They laid out miles of cross fencing and set up a score of water tanks throughout the farm to allow rotational grazing across several dozen paddocks. In 2016, the farm added 250 acres of adjoining land that had been badly abused through outdated “industrial” agriculture practices. Intensive use of tillage combined with non-stop applications of herbicides and pesticides had devastated soil life and severely impaired air and water quality. As Lick Skillet Farm approached its centennial year, history was repeating itself. The farm undertook a major project to implement the complex bundle of environmental stewardship practices comprising regenerative agriculture. Regenerative agriculture uses a systems approach to protect air and water quality while restoring environmental health to the capacity and capabilities existing prior to 200 years of extractive agriculture.

Regenerative agriculture has allowed Lick Skillet Farm to greatly reduce its carbon footprint, and in 2022, become what is believed to be the first U.S. farm to receive carbon credits generated by planting trees as part of an integrated livestock-agroforestry plan. In 2012, Lick Skillet Farm carried 200 animal units (one animal unit equals 1,000 pounds of grazing livestock) supplemented with 750 tons of hay. A decade later, in 2022, its improved pastures are carrying 330 animal units and with only 255 tons of supplemental hay. In rough terms, by 2022, the farm’s regenerative practices have increased carrying capacity by nearly two-thirds, while reducing supplemental feed by two-thirds. Additional programs implemented at Lick Skillet Farm over the last five years are the use of intensive multi-species grazing; prescribed burning to establish native grasses and pollinators; integrated pest management using birds instead of pesticides; achievement of 100 percent grass finished cattle and sheep and 100 percent no-corn-no-soy pastured pigs and poultry; a focus on air and water quality and soil health which required adopting a 100 percent no-till policy; extensive use of annuals for cover crops to sequester more carbon; installation of two commercial-scale solar energy installations and geothermal energy; replacement of synthetic fertilize inputs with a commercial-scale composting project; installation of the community’s only solar-powered electric vehicle charging station free to the public; and education to the local K-6 elementary school which visits the farm at least once a year. Beyond all these successes, the farm is aiding in the rejuvenation of the Tennessee Grazing Lands Coalition, a producer network for growing the regenerative agriculture movement for improved economic and environmental sustainability for Tennessee farmland.













The Governor's Environmental Stewardship Award
for
Building Green

Asurion Gulch Hub

Nashville, Tennessee





The Asurion Gulch Hub is a new LEED-Gold certified headquarters for Asurion, a global technology company with over 280 million customers worldwide. The global headquarters, developed by Highwoods Properties, is designed to foster productivity, collaboration, and innovation to attract and retain talent while enhancing and engaging the neighborhood and broader community.

Asurion Headquarters, offers two new, Class-A office towers (eight and nine stories) of approximately 1,300,000 total square feet, which includes approximately 500,000 square feet for retail/office space and approximately 700,000 square feet for 1,920 parking spaces below grade. The development includes an elevated outdoor public plaza/tenant courtyard and drop-off of approximately 90,000 square feet, and two elevated, steel-framed connector walkways at the fourth and sixth floors.

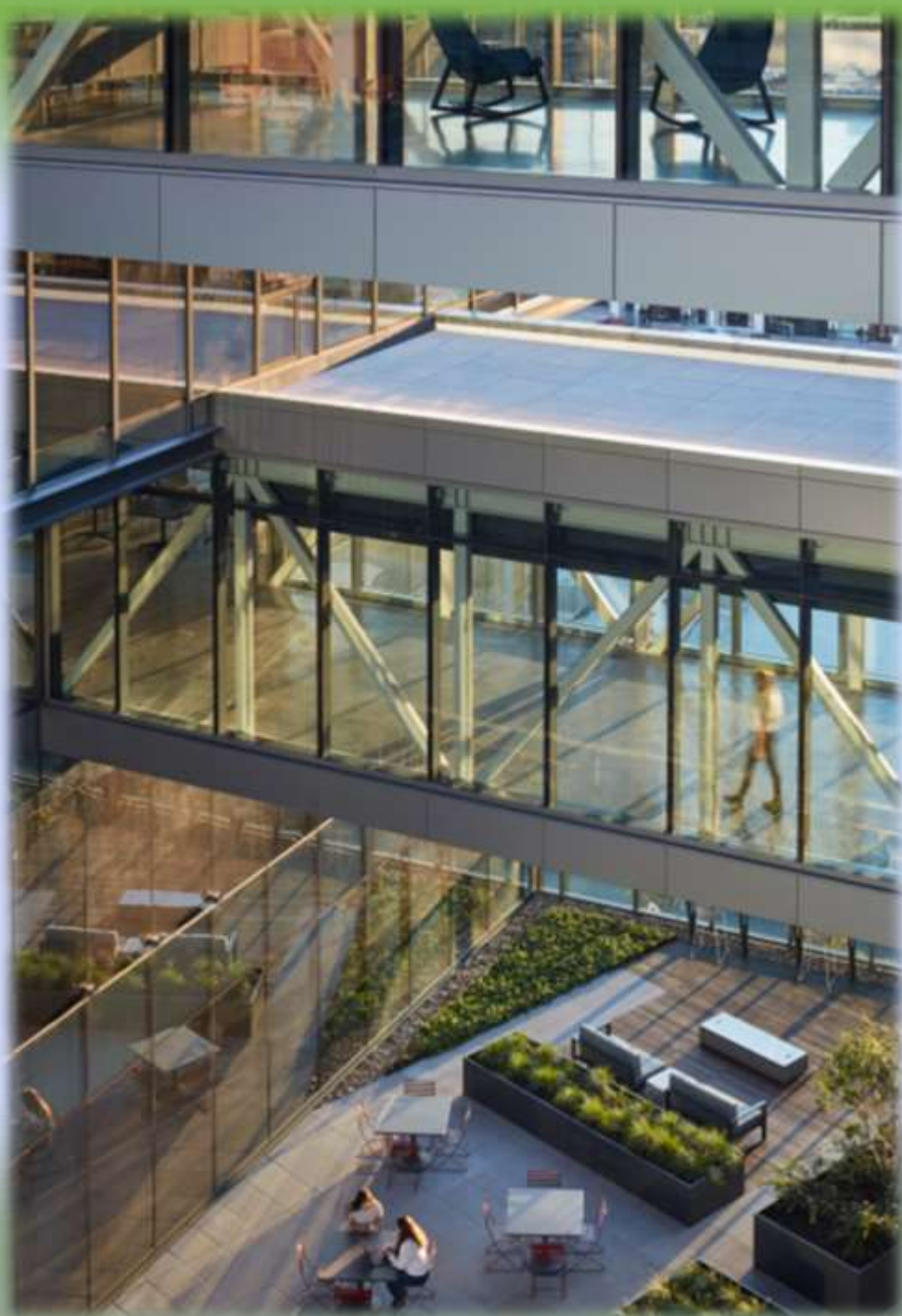
On the first floor, the Town Hall space accommodates dining, meeting, or working. At the southwest corner of the ground floor, the Pavilion brings the outdoors in with floor-to-ceiling glass, and two 20-foot-wide sections of operable window wall. The Asurion Gulch Hub supports over 2,000 employees in spaces that range from large communal gathering spaces and food halls to micro-markets, coffee bars, board and meeting rooms, game room, repair lounge, secure command center, and a fitness center. The space was prioritized and designed by key stakeholders and leaders with sustainability goals in mind, and the wellbeing and engagement of all employees. The building achieved LEED Gold certification in October 2022, achieving Gold level certification under the LEEDv4 BD+C: Core & Shell rating system and the LEEDv4 ID+C: Commercial Interiors rating system. LEED points were earned for a variety of sustainability measures which include a 31 percent reduction in potable water use, a 71 percent reduction in outdoor water use, a 19 percent energy cost savings, utilization of over 50 building products that have disclosed third-party verified life-cycle assessments, and 30 percent of the building materials were of recycled content. Building construction achieved an approximately 68.88 percent diversion from the landfill with construction and demolition waste.

Biophilic design strategies and access to over 80,000-square-feet of outdoor green space help improve the wellness of employees and guests in and outside the building. For the first time since rail lines were laid in the 19th-century, Asurion Gulch Hub unified the most exciting neighborhoods within Nashville's urban core which have historically been divided by overpasses, railroads, and industrial areas with greenway connections. The building enhances the pedestrian experience on both 11th Avenue and Church Street with a monumental stair mediating the 42-foot elevation difference between the two streets. In addition to the building itself, on Thursday, August 4, 2022, Metro Parks and Greenways of Nashville celebrated the ribbon cutting of the redesigned Gulch Greenway opening of a 1,400 feet new linear park to the public adjacent to Asurion Gulch Hub. This 1/4-mile segment of the broader Gulch Greenway integrated with Asurion's Gulch Hub exemplifies a successful public-private partnership between Metro and Highwoods Properties who funded and constructed the realignment and extension of the greenway trail.













The Governor's Environmental Stewardship Award
for
Clean Air

OxyChem

New Johnsonville, Tennessee





L to R: Taylor Forrest: OxyChem Process Supervisor; Michael Kee: OxyChem Maintenance Superintendent; David Salyers, Commissioner of the Department of Environment and Conservation; Sean Stephan: OxyChem Sustainability Director; Aaron Jones: OxyChem Sustainability Manager; Kiara Edinbyrd: OxyChem Hydrogen Business Manager; Governor Bill Lee; Ted Moore, Humphreys County Economic Development Council Executive Director; Justin Smith, Plant Manager

OxyChem in New Johnsonville is a wholly owned subsidiary of international energy company Occidental. It is among the top three producers in the United States for the chlor-alkali, chlorinated organic, and is a global leader in the production of polyvinyl chloride. OxyChem manufactures products that form the building blocks for everyday household goods and drive crucial industrial processes. The New Johnsonville facility was the first greenfield project which does not have any existing infrastructure or legacy systems. The facility uses a modern membrane brine electrolysis process to produce chlorine, caustic soda, and hydrogen.

The use of an on-site hydrogen fired boiler was identified as an opportunity to reduce externally generated steam consumption from carbon-based fuels by 415 million pounds. The targeted reduction in CO2 emissions from natural gas to clean burning hydrogen was estimated to be 35 million pounds on an annual basis. Hydrogen is a gas that is produced as a byproduct of the electrolysis process of manufacturing chlorine and caustic. Due to hydrogen's thermodynamic properties, it can also be used as an alternative clean energy source for producing steam, which is vital to plant operations. The New Johnsonville facility initiated a project to capture hydrogen vented to the atmosphere to generate steam, thereby reducing externally generated steam using carbon-based fuels. This was completed by designing, constructing, and operating a hydrogen fed, clean burning boiler to produce steam for the site resulting mitigated CO2 emissions and improved hydrogen usage efficiency.

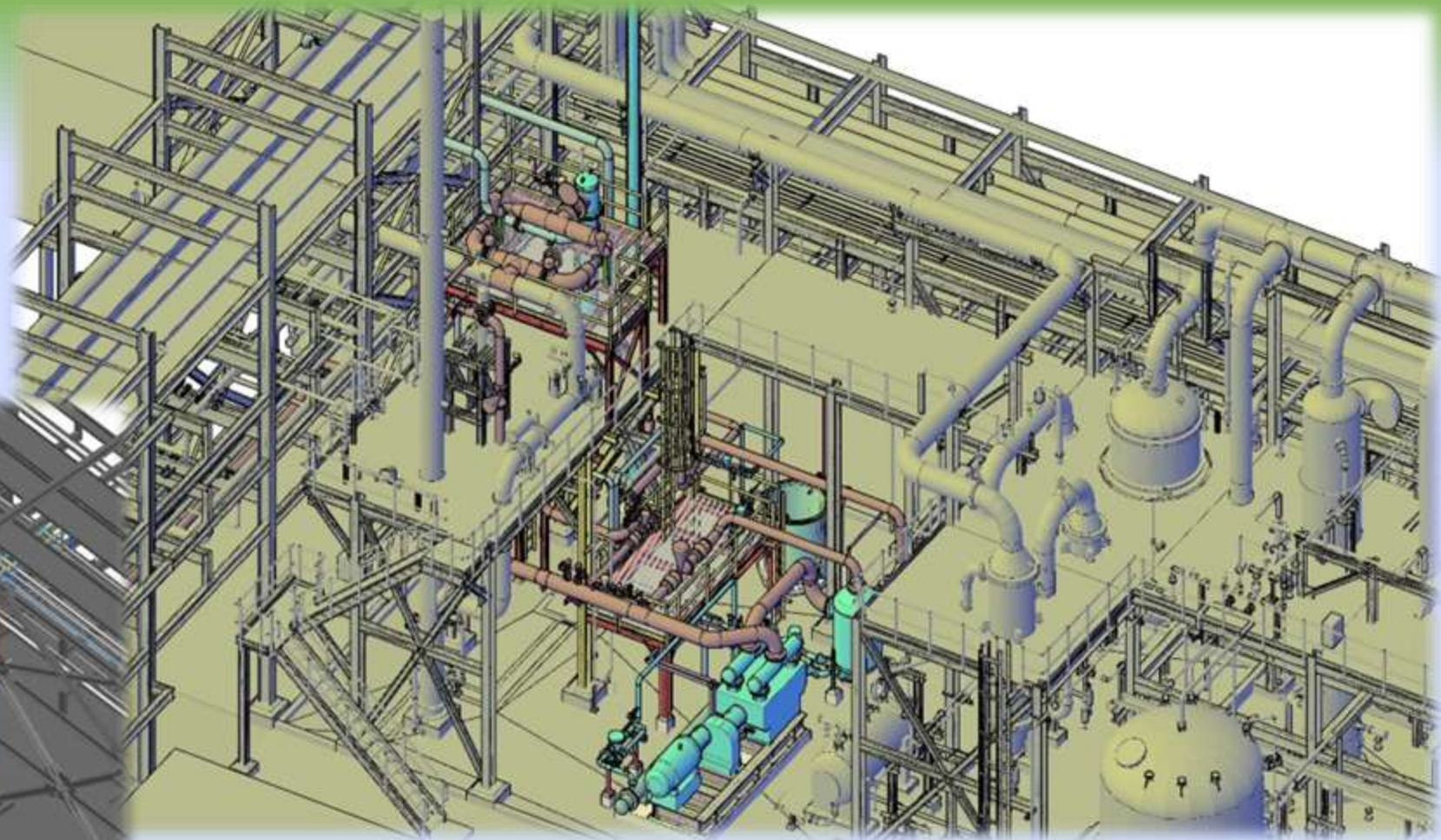
To recover hydrogen vented to the atmosphere, OxyChem invested in a multi-million-dollar project to install a high-pressure hydrogen vent stack, liquid ring hydrogen compressor, and hydrogen boiler and associated controls. The boiler design capacity was targeted to meet full production demand of 62,000 lbs/hr at 160 pounds per square inch gauge (psig) steam. The domino of improvement opportunities followed by vibration issues identified at the compressor which required improved foundation support and bearings replacement. The site persisted through reliability improvement initiatives on the hydrogen compressor through summer of 2020 by identifying the need and designing with the vendor a water-cooled bearing seal. This improved reliability of the hydrogen compressor which was required to compress the hydrogen to the required 15 psig header pressure to feed the boiler.

Since completion of the hydrogen boiler project and header control improvements, the site has averaged 88 percent self-produced steam consumption. This has mitigated a potential 28.1 million pounds of CO2 since April of 2022. Excluding freezing weather events experienced in December 2022, this would provide an annualized reduction of 53,553,584 pounds of mitigated CO2 emissions. The hydrogen recovery efficiency annualized improvement is 545,234 MMBTU which is equivalent to 37,725 tons of coal fuel.

OxyChem continually evaluates ways that it can integrate sustainability throughout the company, and this change is part of their continuous effort to improve raw material utilization (increasing its hydrogen recovery by 43.4 MMBTU), decreasing wastewater impacts (decreasing effluent chlorides by 13,281 lbs.), and decreasing its overall carbon footprint (reduction of delivered raw material by tanker truck mitigating ~109.2 tons CO2 per month.)













The Governor's Environmental Stewardship Award
for
Environmental Education and Outreach

**University of Tennessee
Institute of Agriculture**

Knoxville, Tennessee





Shawn Hawkins, Associate Professor, Biosystems Engineering and Soil Science at the University of Tennessee; David Salyers, Commissioner of the Department of Environment and Conservation; Forbes Walker, Associate Professor, Biosystems Engineering and Soil Science; Dr. Hongwei Xin, Dean of AgResearch and Director of the Tennessee Agricultural Experiment Station at The University of Tennessee Institute of Agriculture; Governor Bill Lee; Dr. Tom Tabler, Statewide Poultry Extension/Research Specialist at The University of Tennessee; Dr. Julie Carrier, Professor and Head, Biosystems Engineering and Soil Science at the University of Tennessee; Dr. Justin Rhinehart, Assistant Dean, Biosystems Engineering and Soil Science at the University of Tennessee; Dr. Dale Barnett, Executive Director, Tennessee Poultry Association

The Department of Biosystems Engineering and Soil Science at the University of Tennessee Institute of Agriculture has created a solution for poultry litter in the state. There are over 400 million broilers processed each year in Tennessee at six different processing plants. However, broiler production generates a large amount of poultry litter, for instance a 40,000-bird broiler house with six flocks per year will produce approximately 300 tons of poultry litter. In total, Tennessee's broiler production generates over 400,000 tons of poultry litter per year. Poultry litter can be used as fertilizer on farmland in the state as it contains nitrogen, phosphorus, and potassium along with several other micronutrients. One ton of poultry litter can contain 66 pounds of nitrogen, 50 pounds of phosphorus, and 40 pounds of potassium.

Application of the poultry litter back on to farm fields for plant production recycles the nutrients and is intuitively the right thing to do. However, poultry litter must be applied in a controlled fashion or else an excess application will be viewed as disposal and could result in degradation of local and distant water bodies, leading to hypoxia and eutrophication. Additionally, excessive poultry litter application to agricultural production fields could result in prosecution for illegally discharging poultry litter into the environment. The application of poultry litter on agricultural production fields can be a good thing, so the question became how much and when should it be applied?

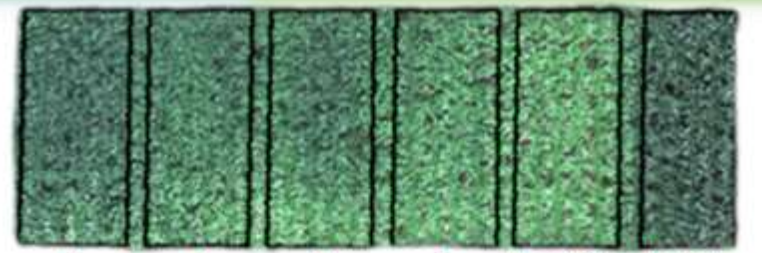
Faculty members Dr. Shawn Hawkins and Forbes Walker created the publication Litter Land Application Management (W 796) for successful poultry litter management in the state. This publication provides producers with a field-specific nutrient management system for agricultural utilization of poultry litter nutrients, as well as the required recordkeeping. The publication also contains a worksheet that enables producers to determine the amount of poultry litter that will maximize its value, while minimizing the cost of commercial fertilizer. Additionally, the worksheet enables the calculation of the correct amount of litter to apply on a field such that a producer is well below the limit that could cause a risk of illegal discharge. All this is done without affecting economic returns on crops.

Prior to making the calculations on the worksheet, producers need to assemble information from field soil tests and poultry litter nutrient analysis; gather information on field crop history and yield data over the past five years; determine field litter application records for the prior two years; and produce field images or maps that show the field area in acres. A detailed description of this information is provided in the publication. Once these values are in hand and crop yield goals are established, producers can enter the values step-by-step into the worksheet. The values that are calculated are explained in detail within the publication. The Publication W 796 is straightforward and provides guidance to the Tennessee poultry producers and other producers who are utilizing poultry litter for fertilizer to use the litter as a resource and in a safe manner. This publication has been downloaded over 35 times. This publication is proving to be invaluable to the poultry industry and its producers. The future competitiveness of U.S. agricultural production, particularly for the livestock and poultry sector, depends on improving profitability and animal welfare while reducing the environmental impact of production. Publication W 796 is a path toward improving profitability, while reducing the environmental impact of poultry production.

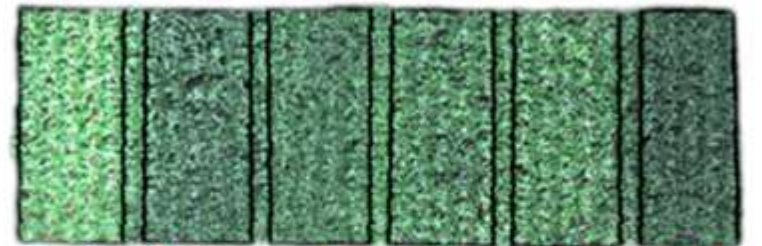




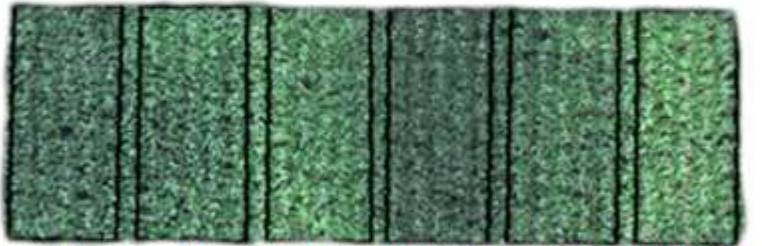




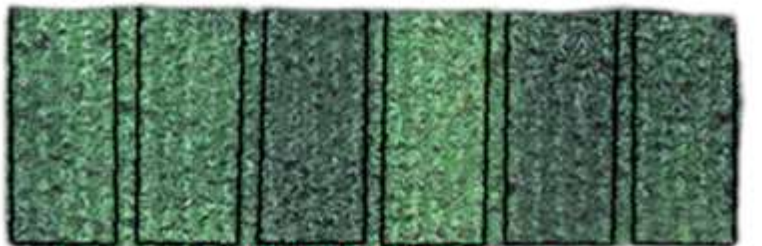
7 ton/ac 4 ton/ac 3 ton/ac 2 ton/ac Negative Control Positive Control



Negative Control Positive Control 4 ton/ac 3 ton/ac 2 ton/ac 7 ton/ac



7 ton/ac 4 ton/ac 2 ton/ac Positive Control 3 ton/ac Negative Control

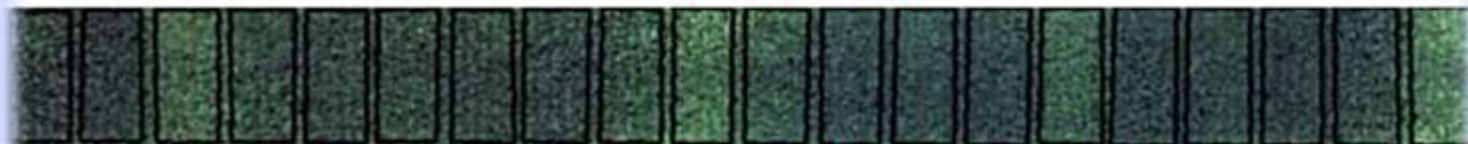


3 ton/ac 2 ton/ac Positive Control Negative Control 7 ton/ac 4 ton/ac

Litter Only Versus Conventional Fertilizers

Conventional Fertilizers (80 lb-N/ac + P & K) at Planting

+ V6 Conventional N Fertilizer



100 160 0 70 130 100 130 160 70 0 100 130 100 160 0 130 70 100 160 0
lb-N lb-N

3 ton/ac Broiler Litter at Planting

+ V6 Conventional N Fertilizer



160 70 0 100 130 0 100 130 160 70 100 130 160 70 0 70 160 100 0 130
lb-N lb-N





The Governor's Environmental Stewardship Award
for
Energy and Renewable Resources

City of Chattanooga

Chattanooga, Tennessee





L to R:

Sarah Robinson; David Salyers, Commissioner of the Department of Environment and Conservation ; Erik Schmidt, City of Chattanooga, Director of Sustainability ; Mark Heinzer, Administrator of the Moccasin Bend Environmental Campus (WWTP); Governor Bill Lee; Xavier Pedueux of Jacobs Engineering

The City of Chattanooga is one of around 40 U.S. cities that participated in the U.S. Department of Energy's Better Building Challenge. The city was named a Better Buildings Goal Achiever in 2019 and has since achieved more than a 35 percent reduction (saving 18.16 GWh) in energy use intensity from a 2015 baseline across 2 million square feet of building space, meeting the goal six years ahead of schedule. The City's Moccasin Bend Environmental Campus (MBEC), a Better Buildings Showcase Project, underwent several structural improvements beginning in 2018 to ensure long-term effective wastewater treatment for its growing population and increased resilience in times of extreme events.

The Moccasin Bend Wastewater Treatment Facility, which is the foundational facility on the Moccasin Bend Environmental Campus (MBEC), was originally built in 1961 and serves a six-county regional territory including over 400,000 residents. The wastewater treatment facility supports approximately 1,263 miles of sewer lines, seven large custom-built pumping stations, eight custom-built storm stations, 53 underground, wet well mounted, submersible pumping stations, approximately 171 residential/grinder stations, and eight combined sewer overflows. It remains the largest energy consumer (55 percent) of the city's owned and operated facilities, treating 140 million gallons per day (MGD). MBEC produces approximately 70,000 wet tons of biosolids per year, which are treated with lime and land applied as a Class B biosolid in surrounding agricultural areas.

MBEC underwent several structural improvements to include a 10-acre solar PV installation, Equalizer Blower upgrades, LED lighting retrofit, variable frequency drive control updates, and water efficiency improvements with a 24 percent reduction of water consumption and an annual savings of \$27,462 in energy costs. The water efficiency improvements included potable and plant water systems to reduce overall water use by substituting lower-grade water for certain non-potable water process uses and finding and eliminating leaks in the water system. These upgrades will reduce power use for supplying the spray water for the gravity thickeners by reducing their operating pressure and downsizing the plant water pumps.

In nine years, MBEC reduced its annual electricity use by over 30 percent. This equals a reduction in energy usage from 59.32 Gigawatt hours (GWh) in 2012 to 41.16 GWh in 2021, saving 18.16 GWh total. In five years, MBEC's water consumption decreased by 24 percent (2016 to 2021). These reductions are the direct results of the MBEC's energy efficiency improvements. These improvements culminated in energy cost savings for the campus totaling \$1.4 million per year. The City of Chattanooga has prioritized energy and water efficiency and found innovative ways to achieve both, reaching over 35 percent energy intensity savings across its 2-million-square-foot portfolio of buildings.











The Governor's Environmental Stewardship Award
for
Materials Management

Memphis Tire Recyclers, LLC.

Memphis, Tennessee





L to R: Richard Mack, Advisor/Consultant, Memphis Tire Recyclers; David Salyers, Commissioner of the Department of Environment and Conservation; David Burgess, Co-Owner and Chief Operating Officer, Memphis Tire Recyclers; Governor Bill Lee; Corteney Mack, Co-Owner and Chief Business Officer, Memphis Tire Recyclers; Adrian Lowery, Operations Supervisor, Memphis Tire Recyclers; Alle Crampton, Department of Health, Program Director

Memphis Tire Recyclers LLC (MTR) is the City of Memphis' only minority-owned standard recycling facility with a focus on collecting and recycling scrap tires and rubber waste, and producing tire-derived aggregate, tire-derived fuel, and crumb rubber.

MTR is the brainchild of Corteney Mack and David Burgess both native Memphians, which was the main reason they developed this idea. They both saw the damage and blight illegally dumped tires contributed to the Memphis area, with no entities to assist with remediation. The company has been in business for roughly a year and has had many accomplishments. They have onboarded 14 new customers; successfully cleaned up 11 illegal tire dump sites; and developed the capability to pave sidewalks, playgrounds, and trails with recycled crumb rubber.

Scrap tires pose a serious threat and impact if not properly remediated. They are the perfect breeding ground for vector-borne illnesses like West Nile Virus. The open center of a tire collects rainwater as it sits, creating small, still water pools, allowing for mosquitos to lay their eggs. Most vehicle tires contain a high fossil fuel content. They are highly flammable, and once they start burning, it isn't easy to put them out. Even a small tire pile that catches on fire can burn for months before running out of fuel.

MTR has identified ways in which they can educate citizens on how to responsibly recycle tires. It believes that a large part of the reason that tire blight is such an immense problem is simply because people are not educated about the laws and how tires can impact the environment. MTR has the following four-prong plan and approach on how to educate the community about the importance of eliminating illegal tire dumps. It disseminates information on the company website and company social media pages; does interviews with local news and media outlets; host company tours and workshops that break down recycling equipment; and is in the beginning stages of having a company podcast.

MTR has successfully collected and/or cleaned up 32,348 scrap tires and shredded 12,562 tires down to 350 tons of various aggregates. This means almost 33,000 tires have been diverted from landfill space and placed into a circular ecosystem that promotes rubber as an alternative fuel source, and green manufacturing by aiding tire manufacturers to utilize carbon black to process new tires.



Grand opening and check presentation for Memphis Tire Recyclers



PIC-COLLAGE

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PIC•COLLAGE

PIC•COLLAGE





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New Tire Recycling Service in Memphis

Located in the metropolitan Memphis, Tennessee area, Memphis Tire Recyclers LLC, is the brainchild of native Memphians Cortney Mack and David Burgess, and one of the city's few recycling facilities with a core competency of collecting and recycling scrap tires and rubber.



Eldan equipment arrives at Memphis Tire Recyclers

With no dedicated facilities in the area to assist with remediation of illegally dumped tires or manage scrap tires, Mack and Burgess saw an opportunity to provide responsible scrap tire collection and recycling services and began laying the groundwork to open a tire and rubber facility in August '21 and through rigorous work, officially opened Memphis Tire Recyclers LLC in January '22.

After researching the tire and rubber processing industry as well as end products and uses for tire derived materials, the partners set a goal of processing tires into a range of end product materials and began sourcing the equipment that would give the company the capability to produce those materials.



Granutech primary shredding line

They settled on a Saturn 62x40 Granutech primary shredder and an Eldan Kasper 122T for secondary shredding and granulation. With this equipment, the company is capable of producing 2-inch nominal chips w/ wire; 1-inch (+/- 1/4 inch) nominal chips w/o wire (90% wire free rubber); 3/4-inch (+/- 1/4 inch) nominal chips w/o wire (90% wire free rubber); crumb rubber; Steel bead and tread wire pieces.

"This combination of equipment has been very effective in helping us meet our market goals to convert scrap tires and other rubber scrap into marketable tire derived aggregate, tire derived fuel and crumb rubber and other end-use materials," Cortney Mack said.

In March '22, they collected their first scrap tire from a customer and since have become the official scrap tire recycler for fourteen large and mid-size entities in the Memphis area including Steepleton Tires, Memphis Airport Authority, Roland Tires, and Southwest Community College. In their first year of operation, Memphis Tire Recyclers successfully cleaned up eleven illegal dumpsites in and around the city.

As of January '23, Memphis Tire Recyclers LLC has successfully collected and/or cleaned up 32,348 scrap tires from a collection area that spans all of Shelby County as well as surrounding cities/states including West Memphis, AR, Corinth, MS, Osceola, AR, Jackson, TN. Of the tires collected 12,562 tires were shredded and processed into 350 tons of various aggregates for use in end-product applications. ♦

Scrap Tire NEWS

Vol. 37 No. 3 Covering News & Developments in Tire and Rubber Recycling March 2023



Liberty's SmartMix and other new technologies are making rubberized asphalt a growing pavement choice among facility owners and contractors for large parking lots, storage areas and driveways around commercial buildings.

alendar

Ship, Truip County, GA
info@libertyttr.com
 TIEDT, GHG, Emission Calculation
info@boundlessimpact.net

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 (30) 743144
 Issues - Complex, Challenges,

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Memphis Tire Recyclers is a full-service tire recycling center that offers tire & rubber collection & remediation, Delivery, drop off, container & trailer services.

2" nominal Tire Derived Fuel w/wire available
 Tire Derived Aggregate Chips w/wire available
 3/4 - 1 inch nominal chips without wire
 Crumb Rubber • Steel bead and tread wire

Contact:
 (Office) 901-463-2960
 Cortney Mack
 (Cell) 901-656-9286
 David Burgess
 (Cell) 901-648-8009

Email: mtr@memphistires.org
 Web: www.memphistires.org



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The Governor's Environmental Stewardship Award
for
Natural Resource

T.O. Fuller State Park
Tires to Trails

Memphis, Tennessee





L to R: Brittany Morris, TDOT, Highway Beautification Office, Outreach Coordinator; Ronne Adkins, Director of Division of Stakeholder Engagement • Department of Environment and Conservation; Anne Marshall, Senior Advisor Deputy Commissioner's Office • Department of Environment and Conservation; David Salyers, Commissioner of the Department of Environment and Conservation; Governor Bill Lee; Michael Meister, Trails & Vistas Administrator • Tennessee State Parks; Corteney Mack, Co-Owner and Chief Business Officer, Memphis Tire Recyclers; David Burgess, Co-Owner and Chief Operating Officer, Memphis Tire Recyclers; Mike Robertson, Director of Operations • Tennessee State Parks

T.O. Fuller State Park in Memphis created one of the first full circle sustainability projects of its kind. How could 25,000 waste tires, a closed Tennessee State Park golf course, and a historically, economically distressed community come together? The Tires to Trails project has done just that by creating a community resource that simply means more than the sum of its parts.

After more than half a century of operation, the golf course at T.O. Fuller State Park was closed in 2011. Since then, the golf greens have transformed into a thriving native grassland and prairie space for wildlife with a state-of-the-art interpretive center that focuses on green energy and sustainable building practices. These two things are incredible additions to the community and greatly increase the park's opportunity to educate youth on the outdoors and sustainability. However, one thing remained in disrepair – the old crumbling golf-cart paths. In such a beautiful and inspiring area of the park, it was always a frustration to see the cart paths, now used mainly by school groups during field trips or by community members for walking, literally crumbling beneath users' feet and at times they would abruptly end as nature had swallowed up entire portions of the pavement.

In mid-2018 a group of Tennessee State Park staff met with local government and community members to discuss how to revitalize the trail system. A suggestion to use a new type of surfacing called flexible porous pavement, that had been experimented with at other parks around the state, was made. Rather than a cement like concrete, or petroleum asphalt, this surface utilizes recycled tire rubber. This new surface type had many advantages over concrete and asphalt, such as being made of recycled material, being very porous to water, and being more resilient when used in a natural environment. The park was very creative in finding the material used to make this "new" surface.

During each drive into and out of the park visitors noticed illegally dumped tires along roadways, in abandoned lots, in ditches, etc. And this wasn't just a few tires, this was hundreds, maybe even thousands along one route in and out of the park, all within a couple of miles. How could their recycled pavement project help the community at large? The Tires to Trails project was envisioned and was a full-circle project that would help alleviate a major community issue. This project leveraged three grant funding sources and required extensive cooperation between several governmental agencies and buy-in from local community groups and non-profits. By utilizing volunteers and paid local contractors, the project was able to clean up over 24,000 illegally dumped tires over the span of 18 months, and the Tires to Trails Project renovated and constructed a 2.9-mile hard surface walking and biking trail. The tires were collected, transported, and were recycled into 1/4-inch and 3/8-inch crumb that is needed for flexible porous pavement with all wire and most of the fabric removed. This trail system largely utilized existing cart paths at the old golf course, though many new connections have been made to make a more sensible and modern "loop" trail design. This trail system is not only completely hard surfaced and therefore more accessible but has specific sections that are completely ADA compliant. This project had an impact on the park, and on the surrounding neighborhoods, ensuring that the project was doing what it could to fight inequity where possible and stands as a blueprint for other parks in Tennessee and throughout the nation as to how to create a truly full-circle project.













The Governor's Environmental Stewardship Award
for
Sustainable Performance

Bailey

Nashville, Tennessee





L to R: Sara Sloane, HR Director; Lindsey Rose, Marketing Manager; Keiven Davis, Building Maintenance Manager; David Salyers, Commissioner of the Department of Environment and Conservation ; Governor Bill Lee; Justin Bailey, VP Sales & Marketing; Luis Bradshaw, Safety & Purchasing Manager; Jenna Roberts, Marketing Coordinator; Bill Sweeney, Regional Sales Director

Bailey, located in Nashville since 1949, provides end-to-end material handling solutions. It is proud to be family-owned and operated, certified woman-owned, and the first TRUE Zero Waste forklift dealership in the nation. Bailey has 12 locations with 300+ employees throughout Tennessee, north Georgia, and southeastern Kentucky, that offer forklifts and other equipment from leading brands. Eight of the nine facilities in Tennessee are powered by solar, and reclaim waste oil and use it to heat its shops. Bailey recycles tires, plastic film, food, and organic waste and donates scrap metal and parts to local artists. The 25,000-sq.-ft. facility/headquarters in Nashville became TRUE Zero Waste Platinum Certified and became the first Zero Waste certified forklift company in the United States. For the last two years its landfill diversion rate has been 99.4 percent-99.5 percent.

Bailey's approach is holistic, creating solutions for the entire waste system. Its recycling programs are designed to compost, reuse, or recycle everything to include but not limited to tires, paper, metal, and oil. While leadership is fully committed to its efforts, it also encourages innovation from employees to exercise their creativity. For over a decade, Bailey has used special heaters that burn used oil to heat its mechanic shops. An employee of Bailey developed an oil bottle draining system that captures and collects oil residue in oil bottles. Fully draining the bottles allows Bailey to recycle them, and the remaining oil is used to heat its mechanic shops. All employees sign an environmental sustainability commitment as part of onboarding while leadership also looks for candidates with previous experience in sustainability practices, so that there are always fresh ideas and a culture of continuous improvement in environmental sustainability.

Additionally, Bailey celebrates its commitment to sustainability by incorporating it into employee annual review and bonus structures. Bailey understands that sustainability is a team effort and encourages its employees to work together to achieve sustainability goals. In addition to encouraging sustainability within the business and among employees, Bailey takes an active role in promoting environmental stewardship in the community by being lead sponsor of various organizations and events. Bailey has an annual Equipment Giving Program, when deserving non-profits each year apply to receive equipment, such as electric pallet jacks. Since its inception in 2019, the Bailey Equipment Giving Program has donated equipment to L.P. Pencil Box, Second Harvest Food Bank, Thistle Farms, Book'em, among others. While Nashville is its first and only TRUE Zero Waste certified site, Bailey is actively transferring these same operations to their other locations.













The Governor's Environmental Stewardship Award
for
Water Quality

**Tyson Foods
Obion County Complex**

Union City, Tennessee





L to R: Todd Cartwright- Senior Environmental Manager for Tyson Foods, Obion County; David Salyers, Commissioner of the Department of Environment and Conservation; Governor Bill Lee; Michael Cirkles, Wastewater Supervisor at Tyson Foods, Obion County; Dale Barnett, Executive Director, Tennessee Poultry Association

Tyson Foods' Obion County Complex operates its own wastewater treatment plant that fully treats all process water from the poultry processing plant and the hatchery. In 2018, the processing plant and hatchery began an expansion project that doubled their processing capabilities. The expansion added an additional four fryer lines totaling seven to the production plant which includes smoking, cooking, canning, curing, refining, and/or rendering of the poultry.

Since the expansion, the processing plant harvests, on average, 1.3 million birds per week weighing an average of 7.6 pounds per bird, and the hatchery hatches approximately 1.2 million chicks per week. These increases in production also caused an increase in water usage, the processing plant now uses approximately 10.5 million gallons of water a week and the hatchery generate approximately 225,000 gallons of water per week that is sent to the wastewater treatment plant. Because of the increase in water usage, the wastewater treatment plant also went through an expansion to better treat the process water.

Tyson prides themselves on going above and beyond in environmental stewardship. Tyson has set forth several standards surrounding water quality, the main standard being the Wastewater Discharge Standard which includes several standard operating procedures that ensures the treatment process is treating the water as effectively and efficiently as possible.

Through plant upgrades including adding a new Dissolved Air Flootation (DAF) system in addition to the existing system to run in parallel together, Tyson achieved an overall 15 percent reduction in water usage. Together the DAF systems serve as pretreatment to the wastewater treatment process. This process creates a blanket of sludge on top of the DAF systems which are then skimmed off and stored into a tank where a third-party vendor will pick up the sludge and land apply it on pasture or crop land as a beneficial rich fertilizer consisting of organics and nutrients. Land applying the sludge created by the DAF helps Tyson to maintain its Zero Waste to Landfill certificate by diverting that sludge from the landfill. In 2022, approximately 4 million gallons of waste activated sludge was land applied.

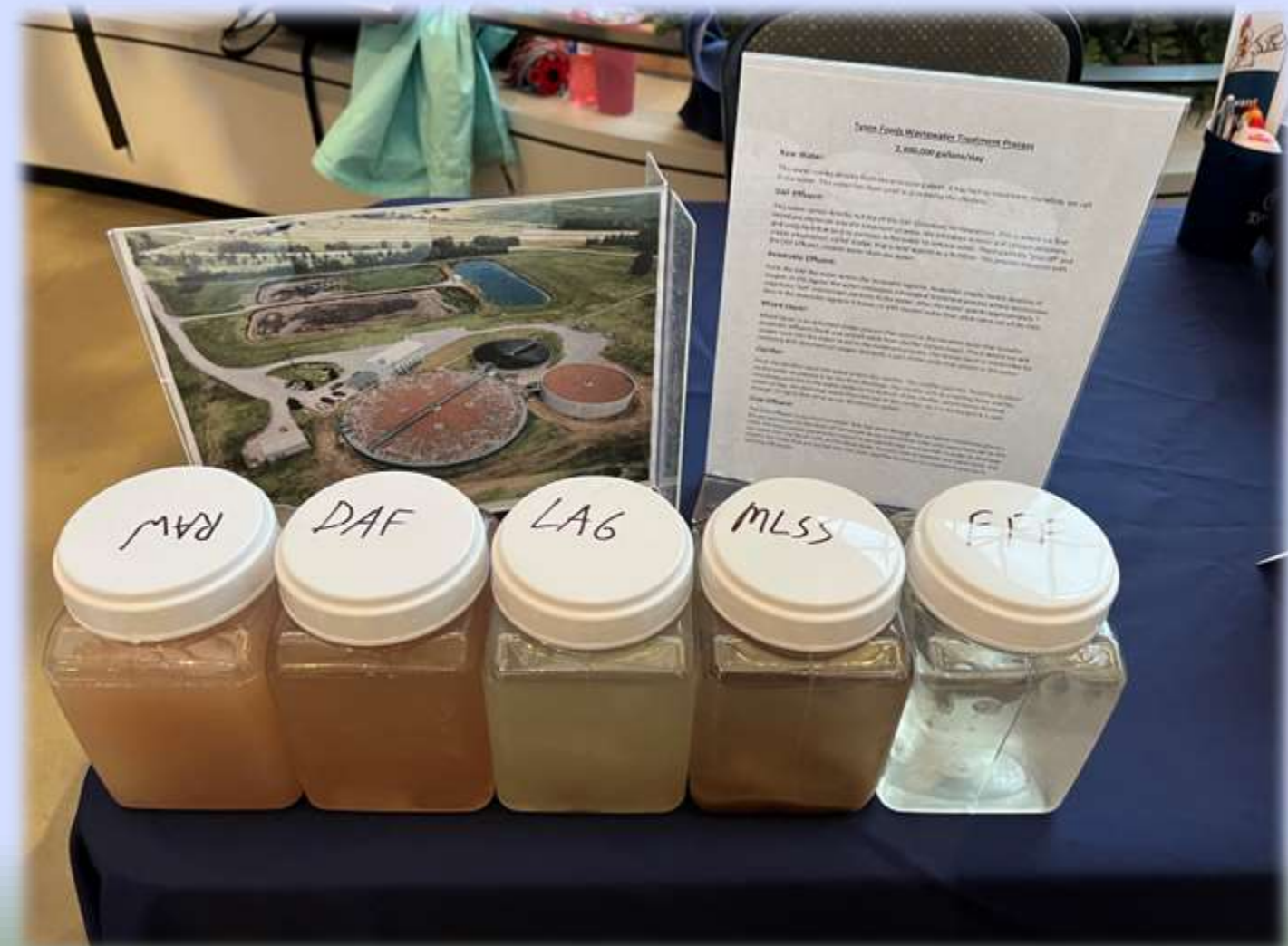
Its two existing anaerobic lagoons had new variable frequency drives installed to increase the pumping capacity to handle the increase in wastewater flow along with a few other upgrades to the two-stage biological nitrogen removal system. This system helped achieve total nitrogen removal by biological nitrification and denitrification to reduce final effluent total nitrogen concentrations of 37 percent below its allowed permit limits. Once the final effluent has completed the last step in the treatment process, part of the water, approximately 2.5 million gallons a week, is sent back into the water reuse system. This water is then pumped back into the processing plant to be used in non-contact processes such as offal screen cleaning, vacuum pump cooling, and non-production washdown. The full treatment wastewater facility treats, disinfects, and discharges approximately 11.9 million gallons of water a week into the Obion River which is an 11 percent reduction in total discharge to the river through beneficial reuse and upgrades which substantially reduces the overall impact to the Obion River. In 2022, the Obion County location reused 117,720,850 gallons of fully treated wastewater. The treated wastewater that is not sent back through the reuse system is then discharged into the North Fork of the Obion River.













The Governor's Environmental Stewardship Award
for
Pursuit of Excellence

**Tennessee Department of Agriculture
Division of Forestry**

Westel, Tennessee





L to R: Katie Biggert, HWA Strike Team Coordinator; Hannah Hollowell, Forest Health Program Specialist; Jackie Broeker, Strike Team Coordinator, Department of Agriculture; Charlie Hatcher, Commissioner of the Department of Agriculture; David Salyers, Commissioner of the Department of Environment and Conservation; Governor Bill Lee; Trish Johnson, Co-Founder TN Hemlock Conservation Partnership and HWA Strike Team; Heather Slayton, Assistant State Forester and Co-Founder TN Hemlock Conservation Partnership and HWA Strike Team; Robert Elliott, Forest Health and Sustainability Unit Leader

The Tennessee Department of Agriculture Division of Forestry created a Strike Team over 20 years ago to solve the problem of the Hemlock Woolly adelgid (HWA), a non-native invasive insect causing extensive mortality and decline in the Eastern Hemlock and Carolina Hemlock across Tennessee. Since winning the Governor's Environmental Stewardship award in Agriculture and Forestry in 2020, the HWA Strike Team chemically treated over 150 Hemlock Conservation Areas (HCAs). Some of these HCAs are on their second and third round of treatments. This means that over the last decade, the HWA Strike Team has treated more than 85,000 hemlocks over 6,000 acres across state-owned forests and forests that are protected by conservation easements. The team has facilitated the release of tens of thousands of predator beetles reared at the Lindsay Young Beneficial Insects Laboratory at University of Tennessee.

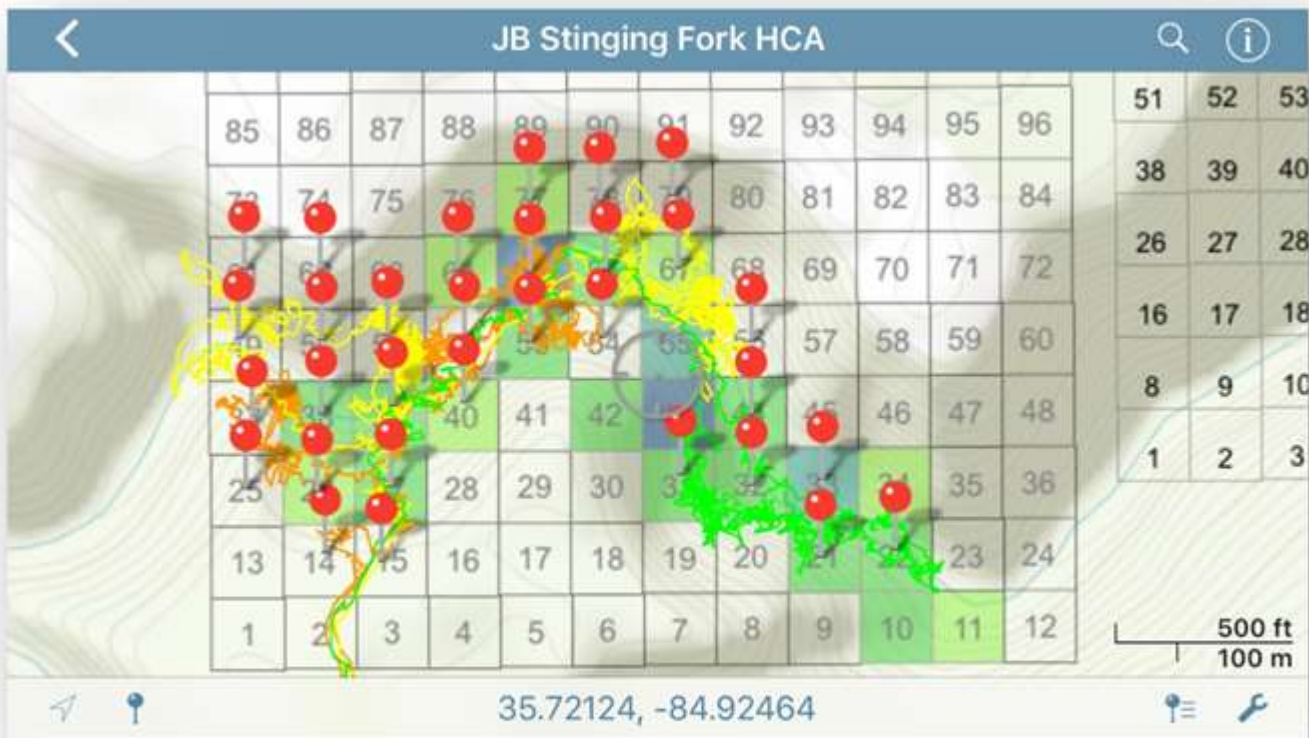
Hemlock forests can be found in 39 counties throughout Tennessee totaling approximately 150,000 acres both on public and private lands. This distribution varies from old growth dominant hemlock forests in the Great Smoky Mountains National Park to less than 5 percent composition in scattered riparian areas of Middle Tennessee. From east to west, the topography and site characteristics differ dramatically as do management approaches. Hemlock forests provide a unique set of environmental services to the ecosystem. No tree species has been identified to fill its void if HWA is successful in eradicating the hemlock tree. Hemlocks predominantly grow in riparian areas, next to streams, and provide a myriad of services: streambank stabilization, water temperature regulation, both aquatic and terrestrial habitat, and aesthetics.

The HWA Strike Team in collaboration with the Tennessee Hemlock Conservation Partnership has hosted dozens of landowner workshops across the entire hemlock region that has resulted in thousands of private citizens learning what HWA is, why treating for HWA is important, and how they can be a part of a bigger conservation story. Over the past 10 years, the THCP grew to include universities, other non-government organizations and most importantly, private citizens. The private landowner treatment kits contain various equipment needed for any homeowner to successfully treat hemlocks and are loaned out, free of charge, from the Division of Forestry. Additionally, the HWA Strike Team has developed a series of YouTube videos to demonstrate HWA treatment methods to the public.

The HWA Strike Team also participates in research and leans on volunteers to test solutions that other organizations have developed. For example, Dr. Elizabeth McCarty has developed an optimized dosage of imidacloprid that is lethal to HWA while maximizing cost savings of chemical and workforce effort. It fine-tuned the dosage and developed an application procedure that can be implemented by the private landowner. The HWA Strike Team is also collaborating with the Lindsay Young Beneficiary Insects Laboratory on installing field insectaries which is an innovative approach to HWA biological control.













The Governor's Environmental Stewardship Award
for
Pursuit of Excellence

green|spaces

Chattanooga, Tennessee





L to R: Michael Walton, former Executive Director, green|spaces, current Partner at Emerald Operating Partners; Francine Baggi, Empower/Empoderate Director, green|spaces; Madison Rollings, Director of Sustainability and Events, green|spaces; David Salyers, Commissioner of the Department of Environment and Conservation; Governor Bill Lee; DeAngelo Hudgins, Build It Green/AmeriCorps, Project and Cohort Recruitment Lead; Sherrod Gary, Build It Green/AmeriCorps Member; Destiny Edmondson, Build It Green/AmeriCorps Team Leader; Keyta Young-Price, Build It Green Program Manager

Since 2007, green|spaces, a 501(c)3 sustainability resource center, has advanced the sustainability of living, working, and building in Southeast Tennessee with a wide range of programs serving a diversity of constituencies. Three of the most impactful programs include Build It Green, Empower/Empodérate, and the Chattanooga Green Prix.

Build It Green (BIG) is a three-month to one-year workforce development program created to break the cycle of poverty through construction skills training and social-emotional learning. Construction skills include OSHA-10 certification, blower door testing, and home repairs. Typically, home repairs are provided for homeowners who are senior and/or on fixed incomes. These residents are not able to afford needed upgrades and repairs. BIG completes the work at no cost to the residents. To date, BIG has graduated 60 members which is 22 more individuals since winning the 2020 Governor's Environmental Stewardship Award in the Environmental Education and Outreach category. Through partnerships with the local nonprofit organization Build Me a World, the program bolsters an 80 percent graduation rate with a 90 percent placement job rate which is 10 percent better than in 2020.

An additional program is their Empower/Empodérate which is for low-income households, which spend an average of 15 percent-20 percent of their income on energy bills. This program includes eight rural counties surrounding Hamilton County. This disproportionately affects economically disadvantaged and older adult populations. The Empower/Empodérate program's impetus is to reduce this burden through free energy savings workshops where over 1,000 participants have attended. The workshops are also offered to the Latino community with the addition of Spanish workshops. EPB found an average savings of 5 percent for attendees who implemented the workshop strategies.

The longest tenured program at green|spaces is the Chattanooga Green Prix, launched in 2017 to give students opportunities to prepare for the fast-growing industry of electric vehicles. Teams throughout the region work together for four to six months to build, maintain, and race an electric car on a full-scale track. They host two races each school year and in 2022 40 teams participated in the races with over 700 attendees for each two-day event. Over 40 percent of the registered schools involved are Title 1 schools.

Lastly, green|spaces provides local students the ability to expand their knowledge of the field through their student memberships at green|spaces and the green|leader program. The green|leader Certificate is an online, self-paced course designed to help working professionals, students, and passionate citizens acquire a significant understanding of the fundamental challenges and business opportunities arising from a rapidly changing environment and economic landscape.

Empower
CHATTANOOGA



BUILD IT GREEN



Empoderate
CHATTANOOGA







**REGENERATIVE
DESIGN SUMMIT**

**THE WESTIN
AUGUST 9-10**



**REGENERATIVE
DESIGN SUMMIT**

August 9-10, 2022
Chattanooga, TN



2023 Robert Sparks Walker Lifetime Achievement

Justin P. Wilson

Nashville, Tennessee





L to R: Walter Wilson (son); Blair Wilson (brother); Whit Wilson, (son; to receive the award for Justin); Linde Wilson (sister-in-law); Governor Bill Lee; David Salyers, Commissioner of the Department of Environment and Conservation

Justin P. Wilson is arguably one of Tennessee's most important conservationists over the past five decades based on his work and contributions in the public sector, private business and non-profit partnerships. His knowledge of the law, public policy, people, and possibilities has made a clear and lasting difference for Tennessee, has been named winner of the 2023 Robert Sparks Walker Lifetime Achievement Award. The award is part of the annual Governor's Environmental Stewardship Awards administered by the Tennessee Department of Environment and Conservation (TDEC). The announcement was made at the annual awards luncheon today.

Justin served as Commissioner of the Tennessee Department of Environment and Conservation (TDEC), (1996-1997) and as Deputy to the Governor for Policy under Governor Don Sundquist (1995-2003). He was a member of the Financial Advisory Board of the U.S. Environmental Protection Agency (EPA), and served as Chairman of the Nashville Electric Board, the Davidson County Metropolitan Health Board, and the Community Health Agency of Nashville and Davidson County. He has served in leadership positions for numerous Nashville businesses as well as civic and charitable organizations. From 2009 to 2021, he served six consecutive terms as Tennessee's Comptroller. He continues today at Comptroller Emeritus.

In 1986, Justin was one of seven founding members of the Nashville Tree Foundation and served as its first treasurer. This vanguard to educate the public and recreate Nashville's urban forests was the predecessor for at least seven other Nashville community tree-planting non-profits.

As TDEC Commissioner, he established a Policy Office to emphasize thoughtful planning focused on the needs of Tennessee and advance the cause of transparency for public information. His support for establishing an early web presence for TDEC create a foundation for greater transparency with rules, permits, enforcement actions and environmental justice data. He also led TDEC to be one of only four states awarded an EPA environmental justice planning grant in the 90's. This landmark plan made pollution, permit, and enforcement data much more visible and accessible online.

Justin initiated administration efforts to clean up one of the largest and severely contaminated Resource Conservation and Recovery Act sites in Tennessee: the 7,700-acre Volunteer Army Ammunition Plant in Chattanooga that became Enterprise South. This bipartisan effort led to roughly half of the property's use for economic and industrial expansion and the other half for buffers, parks, and public uses. Today, Enterprise South is home to VW's LEED Platinum manufacturing plant for Electric Vehicles and Tennessee's first utility-scale solar farm.

As Deputy Governor, Justin refocused the Interbasin Water Transfer Act of 2000 to address potential intercounty and interstate water conflicts with solid research and legal linchpins. This far-sighted Act ended the city of Atlanta's attempts to freely transfer water from the Tennessee River to north Georgia. His support for the Water Information Act of 2002 enabled water use data collection to define water rights and defend interstate, supreme court lawsuits.

While always focused on our state's interests, Justin initiated a regional air quality collaboration meeting with the governors of North Carolina, Georgia, and Tennessee. The event led to a regional agreement on air quality that helped avoid needless signals of conflict and policy uncertainty to the public and investors. Although these first gubernatorial collaborations focused on air quality in the Smokies, they fostered regional interest and collaboration for future low-carbon and renewable energy expansions. They were harbingers of intentional efforts leading TVA to progressively shutting down its remaining coal-fired plants.

The Pigeon River Cleanup in East Tennessee (Cocke County) was an example of his enormous dedication and tenacity. He convinced Governor Sundquist to seek federal action to pressure North Carolina's water permits impacting the Pigeon. By 2004, University of Tennessee researchers documented the Pigeon River Revival. Now the Pigeon River is much cleaner and a premier outdoor recreational resource in a distressed county. Without Justin's leadership, much of the success seen today would not have been possible.

Justin's keen intellect paid dividends for Tennessee as he personally oversaw the creation of a National Environmental Policy Act Clearing House, which allowed for the coordinated review and feedback on federal capital investments in Tennessee. His involvement resulted in unprecedented influence on federally funded projects that could have significantly impacted Tennessee's environment from 1997-2002. Justin oversaw the land management transition of TVA Land Between the Lakes to the U.S. Forest Service to preserve hunting and fishing there. He avoided political stalemates and lawsuits to end coal mining in the Fall Creek Falls Watershed, except for re-mining that would help fund the restoration of abandoned mine sites. He helped with the removal, land transfer, and wildlife management area of the Columbia Dam in 1999. Justin also secured \$7 million from TVA to fund water supply projects lost by the removal of the dam.

Along with all his environmental work, Justin helped establish the 300-mile Cumberland Trail as he shared the original vision of Mack Pritchard, Sam Powell, Bob Brown, and others. He invested his whole being in securing funding for it as TDEC Commissioner and as the governor's policy lead. It became Tennessee's 53rd state park in 1998 and the state's only linear park. The park is named after Justin in honor of his work and was designated permanent by law. The park continues to expand and models success for Governor Lee's investments in new state parks, both in terms of access, wilderness preservation, and enjoyment.

Over the past 30 years, Justin P. Wilson has significantly influenced the lives of hundreds of sustainability leaders in Tennessee, fostered and guided the careers of at least three TDEC commissioners, and created a new norm for conservative ideology in Tennessee that includes integrity, fairness, decency, conflict management, collaboration, and honor to our state. Justin changed lives at an individual and large-scale level. No doubt, he left Tennessee's political and natural landscape much better than he found it.

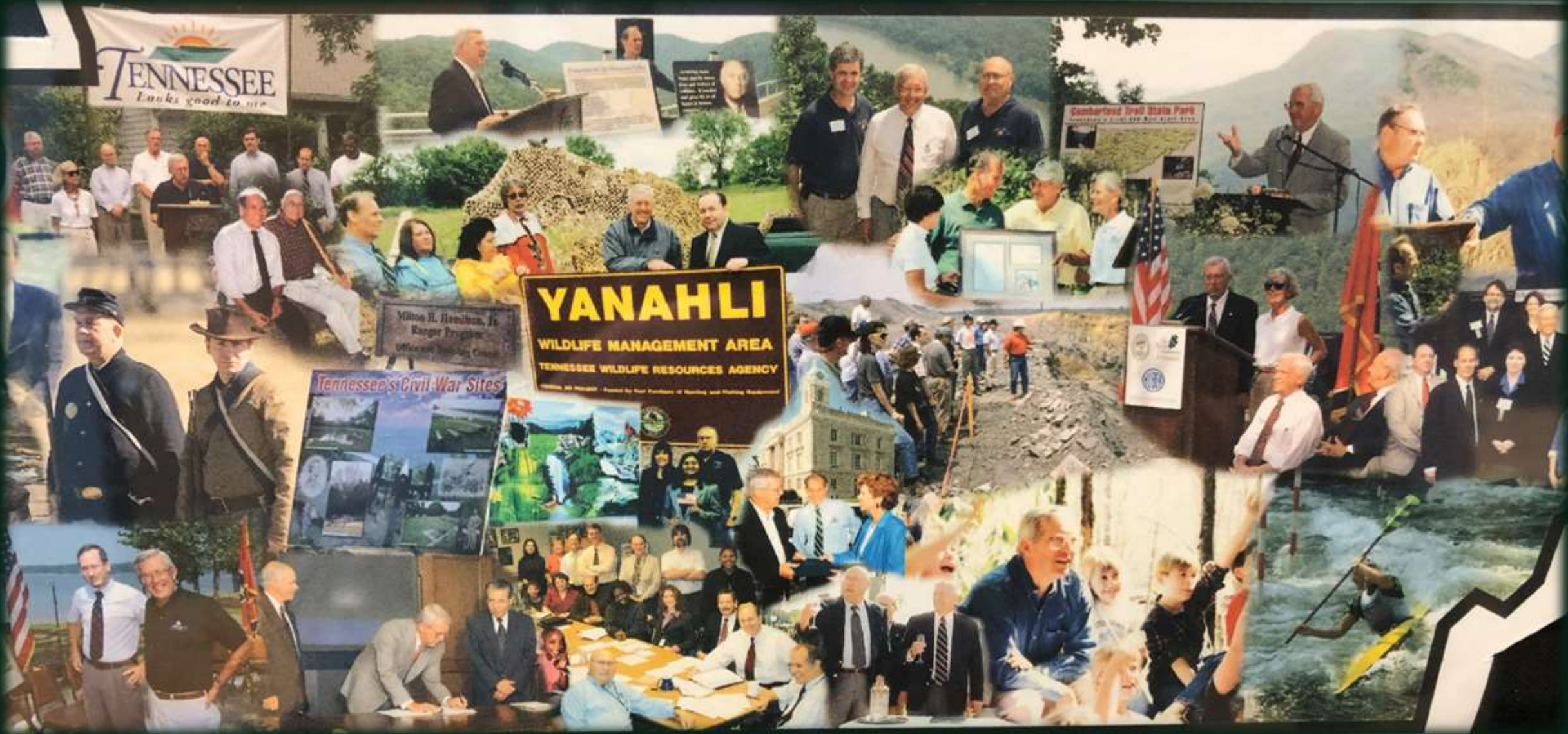
JUSTIN P. WILSON
CUMBERLAND TRAIL
STATE PARK
ESTABLISHED 1998



Tennessee's Civil War Sites

2008-2011 - Funded by Your Purchase of Hunting and Fishing Equipment











main post office building is simply too good an offer for the city to bypass. The foundation's money and the need for a first-rate art museum in a growing community are compelling factors.

The deal is good financially for the city, as Councilman Ronnie Steine, spon-

Saving Fall Creek Falls

TENN 8/2/98

THE Sundquist administration is far ahead of what's supposed to be an environmentally conscious Clinton administration regarding Fall Creek Falls State Park.

The Skyline Coal Company is strip mining near the park, a gem in Tennessee's state park system. Skyline holds leases on land both inside and outside the park's watershed. It is currently operating outside the watershed but is inching closer to it.

Any mining in the watershed could cause great damage to the park. For starters, the very act of strip mining wounds the land. But more to the point, it creates acidic drainage that can seep into the park's streams. It could kill plants and adversely affect the wildlife in the park. It could also prove unsafe for humans.

But apparently, the federal government sees the issue quite differently. The federal Office of Surface Mining has announced that strip mining should be allowed in the watershed, specifying only that a separate evaluation be conducted for each site that comes up.

The governor's office has cried foul, as well it should. Justin Wilson, deputy to the governor for policy, said the OSM failed to do its homework. He said the federal government didn't look at the broader impact such mining would have. The state wants the OSM to revisit its

sional sports teams for fun. It will soon have a new library system where residents can learn.

Yet Nashville's leaders are still worried about tourism. So give everyone something challenging as well as inspirational to see — at the new arts center. ■

Federal plan falls far short of what is needed

decision and analyze the data again. Wilson has sent the Office of Surface Mining a letter explaining the value of the natural resources in the park and noting the vulnerability to strip mining.

Skyline officials have said the mining could be done without creating the acidic runoff by mixing lime with the rock removed to get to the coal. But make no mistake: The company's primary interest is the coal, not the environment. It's hard to see how the business would be motivated to follow through on its assertion. The state also has revenue from the park to consider. If tourists see that the resources are not being protected, they will stop visiting the park.

The final call is up to Interior Secretary Bruce Babbitt. Every Tennessee lawmaker as well as Vice President Al Gore, should alert the federal agency of the shortcomings of its proposal.

The state has been on the right side of this issue, along with vocal environmentalists, most notably the grassroots group Save Our Cumberland Mountains. The Office of Surface Mining should heed the calls from Tennessee. ■



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See HOSPITAL, A2

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Appeal

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See ROWS

Though the Yug- ernment says it intends to try him at home for ruining the nation, the UN war crimes tribunal in The

over. Milosevic's lawyer said the

See MILOSEVIC, A8

New scenic rivers bill is landowner friendly

By Tom Charlier

charlier@gomemphis.com

COLUMBIA, Tenn. — Much like the dam here that was partially built, mothballed and ultimately chiseled to the ground, the Tennessee Scenic Rivers program has been stalled for years — a hostage to competing interest groups.

But at this spot on the Duck River, where anglers cast for crappie in currents that swirl beneath cedar-draped limestone bluffs, the stream-protection program soon could start flowing

again.

Bills now before the General Assembly would add about 30 miles of the Duck to the scenic river system. It would be only the second time in 17 years that a river has been designated.

But the legislation would do much more than expand the system. Lawmakers want to change the process by which rivers are protected in a way that addresses property-rights concerns expressed over the years by landowners and agricultural and indus-

See RIVERS, A2

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Protecting the park

■ State works to shield Fall Creek Falls watershed from surface mining

The state of Tennessee acted correctly and wisely recently in turning down a proposal to allow surface mining for coal in the area surrounding Fall Creek Falls State Park and Natural Area.

Justin Wilson, Gov. Don Sundquist's deputy for policy, told the Knoxville unit of the U.S. Office of Surface Mining that the federal agency's study failed to fully consider the economic and environmental impact that acid mine drainage would have on the park, located in Van Buren and Bledsoe counties.

The debate began when Skyline Coal Co., which operates the state's largest surface mine on the outskirts of the watershed area, sought a permit to move its mining work inside the watershed.

Two environmental groups - Save Our Cumberland Mountains and Tennessee Citizens for Wilderness Planning - filed a petition to have the 86,688 acres surrounding the park declared unsuitable for surface mining. In its draft study, OSM rejected the two groups' petition and recommended that mining be permitted, with individual environmental permits for each mine. OSM's final recommendation is due the first of next year.

The Sundquist administration clearly did its homework in protecting Tennessee's most visited state park. In his letter, Wilson noted the history of acid mine drainage in the park's watershed. The drainage, which occurs when sealed shale and coal seams are disrupted, would pose risks to animals and plants in the area, particularly near rivers. As Wilson said, "The park and surrounding region are undeniably linked."

Wilson also pointed out that OSM's site-by-site permit proposal did not adequately consider the cumulative effect of mining in the watershed. And while the state did not designate the entire area off limits to mining, Wilson found convincing evidence that some portions should not be mined.

As during the controversy over a permit for continued pollution of the Pigeon River, the state of Tennessee again is taking the lead over federal policy makers with Fall Creek Falls State Park. That will help to keep protection of the environment a priority in the state.

Knox area well short of record

It was a hotter than normal July in East Tennessee but it was a long way from setting any records.

"I'm not sure where or why it (last month's average temperature) would rank but it's not even in the top 10," said Joanne LaBounty, a meteorologist with the National Weather Service in Morristown.

According to records, the average temperature in Knoxville last month was 79.4 degrees. That's just a tad hotter than the average normal temperature here for the month of July - 76.4 degrees.

"It was a little bit hotter, but there were no records broken," LaBounty said.

She said the hottest July on record occurred in 1993 when the average temperature in Knoxville was a sweltering 83 degrees.

The average daily high in July in Knoxville is 87.1 degrees, according to Weather Service records, and the average low is 68.

The hottest day last month occurred July 19, when the high hit 96 degrees; the coolest temperature, 65 degrees, occurred July 18 and July 3.

KNOXVILLE NEWS

SENTINEL

8/4 1998

Falls

Skyline would sue the federal government to get the money it estimates to lose if it cannot mine in the watershed of Fall Creek than "clearly 86,000 acres."

State goes to bat for Fall Creek, demands hard look before strip mining allowed in watershed area

By DYANA BAGBY

HERALD-CITIZEN Staff

Do it over again.

That's the message the State of Tennessee sent to the federal Office of Surface Mining this week regarding the agency's recently released environmental study of the impact strip mining would have in the watershed of Fall Creek Falls State Park.

And for area citizens groups who have worked for years to have the entire 86,000-acre watershed around the state park protected by federal law from mining, the state's public position signifies a victory.

"I think we all felt the administration (of Gov. Sundquist) thought about its stance carefully and got input from several state agencies," said Brian Paddock of Cookeville, a member of Save Our Cumberland Mountains, who along with several other SOCM members and representatives from other citizens groups met this week with state officials to discuss the state's official stance.

"And the state's position on the inadequacy of the Office of Surface Mining's environmental impact statement is exactly right," Paddock said.

"Yes, it is a victory for us."

The threat of acid mine drainage and the poisonous effects it can have on the streams, creeks and the majestic Fall Creek Falls itself is fueling the citizens groups' fight to protect the park's watershed from strip mining.

Skyline Coal Co., which is currently strip mining coal just a few miles outside the park's watershed, could not be reached for comment.

The coal company, located in Sevier County, plans to mine in the watershed in the next decade.

Today marks the last day for the public to make any comment to the Knoxville-based Office of Surface Mining on the issue of Fall Creek Falls.

The state's flat-out rejection of the current environmental impact statement - which included OSM's recommendation that mining in the watershed be granted on an individual mine-by-mine basis - means more than likely the federal agency will simply start all over again and conduct another environmental study, said Paddock.

And this could mean waiting many more years before a final decision is made.

"It's not over. While SOCM has worked for many years on this petition (to get the watershed protected), all of us need to pay attention until we get some kind of permanent protection of our lands and water," he said.

Public outcry and the visibility of the Fall Creek Falls crusade also have played a role in pushing the state to take an official position, Paddock said.

"They (state officials) told us they looked carefully at the fact that so many people showed up at a public hearing with OSM (in Crossville last month) and so many people spoke out against the current environmental study," Paddock said.

"The visibility of this issue was a factor for them."

In the 12-page letter from the State of Tennessee sent to OSM, signed by Justin Wilson, deputy to

(See FALLS, p. 9)

Environmentalists agree with governor: Air, water quality much improved

By Jim Smith

GOVERNOR James B. Ray and environmentalists agree that Tennessee's air and water quality has improved significantly since 1970. The Tennessee Department of Environment and Conservation reported that the state's air quality index (AQI) has risen from 1.0 in 1970 to 2.0 in 1987. This indicates that the state's air is now cleaner than it was in 1970. The report also noted that the state's water quality has improved significantly since 1970. The Tennessee Department of Environment and Conservation reported that the state's water quality index (WQI) has risen from 1.0 in 1970 to 2.0 in 1987. This indicates that the state's water is now cleaner than it was in 1970.

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Great gift for Tennessee

Important decisions to be made about Duck River land

Tennessee stands to receive a great gift and a new opportunity under the Duck River Land Transfer Act. The act would transfer 12,000 acres of land around the Duck River to the state. This land is currently owned by the TVA. The act would allow the state to develop the land for public use. The state would have the right to sell the land to private citizens. The state would also have the right to lease the land to private citizens. The state would also have the right to use the land for public purposes. The state would also have the right to use the land for private purposes. The state would also have the right to use the land for public purposes. The state would also have the right to use the land for private purposes.

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State report rosy on environment

Tenn. at cleanest level in past quarter-century

The Department of Environment and Conservation's report on Tennessee's environment is the cleanest in a quarter-century. The report shows that Tennessee's air quality is the best in the nation. Tennessee's water quality is also the best in the nation. Tennessee's land quality is also the best in the nation. Tennessee's overall environment is the best in the nation. The report also notes that Tennessee's environment is cleaner than it was in 1970. This is due to the state's efforts to improve its environment. The state has implemented many programs to improve its environment. These programs have helped to reduce air pollution, improve water quality, and protect land resources. The state's environment is now cleaner than it was in 1970.

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Cleaning up the Pigeon

Long-sought agreement should give river new life

It took more than 10 years to negotiate, but an agreement was reached on how to clean up the Pigeon River. The agreement is a significant environmental achievement. It will help to improve the river's water quality and protect its ecosystem. The agreement also provides for the construction of a dam on the river. This dam will help to control flooding and improve the river's water quality. The agreement also provides for the construction of a dam on the river. This dam will help to control flooding and improve the river's water quality. The agreement also provides for the construction of a dam on the river. This dam will help to control flooding and improve the river's water quality.

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State air, land, water best in 25 years, Sundquist says

By Jim Smith

NASHVILLE—Tennessee's air, land, and water are the cleanest they've been in a quarter-century, Gov. Don Sundquist proclaimed Tuesday. He said the state's environment is cleaner than it was in 1970. This is due to the state's efforts to improve its environment. The state has implemented many programs to improve its environment. These programs have helped to reduce air pollution, improve water quality, and protect land resources. The state's environment is now cleaner than it was in 1970.

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Land proposal would establish 6 natural areas

By Jim Smith

The Tennessee Department of Environment and Conservation has proposed to establish six natural areas. These areas would be located in the state's mountains. The areas would be established to protect the state's natural resources. The areas would also provide for the construction of a dam on the river. This dam will help to control flooding and improve the river's water quality. The areas would also provide for the construction of a dam on the river. This dam will help to control flooding and improve the river's water quality.

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Tennessee's air, land and water cleanest in quarter-century

By The Associated Press and The Associated Press

NASHVILLE—Tennessee's air, land and water are the cleanest they've been in a quarter-century, Gov. Don Sundquist proclaimed Tuesday, and a leading state environmentalist agreed on Tuesday. The state's environment is cleaner than it was in 1970. This is due to the state's efforts to improve its environment. The state has implemented many programs to improve its environment. These programs have helped to reduce air pollution, improve water quality, and protect land resources. The state's environment is now cleaner than it was in 1970.

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Pigeon permit called victory for state, area

By Jim Smith

The Tennessee Department of Environment and Conservation has called the Pigeon River permit a victory for the state and the area. The permit will help to improve the river's water quality and protect its ecosystem. The permit also provides for the construction of a dam on the river. This dam will help to control flooding and improve the river's water quality. The permit also provides for the construction of a dam on the river. This dam will help to control flooding and improve the river's water quality.

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Officials say state's environment cleanest in 25 years

By Jim Smith

GOVERNOR James B. Ray and environmentalists agree that Tennessee's air and water quality has improved significantly since 1970. The Tennessee Department of Environment and Conservation reported that the state's air quality index (AQI) has risen from 1.0 in 1970 to 2.0 in 1987. This indicates that the state's air is now cleaner than it was in 1970. The report also noted that the state's water quality has improved significantly since 1970. The Tennessee Department of Environment and Conservation reported that the state's water quality index (WQI) has risen from 1.0 in 1970 to 2.0 in 1987. This indicates that the state's water is now cleaner than it was in 1970.

Renewing the river

By Jim Smith

The Tennessee Department of Environment and Conservation is working to renew the river. The department is implementing many programs to improve the river's water quality and protect its ecosystem. These programs include the construction of a dam on the river. This dam will help to control flooding and improve the river's water quality. The department is also implementing many programs to improve the river's water quality and protect its ecosystem. These programs include the construction of a dam on the river. This dam will help to control flooding and improve the river's water quality.

Environment draws praise from officials

By Jim Smith

The Tennessee Department of Environment and Conservation has received praise from officials for its efforts to improve the state's environment. The department has implemented many programs to improve the state's environment. These programs have helped to reduce air pollution, improve water quality, and protect land resources. The state's environment is now cleaner than it was in 1970.

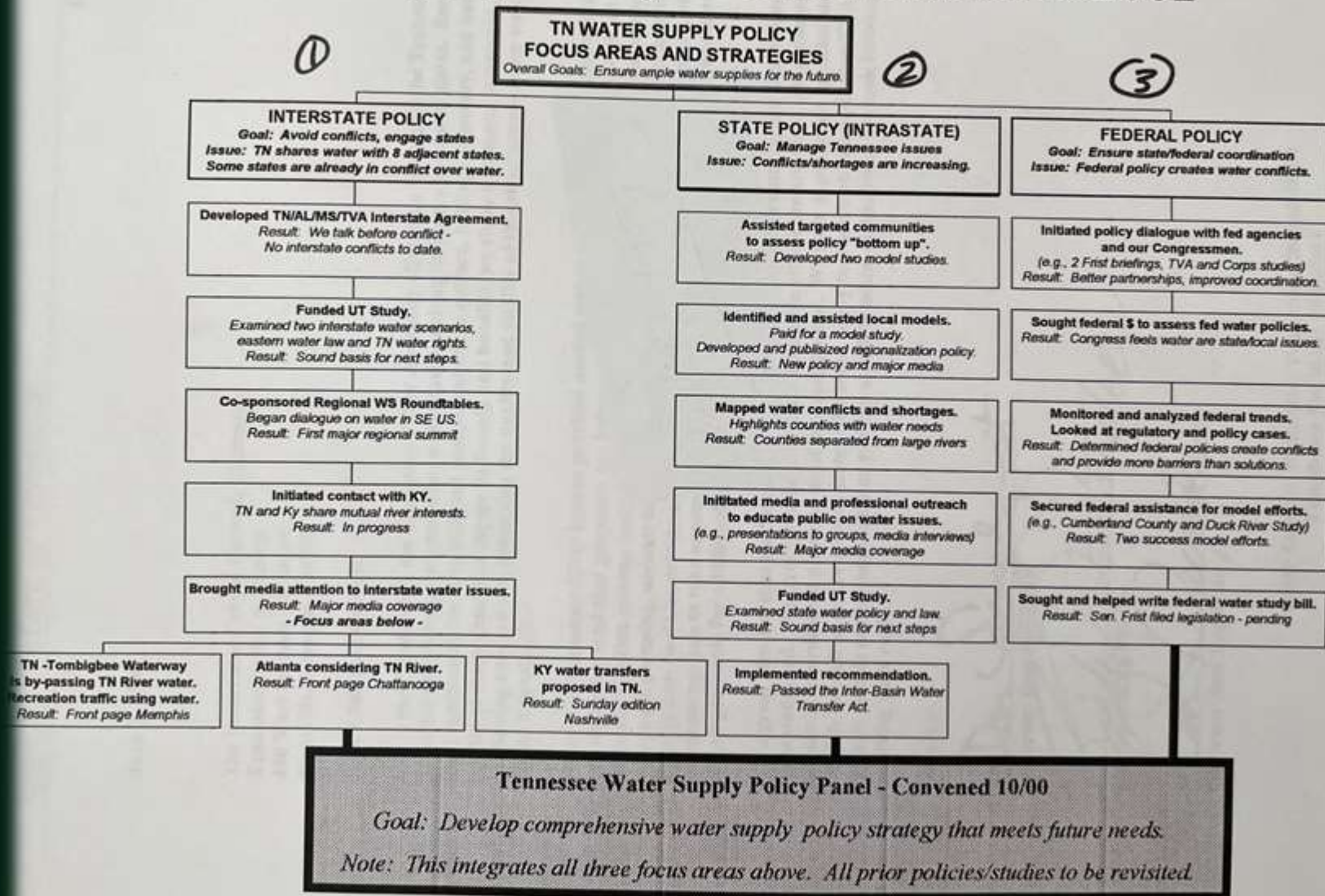
State report rosy on environment

By Jim Smith

The Tennessee Department of Environment and Conservation's report on Tennessee's environment is the cleanest in a quarter-century. The report shows that Tennessee's air quality is the best in the nation. Tennessee's water quality is also the best in the nation. Tennessee's land quality is also the best in the nation. Tennessee's overall environment is the best in the nation. The report also notes that Tennessee's environment is cleaner than it was in 1970. This is due to the state's efforts to improve its environment. The state has implemented many programs to improve its environment. These programs have helped to reduce air pollution, improve water quality, and protect land resources. The state's environment is now cleaner than it was in 1970.

Sundquist Administration

Water Supply Policy Framework 1995-2001



Planning for Environmental Justice

Have you ever noticed how proud Tennesseans are to be from Tennessee? Did you ever wonder why? Tennesseans are proud of their diversity, both in the people and in the scenic beauty of the state.

From the lush mountains and foothills of east Tennessee to the deep river basins of west Tennessee, and all the forests, lakes and woodlands in between, Tennesseans love to live, work and play in this natural environment.

Although Tennesseans now have a much cleaner and healthier environment than in years past, the Tennessee Department of Environment and Conservation (TDEC) wants to work harder to meet the environmental needs of all citizens. To help do this, TDEC has developed an environmental justice strategic plan that we hope will become a state and national model for providing meaningful community involvement as the department implements its programs.

The environmental justice strategic plan was developed with the input of diverse residents across the state. A representative external steering committee and numerous work groups reflecting a variety of interests and the broad geographical reaches of Tennessee guided the plan development. Special efforts were made to address the needs of people of color and of low income.

Tennessee is the second state in the nation to develop and implement an environmental justice strategic plan. This plan is designed to become a part of all TDEC operations and to guide the way we develop and implement rules, regulations, programs, policies and activities. It is designed to prevent environmental justice issues from occurring and to further reduce environmental pollutants.



Our Vision: Tennessee residents will have access to environmental knowledge and be empowered to ensure an equal opportunity to attain a high quality of life.



the
Chickasaw
Nation HEADQUARTERS

Arlington at Mississippi / Box 1548 / Ada, OK 74821-1548 / (580) 436-2603

Bill Anoatubby
Governor

Jefferson Keel
Lieutenant
Governor

March 19, 2002

Mr. G. Dodd Galbreath, Director of Policy
Department of Environment and Conservation
21st Floor, L&C Tower
401 Church Street
Nashville, TN 37243

Dear Mr. Galbreath:

The Chickasaw Nation endorses your selection of a Chickasaw word in naming the 10,000 acres along Duck River near Columbia, Tennessee.

Your interest to select and honor us by naming the lands Yanahli Wildlife Management Area is appreciated.

Sincerely,

Bill Anoatubby
Bill Anoatubby, Governor
The Chickasaw Nation

THE DEPARTMENT OF
ENVIRONMENT & CONSERVATION

MAR 27 2002

BUREAU OF ENVIRONMENT



Putting Our Vote to Work!

DG

EDITORIALS

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A good protector of state environment

NO matter where Justin Wilson ends up, he has charted the right direction for the state Department of Conservation and Environment.

Political insiders have speculated for months that Wilson, commissioner for less than a year, was merely warming the seat for Milton Hamilton, who is departing from the state Senate.

To his credit, however, Wilson's done more than just play the caretaker.

Environmentalists were extremely leery of Gov. Don Sundquist when he came into office. His campaign statements indicating opposition to regulation, coupled with a lackluster congressional record on conservation caused legitimate concerns.

Indeed, the perception of the Sundquist administration seemed confirmed during the fiasco over the Great Smoky Mountains National Park and the lack of state pollution protections.

It was in the midst of those environmental troubles that Wilson, a Nashville attorney, was appointed to replace Don Dilts. He quickly managed to ease tensions by establishing a rapport with federal park officials and environmentalists. Just recently, Wilson stood up for the long-suffering residents of the Pigeon River, who continue to be besieged by the emissions of the Champion Paper Co. in North Carolina.

Not all has been smooth. The department was embarrassed this summer by reports that a contractor for a state park

Wilson has worked to establish credibility

Recently, confusion has surfaced about a conversation between Wilson and Booker T. Washington State Park manager, Erie Gooding. Gooding said he asked Wilson to hire more blacks in the department and that Wilson responded that he didn't want to "lower our standards." Wilson, however, said he was referring to training for the Police Academy and that when he learned his remarks had been misinterpreted he immediately phoned Gooding to apologize.

Wilson has said all along that he serves at the pleasure of the governor. Hamilton is equally candid about his eagerness to occupy the commissioner's chair.

If Wilson does depart from the administration, his successor can learn from the example he has set in his brief tenure. Wilson has been accessible. He's tried to reach out to environmentalists as well as to the business community. He's engendered some good will for this administration that wasn't apparent before. He's worked hard to find some solutions to difficult problems.

Over just a matter of months, Wilson has managed to demonstrate that state government can be caring, cooperative and effective. The governor should demand the same quality of service from



THE TENNESSEE FARM BUREAU NEWS

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Inside THE NEWS:



Ag Museum Essay Contest

Winning essays on pages 12, 13



Forestry

Farm Bureau outlines legislative position. Page 24



Spring arrives in Tennessee - With much needed rains and warming temperatures Spring arrived across the state this month following a very mild winter. This farm scene made near Eagleville, Tennessee, shows that farm planting season is here.

Inter-Basin Water Transfer Act

Working to protect Tennessee waters

When you turn on a faucet, you expect water to come out. When the weather warms up, you assume you have enough water to wash your car and keep the lawn green. We tend to take water supply for granted in Tennessee, and a new bill is now being considered to ensure protection of the state's water resources.

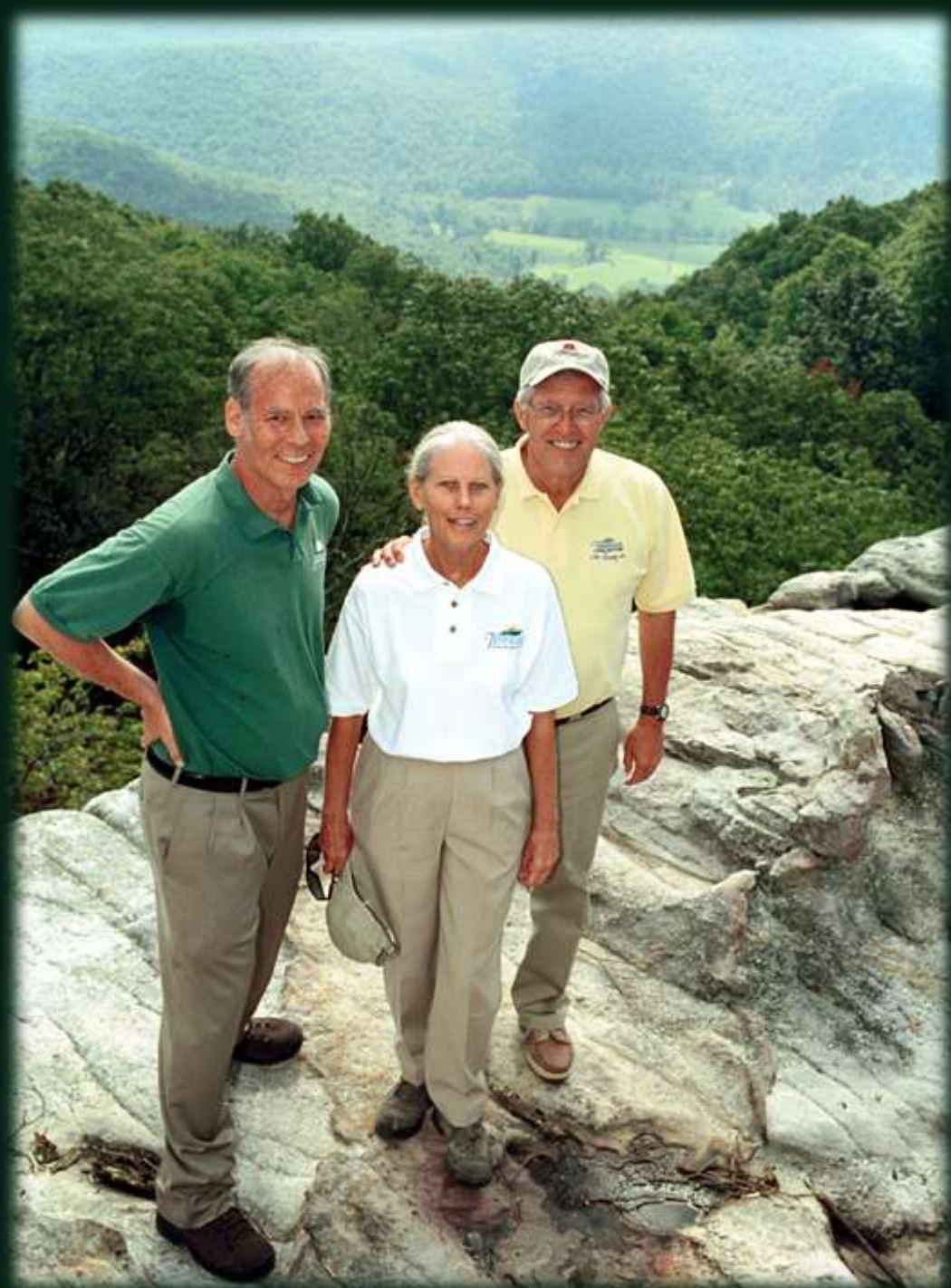
The Inter-Basin Water Transfer Act is designed to meet water supply challenges within Tennessee and is moving through the legislative process. It gives the state the authority to evaluate when it would or would not be appropriate for water to be transferred from one river basin to another. The process also allows for increased participation and input from

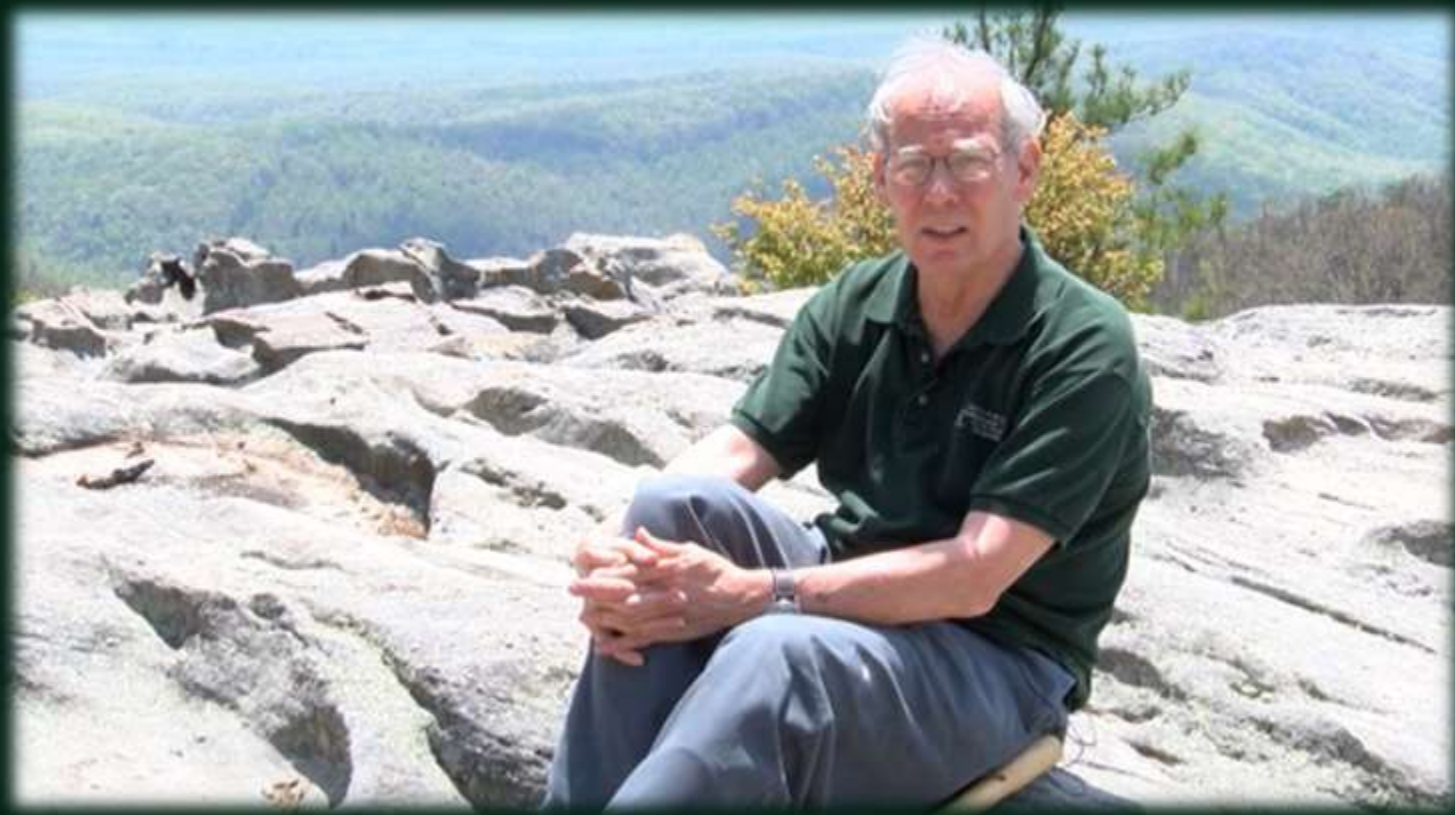
the public." Farm Bureau was initially concerned that the bill in its original form might impact farmers involved in irrigating farm products. The bill has now been amended so that it is very clear that any entity impacted must either be in the business of providing public drinking water or is an entity with the power of condemnation. If one is involved in either of these activities or powers and is planning to transfer water from one water basin to another then the bill kicks in. Farm Bureau was also concerned with the definition of a 'basin'. The Department of Environment and Conservation has now

Continued on page 2

FB VALUE FACTS:

SOY BOOM - A recent USDA-funded research report suggests that consuming soy protein may be a factor in protecting women against developing breast cancer. Food labels can now state that consuming 25 grams of soy protein a day and a diet low in saturated fat and cholesterol can cut heart disease risk. Soybean producers







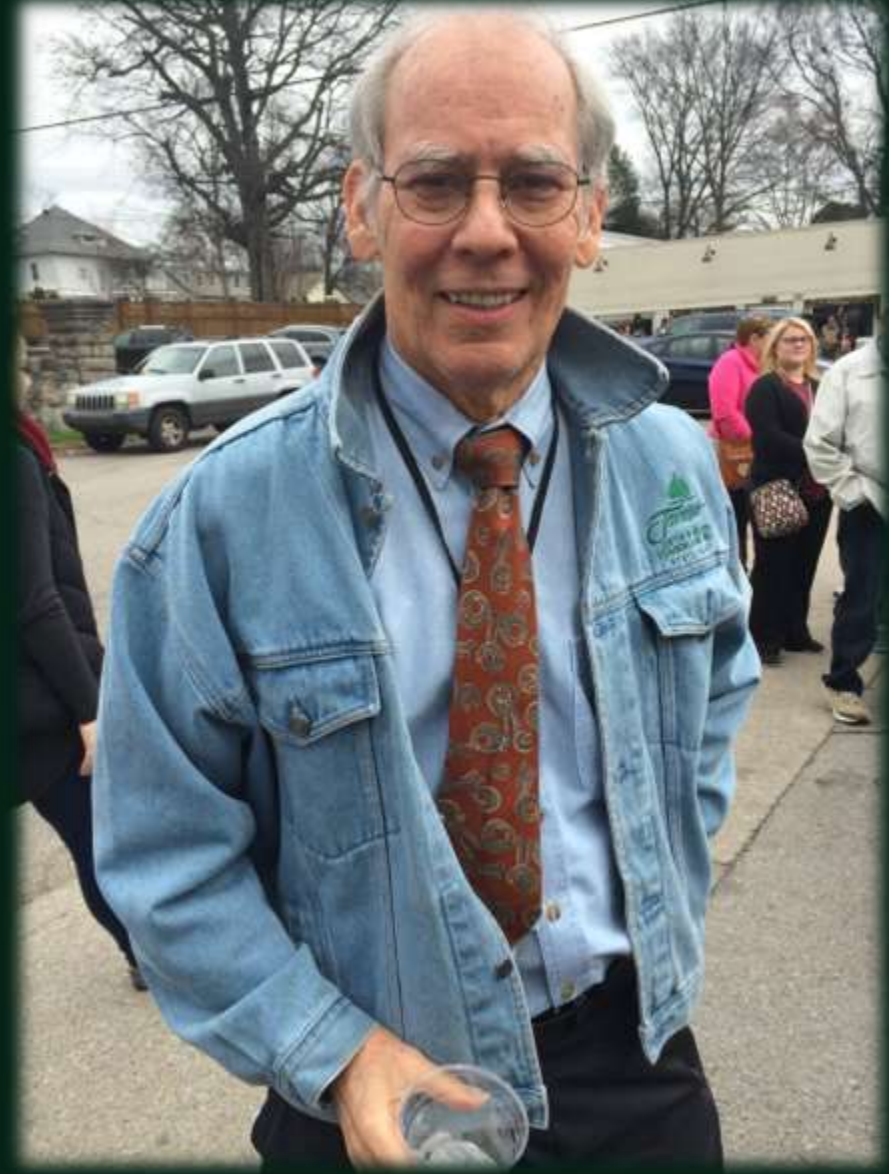












2023 Robert Sparks Walker Lifetime Achievement Award



Justin P. Wilson



2023 Governor's Award Winners



CLASS OF 2023

