



Executive Summary

The Noblesville Utilities Department is a 24-hour facility that is responsible for wastewater treatment. Additionally, the department handles the monthly utility billing, sanitary sewer line locations, sewer problem resolutions, and collection system assistance. Noblesville Utilities Wastewater Treatment Plant began construction in 1948 and was designed for flows up to 850,000 gallons per day. Today, the city is designed for flows up to 10 million gallons per day.

Several significant upgrades and changes over the years were needed due to our growing community and ever changing environmental requirements. Noblesville Utilities continues to implement the latest technology in the industry, always searching for more economical and efficient ways to run the facility.

In 2018, the department worked on facility upgrades. These included the Phosphorus Removal Project, energy efficient changes, and preparing for a bio-solids study. In the city, work continued on Phase IV of our Long Term Control Plan. The city added 50,090 linear feet of storm sewer and 34,602 linear feet of sanitary sewer to its inventory in 2018. Noblesville also added 620 manholes.

	2016	2017	2018
Total Utilities Customers	20,032	20,489	21,165
Monthly Sewer Fee	\$37.68	\$39.00	\$40.36
Monthly Trash Fee	\$10.57	\$10.69	\$10.82

Billing Office

The Noblesville Utilities Billing Office calculates and bills for sewer charges, calculates and bills residential customers only for trash service, collects and processes revenue, and provides customer service to the Noblesville community.

■ Residential Customers are charged a flat rate of \$40.36 per month for sewer and \$10.82 per month for trash. Those residential customers who have qualifying exemptions on their property taxes are eligible for reduced rates on their sewer and trash fees.

■ Non-Residential Customers have their sewer charge re-averaged annually based on their actual water usage and water meter size.

Facility Upgrades

In 2018, Noblesville Utilities was under construction to convert to a Bio-P removal process. Construction was originally expected to be completed by early fall, but upgrades had to be made to the electrical and SCADA system in an older part of the facility. We are seeing good results, while staying below the 1.0 mg/L discharge limit. The utility also should see a drop in electrical consumption due to the new energy efficient turbo blowers and aeration supply piping.

In 2019, the department began

a study that will help determine what options Noblesville has with the bio-solids generated at its facility. The city currently hauls bio-solids to a landfill, but there may be better choices such as fertilizer or use in composting operations. The byproduct of our bio-solids is methane gas.

Utilities currently use this gas to fire two boilers, which in turn heat the digester tanks that hold and mix bio-solids as needed. The department also is exploring other uses or options for the methane generated, such as renewable natural gas. This can be used where it is produced for operational purposes such as



generating electricity or fueling a utility pipeline and transported to an end user. vehicles, or it can be injected into

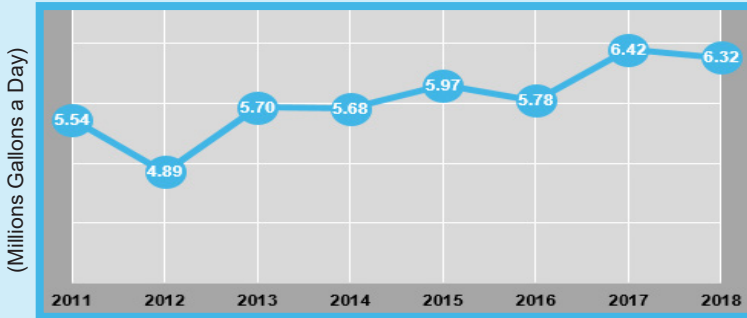


Downtown Brick Sewer

In early 2018, Noblesville Utilities performed a rehabilitation project of the brick sewer in the downtown business district. This work included lining of approximately 1,400 feet of 36-inch diameter brick sewer and the manhole replacement at Ninth and Logan streets. Most of this work was performed in the evening hours to avoid interruptions to the businesses downtown. Work was done proactively due to the age of the brick sewer. Noblesville has two other areas with brick sewers and the utilities department is currently planning the lining of these as well with future projects.



Annual Average Effluent Flows (MGD)



Treatment Plant

Plant maintenance personnel have spent the majority of the year working with the contractors on the Phosphorous Removal Project. The plant maintenance crews worked ahead of the contractors draining, cleaning and doing required repairs to the plant tanks, so that the contractors could do their work.

Noblesville Utilities treats an average 6.4 million gallons per day of flow that comes into the plant. The city has three digesters that hold just under 670,000 gallons each to treat sludge. The average annual sludge tons produced this year was 875 up from last year's total of 807. We had a total of 22 tanks that were cleaned and repaired this year.

Long Term Control Plan Phase IV

Phase IV involved separating sewers in the northern area of Old Town Noblesville. The main purpose of this project was to separate the combination sewers so stormwater is sent to the receiving stream of White River and the sanitary sewer to the Wastewater Treatment Plant. Prior to this project, stormwater and sewage both ran to the treatment plant, which caused additional workload to the plant - especially in times of flooding or high rainfall. The project has improved drainage during heavy downpours as well.



Early results from Phase IV have proven that the work has taken an enormous amount of storm water out of the sewer system. This was a very successful project and the department looks forward to seeing further results as we progress into 2019.

One of the most challenging parts of this project was the restoration of the brick streets in Old Town. Utilities found bricks matching as close as possible to the existing roadway from Iowa City, Iowa. These bricks were from public works projects from communities in that area that were taken out and replaced with asphalt. These were very close matches and we had to use three different types to match between Logan and Clinton Streets.



Collections

The collection system had several different large projects completed in 2018 starting with the Pebblebrook Project which required deep excavation of an abandoned lift station to remove a 100-pound check valve. Utility crews completed 144 inlet repairs ahead of the city's annual road rehabilitation project. In conjunction with the Engineering Department, a 300-foot dual corrugated metal pipe was lined under Little Chicago Road.



Did You Know?

Noblesville Utilities maintains 532.4 miles of sewer pipe, which is enough to stretch from here to Reading, Penn.

	2018
Treatment Plant Operators	13
Grease Traps Inspected	443
Oil/Silt Separator Inspections	184
Totes of Recycled Materials	239
Equipment Items Maintained	918
Lift Stations	23
Average Annual Sludge Tons Produced	875
Daily Lab Tests Performed	123
Required Days Lab Operates	365

COLLECTIONS SYSTEMS	2016	2017	2018
Line Locates	14,914	15,378	21,962
Sewer Emergency Calls	60	87	62
Total Sewer Feet Cleaned	112,215	111,630	169,622
Total Sewer Feet Televised	102,380	171,562	166,577
Sewer Repairs Made	87	74	151