Greetings! I hope that your 2019 is off to a good start! TDEC is excited to share with you a new tool designed to help communities across Tennessee realize environmental and cost savings associated with water and wastewater treatment. The department’s Tennessee Plant Optimization Program (TN POP), operated by TDEC’s Division of Water Resources with assistance from the Office of Policy and Sustainable Practices, provides resources, at no cost, to support water and wastewater operators in achieving optimization in energy use and removal of nutrients for their facilities through low-and-no-cost measures. Existing participants in TN POP – your peer communities – are experiencing substantial cost savings and nutrient reduction in effluent. They’ve had additional successes: affordably avoiding rate increases, negating the need for costly capital improvements, and leveraging ongoing cost-savings for infrastructure and capital improvements.

There are significant environmental benefits, too. We have over 3000 miles of streams and over 15,000 acres of lake in Tennessee that are impaired due to nutrients and this program is a component of Tennessee’s ongoing efforts to accomplish long-term nutrient reduction in all of our water resources.

In 2011, TDEC, working with DOE and TVA, developed and implemented the Energy Efficiency Partnership with water and wastewater facilities. In 2016, TDEC, working with TAUD and MTAS, piloted the Nutrient Optimization Program. The findings of these programs?

*Facilities consistently achieved ~20% ongoing reduction in energy usage and ~40% reduction in nutrients through low-to-no-cost measures.* Efficient use of existing resources allowed facilities to avoid rate increases and capital improvements; some facilities leveraged cost-savings to support needed infrastructure and capital investment improvements through SRF and other funding sources.

Through the TN POP, TDEC is working with partners – TAUD, MTAS, and the Tennessee Industrial Assessment Center (TIAC) - to support you in achieving cost-savings and improved facility performance, including cleaner effluent, through low-and-no-cost measures. On the TN POP website, you can access training videos, implementation and audit resources, case studies, technical assistance partners, and potential funding sources.
If your facility applies and qualifies as a member of the TN POP, which is a free program, it will benefit from:

- Technical assistance in pursuing facility optimization;
- Significant cost-savings opportunities, which can be leveraged to support additional personnel, capital improvements and infrastructure needs through SRF loans, avoidance of rate increases, avoidance of capital improvements and outlay;
- Nutrient reduction in effluent, which supports avoiding the need for implementation of nutrient limits in permits; and
- Flexible and informed regulatory oversight from TDEC’s Division of Water Resources.

Join with your peers and TDEC to pursue optimization of energy usage and nutrient output in your water and wastewater treatment facilities. Interested facilities should contact Karina Bynum, karina.bynum@tn.gov, for more information on how to apply and join TN POP.