



City of Grand Island

Tuesday, July 21, 2020

Study Session

Item -1

Presentation of the Electric and Water Budgets for FY 2020-2021

Staff Contact: Tim Luchsinger, Utilities Director

Council Agenda Memo

From: Timothy Luchsinger, Utilities Director

Meeting: July 21, 2020

Subject: Utility Budget for 2020 - 2021

Presenter(s): Timothy Luchsinger, Utilities Director

Background

The proposed budgets for Electric Utility Enterprise Fund 520 and Water Utility Enterprise Fund 525 have been developed for the City's Fiscal Year 2020-2021 by Department management and financial staff.

Discussion

These budgets will be presented for preliminary discussion by Council.

Conclusion

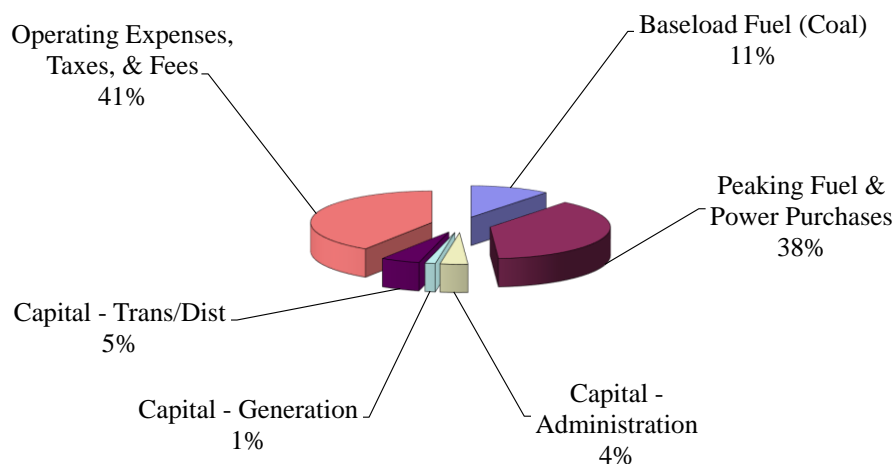
This item is presented to the City Council in a Study Session to allow for any questions to be answered and to create a greater understanding of the issue at hand.

It is the intent of City Administration to bring this issue to a future council meeting for the Council's consideration.

	ACCOUNT	2018-2019 ACTUAL	2019-2020 BUDGET	2019-2020 PROJECTED	2020-2021 BUDGET
ENTERPRISE DEPARTMENT 520 - ELECTRIC UTILITY					
ACCRUED EXPENSES					
METER READING EXPENSE	90200	281,909	375,000	334,000	345,000
RECORDS & COLLECTION	90300	700,965	575,000	590,000	600,000
RECORDS & COLLECTION-MIS	90301	529,856	500,000	500,000	520,000
CASH OVER & SHORT	90310	-	-	-	-
UNCOLLECTABLE ACCOUNTS	90400	113,019	90,000	139,000	145,000
ADMINISTRATIVE SALARIES	92000	527,202	720,000	610,000	630,000
OFFICE SUPPLIES & EXPENSE	92100	37,458	40,000	31,000	35,000
OUTSIDE SERVICES EMPLOYED	92300	1,274,104	1,325,000	1,280,000	1,280,000
INSURANCE	92400	419,694	400,000	440,000	475,000
INJURIES & DAMAGES	92500	298,470	225,000	275,000	285,000
EMPLOYEE BENEFITS	92600	1,425,046	1,140,000	1,262,000	1,325,000
MISCELLANEOUS GENERAL	93000	116,593	135,000	105,000	110,000
UTILITY OFFICE RENT	93101	7,370	7,370	7,370	7,370
MAINTENANCE OF GENERAL PROPERTY	93200	12,098	35,000	6,000	10,000
GENERAL ADMINISTRATIVE SERVICE EXPENSE		5,743,784	5,567,370	5,579,370	5,767,370
DEPRECIATION-PLANT	40310	6,643,879	7,000,000	6,708,000	6,950,000
DEPRECIATION-TRANSMISSION	40340	863,178	900,000	874,000	905,000
DEPRECIATION-DISTRIBUTION	40350	3,681,878	3,800,000	3,800,000	3,925,000
DEPRECIATION-GENERAL	40360	1,136,715	1,200,000	1,160,000	1,200,000
MERCHANDISE MATERIAL	41510	353,680	150,000	115,000	200,000
MERCHANDISE LABOR	41520	275,496	250,000	110,000	150,000
NON-UTILITY PROPERTY	41710	232	200	230	250
LOSS ON DISPOSITION OF PROPERTY	42120	26,964	200,000	100,000	100,000
INTEREST 2012 LONG TERM DEBT	42775	283,100	214,034	214,034	146,400
INTEREST 2013 LONG TERM DEBT	42785	1,396,613	1,348,017	1,348,017	1,285,850
AMORTIZATION OF DEBT EXPENSE	42800	-	-	-	-
DEPOSIT INTEREST EXPENSE	43100	8,400	5,000	8,300	9,000
OPER SUPERVISION & ENG - BURDICK STEAM	50010	-	-	-	-
OPER SUPERVISION & ENG - PGS	50020	449,300	485,000	445,000	465,000
GENERATION FUEL - BURDICK STEAM	50110	-	-	-	-
GENERATION FUEL - PGS	50120	9,900,542	10,300,000	9,700,000	9,700,000
STATION LABOR & MATERIAL - PGS	50220	1,540,297	1,568,000	1,634,000	1,610,000
GENERATION PRODUCTION - PGS	50520	1,553,712	1,490,000	1,788,000	1,790,000
GENERATION PRODUCTION - PGS LIME	50521	442,469	460,000	445,000	425,000
GENERATION PRODUCTION - PGS PAC	50522	118,460	200,000	98,000	105,000
OPERATION SUPPLIES - PGS	50620	503,660	550,000	511,000	525,000
MAINT SUPER & ENG - PGS	51020	218,376	240,000	209,000	220,000
MAINT OF STRUCTURES - PGS	51120	896,342	1,100,000	1,016,000	1,100,000
MAINT OF BOILER PLANT - PGS	51220	3,431,636	3,250,000	3,540,000	3,500,000
MAINT OF AQCS - PGS	51225	618,158	615,000	658,000	680,000
MAINT OF GENERATION EQUIP - PGS	51320	548,435	530,000	446,000	460,000
OPER SUPERVISION & ENG - BURDICK CT'S	54630	339,950	310,000	345,000	360,000
GENERATION FUEL - BURDICK CT'S	54730	490,214	600,000	420,000	450,000
GENERATION PRODUCTION - BURDICK CT'S	54830	948,488	960,000	1,296,000	1,200,000
OPERATION SUPPLIES - BURDICK CT'S	54930	223,777	215,000	289,000	300,000
MAINT SUPER & ENG - BURDICK CT'S	55130	109,817	75,000	74,000	80,000
MAINT OF STRUCTURES - BURDICK CT'S	55230	104,346	100,000	149,000	155,000
MAINT OF GENERATION EQUIP - BURDICK CT'S	55330	368,469	440,000	550,000	575,000
PURCHASED POWER-NPPD	55500	-	-	-	-
PURCHASED POWER-WAPA	55510	817,488	1,000,000	834,000	875,000
PURCHASED POWER-OPPD	55520	9,195,473	9,400,000	9,387,000	9,500,000

	ACCOUNT	2018-2019 ACTUAL	2019-2020 BUDGET	2019-2020 PROJECTED	2020-2021 BUDGET
PURCHASED POWER-PPGA	55530	4,735,630	5,200,000	4,762,000	4,900,000
PURCHASED POWER-WIND	55540	862,815	850,000	918,000	900,000
PURCHASED POWER-WIND / INVENERGY	55541	3,652,323	4,000,000	3,865,000	4,000,000
PURCHASED POWER-MEAN	55550	-	-	-	-
PURCHASED POWER-TENASKA	55560	18,074,905	19,500,000	16,000,000	18,200,000
PURCHASED POWER-SOLAR	55570	95,826	150,000	109,000	125,000
OPER SUPERVISION & ENG-TRANS	56000	750,151	900,000	715,000	750,000
LOAD DISPATCHING-TRANS	56100	452,883	720,000	494,000	475,000
PURCHASED POWER - TRANSMISSION	56110	3,570,752	4,500,000	3,320,000	3,800,000
MAINT OF SUBSTATION-TRANS	57000	30,477	30,000	109,000	200,000
MARKET EXPENSE- TRANS	57500	204,740	225,000	211,000	220,000
OPER SUPERVISION & ENGINEERING-DIST	58000	204,505	275,000	242,000	255,000
LOAD DISPATCHING-DIST	58100	715,870	700,000	738,000	735,000
OPER OF SUBSTATION-DIST	58200	676	750	550	600
OVERHEAD LINE-DIST	58300	148,345	180,000	145,000	190,000
UNDERGROUND OPERATION - DIST	58400	-	-	50,000	115,000
METER OPERATING-DIST	58600	90,660	150,000	114,000	125,000
MAINT OF SERV ON CUST PROP-DIST	58700	256,060	250,000	279,000	290,000
OFFICE SUPPLIES-DIST	58800	1,468,712	1,500,000	1,450,000	1,450,000
MAINT OF STATION EQUIP-DIST	59200	989,956	1,300,000	801,000	810,000
MAINT OF LINES-DIST	59300	854,875	850,000	857,000	865,000
MAINT OF UNDERGROUND LINES-DIST	59400	678,073	775,000	743,000	750,000
MAINT OF TRANSFORMER-DIST	59500	21,767	50,000	15,000	20,000
MAINT OF METERS-DIST	59700	-	-	-	-
MAINT OF MISC PLANT-DIST	59800	357,067	350,000	287,000	350,000
TOTAL OPERATING EXPENSE		85,706,609	91,411,001	84,496,131	88,472,100
ACCRUED ADMIN & OPERATING EXPENSES		91,450,393	96,978,371	90,075,501	94,239,470
TOTAL CAPITAL EXPENSES		8,169,594	13,980,000	12,650,000	9,365,000
ACCRUED & CAPITAL EXPENSE		99,619,986	110,958,371	102,725,501	103,604,470
OTHER USES OF FUNDS - IN LIEU OF TAX	40800	445,443	700,000	430,000	420,000
LESS DEPRECIATION		(12,325,650)	(12,900,000)	(12,542,000)	(12,980,000)
FINAL ACCRUED EXPENSE		87,739,779	98,758,371	90,613,501	91,044,470
ACCRUAL RECONCILIATION		3,834,908	-	-	-
TOTAL APPROPRIATION		91,574,687	98,758,371	90,613,501	91,044,470

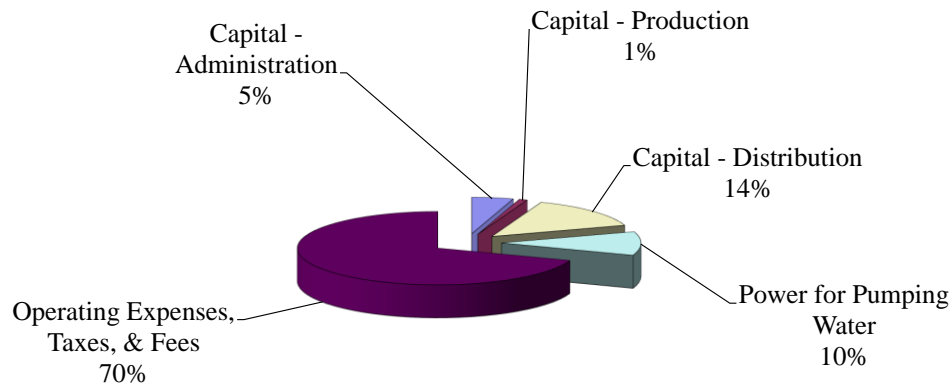
Electric Department Appropriation



	ACCOUNT	2018-2019 ACTUAL	2019-2020 BUDGET	2019-2020 PROJECTED	2020-2021 BUDGET
ACCRUAL REVENUE					
MERCHANDISE SALES	41500	903,252	500,000	500,000	500,000
REVENUE NON-UTILITY PROPERTY	41700	-	-	-	-
INTEREST & DIVIDEND	41900	1,090,179	400,000	1,400,000	1,250,000
MISC NON-OPERATING	42100	2,057	12,500	1,100	1,100
WATER SYSTEM OPERATING REVENUE	42105	-	-	220,536	225,000
GAIN ON DISPOSITION OF PROP	42110	27,020	25,000	31,000	25,000
AMORTIZATION OF DEBT PREMIUM	42900	397,539	397,540	366,591	330,902
RESIDENTIAL SALES	44000	20,053,174	21,000,000	20,700,000	20,900,000
DUSK TO DAWN SALES	44020	116,464	140,000	115,500	116,500
COMMERCIAL & INDUSTRIAL SALES	44200	39,509,736	43,000,000	39,490,000	39,885,000
WHOLESALE ENERGY - NPPD	44700	213,244	250,000	185,000	187,000
WHOLESALE ENERGY - TENASKA	44730	22,971,321	24,000,000	19,160,000	19,500,000
WHOLESALE ENERGY - NE CITY	44750	309,550	300,000	389,000	393,000
WHOLESALE ENERGY - NELIGH	44760	88,443	85,000	111,000	112,000
WHOLESALE ENERGY - WAPA	44770	913,436	825,000	875,000	915,000
INTERDEPARTMENTAL SALES	44800	1,875,645	1,800,000	2,339,000	2,362,000
FORFEITED DISCOUNTS	45000	186,638	190,000	188,000	190,000
SERVICE SALES	45100	9,035	15,000	9,400	9,500
RENT FROM PROPERTY	45400	71,841	60,000	143,000	145,000
TOTAL ACCRUAL REVENUE		88,738,575	93,000,040	86,224,127	87,047,002
ACCRUAL RECONCILIATION		(397,539)	(397,540)	(366,591)	(330,902)
TOTAL REVENUE		88,341,036	92,602,500	85,857,536	86,716,100
BOND & LOAN PROCEEDS		-	-	-	-
TOTAL REVENUE & BOND PROCEEDS		88,341,036	92,602,500	85,857,536	86,716,100
OPERATING EXCESS (DEFICIT)		4,935,942	7,824,129	7,894,035	5,036,630
CAPITAL EXPENDITURES		(8,169,594)	(13,980,000)	(12,650,000)	(9,365,000)
BEGINNING FUND BALANCE		51,332,269	48,098,617	48,098,617	43,342,652
ENDING UNRESTRICTED BALANCE		39,834,572	32,886,949	35,509,753	31,124,165
ENDING RESTRICTED BALANCE		8,264,046	9,055,797	7,832,899	7,890,117

	ACCOUNT	2018-2019 ACTUAL	2019-2020 BUDGET	2019-2020 PROJECTED	2020-2021 BUDGET
ENTERPRISE DEPARTMENT 525 - WATER OPERATIONS					
ACCRUED EXPENSES					
METER READING	78100	101,725	195,000	138,000	142,000
CUSTOMER BILLING & ACCOUNTING	78200	309,486	310,000	303,000	315,000
DATA PROCESSING	78250	62,616	70,000	59,000	66,400
UNCOLLECTABLE ACCOUNTS	78400	12,070	11,000	10,200	12,000
ADMINISTRATIVE SALARY EXPENSE	79000	53,281	60,000	54,000	64,900
OFFICE SUPPLIES	79300	8,097	10,000	9,100	10,900
SPECIAL SERVICES	79500	120,764	135,000	121,000	120,000
INSURANCE	79800	12,980	15,000	13,000	15,000
INJURIES & DAMAGES	79900	3,223	12,500	3,000	8,000
EMPLOYEE BENEFITS	80010	178,858	80,000	90,000	109,900
PENSIONS	80020	26,026	15,000	15,000	15,000
MISCELLANEOUS	80100	14,838	15,000	15,000	15,000
MAINT OF GENERAL PROPERTY	80200	113,157	125,000	100,000	106,500
UTILITY OFFICE RENT	80300	3,630	3,630	3,630	3,630
BACKFLOW PROTECTION PROGRAM	81000	133,794	150,000	145,000	147,200
GENERAL ADMINISTRATIVE SERVICE EXPENSE		1,154,544	1,207,130	1,078,930	1,151,430
DEPRECIATION-SUPPLY	50310	72,411	75,000	73,000	76,000
DEPRECIATION-PUMPING EQUIP	50320	25,153	30,000	25,000	27,000
DEPRECIATION-TREATMENT PLANT	50330	151,452	165,000	153,500	158,000
DEPRECIATION-DISTRIBUTION	50340	697,174	725,000	710,000	735,000
DEPRECIATION-GENERAL	50350	192,702	200,000	196,000	205,000
INTEREST EXPENSE - 2017 BONDS	53010	195,102	189,347	189,347	183,189
DEBT EXPENSE ON BONDS	53100	-	-	-	-
MERCHANDISE-MATERIAL	61610	90,915	200,000	85,000	120,000
MERCHANDISE-LABOR	61620	81,606	150,000	91,000	110,000
OPERATION SUPPLIES	70300	14,025	20,000	18,000	23,200
MAINT OF WELLS & STRUCTURES	70500	52,553	70,000	41,000	65,000
OPERATION LABOR	72200	297,080	315,000	240,000	240,000
POWER FOR PUMPING	72300	536,644	550,000	665,000	675,000
MAINT OF PUMPING EQUIP	72700	273,185	140,000	277,000	280,000
PURIFICATION SUPPLIES	74300	982,516	1,000,000	1,010,000	1,050,000
MAINT OF PURIFICATION EQUIP	74600	22,816	30,000	25,000	23,000
OPERATION SUPERVISION & ENG	75100	212,417	320,000	312,000	324,000
OFFICE EXPENSE-DIST	75200	25,381	65,000	62,000	65,000
OPERATION OF MAINS	75300	174,291	275,000	194,000	196,900
OPERATION OF METERS	75400	140,690	140,000	146,000	152,000
MAINT OF DIST MAINS	75800	188,058	230,000	200,000	206,800
MAINT OF FIRE HYDRANTS	75900	175,232	190,000	229,000	238,700
OPERATIONS TOTAL		4,601,403	5,079,347	4,941,847	5,153,789
ACCRUED ADMIN & OPERATING EXPENSES		5,755,947	6,286,477	6,020,777	6,305,219
TOTAL CAPITAL EXPENSES		1,782,589	2,205,000	1,770,000	1,295,000
ADJUSTED ACCRUED EXPENSES		7,538,536	8,491,477	7,790,777	7,600,219
OTHER USES OF FUNDS - IN LIEU OF TAX	53300	71,923	70,000	65,000	65,000
LESS DEPRECIATION		(1,138,891)	(1,195,000)	(1,157,500)	(1,201,000)
FINAL ACCRUED EXPENSE		6,471,568	7,366,477	6,698,277	6,464,219
ACCUAL RECONCILIATION		(48,007)	-	-	-
TOTAL APPROPRIATION		6,423,561	7,366,477	6,698,277	6,464,219

Water Department Appropriation



ACCRUAL REVENUE

WATER TAP FEES	52000	36,906	10,000	10,000	10,000
WATER MAIN CONTRIBUTIONS	52010	1,049,478	-	-	-
RENT FROM PROPERTY	52200	-	-	-	-
INTEREST & DIVIDEND	52400	7,348	10,000	10,000	10,000
MISC NON-OPERATING	52600	136,152	125,000	125,000	500
GAIN ON DISPOSITION-PROP	52610	10,125	-	-	-
METERED SALES	60100	5,436,741	5,950,000	5,460,000	5,700,000
PRIVATE FIRE PROTECTION	60400	82,238	80,000	80,000	85,000
INTERDEPARTMENTAL SALES	60800	187,498	170,000	175,000	180,000
SALE OF WATER SERVICES	61400	72	70	70	75
MERCHANDISE SALES	61600	245,734	350,000	229,000	250,000
TOTAL ACCRUAL REVENUE		7,192,290	6,695,070	6,089,070	6,235,575
ACCRUAL RECONCILIATION		(1,049,478)	-	-	-
TOTAL REVENUE		6,142,812	6,695,070	6,089,070	6,235,575
BOND PROCEEDS					
TOTAL REVENUE & BOND PROCEEDS		6,142,812	6,695,070	6,089,070	6,235,575
OPERATING EXCESS (DEFICIT)		1,501,840	1,533,593	1,160,793	1,066,356
CAPITAL EXPENDITURES		(1,782,589)	(2,205,000)	(1,770,000)	(1,295,000)
BEGINNING FUND BALANCE		7,311,175	7,030,426	7,030,426	6,421,219
ENDING UNRESTRICTED BALANCE		6,611,434	5,887,935	5,999,818	5,765,857
ENDING RESTRICTED BALANCE		418,992	471,084	421,401	426,718

CAPITAL IMPROVEMENTS BUDGET – June 10, 2020 Draft #3
ELECTRIC DEPARTMENT
FISCAL YEAR 2020-21

ADMINISTRATION

1. Administrative Capital Additions: \$0
2. 2012 Revenue Bond Payment: \$1,920,000
Anticipated debt service on Series 2012 Bonds.
3. 2013 Revenue Bond Payment: \$1,425,000
Anticipated debt service on Series 2013 Bonds.

TRANSMISSION

4. Transmission Line Improvements: \$0
5. Additional Substations: \$0
6. Equipment & Vehicles: \$0
7. PCC Improvements: \$0
8. Substation Upgrades: \$1,000,000
\$1,000,000 – New spare substation transformer

DISTRIBUTION

9. Overhead Material: \$1,900,000
\$1,650,000 - This routine item includes pole-mounted transformers, conductors, poles, meters, streetlights, small tools, hardware and labor necessary for overhead electrical distribution. The budgeted amount is based on historical expenditures.
\$250,000 - AMI meter deployment. Allows for new installations and shutoffs.
10. Underground Materials: \$1,700,000
This is a routine item that includes the cable, pad-mounted transformers, conduit, small tools, hardware and labor necessary to supply underground electric service to new businesses and subdivisions. Cable nearing the end of its useful 30 year life is replaced from this line item. Most projects have a short lead-time, and the budgeted amount is based on the historic needs.
11. Equipment & Vehicles: \$0
12. Outside Contractors: \$170,000
Contractors used for underground boring to install conduit for the Underground Department
13. Distribution Building Improvements: \$0

CAPITAL IMPROVEMENTS BUDGET – June 10, 2020 Draft #3
ELECTRIC DEPARTMENT
FISCAL YEAR 2020-21

14. Distribution Improvements: \$0

PRODUCTION

15. PGS Improvements: \$1,250,000

\$750,000 – Turbine Generator Valve Overhaul

\$250,000 – Precipitator Repairs

\$250,000 – Precipitator Controls

16. PGS Air Quality Control: \$0

17. Equipment & Vehicles: \$0

18. Burdick Steam Units: \$0

19. Burdick Gas Turbines: \$0

Utilities Department
Capital Improvement Budget
Fiscal Year 2020-21

Electric Fund 520

Budget FY 2019-20	Projected FY 2019-20	Line items FY 2019-20	Budget FY 2020-21	Budget FY 2021-22	Budget FY 2022-23	Budget FY 2023-24	Budget FY 2024-25
Administration							
\$0	\$0	Administrative Capital Additions	\$0	\$0	\$0	\$0	\$0
\$1,645,000	\$1,645,000	2012 Revenue Bond Payment	\$1,920,000	\$2,060,000	\$0	\$0	\$0
\$1,580,000	\$1,580,000	2013 Revenue Bond Payment	\$1,425,000	\$1,425,000	\$3,635,000	\$3,820,000	\$4,010,000
\$3,225,000	\$3,225,000	Administration Subtotal	\$3,345,000	\$3,485,000	\$3,635,000	\$3,820,000	\$4,010,000
Transmission							
\$750,000	\$950,000	Transmission line Improvements	\$0	\$500,000	\$250,000	\$250,000	\$250,000
\$0	\$0	Additional Substation	\$0	\$0	\$0	\$0	\$0
\$40,000	\$0	Equipment & Vehicles	\$0	\$55,000	\$120,000	\$0	\$0
\$100,000	\$85,000	PCC Improvements	\$0	\$0	\$0	\$0	\$0
\$1,000,000	\$85,000	Substation Upgrades	\$1,000,000	\$400,000	\$100,000	\$100,000	\$1,000,000
\$1,890,000	\$1,120,000	Transmission Subtotal	\$1,000,000	\$955,000	\$470,000	\$350,000	\$1,250,000
Distribution							
\$2,400,000	\$2,400,000	Overhead Material	\$1,900,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000
\$1,500,000	\$1,500,000	Underground Material	\$1,700,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000
\$400,000	\$290,000	Equipment & Vehicles	\$0	\$320,000	\$235,000	\$295,000	\$500,000
\$125,000	\$125,000	Outside Contractors	\$170,000	\$150,000	\$150,000	\$150,000	\$150,000
\$100,000	\$50,000	Building Improvements	\$0	\$100,000	\$100,000	\$100,000	\$100,000
\$0	\$0	Distribution Improvements	\$0	\$0	\$0	\$0	\$0
\$4,525,000	\$4,365,000	Distribution Subtotal	\$3,770,000	\$4,720,000	\$4,635,000	\$4,695,000	\$4,900,000
Production							
\$1,650,000	\$1,650,000	PGS Improvements	\$1,250,000	\$1,000,000	\$1,000,000	\$3,500,000	\$1,000,000
\$0	\$0	PGS Air Quality Control	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
\$40,000	\$40,000	Equipment & Vehicles	\$0	\$70,000	\$0	\$0	\$40,000
\$950,000	\$450,000	Burdick Steam Units	\$0	\$5,000,000	\$0	\$0	\$0
\$1,700,000	\$1,800,000	Burdick Gas Turbines	\$0	\$1,000,000	\$500,000	\$500,000	\$500,000
\$4,340,000	\$3,940,000	Production Subtotal	\$1,250,000	\$8,070,000	\$2,500,000	\$5,000,000	\$2,540,000
Electric Total	\$13,980,000	\$12,650,000	\$9,365,000	\$17,230,000	\$11,240,000	\$13,865,000	\$12,700,000

CAPITAL IMPROVEMENTS BUDGET – June 10, 2020 Draft #3
WATER DEPARTMENT
FISCAL YEAR 2020-21

ADMINISTRATION

1. Administrative Capital Additions: \$0
2. 2017 Revenue Bond Payment: \$310,000
Anticipated debt service on Series 2017 Bonds.

DISTRIBUTION

3. Water Main Districts: \$300,000
This item includes unplanned extensions of water mains into new subdivisions and developments and inspection of private water mains/services. Compliance with Federal regulations, annexation, and aquifer contamination will continue to produce additional requests for water main extensions.
4. Equipment & Vehicles: \$0
5. Distribution Improvements: \$625,000
\$75,000 – Sycamore (22nd to Capital)
\$175,000 – Kimball (Koenig to Division)
\$200,000 – Oak (Koenig to Division)
\$100,000 – Newcastle Rd (S. of Coventry Ln)
\$75,000 – Koenig & Grant
6. Trunk Line Expansion: \$0

PRODUCTION

7. Well Field Improvements: \$60,000
Wellfield Reservoir Design
8. Equipment & Vehicles: \$0
9. Pumping Station Improvements: \$0

Utilities Department
Capital Improvement Budget
Fiscal Year 2020-21

Water Fund 525

	Budget FY 2019-20	Projected FY 2019-20	Line items FY 2019-20	Budget FY 2020-21	Budget FY 2021-22	Budget FY 2022-23	Budget FY 2023-24	Budget FY 2024-25
Administration								
	\$0	\$0	Administrative Capital Additions	\$0	\$0	\$0	\$0	\$150,000
	\$305,000	\$305,000	2017 Revenue Bond	\$310,000	\$320,000	\$325,000	\$330,000	\$340,000
	\$305,000	\$305,000	Administration Subtotal	\$310,000	\$320,000	\$325,000	\$330,000	\$490,000
Distribution								
	\$500,000	\$200,000	Water Districts	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
	\$45,000	\$45,000	Equipment & Vehicles	\$0	\$50,000	\$125,000	\$130,000	\$35,000
	\$1,195,000	\$1,150,000	Distribution Improvements	\$625,000	\$570,000	\$500,000	\$600,000	\$0
	\$0	\$0	Trunk line Expansion	\$0	\$0	\$0	\$0	\$500,000
	\$1,740,000	\$1,395,000	Distribution Subtotal	\$925,000	\$920,000	\$925,000	\$1,030,000	\$835,000
Production								
	\$0	\$70,000	Well field Improvements	\$60,000	\$500,000	\$0	\$0	\$0
	\$0	\$0	Equipment & Vehicles	\$0	\$0	\$0	\$0	\$0
	\$160,000	\$0	Pumpstation Improvements	\$0	\$0	\$200,000	\$160,000	\$0
	\$160,000	\$70,000	Production Subtotal	\$60,000	\$500,000	\$200,000	\$160,000	\$0
Water Total	\$2,205,000	\$1,770,000		\$1,295,000	\$1,740,000	\$1,450,000	\$1,520,000	\$1,325,000

Executive Summary – *Preliminary* Grand Island, Nebraska 2020 Water Financial Plan Analysis Update Study

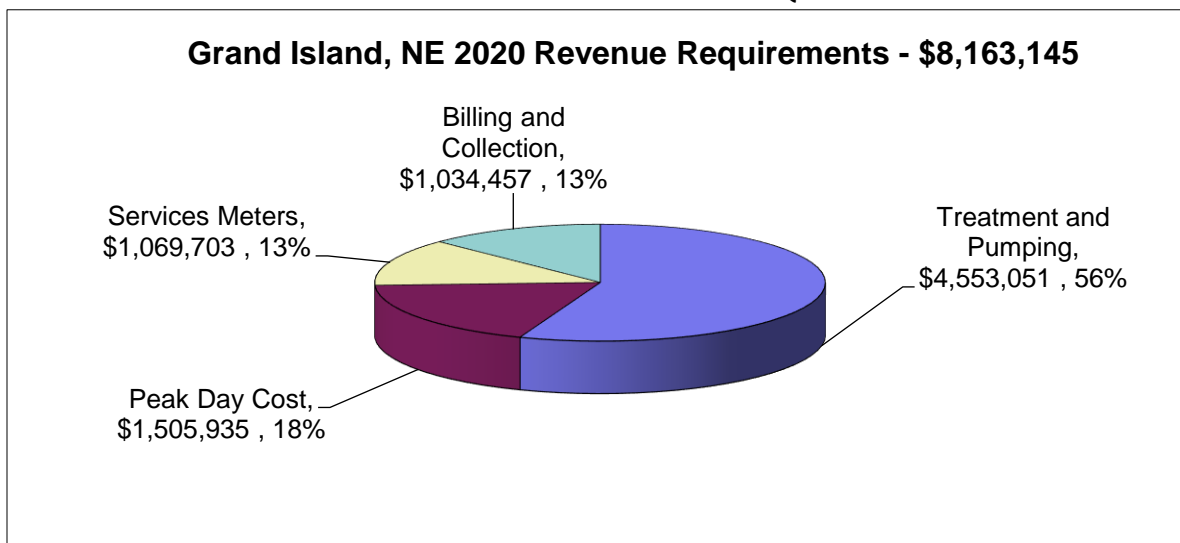
EXECUTIVE SUMMARY

The City of Grand Island's Utilities Department and City Council (Grand Island), concerned about continued load growth, planned system facilities improvements, and necessary increases in labor and general operating expenses, requested that The Nebraska Municipal Power Pool (NMPP) conduct a Financial Plan Analysis of the water utility. This report summarizes the findings and recommendations resulting from the five-year Financial Planning Model.

This study update includes revised assumptions for consumption by customers, operating costs, capital construction, treatment, and maintenance costs. This financial projection indicates that the utility has sufficient cash reserves. Thus, we propose no revenue increase at this time to maintain net income and cash reserves at system financial targets. Chart 1 below shows the \$8,163,145 total revenue requirements used in the Cost of Service Study (COS) broken down by specific budget classes. These also include depreciation and a return on facility investments. Treatment and Pumping costs sum to \$4,553,051 or 56% of the total. Peak Day costs are \$1,505,953 or 18%, while Billing and Collection costs and Service Meters comprise the remainder at 13% each, respectively.

Individual escalators for labor, supplies, capital construction, long-term borrowing and earnings on reserves are used to determine the revenue requirements for the test year and for each year to FYE 2020.

CHART 1: GRAND ISLAND COST-OF-SERVICE REVENUE REQUIREMENTS FOR FYE 2020



PROJECTED REVENUE REQUIREMENTS

A critical aspect of a COS analysis is determination of the utility revenue requirements. Table A below, shows FYE 2017-19 actual and FYE 2020-25 projected statement of income and expenses. For FYE September 2019, existing rates are estimated to derive \$5,661,145 in revenue (line 2) resulting in \$499,916 in net operating income (line 15) which takes cash balance to \$7,028,009 (line 40). The projections are based on the City's budget projections and adjustments that have or will affect each year.

TABLE A: PRO-FORMA OPERATING STATEMENTS WITHOUT RATE ADJUSTMENTS

	For FYE September	2017	2018	2019	2020	2021	2022	2023	2024	2025
a	Sales Growth Base Load					0.0%	0.0%	0.0%	0.0%	0.0%
b	Operational Expense Inflation	9.0%	-6.1%	5.6%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
c	General Inflation				3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
d	Interest Rate on Cash Balances	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
e	Rate Adjustments					0.0%	0.0%	0.0%	0.0%	0.0%
	For FYE September Effective date					Oct1, 2020	Oct1, 2021	Oct1, 2022	Oct1, 2023	Oct1, 2024
1	Revenues									
2	Retail Sales	6,440,762	6,091,949	5,661,145	5,791,351	5,791,351	5,791,351	5,791,351	5,791,351	5,791,351
3	Other Operating Rev	251,940	253,558	291,675	300,425	309,438	318,721	328,283	338,131	348,275
4	Total Revenues	6,692,702	6,345,507	5,952,820	6,091,777	6,100,789	6,110,072	6,119,634	6,129,483	6,139,627
5	Expenses									
6	Administrative & General	634,686	621,858	668,652	568,730	585,792	603,366	621,467	640,111	659,314
7	Billing and Collection	607,910	441,051	485,897	510,200	525,506	541,271	557,509	574,235	591,462
8	Operation	989,141	1,068,318	916,069	1,137,000	1,171,110	1,206,243	1,242,431	1,279,704	1,318,095
9	Production	2,052,346	1,893,530	2,178,819	2,349,000	2,419,470	2,492,054	2,566,816	2,643,820	2,723,135
10	Total O&M	4,284,083	4,024,757	4,249,437	4,564,930	4,701,878	4,842,934	4,988,222	5,137,869	5,292,005
11	Depreciation	1,082,210	1,111,349	1,138,892	1,157,500	1,209,300	1,278,900	1,336,900	1,397,700	1,458,500
12	Interest Income	(8,107)	(9,664)	(7,348)	(7,063)	(6,251)	(5,785)	(4,740)	(3,850)	(2,746)
13	Transfers	1%	83,520	66,442	71,923	73,577	73,577	73,577	73,577	73,577
14	Total Water Expense	5,441,706	5,192,884	5,452,904	5,788,944	5,978,504	6,189,626	6,393,959	6,605,296	6,821,336
15	Net Operating Income	1,250,996	1,152,623	499,916	302,833	122,285	(79,554)	(274,325)	(475,813)	(681,709)
16	Net Income Target % of UPIS	4.0%	2,468,552	2,595,174	2,652,959	2,674,627	2,675,983	2,691,643	2,693,847	2,696,307
17	Net Income Actual % of UPIS	2.0%	1.8%	0.8%	0.5%	0.2%	-0.1%	-0.4%	-0.7%	-1.0%
18	Debt Service	514,216	502,874	499,269	498,514	499,972	499,438	497,955	500,263	498,567
19	Debt Coverage Ratio Minimum Requirement	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
20	Debt Coverage Ratio	4.54	4.50	3.28	2.93	2.66	2.40	2.13	1.84	1.56
21	COS Revenue Requirement				8,163,145					
22	Other Revenues & (Expenses)									
23	Interest on Existing LTD Debt	(137,783)	(193,874)	(195,102)	(189,347)	(181,638)	(175,272)	(168,788)	(161,930)	(154,400)
24	Fees On Existing LT Debt	(140,433)								
25	Total Profit / Loss	972,786	958,756	304,822	113,495	(59,343)	(254,814)	(443,102)	(637,730)	(836,095)
26	Net Utility Plant in Service (UPIS)	61,713,795	64,879,356	66,323,968	66,865,668	66,899,568	67,291,068	67,346,168	67,407,668	67,408,368
27	Historic Utility Plant in Service (OCUP)	79,091,964	83,364,197	85,896,263	87,666,263	88,961,263	90,701,263	92,151,263	93,671,263	95,191,263
28	Net UPIS/OCUP	78%	78%	77%	76%	75%	74%	73%	72%	71%
29	Cash Inflows									
30	Net Income	972,786	958,756	304,822	113,495	(59,343)	(254,814)	(443,102)	(637,730)	(836,095)
31	Contribution in aid of construction	1,443,108		1,049,478						
32	Gain on sale of assets	10,668		10,125						
33	Depreciation Expense	1,082,210	1,111,349	1,138,892	1,157,500	1,209,300	1,278,900	1,336,900	1,397,700	1,458,500
34	Cash Inflows	3,508,772	2,070,105	2,503,317	1,270,995	1,149,957	1,024,086	893,798	759,970	622,405
35	Cash Outflows									
36	Capital Improvements & C/WIP	2,842,400	4,572,235	1,782,589	1,770,000	1,295,000	1,740,000	1,450,000	1,520,000	1,520,000
37	Principal on Existing Debt	236,000	309,000	304,167	309,167	318,333	324,167	329,167	338,333	344,167
38	Cash Outflows	3,078,400	4,881,235	2,086,756	2,079,167	1,613,333	2,064,167	1,779,167	1,858,333	1,864,167
39	Change in Cash	430,372	(2,811,130)	416,561	(808,172)	(463,376)	(1,040,081)	(885,368)	(1,098,364)	(1,241,762)
40	Cash Balance	10,025,797	7,311,174	7,028,009	6,219,837	5,756,461	4,716,380	3,831,012	2,732,648	1,490,886
41	Cash Balance Target	3,886,619	3,915,911	3,402,608	3,470,909	3,603,614	3,732,001	3,744,435	3,832,432	3,908,679



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PROJECTED CASH FLOW

The \$8,163,145 revenue requirement (line 21) is the 2020 full COS rate recovery and includes a 4% return on distribution plant investments less accumulated depreciation expenses (line 11). A typical recommendation is a net income target (line 16) between 4.0% and 9.0% return on investments (ROI) in depreciated utility plant. The current rates are estimated to produce 0.8% ROI for 2019 (line 17) and with no rate increase the ROI drops to negative 1.0% in 2025.

Table A, shows 2020 capital improvements and Construction-Work-In-Progress (CWIP) on line (36) and was \$1,782,589 for 2019 and projected at approximately \$1,500,000 each year after that. The City capital improvement program is the source of these construction estimates.

TABLE B: MINIMUM CASH RESERVE POLICY

Cash Reserve Policy				2020
1	O&M Expenses	4,564,930	25%	1,141,233
2	Historic Utility Plant in Service (OCUP)	87,666,263	1.00%	876,663
3	Deposits	-	100%	-
4	Debt Service	498,514	100%	498,514
5	Current Year Capital Improvements less Borrowings	1,770,000	10%	177,000
6	Five Year Capital Improvements less Borrowings	7,775,000	10%	777,500
7	Minimum Reserve Target			3,470,909

CASH RESERVE POLICY DISCUSSION

A minimum cash reserve target illustrated in Table B above has 6 elements. First is three months or 25% of annual operation and maintenance (line 1) and is a frequently used primary element of a cash reserve policy and can be labeled as a best-practice. Typically, anywhere from 3-6 months can be used. Line 2 covers the risk and peril system facilities are exposed to, like weather, accidents and vandalisms. One to three percent of utility plant is typical; however, a tornado, earth-quake or ice storm prone region utility may choose a higher percentage. Deposits (3) and Debt Service (4) are contract obligations so 100% is required. The most subjective element is for capital improvements elements lines 5 & 6. Typically, we recommend between 10% and 20%; higher percentages for utilities with more aged utility plant and where more construction is needed for replacements and renewals. A lower percent may be recommended for utilities with high growth rates and where more of construction is expansion work. The 2020 minimum cash reserve is based on a recommended policy illustrated in Table B above.

FINANCIAL FORECAST AND FIVE-YEAR RATE TRACK

Table C below shows the recommended rate increases that would be required for FYE 2023-25 (line e) to achieve financial targets. Annual 8.5% increases are recommended effective at the beginning of each FYE 2023-25. ROI returns to positive 1.3% in 2025 and cash reserves (line 40) stay positive above cash reserve minimum (line 41). This approach helps to stabilize revenue increases while maintaining positive financial objectives for the utility. For this study the focus will be on recommending no rate adjustments for FYE 2021 and FYE 2022, however the rate adjustments will be designed to move classes closer to a more fair and equitable recovery of costs by using the recommended rate design guideline of plus or minus 2.0% from the



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system average of 0.0% (or other as directed). The new rates will thus be effective October 1, 2021 and October 1, 2022. Thus, no class will get more than 3.0% or less than a 3.0% decrease.

An update study will then be recommended in two years to review the utility's financials and evaluate the rates for FYE 2023 and beyond.

TABLE C: PROJECTED OPERATING STATEMENTS & CASH FLOW W/5-YEAR RATE TRACK

	For FYE September	2017	2018	2019	2020	2021	2022	2023	2024	2025
a	Sales Growth Base Load					0.0%	0.0%	0.0%	0.0%	0.0%
b	Operational Expense Inflation	9.0%	-6.1%	5.6%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
c	General Inflation				3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
d	Interest Rate on Cash Balances	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
e	Rate Adjustments					0.0%	0.0%	8.5%	8.5%	8.5%
	For FYE September Effective date					Oct 1, 2020	Oct 1, 2021	Oct 1, 2022	Oct 1, 2023	Oct 1, 2024
1	Revenues									
2	Retail Sales	6,440,762	6,091,949	5,661,145	5,791,351	5,791,351	5,791,351	6,283,616	6,817,724	7,397,230
3	Other Operating Rev	251,940	253,558	291,675	300,425	309,438	318,721	328,283	338,131	348,275
4	Total Revenues	6,692,702	6,345,507	5,952,820	6,091,777	6,100,789	6,110,072	6,611,899	7,155,855	7,745,505
5	Expenses									
6	Administrative & General	634,686	621,858	668,652	568,730	585,792	603,366	621,467	640,111	659,314
7	Billing and Collection	607,910	441,051	485,897	510,200	525,506	541,271	557,509	574,235	591,462
8	Operation	989,141	1,068,318	916,069	1,137,000	1,171,110	1,206,243	1,242,431	1,279,704	1,318,095
9	Production	2,052,346	1,893,530	2,178,819	2,349,000	2,419,470	2,492,054	2,566,816	2,643,820	2,723,135
10	Total O&M	4,284,083	4,024,757	4,249,437	4,564,930	4,701,878	4,842,934	4,988,222	5,137,869	5,292,005
11	Depreciation	1,082,210	1,111,349	1,138,892	1,157,500	1,209,300	1,278,900	1,336,900	1,397,700	1,458,500
12	Interest Income	(8,107)	(9,664)	(7,348)	(7,063)	(6,251)	(5,785)	(4,740)	(4,339)	(4,254)
13	Transfers	1%	83,520	66,442	71,923	73,577	73,577	79,831	86,617	93,979
14	Total Water Expense	5,441,706	5,192,884	5,452,904	5,788,944	5,978,504	6,189,626	6,400,213	6,617,847	6,840,231
15	Net Operating Income	1,250,996	1,152,623	499,916	302,833	122,285	(79,554)	211,686	538,008	905,275
16	Net Income Target % of UPIS	4.0%	2,468,552	2,595,174	2,652,959	2,674,627	2,675,983	2,691,643	2,693,847	2,696,307
17	Net Income Actual % of UPIS		2.0%	1.8%	0.8%	0.5%	0.2%	-0.1%	0.3%	0.8%
18	Debt Service	514,216	502,874	499,269	498,514	499,972	499,438	497,955	500,263	498,567
19	Debt Coverage Ratio Minimum Requirement	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
20	Debt Coverage Ratio	4.54	4.50	3.28	2.93	2.66	2.40	3.11	3.87	4.74
21	COS Revenue Requirement				8,163,145					
22	Other Revenues & (Expenses)									
23	Interest on Existing LT Debt	(137,783)	(193,874)	(195,102)	(189,347)	(181,638)	(175,272)	(168,788)	(161,930)	(154,400)
24	Fees On Existing LT Debt	(140,433)								
25	Total Profit / Loss	972,786	958,756	304,822	113,495	(59,343)	(254,814)	42,909	376,091	750,889
26	Net Utility Plant in Service (UPIS)	61,713,795	64,879,356	66,323,968	66,865,668	66,899,568	67,291,068	67,346,168	67,407,668	67,408,368
27	Historic Utility Plant in Service (OCUP)	79,091,964	83,364,197	85,896,263	87,666,263	88,961,263	90,701,263	92,151,263	93,671,263	95,191,263
28	Net UPIS/ OCUP	78%	78%	77%	76%	75%	74%	73%	72%	71%
29	Cash Inflows									
30	Net Income	972,786	958,756	304,822	113,495	(59,343)	(254,814)	42,909	376,091	750,889
31	Contribution in aid of construction	1,443,108		1,049,478						
32	Gain on sale of assets	10,668		10,125						
33	Depreciation Expense	1,082,210	1,111,349	1,138,892	1,157,500	1,209,300	1,278,900	1,336,900	1,397,700	1,458,500
34	Cash Inflows	3,508,772	2,070,105	2,503,317	1,270,995	1,149,957	1,024,086	1,379,809	1,773,791	2,209,389
35	Cash Outflows									
36	Capital Improvements & CWIP	2,842,400	4,572,235	1,782,589	1,770,000	1,295,000	1,740,000	1,450,000	1,520,000	1,520,000
37	Principal on Existing Debt	236,000	309,000	304,167	309,167	318,333	324,167	329,167	338,333	344,167
38	Cash Outflows	3,078,400	4,881,235	2,086,756	2,079,167	1,613,333	2,064,167	1,779,167	1,858,333	1,864,167
39	Change in Cash	430,372	(2,811,130)	416,561	(808,172)	(463,376)	(1,040,081)	(399,358)	(84,543)	345,222
40	Cash Balance	10,025,797	7,311,174	7,028,009	6,219,837	5,756,461	4,716,380	4,317,023	4,232,480	4,577,702
41	Cash Balance Target	3,886,619	3,915,911	3,402,608	3,470,909	3,603,614	3,732,001	3,744,435	3,832,432	3,908,679



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FINDINGS AND RECOMMENDATIONS

To ensure costs are fairly recovered from customer classes, the City Council is asked to consider the following recommendations:

1. If warranted, consider directing staff and NMPP to design 0.0% rate adjustments to be effective October 1, 2021 and again October 1, 2022 to bring classes closer to Cost of Service. Rates will be designed after NMPP is given direction on the level of increase in revenues and a range of allowed impacts by class.
2. Rate changes should be reviewed every other year and adjusted as necessary to recover higher or lower than assumed revenue, load and cost escalations. This will continue the process of bringing classes closer to their actual cost of service, maintaining net operating income of at least about 5.0% of plant investment, and retaining a minimum cash reserve as determined by recommended Cash Reserve Policy.
3. Review Capital plan since that is biggest variable affecting rates at this time. Changes should be incorporated into this model as they arise to address impacts.



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2020-21 BUDGET OVERVIEW

Electric Department – Fund 520

Water Department – Fund 525

Budget Guidelines

- ☛ Conservative (low) revenue forecast
 - ☛ Weather dependent
 - ☛ Ensure debt service coverage
- ☛ Conservative (high) operating costs
 - ☛ Generation fuel/purchased power
 - ☛ Allow potential production capacity
- ☛ Maintain adequate cash reserves
- ☛ Manage controllable operating expenses and capital expenditures

Cash Reserve Guidelines

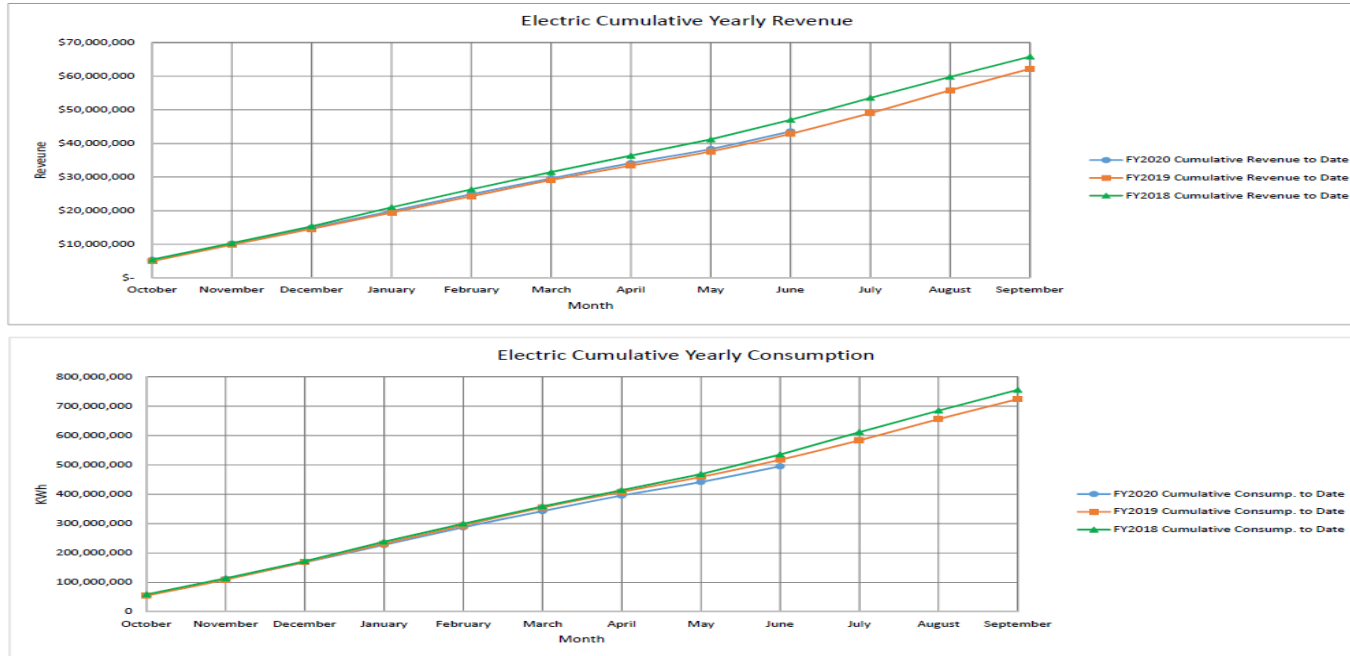
- ☞ Cash Reserve Considerations
 - ☞ Working Capital
 - ☞ Replacement Power
 - ☞ Asset Replacement
 - ☞ Capital Improvement Reserve
 - ☞ Debt Service Reserve

- ☞ Electric Fund - \$32,971,700
- ☞ Water Fund - \$2,759,100

Capital Improvement Budgets

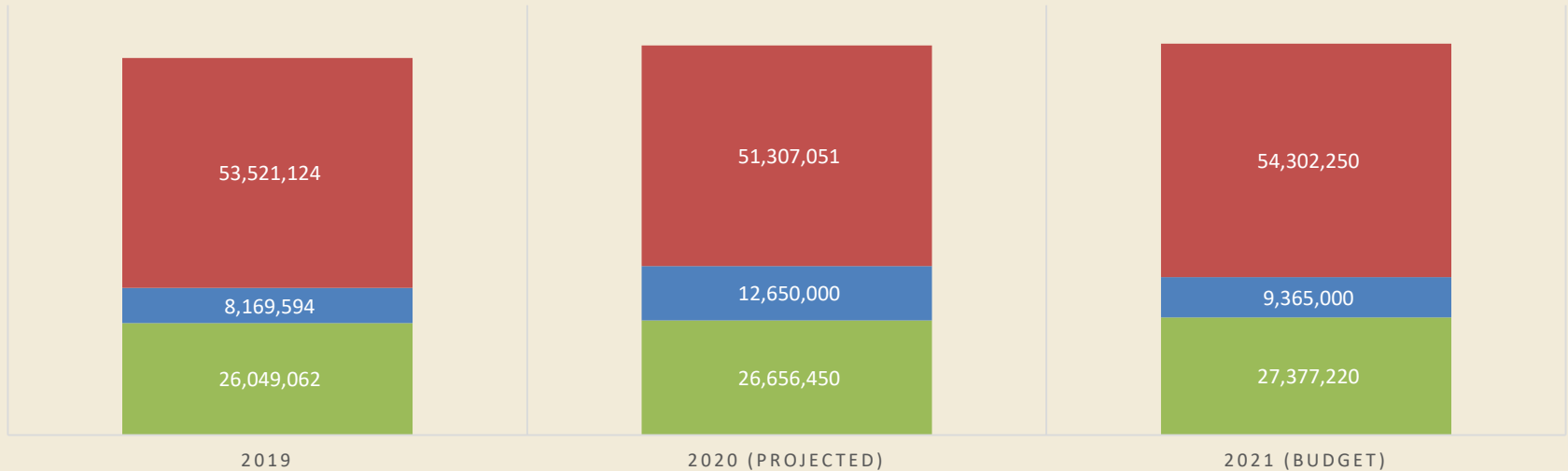
- Electric and Water Master Plans recently completed
- 5 and 20 Year System Requirements
 - Technical Evaluation
 - No Financial Evaluation
- Recommendations included in 5 year capital improvement budget forecasts
- Tri-annual water cost of service study included

ELECTRIC DEPARTMENT FUND 520



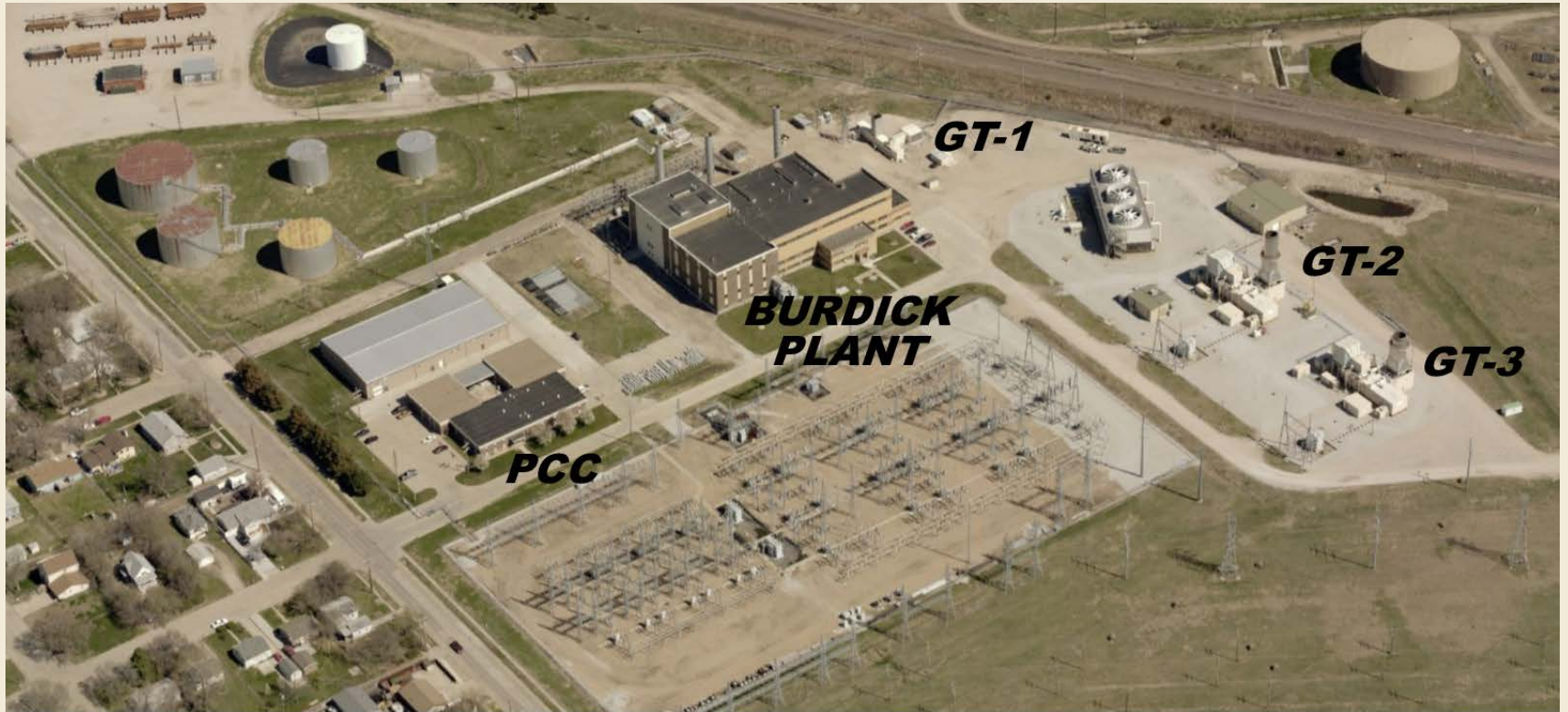
ELECTRIC DEPARTMENT - FUND 520

■ Admin and Operating ■ Capital Expenditures ■ Fuel, purchase power, debt service

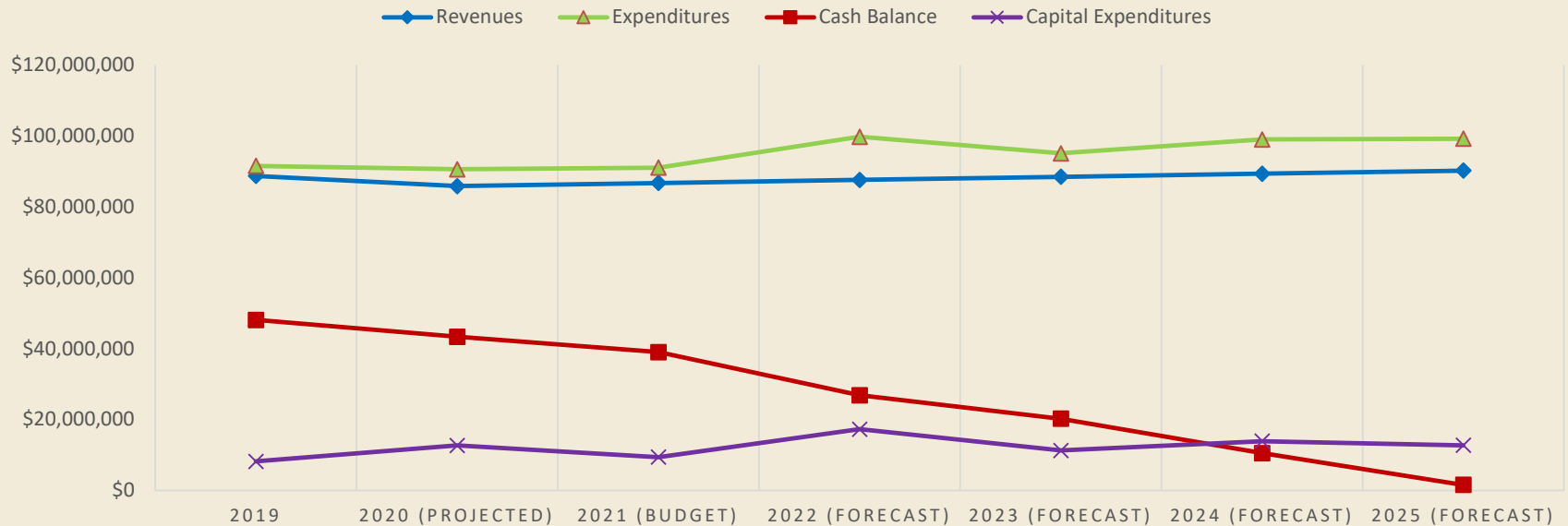


Electric Capital Improvements

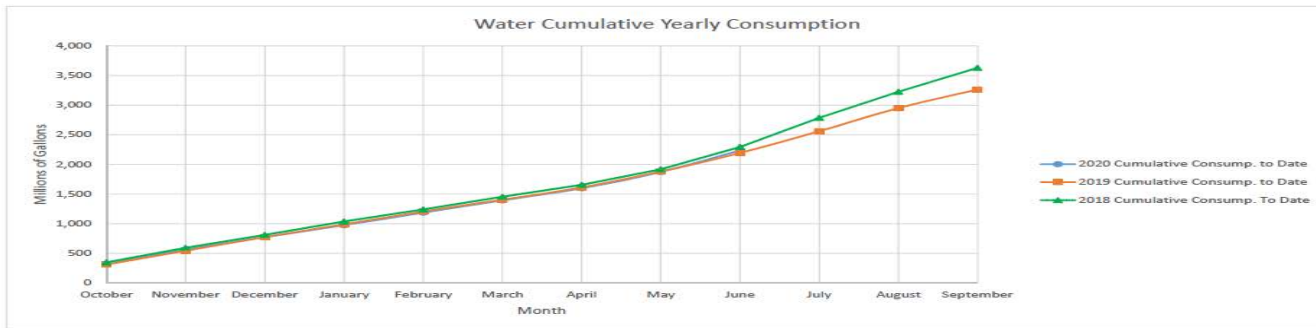
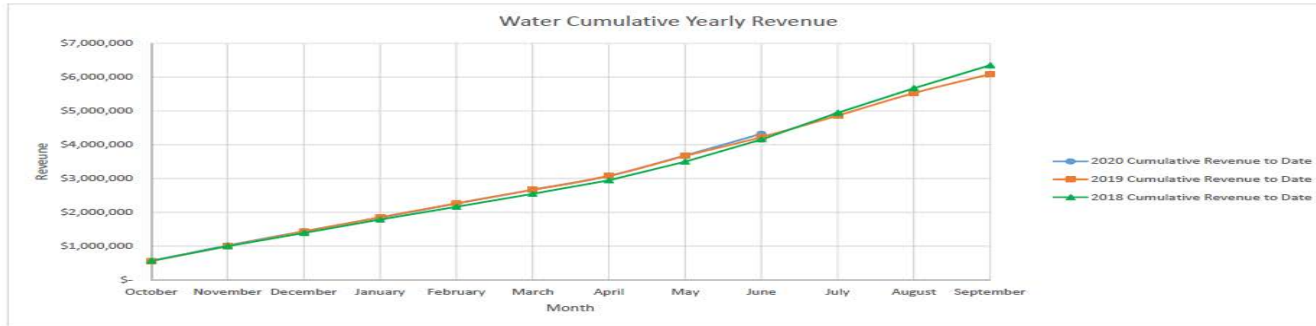
- ☛ Total Capital Budget - \$9,365,000
- ☛ Transmission and Substation Upgrades - \$1,000,000
- ☛ Bond payments - \$3,345,000
- ☛ Distribution improvements - \$3,770,000
- ☛ Power plant maintenance/improvements - \$1,250,000



ELECTRIC DEPARTMENT - FUND 520

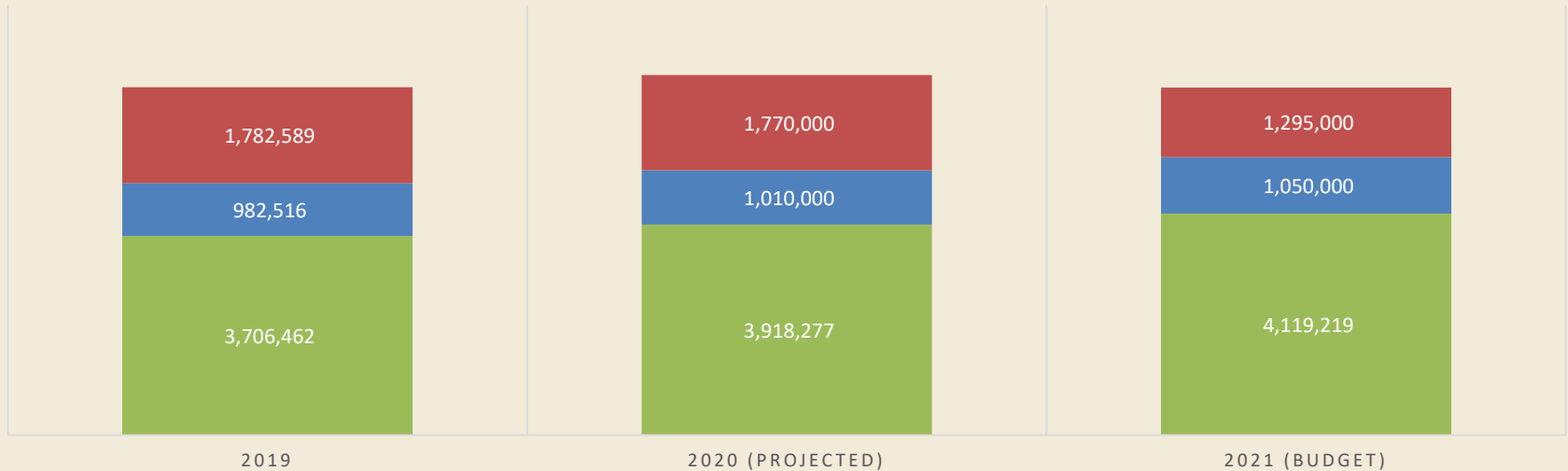


WATER DEPARTMENT FUND 525



WATER DEPARTMENT - FUND 525

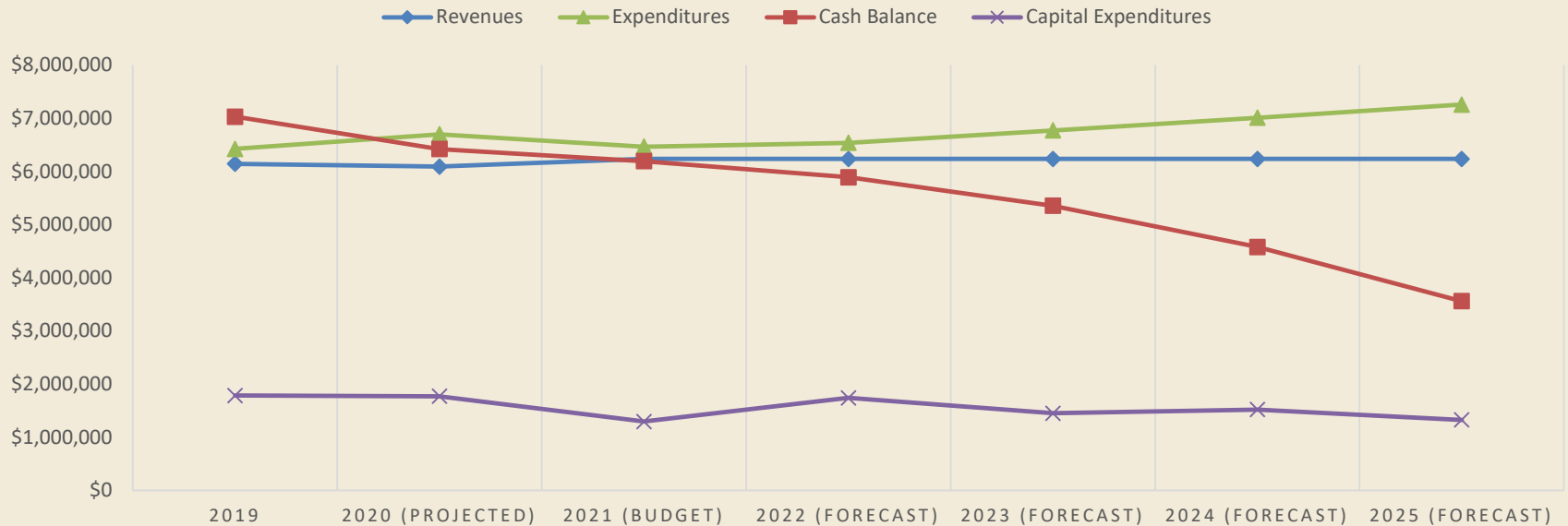
Admin and Operating Uranium Removal Operation Expense Capital Expenditures



Water Capital Improvements

- ☛ Total Capital Budget - \$1,295,000
 - ☛ Bond payments - \$310,000
 - ☛ Distribution improvements- \$925,000
 - ☛ Production improvements - \$60,000

WATER DEPARTMENT - FUND 525



Questions?