

**City of Conover Wastewater Treatment System**  
**Performance Annual Report for 2020**

**January 27, 2021**

**I. General Information**

Facility Name: City of Conover Sanitary Sewer Collection System

Contact Person: Thomas J. Miller Jr.,  
Collection System Operator Responsible in Charge (ORC)  
PO Box 549  
Conover, NC 28613  
828-464-4808

Applicable Permits: Wastewater Collection System Permit Number-  
WQCS00088  
ALSO

Facility Name: City of Conover, Northeast Wastewater Treatment Plant

Contact Person: Brian Bradshaw, WWTP Operator Responsible in Charge-  
Pretreatment Coordinator  
PO Box 549  
Conover, NC 28613  
828-464-4808

Applicable Permits: National Pollutant Discharge Elimination System (NPDES)  
Permit Number – NC0024252

The City of Conover views environmental protection as one of our top priorities. For this reason, the City actively participates in the collection, treatment and disposition of sewage generated within its boundaries.

Description of Collection System

The City of Conover's collection system consist of 126 miles of sewer line with six (6) sewer lift stations. The collection system transports wastewater to the City of Conover's Northeast Wastewater Treatment Plant, and a portion to the City of Newton's Clark Creek Regional Wastewater Treatment Plant.

Homes, businesses, and industries discharge their wastewater (sewage) into the sanitary sewer system. Once the wastewater is discharged into the sewer pipes it travels through the collection system until it reaches the wastewater treatment plant

Upon arrival at the treatment plant, located at 3680 Hillview Drive, all wastewater is treated and discharged in an environmentally safe manner in accordance with the National Pollutant Discharge Elimination System (NPDES) regulations.

Conover's Northeast Wastewater Treatment Plant, originally built in 1964, upgraded in 1980 and completely redesigned in 1991 currently operates according to NPDES permit NC0024252. The facility is a Sequencing Batch Reactor (SBR) activated sludge facility with tertiary sand filters, which has a permitted treatment capacity of 1.5 million gallons per day. The facility operates 24 hours per day and is staffed 8 hours per day, except on weekends. Staff visits the facility on the weekend and holidays to ensure that it is operating properly. The 2020 daily average flow is 1.053 Million Gallons per Day (MGD).

## **II. Performance**

### **Yearly Performance:**

During the year 2020, the wastewater collection staff visited all lift stations at a minimum of once per week. The collection staff performed schedule preventative maintenance and made all necessary repairs as needed to keep the lift stations operating at peak performance. In 2020, we have visually inspected 5,234 feet (0.99 miles) of sewer lines and cleaned 66,628 feet (12.62 miles) of sewer lines. The combined 13.61 miles of sewer lines inspected represents 10.8 % of Conover's collection system. The aerial and high priority lines are inspected 4 times per year and after major rain events. Lines that are not visible to the general public are mowed three (3) times per year in the spring and summer months.

### **Sanitary Sewer Overflows (SSOs):**

The City of Conover wastewater collection system experienced eighteen (18) reportable overflows and all five (5) reached the waters of North Carolina. One (1) overflow did result in a fish kill (creek chubs).

02/06/2020 210 3<sup>rd</sup> Ave NE, Inflow and Infiltration was the cause. The estimated volume spill was 5,400 gallons reaching the waters of tributary of Lyle Creek. Reported to DWR incident# 202000358.

02/06/2020 127 13<sup>th</sup> Ave SE, Infiltration and Inflow was the cause of the spill. The estimated volume of 225 gallons reach a tributary of McLin Creek. Reported to DWR incident # 202000360.

02/06/2020 1004 Keisler Rd SE, Infiltration and Inflow was the cause of the spill. The estimated volume of 400 gallons reached a tributary of McLin Creek. Reported to DWR incident # 202000356.

02/24/2020 309 7<sup>th</sup> St Pl NE, an estimated 1,000 gallons spilled into the waters of Lyle Creek. Grease and debris in the line was the cause. It was reported to DWR incident # 202000781.

05/20/2020 406 3rd Ave NE, an estimated 500 gallons reached a tributary of Lyle Creek. Pipe failure and Infiltration and Inflow was the cause. It was reported to DWR incident # 202001443.

05/27/2020 406 3rd Ave NE, an estimated 500 gallons reached a tributary of Lyle Creek. Infiltration and Inflow was the cause. It was reported to DWR incident # 202001597.

06/19/2020 406 3rd Ave NE, an estimated 1,700 gallons reached a tributary of Lyle Creek. Infiltration and Inflow was the cause. It was reported to DWR incident # 202001992.

06/25/2020 Outfall at aerial crossing 609 County Home Rd., an estimated 800 gallons reached a tributary of Lyle Creek. Grease and Debris was the cause. It was reported to DWR incident # 202002074.

06/26/2020 1226 Fedex Drive SW., an estimated 500 gallons reached a tributary of Clines Creek. Pipe Failure was the cause. It was reported to DWR incident # 202002084.

07/20/2020 150 Lap Rd, an estimated 900 gallons reached a tributary of Lyle Creek. Root and debris in the line was the cause. It was reported to DWR incident # 202002196.

08/05/2020 130 Somerset Drive NW, an estimated 900 gallons reached Lyle Creek. Pipe failure was the cause. It was reported to DWR incident # 202002293.

08/05/2020 130 Somerset Drive NW, an estimated 900 gallons reached Lyle Creek. Pipe failure was the cause. It was reported to DWR incident # 202002293.

08/15/2020 3680 Hillview Drive NE, an estimated 1,500 gallons reached Lyle Creek. Debris in the line was the cause. It was reported to Emergency Management incident # 202002372.

11/11/2020 406 3<sup>rd</sup> Ave NE, an estimated 6,000 gallons reached a tributary of Lyle Creek. Infiltration and Inflow in the line was the cause. It was reported to DWR incident # 202002960.

11/11/2020 1820 Evans St. NE, an estimated 1,650 gallons reached Mull Creek. Infiltration and Inflow caused Pump Station to overflow. It was reported to DWR incident # 202002963.

11/12/2020 406 3<sup>rd</sup> Ave NE, an estimated 3,600 gallons reached a tributary of Lyle Creek. Infiltration and Inflow in the line was the cause. It was reported to DWR incident # 202002964.

11/12/2020 3875 Deer Run Drive NE, an estimated 13,500 gallons reached Lyle Creek. Pump Station was flooded by Lyle Creek was the cause. It was reported to DWR incident # 202002965.

12/14/2020 408 3<sup>rd</sup> Ave NE, an estimated 50 gallons reached a tributary of Lyle Creek. Infiltration and Inflow was the cause. It was reported to DWR incident # 20203474.

12/30/2020 408 3<sup>rd</sup> Ave NE, an estimated 9,000 gallons reached a tributary of Lyle Creek. Pipe failure was the cause. It was reported to DWR incident # 20203588.

**Northeast Wastewater Treatment Plant Performance**

NEWWTP NC0024252	Discharge 001										
	Date	Flow (mgd)	Effluent Pollutants				Toxicity	Influent Pollutants			Removal
BOD			NH3	TSS	Fecal Coliform	BOD		TSS	BOD%	TSS%	
	1/2020	1.194	1.31	0.5	0	1.47		274.4	88.3	99.5%	100%
	2/2020	1.384	2.88	0.2	0.53	1		302.3	94.4	99.0%	99.4%
	3/2020	0.966	2.10	0	1.79	1.35	PASS	271.6	96.4	98.6%	100%
	4/2020	0.905	2.39	0.25	1.24	1.47		288.1	94.7	99.2%	98.7%
	5/2020	1.178	6.22	0.62	3.67	1		276.7	119.2	97.8%	96.9%
	6/2020	1.013	3.78	0.44	0	1.54	PASS	263.5	135.9	98.6%	100%
	7/2020	0.730	0.91	0	0	1		313.9	169.7	99.7%	100%
	8/2020	1.047	0.38	0.05	0	1		265.2	127.0	99.9%	100%
	9/2020	0.990	1.86	0.19	0	1	PASS	309.6	126.3	99.4%	100%
	10/2020	1.063	2.01	0.05	0.91	1		297.6	92.8	99.3%	99.0%
	11/2020	1.052	2.27	0.07	0	1		322.8	226.7	99.3%	100%
	12/2020	1.114	1.23	0.06	0	1	PASS	253.2	98.8	99.5%	100%
	average	1.053	2.28	0.22	0.68	1.15		286.6	122.5	99.2%	99.5%
<b>NPDES LIMIT</b>	<b>1.500</b>	<b>16/8</b>	<b>4.0/2.0</b>	<b>30</b>	<b>200col/100ml</b>	<b>Pass/Fail</b>				<b>85%</b>	<b>85%</b>

Exceeded weekly BOD average of 12.0 mg/L for week of May 18<sup>th</sup>- May 22<sup>nd</sup>, 2020. The weekly average was 15.1 mg/L.

## Questions?

Should you have any questions regarding the treatment of wastewater in your community or need to report a sewer problem, please feel free to call Conover Public Works at 828-464-4808. To report a sewer problem after 4:30 PM or on weekends call Catawba County Communications at 828-464-3112.