



Quarterly Update at NEW Water

September 10, 2019

Agenda

- Welcome / Brief Updates – Tom Sigmund, Executive Director
 - Budget Overview
 - PFAS
- Adaptive Management – Jeff Smudde, Environmental Programs Director
- Facilities Plan – Nate Qualls, Technical Services Director
- R2E2 Projections – Nate Qualls
- Inflow & Infiltration Stakeholder Advisory Group – Nate Qualls



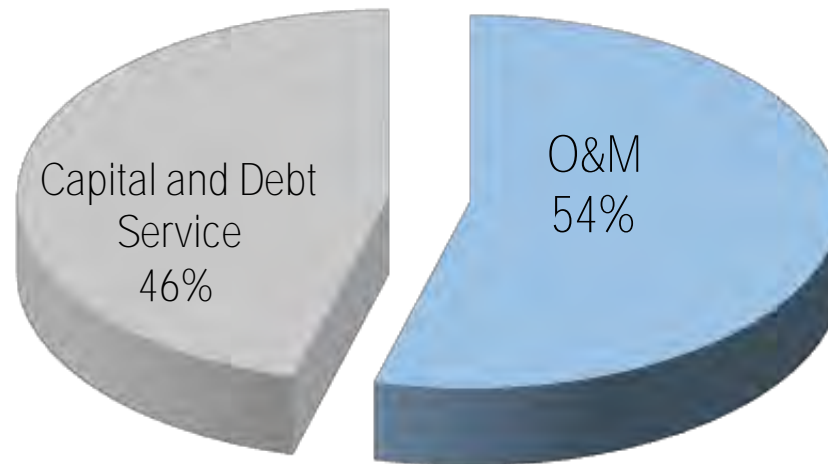
Updates from Executive Director

- 2020 Budget Overview
- PFAS



2020 Proposed Expenses

Budget Category	2019 Budget	2020 Budget
Operations & Maintenance (O&M)	\$21,193,678	\$22,759,001
Debt Service and Annual Capital	\$18,464,177	\$19,266,923
Total Expenses	\$39,657,855	\$42,025,924



2020 Budget O&M Expenses

Broad Categories	2019 Budget	2020 Budget
Salaries & Benefits	\$10,741,619	\$11,297,316
Power	\$1,537,400	\$1,598,677
Natural Gas & Fuel Oil	\$327,449	\$726,907
Chemicals	\$1,045,447	\$1,118,967
Maintenance – Plant	\$1,688,721	\$1,667,196
Interceptors	\$1,106,301	\$689,725
Contracted Services	* \$2,966,020	** \$3,872,558
Solid Waste Disposal	\$283,828	\$199,828
Insurance	\$274,830	\$276,490
Administrative	\$1,222,063	\$1,311,337
Total O&M Expenses	\$21,193,678	\$22,759,001



Municipal Rate Comparison

Parameter	2019	2020	% Change
Volume (1,000 gals)	\$0.9140	\$0.8807	-3.6%
Biochemical Oxygen Demand (lbs)	\$0.5325	\$0.5538	4.0%
Suspended Solids (lbs)	\$0.5266	\$0.5286	0.4%
Phosphorus (lbs)	\$1.0111	\$1.1843	17.1%
Total Kjeldahl Nitrogen (lbs)	\$0.9732	\$1.0134	4.1%

Note: Rates shown above are for comparison only and include allocation of \$12,456,715 fixed charge for 2019 and \$12,523,500 fixed charge for 2020. Parameter rates billed to customers do not include fixed charge, that is billed separately.

PFAS

PFAS WHAT YOU NEED TO KNOW

WHAT ARE PFAS CHEMICALS?

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS and GenX chemicals. Since the 1940s, PFAS have been manufactured and used in a variety of industries around the globe, including in the United States. PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both are very persistent in the environment and in the human body. Exposure to certain PFAS can lead to adverse human health effects.

PFOA & PFOS

U.S. manufacturers voluntarily phased out PFOA and PFOS, two specific PFAS chemicals.



GenX Chemicals

GenX chemicals are a replacement for PFOA.



“PFAS,” or per-and polyfluoralkyl substances, is a hot topic in the news lately. They are synthetic substances found in many everyday items, from clothing you may wear to food packaging to nonstick cookware, and include more than 3,000 chemical varieties. Scientific knowledge on this topic is just beginning to evolve; meanwhile, dedicated website pages have been created on this topic – see the [DNR’s PFAS page](#), and the [EPA’s PFAS page](#) to find more information. Image credit: [EPA](#)

Adaptive Management

NEW Watershed Program

Partnering for
Water Quality



Progress with Adaptive Management

- Silver Creek Pilot Project
 - Focusing on cover crop planting
 - Aerial seeding opportunities
 - Soil sampling every field – Fall 2019
 - Final report – Summer 2020
 - Ongoing efforts to maintain conservation in Silver Creek
- Ashwaubenon Creek and Dutchman Creek
 - Public Involvement Plan completed
 - Water quality monitoring ongoing
 - Planning strategies for kickoff events



WPDES - Effluent Permit Update

- Existing permit expired June 30, 2019
- Operating under old permit conditions until new permit issued
- Working with WDNR staff for more revisions of Adaptive Management Plan
- Expect draft permit limits soon, and draft permit early 2020.



Grant Updates

- USDA Forest Service Great Lakes Restoration Initiative

- \$100,000 grant opportunity
- 2-year grant (2020 & 2021)
- Address storm water runoff by planting trees in Lower Fox River basin
- NEW Water extended offer to all customers and partners
- Response expected in October

- EPA Great Lakes Restoration Initiative

- \$338,438 grant application
- 3-year grant (2020-2022)
- Permanent buffers on ephemeral headwater tributaries in Ashwaubenon and Dutchman Creek watersheds
- Reduce sediment and phosphorus loading in Lower Fox River and Green Bay
- Response expected in September



Facilities Plan

- Facilities Plan play an important role in planning for the future of our wastewater infrastructure
- Awarded contract to Black & Veatch and Donohue
- Project funding from NEW Water reserves (~\$720,000)
- Expected 18-month project with late 2020/early 2021 completion
- Will communicate with Customers & Commission along the way



Facilities Plan

- Major deliverables:
 - Flows and Loads projections
 - Hydraulic & process models
 - 50-year conceptual plan
 - 20-year Capital Improvement Plan



Facilities Plan

- Infrastructure gap analysis for both facilities:
 - Capacity, age, operability, maintainability, and performance
 - Plant pumping stations, headworks, screening, grit removal
 - Aeration and nutrient removal
 - Thickening improvements
 - De Pere Facility long-term vision
 - Whole plant odor control
 - Whole plant energy, nutrient, resource management



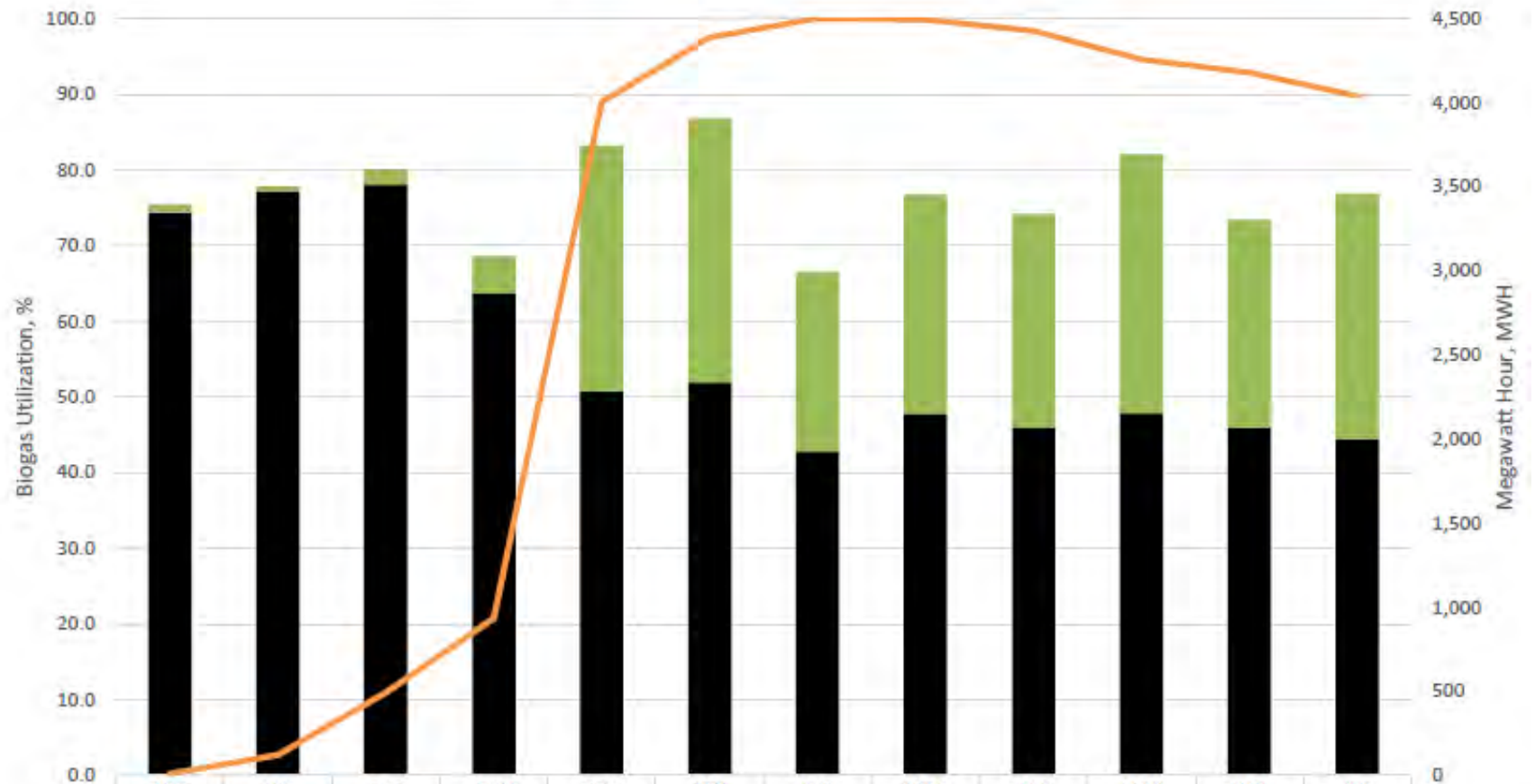
R2E2 Projections

- Contract 34 – Digestion and Solids Facility
 - Punch list work ongoing
 - Estimate 3.5% change order rate
 - Continue optimization & HSW program expansion
 - Evaluate redundancy and reliability concerns
- Contract 35 – existing system demolition
 - Contract executed
 - R2E2 Reserve funded
 - Anticipate demolition complete by Jan 2020
 - Anticipate restoration complete by Oct 2020



R2E2 Projections

GBF Energy Utilization - R2E2



Generated Electricity, MWH	49	29	92	225	1,454	1,569	1,066	1,301	1,272	1,539	1,237	1,459
Purchased Electricity, MWH	3,346	3,471	3,512	2,863	2,288	2,338	1,927	2,151	2,065	2,153	2,067	2,001
Biogas Utilized, %	0.2	2.7	10.9	20.8	88.9	97.5	100.0	99.8	98.4	94.6	92.8	89.8

Inflow & Infiltration Stakeholder Advisory Group

- Advisory group comprised of NEW Water staff and customers
- First meeting today with a focus on chartering the group
- NEW Water will inform customers on the progress of this group





Thank you for coming!

Stay tuned to NEW Water news

