

From the Executive Director



Michael Wilson

The main focus over the past year has been to the financing and start of construction of the expansion of the Rocky River Regional Wastewater Treatment Plant (RRRWWTWP). After several years of preparation in improving the financial status of the Water and Sewer of Cabarrus County (WSACC), WSACC sought its first public credit rating by the rating agencies. Shortly afterward, WSACC issued \$65.790 million in revenue bonds to finance its share of the \$100+ million Phase 3 Expansion Project.

WSACC has seen a moderation in the number of building permits with new sewer connection dropping from the peak in FY 20 of 1,816 to 1,397 in the current year. System Development Fees collected dropped from \$6.179 million to \$4.426 million in the current year. Sewer flows for the past two years have remained level due to rainfall returning to near normal amounts.

WSACC implemented a one point three percent (1.3%) and four point seven percent (4.7%) rate increases in FY 22 and FY 23 respectively. For the FY 22 WSACC operating results on a budgetary basis resulted in revenues exceeding expenditures by \$2,559,586.

Work continues by Black & Veatch to update our Master Plan. The Master Plan is looking at the water and sewer needs of Cabarrus County for the next 20 years. Once the sewer needs are identified, Black & Veatch will assist WSACC with filing the necessary documentation to the NC Department of Environmental Quality requesting a new sewer capacity permit above the current 34 MGD permit at RRRWWTP. The Master Plan will also allow for updating our Capital Improvement Program to reflect the changing needs of Cabarrus County.

Compliance - Industrial Customers

WSACC pretreatment program has 15 significant industrial users (SIUs) and 12 insignificant industrial users. WSACC would like to commend all of its industrial users for a job well done in 2022. Only one industry was in significant non-compliance (SNC). WSACC is working directly with the industrial users to prevent future violations and maintain compliance. No adverse effect was observed to the wastewater treatment plant or water quality standards during the non-compliance. WSACC is required by federal regulations to report annually all SIUs in SNC to the Division of Environmental Quality.

Environmental Assistance

North Carolina Division of Environmental Assistance and Customer Service (DEACS) provides free assistance to state agencies or local governments on ways to eliminate, reduce, reuse, or recycle waste. Contact DEACS at 877-623-6748 or www.wastereductionpartners.org

Report Sanitary Sewer Overflows

Sewer collection system overflows often go unreported. Call 704-788-4164 immediately if you see water flowing from a manhole or underground pipe.



Toxic Chemicals - Disposal

Cabarrus County operates a Household Hazardous Waste disposal facility, which is FREE for Cabarrus County residents. Please remember, materials that are improperly stored or disposed of can be hazardous to your health and the environment.

Rocky River Regional Wastewater Treatment Plant

6400 Breezy Lane, Concord, NC 28025

Phone: 704-788-4164 Fax: 704-786-1967

www.wsacc.org



WASTEWATER SYSTEM REPORT 2022

RRRWWTWP is owned and operated by the Water and Sewer Authority of Cabarrus County (WSACC). The facility serves the thriving area north of Charlotte, including the cities of Concord and Kannapolis, the towns of Harrisburg and Mt. Pleasant, and Cabarrus County. This report contains performance highlights of the Rocky River Regional Wastewater Treatment Plant (RRRWWTWP) and its Collection System for the year 2022. This annual report is required by the Clean Water Act of 1999.

The staff performs all functions related to the facility including operations and maintenance, laboratory analysis, and industrial and groundwater monitoring. The Plant uses a pure-oxygen activated sludge, secondary treatment system that processes domestic and industrial wastewater from both in-plant and off-site sources. The solids processing operation relies on a combination of proven technologies, innovations, and cost effective equipment and operations. All current state and federal standards are strongly adhered to for air and water resources protection.

RRRWWTWP operates under a National Pollutant Discharge Elimination System (NPDES) permit (NC0036269) issued and enforced by the North Carolina Department of Environmental Quality. RRRWWTP operates a biosolids incinerator under its Air Permit (NC04475T22), which includes an on-site emergency generator. The Plant also has an off-site pump station generator under a separate Air Permit (NC08780G02).

To comply with our permit, RRRWWTP's lab conducted over 23,400 water quality control tests in 2022. The 2022 Performance Report table summarizes those permit compliance results.



On February 6, 2017 the Division of Air Quality issued WSACC its first Title V Air Quality permit. This permit covers operation and monitoring of our multi-hearth incinerator. WSACC continues to operate the incinerator in compliance with its permit and there have been no exceedances of the permit since 1997.



The Collection System consists of 148 miles of interceptor sewer, ranging in pipe size diameters from 12 to 72 inches. Five remote pump stations provide wastewater transportation services from the surrounding areas to RRRWWTP. Other Interceptor duties include inspections, rehabilitation, right-of-way maintenance, and flow monitoring. The Collection System operates under the Collection System Permit (WQCS00009), and must comply with detailed design, inspection, and monitoring regulations. Any problems or spills must be reported to the North Carolina Department of Environment and Natural Resources within 24 hours. Public notification through news releases is also required. WSACC has implemented a preventative maintenance program to reduce problems and overflows, and as the table to the right shows, there was one reportable overflow in 2022. WSACC televised 70,657 feet of sewer lines during 2022.



2022 Performance (January-December)

Parameter Units	Effluent Permit Limits	Average Influent	Average Effluent	Removal Efficiency %	Exceeded Limit
CBOD5 (mg/L)	15.4 summer/22.6 winter	309 mg/L	5.3 mg/L	98.2	0
NH3-N (mg/L)	1.7 summer/3.9 winter	33.9 mg/L	0.2 mg/L	99.4	0
TSS (mg/L)	45 weekly/30 monthly	390 mg/L	17.4 mg/L	95.5	0
Dissolved Oxygen (ppm)	Minimum 6.0 ppm	—	Min = 6.8 ppm		0
pH	6.0 - 9.0 s.u.	—	6.0 - 6.7		0
Fecal Coliform (MPN/100mL)	200 monthly/400 weekly	—	112		0
Chlorine Residual (µg/L)	<50 µg/L (Compliant)		<50 (12) µg/L		0
Chronic Toxicity	66.5 %		93.6 %		0
Flow (MGD)	26.5 MGD		21.03 MGD		0

Rocky River Regional Wastewater Treatment Plant Operator in Responsible Charge (ORC) - James Sims

2022 Spills	NC Location	Volume (Gallons)	Cause & Corrective Measure
April	Concord	120,000	Air relief failure

WSACC Collection System Operator in Responsible Charge (ORC) - Wayne Lyles

Certification

I certify under penalty of law that this report is complete and accurate to the best of my knowledge. I further certify that this report has been made available to the users or customers of the named system and that those users have been notified of its availability.

James Sims
Wastewater Operations Manager
February 14, 2023

Notification

WSACC is a wholesale supplier of wastewater services for area municipalities. This report was distributed to the following government officials on February 14, 2023.

- Steve Morris, Chairman, Cabarrus County Commissioners
- Mike Downs, Cabarrus County Manager
- Angela Charles, Charlotte Water Director
- W. Del Eudy, Mayor, Town of Mt. Pleasant
- William C. Dusch, Mayor, City of Concord
- Lloyd Payne, Concord City Manager
- Jeff Corley, Director, Concord Water Resources
- Jennifer Teague, Mayor, Town of Harrisburg
- John Crump, Mayor, Town of Midland
- Darrell Hinnant, Mayor, City of Kannapolis
- Michael Legg, Kannapolis City Manager