

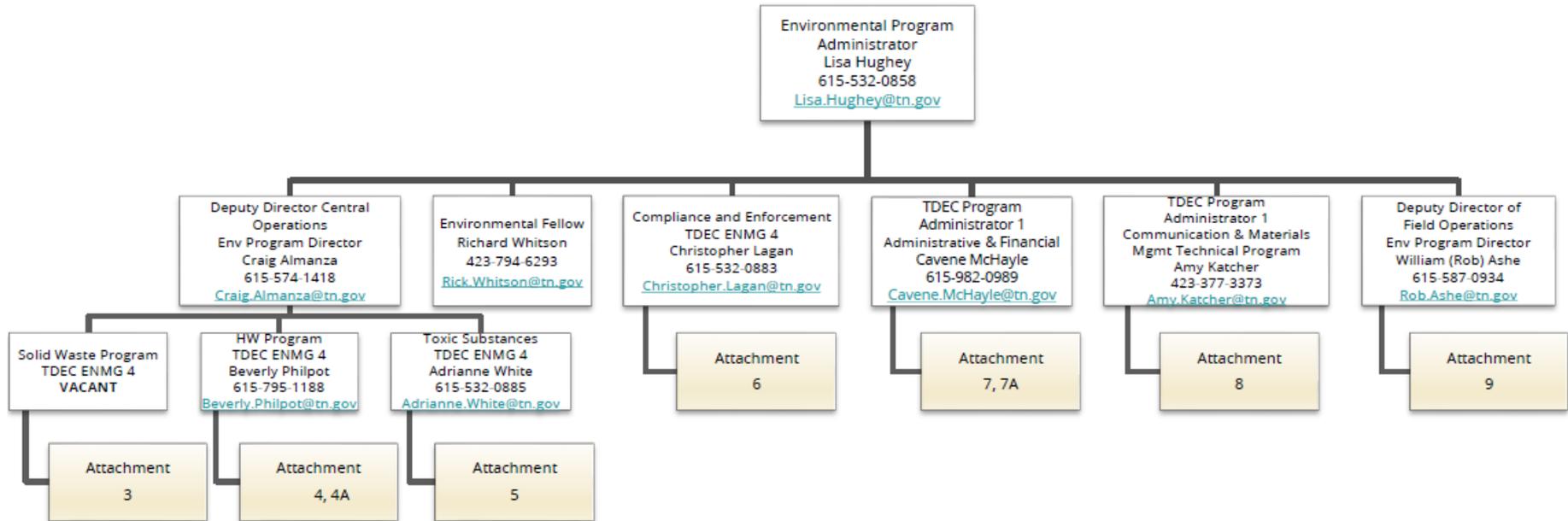


Department of
**Environment &
Conservation**

TDEC- Division of Solid Waste Management 2022 Division Update

A&WMA 2022 Southern Section Conference

Division Organizational Chart



Field Offices

Have a question about Tennessee's Environment?
Call 1-888-891-TDEC (8332)
ask.tdec@tn.gov

Nashville

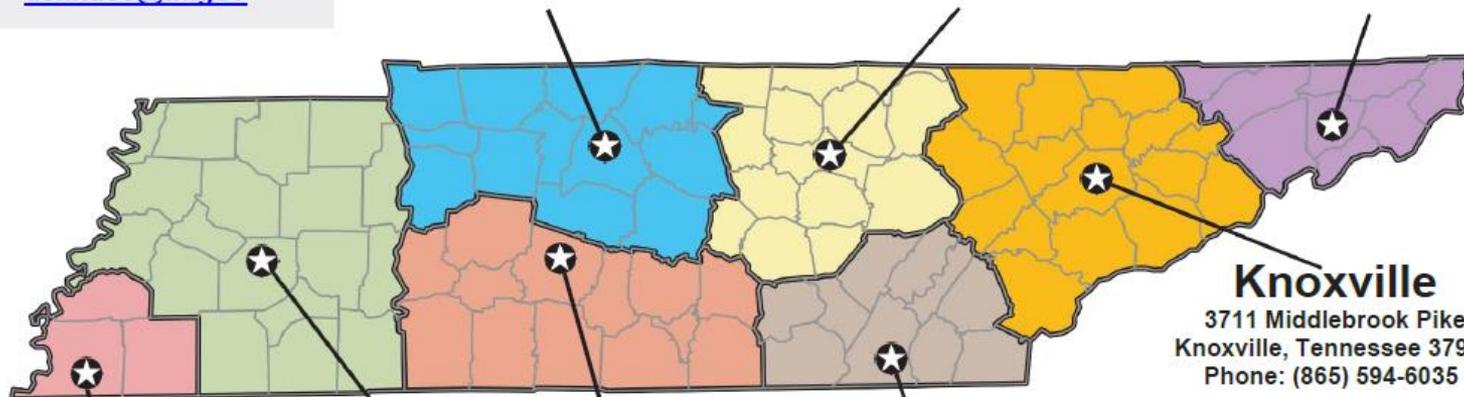
711 R.S. Gass Boulevard
Nashville, Tennessee 37243
Phone: (615) 687-7000

Cookeville

1221 South Willow Avenue
Cookeville, Tennessee 38506
Phone: (931)520-6688

Johnson City

2305 Silverdale Road
Johnson City, Tennessee 37601
Phone: (423)854-5400



Jackson

1625 Hollywood Drive
Jackson, Tennessee 38305
Phone: (731) 512-1300

Chattanooga

1301 Riverfront Parkway, Suite #206
Chattanooga, Tennessee 37402
Phone: (423) 634-5745

Knoxville

3711 Middlebrook Pike
Knoxville, Tennessee 37921
Phone: (865) 594-6035

Memphis

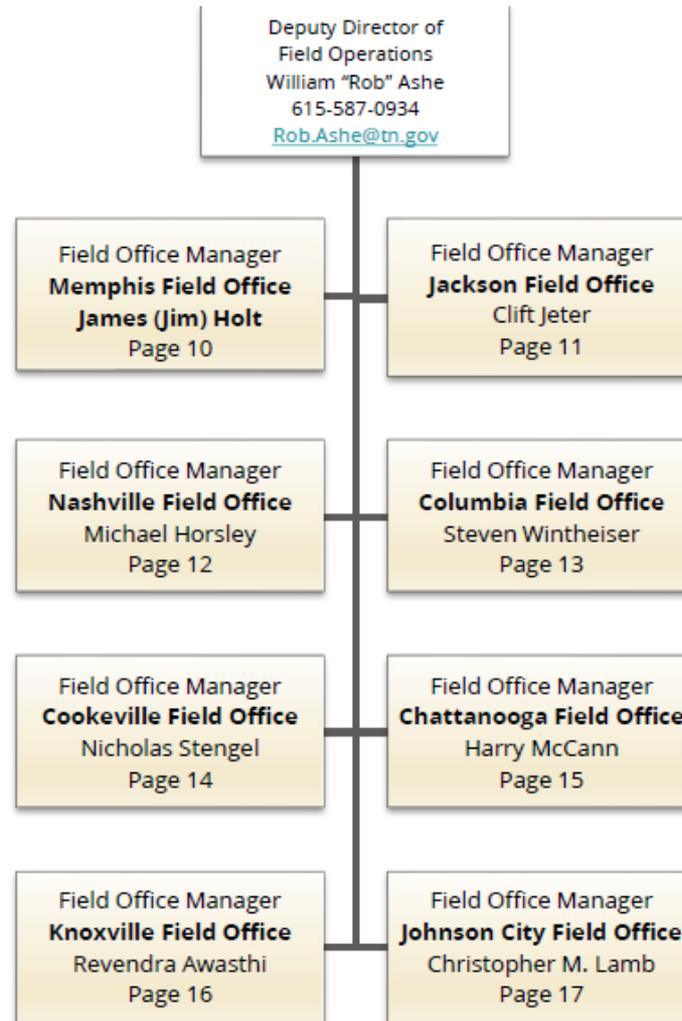
8383 Wolf Lake Drive
Bartlett, Tennessee 38133
Phone: (901) 371-3000

Columbia

1421 Hampshire Pike
Columbia, Tennessee 38401
Phone: (931) 380-3371



Field Office Managers

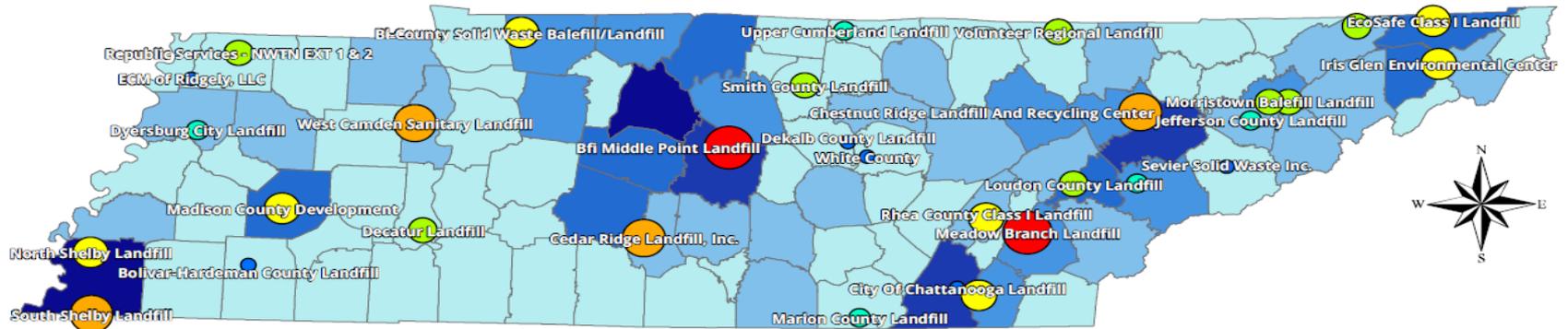


Field Office Vacancies

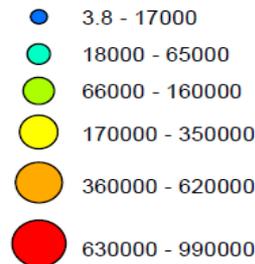
- Memphis – Haz Waste Inspector
- Jackson – Solid Waste Inspector
- Nashville – 2 Solid Waste Positions
- Columbia – 3 Solid waste Positions
- Knoxville – 1 Solid Waste Inspector

Class I Disposal (Private and Public)

2019 Active Class I Landfill and County Tonnages in Tennessee



2019 Landfilled Tonnages



MSW Generated by County



Tennessee at a Glance

TENNESSEE AT A GLANCE

Calendar Year January 1, 2019 through December 31, 2019

Disposal and Generation	
Class I Landfill Municipal Solid Waste Disposal	7,710,071.23 tons
Class III/IV Landfill Construction and Demolition Diversion *	1,811,078.00 tons
Total Generation Including Class I Disposal, Class III/IV and other Diversion, and Recycling both Public and Private (as reported)	19,336,424.00 tons

Total Post-Consumer Recycling by Public Programs Totals Exclude All Private Commercial and Industrial Recycling	
Plastic	7,350.80 tons
Paper	116,219.50 tons
Metal	57,052.60 tons
Glass	12,504.90 tons

Hot Topics

Chronic Wasting Disease:

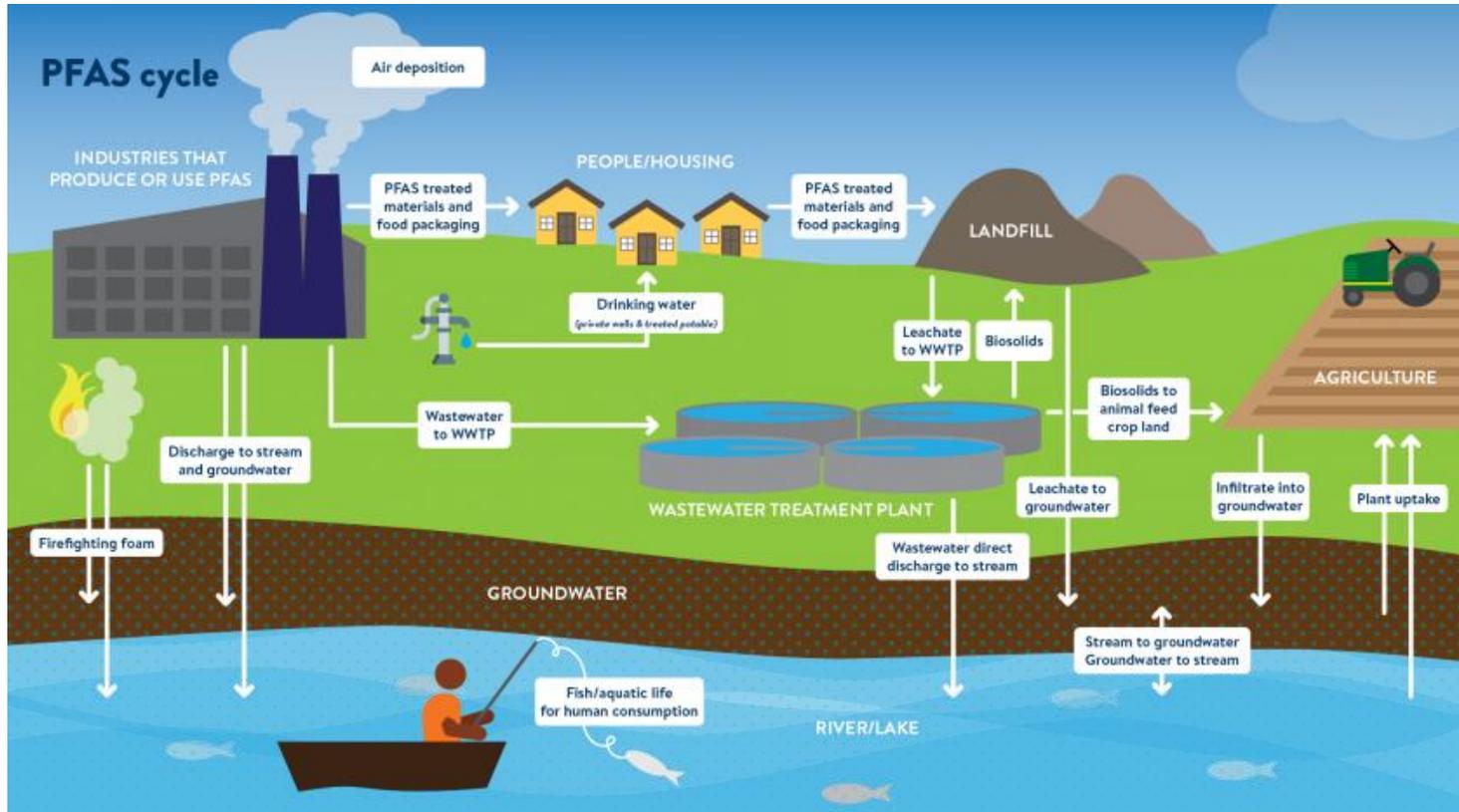
- “Beginning in October 2022, Chronic Wasting Disease (CWD) carcass management will look different in Tennessee. TDEC DSWM has worked with the Tennessee Wildlife Resource Agency (TWRA) to acquire and permit several incinerators, including a large-scale version that burns at the temperature (i.e., >1800 degrees) needed to destroy the prions that cause CWD. This method of disposal ensures Tennessee is managing deer carcasses in a manner both protective of human health and the environment and aids TWRA in the overall management of CWD in the state.”

Hot Topics

PFAS:

- Per- and polyfluoroalkyl (PFAS) substances are a large and diverse family of over 5,000 manmade chemicals used in a wide variety of manufactured goods
- Increasing attention has been focused on PFAS.
- They don't break down in the environment and that is how they find their way to landfills and WWTPs

Hot Topics



This image illustrates the potential pathways in which PFAS moves into and through human infrastructure (e.g., wastewater treatment plants) and the environment

Hot Topics

- In recognition of this and the increasing attention to PFAS at the federal level (EPA 2021a), the Tennessee Department of Environment and Conservation (TDEC) initiated a Landfill/WWTP PFAS Work Group to bring public and private stakeholders together to discuss PFAS in landfills and WWTPs.
- The Working Group's membership includes:
 - senior wastewater consultants, senior managers from private waste management companies, municipal solid waste managers, municipal water resource managers, and staff from TDEC's Division of Water Resources, Division of Solid Waste Management, Office of Policy and Sustainable Practices, Office of General Counsel, and Office of the Commissioner
- The Working Group began their efforts in December 2020
- Based on the Working Group's discussions, a literature review, and the EPA-acknowledged need for additional studies and data on the relationship between PFAS, landfills, and WWTPs, TDEC has determined that the appropriate path forward for Tennessee is to collect additional data and evaluate future EPA announcements and scientific studies
- This approach will better inform TDEC on what, if any, actions are needed to address PFAS in relation to landfills and WWTPs in Tennessee

Thoughts to Leave you With



Clean Energy and future opportunities

Thoughts to Leave you With

- We all should know by now that Solar has its hurdles to overcome before it becomes a viable alternative energy source
- Issues like
 - Excessive mining of minerals for panel production
 - Lifespan of panels
 - Battery usage and costs
 - Lack of constant energy production
 - And waste streams (Haz & Non Haz)
 - Recycling is not a viable option yet and return little usable material
 - Estimated \$20-\$30 to recycle a panel vs \$1-\$2 to landfill the same panel (not considering the Haz Waste)

Thoughts to Leave you With

- But, what about wind?
- Just recently brought to our attention, wind turbines pose an interesting issue in the solid waste world as well
- More than 70,800 wind turbines in the U.S.
 - Each having 3 blades, 155' long and roughly 27,000lbs each
 - Blade life is expected to be 20 years
 - 48,000lb load capacity = 2 blades per truck
- Some of the Turbine can be recycled for metals
- Blades must be cut up on site and transported to a disposal facility
- Recycling process for blades is still a challenge

Thoughts to Leave you With

- Some are being transported to TN
 - Costs associated with the transport?
 - Costs associated with recycling?
 - Value of product reclaimed?
- Definitely some challenges and opportunities for the future

The End!

Thank You!

Rob Ashe

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