



BLUEGRASS WATER

Utility Operating Company

A CSWR Managed Utility

September 2023



centralstateswaterresources.com

Mission



● CSWR OWNED SYSTEMS ● FILED ACQUISITION CASES NOT CURRENTLY OWNED

Our mission is to bring safe, reliable and environmentally responsible water resources to every community in the U.S.



SAFE WATER, HEALTHY COMMUNITIES

- Largest owner/operator of individual domestic wastewater systems in the U.S.
- We have removed 190 systems from compliance agreements with state environmental agencies.



America's Water Crisis



- **One in every four** Americans is exposed to potentially unsafe drinking water or wastewater systems.
- Water systems across the U.S. often lack staff, expertise and funding to address critical water safety, reliability and quality standards.
- Most water systems have been in operation between **50 - 100 years**, often leading to unsafe and environmentally damaging conditions including hazardous lead levels and E.coli contamination.



Improving Communities



Our investments in water resources are investments in communities overall, ultimately enhancing value, driving outside investment and growth.



CSWR - Operational Performance

- Operating **809 plants** at the end of 2022.
- **Single largest operator of wastewater plants in the United States.**
- **100% compliance** with Agreed Orders (environmental compliance agreements) to bring over 200 wastewater plants into compliance in 10 states.
- **Over 20,000** samples taken at CSWR owned water & wastewater facilities to monitor system performance.
- Outperformed all other utilities during Hurricane Ida response and restored service to all affected customers within 48 hours while some competitors' customers were without service for weeks.
- We have reduced receivership systems in every state where CSWR operates, lowering the amount of state-appointed trustee-run systems by as much as **77 percent** in one jurisdiction.
- No sustained Customer Complaints with Public Utility Regulators.

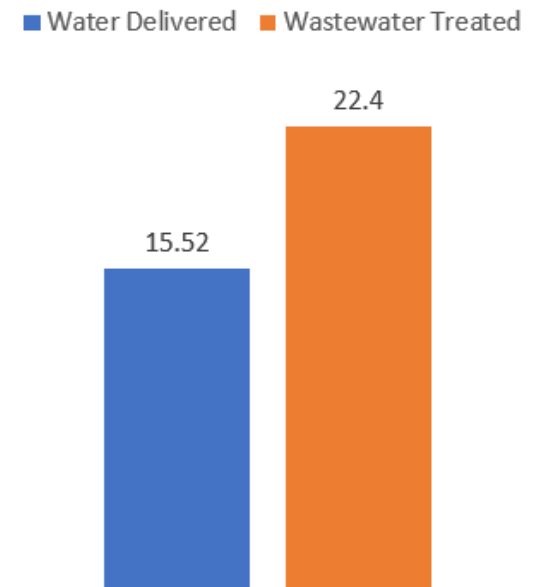




CSWR - Environmental Performance

- CSWR currently delivers on average **15.52MM gallons** of water and treats **22.40MM gallons** of wastewater daily for over **300,000** customers in 11 states.
- CSWR's wastewater treatment removes approximately **53.6 million lbs.** of pollution from local water bodies annually. This is calculated from removal of the primarily measured residential effluent pollutants (BOD, TSS, and Ammonia).
- The annual level of treatment improvement post-CSWR acquisition is estimated to be in excess of **9.0 million lbs.** of pollution removed from local water bodies (BOD, TSS and Ammonia).
- CSWR sends internal compliance personnel to conduct site visits annually on **ALL** owned plants.
- CSWR completed voluntary testing of all drinking water sources for PFAS to protect human health and safety in communities served.

YE 2022 CSWR Average Daily Flow (millions)

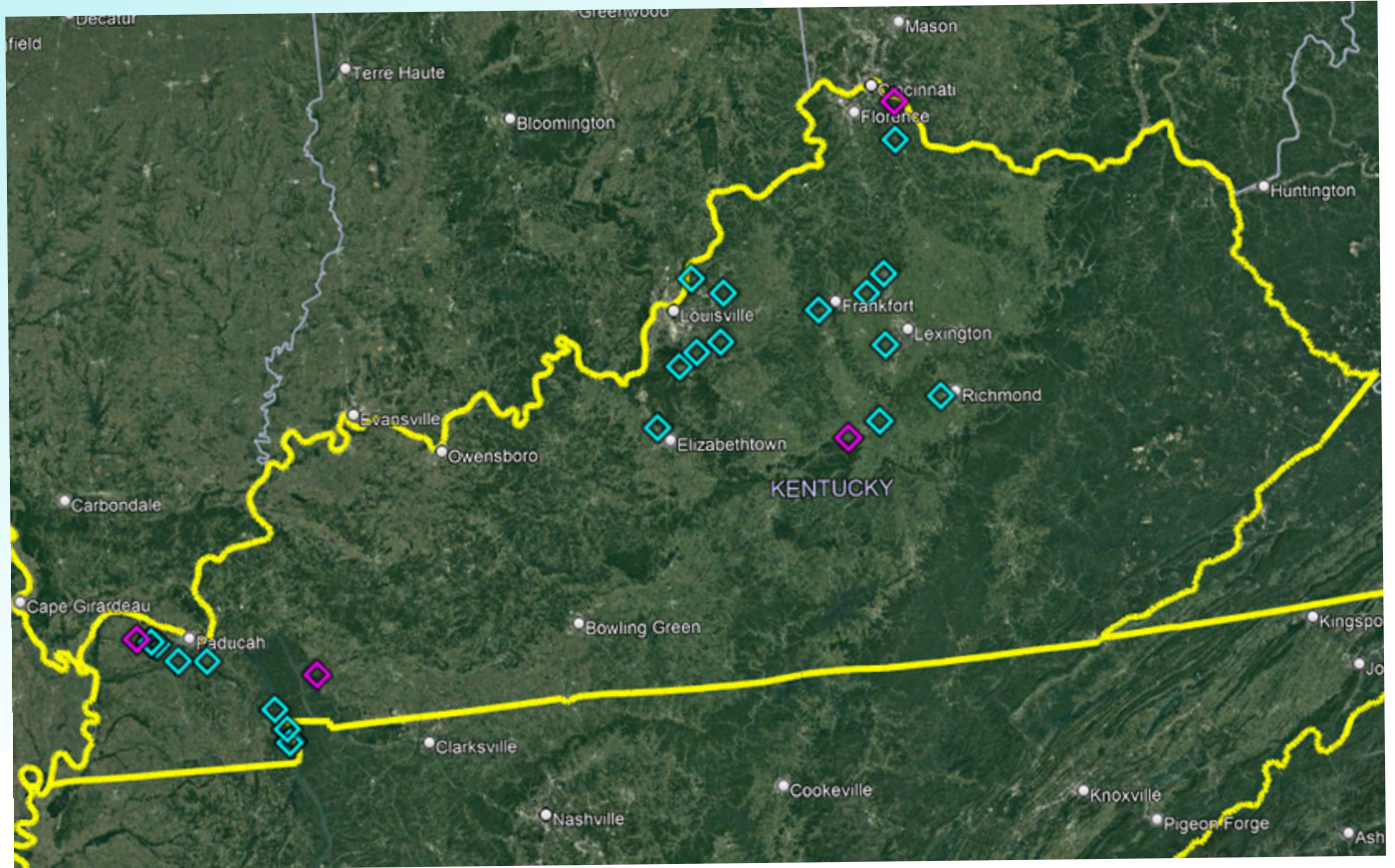




Bluegrass Water Rate Case Docket 2022-00432



Bluegrass Water Footprint



 Bluegrass Water Owned Facility

 Facility Under Contract



Bluegrass Systems

Company	Facility Name	Type	County
Kingswood	Kingswood	wastewater	Bullitt
Persimmon Ridge	Persimmon Ridge	wastewater	Shelby
Brocklyn	Brocklyn	wastewater	Madison
Airview	Airview	wastewater	Hardin
Lake Columbia	Lake Columbia	wastewater	Bullitt
LH Treatment	LH	wastewater	Scott
Fox Run	Fox Run	wastewater	Franklin
Marshall Co. Env.	Golden Acres	wastewater	Marshall
Marshall Co. Env.	Great Oaks	wastewater	McCracken
Joann Estates	Timberland	wastewater	McCracken
River Bluffs	River Bluffs	wastewater	Oldham
Arcadia Pines	Arcadia Pines	wastewater	McCracken
Carriage Park	Carriage Park	wastewater	McCracken
Marshall Ridge	Harting Ridge Lagoon	wastewater	McCracken
Delaplain Disposal	Delaplain Disposal	wastewater	Scott
Herrington Haven	Herrington Haven	wastewater	Garrard
Springcrest Sewer	Springcrest Sewer	wastewater	Jessamine
Woodland Acres	Woodland Acres	wastewater	Bullitt
Darlington Creek	Darlington Creek	wastewater	Campbell



System Updates



Airview-1

Before: Failed bar screens, clogged structure



After: Screen replaced, guard rails added, repairs made



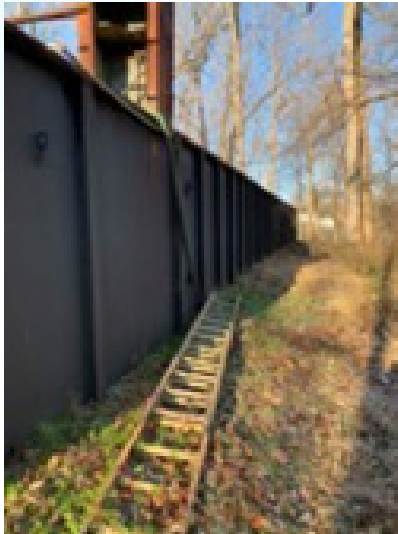


Airview-2

Before: Rusted tank, compromised fencing



After: New fencing, recoated tank





Brocklyn

Before: Clogged contact chamber, channel erosion



After: New contact chamber, erosion control implemented



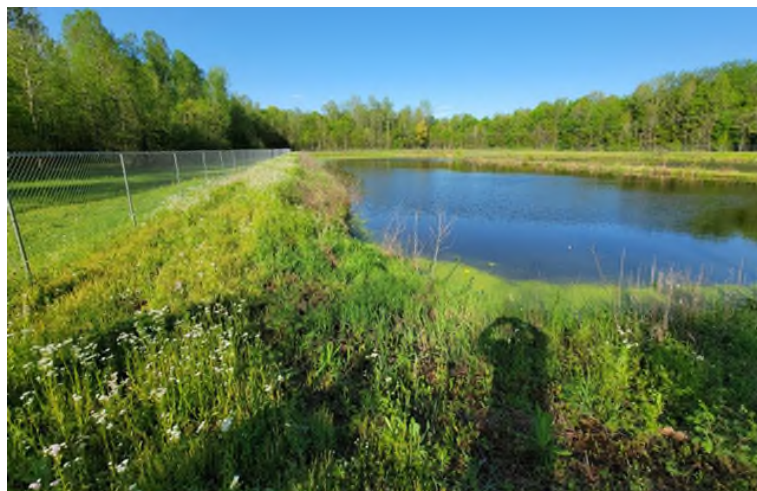


Arcadia & Carriage Park

Before: Leaking, eroding, vegetation growing in berms



After: Berms cleared and erosion control implemented





Fox Run-1

Before: Failed fencing, broken barbed wire, trash, deteriorated tank coating, no safety rails



After: Facility fencing repaired, tanks recoated





Fox Run-2

Before: Deteriorated service area, no safety rails



After: Improved influent lift station, safety rails installed



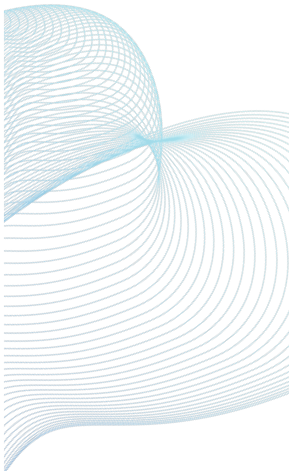


Golden Acres

Before: Corroded equipment due to flooding, loose rails



After: Corroded equipment replaced, safety rails installed, remote technology installed





Great Oaks-1

Before: Failing catwalk & handrails, sludge accumulation & overgrowth



After: Safe catwalk & handrails restored; Accumulated sludge & vegetation cleared





Great Oaks-2

Before: Failed digester out of service due to leaking into contact chamber, improper influent lines, tank corrosion



After: Repairs made, catwalk screens replaced, new proper influent line with flow meter installed



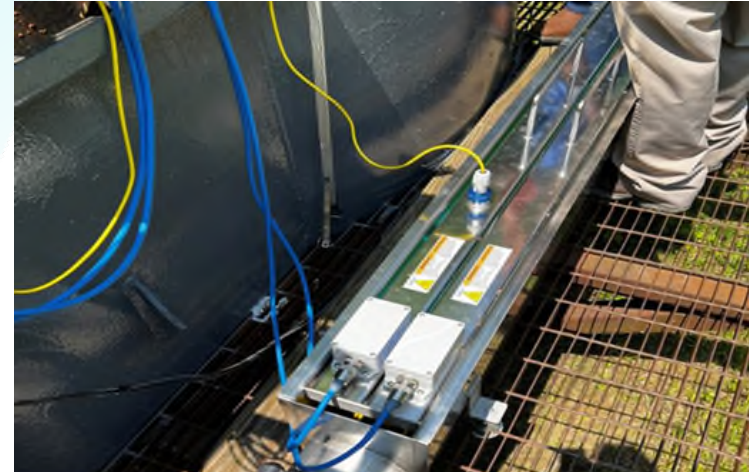


Kingswood

Before: Obsolete, broken UV disinfection system,
damaged handrails & catwalk



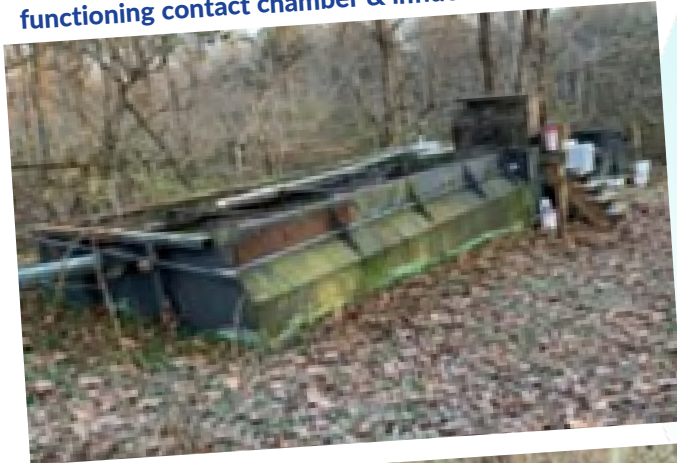
After: Replacement UV disinfection during installation,
repaired catwalk and handrails





Lake Columbia

Before: Deteriorating aeration plant, deteriorated low functioning contact chamber & influence screen box



After: Aeration plant repaired, new blower housing, new contact chamber, new influent screen box





LH

Before: Failing disinfection shed, no safety rails around treatment basin



After: New disinfection shed, safety rails installed around treatment basin





Marshall Ridge

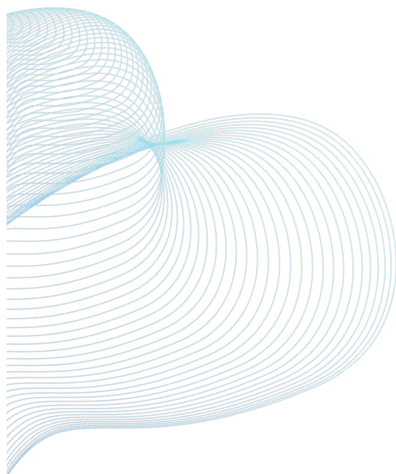
Before: Overgrowth of vegetation and duckweed in lagoon



After: Berms cleared and duckweed reduced



Failed drain field, in the process of being permitted for drain field replacement and additional work





Persimmon Ridge

Before: Damaged aeration, damaged lagoon baffle, poorly dosed chlorine with no monitoring scale



After: Improved aeration, repaired lagoon baffle, new chlorine system with scale & precise dosing





River Bluffs-1

Before: Terrible effluent quality, deteriorated aeration piping



After: Improved effluent quality, new aeration piping





River Bluffs-2

Before: Digester filled with solids, severe corrosion throughout plant



After: Digester repaired, cleaned out and recoated, repaired corrosion, replaced catwalks & handrails





Timberland-1

Before: Failing blowers & control system, poor influent lift station with overhead line causing splashing of waste



After: New blowers, lift station repaired and regraded with new below ground influent line



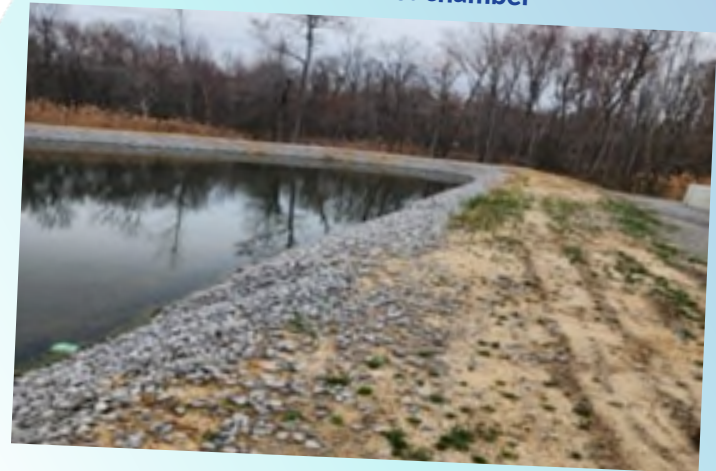


Timberland-2

Before: Overgrown, stagnant lagoon with damaged berms, failing contact chamber



After: Berms repaired and lagoon cleaned, new chlorine contact chamber





Timberland-3

Before: Corroded, leaking tanks, corrosion on much of the equipment and catwalks



After: Tank leaks patched, aeration improved, influence screen replaced





Compliance Overview

- Out of an estimated 651 NPDES regulated domestic wastewater facilities in Kentucky, 563 have had some form of noncompliance in the last 3 years (86%). These facilities have, over the last 5 years, incurred an average of 7.1 informal enforcement actions and 1.1 formal enforcement actions.
- For the systems it owns, CSWR has worked closely with DOW/EEC to form “Friendly Agreed Orders” recognizing noncompliance at wastewater systems and establishing a path to compliance.
- CSWR has formed these agreements for 15 historically noncompliant systems and has brought **5 facilities into consistent compliance** (Airview, Brocklyn, Golden Acres, Lake Columbia, LH) and expect to have **4 more** removed by the end of 2023 (Fox Run, Kingswood, River Bluffs, Timberland).
- We work closely with the environmental regulators to provide an option to resolve long-term noncompliance at systems which do not have the resources to reinvest or properly operate the systems on their own.
- An additional Friendly Agreed Order is currently being negotiated for the upcoming acquisitions of Magruder Village, Moon River, and Yung Farms.



Compliance Overview

Bluegrass Compliance Status			Pre Acquisition Compliance Data				August 2023 Data			
System	Permit	Aquisition	CBOD	NH3	DO	TRC	CBOD mg/l	NH3 mg/l	DO mg/l	TRC mg/l
Airview	KY0045390	9/19/2019	94	19.6		0.58	<4	<.2	0.1	<.01
Brocklyn	KY0081299	9/17/2019	14				<4	<.2	7.7	<.01
Delaplain Disposal	KY0079049	2/23/2021				0.33	<4	0.5	7.15	<.01
Fox Run	KY0086967	9/30/2019				0.026	17	<0.2	7.42	<.01
Golden Acres	KY0044164	9/30/2019	36	11			4	2.7		
Great Oaks	KY0080845	9/30/2019	49	26.5	6.6	0.06	<4	4.2	7.61	<.01
Kingswood	KY0101419	9/16/2019		4.1			4	<.2	8.37	
LH	KY0081591	9/25/2019	67		6.8		15	<.2	7.3	<.01
Persimmon Ridge	KY0090956	9/16/2019	12	10.6		1.19	4	<.2	8.03	<.01
River Bluffs	KY0043150	5/1/2020		4.1			10	0.2	8.1	0.01
Timberland	KY0083755	4/30/2020	16	4.93			10	<0.2	7.43	<.01
Woodland Acres	KY0091600	3/9/2021	30	11			<4	<.2		

- **CBOD: Carbonaceous Biochemical Oxygen Demand** is a measure of how much organic material is in the H2O for bacteria using oxygen consumes. Too high a measure means there's too much organic material in the water.
- **NH3: Ammonia** contributes to algae growth. Too much algae in the receiving waters will snuff out naturally occurring plant and fish life
- **TRC: Total Residual Chlorine** is the amount of chlorine left after the disinfection process which can kill plant and animal life if left unchecked
- **DO: High Dissolved Oxygen** levels are crucial for the breakdown of organic material by bacteria and are necessary for fish and other aquatic organisms to survive



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Thank you!



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Case No. 2022-00432

Bluegrass Water's Supplemental Response to PSC 2-3

Exhibit PSC 2-3

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