MEET THE STAFF

- Mike Galloway, WWTP Superintendent
 - 31 years with the Danville
 Wastewater Plant
 - KY Class 4 Operator since1996
 - Superintendent 2003-Present
 - Contact Info:mgalloway@danvilleky.gov859-238-1240



DANVILLE WWTP



1970 Stanford Rd, Danville, KY

WWTP DETAILS

- Original Construction 1980 → 2.8 MGD
- Plant Upgraded in 2000 → 6.5 MGD

- 3 EQ lagoons have approximately 20 MG of holding capacity for wet weather storage
 - 2.7 acre onsite EQ lagoon
 - 2 offsite EQ lagoons
 - 2.5 acres lagoon @ JE Woods Drive → Clarks Run
 - 7.5 acres lagoon @ 2168 Connector → Spears Creek

WWTP DETAILS AND PERMIT

- Average Flow currently = 5 MGD
- Plant includes 2 oxidation ditches, 4 clarifiers, Trojan UV disinfection system, and 2 magnetic meters to measure discharge flow
- Danville WWTP Laboratory is certified through KY Division of Water to analyze:
 - ✓ Total Suspended Solids (TSS)
 - ✓ E. Coli
 - ✓ Dissolved Oxygen
 - ✓ pH

- ✓ Ammonia Nitrogen
- ✓ Total Phosphorus
- ✓ CBOD5

KPDES Discharge Permit #KY0057193 sets limits for each

WWTP EFFLUENT OUTFALL



WWTP SERVICE

- Primarily serves Danville and Boyle County including Junction City and North Point Training Center
- Also serves:
 - Burgin
 - Mercer Co Sanitation District
 - Moreland/Hustonville (Lincoln Co Sanitation District)
- Service Includes
 - 6,850 connections
 - 19,226 persons
 - 8,339 households

PLANS TO UPGRADE

- Planned Upgrade Projected for 2021
- Approx. \$10 Million in upgrades
- New UV disinfection (16 MGD Peak → 26 MGD Peak)
- New screening at headworks
- New Lab and Operations Bldg. with system wide SCADA
- New Solids Handling Bldg. with 2 new screw presses for solids dewatering
- Rehab RAS, scum, and sanitary sewer pump stations
- Phase #1 upgrade does not include increased design capacity, but does increase peak factor for disinfection

CHALLENGES

Biggest Operational Challenge

Inflow and Infiltration