

#### City of Grand Island

Tuesday, July 21, 2020 Study Session

#### Item -2

Presentation of Solid Waste and Wastewater Budgets for FY 2020-2021

**Staff Contact: John Collins** 





Landfill on Husker Hwy @ Hall / Buffalo County Line

# Solid Waste Division FY 2021 Budget



## **Enterprise Fund**

- Receive no funding from General Fund
- All revenues generated from tipping fees
- One of the few divisions with competition
- Serves residents and non-residents



#### Landfill Site Life

- ▼ 19 years life left in current area (Cells 1, 2, & 3)
- Approximately27 years life leftin total Phase 1area



#### Notable Items from FY 2020

- Continued routine capital replacement schedule
  - **₹** Transfer Station
    - New wheel loader, truck, and transfer trailer
  - **₹** Landfill
    - Used dozer for back-up machine





#### **Notable from FY 2020**

Transfer Station facility improvement study & rate study progressing

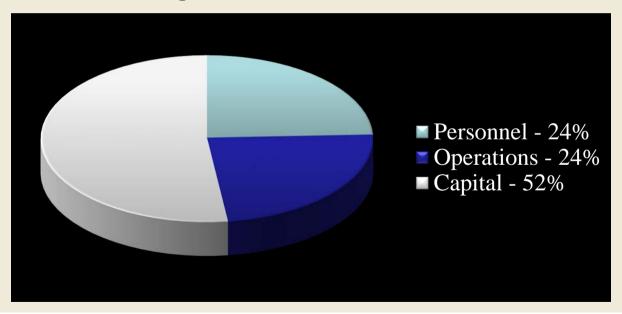
- Modify operations and facilities to better handle current and future customer traffic/tonnage
- ₹ Will be beneficial to customers and staff
- ₹ Will be presented to City Council at a later date



## FY 2021 Budget

**₹** Personnel = \$1,320,693

Arr Capital = \$2,810,000



## FY 2021 Budget Capital Expenditures

- Replacement of landfill compactor (\$675,000)
- Replacement of Utility vehicle/litter vacuum for landfill (\$75,000)
- Transfer station and landfill concrete replacement
- Old Phillips Landfill earthwork and re-capping per NDEE requirements (\$2,000,000)





## FTE Request

#### ₹ 1.0 Equipment Operator

- Annual tonnage at the transfer station averaged 53,000 tons annually (FY2010/FY2011)
- Annual tonnage has continued to increase, with last fiscal year reaching 68,000 tons received, which is 28% higher than the FY2010/FY2011 average
- The increase equates to an additional 750 truck loads of waste hauled to the landfill in one (1) year
- An additional equipment operator is imperative for keeping up with this significant work load on an annual basis.

## Highlights of FY 2021 Budget

Rate increase proposed for FY 2021

₹ 5.23% increase at transfer station

<u>Location</u>	Transfer Station Rate Per Ton	Landfill Rate Per Ton
Grand Island	\$46.00 (uncompacted)	\$34.76 (uncompacted)
	\$37.02 (compacted)	\$30.63 (compacted)
Columbus	\$69.00	
Norfolk	\$65.00	
Gering	\$70.00	
York		\$49.50
Holdrege		\$36.50
Hastings		\$41.00
Lincoln		\$38.65



## Questions?









# 2021 Wastewater Budget

Jon Menough, Ph.D. P.E. Wastewater Plant Engineer



## **Enterprise fund**

- Treat wastewater generated by community residents, businesses and industries
- Meet all state and national requirements
- Funded sole through self generated revenue
- Average residential bill for 2019: \$30.89, well below the \$55.77 average\*

\*AWWA 2019 WATER AND WASTEWATER NATIONAL RATE SURVEY, AVG POPULATION 53,000



#### **Wastewater Overview**

Average: 13.2 million gallons per day (MGD)

Peak flows over 36 MGD

F.O.G. (Fat, Oil, Grease) Monitoring

▼ Particularly damaging to the collection system
(Generates H₂S, degrading all pipes and manholes)





#### **FY 2020 Capital Projects**

Project	20	20 Budget	2020 Forecast		
Lab, Ops Control Center and Admin Building Reno	\$	210,000	\$	300,000	
Biological Nutrient Removal Study	\$	-	\$	1,994	
Sanitary Sewer Modeling Study	\$	170,000	\$	171,160	
Truck Wash Pad	\$	-	\$	30,889	
Online Monitoring	\$	-	\$	2,790	
Clarifier Renovation	\$	-	\$	550,000	
Facility Security	\$	50,000	\$	-	
WWTP Paving Improvements; 2020-WWTP-1	\$	-	\$	200,000	
Diffuser Replacement	\$	-	\$	95,913	
Sewer Rehabilitation	\$	350,000	\$	696,126	
Lift Station No. 11 Relocation	\$	400,000	\$	429,936	
Willow Street; Sanitary Sewer District No. 543		220,000	\$	265,745	
Sanitary Sewer Inflow & Infiltration		-	\$	142,977	
North GI/ CNRA Improvements; Project No. 2017-S-4		-	\$	300,000	
Ellington Pointe; Sanitary Sewer Dist No. 544		1,350,000	\$	300,000	
	\$	2,750,000	\$	3,487,531	



## **2021 Capital Projects**

Collection System Breaks	\$	350,000
Aeration Basin Diffuser Replacement	\$	50,600
Downtown Manhole Rehabilitation	\$	367,500
WWTP Security System	\$	50,000
Final Clarifier No. 2 Rehabilitation	\$	275,000
WWTP Piping for JBS Flow	\$	80,000
Micro C Distribution	\$	10,000
North GI/ CNRA Improvements; Project No. 2017-S-4	\$	872,000
Lab, Ops Control Center, & Admin Building Renovations	\$	3,088,000
WWTP Paving Improvements	\$	1,165,000
Relocate Lift Station No. 17	\$	150,000
Ellington Pointe; Sanitary Sewer District No. 544	\$	930,000
UV Diversion Gate Valve Replacement		50,000
	\$	7,438,100



## 2021 Budget

Beginning Cash	\$	(20,578,189)
Revenue		(13,476,493)
Total	Revenue \$	(34,054,682)
Operating Costs	\$	7,932,624
Loan/Bond Payments	\$	4,709,416
Capital Expenses	\$	7,438,100
Total Expe	enditures \$	20,080,140
Ending Cash Balance	\$	(13,974,542)

# Grand Island

## 2020 Capital Project Future Expenses

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Project		2021		2022		2023	2024		2025
Collection System Breaks		350,000							
Aeration Basin Diffuser Replacement	\$	50,600	\$	51,200	\$	51,800	\$ 52,400	\$	53,000
Downtown Manhole Rehabilitation		367,500							
WWTP Security System	\$	50,000	\$	25,000	\$	25,000	\$ 25,000	\$	25,000
Final Clarifier No. 2 Rehabilitation	\$	275,000	\$	80,000					
WWTP Piping for JBS Flow	\$	80,000							
Micro C Distribution		10,000	\$	200,000			\$ 237,500		
North GI/ CNRA Improvements; Project No. 2017-S-4	\$	872,000	\$	4,415,000	\$	885,000			
Lab, Ops Control Center, & Admin Building Renovations	\$	3,088,000	\$	447,000					
WWTP Paving Improvements	\$	1,165,000							
Relocate Lift Station No. 17	\$	150,000	\$	1,340,000	\$	435,000			
Ellington Pointe; Sanitary Sewer District No. 544		930,000							
UV Diversion Gate Valve Replacement		50,000							
Online Monitoring			\$	75,000	\$	140,000	\$ 150,000		
Internal Recycle Pumps & Piping			\$	2,402,500					
Sr High WS 22 Collection Lining			\$	1,080,000					
Repair/Replace Aeration Basin Slide Gates			\$	210,000					
S Interceptor CIPP & Manhole Rehabilitation					\$	1,250,000			
Fill in Building 5 Sub-Levels							\$ 180,000		
5th & Evans Reroute- LS No. 6 Removal							\$ 4,800,000		
Vine St Line Rerouting							\$ 825,000		
Rate Study							\$ 270,000		
Replace Main Vine St, Koenig to Sutherland								\$	910,000
	\$	7,438,100	\$	10,325,700	\$	2,786,800	\$ 6,539,900	\$	988,000



#### 2020 Awards

- NWEA Silver Safety Award (6<sup>th</sup> Year in a Row)
- NWEA Scott Wilber Award BEST IN CLASS (6<sup>th</sup> Year in a Row)

