



City of Grand Island

Tuesday, July 24, 2018

Council Session

Item C-2

Presentation of 2019 Wastewater Budget

Staff Contact: John Collins

2019 Wastewater Budget



Enterprise fund

- ☛ Handles wastewater generated by community residents, businesses and industries
- ☛ Meets all state and national requirements for effluent quality
- ☛ All operational and capital funding based on fees collected
 - ☛ Past Due Assessments in 2014 \$ 450,645
 - ☛ Past Due Assessments in 2018 \$ 86,667

2018 CIP Projects

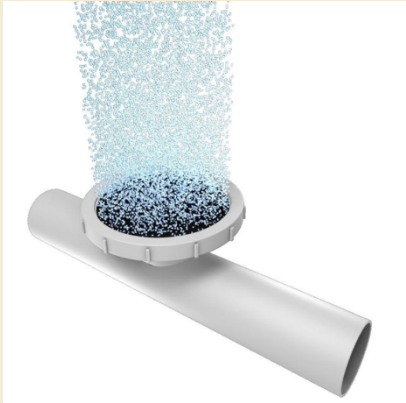
Project	Award Date	Construction Costs
Lift Station No. 14 Abandonment (2017-S-1)	3/28/2017	\$102,240
Lift Station No. 20 Upgrade & Force Main Rehabilitation (2017-S-1)	3/28/2017	\$2,601,720
West Stolley Park Rd & Engleman Rd Sanitary Sewer Extension (2017-S-3 & 540T)	1/23/2018	\$946,413
Lift Station No. 11 Relocation (2018-S-1)	3/27/2018	\$1,907,712
Sanitary Sewer District No. 539; Webb Rd & 13th St *completed*	3/28/2017	\$87,483
Sanitary Sewer Collection System Rehabilitation- Various Locations (2017-S-2A)	5/23/2017	\$458,554
Sanitary Sewer Collection System Rehabilitation- Various Locations (2017-S-2B)	11/14/2017	\$484,328
Sanitary Sewer Manhole Flow Monitoring/Rehabilitation (2018-WWTP-2)	5/22/2018	\$205,967
Total		\$6,794,417

2019 Budget

Beginning Cash	\$	14,739,563
Revenue (Including SRF Proceeds)	\$	14,139,970
Operating Costs	\$	7,278,707
Loan/Bond Payments	\$	4,837,623
Capital Expenses	\$	3,720,000
Total Expenditures	\$	15,836,330
Ending Cash	\$	13,043,203

Diffuser Replacement \$50,000

- About 20% are replaced each year
- Each diffuser has a 5-7 year life



Facility Security

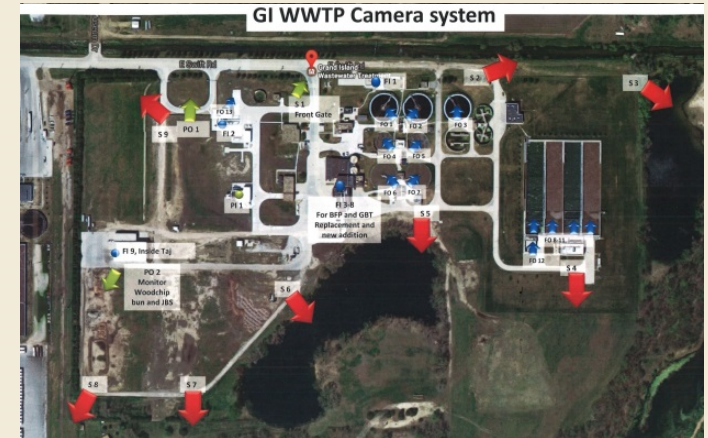
\$50,000

- Install security cameras
- Increase plant security and prevent physical intrusion

View WWTP of Back Lot



Long Range Plan



Update Rate & Flow Model

\$270,000

- Accurate modeling of flow is critical to correct planning for capital expenditures
- The current model relied on estimated flows in many areas
- Current rates to be reviewed as the last step of the rehabilitation project

Capital Equipment: Flusher Truck

\$300,000

- 17 years old
- Original cost: \$98,000
- Operating hours: 8,811 (equivalent to 300-400,000 miles)
- Total maintenance cost of over \$140,000
- Limited water tank capacity causes frequent trips for refilling



Online Monitoring

\$300,000

- Facilitate Regulatory Reporting & Data Analysis
- Enable quicker response to changes
- Improve process stability
- Reduce chance of violating discharge permit

Final Clarifier Rehabilitation

\$400,000

- Final clarifiers installed in 2000
- Typically have 15-20 year life



Anodes inhibit corrosion

Corrosion in Clarifier



2019 Collection System Rehabilitation

\$750,000

- Aging infrastructure
 - Some areas are over 100 years old
 - Many old lines run under building foundations and show cracking on video
- A number of areas in town have high I&I levels
 - High groundwater levels
 - Broken pipes, bad connections, improper taps
 - Result in higher flow and elevated treatment costs

Lift Station No. 11 Relocation

\$1,400,000

- Current facility is in residential backyard
- Wet well size is too small
- Serves CHI Health St. Francis
 - Continuity of service is critical
 - Need to install generator for backup power
- Will move approximately 100,000 gallons/day from south interceptor to north interceptor



2019 Capital Project Future Expenses

Description	2019	2020	2021	2022	2023	2019-2023 Total
Diffuser Replacement	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
Facility Security	\$50,000	\$50,000				\$100,000
Update Rate & Flow Model	\$270,000					\$270,000
Vehicle Addition/Replacement	\$300,000	\$50,000	\$50,000	\$50,000	\$ 50,000	\$500,000
Online Monitoring (Reg System)	\$300,000					\$300,000
Final Clarifier Rehabilitation	\$400,000	\$400,000	\$400,000			\$1,200,000
2019 Collection System Rehabilitation	\$750,000					\$750,000
Lift Station 11 Relocation	\$1,400,000					\$1,400,000
Total	\$3,520,000	\$550,000	\$500,000	\$100,000	\$100,000	\$4,770,000

FY 2018 Wastewater Awards

- 🌊 NWEA Silver Safety Award (4th Year in a Row)
- 🌊 NWEA Scott Wilber Outstanding Facility Award (4th Year in a Row)

