



## Wastewater Collection System

### System Performance Annual Report July 1, 2019– June 30, 2020

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I. General Information:

A. Facility / System Name:

City of Hendersonville Wastewater Collection System

B. Responsible Entity:

City of Hendersonville

C. Operator in Responsible Charge (ORC):

Tim Sexton

305 Williams Street

Hendersonville NC 28792

(828) 697-3073

Email [tsexton@hvlnc.gov](mailto:tsexton@hvlnc.gov)

D. Non-Discharge Permit Number:

Collection System Permit Number WQCS00070

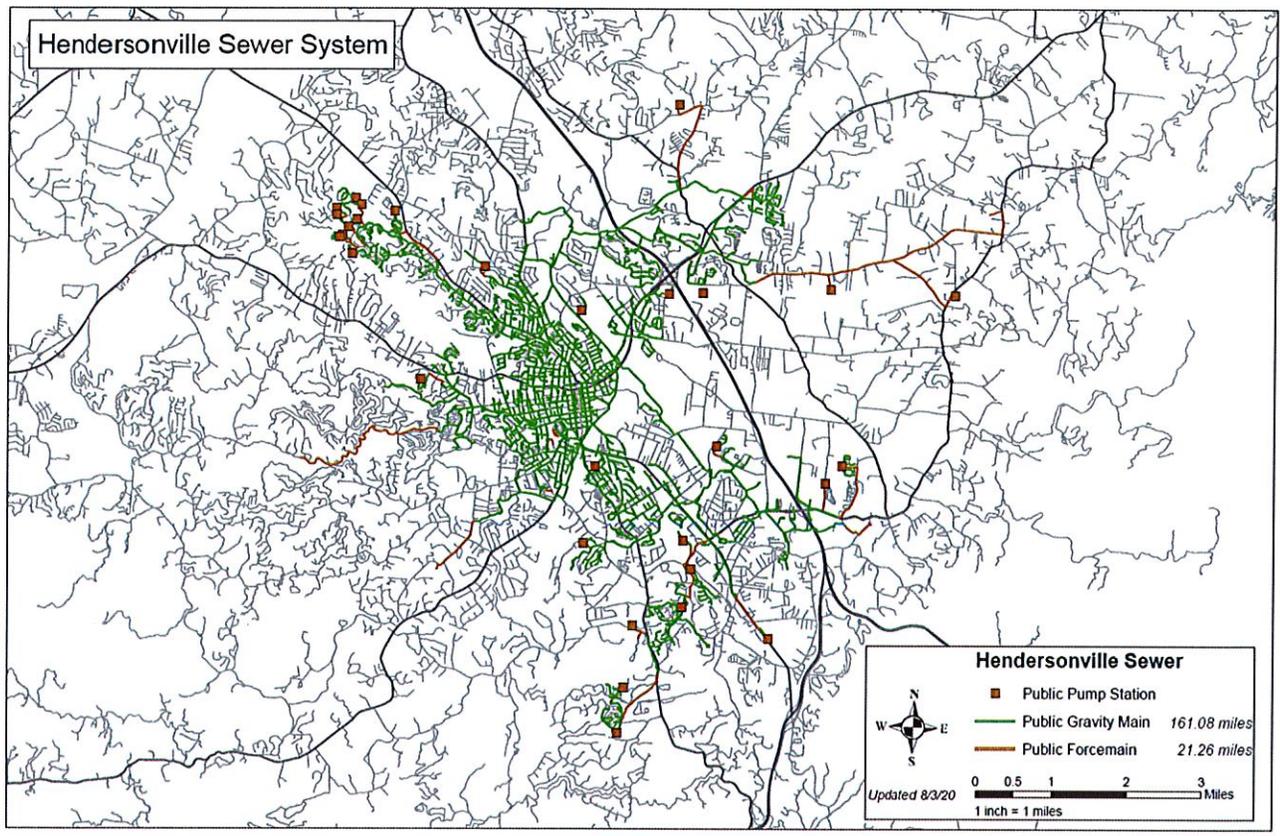
NPDES Permit Number (WWTP):

NC0025534

E. Description of Collection System:

The City of Hendersonville (the "City") wastewater collection system is located in and around the corporate limits of the City. The majority of the system consists of gravity sewer mains. There are currently 30-wastewater lift stations with pressure force mains located within the system that are owned and operated by the City. The collection system consists of approximately 161-miles of gravity sewer mains ranging in size from 6" to 42". These mains are connected by manholes at each intersecting point. Also, there are approximately 21-miles of sewer force mains ranging from 2" to 8" that connect to the lift stations and discharge into manholes at a higher elevation. The system collects wastewater and delivers it to the City's wastewater treatment plant (NPDES Permit No. NC0025534) located on Balfour Road.

F. Map of Collection System:



II. Performance:

A. General:

The City's wastewater collection system had a total of fourteen (14) reportable sanitary sewer overflows (SSOs) during the twelve-month period from July 1, 2019 to June 30, 2020. These spills resulted in a total of approximately 52,128-gallons of untreated wastewater reaching area streams with a total of 964,990,000-gallons of wastewater being treated at the wastewater treatment facility during the same period. The spills did not result in any fish kills or other known environmental impact.

The City added an inflow infiltration technician position to the sewer collections division of the Department in 2015. This technician is dedicated to searching out and identifying potential sources of inflow through smoke testing and dye testing and continues to work on reducing inflow and infiltration (I/I). During this twelve-month period our crews repaired sections of the system resulting in the reduction of approximately 6,931-gallons of inflow per one-inch of rainfall and 162-gallons per minute (gpm) of continuous flow. Also, during this twelve-month period, we have smoke tested 20,598-ft. of sewer mains. The City has also hired a utilities engineer to assist with this effort and continues to design repair and replacement plans for any defective sewer mains identified that are resulting in inflow.

During the year our crews have cleaned 90,462-ft. of our sewer system or approximately 9.7% of the gravity system. Our crews have also inspected approximately 50,452-ft. of sewer mains or approximately 5.4% of the gravity sewer system using closed-circuit television (CCTV)

equipment. The City invested over \$218,000 in new CCTV equipment and vehicle, approximately \$350,000 in new combination vacuum cleaning equipment and truck in 2012. The City has also invested approximately \$70,000 for a mini-excavator with a mowing attachment and approximately \$128,000 for two skid-steer bush hog machines, both for clearing sewer rights-of-way. In 2018, the Department added a dedicated 4-man rights-of-way maintenance crew, including a crew leader to oversee the crew, for maintaining all sewer easements and rights-of-way.

B. By Month:

SSOs which reached area streams:

**Thursday, July 11, 2019** an SSO totaling approximately **3,800 gallons** was experienced within the City's collection system.

The SSO resulted from a gravity main blocked by sanitary rags at 1724 Brevard Rd. resulting in **3,800 gallons** of untreated wastewater entering Wash Creek. The incident was identified by City staff at 11:00 a.m. and ended at 11:38 a.m. There were no known environmental impacts resulting from this overflow.

**Wednesday, October 9, 2019** an SSO totaling approximately **30 gallons** was experienced within the City's collection system.

The SSO resulted from a gravity main blocked by grease at 419 Short St. resulting in approximately **30 gallons** of untreated wastewater entering an unnamed tributary to Mud Creek. The incident was identified by City staff at 3:20 p.m. and ended at 3:50 PM. There were no known environmental impacts resulting from this overflow.

**Sunday, January 12, 2020** an SSO totaling approximately **20,000 gallons** was experienced within the City's collection system.

The SSO resulted from a damaged manhole lid behind 142 Pinehurst Dr. resulting in approximately **20,000 gallons** of untreated wastewater entering Clear Creek. The incident was identified by City staff at 10:20 a.m. and ended at 5:00 p.m. There were no known environmental impacts resulting from this overflow.

**Sunday, January 12, 2020** an SSO totaling approximately **100 gallons** was experienced within the City's collection system.

The SSO resulted from a manhole rim and lid that was not sealed across from 309 Berkeley Rd. resulting in approximately **100 gallons** of untreated wastewater entering Mud Creek. The incident was identified by City staff at 12:44 p.m. and ended at 12:54 p.m. There were no known environmental impacts resulting from this overflow.

**Sunday, January 12, 2020** an SSO totaling approximately **200 gallons** was experienced within the City's collection system.

The SSO resulted from a manhole that was not sealed at 99 Balfour Rd. resulting in approximately 200 gallons of untreated wastewater entering Mud Creek. The incident was identified by City staff at 12:44 p.m. and ended at 12:54 p.m. There were no known environmental impacts resulting from this overflow.

**Friday, January 24, 2020** an SSO totaling approximately **1,145 gallons** was experienced within the City's collection system.

The SSO resulted from a non-locking manhole lid at 813 Jonesborough St. resulting in **1,145 gallons** of untreated wastewater entering Mud Creek. The incident was identified by City staff at 1:21 p.m. and ended at 5:10 p.m. There were no known environmental impacts resulting from this overflow.

**Friday, January 24, 2020** an SSO totaling approximately **1,145 gallons** was experienced within the City's collection system.

The SSO resulted from a non-locking manhole lid at 732 Jonesborough St. resulting in **1,145 gallons** of untreated wastewater entering Mud Creek. The incident was identified by City staff at 1:21 p.m. and ended at 5:10 p.m. There were no known environmental impacts resulting from this overflow.

**Friday, January 24, 2020** an SSO totaling approximately **4,100 gallons** was experienced within the City's collection system.

The SSO resulted from a non-locking manhole lid at 813 Jonesborough St. resulting in **4,100 gallons** of untreated wastewater entering Mud Creek. The incident was identified by City staff at 1:45 p.m. and ended at 5:10 p.m. There were no known environmental impacts resulting from this overflow.

**Friday, January 24, 2020** an SSO totaling approximately **10,260 gallons** was experienced within the City's collection system.

The SSO resulted from a damaged manhole seam at 305 Berkeley Rd. resulting in **10,260 gallons** of untreated wastewater entering Mud Creek. The incident was identified by City staff at 2:57 p.m. and ended at 11:30 p.m. There were no known environmental impacts resulting from this overflow.

**Friday, January 24, 2020** an SSO totaling approximately **4,800 gallons** was experienced within the City's collection system.

The SSO resulted from a manhole that was not sealed at 99 Balfour Rd. resulting in **4,800 gallons** of untreated wastewater entering Mud Creek. The incident was identified by City staff at 3:30 p.m. and ended at 11:30 p.m. There were no known environmental impacts resulting from this overflow.

**Thursday, February 6, 2020** an SSO totaling approximately **2,440 gallons** was experienced within the City's collection system.

The SSO resulted from a bad manhole seal across from 627 Clear Creek Rd. resulting in **2,440 gallons** of untreated wastewater entering Clear Creek. The incident was identified by City staff at 10:00 a.m. and ended at 6:20 a.m. There were no known environmental impacts resulting from this overflow.

**Thursday, February 6, 2020** an SSO totaling approximately **3,185 gallons** was experienced within the City's collection system.

The SSO resulted from a bad manhole seal at 69 Balfour Rd. resulting in approximately **3,185 gallons** of untreated wastewater entering Mud Creek. The incident was identified by City staff at 10:07 a.m. on February 6 and ended at 10:00 a.m. on February 7. There were no known environmental impacts resulting from this overflow.

**Friday, February 7, 2020** an SSO totaling approximately **473 gallons** was experienced within the City's collection system.

The SSO resulted from a manhole lid that was not locked correctly at 99 Balfour Rd. resulting in approximately **473 gallons** of untreated wastewater entering Mud Creek. The incident was identified by City staff at 8:37 a.m. and ended at 4:30 p.m. There were no known environmental impacts resulting from this overflow.

**Monday, April 6, 2020** an SSO totaling approximately **450 gallons** was experienced within the City's collection system.

The SSO resulted from a gravity main blocked by seeds at 2530 Chimney Rock Rd. resulting in approximately **450 gallons** of untreated wastewater entering Allen Branch. The incident was identified by City staff at 11:15 a.m. and ended at 11:30 a.m. There were no known environmental impacts resulting from this overflow.

Note: After flood events our crews inspect low lying areas in search of damaged manholes.

III. Notification:

Copies of this report are available to the public at:

Hendersonville Water and Sewer  
City Operations Center  
305 Williams Street  
Hendersonville, North Carolina 28792  
8:00 AM – 5:00 PM (Monday through Friday)

Also published on the City's website at [www.hvlnc.gov](http://www.hvlnc.gov)

Customers on the City's wastewater system have been notified of this report by a press release to all electronic and print news media outlets that provide general coverage to the Henderson County area.

IV. 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 City of Hendersonville's wastewater collection system and that those users have been notified of its availability.



\_\_\_\_\_  
Tim Sexton, ORC  
Collection System Supervisor  
Hendersonville Water and Sewer

8-3-20

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Date