



## FAQ's – WWTP Upgrade and Rate Impact

### Why must the Wastewater Treatment Plant be upgraded?

#### Rock River – Impaired Water Body

Waupun's Wastewater Treatment Plant discharges into the impaired water body South Branch Rock River and must comply with the stringent phosphorus standards mandated by the U.S. Environmental Protection Agency and Wisconsin Department of Natural Resources (DNR) by 2025. It was determined that the Utility will be unable to meet the new level of effluent phosphorus limits with only operational improvements and minor facility modifications.

The Waupun South Branch Rock River was placed on Wisconsin's 303(d) Impaired Waters List by the Wisconsin Department of Natural Resources. The Rock River Basin was placed as a high priority to address the impairments caused by excess phosphorus and sediment loading. Section 303(d) of the Federal Clean Water Act requires each state to identify those waters within its boundaries not meeting water quality standards for any given pollutant applicable to the water's designated uses.

The Rock River Basin is located in southern Wisconsin. Several lakes, rivers, and streams in the Rock River Basin are impaired by excessive phosphorus and sediment concentrations, which lead to nuisance algae growth, oxygen depletion, reduced submerged aquatic vegetation, water clarity problems, and degraded habitat. These impairments adversely affect fish and other aquatic life, water quality, recreation, and navigation. To help plan for addressing these impairments, a Total Maximum Daily Load (TMDL) was developed for total phosphorus and total suspended solids.

For more information on the Rock River TMDL implementation process, see the WI DNR's website:

<https://dnr.wi.gov/topic/TMDLs/RockRiver/>



### What upgrades are necessary and how much will it cost?

Several compliance options were considered and screened for technical feasibility. Following a life cycle cost evaluation and pilot testing, the recommended treatment process is Advanced Biological Nutrient Recovery (ABNR). The ABNR system is an algae-based system capable of recovering phosphorus and nitrogen into harvested algal biomass.

The costs to construct and install the ABNR system and related upgrades are significant and projected at \$32 million. In anticipation of a wastewater plant facilities upgrade, the Utility submitted for a USDA Rural Development (USDA) loan and grant to finance the facility improvements and were successful. The Utility was awarded a USDA loan at 2.4% in the amount of \$22,807,000 and a grant in the amount of \$9,479,000.

For more information on an ABNR, see [CLEARAS WATER RECOVERY](#).

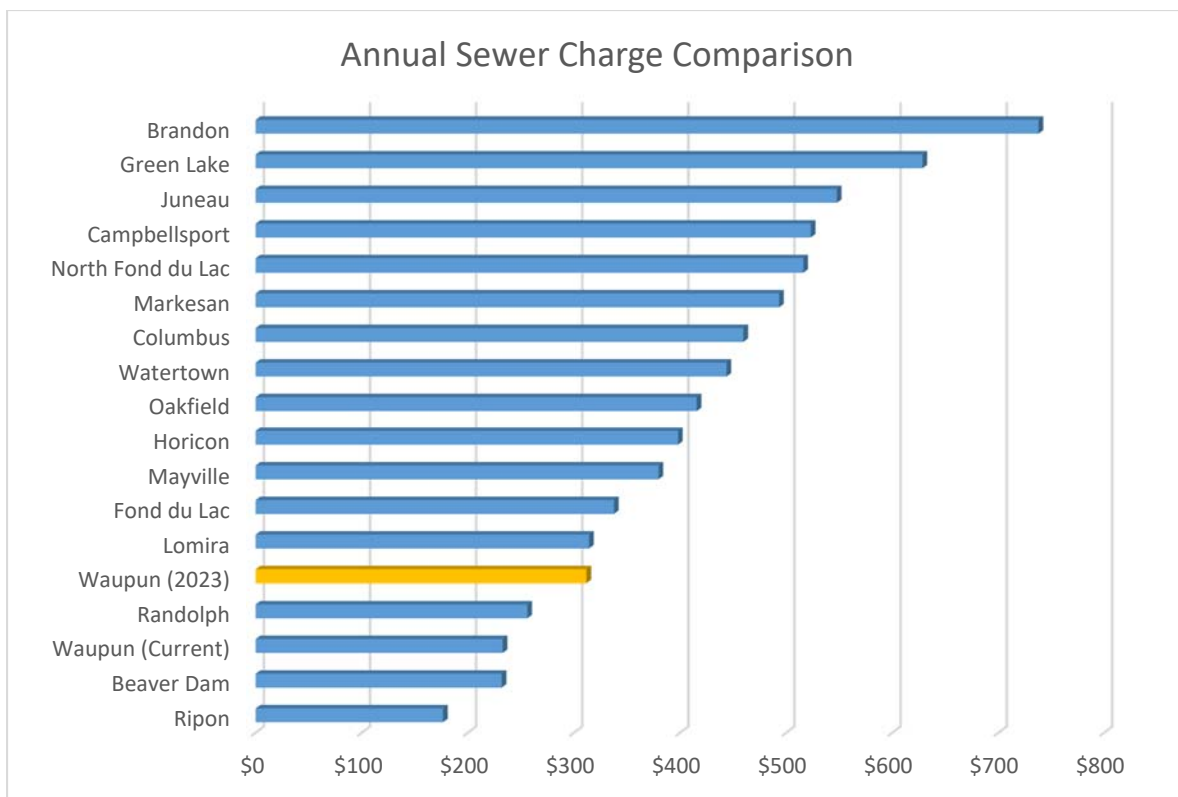
## What is the project timeline?

- June 2019 - Preliminary Design Engineering Started
- December 2019 – Public Open House
- August 2020 – Advertised for Construction Bids
- October 2020 – Bid Opening
- December 2020 – Notice to Proceed Construction
- October 2022 – Startup ABNR / Substantial Completion of Project
- January 2023 – Final Completion of Project

## How will this impact my monthly residential utility bill?

The cost to comply with these new standards is significant and it requires a sewer rate increase to pay for the improvements. A rate study was completed during 2019 and the findings require a rate change of approximately \$76.00 per year, or 32.2% for the average residential customer. The rate adjustment will be implemented over a four-year period equating to approximately \$19.00 per year (\$1.58 monthly) for the average customer, or an annual increase of approximately 7.23% for a four-year period.

## How will the new 2023 residential sewer rate compare to regional municipal sewer utilities?



## How will the new 2023 residential sewer rate compare to all similar sized sewer utilities within Wisconsin?

	Monthly Cost	Annual Cost
Class C Utilities Average <sup>1</sup>	\$32.52	\$390.22
Regional Utilities	\$34.07	\$408.78
2023 Proposed Rate <sup>2</sup>	\$25.98	\$311.80
Current Rate	\$19.43	\$233.21

<sup>1</sup> 120 utilities with 1,000 to 3,999 customers

## Recommended rates for 2020 through 2023.

	Present	2020	2021	2022	2023
Volume charge	\$3.16	\$3.33	\$3.50	\$3.67	\$3.84
BOD surcharge	\$0.54	\$0.56	\$0.58	\$0.59	\$0.60
SS surcharge	\$0.44	\$0.46	\$0.48	\$0.49	\$0.50
Phosphorous surcharge	\$13.83	\$14.82	\$15.81	\$16.80	\$17.79
<u>Meter Size:</u>					
5/8"	\$6.76	\$7.50	\$8.37	\$9.45	\$10.62
3/4"	\$6.76	\$7.50	\$8.37	\$9.45	\$10.62
1"	\$8.68	\$10.45	\$12.22	\$13.99	\$15.76
1-1/2"	\$11.87	\$14.99	\$18.11	\$21.23	\$24.33
2"	\$15.71	\$20.44	\$25.17	\$29.90	\$34.61
3"	\$24.66	\$33.15	\$41.64	\$50.13	\$58.61
4"	\$37.45	\$51.31	\$65.17	\$79.03	\$92.88
6"	\$69.41	\$96.70	\$123.99	\$151.28	\$178.56
8"	\$107.77	\$151.17	\$194.57	\$237.97	\$281.38

## Average Monthly Bill by Customer Class for 2020 through 2023.

Customer	Meter Size	Volume (100 cubic ft)	Average Monthly Charge				
			Present	2020	2021	2022	2023
Residential	5/8"	4	\$19.40	\$20.82	\$22.37	\$24.13	\$25.98
Commercial	5/8"	15	\$54.16	\$57.45	\$60.87	\$64.50	\$68.22
Industrial	1"	83	\$270.96	\$286.84	\$302.72	\$318.60	\$334.48
Public Authority	1"	17	\$62.40	\$67.06	\$71.72	\$76.38	\$81.04