



# Water & Sewer 2017/2018 Operating Budget and 5 Year CIP

June 15, 2016



# Overview

- Rates/Revenue
  - Model assumptions
  - Rate changes
    - Water budget rates
- Operating
- Capital
  - Review program drivers
  - New projects

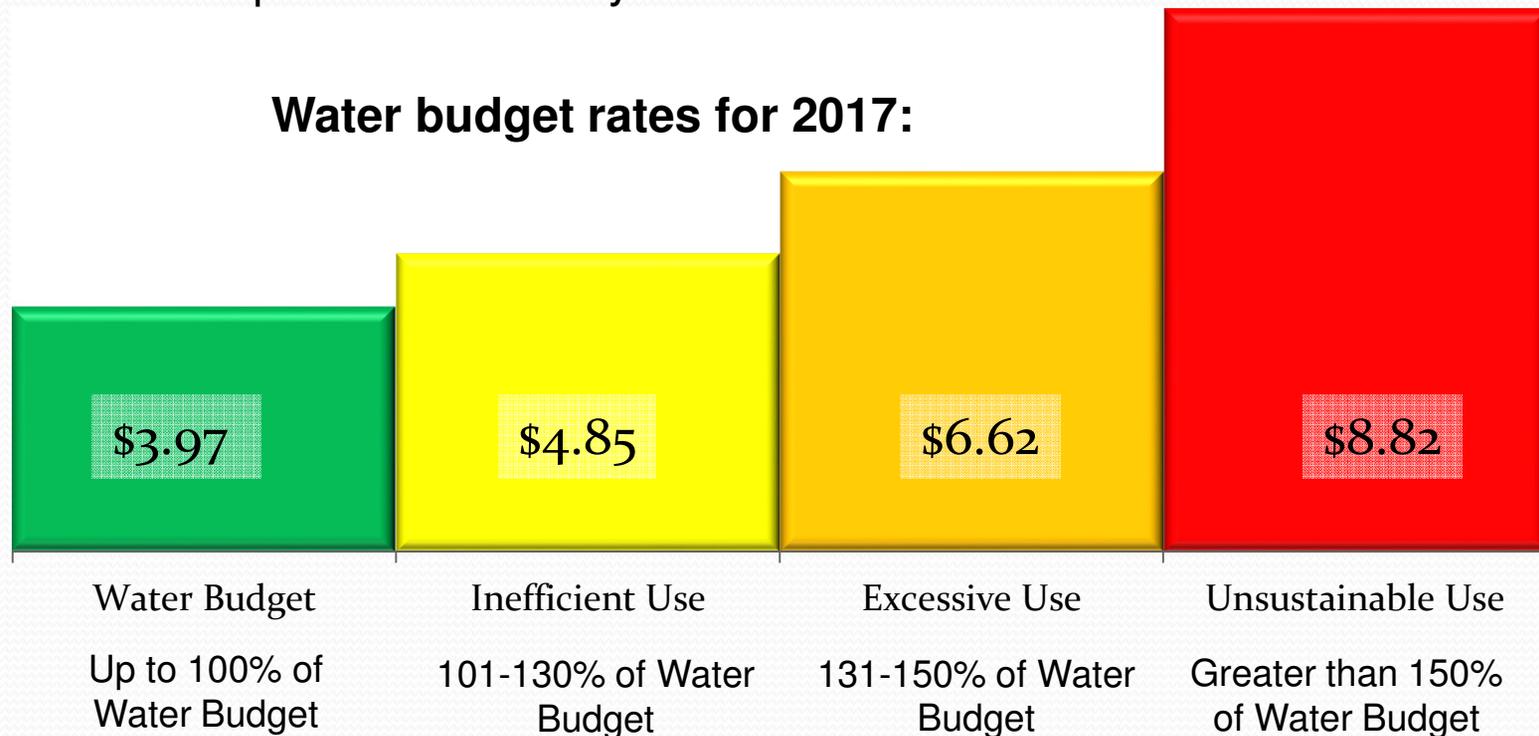


# Model Information

- Growth rate = 1.8%
- Single family water use = 130,000 gallons/year
  - Down 7,000 gallons from previous model
  - Incorporated water budget rates
- 2006 & 2008 water bonds refunded
  - Average annual savings of \$400,000

# Residential Water Budget Rate Structure

Proposed for Greeley SFR customers for 2017:

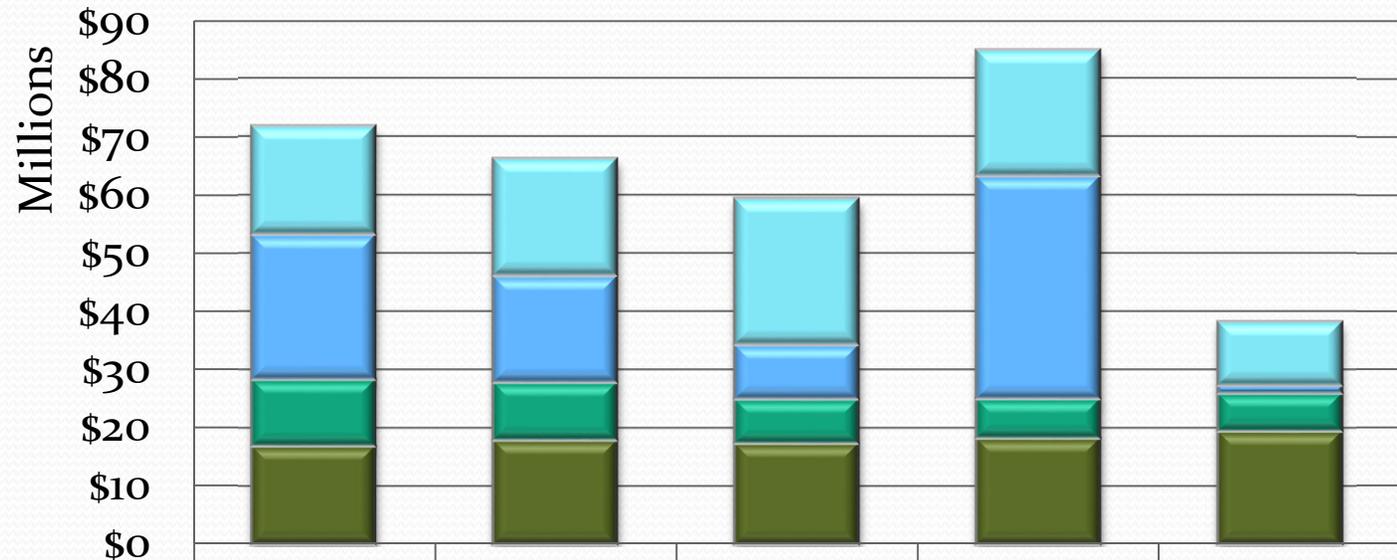


Uniform rate would have been \$4.21 – 3.5% increase from the 2016 rate of \$4.10

# Proposed Water Rate Changes

Customer Class	% Rate Increase	Rates
Inside Residential	3.5%	Varies
Inside Commercial	4.5%	\$4.04
Inside Industrial	1.0%	\$3.05
Outside Residential	0.5%	\$9.92
Outside Commercial	0.5%	\$9.72
Outside Industrial	(6.0)%	\$3.10
City of Evans	7.0%	\$3.23
Town of Windsor	4.5%	\$3.66
Town of Milliken	(7.0)%	\$5.40

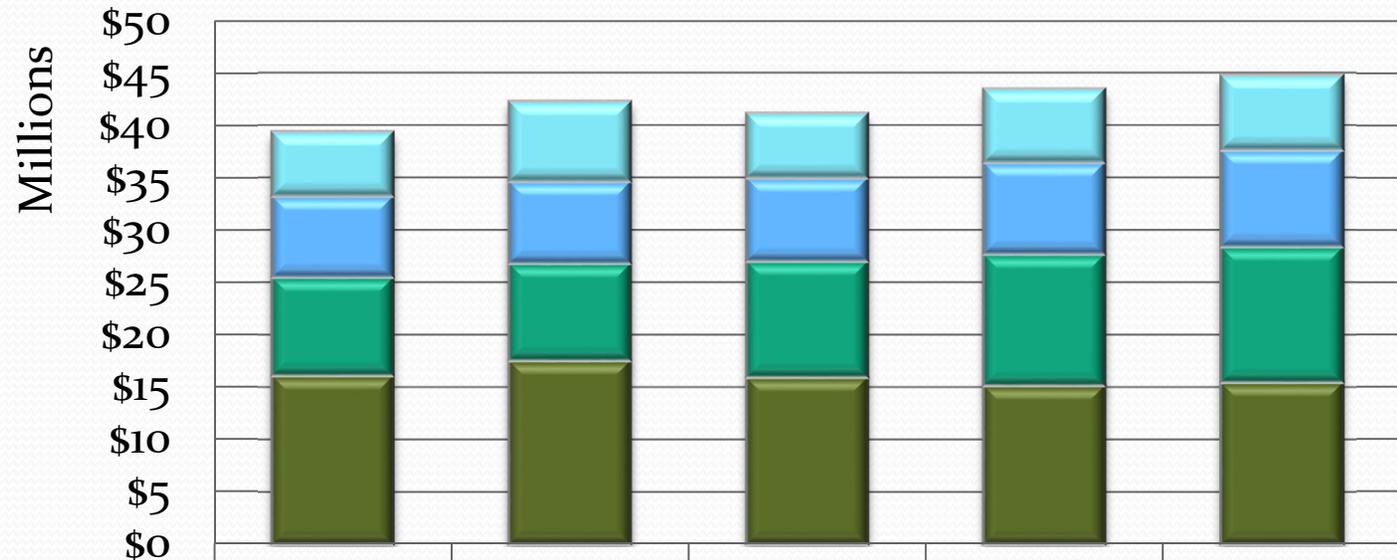
# Water Expenditure Projections\*



	2015	2016	2017	2018	2019
Replacement	\$18.7	\$20.2	\$25.1	\$21.7	\$10.9
New Construction	\$24.8	\$18.2	\$9.3	\$38.2	\$1.4
Acquisition	\$11.4	\$9.9	\$7.6	\$6.8	\$6.6
Operating	\$16.9	\$17.9	\$17.4	\$18.2	\$19.4
Total	\$71.8	\$66.2	\$59.4	\$84.9	\$38.2

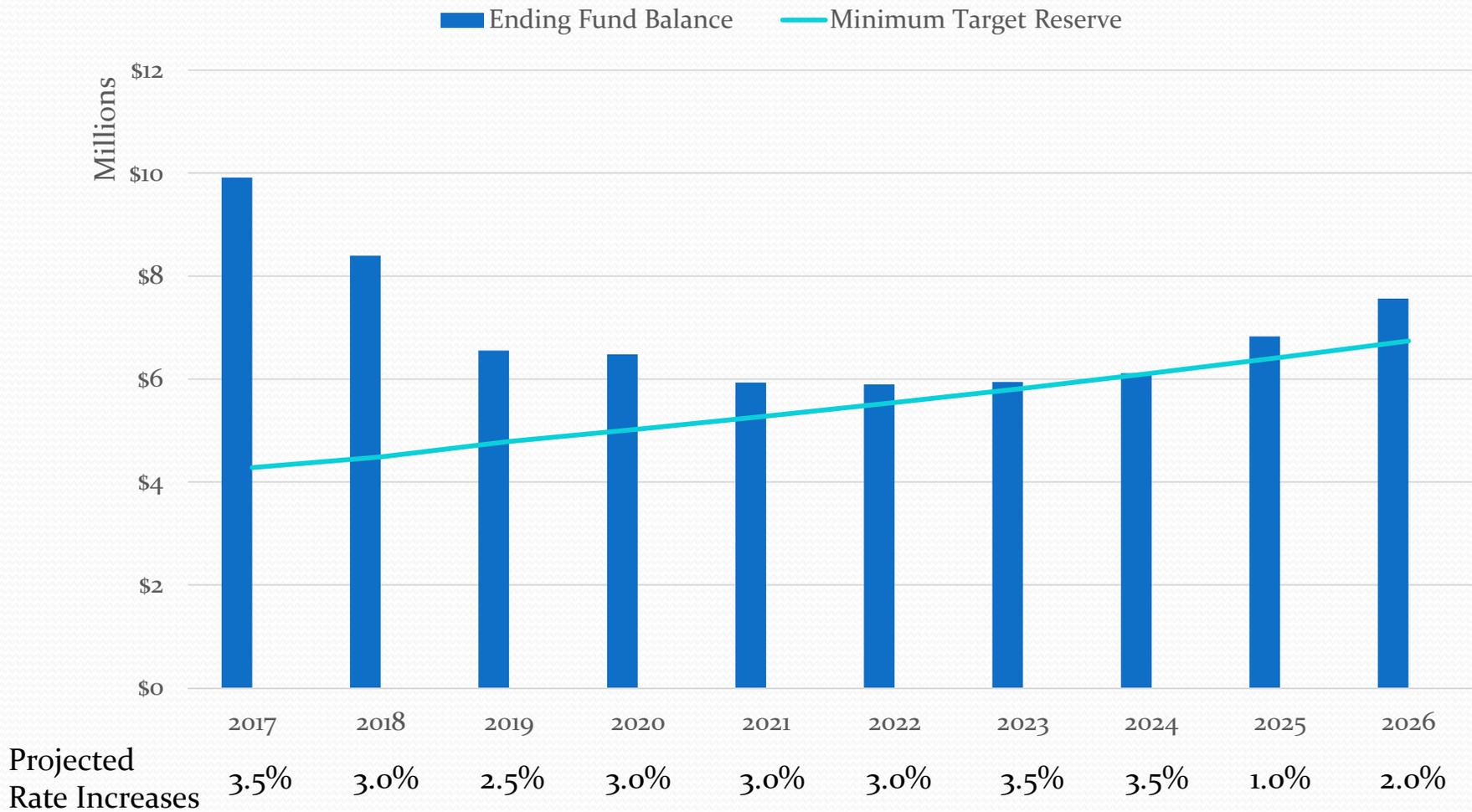
\* Projected cash flow – timing will differ from budget

# Water Revenue Projections



	2015	2016	2017	2018	2019
PIF	\$6.2	\$7.7	\$6.2	\$7.0	\$7.2
Rates-Depreciation	\$7.7	\$7.8	\$8.0	\$8.7	\$9.2
Rates-Debt Service	\$9.4	\$9.3	\$11.1	\$12.5	\$12.9
Rates-O&M	\$16.1	\$17.5	\$16.0	\$15.2	\$15.5
<b>Total</b>	<b>\$39.4</b>	<b>\$42.3</b>	<b>\$41.1</b>	<b>\$43.5</b>	<b>\$44.8</b>

# Projected Water Operating Cash Flow



# Proposed Sewer Rate Changes

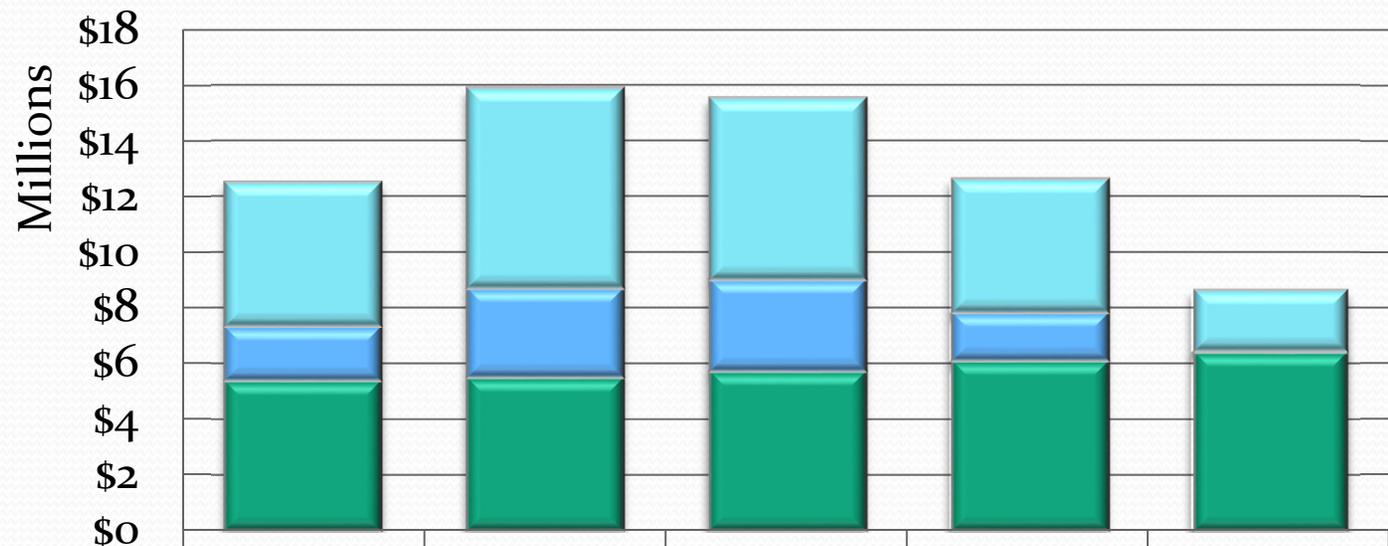
Customer Class	% Revenue Increase	Rates
Single Family	0%	\$1.89
Multi-Family	2.0%	\$2.22
Commercial I	2.0%	\$2.21
Commercial II	0%	\$3.03
Commercial III	0%	\$3.87
Commercial IV	0%	\$4.69
Commercial V	0%	\$5.41

Avg monthly bill = \$19.39  
--No change from 2016

# Proposed Sewer Rate Changes

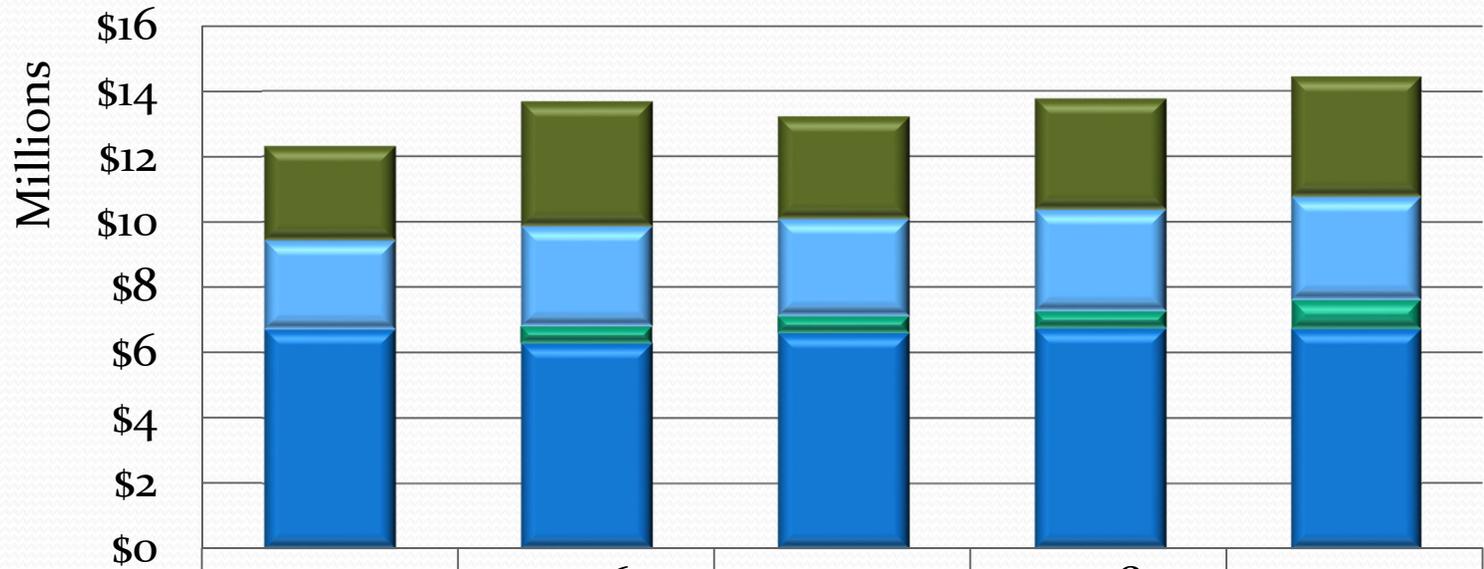
Customer Class	% Revenue Increase	Rates
Industrial SIC 2026	2.5%	\$13.27
Industrial 2013	0%	\$14.13
Industrial SIC 7218	4.0%	\$3.55
Industrial SIC 2034	0%	\$2.70

# Sewer Expenditure Projections



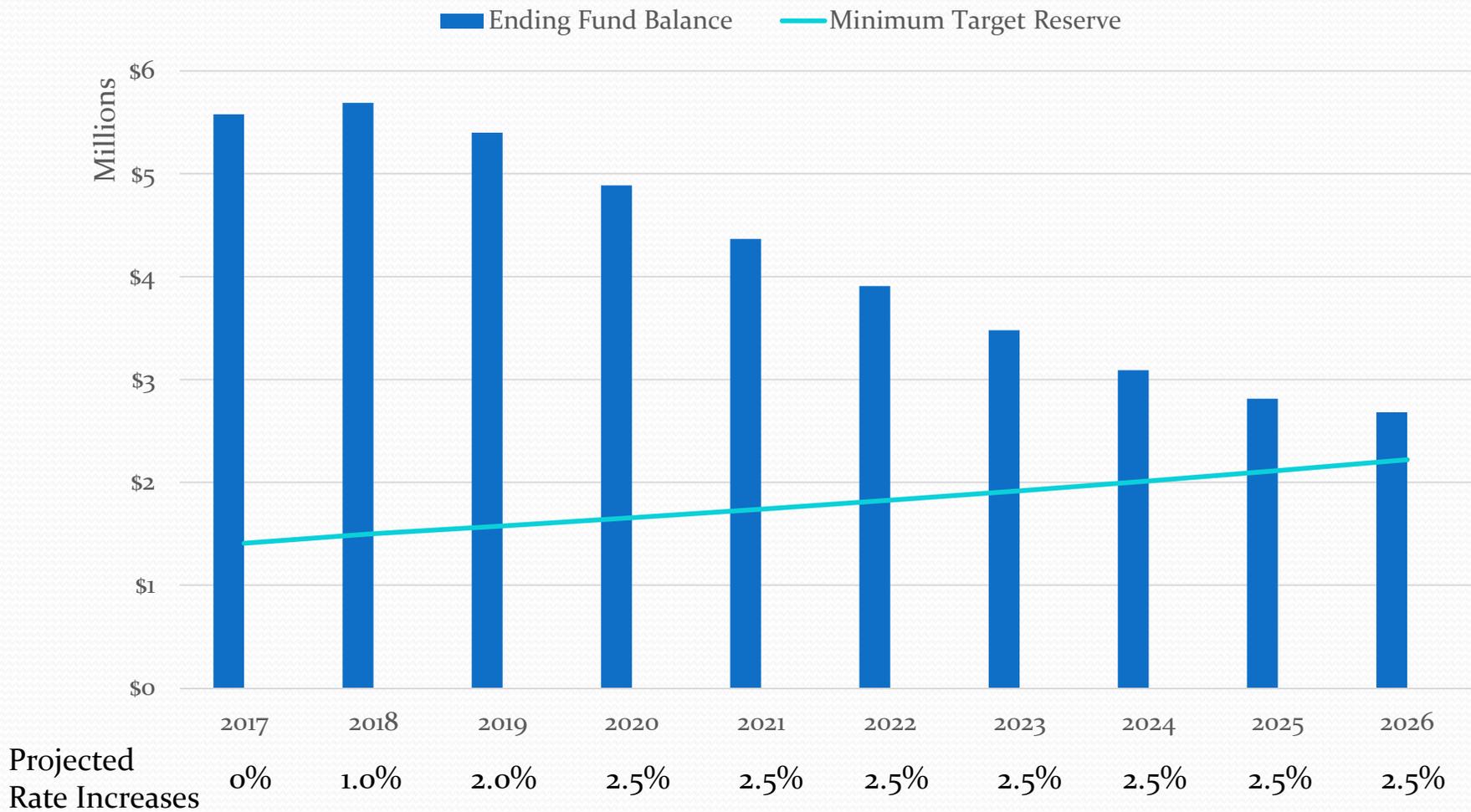
	2015	2016	2017	2018	2019
Replacement	\$5.2	\$7.2	\$6.5	\$4.8	\$2.2
New Construction	\$1.9	\$3.2	\$3.3	\$1.7	\$0.1
Operating	\$5.4	\$5.5	\$5.7	\$6.1	\$6.4
Total	\$12.5	\$15.9	\$15.5	\$12.6	\$8.6

# Sewer Revenue Projections



	2015	2016	2017	2018	2019
■ PIF	\$2.9	\$3.8	\$3.1	\$3.4	\$3.7
■ Rates-Depreciation	\$2.7	\$3.1	\$3.0	\$3.1	\$3.1
■ Rates-Debt Service	\$0.0	\$0.5	\$0.5	\$0.5	\$0.9
■ Rates-O&M	\$6.7	\$6.3	\$6.6	\$6.7	\$6.7
<b>Total</b>	<b>\$12.3</b>	<b>\$13.7</b>	<b>\$13.2</b>	<b>\$13.8</b>	<b>\$14.4</b>

# Projected Sewer Operating Cash Flow



# 2017 Residential Rate Impacts

- System wide
  - Average combined water and sewer bill increases by \$0.55/month
- If within water budget
  - Average combined water and sewer bill **decreases** by \$2.80/month
  - One time adjustment because of the transition from uniform rate to water budget rates

# Plant Investment Fees

	2016	2017
Water	\$10,800	\$10,800
Sewer	\$5,450	\$5,300
Total W&S PIF	\$16,250	<b>\$16,100</b>



# Operating Budget

- No new positions or programs
- Continue succession planning program

# Budget Drivers - Capital

## Continuing projects

- Water treatment plants rehab projects – \$38 million
- Windy Gap firming - \$37 million
- These 2 projects require an estimated **\$53 million** bond in 2017
- Milton Seaman permitting - \$4 million
  - Water resources advertisement campaign
    - \$600,000 - 2 year project
  - Water efficiency tactical team (WETT)
    - \$400,000 - 2 year project



# Budget Drivers - Capital

- Continuing projects
  - WPCF rehab projects
    - Primary Clarifier Pumping and Thickening - \$3 million
    - Nitrification Phase 2 - \$11 million

# Recommended Projects & Additions - Approximate Rate Impact

Project	10 Year Rate Impact	Annual Rate Impact
W.R Advertisement Campaign/WETT	0.2%	0.02%
Succession program	0.1%	0.01%



Questions?

## W&S Projected Revenues and Expenses

### Water

#### Revenue Summary

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total 2017-2026</u>
User Charges	\$33.2	\$34.6	\$35.0	\$36.4	\$425.6
Plant Investment Fees	\$6.2	\$7.7	\$6.2	\$7.0	\$89.3
Hydrant Water Sales	\$1.0	\$0.8	\$0.4	\$0.4	\$4.2
Miscellaneous Revenue	\$1.6	\$1.6	\$1.4	\$1.4	\$16.2
Sale of Assets (Includes Windy Gap Unit Sale)	\$6.5	\$6.5	\$0.0	\$0.0	\$0.0

(Millions)

#### Expense Summary

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total 2017-2026</u>
O&M (Includes Assessments)	\$17.3	\$17.6	\$17.4	\$18.2	\$222.2
Water Acquisition	\$5.9	\$11.4	\$7.6	\$6.8	\$68.5
Water Construction	\$22.4	\$24.8	\$9.3	\$38.2	\$77.8
Capital Replacement	\$10.1	\$16.7	\$25.1	\$21.7	\$125.3
Debt Service	\$9.4	\$9.3	\$11.5	\$12.5	\$137.5

#### New Bonds

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total 2017-2026</u>
Water Construction	\$0.0	\$0.0	\$30.0	\$0.0	\$30.0
Water Acquisition	\$0.0	\$0.0	\$0.0	\$0.0	\$39.0
Water Replacement	\$0.0	\$0.0	\$23.0	\$0.0	\$49.0

### Sewer

#### Revenue Summary

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total 2017-2026</u>
User Charges	\$9.3	\$9.6	\$9.9	\$10.2	\$118.8
Plant Investment Fees	\$2.7	\$3.8	\$3.1	\$3.4	\$44.6
Miscellaneous Revenue	\$0.2	\$0.2	\$0.2	\$0.2	\$1.6

#### Expense Summary

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total 2017-2026</u>
O&M	\$5.8	\$5.4	\$5.7	\$6.1	\$72.9
Sewer Construction	\$3.4	\$5.4	\$3.3	\$1.7	\$21.3
Capital Replacement	\$3.3	\$8.7	\$6.5	\$4.8	\$40.0
Debt Service	\$0.6	\$0.5	\$0.5	\$0.5	\$10.0

#### New Bond Issues

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total 2017-2026</u>
Sewer Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Sewer Replacement	\$6.0	\$0.0	\$0.0	\$0.0	\$8.0

#### W&S Totals

	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total 2017-2026</u>
O&M	\$23.1	\$23.0	\$23.1	\$24.3	\$295.1
Capital-New & Replacement	\$39.3	\$55.6	\$44.2	\$66.4	\$264.4
Acquisition	\$5.9	\$11.4	\$7.6	\$6.8	\$68.5

Water Pro-Forma 2017

Line No.	Total for 2017	Operating	Construction	Replacement	Acquisition	
<b>Operating Revenue:</b>						
1	34,961,297	34,961,297				
2	6,178,660		6,178,660			
3	375,000	375,000				
4	365,000				365,000	
5	102,700		102,700			
6	41,982,657	35,336,297	6,281,360	-	365,000	
<b>Operating Expenses:</b>						
7	16,568,971	16,467,764	101,207			
8	898,000	898,000				
9	17,466,971	17,365,764	101,207	-	-	
10	<b>Operating Income</b>	24,515,686	17,970,533	6,180,153	-	365,000
<b>Non-Operating Revenue:</b>						
11	1,430,000	1,430,000				
12	113,000	25,700	32,600	27,200	27,500	
13	114,958	114,958				
14	-		-			
15	53,000,000		30,000,000	23,000,000		
16	54,657,958	1,570,658	30,032,600	23,027,200	27,500	
<b>Non-Operating Expenses:</b>						
17	7,612,200				7,612,200	
18	34,389,560		9,303,140	25,086,420		
19	11,453,736	1,114,219	6,351,528	1,074,311	2,913,678	
20	122,065	122,065				
21	1,879,948	1,879,948				
22	55,457,509	3,116,232	15,654,668	26,160,731	10,525,878	
<b>Interfund Revenue or (Expense)</b>						
23	60,600	(17,129,583)	6,262,268	8,014,237	2,913,678	
24	<b>Annual Surplus (Deficiency)</b>	23,776,735	(704,624)	26,820,353	4,880,706	(7,219,700)
25	Beginning Fund Balance 2017	33,289,509	10,618,763	(385,025)	8,439,082	14,616,689
26	Ending Fund Balance 2017	57,066,244	9,914,139	26,435,328	13,319,788	7,396,989
27	Minimum Target Reserve		4,281,969			

Water Pro Forma 2017 - 2026

Line No.	10-year Total	Operating	Construction	Replacement	Acquisition	
<b>Operating Revenue:</b>						
1	421,444,179	421,444,179				
2	89,321,180		89,321,180			
3	4,184,667	4,184,667				
4	9,744,263				9,744,263	
5	1,228,835		1,228,835			
6	525,923,124	425,628,846	90,550,015	-	9,744,263	
<b>Operating Expenses:</b>						
7	210,864,825	209,704,606	1,160,219			
8	11,301,573	11,301,573				
9	222,166,398	221,006,179	1,160,219	-	-	
10	<b>Operating Income</b>	303,756,726	204,622,667	89,389,796	-	9,744,263
<b>Non-Operating Revenue:</b>						
11	16,176,934	16,176,934				
12	809,500	178,000	462,500	121,600	47,400	
13	1,245,579	1,245,579				
14	-					
15	118,000,000		30,000,000	49,000,000	39,000,000	
16	136,232,013	17,600,513	30,462,500	49,121,600	39,047,400	
<b>Non-Operating Expenses:</b>						
17	68,461,487				68,461,487	
18	203,047,634		77,796,264	125,251,370		
19	137,453,535	3,339,397	60,090,081	26,804,066	47,219,991	
20	1,065,729	1,065,729				
21	21,551,497	21,551,497				
22	431,579,882	25,956,623	137,886,345	152,055,436	115,681,478	
<b>Interfund Revenue or (Expense)</b>						
23	556,800	(199,322,985)	59,281,906	93,377,889	47,219,990	
24	<b>Total Surplus (Deficiency)</b>	8,965,657	(3,056,428)	41,247,857	(9,555,947)	(19,669,825)
25	Beginning Fund Balance 2017	33,289,509	10,618,763	(385,025)	8,439,082	14,616,689
26	Ending Fund Balance 2026	42,255,166	7,562,335	40,862,832	(1,116,865)	(5,053,136)
27	Minimum Target Reserve		6,737,782			

**Sewer Pro-Forma 2017**

Line No.		Total for 2017	Operating	Construction	Replacement
<b>Operating Revenue:</b>					
1	User Charges	9,945,876	9,945,876		
2	Plant Investment Fees	3,121,885		3,121,885	
3	Total Operating Revenue	13,067,761	9,945,876	3,121,885	-
<b>Operating Expenses:</b>					
4	O&M	5,712,745	5,712,745		
5	Total Operating Expenses	5,712,745	5,712,745	-	-
6	<b>Operating Income</b>	7,355,016	4,233,131	3,121,885	-
<b>Non-Operating Revenue:</b>					
7	Miscellaneous	138,000	138,000		
8	Investment Income	24,829	13,503	9,019	2,307
9	Bond Issue	-			
10	Total Non-Operating Revenue	162,829	151,503	9,019	2,307
<b>Non-Operating Expenses:</b>					
11	Capital	9,821,655		3,295,395	6,526,260
12	Debt Service	531,144			531,144
13	Art In Public Places	32,805		32,805	
14	Water Fund for Services and Meters	82,153	82,153		
15	General Fund for General Administration	547,117	445,910	101,207	
16	Total Non-Operating Expenses	11,014,874	528,063	3,429,407	7,057,404
<b>Interfund Revenue or (Expense)</b>					
17	Total Interfund Revenue (Expense)	-	(3,503,961)	-	3,503,961
18	<b>Annual Surplus (Deficiency)</b>	(3,497,029)	352,610	(298,503)	(3,551,136)
19	Beginning Fund Balance 2017	11,680,156	5,224,793	3,757,009	2,698,354
20	Ending Fund Balance 2017	8,183,127	5,577,403	3,458,506	(852,782)
21	Minimum Target Reserve		1,408,622		

Sewer Pro Forma 2017 - 2026

Line No.		10-year Total	Operating	Construction	Replacement
<b>Operating Revenue:</b>					
1	User Charges	118,785,400	118,785,400		
2	Plant Investment Fees	44,590,519		44,590,519	
3	Total Operating Revenue	163,375,919	118,785,400	44,590,519	-
<b>Operating Expenses:</b>					
4	O&M	72,909,041	72,909,041		
5	Total Operating Expenses	72,909,041	72,909,041	-	-
6	<b>Operating Income</b>	90,466,878	45,876,359	44,590,519	-
<b>Non-Operating Revenue:</b>					
7	Miscellaneous	1,524,639	1,524,639		
8	Investment Income	427,226	107,910	292,799	26,517
9	Bond Issue	8,000,000			8,000,000
10	Total Non-Operating Revenue	9,951,865	1,632,549	292,799	8,026,517
<b>Non-Operating Expenses:</b>					
11	Capital	61,330,738		21,332,810	39,997,928
12	Debt Service	10,031,458			10,031,458
13	Art In Public Places	257,554		257,554	
14	Water Fund for Services and Meters	988,025	988,025		
15	General Fund for General Administration	6,272,077	5,111,858	1,160,219	
16	Total Non-Operating Expenses	78,879,852	6,099,883	22,750,583	50,029,386
<b>Interfund Revenue or (Expense)</b>					
17	Total Interfund Revenue (Expense)	-	(43,952,090)	-	43,952,090
18	<b>Total Surplus (Deficiency)</b>	21,538,891	(2,543,065)	22,132,735	1,949,221
19	Beginning Fund Balance 2017	11,680,156	5,224,793	3,757,009	2,698,354
20	Ending Fund Balance 2026	33,219,047	2,681,728	25,889,744	4,647,575
21	Minimum Target Reserve		2,221,200		

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	<b>CITY OF GREELEY - WATER &amp; SEWER DEPARTMENT 10 YEAR CIP for Water and Sewer Projects - 2017-2026</b>														
2	<i>Revised June 1, 2016</i>														
3	<b>POTABLE DEMAND</b>				<u>YEAR</u>	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
4	Projected Peak Potable demand (base)					50.3	50.5	50.8	51.3	51.8	52.3	52.8	53.3	53.9	54.4
5	<b>DESIGN-Peak potable demand (10% safety)</b>					<b>55.3</b>	<b>55.6</b>	<b>55.8</b>	<b>56.4</b>	<b>57.0</b>	<b>57.5</b>	<b>58.1</b>	<b>58.7</b>	<b>59.3</b>	<b>59.9</b>
6															
7	<b>Bellvue System</b>														
8	Capacity of Bellvue Plant					32	32	52	52	52	52	52	52	52	52
9	Capacity of Bellvue Transmission Lines					26.6	26.6	31	31	31	31	31	31	31	31
10	<b>Capacity of Bellvue System</b>					<b>26.6</b>	<b>26.6</b>	<b>31.0</b>	<b>31.0</b>	<b>31.0</b>	<b>31.0</b>	<b>31.0</b>	<b>31.0</b>	<b>31.0</b>	<b>31.0</b>
11	<b>Boyd System</b>														
12	Capacity of Boyd Plant					38	38	38	38	38	38	38	38	38	38
13	Capacity of Boyd Pipelines					40	40	40	40	40	40	40	40	40	40
14	<b>Capacity of Boyd system</b>					<b>38.0</b>	<b>38.0</b>	<b>38.0</b>	<b>38.0</b>	<b>38.0</b>	<b>38.0</b>	<b>38.0</b>	<b>38.0</b>	<b>38.0</b>	<b>38.0</b>
15	<b>Combined System Capacities</b>														
16						<b>64.6</b>	<b>64.6</b>	<b>69.0</b>	<b>69.0</b>	<b>69.0</b>	<b>69.0</b>	<b>69.0</b>	<b>69.0</b>	<b>69.0</b>	<b>69.0</b>
17	<b>WATER</b>				<b>PROJECT TOTALS</b>										
18	<b>CONSTRUCTION 405</b>				<b>PROJECT TOTALS</b>										
19	<b>Supply</b>	<b>Driver</b>	<b>Period</b>	<b>Description</b>	<b>2017 to 2026</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
20	Milton Seaman Permitting	Master Plan	Long Term	Enlargement adds raw water storage for drought protection	3,958,000	1,250,000	1,250,000	1,250,000	208,000						
21	Milton Seaman & Bellvue Waterline Mitigation	Master Plan	Long Term	Mitigation for impacts of Milton Seaman Expansion & Bellvue Pipeline	3,200,000	100,000	100,000					750,000	750,000	750,000	750,000
22	Windy Gap FIRMING	Master Plan	Long Term	Firms water rights for 49 Windy Gap units	37,075,000	575,000	36,500,000								
23	30" Pleasant Valley Pipeline Connection	Master Plan	Mid Term	Greeley & Tri-Dist line from Pleasant Valley pipeline to Overland ponds	809,000							109,000	700,000		
24	Pump Station at Overland Ponds	Master Plan	Mid Term	Greeley & Tri-Dist PS to remove water from river; hold to time release	300,000								300,000		
25	<b>Treatment</b>														
26	Bellvue 2mg Clearwell	Operations	Short to Long Term	Best practice 10% of max daily production, need 4 mg have 2mg	5,014,400				490,000	4,524,400					
27	Boyd WTP-UV @ 40mgd	Regulatory	Long Term	Additional treatment if required. Potential future State requirements	5,692,000									883,000	4,809,000
28	Residuals Gravity Thickener-Bellvue	Operations	Short Term	2nd residual gravity thickener to respond to increased loads after fires	1,900,040				184,000	1,716,040					
29	<b>Transmission &amp; Distribution</b>														
30	Finished storage 10MG	Master Plan	Mid to Long Term	Master Plan shows additional 15 mg near Gold Hill, 5 in 2015, 10 in 2022	10,000,000							10,000,000			
31	Bellvue Treated Water Line Permitting	Master Plan	Short Term	Permitting activities for the Northern Segment	50,000	50,000									
32	Bellvue Transmission Program (60")	Master Plan	Short to Long Term	Northern Segment will allow limited gravity service to Gold Hill.	1,401,500	1,353,000	17,200	31,300							
33	Distribution Line Extension & Oversizing	Operations & Master Plan	Short Term	Development reimbursement for water line oversizing	2,284,000	1,151,000	115,200	116,200	122,300	129,300	130,000	130,000	130,000	130,000	130,000
34	Land Acquisition & Management	Administration	On-going	Easements info into GIS & protects rights, acquire easements	1,500,000	135,000	140,000	145,000	150,000	155,000	155,000	155,000	155,000	155,000	155,000
35	New Construction Meters	Operations	On-going	City installed meters for new development (reimbursed)	350,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
36	Water Taps	Operations	On-going	City installed taps for new development or removing compound taps	750,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
37	<b>SUB-TOTAL 405 PROJECTS</b>				<b>74,283,940</b>	<b>4,724,000</b>	<b>38,232,400</b>	<b>1,652,500</b>	<b>1,264,300</b>	<b>6,634,740</b>	<b>395,000</b>	<b>11,254,000</b>	<b>2,145,000</b>	<b>2,028,000</b>	<b>5,954,000</b>

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
38	<b>WATER</b>				<b>PROJECT</b>											
39	<b>REPLACEMENT 406</b>				<b>TOTALS</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	
40	<b>Supply</b>	<b>Driver</b>	<b>Period</b>		<b>2017 to 2026</b>											
41	Ancillary system Improvements	Maintenance	On-going	Irrigation ditch system assessments and City maint.	3,650,000	365,000	365,000	365,000	365,000	365,000	365,000	365,000	365,000	365,000	365,000	
42	Non-Potable Replacement Rehab.	Maintenance	On-going	Maintenance to non-potable irrigation system	1,302,000	126,000	126,000	126,000	132,000	132,000	132,000	132,000	132,000	132,000	132,000	
43	Non-Potable Master Plan	Master Plan	Short Term	Non-potable distribution analysis based off of Water Resources MP	50,000	50,000										
44	Poudre River Turnout Rehabilitation	Maintenance	Short to Long Term	Bellvue WTP 60 yr old Poudre River turnout ogee weir	560,000	560,000										
45	Water Resource Advertisement Campaign	Master Plan	Short Term	Ad campaign in support of Milton Seaman permitting	600,000	300,000	300,000									
46	Water Efficiency Tactical Team	Master Plan	Short Term	Multi-pronged study related to managing City's water resources	400,000	200,000	200,000									
47	Water Operations Master Plan	Master Plan	Short to Long Term	Knowledge capture project transferring paper data to electronic	100,000	100,000										
48	Boyd Water Quality Study	Operations	Long Term	Source water treatment to improve water quality for Boyd	400,000			250,000	150,000							
49	Milton Seaman Outlet Works Evaluation	Operations	Short Term	Alternatives evaluation for reservoir outlet gates	300,000	300,000										
50	Milton Seaman Bridge Replacement	Operations	Short Term	Replace existing south bridge into Milton Seaman	645,000	645,000										
51	<b>Treatment</b>															
52	Bellvue WTP General Rehab.	Maintenance	On-going	Small or unanticipated maintenance projects	2,166,000	355,000	283,000	191,000	191,000	191,000	191,000	191,000	191,000	191,000	191,000	
53	Boyd WTP- General Rehab.	Maintenance	On-going	Small or unanticipated maintenance projects	1,893,000	373,000	240,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	160,000	
54	Water Security Projects	Operations	On-going	System security identified after 9/11. Respond to any new requirements	170,000	17,000	17,000	17,000	17,000	17,000	17,000	17,000	17,000	17,000	17,000	
55	Bellvue Needs Assessment Projects	Maintenance	Short Term	Design/construct improvements to filters and other systems at Bellvue	24,747,000	22,722,000	130,000	1,455,000	440,000							
56	Boyd Needs Assessment Projects	Maintenance	Short Term	Design/construct improvements to enable Boyd to operate in winter	14,695,900	11,907,400	86,500	1,129,000	1,064,000	509,000						
57	Boyd Plant #2 Demolition	Maintenance	Short Term	Demolition of existing plant constructed in 1967	456,000	456,000										
58	<b>Transmission &amp; Distribution</b>															
59	Transmission System Rehab.	Maintenance	On-going	Replacement and rehabilitation of transmission lines	16,290,000	1,906,000	1,752,000	1,579,000	1,579,000	1,579,000	1,579,000	1,579,000	1,579,000	1,579,000	1,579,000	
60	Distribution Pipeline Replacements	Maintenance	On-going	Replaces lines based on leak history or increase size for operation	10,433,000	1,908,000	1,325,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	
61	Valve Replacement	Maintenance	On-going	Replaces failed valves	990,000	99,000	99,000	99,000	99,000	99,000	99,000	99,000	99,000	99,000	99,000	
62	Fire Hydrant Replacement	Maintenance	On-going	Replace hydrants that do not meet current city standards	770,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	
63	Meter Replacement	Maintenance	On-going	Replace meters that become inaccurate or fail	2,425,000	325,000	325,000	325,000	325,000	325,000	160,000	160,000	160,000	160,000	160,000	
64	Treated Water Reservoir Rehabilitation	Maintenance	Short Term	Gold Hill joint repairs and system repairs at Moiser Hill	489,000	36,000	36,000	88,500	88,500	40,000	40,000	40,000	40,000	40,000	40,000	
65	Gold Hill Tank Repair	Maintenance	Short Term	Repair floor joints at the 15 MG Gold Hill Reservoir		1,262,600	27,000									
66	Instrumentation & Controls	Operations	On-going	Maintains SCADA systems and control panels	2,000,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
67	Capital Outlay Replacement	Maintenance	On-going	Replacement of rolling stock: trucks, loaders, etc.	6,250,000	1,097,000	570,000	583,000	510,000	490,000	600,000	600,000	600,000	600,000	600,000	
68	Transmission Customers Re-Route	Operations	Short Term	Existing transmission line customers moved to other water providers	2,150,000						450,000	400,000	450,000	400,000	450,000	
69	W&S Facilities Program	Operations	Long Term	Site will be developed to house W&S construction crews/equipment	4,000,000			4,000,000								
70	Distribution System Model & Master Plan	Master Plan	Short to Long Term	Study to determine distribution system improvements needed	655,000	355,000	300,000									
71	Asset Management System	Operations	Short to Long Term	Hardware and software for asset management system started 2013	45,000	15,000	15,000	15,000								
72	Bellvue Raw Water Line Replacement	Maintenance	Short Term	Rehabilitate raw water lines at Bellvue WTP	16,240,600			373,000	660,000	6,874,300	8,333,300					
73	Bellvue Raw Water Line Permitting	Master Plan	Short term	Permitting activities for the Northern Segment	500,000			250,000								
74	<b>SUB-TOTAL 406 PROJECTS</b>				<b>116,662,100</b>	<b>45,757,000</b>	<b>6,723,500</b>	<b>12,182,500</b>	<b>6,957,500</b>	<b>11,958,300</b>	<b>13,303,300</b>	<b>4,920,000</b>	<b>4,970,000</b>	<b>4,920,000</b>	<b>4,970,000</b>	
75	<b>WATER ACQUISITIONS 407</b>	<b>Driver</b>	<b>Period</b>													
76	Equalizer	Master Plan	Long Term	Reservoir and exchanges for higher yields from GLIC	4,300,000	50,000					4,250,000					
77	Overland Trail	Master Plan	Long Term	Greeley and Tri-Districts for approx 2,350 ac-ft storage	6,230,000	435,000	35,000						5,760,000			
78	Development of Parcel B, Poudre Ponds	Master Plan	Long Term	Augmentation storage and return flows	4,623,000	673,000	375,000	375,000			3,200,000					
79	Future Water Acquisition	Master Plan	Long Term	Water rights for 10,000 ac-ft	49,350,000	6,550,000	6,550,000	6,550,000	6,550,000	6,550,000	6,550,000	6,550,000	3,500,000			
80	Greeley Irrigation Company Change Case	Master Plan	Long Term	Water use court system change from irrigation to municipal use	300,000	150,000	150,000									
81	Rockwell Ranch Change Case	Master Plan	Long Term	Water use court system change from irrigation to municipal use	300,000	200,000	100,000									
82	Larimer & Weld Companies Change Case	Master Plan	Long Term	Water use court system change from irrigation to municipal use	600,000	200,000	200,000	200,000								
83	Leprino Produced Water Claim	Master Plan	Long Term	Water use court system to claim credit for Leprino produced water	500,000	200,000	150,000	150,000								
84	<b>SUB-TOTAL 407 PROJECTS</b>				<b>66,203,000</b>	<b>8,458,000</b>	<b>7,560,000</b>	<b>7,275,000</b>	<b>6,550,000</b>	<b>6,550,000</b>	<b>14,000,000</b>	<b>6,550,000</b>	<b>9,260,000</b>			
85	<b>WATER TOTALS (405+406+407)</b>															
86						<b>257,149,040</b>	<b>58,939,000</b>	<b>52,515,900</b>	<b>21,110,000</b>	<b>14,771,800</b>	<b>25,143,040</b>	<b>27,698,300</b>	<b>22,724,000</b>	<b>16,375,000</b>	<b>6,948,000</b>	<b>10,924,000</b>

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
87	<b>SEWER</b>				<b>PROJECT TOTALS</b>										
88	<b>CONSTRUCTION 402</b>														
89															
90	<b>Collection</b>	<b>Driver</b>	<b>Period</b>	<b>Description</b>	<b>2017 to 2026</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
91	N. Greeley Sewer Phase II	Master Plan	Mid to Long Term	Provides service north of the Poudre and along HWY 85	5,758,000						5,758,000				
92	Additional Sanitary Sewer MH's	Operations	Short Term	Manholes added for operation and maintenance benefits	590,000	43,000	53,000	53,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000
93	Sewer Taps	Operation	Short Term	Sewer taps for new development (reimbursed)	100,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
94	Poudre Trunk Phase II	Master Plan	Mid to Long Term	Provides service west of 83rd Ave to 120th Ave	2,450,500	420,000			2,030,500						
95	83rd Ave Sewer Project	Master Plan	Mid to Long Term	Provides service from 10th St and 83rd Ave to Poudre Trunk Phase II	1,439,000	205,000			1,234,000						
96	Highland Capacity Improvements	Maintenance	Short Term	Master Plan identified sewer that does not meet city std capacity	2,062,500			170,000	1,892,500						
97	<b>Treatment</b>														
98	New Primary Clarifier (1 @ 100 dia)	Master Plan	Long Term	When flows require add clarifier expands hydraulic capacity of WPCF	4,985,000							235,000	4,750,000		
99	<b>SUB-TOTAL 402 PROJECTS</b>				<b>17,385,000</b>	<b>678,000</b>	<b>63,000</b>	<b>233,000</b>	<b>5,230,000</b>	<b>73,000</b>	<b>5,831,000</b>	<b>308,000</b>	<b>4,823,000</b>	<b>73,000</b>	<b>73,000</b>
100	<b>SEWER</b>				<b>PROJECT TOTALS</b>										
101	<b>REPLACEMENT 403</b>														
102	<b>Collection</b>	<b>Driver</b>	<b>Period</b>		<b>2017 to 2026</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
103	Sewer Collection Rehabilitation	Maintenance	Short Term	Lines smaller than 6" identified for replacement and system rehab	3,063,000	406,500	402,000	319,500	297,500	262,500	275,000	275,000	275,000	275,000	275,000
104	Trenchless Main and Collector Rehab	Maintenance	On-going	Inpipe Cure-in-Place repair of sanitary system	4,971,000	575,000	732,000	518,000	448,000	448,000	450,000	450,000	450,000	450,000	450,000
105	Manhole Rehabilitation	Maintenance	On-going	Repair corroded manholes with cementitious material	110,000		55,000		55,000						
106	Lift Station Rehabilitation	Maintenance	Short Term	Rehab existing lift station and update to current standards	1,495,500	595,500	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
107	Manhole & Pipe Replacement	Maintenance	On-going	MH lids replaced during city street overlays	1,395,000	320,000	155,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000	115,000
108	Wastewater Flow Monitoring Program	Maintenance	Short Term	Install flow meters on trunk lines for flow monitoring	250,000	50,000	50,000	50,000	50,000	50,000					
109	<b>Treatment</b>														
110	General Rehabilitation Projects	Maintenance	On-going	Small or unanticipated maintenance projects	1,686,600	240,300	160,700	160,700	160,700	160,700	160,700	160,700	160,700	160,700	160,700
111	Sewer Security Projects	Regulatory	Long Term	System security identified after 9/11. Respond to any new requirements	250,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
112	Dewatering Centrifuge	Maintenance	Short Term	MP identified anticipated replacement of 1995 centrifuge.	1,106,300				136,300	970,000					
113	Replace Influent Raw Sewage Pumps (3)	Maintenance	Short Term	1995 pumps which are beginning to have more frequent repairs	1,011,600					1,011,600					
114	900 KW Generator	Maintenance	Short Term	MP identified anticipated replacement of 1985 generator	708,800					708,800					
115	Rotomat Barscreens @ Headworks (3)	Maintenance	Short Term	MP identified anticipated replacement of 1994 Barscreen	1,002,000							1,002,000			
116	Dewatered Sludge Cake Pump	Maintenance	Short Term	MP identified anticipated replacement of 1996 pump	592,100				71,800	520,300					
117	Convert Sludge Storage Tank to Primary Digester	Maintenance/Operations	Short to Long Term	Add digester capacity	1,361,300						154,300	1,207,000			
118	WPCF Stream Temperature Assessment	Regulatory	Short to Long Term	Study effluent temperature issues for possible new regulations	200,000	50,000	50,000	50,000	50,000						
119	Nitrification Project Phase II	Regulatory	Long Term	Plant upgrade to meet upcoming biological nutrient reduction regs	11,235,700			956,100	10,279,600						
120	WPCF Solids Processing Improvements	Maintenance	Short Term	Plant maintenance/replacement that will improve solids processing	535,400	535,400									
121	WPCF Secondary Clarifier Mechanisms Replace	Maintenance	Short Term	Replace secondary clarifier mechanisms	1,117,370			138,570	978,800						
122	<b>Studies &amp; Others</b>														
123	San. Sewer Mast. Plan Update	Master Plan	Long Term	Update 2008 Collection Master Plan	605,000		605,000								
124	Capital Outlay Replacement	Maintenance	On-going	Replacement of rolling stock: trucks, loaders, etc.	1,596,000	767,000	42,000			400,000	50,000		85,000	202,000	50,000
125	WPCF Solids Handling & Treatment MP	Master Plan	Long Term	Update 2011 WPCF Solids Handling & Treatment Master Plan	340,300	340,300									
126	<b>SUB-TOTAL 403 PROJECTS</b>				<b>34,632,970</b>	<b>3,905,000</b>	<b>2,376,700</b>	<b>2,432,870</b>	<b>12,767,700</b>	<b>4,771,900</b>	<b>1,330,000</b>	<b>3,334,700</b>	<b>1,210,700</b>	<b>1,327,700</b>	<b>1,175,700</b>
127															
128	<b>SEWER TOTALS (402+403)=</b>				<b>52,017,970</b>	<b>4,583,000</b>	<b>2,439,700</b>	<b>2,665,870</b>	<b>17,997,700</b>	<b>4,844,900</b>	<b>7,161,000</b>	<b>3,642,700</b>	<b>6,033,700</b>	<b>1,400,700</b>	<b>1,248,700</b>
129	<b>WATER &amp; SEWER TOTALS=</b>				<b>309,167,010</b>	<b>63,522,000</b>	<b>54,955,600</b>	<b>23,775,870</b>	<b>32,769,500</b>	<b>29,987,940</b>	<b>34,859,300</b>	<b>26,366,700</b>	<b>22,408,700</b>	<b>8,348,700</b>	<b>12,172,700</b>

# Water & Sewer Capital Program

2017-2021

## 405 – Water New Construction Fund





# Windy Gap Firming

<b>Project Number:</b>	197	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Construction Supply	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	405 - Water Construction	<b>Location:</b>	Proposed Chimney Hollow Reservoir near Carter Lake
<b>Project Manager:</b>	Eric Reckentine	<b>Budget Unit #:</b>	4050088088070000
<b>Project Status:</b>	Funded		

## Description:

The project will fund the Northern Water's Windy Gap Firming Project (WGFP) which is expected to deliver a firm annual yield of 4,000 acre-feet. The final Environmental Impact Statement has been received and Northern Water is negotiating a carriage contract with the Bureau of Reclamation before obtaining water quality certification from the state and a 404 permit for the U.S. Corps of Engineers.

## Discussion of Progress:

Permitting ongoing

## Justification:

Due to storage limitations within the Colorado Big Thompson (C-BT) and other factors, Windy Gap owners haven't been able to rely on Windy Gap to meet a portion of their current water needs or future requirements. The Windy Gap Firming project is proposed to improve the yield of water deliveries from the existing Windy Gap project to participating Windy Gap owners.

## Revenue Detail:

None

## Impact on Operating Budget:

Water resource assessments will go up an unknown amount once the project is built and Northern Water starts assessing Greeley for its upkeep and operation.

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
	Fund Balance	-	36,500,000	-	-	-	36,500,000
4611	Development Fees	575,000	-	-	-	-	575,000
	<b>Total Revenue</b>	<b>\$575,000</b>	<b>\$36,500,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$37,075,000</b>
Expense							
8202	Construction	-	36,500,000	-	-	-	36,500,000
8206	Design Fees	575,000	-	-	-	-	575,000
	<b>Total Expense</b>	<b>\$575,000</b>	<b>\$36,500,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$37,075,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Bellvue Two Million Gallon Clearwell

<b>Project Number:</b>	378	<b>Budget Year:</b>	2017
<b>Division:</b>	870 - Treatment and Supply	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Construction Treatment	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	405 - Water Construction	<b>Location:</b>	Bellvue Filter Plant
<b>Project Manager:</b>	Sam Boone	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

**Description:**

Design and construct a 2 million gallon (mg) clearwell, piping, and chemical injection in tandem with the existing clearwell.

**Discussion of Progress:**

Planning

**Justification:**

Colorado Department of Health & Environment (CDPHE) Design Criteria requires sufficient storage volume to backwash several filters in rapid succession without the filters having to follow fluctuations in water use. Design criteria also requires two clearwell compartments. We do not currently meet CDPHE guidelines; plant flows currently have to be raised four to six million gallons per day (mgd) during filter backwashing and there is only one compartment in the existing clearwell.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
4611	Development Fees	-	-	-	490,000	4,524,400	5,014,400
	<b>Total Revenue</b>	-	-	-	\$490,000	\$4,524,400	\$5,014,400
Expense							
8202	Construction	-	-	-	-	4,390,000	4,390,000
8206	Design Fees	-	-	-	440,000	-	440,000
8214	Legal Publications	-	-	-	-	500	500
8232	Project Management	-	-	-	20,000	50,000	70,000
8236	Soils Investigation	-	-	-	25,000	-	25,000
8238	Surveying	-	-	-	5,000	-	5,000
8240	Testing And Inspection	-	-	-	-	40,000	40,000
9303	Public Art Fund	-	-	-	-	43,900	43,900
	<b>Total Expense</b>	-	-	-	\$490,000	\$4,524,400	\$5,014,400
<b>Net Total</b>							
		-	-	-	-	-	-

# Bellvue Residuals Gravity Thickener

<b>Project Number:</b>	2151	<b>Budget Year:</b>	2017
<b>Division:</b>	870 - Treatment and Supply	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Construction Treatment	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	405 - Water Construction	<b>Location:</b>	Bellvue Filter Plant
<b>Project Manager:</b>	Sam Boone	<b>Budget Unit #:</b>	4050088083990000
<b>Project Status:</b>	Funded		

**Description:**

Design in 2020 and construct in 2021 a 2nd residuals gravity thickener with cover at the Bellvue Water Treatment Plant.

**Discussion of Progress:**

Planning

**Justification:**

Phase I of the residuals handling facilities was designed for a plant production rate of 25 million gallons per day (mgd). Current plant rating by the State is 35 mgd. The wild fires of 2011 and 2012 and the flooding in 2013 have significantly altered the raw water quality requiring increased chemical dosing with increased residuals production. The 2nd gravity thickener will provide acceptable solids loading for these increases and increased production.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
4611	Development Fees	-	-	-	184,000	1,716,040	1,900,040
	<b>Total Revenue</b>	-	-	-	\$184,000	\$1,716,040	\$1,900,040
<b>Expense</b>							
8202	Construction	-	-	-	-	1,654,000	1,654,000
8206	Design Fees	-	-	-	166,000	-	166,000
8214	Legal Publications	-	-	-	-	500	500
8232	Project Management	-	-	-	8,000	25,000	33,000
8236	Soils Investigation	-	-	-	10,000	-	10,000
8240	Testing And Inspection	-	-	-	-	20,000	20,000
9303	Public Art Fund	-	-	-	-	16,540	16,540
	<b>Total Expense</b>	-	-	-	\$184,000	\$1,716,040	\$1,900,040
<b>Net Total</b>							
		-	-	-	-	-	-



# Bellvue Transmission Program - 60-inch

<b>Project Number:</b>	123	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Construction Transmission & Distribution	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	405 - Water Construction	<b>Location:</b>	Bellvue transmission line-Laporte area
<b>Project Manager:</b>	Dan Moore	<b>Budget Unit #:</b>	4050088088180000
<b>Project Status:</b>	Funded		

**Description:**

This project is the construction of the Northern Segment of the Bellvue Transmission Main, six miles of the 60-inch line between the end of the completed line at Shields in Fort Collins to the Bellvue Filter Plant. Construction has begun as Corps of Engineers' verification of a Nationwide 12 permit for the line segment has been obtained.

**Discussion of Progress:**

Phase 2 tunnel construction scheduled for completion June 2017. Warranty ends June 2019.

**Justification:**

To secure Greeley's water future, the 2003 Water Master Plan instituted a policy to expand the transmission system when demand reaches 90% of system capacity. The 60" transmission pipeline, which is 29 miles long, is being built in multiple segments over several years to connect the Bellvue Water Treatment Plant to customers in Greeley. Sections of this pipeline have passed through developing areas in Fort Collins and Windsor. The Northern Segment will pass through areas of unincorporated Larimer County. The project was 80% (24 miles) complete at the beginning of 2016. The Northern Segment is needed to supply water by gravity to the Gold Hill treated water storage reservoirs.

**Revenue Detail:**

The new pipeline may allow less use of the Boyd Filter Plant which is more expensive to run than the Bellvue Filter Plant

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
4611	Development Fees	1,353,000	17,200	31,300	-	-	1,401,500
	<b>Total Revenue</b>	<b>\$1,353,000</b>	<b>\$17,200</b>	<b>\$31,300</b>	<b>-</b>	<b>-</b>	<b>\$1,401,500</b>
<b>Expense</b>							
8204	Contingency	1,000,000	-	-	-	-	1,000,000
8206	Design Fees	30,000	-	-	-	-	30,000
8212	Land/Building	150,000	10,000	15,000	-	-	175,000
8226	Permits,Fees, Etc	30,000	-	-	-	-	30,000
8229	Professional Services	20,000	-	-	-	-	20,000
8232	Project Management	50,000	5,000	10,000	-	-	65,000
8240	Testing And Inspection	60,000	2,000	6,000	-	-	68,000
9303	Public Art Fund	13,000	200	300	-	-	13,500
	<b>Total Expense</b>	<b>\$1,353,000</b>	<b>\$17,200</b>	<b>\$31,300</b>	<b>-</b>	<b>-</b>	<b>\$1,401,500</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Distribution Line Extension and Oversizing

<b>Project Number:</b>	124	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Construction Transmission & Distribution	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	405 - Water Construction	<b>Location:</b>	City wide
<b>Project Manager:</b>	Dan Moore	<b>Budget Unit #:</b>	4050088088050000
<b>Project Status:</b>	Funded		

## Description:

This program provides for reimbursement to developers for installing oversized pipe at the request of the City. The program can also fund extensions between completed subdivisions to improve the pipe network system. Anticipated projects for 2017 construction will connect the Spanish Colony to "C" Street. Oversizing reimbursement is anticipated for Boomerang Ranch, Northridge, and Owl Ridge subdivisions.

## Discussion of Progress:

Annual program

## Justification:

Provides the means for the City to oversize pipes being installed by developers and to extend mains as necessary for the benefit of the entire system. Oversizing and main extensions are dependent upon development and master grid sizing plans. As a result, improved flow, pressure, and system reliability can be built into the future and existing distribution system. Overall cost to the developer is minimal and the City saves mobilization costs.

## Revenue Detail:

This program is in place to oversize water pipes in coordination with new development. Expenditures are usually at least partially reimbursable.

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
4611	Development Fees	1,151,000	115,200	116,200	122,300	129,300	1,634,000
<b>Total Revenue</b>		<b>\$1,151,000</b>	<b>\$115,200</b>	<b>\$116,200</b>	<b>\$122,300</b>	<b>\$129,300</b>	<b>\$1,634,000</b>
Expense							
8202	Construction	750,000	100,000	101,000	107,000	114,000	1,172,000
8203	Construction - City Depts	5,000	7,000	7,000	7,000	7,000	33,000
8204	Contingency	70,000	-	-	-	-	70,000
8206	Design Fees	100,000	-	-	-	-	100,000
8212	Land/Building	100,000	-	-	-	-	100,000
8226	Permits, Fees, Etc	20,000	-	-	-	-	20,000
8232	Project Management	25,000	1,000	1,000	1,000	1,000	29,000
8234	Repair/Maintenance Supplies	-	6,000	6,000	6,000	6,000	24,000
8240	Testing And Inspection	70,000	-	-	-	-	70,000
9303	Public Art Fund	11,000	1,200	1,200	1,300	1,300	16,000
<b>Total Expense</b>		<b>\$1,151,000</b>	<b>\$115,200</b>	<b>\$116,200</b>	<b>\$122,300</b>	<b>\$129,300</b>	<b>\$1,634,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Land Acquisition and Management

<b>Project Number:</b>	125	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Construction Transmission & Distribution	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	405 - Water Construction	<b>Location:</b>	City wide
<b>Project Manager:</b>	Dan Moore	<b>Budget Unit #:</b>	4050088088110000
<b>Project Status:</b>	Funded		

## Description:

This annual program supports contract employees and consultants to acquire new easements and property and to research, compile, and defend existing easements and lands. A new filing system is being created utilizing the GIS to efficiently catalog for quick retrieval over 100 years of easement and land records that have been buried in hundreds of project and property files.

## Discussion of Progress:

Annual program

## Justification:

Professional expertise is required to acquire new land and easements and to protect Greeley's existing properties for the installation, operation, and maintenance of Greeley's pipelines, treatment plants, reservoirs, pump stations and other facilities. This project also provides the department with right-of-way expertise to protect our existing facilities from development on and around those facilities outside of the Greeley city limits. Proper cataloging of existing records for rapid retrieval provides good customer service to developers, contractors, and City staff.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
4611	Development Fees	135,000	140,000	145,000	150,000	155,000	725,000
<b>Total Revenue</b>		<b>\$135,000</b>	<b>\$140,000</b>	<b>\$145,000</b>	<b>\$150,000</b>	<b>\$155,000</b>	<b>\$725,000</b>
Expense							
8212	Land/Building	135,000	140,000	145,000	150,000	155,000	725,000
<b>Total Expense</b>		<b>\$135,000</b>	<b>\$140,000</b>	<b>\$145,000</b>	<b>\$150,000</b>	<b>\$155,000</b>	<b>\$725,000</b>
<b>Net Total</b>							

# New Construction Meters

<b>Project Number:</b>	121	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Construction Transmission & Distribution	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	405 - Water Construction	<b>Location:</b>	City wide
<b>Project Manager:</b>	Jeff Littell	<b>Budget Unit #:</b>	4050088088080000
<b>Project Status:</b>	Funded		

## Description:

This program purchases new meters for resale to property owners or developers for new water service connections. To maintain quality and uniformity, the customer is required to purchase all system meters from the City. This is an on-going project.

## Discussion of Progress:

Annual program

## Justification:

City ordinance requires a meter on every tap. The cost of new meters in this account is offset by the sale of these meters to customers. Providing meters to customers assures the proper meter is installed and compatible with our automated meter reading and billing system. The cost of each meter varies from \$200 to \$11,850.

## Revenue Detail:

New customers = new revenue sources

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
4611	Development Fees	35,000	35,000	35,000	35,000	35,000	175,000
	<b>Total Revenue</b>	<b>\$35,000</b>	<b>\$35,000</b>	<b>\$35,000</b>	<b>\$35,000</b>	<b>\$35,000</b>	<b>\$175,000</b>
Expense							
8208	Furniture, Fixtures &	27,500	27,500	27,500	27,500	27,500	137,500
8234	Repair/Maintenance Supplies	2,000	2,000	2,000	2,000	2,000	10,000
8244	Capital Equipment >\$5,000	5,500	5,500	5,500	5,500	5,500	27,500
	<b>Total Expense</b>	<b>\$35,000</b>	<b>\$35,000</b>	<b>\$35,000</b>	<b>\$35,000</b>	<b>\$35,000</b>	<b>\$175,000</b>
<b>Net Total</b>							

# Water Taps

<b>Project Number:</b>	122	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Construction Transmission & Distribution	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	405 - Water Construction	<b>Location:</b>	City wide
<b>Project Manager:</b>	Jeff Littell	<b>Budget Unit #:</b>	4050088088100000
<b>Project Status:</b>	Funded		

## Description:

The transmission/distribution crews construct taps on the water system lines for both its own operations and those required by new customers. Tapping valves and pipe related materials used for tap construction are purchased from the Inventory account. All applicable costs are included in this account to complete the tap (asphalt, flow fill, concrete, etc.)

## Discussion of Progress:

Annual program

## Justification:

The transmission/distribution crews construct taps on the water system lines for both its own operations and those required by new customers. Tapping valves and pipe related materials used for tap construction are purchased from the Inventory Budget account. All applicable costs are included in this account to complete the tap (asphalt, flow fill, concrete, etc.). Cost recovery is only applicable for taps constructed for customers.

## Revenue Detail:

New customers = new water revenue

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
4461	New Meter Sales	25,000	26,265	27,594	28,990	30,440	138,289
4462	Large Meter Sales	15,000	15,759	16,556	17,394	18,232	82,941
4464	Labor & Materials	2,700	2,837	2,980	3,131	3,287	14,935
4611	Development Fees	1,529,660	5,379,043	5,598,778	6,464,014	1,867,348	20,838,843
4724	Expense Reimbursement	172,770	-	-	-	-	172,770
5632	Rents From Equipment	60,000	60,000	60,000	60,000	60,000	300,000
5902	Bond Proceeds	30,000,000	-	-	-	-	30,000,000
<b>Total Revenue</b>		<b>\$31,805,130</b>	<b>\$5,483,904</b>	<b>\$5,705,908</b>	<b>\$6,573,529</b>	<b>\$1,979,307</b>	<b>\$51,547,778</b>
<b>Expense</b>							
8202	Construction	5,000	5,000	5,000	5,000	5,000	25,000
8203	Construction - City Depts	5,000	5,000	5,000	5,000	5,000	25,000
8216	Miscellaneous	3,500	3,500	3,500	3,500	3,500	17,500
8234	Repair/Maintenance Supplies	61,500	61,500	61,500	61,500	61,500	307,500
<b>Total Expense</b>		<b>\$75,000</b>	<b>\$75,000</b>	<b>\$75,000</b>	<b>\$75,000</b>	<b>\$75,000</b>	<b>\$375,000</b>
<b>Net Total</b>		<b>\$31,730,130</b>	<b>\$5,408,904</b>	<b>\$5,630,908</b>	<b>\$6,498,529</b>	<b>\$1,904,307</b>	<b>\$51,172,778</b>

## 406 – Water Replacement Fund

# Ancillary System Improvements

<b>Project Number:</b>	174	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Christie Coleman	<b>Budget Unit #:</b>	4060088088580000
<b>Project Status:</b>	Funded		

**Description:**

This program provides contributions for capital repairs of irrigation ditches and pumping systems of which the City is part owner.

**Discussion of Progress:**

Annual program

**Justification:**

As a part owner of various irrigation ditches, the department has the responsibility to participate in the cost and maintenance of aging ditch and lateral infrastructure.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	365,000	365,000	365,000	365,000	365,000	1,825,000
	<b>Total Revenue</b>	<b>\$365,000</b>	<b>\$365,000</b>	<b>\$365,000</b>	<b>\$365,000</b>	<b>\$365,000</b>	<b>\$1,825,000</b>
Expense							
8202	Construction	300,000	300,000	300,000	300,000	300,000	1,500,000
8206	Design Fees	30,000	30,000	30,000	30,000	30,000	150,000
8216	Miscellaneous	18,000	18,000	18,000	18,000	18,000	90,000
8232	Project Management	17,000	17,000	17,000	17,000	17,000	85,000
	<b>Total Expense</b>	<b>\$365,000</b>	<b>\$365,000</b>	<b>\$365,000</b>	<b>\$365,000</b>	<b>\$365,000</b>	<b>\$1,825,000</b>
<b>Net Total</b>							

# Non-Potable Replacement Rehabilitation

<b>Project Number:</b>	425	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Roger Schmidt	<b>Budget Unit #:</b>	4060088088740000
<b>Project Status:</b>	Funded		

## Description:

This item funds replacement or rehabilitation of non-potable pumps, piping, ponds, and related equipment. Water and Sewer is now responsible for maintaining non-potable assets that were Parks responsibility. This is an on-going project.

## Discussion of Progress:

Ongoing effort

## Justification:

Efficient economic operation of this program requires ongoing rehabilitation and replacement of features such as pumps, motors, controls, Supervisory Control and Data Acquisition (SCADA) equipment, pressure reducing valves, buildings and piping.

## Revenue Detail:

None

## Impact on Operating Budget:

The non-potable division has taken on assets that were being maintained by Parks. The electric budget in operating has increased to account for the increased pumping capacity.

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
	Fund Balance	-	-	6,000	-	-	6,000
5638	Funded Depreciation	126,000	126,000	126,000	132,000	132,000	642,000
	<b>Total Revenue</b>	<b>\$126,000</b>	<b>\$126,000</b>	<b>\$132,000</b>	<b>\$132,000</b>	<b>\$132,000</b>	<b>\$648,000</b>
<b>Expense</b>							
8202	Construction	25,000	25,000	30,000	30,000	30,000	140,000
8208	Furniture, Fixtures &	4,000	4,000	4,000	4,000	4,000	20,000
8216	Miscellaneous	8,000	8,000	8,000	8,000	8,000	40,000
8234	Repair/Maintenance Supplies	80,000	80,000	80,000	80,000	80,000	400,000
8244	Capital Equipment >\$5,000	9,000	9,000	10,000	10,000	10,000	48,000
	<b>Total Expense</b>	<b>\$126,000</b>	<b>\$126,000</b>	<b>\$132,000</b>	<b>\$132,000</b>	<b>\$132,000</b>	<b>\$648,000</b>
<b>Net Total</b>		-	-	-	-	-	-



# Cache la Poudre River Turnout Rehabilitation

<b>Project Number:</b>	841	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	Bellvue Filter Plant
<b>Project Manager:</b>	Christie Coleman	<b>Budget Unit #:</b>	4060088088830000
<b>Project Status:</b>	Funded		

**Description:**

This project will assess maintenance needs and complete needed maintenance at the Bellvue WTP Intake Structure including possibly repairing/upgrading gates; improving maintenance access to the sediment chamber; replacing valves and trash racks; and resurfacing the existing weir.

**Discussion of Progress:**

The design is complete. Construction is expected in the winter of 2016

**Justification:**

The existing concrete structure is over 60 years old and is in need of maintenance in order to ensure it's continued functionality. With out this needed maintenance, trash and sediment may enter and block the Bellvue WTP raw-water supply lines.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
5638	Funded Depreciation	560,000	-	-	-	-	560,000
	<b>Total Revenue</b>	<b>\$560,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$560,000</b>
<b>Expense</b>							
8202	Construction	550,000	-	-	-	-	550,000
8240	Testing And Inspection	10,000	-	-	-	-	10,000
	<b>Total Expense</b>	<b>\$560,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$560,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Water Resource Advertisement Campaign

<b>Project Number:</b>	406.22	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Studies	<b>Regions:</b>	
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	Region wide
<b>Project Manager:</b>	Eric Reckentine	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

## Description:

Water education campaign for rate payers and other key stakeholders in the region.

## Discussion of Progress:

Planning

## Justification:

Greeley is growing into a regional water provider. As such, we take a lead role in water planning and infrastructure. We have recognized that our decisions and projects are likely to have public support when our residents and rate-payers understand how our system works, and how we secure their water future. This program is designed to offer the education that provides that understanding.

## Revenue Detail:

No additional information

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	300,000	300,000	-	-	-	600,000
	<b>Total Revenue</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$600,000</b>
Expense							
8216	Miscellaneous	50,000	50,000	-	-	-	100,000
8229	Professional Services	250,000	250,000	-	-	-	500,000
	<b>Total Expense</b>	<b>\$300,000</b>	<b>\$300,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$600,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Water Efficiency Tactical Team

<b>Project Number:</b>	406.21	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Studies	<b>Regions:</b>	
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Eric Reckentine	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

**Description:**

As Greeley plans for its future, water planning is critical. A major portion of this planning includes water conservation. This activity includes work items all meant to conserve and/or efficiently use our current and future water supplies. The work items include: continued implementation of the state approved 2015 Water Conservation Plan, approval and implementation of a new landscaping code, updating the non-potable water master plan, implementing a water budget rate structure and developing a water issues messaging campaign similar to the Greeley Unexpected program.

**Discussion of Progress:**

Planning

**Justification:**

Necessary to assure that the City responds to internal and external water supply challenges that have occurred since implementation of the conservation plan and landscape code amendments.

**Revenue Detail:**

No additional information

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	200,000	200,000	-	-	-	400,000
	<b>Total Revenue</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$400,000</b>
Expense							
8216	Miscellaneous	50,000	50,000	-	-	-	100,000
8229	Professional Services	150,000	150,000	-	-	-	300,000
	<b>Total Expense</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$400,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Water Operations Plan

<b>Project Number:</b>	406.10	<b>Budget Year:</b>	2017
<b>Division:</b>	850 - Water General Management	<b>Council Priority:</b>	Infrastructure & Growth- Public Facilities & Equip
<b>Project Type:</b>	Water Replacement Supply	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Adam Prior	<b>Budget Unit #:</b>	4060088084190000
<b>Project Status:</b>	Funded		

## Description:

The Water Operations Plan is a SharePoint system designed for capturing and documenting the copious amounts of paper data the water and sewer department has. It is also capturing the vast knowledge of an aging workforce before they retire.

## Discussion of Progress:

Thus far, the Water Operations Plan has a solid organization, functional metadata, extensive searchability features, and significant backloading of historical data/documents. It has also undergone an enhancement to include a workflow for employee files and an onboarding program.

## Justification:

The Water Operations Plan is becoming a primary tool for operational, record and workflow needs in the department. As data is being uploaded and staff begins to use it more regularly, upgrading and enhancements are becoming more prevalent.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	100,000	-	-	-	-	100,000
	<b>Total Revenue</b>	<b>\$100,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$100,000</b>
Expense							
8229	Professional Services	90,000	-	-	-	-	90,000
8232	Project Management	10,000	-	-	-	-	10,000
	<b>Total Expense</b>	<b>\$100,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$100,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Boyd Water Quality

<b>Project Number:</b>	406.15	<b>Budget Year:</b>	2017
<b>Division:</b>	870 - Treatment and Supply	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Supply	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	Watershed for Boyd Lake
<b>Project Manager:</b>	Sam Boone	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

**Description:**

Design and construction of treatment systems at the source waters for Boyd Lake WTP

**Discussion of Progress:**

Planning

**Justification:**

Treating source waters with effective and economical techniques will improve raw and finished water qualities, reduce treatment plant chemical dosages, reduce residuals production and handling/disposal costs, and improve customer satisfaction.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	-	-	250,000	150,000	-	400,000
	<b>Total Revenue</b>	-	-	\$250,000	\$150,000	-	\$400,000
Expense							
8202	Construction	-	-	-	150,000	-	150,000
8206	Design Fees	-	-	250,000	-	-	250,000
	<b>Total Expense</b>	-	-	\$250,000	\$150,000	-	\$400,000
<b>Net Total</b>							
		-	-	-	-	-	-

# Milton Seaman Outlet Works Evaluation

<b>Project Number:</b>	2162	<b>Budget Year:</b>	2017
<b>Division:</b>	870 - Treatment and Supply	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Supply	<b>Regions:</b>	
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	Milton Seaman Reservoir
<b>Project Manager:</b>	Sam Boone	<b>Budget Unit #:</b>	4060088084090000
<b>Project Status:</b>	Funded		

**Description:**

An engineering evaluation of alternatives to replace the original reservoir outlet gates.

**Discussion of Progress:**

Planning

**Justification:**

The original gates have withstood over 60 years of submergence in an anarobic condition. The cast iron gate leaf seal channels have corroded and eroded to the point of compromising the brass seals allowing water to leak past the gates. This water is lost and can not be credited to our account. The condition will continue to deteriorate jeopardizing drought storage.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	300,000	-	-	-	-	300,000
	<b>Total Revenue</b>	<b>\$300,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$300,000</b>
Expense							
8206	Design Fees	286,000	-	-	-	-	286,000
8229	Professional Services	10,000	-	-	-	-	10,000
8232	Project Management	4,000	-	-	-	-	4,000
	<b>Total Expense</b>	<b>\$300,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$300,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-



# Bellvue Water Treatment Plant General Rehabilitation

<b>Project Number:</b>	705	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	Bellvue Filter Plant
<b>Project Manager:</b>	Sam Boone	<b>Budget Unit #:</b>	4060088088590000
<b>Project Status:</b>	Funded		

**Description:**

This is an annual project for the rehabilitation of buildings, heating/ventilating/air conditioning (HVAC) systems, pumps and motors, electrical replacements, chemical storage & metering, valves, and compressors. For '17 & '18: 8202 - rebuild residuals recovery, return flow, & house service pumps, asphalt repair; '17 to '21: 8234 includes 3 VFD drives on EQ basin mixers, and volumetric chemical feeders.

**Discussion of Progress:**

Ongoing planning, design, procurement, construction

**Justification:**

These items will help to maintain operational reliability, effectiveness, and improve efficiency for continued compliance with Federal and State regulations and fulfill the Water & Sewer department mandates.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
5638	Funded Depreciation	355,000	283,000	191,000	191,000	191,000	1,211,000
	<b>Total Revenue</b>	<b>\$355,000</b>	<b>\$283,000</b>	<b>\$191,000</b>	<b>\$191,000</b>	<b>\$191,000</b>	<b>\$1,211,000</b>
<b>Expense</b>							
8202	Construction	220,000	150,000	60,000	60,000	60,000	550,000
8206	Design Fees	4,000	4,000	4,000	4,000	4,000	20,000
8208	Furniture, Fixtures &	6,000	6,000	6,000	6,000	6,000	30,000
8232	Project Management	10,000	8,000	6,000	6,000	6,000	36,000
8234	Repair/Maintenance Supplies	40,000	40,000	40,000	40,000	40,000	200,000
8244	Capital Equipment >\$5,000	75,000	75,000	75,000	75,000	75,000	375,000
	<b>Total Expense</b>	<b>\$355,000</b>	<b>\$283,000</b>	<b>\$191,000</b>	<b>\$191,000</b>	<b>\$191,000</b>	<b>\$1,211,000</b>
<b>Net Total</b>		-	-	-	-	-	-

# Boyd Water Treatment Plant General Rehabilitation

<b>Project Number:</b>	341	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	Boyd Filter Plant
<b>Project Manager:</b>	Sam Boone	<b>Budget Unit #:</b>	4060088088640000
<b>Project Status:</b>	Funded		

## Description:

This project consists of replacing chemical feed pumps, high service pump overhauls, electrical switchgear components, grounds rehabilitation, and other mechanical items. Account 8202 includes \$45,000 for road rehab.-'17, 800 Hp high service motor rebuild @ \$25k/year-'17 to '20, \$80k/year for Boyd Lake Raw Water Pump rehab.- '17 & '18. 2017 Capital includes a 200 Hp motor & high service pump.

## Discussion of Progress:

Ongoing planning, design, procurement, construction

## Justification:

These items will help maintain operational reliability, effectiveness, and improve efficiency for continued compliance with Federal and State regulations. They will also help to fulfill Water and Sewer department mandates.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
5638	Funded Depreciation	373,000	240,000	160,000	160,000	160,000	1,093,000
	<b>Total Revenue</b>	<b>\$373,000</b>	<b>\$240,000</b>	<b>\$160,000</b>	<b>\$160,000</b>	<b>\$160,000</b>	<b>\$1,093,000</b>
<b>Expense</b>							
8202	Construction	200,000	150,000	75,000	75,000	75,000	575,000
8229	Professional Services	5,000	5,000	5,000	5,000	5,000	25,000
8232	Project Management	18,000	15,000	10,000	10,000	10,000	63,000
8234	Repair/Maintenance Supplies	35,000	35,000	35,000	35,000	35,000	175,000
8244	Capital Equipment >\$5,000	115,000	35,000	35,000	35,000	35,000	255,000
	<b>Total Expense</b>	<b>\$373,000</b>	<b>\$240,000</b>	<b>\$160,000</b>	<b>\$160,000</b>	<b>\$160,000</b>	<b>\$1,093,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Security Projects-Water

<b>Project Number:</b>	406.20	<b>Budget Year:</b>	2017
<b>Division:</b>	870 - Treatment and Supply	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Treatment	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	Bellvue and Boyd Water Treatment Plants
<b>Project Manager:</b>	Sam Boone	<b>Budget Unit #:</b>	4060088087010000
<b>Project Status:</b>	Funded		

## Description:

This program provides security requirements for the water system such as gates or cameras. The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 required security and emergency planning to be incorporated into each water system's overall operations. This is an ongoing project. \$50,000 for security lighting and cameras at the Water Treatment Plants in 2016.

## Discussion of Progress:

Ongoing annual program

## Justification:

This budget is used for identified security and emergency response planning requirements for the water system. The Environmental Protection Agency (EPA) distributes security information and suggests improvements to water systems. Vulnerability assessment and emergency drinking water response plans are periodically required to be updated by the EPA and reviewed during the State Sanitary Inspection. All security installations to date, except for cameras, have been accomplished by using water department staff resources.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	17,000	17,000	17,000	17,000	17,000	85,000
	<b>Total Revenue</b>	<b>\$17,000</b>	<b>\$17,000</b>	<b>\$17,000</b>	<b>\$17,000</b>	<b>\$17,000</b>	<b>\$85,000</b>
Expense							
8203	Construction - City Depts	4,000	4,000	4,000	4,000	4,000	20,000
8208	Furniture, Fixtures &	8,000	8,000	8,000	8,000	8,000	40,000
8234	Repair/Maintenance Supplies	5,000	5,000	5,000	5,000	5,000	25,000
	<b>Total Expense</b>	<b>\$17,000</b>	<b>\$17,000</b>	<b>\$17,000</b>	<b>\$17,000</b>	<b>\$17,000</b>	<b>\$85,000</b>
<b>Net Total</b>							

# Bellvue Needs Assessment Projects

<b>Project Number:</b>	406.9	<b>Budget Year:</b>	2017
<b>Division:</b>	870 - Treatment and Supply	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Treatment	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	Bellvue WTP
<b>Project Manager:</b>	Erik Dial	<b>Budget Unit #:</b>	4060088084210000
<b>Project Status:</b>	Funded		

## Description:

This project encapsulates all of the rehabilitation work for Bellvue Water Treatment Plant outlined in the water treatment Needs Assessment. The most significant portion of the project dollars will be the replacement of the filters at Bellvue.

## Discussion of Progress:

Planning

## Justification:

Both water treatment plants are due for significant rehabilitation. A Needs Assessment was completed that laid out the schedule and estimated costs for performing the rehab activities at both plants. The rehabilitation will result in more flexibility in how water is produced because Boyd will be available year round and Bellvue will operate more efficiently with new filters.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Future	Total
Revenue								
5638	Funded Depreciation	21,071,000	130,000	1,455,000	440,000	-	-	23,096,000
5902	Bond Proceeds	23,000,000	-	10,000,000	-	9,000,000	7,000,000	49,000,000
	<b>Total Revenue</b>	<b>\$44,071,000</b>	<b>\$130,000</b>	<b>\$11,455,000</b>	<b>\$440,000</b>	<b>\$9,000,000</b>	<b>\$7,000,000</b>	<b>\$72,096,000</b>
Expense								
8202	Construction	21,071,000	-	1,330,000	-	-	-	22,401,000
8206	Design Fees	-	130,000	-	440,000	-	-	570,000
8214	Legal Publications	1,000	-	-	-	-	-	1,000
8229	Professional Services	1,400,000	-	75,000	-	-	-	1,475,000
8232	Project Management	100,000	-	50,000	-	-	-	150,000
8240	Testing And Inspection	150,000	-	-	-	-	-	150,000
	<b>Total Expense</b>	<b>\$22,722,000</b>	<b>\$130,000</b>	<b>\$1,455,000</b>	<b>\$440,000</b>	<b>-</b>	<b>-</b>	<b>\$24,747,000</b>
<b>Net Total</b>								
		<b>\$21,349,000</b>	<b>-</b>	<b>\$10,000,000</b>	<b>-</b>	<b>\$9,000,000</b>	<b>\$7,000,000</b>	<b>\$47,349,000</b>

# Boyd WTP Needs Assessment Projects

<b>Project Number:</b>	872	<b>Budget Year:</b>	2017
<b>Division:</b>	870 - Treatment and Supply	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Treatment	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	Boyd Filter Plant
<b>Project Manager:</b>	Sam Boone	<b>Budget Unit #:</b>	4060088084120000
<b>Project Status:</b>	Funded		

## Description:

This project encapsulates all of the rehabilitation work for Boyd Water Treatment Plant outlined in the water treatment Needs Assessment. The work performed will replace many dated components within the plant as well as enable Boyd to operate year round.

## Discussion of Progress:

Planning

## Justification:

Both water treatment plants are due for significant rehabilitation. A Needs Assessment was completed that laid out the schedule and estimated costs for performing the rehab activities at both plants. The rehabilitation will result in more flexibility in how water is produced because Boyd will be available year round and Bellvue will operate more efficiently with new filters.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	11,907,400	86,500	1,129,000	1,064,000	509,000	14,695,900
	<b>Total Revenue</b>	<b>\$11,907,400</b>	<b>\$86,500</b>	<b>\$1,129,000</b>	<b>\$1,064,000</b>	<b>\$509,000</b>	<b>\$14,695,900</b>
Expense							
8202	Construction	10,674,000	-	907,000	895,000	382,000	12,858,000
8206	Design Fees	-	83,000	90,000	38,000	68,000	279,000
8214	Legal Publications	1,000	-	1,000	1,000	1,000	4,000
8229	Professional Services	1,067,400	-	91,000	90,000	38,000	1,286,400
8232	Project Management	100,000	3,500	30,000	30,000	15,000	178,500
8240	Testing And Inspection	65,000	-	10,000	10,000	5,000	90,000
	<b>Total Expense</b>	<b>\$11,907,400</b>	<b>\$86,500</b>	<b>\$1,129,000</b>	<b>\$1,064,000</b>	<b>\$509,000</b>	<b>\$14,695,900</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Boyd WTP Plant #2 Demolition

<b>Project Number:</b>	406.16	<b>Budget Year:</b>	2017
<b>Division:</b>	870 - Treatment and Supply	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Treatment	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	Boyd Water Treatment Plant
<b>Project Manager:</b>	Sam Boone	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

**Description:**

Demolition of the existing plant constructed in 1967 and reclamation of the grounds.

**Discussion of Progress:**

Planning

**Justification:**

The existing plant was decommissioned over 10 years ago. The raw water line was permanently plugged off in 2014 in response to a major influent raw water line leak. Light fixtures are falling from the ceiling in several places. The mold level could be significant. Residential development and a major hiking/biking trail are adjacent to the south and west of the structures. Loveland Fire Department has allowed disconnecting the finished water connection supplying the fire hydrant under the understanding the buildings will be demolished in 2017.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
5638	Funded Depreciation	456,000	-	-	-	-	456,000
	<b>Total Revenue</b>	<b>\$456,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$456,000</b>
<b>Expense</b>							
8206	Design Fees	35,000	-	-	-	-	35,000
8210	HAZMAT	35,000	-	-	-	-	35,000
8212	Land/Building	350,000	-	-	-	-	350,000
8214	Legal Publications	1,000	-	-	-	-	1,000
8226	Permits, Fees, Etc	5,000	-	-	-	-	5,000
8229	Professional Services	8,000	-	-	-	-	8,000
8232	Project Management	12,000	-	-	-	-	12,000
8240	Testing And Inspection	10,000	-	-	-	-	10,000
	<b>Total Expense</b>	<b>\$456,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$456,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Transmission System Rehabilitation

<b>Project Number:</b>	68	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide and along the major transmission line from Bellvue and Boyd Filter Plants
<b>Project Manager:</b>	Dan Moore	<b>Budget Unit #:</b>	4060088088560000
<b>Project Status:</b>	Funded		

## Description:

This project will fund all types of required rehabilitation or replacement of the treated water transmission system. Projects may include the protection of pipe joints, pipe replacement, cathodic protection, lining of pipe, minor upgrades, and repairs to piping for protection prior to impending development. This is an on-going project in part utilizing in-house design and construction. The 2017 project will be the design and replacement of the 20" Kodak line. The 2018 project is the structural rehab for crossing under the Poudre River, railroads, Highway 34, Highway 257, and I-25. Also, 2018 projects include studies for rehabilitation of the existing cathodic protection system, and strategies for rehabilitation or replacement of existing piping. Construction for rehabilitation will occur in 2018 through 2020 at the rate of 2 miles per year.

## Discussion of Progress:

Planning

## Justification:

Council priority to maintain critical infrastructure. This program is intended to maintain and protect assets worth over \$105,000,000 (replacement value) and restore and prolong the useful life of the 138 miles of older pipeline. Bellvue's old pipelines were constructed between 1923- 1969 and 31 miles have been rehabilitated by cement mortar or poly lining. The Boyd lines were constructed in 1967 and 1973. The rehabilitation schedule will be adjusted to meet the most pressing priority.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	1,906,000	1,752,000	1,579,000	1,579,000	1,579,000	8,395,000
<b>Total Revenue</b>		<b>\$1,906,000</b>	<b>\$1,752,000</b>	<b>\$1,579,000</b>	<b>\$1,579,000</b>	<b>\$1,579,000</b>	<b>\$8,395,000</b>
Expense							
8202	Construction	1,631,000	943,000	1,400,000	1,400,000	1,400,000	6,774,000
8204	Contingency	160,000	95,000	140,000	140,000	140,000	675,000
8206	Design Fees	50,000	75,000	-	-	-	125,000
8212	Land/Building	20,000	-	-	-	-	20,000
8214	Legal Publications	500	500	500	500	500	2,500
8226	Permits,Fees, Etc	5,000	5,000	5,000	5,000	5,000	25,000
8228	Printing, Copying	500	500	500	500	500	2,500
8229	Professional Services	3,000	600,000	-	-	-	603,000
8232	Project Management	10,000	10,000	5,000	5,000	5,000	35,000
8238	Surveying	6,000	3,000	3,000	3,000	3,000	18,000
8240	Testing And Inspection	20,000	20,000	25,000	25,000	25,000	115,000

<b>Total Expense</b>	\$1,906,000	\$1,752,000	\$1,579,000	\$1,579,000	\$1,579,000	\$8,395,000
<b>Net Total</b>	-	-	-	-	-	-

# Distribution Pipeline Replacement

<b>Project Number:</b>	69	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Dan Moore	<b>Budget Unit #:</b>	4060088088530000
<b>Project Status:</b>	Funded		

## Description:

This will provide replacement and/or rehabilitation of pipes that exhibit extreme corrosion or have an excessive leak history. Pipes that are too small are replaced and enlarged to increase flow capacity. Various rehabilitation methods such as cement mortar lining, swage lining, and pipe bursting may be used. Every two years projects are prioritized based on paving project coordination and other factors. Most projects are replaced using in-house forces. The main project identified for 2017 is the outside contract replacement of 3000 feet of pipeline that serves the Spanish Colony. In 2018 two bored crossing replacements of 8th Avenue will be performed by outside contractor.

## Discussion of Progress:

Planning

## Justification:

Council priority to maintain critical infrastructure. This program reduces the number of emergency repairs and customer complaints by improving the flow quantity and service for customers and fire protection. Water quality is also improved and chlorination is more effective.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	1,908,000	1,325,000	900,000	900,000	900,000	5,933,000
	<b>Total Revenue</b>	<b>\$1,908,000</b>	<b>\$1,325,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$5,933,000</b>
Expense							
8202	Construction	780,000	300,000	80,000	80,000	80,000	1,320,000
8203	Construction - City Depts	140,000	490,000	490,000	490,000	490,000	2,100,000
8204	Contingency	80,000	4,000	4,000	4,000	4,000	96,000
8206	Design Fees	75,000	-	-	-	-	75,000
8212	Land/Building	100,000	-	-	-	-	100,000
8224	Operating Supplies	1,000	1,000	2,000	2,000	2,000	8,000
8226	Permits, Fees, Etc	2,000	2,000	10,000	10,000	10,000	34,000
8232	Project Management	10,000	8,000	4,000	4,000	4,000	30,000
8234	Repair/Maintenance Supplies	700,000	500,000	305,000	305,000	305,000	2,115,000
8240	Testing And Inspection	20,000	20,000	5,000	5,000	5,000	55,000
	<b>Total Expense</b>	<b>\$1,908,000</b>	<b>\$1,325,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$900,000</b>	<b>\$5,933,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Valve Replacement

<b>Project Number:</b>	72	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Jeff Littell	<b>Budget Unit #:</b>	4060088088500000
<b>Project Status:</b>	Funded		

## Description:

This project replaces inoperable valves. The life expectancy varies from twenty-five to fifty years depending on valve size and maintenance/operation. This is an on-going project.

## Discussion of Progress:

Annual program

## Justification:

The replacement program ensures that system valves are able to be located, in operating condition and are in the correct operating position (open or closed). Replacement valves are obtained through the Transmission/Distribution division's inventory budget. During cement mortar lining (CML) construction years, the valves in the project area are replaced using this account. Approximately 925 hours (\$20,200) per year is spent on valve turning and the labor cost is charged to the operating budget. The system has approximately 9,200 valves.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	99,000	99,000	99,000	99,000	99,000	495,000
	<b>Total Revenue</b>	<b>\$99,000</b>	<b>\$99,000</b>	<b>\$99,000</b>	<b>\$99,000</b>	<b>\$99,000</b>	<b>\$495,000</b>
Expense							
8203	Construction - City Depts	10,000	10,000	10,000	10,000	10,000	50,000
8216	Miscellaneous	1,500	1,500	1,500	1,500	1,500	7,500
8226	Permits, Fees, Etc	1,500	1,500	1,500	1,500	1,500	7,500
8234	Repair/Maintenance Supplies	86,000	86,000	86,000	86,000	86,000	430,000
	<b>Total Expense</b>	<b>\$99,000</b>	<b>\$99,000</b>	<b>\$99,000</b>	<b>\$99,000</b>	<b>\$99,000</b>	<b>\$495,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Fire Hydrant Replacement

<b>Project Number:</b>	71	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Jeff Littell	<b>Budget Unit #:</b>	4060088088510000
<b>Project Status:</b>	Funded		

## Description:

This program will replace substandard fire hydrants and applicable branch piping, gate valves, and asphalt. Repair of asphalt and street damage caused by water truck loading at hydrants is also included. This is an on-going project.

## Discussion of Progress:

Annual program

## Justification:

The Water staff and Fire department personnel identify approximately ten units for replacement each year. Labor for replacing and performing hydrant maintenance is charged to the operating account. The system has 3,200 hydrants with an expected service life of 50 years. Fire hydrants are also used to distribute water to fracking and construction customers resulting in pavement damage caused by the heavy truck traffic. Each year the damaged pavement is corrected.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
5638	Funded Depreciation	77,000	77,000	77,000	77,000	77,000	385,000
	<b>Total Revenue</b>	<b>\$77,000</b>	<b>\$77,000</b>	<b>\$77,000</b>	<b>\$77,000</b>	<b>\$77,000</b>	<b>\$385,000</b>
<b>Expense</b>							
8202	Construction	25,000	25,000	25,000	25,000	25,000	125,000
8203	Construction - City Depts	13,000	13,000	13,000	13,000	13,000	65,000
8216	Miscellaneous	4,000	4,000	4,000	4,000	4,000	20,000
8234	Repair/Maintenance Supplies	35,000	35,000	35,000	35,000	35,000	175,000
	<b>Total Expense</b>	<b>\$77,000</b>	<b>\$77,000</b>	<b>\$77,000</b>	<b>\$77,000</b>	<b>\$77,000</b>	<b>\$385,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Meter Replacement

<b>Project Number:</b>	67	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Jeff Littell	<b>Budget Unit #:</b>	4060088088608863
<b>Project Status:</b>	Funded		

**Description:**

This program funds the replacement of both large and small water meters and their related components as they wear out or fail; this is an on-going project.

**Discussion of Progress:**

Annual program. Significant effort ongoing to replace radio transponders that are out of date.

**Justification:**

Meter accuracy is paramount for revenue collection; Meters and radio transponders are replaced when they fail, which is approximately every ten to fifteen years. In 2014, a new federal law requires any new meter to the system be the "no-lead" type. These meters cost approximately 30% more than the current system meters. This new law also requires any meter removed for maintenance be replaced with a no-lead meter.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
5638	Funded Depreciation	325,000	325,000	325,000	325,000	325,000	1,625,000
	<b>Total Revenue</b>	<b>\$325,000</b>	<b>\$325,000</b>	<b>\$325,000</b>	<b>\$325,000</b>	<b>\$325,000</b>	<b>\$1,625,000</b>
<b>Expense</b>							
8216	Miscellaneous	15,000	15,000	15,000	15,000	15,000	75,000
8234	Repair/Maintenance Supplies	310,000	310,000	310,000	310,000	310,000	1,550,000
	<b>Total Expense</b>	<b>\$325,000</b>	<b>\$325,000</b>	<b>\$325,000</b>	<b>\$325,000</b>	<b>\$325,000</b>	<b>\$1,625,000</b>
<b>Net Total</b>		-	-	-	-	-	-

# Treated Water Reservoir Rehabilitation

<b>Project Number:</b>	65	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Dan Moore	<b>Budget Unit #:</b>	4060088088610000
<b>Project Status:</b>	Funded		

## Description:

This project will fund the required rehabilitation of the four treated water tanks and reservoirs. The projects may include pumps, motors, structural repairs, floating covers, asphalt driveways, and other miscellaneous reservoir related rehabilitation requirements. This is an on-going project. The 2017 and 2018 work includes PRV vault rehab. The 2019 and 2020 estimates include a sodium hypochlorite replacement for Mosier Hill pump station and 23rd Ave Reservoirs.

## Discussion of Progress:

Preparing RFP documents

## Justification:

Council priority to maintain critical infrastructure. Concrete and steel reservoir and tanks require major structural repairs and maintenance approximately every 20 years. These 4 major facilities also contain numerous large pumps and control valves that also need repairs and maintenance in addition to the maintenance of the respective reservoir sites.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	36,000	36,000	88,500	88,500	40,000	289,000
	<b>Total Revenue</b>	<b>\$36,000</b>	<b>\$36,000</b>	<b>\$88,500</b>	<b>\$88,500</b>	<b>\$40,000</b>	<b>\$289,000</b>
Expense							
8203	Construction - City Depts	9,000	9,000	15,000	15,000	9,000	57,000
8204	Contingency	-	-	1,000	1,000	1,000	3,000
8224	Operating Supplies	1,000	1,000	2,000	2,000	2,000	8,000
8234	Repair/Maintenance Supplies	26,000	26,000	28,000	28,000	28,000	136,000
8244	Capital Equipment >\$5,000	-	-	42,500	42,500	-	85,000
	<b>Total Expense</b>	<b>\$36,000</b>	<b>\$36,000</b>	<b>\$88,500</b>	<b>\$88,500</b>	<b>\$40,000</b>	<b>\$289,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Gold Hill Tank Repair

<b>Project Number:</b>	406.12	<b>Budget Year:</b>	2017
<b>Division:</b>	860 - Transmission/Distribution	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	South of Hwy 34/West of Hwy 257
<b>Project Manager:</b>	Dan Moore	<b>Budget Unit #:</b>	4060088084250000
<b>Project Status:</b>	Funded		

## Description:

This 2017 project is for repairs of 9320 feet of floor joints at the 15 MG Gold Hill Reservoir and other repairs as determined by the 2014 engineering study and 2016 design for Gold Hill Reservoir.

## Discussion of Progress:

Planning and Design

## Justification:

Council priority to maintain critical infrastructure. Concrete and steel reservoir and tanks require major structural repairs and maintenance approximately every 20 years. Gold Hill is experiencing leakage through the joints which wastes time and money and may cause damage to the foundation.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	1,262,600	27,000	-	-	-	1,289,600
	<b>Total Revenue</b>	<b>\$1,262,600</b>	<b>\$27,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$1,289,600</b>
Expense							
8202	Construction	1,100,800	-	-	-	-	1,100,800
8206	Design Fees	100,000	-	-	-	-	100,000
8214	Legal Publications	200	-	-	-	-	200
8224	Operating Supplies	3,000	3,000	-	-	-	6,000
8226	Permits, Fees, Etc	500	-	-	-	-	500
8228	Printing, Copying	100	-	-	-	-	100
8232	Project Management	20,000	10,000	-	-	-	30,000
8234	Repair/Maintenance Supplies	2,000	2,000	-	-	-	4,000
8240	Testing And Inspection	36,000	12,000	-	-	-	48,000
	<b>Total Expense</b>	<b>\$1,262,600</b>	<b>\$27,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$1,289,600</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Instrumentation And Control

<b>Project Number:</b>	342	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Steve Robben	<b>Budget Unit #:</b>	4060088088548855
<b>Project Status:</b>	Funded		

**Description:**

This program replaces and refurbishes instruments and control systems known as SCADA (Supervisory Control and Data Acquisition). These devices are used to operate water and sewer systems, including recording data required by regulation and measurement and control of various chemicals. This is an on-going project.

**Discussion of Progress:**

Annual program

**Justification:**

Instrumentation and controls wear out or become obsolete over time, requiring replacement or major refurbishment. Refurbishment typically occurs at the facilities of the local supplier or manufacturer. City instrumentation technicians perform the replacement projects. This account includes instruments at all water facilities and pipelines.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
5638	Funded Depreciation	200,000	200,000	200,000	200,000	200,000	1,000,000
	<b>Total Revenue</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$1,000,000</b>
<b>Expense</b>							
8203	Construction - City Depts	15,000	15,000	15,000	15,000	15,000	75,000
8208	Furniture, Fixtures &	80,000	80,000	80,000	80,000	80,000	400,000
8216	Miscellaneous	5,000	5,000	5,000	5,000	5,000	25,000
8224	Operating Supplies	5,000	5,000	5,000	5,000	5,000	25,000
8234	Repair/Maintenance Supplies	75,000	75,000	75,000	75,000	75,000	375,000
8244	Capital Equipment >\$5,000	20,000	20,000	20,000	20,000	20,000	100,000
	<b>Total Expense</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$1,000,000</b>
<b>Net Total</b>		-	-	-	-	-	-

# Capital Outlay Replacement-Water

<b>Project Number:</b>	188	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Jeff Littell	<b>Budget Unit #:</b>	4060088088540000
<b>Project Status:</b>	Funded		

**Description:**

This program replaces major rolling stock: pickups, tractor backhoes, loaders, compressors, dump trucks, and other identified replacement capital items.

**Discussion of Progress:**

Ongoing equipment replacement

**Justification:**

This will replace rolling stock that has reached the end of its economic life. This will help maintain the equipment's ability to perform daily tasks and handle emergency calls.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	828,500	760,000	510,000	490,000	560,000	3,148,500
	<b>Total Revenue</b>	<b>\$828,500</b>	<b>\$760,000</b>	<b>\$510,000</b>	<b>\$490,000</b>	<b>\$560,000</b>	<b>\$3,148,500</b>
Expense							
8142	Construction and Maintenance	500,000	725,000	425,000	400,000	-	2,050,000
8144	Transportation/Vehicles	247,000	35,000	85,000	90,000	560,000	1,017,000
8149	Other	81,500	-	-	-	-	81,500
	<b>Total Expense</b>	<b>\$828,500</b>	<b>\$760,000</b>	<b>\$510,000</b>	<b>\$490,000</b>	<b>\$560,000</b>	<b>\$3,148,500</b>
<b>Net Total</b>		-	-	-	-	-	-

# W&S Facility Program

<b>Project Number:</b>	406.13	<b>Budget Year:</b>	2017
<b>Division:</b>	860 - Transmission/Distribution	<b>Council Priority:</b>	Infrastructure & Growth- Public Facilities & Equip
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Burt Knight	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

**Description:**

A site or sites will be developed to house Water and Sewer construction crews and their equipment for water and sewer.

**Discussion of Progress:**

Planning

**Justification:**

The building that the water crews are currently housed in is in poor condition. Additionally, it is not centrally located and staff have significant travel times to get to the west side of the City.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	-	4,000,000	-	-	-	4,000,000
	<b>Total Revenue</b>	-	\$4,000,000	-	-	-	\$4,000,000
Expense							
8202	Construction	-	4,000,000	-	-	-	4,000,000
	<b>Total Expense</b>	-	\$4,000,000	-	-	-	\$4,000,000
<b>Net Total</b>							
		-	-	-	-	-	-

# Distribution System Model and Master Plan

<b>Project Number:</b>	406.8	<b>Budget Year:</b>	2017
<b>Division:</b>	860 - Transmission/Distribution	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Studies	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Dan Moore	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

**Description:**

Engineering Study to determine what water distribution system improvements are necessary to accommodate future growth.

**Discussion of Progress:**

Planning

**Justification:**

Council priority to plan and develop critical infrastructure. This tool will help facilitate timely and efficient planning to determine the most cost effective improvements required for new development.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	355,000	300,000	-	-	-	655,000
	<b>Total Revenue</b>	<b>\$355,000</b>	<b>\$300,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$655,000</b>
Expense							
8229	Professional Services	300,000	275,000	-	-	-	575,000
8232	Project Management	25,000	25,000	-	-	-	50,000
8240	Testing And Inspection	30,000	-	-	-	-	30,000
	<b>Total Expense</b>	<b>\$355,000</b>	<b>\$300,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$655,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Asset Management System-Water and Sewer

<b>Project Number:</b>	406.7	<b>Budget Year:</b>	2017
<b>Division:</b>	850 - Water General Management	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Transmission & Distribution	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Tony Braun	<b>Budget Unit #:</b>	4060088088541123
<b>Project Status:</b>	Funded		

## Description:

Purchase hardware, software, training and annual support for the asset management program which began in 2014.

## Discussion of Progress:

The asset management system is progressing through the Water Distribution work groups. A staff member was lost to another government agency which has slowed progress. This project will be a multi-year process.

## Justification:

To manage and maintain infrastructure in a more effective and efficient way. Reduce the frequency and cost of emergency repair. Provide condition tracking and risk assessment tools for evaluating the probability and consequence of failure and enable more accurate capital budgeting. This project is being moved from 405-Water New Construction to 406-Water Replacement.

## Revenue Detail:

None

## Impact on Operating Budget:

This is an on-going program to purchase hardware, software, training and annual support for the asset management program which began in 2014. Asset management systems have been updated for the water distribution system, Boyd Lake water treatment plant, and Bellvue water treatment plants.

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	15,000	15,000	15,000	-	-	45,000
	<b>Total Revenue</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>-</b>	<b>-</b>	<b>\$45,000</b>
Expense							
8208	Furniture, Fixtures &	15,000	15,000	15,000	-	-	45,000
	<b>Total Expense</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>\$15,000</b>	<b>-</b>	<b>-</b>	<b>\$45,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Bellvue Raw Water Line Rehabilitation

<b>Project Number:</b>	2156	<b>Budget Year:</b>	2017
<b>Division:</b>	870 - Treatment and Supply	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Treatment	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	Bellvue Filter Plant
<b>Project Manager:</b>	Christie Coleman	<b>Budget Unit #:</b>	4060088084040000
<b>Project Status:</b>	Funded		

**Description:**

This project will rehabilitate and increase the water-carrying capacity of two 20-inch CIP and one 36-inch RCP existing raw water lines from their connection to the city's Poudre River diversion structure to the Bellvue Water Treatment Plant.

**Discussion of Progress:**

Planning

**Justification:**

The 50 to 80 year old pipes are in need of rehabilitation. The project will facilitate the delivery of additional raw water to the Bellvue Water Treatment Plant.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	-	-	373,000	660,000	6,874,300	7,907,300
<b>Total Revenue</b>		-	-	\$373,000	\$660,000	\$6,874,300	\$7,907,300
Expense							
8202	Construction	-	-	-	-	6,808,000	6,808,000
8206	Design Fees	-	-	-	608,000	-	608,000
8214	Legal Publications	-	-	-	-	300	300
8226	Permits, Fees, Etc	-	-	13,000	-	-	13,000
8228	Printing, Copying	-	-	4,000	-	-	4,000
8229	Professional Services	-	-	304,000	-	-	304,000
8232	Project Management	-	-	52,000	52,000	52,000	156,000
8240	Testing And Inspection	-	-	-	-	14,000	14,000
<b>Total Expense</b>		-	-	\$373,000	\$660,000	\$6,874,300	\$7,907,300
<b>Net Total</b>							
		-	-	-	-	-	-

# Bellvue Raw Water Line Permitting

<b>Project Number:</b>	406.23	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Replacement Studies	<b>Regions:</b>	
<b>Fund:</b>	406 - Water Capital Replacement	<b>Location:</b>	Bellvue Water Treatment Plant
<b>Project Manager:</b>	Christie Coleman	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

**Description:**

This budget is for permitting activities related to maintenance upgrades to the Bellvue Raw-water Lines.

**Discussion of Progress:**

Planning

**Justification:**

Since permitting has been very involved for the Northern Segment of the Bellvue Treated-water Line, permitting is anticipated to be very involved for upcoming maintenance to the Bellvue Raw-water Lines as well. Staff believes it would be best to treat permitting as a separate project.

**Revenue Detail:**

No additional information

**Impact on Operating Budget:**

none

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	-	250,000	250,000	-	-	500,000
	<b>Total Revenue</b>	-	\$250,000	\$250,000	-	-	\$500,000
Expense							
8204	Contingency	-	-	25,000	-	-	25,000
8229	Professional Services	-	250,000	225,000	-	-	475,000
	<b>Total Expense</b>	-	\$250,000	\$250,000	-	-	\$500,000
<b>Net Total</b>							
		-	-	-	-	-	-

## 407 – Water Acquisition Fund

# Equalizer

<b>Project Number:</b>	584	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Rights Acquisition	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	407 - Water Rights Acquisition	<b>Location:</b>	Greeley Loveland Irrigation Company land
<b>Project Manager:</b>	Eric Reckentine	<b>Budget Unit #:</b>	4070088088910000
<b>Project Status:</b>	Funded		

**Description:**

This phase of the Lower Equalizer project will secure options to purchase existing or potential gravel pits in the Big Thompson drainage. The Lower Equalizer Project will exchange reusable wastewater effluent down the Poudre River, into the South Platte River and back up the Big Thompson River to be stored, along with junior water storage rights, in proposed reservoirs in the Big Thompson and Poudre River Basins. Water could also be stored in the Lower Equalizer Ponds from the Greeley Loveland Irrigation Company ditch. Stored water could be pumped back to the GLIC system for non-potable irrigation, or released to provide support for non-potable irrigation, exchanges, and augmentation. These are long-term projects. Studies have shown the necessary storage could range up to 2,700 ac/ft and cost from \$6,000 to \$8,000 per acre foot, when complete with inlet and outlet works.

**Discussion of Progress:**

Greeley Loveland Irrigation Company is designing

**Justification:**

Project is adding raw water storage capacity as specified in the Water Master Plan

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
	Fund Balance	50,000	-	-	-	-	50,000
	<b>Total Revenue</b>	<b>\$50,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$50,000</b>
Expense							
8229	Professional Services	50,000	-	-	-	-	50,000
	<b>Total Expense</b>	<b>\$50,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$50,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Overland Trail

<b>Project Number:</b>	1065	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Rights Acquisition	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	407 - Water Rights Acquisition	<b>Location:</b>	Northwest of Fort Collins
<b>Project Manager:</b>	Eric Reckentine	<b>Budget Unit #:</b>	4070088088920000
<b>Project Status:</b>	Funded		

## Description:

The Overland Trail Gravel Pits are located NW of Fort Collins. Greeley and the Tri-Districts purchased half of the gravel pits from Lafarge in 2004. The other half were owned by individual land owners; Greeley and Tri-Districts are purchasing these pits as they are mined out and lined. Ultimately, Greeley's storage will be 2,343 acre-feet. The pits will be used to store potable supplies for the Bellvue filter plant and to meet return flows required by ditch company acquisition. The costs shown are Greeley's portion to be paid to the Tri-Districts which are creating the storage.

## Discussion of Progress:

See description for progress to date

## Justification:

The Water Master Plan intends for the City to develop high quality supplies in the Poudre basin to meet water supply needs prior to the expansion of the Milton Seaman reservoir. The desirable options include building small projects such as the Overland Trail to maximize the value of existing water supplies and of purchased supplies in the future.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
	Fund Balance	435,000	35,000	-	-	-	470,000
	<b>Total Revenue</b>	<b>\$435,000</b>	<b>\$35,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$470,000</b>
Expense							
8212	Land/Building	400,000	-	-	-	-	400,000
8229	Professional Services	20,000	20,000	-	-	-	40,000
8232	Project Management	15,000	15,000	-	-	-	30,000
	<b>Total Expense</b>	<b>\$435,000</b>	<b>\$35,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$470,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-



## Water Acquisition Phase II

<b>Project Number:</b>	581	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Rights Acquisition	<b>Regions:</b>	5- Outside City
<b>Fund:</b>	407 - Water Rights Acquisition	<b>Location:</b>	City wide
<b>Project Manager:</b>	Eric Reckentine	<b>Budget Unit #:</b>	4070088088950000
<b>Project Status:</b>	Funded		

### Description:

Greeley needs additional water supplies for growth. Water Acquisition Phase II is acquisition of 10,000 acre-feet of agricultural water supplies. An enlarged Seaman Reservoir would expand these supplies by another 6,600 acre-feet. Greeley also needs gravel pit storage on the lower Poudre and Big Thompson Rivers to capture reusable effluent in order to extend water supplies. It is estimated that \$90 million is necessary to purchase this water.

### Discussion of Progress:

Ongoing budget, reducing budget to reflect the realities of the water rights market.

### Justification:

The Water Master Plan intended for the City to develop a \$36 million Future Water Account (FWA) and to generally identify the water supplies needed for acquiring 6,000 acre-feet of potable firm yield. Supplies identified as being the best fit for the Greeley water system are selling to other utilities at a rate such that when Greeley can generate funds from the cash-in-lieu of water sales they may no longer be available for purchase. Therefore, if the City is going to secure water for its future growth, an active acquisition program should be implemented.

### Revenue Detail:

The water fund receives varying amounts of revenue by renting the water supplies back to agriculture. The revenue amount varies year to year depending on water availability.

### Impact on Operating Budget:

Water assessment fees increase when the city buys additional shares of ditch company water. The cost varies by the water right acquired.

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
	Fund Balance	6,550,000	6,550,000	6,550,000	6,550,000	6,550,000	32,750,000
	<b>Total Revenue</b>	<b>\$6,550,000</b>	<b>\$6,550,000</b>	<b>\$6,550,000</b>	<b>\$6,550,000</b>	<b>\$6,550,000</b>	<b>\$32,750,000</b>
Expense							
8212	Land/Building	6,500,000	6,500,000	6,500,000	6,500,000	6,500,000	32,500,000
8229	Professional Services	50,000	50,000	50,000	50,000	50,000	250,000
	<b>Total Expense</b>	<b>\$6,550,000</b>	<b>\$6,550,000</b>	<b>\$6,550,000</b>	<b>\$6,550,000</b>	<b>\$6,550,000</b>	<b>\$32,750,000</b>
<b>Net Total</b>		-	-	-	-	-	-

# Greeley Irrigation Company Change

<b>Project Number:</b>	884	<b>Budget Year:</b>	2017
<b>Division:</b>	880 - Water Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Rights Acquisition	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	407 - Water Rights Acquisition	<b>Location:</b>	City wide
<b>Project Manager:</b>	Eric Reckentine	<b>Budget Unit #:</b>	4070088088970000
<b>Project Status:</b>	Funded		

## Description:

This water court case involves the transfer of 77.8 unchanged Greeley Irrigation Company shares from irrigation use to municipal use. Once shares are acquired in the Water Acquisition Program Phase I and II, they must be taken through water court in order to be available for municipal use.

## Discussion of Progress:

Engineering and legal costs are ongoing while the city prepares the change case. This will likely be a multi-year process.

## Justification:

Ditch shares can only be used for municipal uses including augmentation and replacing return flows if they have been changed in court.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
	Fund Balance	150,000	150,000	-	-	-	300,000
	<b>Total Revenue</b>	<b>\$150,000</b>	<b>\$150,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$300,000</b>
Expense							
8229	Professional Services	150,000	150,000	-	-	-	300,000
	<b>Total Expense</b>	<b>\$150,000</b>	<b>\$150,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$300,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Rockwell Ranch Change Case

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<b>Project Number:</b>	407.2	<b>Budget Year:</b>	2017
<b>Division:</b>	850 - Water General Management	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Rights Acquisition	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	407 - Water Rights Acquisition	<b>Location:</b>	City wide
<b>Project Manager:</b>	Eric Reckentine	<b>Budget Unit #:</b>	4070088087020000
<b>Project Status:</b>	Funded		

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**Description:**

File water court application, complete engineering and obtain decree for the change of use of unchanged water rights.

**Discussion of Progress:**

Planning stage

**Justification:**

Ditch and reservoir company shares can only be used for municipal uses including augmentation and replacing return flows if they have been changed in court.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
	Fund Balance	200,000	100,000	-	-	-	300,000
	<b>Total Revenue</b>	<b>\$200,000</b>	<b>\$100,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$300,000</b>
Expense							
8229	Professional Services	200,000	100,000	-	-	-	300,000
	<b>Total Expense</b>	<b>\$200,000</b>	<b>\$100,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$300,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

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# Larimer & Weld Companies Change Case

<b>Project Number:</b>	2164	<b>Budget Year:</b>	2017
<b>Division:</b>	870 - Treatment and Supply	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Rights Acquisition	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	407 - Water Rights Acquisition	<b>Location:</b>	City wide
<b>Project Manager:</b>	Eric Reckentine	<b>Budget Unit #:</b>	4070088084150000
<b>Project Status:</b>	Funded		

**Description:**

File water court application, complete engineering and obtain decree for the change of use of unchanged Larimer and Weld Companies.

**Discussion of Progress:**

Planning

**Justification:**

Ditch and reservoir company shares can only be used for municipal uses including augmentation and replacing return flows if they have been changed in court.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
	Fund Balance	200,000	200,000	200,000	-	-	600,000
	<b>Total Revenue</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>-</b>	<b>-</b>	<b>\$600,000</b>
Expense							
8229	Professional Services	200,000	200,000	200,000	-	-	600,000
	<b>Total Expense</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>-</b>	<b>-</b>	<b>\$600,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Leprino Produced Water Claim

<b>Project Number:</b>	2163	<b>Budget Year:</b>	2017
<b>Division:</b>	870 - Treatment and Supply	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Water Rights Acquisition	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	407 - Water Rights Acquisition	<b>Location:</b>	City wide
<b>Project Manager:</b>	Eric Reckentine	<b>Budget Unit #:</b>	4070088084140000
<b>Project Status:</b>	Funded		

**Description:**

File water court application, complete engineering and obtain decree to claim credit for water produced as a result of cheese production process

**Discussion of Progress:**

Planning

**Justification:**

As a part of the contract to provide water to Leprino, Greeley is responsible for filing an application to claim the credit for water developed as a result of the production of cheese from milk.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
	Fund Balance	200,000	150,000	150,000	-	-	500,000
	<b>Total Revenue</b>	<b>\$200,000</b>	<b>\$150,000</b>	<b>\$150,000</b>	<b>-</b>	<b>-</b>	<b>\$500,000</b>
Expense							
8229	Professional Services	200,000	150,000	150,000	-	-	500,000
	<b>Total Expense</b>	<b>\$200,000</b>	<b>\$150,000</b>	<b>\$150,000</b>	<b>-</b>	<b>-</b>	<b>\$500,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

## 402 – Sewer New Construction Fund

# Additional Sanitary Sewer Manholes

<b>Project Number:</b>	184	<b>Budget Year:</b>	2017
<b>Division:</b>	830 - Sewer Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Construction Collection	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	402 - Sewer Construction	<b>Location:</b>	City wide
<b>Project Manager:</b>	Justin Scholz	<b>Budget Unit #:</b>	4020083083108312
<b>Project Status:</b>	Funded		

**Description:**

This program constructs new manholes that are found to be necessary for safe and efficient access to the sanitary sewer system. As existing sewer lines are inspected, the need for new manholes is often discovered in sewer lines that have limited access, such as cul-de-sacs or line intersections without manholes. The installation of additional manholes allows staff to clean and flush sewer lines efficiently.

**Discussion of Progress:**

Annual program

**Justification:**

As existing sewer lines are inspected, the need for constructing new manholes is discovered, e.g. cul de sac with no manholes, lines intersecting with no manholes, and any other sites where access is required. Without the installation of new manholes the system cannot be properly flushed and cleaned which could lead to backups.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
4611	Development Fees	43,000	53,000	53,000	63,000	63,000	275,000
	<b>Total Revenue</b>	<b>\$43,000</b>	<b>\$53,000</b>	<b>\$53,000</b>	<b>\$63,000</b>	<b>\$63,000</b>	<b>\$275,000</b>
<b>Expense</b>							
8203	Construction - City Depts	10,000	10,000	10,000	10,000	10,000	50,000
8226	Permits, Fees, Etc	500	500	500	500	500	2,500
8232	Project Management	1,000	1,000	1,000	1,000	1,000	5,000
8234	Repair/Maintenance Supplies	30,000	40,000	40,000	50,000	50,000	210,000
8240	Testing And Inspection	1,500	1,500	1,500	1,500	1,500	7,500
	<b>Total Expense</b>	<b>\$43,000</b>	<b>\$53,000</b>	<b>\$53,000</b>	<b>\$63,000</b>	<b>\$63,000</b>	<b>\$275,000</b>
<b>Net Total</b>							

# Sewer Taps

<b>Project Number:</b>	234	<b>Budget Year:</b>	2017
<b>Division:</b>	830 - Sewer Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Construction Collection	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	402 - Sewer Construction	<b>Location:</b>	City wide
<b>Project Manager:</b>	Paul Tucker	<b>Budget Unit #:</b>	4020083083108311
<b>Project Status:</b>	Funded		

**Description:**

This program installs sewer taps for new homes. City crews tap the sewer main and complete the installation of the sewer tap. Due to poor quality work by contractors, the City does not allow contractors to install sewer or water taps.

**Discussion of Progress:**

Annual program

**Justification:**

Water and Sewer specifications require city personnel to make new taps on existing sewer collection mains.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
4611	Development Fees	10,000	10,000	10,000	10,000	10,000	50,000
	<b>Total Revenue</b>	<b>\$10,000</b>	<b>\$10,000</b>	<b>\$10,000</b>	<b>\$10,000</b>	<b>\$10,000</b>	<b>\$50,000</b>
Expense							
8202	Construction	10,000	10,000	10,000	10,000	10,000	50,000
	<b>Total Expense</b>	<b>\$10,000</b>	<b>\$10,000</b>	<b>\$10,000</b>	<b>\$10,000</b>	<b>\$10,000</b>	<b>\$50,000</b>
<b>Net Total</b>		-	-	-	-	-	-

## Poudre Trunk Line Phase 2

<b>Project Number:</b>	544	<b>Budget Year:</b>	2017
<b>Division:</b>	830 - Sewer Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Collection	<b>Regions:</b>	4 - 10 St North/23 Ave West
<b>Fund:</b>	402 - Sewer Construction	<b>Location:</b>	Poudre River from 83rd Avenue to 120th Avenue
<b>Project Manager:</b>	Justin Scholz	<b>Budget Unit #:</b>	4020083083250000
<b>Project Status:</b>	Funded		

### Description:

Design and construct 6,200 feet of 27 inch sewer trunk main along the Poudre River from 83rd Avenue west to 95th Avenue and 4,300 of 18 inch sewer trunk main in 95th Avenue south to 4th Street. This trunk line would serve developments north of 10th street and west of 83rd avenue. This project scheduled for design in 2017 and construction in 2020. Includes Ditch crossing, traffic control for 83rd Avenue, crossing 3 transmission lines, and ground water assumed in WCR 62.

### Discussion of Progress:

Planning

### Justification:

The trunk would provide sewer service to developments north of 10th Street. No sewer service is available currently to serve this area.

### Revenue Detail:

None

### Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
4611	Development Fees	420,000	-	-	2,030,500	-	2,450,500
	<b>Total Revenue</b>	<b>\$420,000</b>	<b>-</b>	<b>-</b>	<b>\$2,030,500</b>	<b>-</b>	<b>\$2,450,500</b>
Expense							
8202	Construction	-	-	-	1,500,000	-	1,500,000
8204	Contingency	-	-	-	300,000	-	300,000
8206	Design Fees	200,000	-	-	100,000	-	300,000
8212	Land/Building	150,000	-	-	30,000	-	180,000
8214	Legal Publications	-	-	-	500	-	500
8216	Miscellaneous	5,000	-	-	5,000	-	10,000
8226	Permits, Fees, Etc	-	-	-	5,000	-	5,000
8229	Professional Services	30,000	-	-	-	-	30,000
8232	Project Management	30,000	-	-	20,000	-	50,000
8240	Testing And Inspection	-	-	-	50,000	-	50,000
9303	Public Art Fund	5,000	-	-	20,000	-	25,000
	<b>Total Expense</b>	<b>\$420,000</b>	<b>-</b>	<b>-</b>	<b>\$2,030,500</b>	<b>-</b>	<b>\$2,450,500</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# 83rd Ave Sewer Project

<b>Project Number:</b>	1038	<b>Budget Year:</b>	2017
<b>Division:</b>	830 - Sewer Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Construction Treatment	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	402 - Sewer Construction	<b>Location:</b>	83rd Avenue/10th Street north to the Poudre trunk line
<b>Project Manager:</b>	Justin Scholz	<b>Budget Unit #:</b>	4020083083340000
<b>Project Status:</b>	Funded		

## Description:

This project will install 5600 linear feet of 18 inch sewer pipe in 83rd avenue from Poudre River Road to a point that is approximately 1/4 mile north of 10th Street. The main will provide sewer service for future developments north of 10th Street. Presently there is no method of transporting sewer flows north to the Poudre Trunk line. The plan would be to begin design in 2018 with construction in 2019. Ditch Crossing and potential right of way acquisition are included.

## Discussion of Progress:

Planning

## Justification:

Should new development occur north of 10th Street and east of 83rd Avenue, this line will provide sewer service to those developments.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
4611	Development Fees	205,000	-	-	1,234,000	-	1,439,000
	<b>Total Revenue</b>	<b>\$205,000</b>	<b>-</b>	<b>-</b>	<b>\$1,234,000</b>	<b>-</b>	<b>\$1,439,000</b>
<b>Expense</b>							
8202	Construction	-	-	-	1,000,000	-	1,000,000
8204	Contingency	-	-	-	160,000	-	160,000
8206	Design Fees	80,000	-	-	-	-	80,000
8212	Land/Building	85,000	-	-	20,000	-	105,000
8214	Legal Publications	-	-	-	500	-	500
8216	Miscellaneous	5,000	-	-	5,000	-	10,000
8226	Permits, Fees, Etc	-	-	-	5,000	-	5,000
8229	Professional Services	20,000	-	-	-	-	20,000
8232	Project Management	15,000	-	-	15,000	-	30,000
8240	Testing And Inspection	-	-	-	20,000	-	20,000
9303	Public Art Fund	-	-	-	8,500	-	8,500
	<b>Total Expense</b>	<b>\$205,000</b>	<b>-</b>	<b>-</b>	<b>\$1,234,000</b>	<b>-</b>	<b>\$1,439,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Highland Capacity Improvement Upper

<b>Project Number:</b>	824	<b>Budget Year:</b>	2017
<b>Division:</b>	820 - Wastewater Collection	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Construction Collection	<b>Regions:</b>	3- 10 St South/23 Ave West
<b>Fund:</b>	402 - Sewer Construction	<b>Location:</b>	16th Street and 47th Avenue
<b>Project Manager:</b>	Justin Scholz	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

**Description:**

The 2008 Sanitary Sewer Master Plan identified based on modeling the existing sanitary sewer from 16th Street to 26th Street in 47th Avenue and in 26th Street and 49th Ave are undersized. The MP recommended 5000 ft (18"), 700 ft (15"), 1500 ft (12") of paralleled existing main. Per the MP this phase of the project will install approximately 4100 ft (18"), 700 ft (15"), and 1500 ft (12") for a total of 6300 ft. Project will require Grapevine Ditch crossing, 47th ave and local street traffic control, crossing transmission lines, bypass pumping.

**Discussion of Progress:**

Planning

**Justification:**

Flows from the T Bone lift station were routed to this sewer main line which wasn't designed to carry these additional flows. Pipe capacity evaluations criteria were developed using d/D (flow depth to pipe diameter) ratings to determine the pipe capacity under wet and dry conditions. The City of Greeley sewer model identified this line as one needing replacement. Staff has continued to monitor the actual flow depths and d/D levels.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
4611	Development Fees	-	-	170,000	1,892,500	-	2,062,500
	<b>Total Revenue</b>	-	-	\$170,000	\$1,892,500	-	\$2,062,500
<b>Expense</b>							
8202	Construction	-	-	-	1,508,000	-	1,508,000
8204	Contingency	-	-	-	300,000	-	300,000
8206	Design Fees	-	-	150,000	-	-	150,000
8214	Legal Publications	-	-	-	500	-	500
8216	Miscellaneous	-	-	-	5,000	-	5,000
8226	Permits, Fees, Etc	-	-	-	1,000	-	1,000
8232	Project Management	-	-	20,000	20,000	-	40,000
8240	Testing And Inspection	-	-	-	40,000	-	40,000
9303	Public Art Fund	-	-	-	18,000	-	18,000
	<b>Total Expense</b>	-	-	\$170,000	\$1,892,500	-	\$2,062,500
<b>Net Total</b>							
		-	-	-	-	-	-

## 403 – Sewer Replacement Fund



# Trenchless Main and Collector Rehabilitation

<b>Project Number:</b>	795	<b>Budget Year:</b>	2017
<b>Division:</b>	830 - Sewer Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Collection	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Justin Scholz	<b>Budget Unit #:</b>	4030083083700000
<b>Project Status:</b>	Funded		

**Description:**

This annual program renews about 1% of the sewer system using cured-in-place pipe. The program focuses on the sewers in the worst condition as identified by the City's TV inspection and by maintenance records.

**Discussion of Progress:**

This is an annual program that primarily occurs over the winter months.

**Justification:**

Each year Sewer Collection identifies existing piping that has severe corrosion issues and rehabilitates that pipe using a cure in place process. If the pipe is not rehabilitated there is the possibility of collapse and sanitary sewer overflows on the streets. This process allows staff to rehabilitate older sewer lines without excavating the street and minimizing disruption to its customers.

**Revenue Detail:**

None

**Impact on Operating Budget:**

Lining sewer pipe has reduced expensive emergency pipe repairs.

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	575,000	732,000	518,000	448,000	448,000	2,721,000
	<b>Total Revenue</b>	<b>\$575,000</b>	<b>\$732,000</b>	<b>\$518,000</b>	<b>\$448,000</b>	<b>\$448,000</b>	<b>\$2,721,000</b>
Expense							
8202	Construction	555,000	705,000	500,000	430,000	430,000	2,620,000
8226	Permits, Fees, Etc	1,000	1,000	1,000	1,000	1,000	5,000
8228	Printing, Copying	1,000	1,000	1,000	1,000	1,000	5,000
8232	Project Management	8,000	1,000	8,000	8,000	8,000	33,000
8240	Testing And Inspection	10,000	15,000	8,000	8,000	8,000	49,000
	<b>Total Expense</b>	<b>\$575,000</b>	<b>\$723,000</b>	<b>\$518,000</b>	<b>\$448,000</b>	<b>\$448,000</b>	<b>\$2,712,000</b>
<b>Net Total</b>		-	\$9,000	-	-	-	\$9,000

# Manhole Rehabilitation

<b>Project Number:</b>	821	<b>Budget Year:</b>	2017
<b>Division:</b>	830 - Sewer Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Collection	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Justin Scholz	<b>Budget Unit #:</b>	4030083083730000
<b>Project Status:</b>	Funded		

## Description:

This program does rehabilitation of various manholes with severe corrosion issues using cementitious materials with minimum disturbance to the surrounding pavement. Manholes are inspected every two years for excessive corrosion and placed on a list to be rehabilitated based on the severity of the corrosion. With completion of coating in 2016 all manholes that are brick have been identified and coated. As manholes are determined to need coating work will be completed every other year as enough manholes are identified to need coating.

## Discussion of Progress:

Ongoing annual program

## Justification:

Manholes are inspected every two years for excessive corrosion and placed on a list to be rehabilitated based on the severity of the corrosion. The rehabilitation of the manholes is essential for the continued flow of sewage and lessens the chances of a sanitary sewer overflow.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	-	55,000	-	55,000	-	110,000
	<b>Total Revenue</b>	-	\$55,000	-	\$55,000	-	\$110,000
Expense							
8202	Construction	-	40,000	-	40,000	-	80,000
8214	Legal Publications	-	200	-	200	-	400
8226	Permits, Fees, Etc	-	800	-	800	-	1,600
8232	Project Management	-	4,000	-	4,000	-	8,000
8240	Testing And Inspection	-	10,000	-	10,000	-	20,000
	<b>Total Expense</b>	-	\$55,000	-	\$55,000	-	\$110,000
<b>Net Total</b>							
		-	-	-	-	-	-

# Lift Station Rehabilitation

<b>Project Number:</b>	1042	<b>Budget Year:</b>	2017
<b>Division:</b>	830 - Sewer Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Collection	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	City Wide
<b>Project Manager:</b>	Justin Scholz	<b>Budget Unit #:</b>	4030083083760000
<b>Project Status:</b>	Funded		

## Description:

This program rehabs existing lift stations based on the facilities condition and updates pumping systems to meet current State requirements. The lift station master plan is used to prioritize projects.

## Discussion of Progress:

Lift Station 15, Purchase of Auto Start in 2015 Design and Construction of Site Improvements 2016.

## Justification:

During the execution of the 2008 Sanitary Sewer Master Plan (SSMP), the City recognized that there was very little information on the condition and hydraulic performance of its lift stations. The assessment determined the remaining useful life and replacement costs. The assessment also identified what systems would need updated to meet compliance with current regulations. Rehab of Lift Station #12 in 2017 backup power, bypass pumping, and consultant recommended repairs.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	595,500	100,000	100,000	100,000	100,000	995,500
	<b>Total Revenue</b>	<b>\$595,500</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$995,500</b>
Expense							
8202	Construction	280,000	-	-	-	-	280,000
8203	Construction - City Depts	110,000	-	-	-	-	110,000
8206	Design Fees	50,000	-	-	-	-	50,000
8214	Legal Publications	500	-	-	-	-	500
8226	Permits, Fees, Etc	5,000	-	-	-	-	5,000
8232	Project Management	20,000	-	-	-	-	20,000
8236	Soils Investigation	5,000	-	-	-	-	5,000
8240	Testing And Inspection	10,000	-	-	-	-	10,000
8244	Capital Equipment >\$5,000	115,000	100,000	100,000	100,000	100,000	515,000
	<b>Total Expense</b>	<b>\$595,500</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$995,500</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Waste Water Collection Manhole and Pipe Rehabilitation

<b>Project Number:</b>	1043	<b>Budget Year:</b>	2017
<b>Division:</b>	830 - Sewer Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Collection	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Tony Braun	<b>Budget Unit #:</b>	4030083083880000
<b>Project Status:</b>	Funded		

**Description:**

This program covers repairs of sanitary sewer manholes and main lines done by Wastewater Collection crews. Examples of these repairs include replacement of existing manholes, point repairs to main lines, purchase of frames and covers, miscellaneous repair parts, drop repairs and installations, channel repairs and other needed repairs to existing infrastructure. The replacement of manhole frames and covers during the City's Asphalt Overlay program are also included.

**Discussion of Progress:**

Annual program

**Justification:**

The existing manholes covers, frames and barrels are damaged over time by traffic. Collections staff investigate existing sanitary systems prior to work being completed by the City's Asphalt Overlay program. The program provides funding for any repairs needed.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	320,000	155,000	115,000	115,000	115,000	820,000
	<b>Total Revenue</b>	<b>\$320,000</b>	<b>\$155,000</b>	<b>\$115,000</b>	<b>\$115,000</b>	<b>\$115,000</b>	<b>\$820,000</b>
Expense							
8202	Construction	20,000	20,000	20,000	20,000	20,000	100,000
8203	Construction - City Depts	25,000	15,000	10,000	10,000	10,000	70,000
8234	Repair/Maintenance Supplies	235,000	120,000	85,000	85,000	85,000	610,000
8244	Capital Equipment >\$5,000	40,000	-	-	-	-	40,000
	<b>Total Expense</b>	<b>\$320,000</b>	<b>\$155,000</b>	<b>\$115,000</b>	<b>\$115,000</b>	<b>\$115,000</b>	<b>\$820,000</b>
<b>Net Total</b>		-	-	-	-	-	-

# Wastewater Flow Monitoring Program

<b>Project Number:</b>	1048	<b>Budget Year:</b>	2017
<b>Division:</b>	830 - Sewer Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Studies	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Justin Scholz	<b>Budget Unit #:</b>	4030083083810000
<b>Project Status:</b>	Funded		

## Description:

Staff will install flow meters on major sewer collection trunk lines throughout the city to monitor flows on its major sewer trunk mains. The monitoring of these flow will help determine the locations of concentrated maintenance efforts.

## Discussion of Progress:

New program

## Justification:

The recorded collection system flows will be used in the City's sanitary sewer model to help determine the operational capacities of the sewer system and focus maintenance efforts.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	50,000	50,000	50,000	50,000	50,000	250,000
	<b>Total Revenue</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$250,000</b>
Expense							
8203	Construction - City Depts	3,000	3,000	3,000	3,000	3,000	15,000
8204	Contingency	7,000	7,000	7,000	7,000	7,000	35,000
8214	Legal Publications	500	500	500	500	500	2,500
8226	Permits, Fees, Etc	500	500	500	500	500	2,500
8229	Professional Services	37,000	37,000	37,000	37,000	37,000	185,000
8232	Project Management	2,000	2,000	2,000	2,000	2,000	10,000
	<b>Total Expense</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$250,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# General Rehabilitation Projects

<b>Project Number:</b>	349	<b>Budget Year:</b>	2017
<b>Division:</b>	830 - Sewer Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Treatment	<b>Regions:</b>	1- 16 St North/35 Ave East
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	Water Pollution Control Facility
<b>Project Manager:</b>	Tom Dingeman	<b>Budget Unit #:</b>	4030083083750000
<b>Project Status:</b>	Funded		

## Description:

A variety of projects that includes such work as the replacement, rehabilitation, or overhaul of large pumps, motors, centrifuge units, gear boxes, air handling units, heat exchangers, variable frequency drive units, landscaping rehab for stormwater program, etc.

## Discussion of Progress:

Annual program. Approximately 70% of all planned rehab projects for 2016 have been completed.

## Justification:

Manufacturer's recommendations, equipment performance, downtime, and repair history; equipment life expectancies; inability to find replacement parts, etc. all enter into the decision as to whether or not a particular item needs to be replaced, repaired, or refurbished. Rehab funds are budgeted annually so that the plant maintenance staff can stay abreast of the need to address aging equipment and infrastructure at the WPCF.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	240,300	160,700	160,700	160,700	160,700	883,100
<b>Total Revenue</b>		<b>\$240,300</b>	<b>\$160,700</b>	<b>\$160,700</b>	<b>\$160,700</b>	<b>\$160,700</b>	<b>\$883,100</b>
Expense							
8208	Furniture, Fixtures &	80,000	70,400	70,400	70,400	70,400	361,600
8214	Legal Publications	300	300	300	300	300	1,500
8229	Professional Services	50,000	90,000	90,000	90,000	90,000	410,000
8234	Repair/Maintenance Supplies	25,000	-	-	-	-	25,000
8244	Capital Equipment >\$5,000	85,000	-	-	-	-	85,000
<b>Total Expense</b>		<b>\$240,300</b>	<b>\$160,700</b>	<b>\$160,700</b>	<b>\$160,700</b>	<b>\$160,700</b>	<b>\$883,100</b>
<b>Net Total</b>							
		-	-	-	-	-	-

## Security Projects-Sewer

<b>Project Number:</b>	403.8	<b>Budget Year:</b>	2017
<b>Division:</b>	810 - Wastewater Treatment	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Treatment	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	Water Pollution Control Facility
<b>Project Manager:</b>	Tom Dingeman	<b>Budget Unit #:</b>	4030083083501121
<b>Project Status:</b>	Funded		

### Description:

Protecting facilities to resist intentional damage at the Water Pollution Control Facility (WPCF).

### Discussion of Progress:

Annual ongoing budget

### Justification:

Since 2001, Federal and State government officials have strongly recommended that wastewater treatment facilities perform vulnerability assessments and adopt measures to 'harden' or secure all areas of their facility. Staff is continuously evaluating and implementing new, cost-effective technologies to keep plant employees safe and protect plant assets. Additional security monitoring equipment, repairs and/or upgrades to existing equipment are performed annually.

### Revenue Detail:

None

### Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	25,000	25,000	25,000	25,000	25,000	125,000
	<b>Total Revenue</b>	<b>\$25,000</b>	<b>\$25,000</b>	<b>\$25,000</b>	<b>\$25,000</b>	<b>\$25,000</b>	<b>\$125,000</b>
Expense							
8208	Furniture, Fixtures &	5,000	5,000	5,000	5,000	5,000	25,000
8214	Legal Publications	300	300	300	300	300	1,500
8229	Professional Services	19,700	19,700	19,700	19,700	19,700	98,500
	<b>Total Expense</b>	<b>\$25,000</b>	<b>\$25,000</b>	<b>\$25,000</b>	<b>\$25,000</b>	<b>\$25,000</b>	<b>\$125,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# WPCF Dewatering Centrifuge Replacement

<b>Project Number:</b>	403.4	<b>Budget Year:</b>	2017
<b>Division:</b>	810 - Wastewater Treatment	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Treatment	<b>Regions:</b>	
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	Water Pollution Control Facility
<b>Project Manager:</b>	Tom Dingeman	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

## Description:

This project would replace the existing 1995 Alfa Laval DS 706 high solids dewatering centrifuge unit located in the Dewatering Building on the South Plant at the Water Pollution Control Facility (WPCF). Equipment evaluation, selection, and design would be performed in 2020 with procurement and installation of a new centrifuge unit in 2021. Lead time on this equipment is generally 7-9 months after the order is placed.

## Discussion of Progress:

Planning

## Justification:

This equipment will serve as a redundant backup unit to the new G3-125 Alfa-Laval dewatering centrifuge that became operational in 2015. Due to aging components, increasing maintenance repairs and downtime, it is anticipated that the DS-706 centrifuge may need to be replaced by 2021. Some repairs were done to the DS-706 centrifuge in December 2015. A new centrifuge would be ~30-40% more energy-efficient than the DS-706.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	-	-	-	136,300	970,000	1,106,300
	<b>Total Revenue</b>	-	-	-	\$136,300	\$970,000	\$1,106,300
Expense							
8202	Construction	-	-	-	-	850,000	850,000
8206	Design Fees	-	-	-	130,000	-	130,000
8214	Legal Publications	-	-	-	300	-	300
8226	Permits, Fees, Etc	-	-	-	3,500	-	3,500
8229	Professional Services	-	-	-	-	120,000	120,000
8240	Testing And Inspection	-	-	-	2,500	-	2,500
	<b>Total Expense</b>	-	-	-	\$136,300	\$970,000	\$1,106,300
<b>Net Total</b>							
		-	-	-	-	-	-

# Replacement of Raw Sewage Pumps (3) at WPCF

<b>Project Number:</b>	832	<b>Budget Year:</b>	2017
<b>Division:</b>	810 - Wastewater Treatment	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Collection	<b>Regions:</b>	1- 16 St North/35 Ave East
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	Water Pollution and Control Facility
<b>Project Manager:</b>	Tom Dingeman	<b>Budget Unit #:</b>	4030083083850000
<b>Project Status:</b>	Funded		

## Description:

This project replaces the three existing Fairbanks Morse vertical turbine raw sewage pumps at the WPCF. In 2021, pump options would be evaluated, followed by a pump selection; then the new pumps would be procured sometime in mid-late 2021 with delivery and installation in mid-2022 due to a long lead time for the manufacture and delivery of the equipment. This critical plant equipment pumps the City's raw sewage from a wet well up into the main wastewater treatment process.

## Discussion of Progress:

Planning

## Justification:

These pumps have been maintained according to the equipment manufacturer's recommendations. Every three years, each pump is sent back to the factory and thoroughly inspected, re-balanced, and worn parts are replaced except for the volute and impeller. These pumps were installed in 1995. Discussions with the manufacturer indicate that total pump replacement may become necessary by 2022. Significant downtime or failure of these pumps could result in a backup of sewage into the collection system (including homes and businesses) east of the plant. One or two of these pumps run continuously with the third pump serving as a backup unit.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	-	-	-	-	1,011,600	1,011,600
	<b>Total Revenue</b>	-	-	-	-	\$1,011,600	\$1,011,600
Expense							
8202	Construction	-	-	-	-	875,000	875,000
8206	Design Fees	-	-	-	-	131,000	131,000
8214	Legal Publications	-	-	-	-	300	300
8226	Permits, Fees, Etc	-	-	-	-	3,800	3,800
8242	Utility Services	-	-	-	-	1,500	1,500
	<b>Total Expense</b>	-	-	-	-	\$1,011,600	\$1,011,600
<b>Net Total</b>							
		-	-	-	-	-	-

# WPCF 900KW Generator Replacement

<b>Project Number:</b>	403.9	<b>Budget Year:</b>	2017
<b>Division:</b>	810 - Wastewater Treatment	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Treatment	<b>Regions:</b>	
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	Water Pollution Control Facility
<b>Project Manager:</b>	Tom Dingeman	<b>Budget Unit #:</b>	4030083083890000
<b>Project Status:</b>	Funded		

## Description:

This project replaces the existing 900KW backup generator located on the North Plant at the Water Pollution Control Facility (WPCF).

## Discussion of Progress:

Planning

## Justification:

The existing North Plant backup generator will be 36 years old in 2021. Due to aging components and its maintenance history, it is anticipated that this generator will need to be replaced by 2021. The typical lifespan for this type of generator is 25-40 years. This generator is a critical piece of plant equipment. When main power is lost to the North Plant, this generator will provide power to run raw sewage pumps, sludge pumps, turbo blowers, clarifier drive motors, UV disinfection system, and other ancillary pumps and motors. A planned turnkey project would add a new generator to the North Plant and help to further maximize the plant's energy savings through Xcel Energy's Interruptible Service Option Credit Program.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	-	-	-	-	708,800	708,800
	<b>Total Revenue</b>	-	-	-	-	\$708,800	\$708,800
Expense							
8202	Construction	-	-	-	-	650,000	650,000
8214	Legal Publications	-	-	-	-	300	300
8226	Permits, Fees, Etc	-	-	-	-	3,500	3,500
8229	Professional Services	-	-	-	-	50,000	50,000
8240	Testing And Inspection	-	-	-	-	5,000	5,000
	<b>Total Expense</b>	-	-	-	-	\$708,800	\$708,800
<b>Net Total</b>		-	-	-	-	-	-

# WPCF Dewatered Sludge Cake Pump Replacement

<b>Project Number:</b>	403.6	<b>Budget Year:</b>	2017
<b>Division:</b>	810 - Wastewater Treatment	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Treatment	<b>Regions:</b>	
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	Water Pollution Control Facility
<b>Project Manager:</b>	Tom Dingeman	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

## Description:

This project replaces the 1996 Schwing sludge cake pump located in the Dewatering Building on the South Plant at the WPCF. This pump delivers solids from the dewatering centrifuge to the sludge hopper for temporary storage or directly to a truck for immediate biosolids land application. This pump will serve as a redundant backup sludge cake pump. The new pump became operational in 2015. Replacement of the old pump is anticipated by 2021. A design project would commence in 2020 to select a new sludge cake pump with procurement and installation of the equipment in 2021. Lead time on this equipment is generally 5-8 months.

## Discussion of Progress:

Planning

## Justification:

The maintenance on the existing pump has increased in recent years. Therefore, a complete pump replacement is anticipated by 2021 based on the equipment's life expectancy, manufacturer's recommendation, and repair/maintenance history. The pump's hydraulic unit was replaced in 2015 and some safety upgrades were added.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	-	-	-	71,800	520,300	592,100
<b>Total Revenue</b>		-	-	-	\$71,800	\$520,300	\$592,100
Expense							
8202	Construction	-	-	-	-	460,000	460,000
8206	Design Fees	-	-	-	70,000	-	70,000
8214	Legal Publications	-	-	-	300	300	600
8226	Permits, Fees, Etc	-	-	-	1,500	-	1,500
8229	Professional Services	-	-	-	-	60,000	60,000
<b>Total Expense</b>		-	-	-	\$71,800	\$520,300	\$592,100
<b>Net Total</b>							
		-	-	-	-	-	-

# WPCF Stream Temperature Assessment Study

<b>Project Number:</b>	403.5	<b>Budget Year:</b>	2017
<b>Division:</b>	810 - Wastewater Treatment	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Studies	<b>Regions:</b>	
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	
<b>Project Manager:</b>	Tom Dingeman	<b>Budget Unit #:</b>	4030083084201122
<b>Project Status:</b>	Funded		

## Description:

This project is a continuation of work that was begun in 2015 in which a pre-hearing statement was prepared and submitted to the Colorado Department of Public Health & Environment (CDPHE). The statement was based in part on a lack of evidence relating in-stream temperature to aquatic life health. It outlines the next steps to eliminate 'uncertainty' in the local stream temperature standards. The ongoing assessment study further investigates the 'uncertainty' regarding the water quality stream standards necessary to protect current and future uses. The scope of work developed is based on the next steps needed to eliminate the uncertainty in the temperature standards. Proposed work includes temperature data assessment, aquatic life data collection and analysis, feasibility studies that analyzes possible alternative temperature management strategies, and regulatory support. Additional fish and benthic data will need to be collected over the next few years per CDPHE's recommendations.

## Discussion of Progress:

This project will require plant staff to collect additional stream data over the next five years. Since this is a regulatory effort that is driven by decisions and direction from the Colorado Water Quality Control Division and Commission, the scope of work could change. The project has commenced and is progressing well. Brown & Caldwell is the consultant.

## Justification:

Failure to meet the current water quality stream standards for temperature may result in the WPCF having to spend several million dollars to design and construct evaporative cooling towers or some other technology to effectively cool the final treated effluent from the wastewater treatment plant prior to its discharge into Segment 12 of the Cache la Poudre River. This technology would be required to meet the current stream standards for temperature. Plant data collected over the past several years indicate that the plant's treated effluent exceeds the current stream standards for this segment of the River often throughout the entire year. A temporary modification request was received in 2015 with the CDPHE. The ultimate goal of this study is to receive site specific standards for stream temperature or a variance by 2020.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	50,000	50,000	50,000	50,000	-	200,000
	<b>Total Revenue</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>-</b>	<b>\$200,000</b>
Expense							
8229	Professional Services	50,000	50,000	50,000	50,000	-	200,000
	<b>Total Expense</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>-</b>	<b>\$200,000</b>
<b>Net Total</b>							
		-	-	-	-	-	-

## Nitrification Project Phase 2

<b>Project Number:</b>	781	<b>Budget Year:</b>	2017
<b>Division:</b>	830 - Sewer Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Treatment	<b>Regions:</b>	1- 16 St North/35 Ave East
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	Water Pollution Control Facility
<b>Project Manager:</b>	Tom Dingeman	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

### Description:

Phase II would include upgrades to the wastewater treatment plant's four aeration basins to provide for biological nutrient reduction (BNR). This project is necessary in order for the WPCF to comply with State of Colorado nutrients regulations promulgated in 2012. The plant will likely have more stringent nutrient limits for total inorganic nitrogen and total phosphorus in its discharge permit by 2017. The construction phase would include all new basin gates, new baffle walls for anoxic and anaerobic zones, instream mixed liquor recycle pumping, new mixing equipment for de-nitrification, additional on-line instrumentation, a second gravity thickener to reduce solids carryover to the BNR process, and a struvite recovery system. The project also includes work to improve primary clarifier performance and provides volatile fatty acids for biological phosphorus removal. A gravity thickener and sludge pumping is added, and the project increases the capacity of the bioreactors (aeration basins). The project is planned for 2019-2020.

### Discussion of Progress:

Planning

### Justification:

This project is driven by the 2012 Colorado Nutrients Regulations which will require the WPCF to comply with total inorganic nitrogen (TIN) and total phosphorus (TP) limits when the plant's discharge permit is renewed in 2017. Project costs have increased to account for current conditions and provide required capacity to meet Regulation 85.

### Revenue Detail:

None

### Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
5638	Funded Depreciation	-	-	956,100	10,279,600	-	11,235,700
	<b>Total Revenue</b>	-	-	\$956,100	\$10,279,600	-	\$11,235,700
<b>Expense</b>							
8202	Construction	-	-	-	9,339,000	-	9,339,000
8206	Design Fees	-	-	934,000	-	-	934,000
8214	Legal Publications	-	-	600	600	-	1,200
8226	Permits, Fees, Etc	-	-	15,000	-	-	15,000
8229	Professional Services	-	-	-	940,000	-	940,000
8240	Testing And Inspection	-	-	5,000	-	-	5,000
8242	Utility Services	-	-	1,500	-	-	1,500
	<b>Total Expense</b>	-	-	\$956,100	\$10,279,600	-	\$11,235,700
<b>Net Total</b>							
		-	-	-	-	-	-

# Water Pollution Control Facility Solids Processing Improvements

<b>Project Number:</b>	403.2	<b>Budget Year:</b>	2017
<b>Division:</b>	830 - Sewer Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Treatment	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	Water Pollution Control Facility
<b>Project Manager:</b>	Tom Dingeman	<b>Budget Unit #:</b>	4030083083940000
<b>Project Status:</b>	Funded		

## Description:

This Project is a continuation of the design work performed in 2015, and includes the 2016-2017 engineering construction management services, equipment procurement costs, and contractor fees for a number of new consolidated sewer capital replacement projects: 1) covers for two primary digesters; 2) mixing system for the primary digesters; 3) boiler heating system for the plant; 4) sludge thickening equipment; 5) conversion of sludge storage tank to a third primary digester; 6) south plant standby generator.

## Discussion of Progress:

The procurement of new equipment and construction services is planned for 2016-2017. In 2016, the estimated engineering construction management services fee is \$615,300, and a power generation package to be covered under the Contractor's fee is estimated at \$464,900. This package will include engineering/design, generation equipment, new switchgear & associated controls, paralleling interconnect, enclosure & cold weather package, testing, concrete pads & site preparation, installation, and training. All project costs were updated in early 2016. Increased project costs have been added to the 2017 budget and is attributed to higher construction cost estimates due to changing market conditions, a more detailed understanding of the project components, higher equipment costs, and added contingency funds for unexpected project occurrences. Engineer's opinion of cost is currently 6.22M.

## Justification:

This continuing work was identified in the 2012 Biosolids Master Plan ("Plan"). The Plan developed a long-term sustainable strategy for the handling, treatment and disposal of the City's wastewater treatment biosolids including a lot of prioritized capital improvement projects and timing as to when those projects would be initiated. The Plan addresses aging equipment and infrastructure deficiencies, equipment redundancy, primary clarifier treatment performance, and future solids handling and treatment needs.

## Revenue Detail:

Sewer depreciation

## Impact on Operating Budget:

May result in more efficient plant operations and potentially lower operating expense.

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	535,400	-	-	-	-	535,400
	<b>Total Revenue</b>	<b>\$535,400</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$535,400</b>
Expense							
8202	Construction	250,000	-	-	-	-	250,000
8204	Contingency	150,000	-	-	-	-	150,000
8214	Legal Publications	400	-	-	-	-	400
8229	Professional Services	130,000	-	-	-	-	130,000
8238	Surveying	2,500	-	-	-	-	2,500
8240	Testing And Inspection	2,500	-	-	-	-	2,500
	<b>Total Expense</b>	<b>\$535,400</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$535,400</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# WPCF Secondary Clarifier Mechanisms Replacement

<b>Project Number:</b>	403.7	<b>Budget Year:</b>	2017
<b>Division:</b>	810 - Wastewater Treatment	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Treatment	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	Water Pollution Control Facility
<b>Project Manager:</b>	Tom Dingeman	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

**Description:**

New secondary (final) clarifier mechanisms with full radius scum trough for two 85' diameter suction header clarifiers, and one 120' diameter suction header clarifier.

**Discussion of Progress:**

Planning

**Justification:**

The existing clarifier mechanisms are over 30 years old and their scum troughs are unable to effectively remove scum and foam from the clarifiers when it accumulates. When foam results from the treatment process, effluent quality is degraded which can potentially lead to permit non-compliances. The new mechanisms are built with elongated scum assemblies, wipers, and scum flushing valves. The existing mechanisms cannot be retrofitted with this new scum removal equipment technology. Also, once the plant commences with the planned biological nutrient removal (BNR) Phase II project, foam mitigation for the aeration basins and secondary clarifiers will become very important and necessary. It is recommended that this project be included as a part of the 2018-2019 Nitrification (BNR) Phase II project.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
5638	Funded Depreciation	-	-	138,570	978,800	-	1,117,370
	<b>Total Revenue</b>	-	-	\$138,570	\$978,800	-	\$1,117,370
<b>Expense</b>							
8202	Construction	-	-	-	883,800	-	883,800
8206	Design Fees	-	-	133,570	-	-	133,570
8226	Permits,Fees, Etc	-	-	2,500	-	-	2,500
8229	Professional Services	-	-	-	95,000	-	95,000
8240	Testing And Inspection	-	-	2,500	-	-	2,500
	<b>Total Expense</b>	-	-	\$138,570	\$978,800	-	\$1,117,370
<b>Net Total</b>							
		-	-	-	-	-	-

# Sanitary Sewer Master Plan Update

<b>Project Number:</b>	247	<b>Budget Year:</b>	2017
<b>Division:</b>	830 - Sewer Capital Improvement	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Studies	<b>Regions:</b>	0 - Multiple Wards
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	City wide
<b>Project Manager:</b>	Justin Scholz	<b>Budget Unit #:</b>	4030083083580000
<b>Project Status:</b>	Funded		

**Description:**

Update the existing master plan to analyze the existing infrastructure with future development and growth within the City of Greeley.

**Discussion of Progress:**

Initiate updates to Masterplan in 2018

**Justification:**

The goals of the updated master plan are to refine the existing models to include newly constructed infrastructure, reevaluate capacity issues with the existing system and with future development based on the most recent master plan, and provide recommendations for capital improvements. The master plan will provide sanitary sewer basins to assist in determining how proposed developments will be served. Includes update to 208 Utility Report.

**Revenue Detail:**

None

**Impact on Operating Budget:**

None

GL	Description	2017	2018	2019	2020	2021	Total
Revenue							
5638	Funded Depreciation	-	605,000	-	-	-	605,000
	<b>Total Revenue</b>	-	\$605,000	-	-	-	\$605,000
Expense							
8206	Design Fees	-	550,000	-	-	-	550,000
8228	Printing, Copying	-	5,000	-	-	-	5,000
8232	Project Management	-	50,000	-	-	-	50,000
	<b>Total Expense</b>	-	\$605,000	-	-	-	\$605,000
<b>Net Total</b>							
		-	-	-	-	-	-



# WPCF Solids Handling & Treatment Master Plan Update

<b>Project Number:</b>	1046	<b>Budget Year:</b>	2017
<b>Division:</b>	810 - Wastewater Treatment	<b>Council Priority:</b>	Infrastructure & Growth- Environmental Infrast'r
<b>Project Type:</b>	Sewer Replacement Treatment	<b>Regions:</b>	1- 16 St North/35 Ave East
<b>Fund:</b>	403 - Sewer Capital Replacement	<b>Location:</b>	Water Pollution Control Facility
<b>Project Manager:</b>	Tom Dingeman	<b>Budget Unit #:</b>	Unassigned
<b>Project Status:</b>	Funded		

## Description:

Update the 2012 Water Pollution Control Facility (WPCF) biosolids master plan every 5 years, and incorporate the necessary changes for the planning, prioritization of work, and budgeting of future plant projects. The updated study would include such items as exploring options for the de-commissioning of the aging digester building and the three secondary anaerobic digester tanks, sludge storage tank conversion to a third primary anaerobic digester, options for additional onsite sludge storage, biogas utilization, energy conservation, solids reduction technologies, etc.

## Discussion of Progress:

Updated every five years. The next update will be done in 2017. Early planning of project will commence in late 2016.

## Justification:

To keep the master plan current with new regulations, treatment technologies, equipment, project priorities and available funding. To further reduce energy and annual operation & maintenance (O&M) costs at the WPCF.

## Revenue Detail:

None

## Impact on Operating Budget:

None

GL	Description	2017	2018	2019	2020	2021	Total
<b>Revenue</b>							
5638	Funded Depreciation	340,300	-	-	-	-	340,300
	<b>Total Revenue</b>	<b>\$340,300</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$340,300</b>
<b>Expense</b>							
8206	Design Fees	340,000	-	-	-	-	340,000
8214	Legal Publications	300	-	-	-	-	300
	<b>Total Expense</b>	<b>\$340,300</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$340,300</b>
<b>Net Total</b>							
		-	-	-	-	-	-

# Water Operating Budget

2017-2018

### Detail Expenditures for Water Fund 404

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
Administration	Regular Employees	393,936	470,292	503,755	627,069	664,153	Operations Manager filled
	Salaries & Wages - Seasonal	6,623	-	-	-	-	
	Overtime-Regular	10,160	5,000	5,000	10,000	10,000	
	Accrued Payroll	494	-	-	-	-	
	Disability	1,734	1,927	2,267	3,294	3,662	
	Health	48,706	98,272	108,065	123,849	138,629	
	Life	1,005	789	874	1,308	1,441	
	Dental	2,063	2,940	3,174	3,861	3,930	
	Workers Compensation	1,784	4,843	5,778	2,211	2,455	
	General Employees	15,675	18,811	20,150	25,084	26,564	
	401K	6,069	9,407	10,075	12,041	12,751	
	FICA	23,979	29,159	31,232	38,879	41,178	
	Medicare	5,729	6,819	7,305	9,094	9,632	
	Office Supplies & Materials	7,370	10,000	10,000	10,000	10,000	
	Medical/Chemical	10	-	-	-	-	
	Clothing And Uniforms	196	-	-	-	-	
	Fleet Fuel	222	887	927	357	370	
	Other Operating Supplies	14,239	5,450	5,450	10,000	10,000	
	Machinery,Vehicle & Equipment Parts	4	-	-	-	-	
	General Maint Supplies	80	1,400	1,400	500	500	
	Small Items Of Equipment \$100 - \$5,000	146,538	145,687	5,000	5,000	5,000	
	Postage	3,310	3,050	3,050	3,150	3,150	
	Advertising	413	1,000	1,000	1,000	1,000	
	In-House Copying	9,761	10,000	10,000	11,000	11,000	
	Outside Printing	6,289	4,500	4,500	6,000	6,000	
	Publications, Subscriptions, and Dues	12,603	20,000	20,000	18,000	18,000	
	Water/Sewer/Stormwater	17,441	15,750	15,750	18,500	18,500	
	Telephone	3,833	3,000	3,000	4,000	4,000	
	Other Professional Services - White collar	56,353	79,170	79,170	79,170	79,170	
	Equipment Maintenance Charges	1,012	2,500	2,500	1,178	1,260	
	Other Repair Maintenance Services	2,864	400	400	400	400	
	Hotel & Motel	300	600	600	1,000	1,000	
	Meals	66	200	200	200	200	
	Air Travel	696	-	-	-	-	
	Mileage	1,573	1,300	1,300	1,300	1,300	
	Other Travel	106	-	-	-	-	
	Registration	4,935	10,000	10,000	10,000	10,000	
	Other Purchased Services - Blue Collar	3,468	2,150	2,150	3,500	3,500	
	Rent	96,690	94,800	94,800	96,000	97,000	
	Bank/Investment Charges	104,609	135,000	135,000	135,000	135,000	
	Miscellaneous	1,735	-	-	-	-	

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
	Grants-Outside Public Agency	1,050	-	-	-	-	
	Bad Debt Expenses	(857)	-	-	-	-	
<b>Administration Total</b>		<b>1,014,865</b>	<b>1,195,103</b>	<b>1,103,872</b>	<b>1,271,945</b>	<b>1,330,745</b>	
Engineering	Regular Employees	146,761	146,889	8,346	262,482	281,934	Chief Engineer filled
	Salaries & Wages - Seasonal	5,942	6,400	6,400	6,400	6,400	
	Termination Leave Payout	11,653	-	-	-	-	
	Overtime-Regular	126	-	-	-	-	
	Accrued Payroll	2,414	-	-	-	-	
	Disability	571	1,932	1,917	1,593	1,810	
	Health	15,452	69,024	63,038	39,104	45,392	
	Life	326	760	713	514	588	
	Dental	555	2,065	1,852	1,126	1,140	
	Workers Compensation	4,382	14,561	12,273	4,175	5,059	
	General Employees	5,473	18,846	17,044	11,310	12,111	
	401K	2,737	9,422	6,874	5,343	5,726	
	FICA	9,416	29,212	21,313	16,675	17,894	
	Medicare	2,202	6,832	4,985	3,901	4,187	
	Office Supplies & Materials	329	1,100	1,100	1,100	1,100	
	Fleet Fuel	1,694	2,380	2,485	1,842	1,914	
	Other Operating Supplies	780	200	200	500	500	
	Machinery,Vehicle & Equipment Parts	56	150	150	150	150	
	Small Items Of Equipment \$100 - \$5,000	2,224	1,000	1,000	1,500	1,500	
	Postage	-	150	150	150	150	
	Advertising	36	300	300	150	150	
	Outside Printing	78	1,500	1,500	750	750	
	Publications, Subscriptions, and Dues	496	2,500	2,500	2,500	2,500	
	Telephone	12,472	4,200	4,200	4,200	4,200	
	Architectural/Engineering	-	15,000	12,000	15,000	15,000	
	Other Professional Services - White collar	-	19,000	22,000	19,000	19,000	
	Equipment Maintenance Charges	2,073	6,000	6,000	6,073	6,498	
	Other Repair Maintenance Services	-	300	300	-	-	
	Hotel & Motel	-	-	-	1,200	1,200	
	Meals	-	205	205	300	300	
	Air Travel	-	500	500	1,000	1,000	
	Mileage	109	-	-	500	500	
	Other Travel	17	-	-	100	100	
	Registration	3,555	5,060	5,060	5,060	5,060	
	Other Purchased Services - Blue Collar	-	200	200	12,000	12,000	
	Rent	63	-	-	-	-	
<b>Engineering Total</b>		<b>231,991</b>	<b>365,688</b>	<b>204,605</b>	<b>425,698</b>	<b>455,813</b>	

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
Utility Construction Inspection	Regular Employees	54,988	61,438	94,696	51,529	56,104	
	Termination Leave Payout	2,736	-	-	-	-	
	Overtime-Regular	1,992	-	-	-	-	
	Accrued Payroll	(711)	-	-	-	-	
	Disability	216	252	427	354	409	
	Health	11,770	11,700	19,299	11,623	13,641	
	Life	137	101	163	102	121	
	Dental	317	350	567	326	328	
	Workers Compensation	1,316	1,148	2,358	223	401	
	General Employees	2,156	2,457	3,786	2,376	2,569	
	401K	1,078	1,229	1,896	1,107	1,199	
	FICA	3,512	3,809	5,871	3,351	3,639	
	Medicare	821	890	1,373	785	850	
	Office Supplies & Materials	59	150	150	150	150	
	Medical/Chemical	46	30	30	30	30	
	Clothing And Uniforms	720	1,740	1,740	1,740	1,740	
	Fleet Fuel	5,754	6,300	6,552	3,673	3,817	
	Other Operating Supplies	493	150	150	150	150	
	General Maint Supplies	14	50	50	50	50	
	Small Items Of Equipment \$100 - \$5,000	446	120	120	120	120	
	In-House Copying	196	150	150	150	150	
	Outside Printing	16	25	25	25	25	
	Publications, Subscriptions, and Dues	-	441	441	441	441	
	Telephone	1,038	750	750	750	750	
	Equipment Maintenance Charges	6,204	3,450	3,450	4,607	4,929	
	Hotel & Motel	-	250	250	500	500	
	Meals	113	-	-	-	-	
	Air Travel	-	150	150	150	150	
Other Travel	18	-	-	-	-		
Registration	280	1,610	1,610	1,985	1,700		
Other Purchased Services - Blue Collar	320	-	-	-	-		
<b>Utility Construction Inspection Total</b>		<b>96,049</b>	<b>98,740</b>	<b>146,054</b>	<b>86,297</b>	<b>93,963</b>	
Service and Meters	Regular Employees	231,404	222,675	233,177	249,453	264,205	
	Salaries & Wages - Seasonal	-	16,800	-	-	-	
	Overtime-Regular	5,899	5,425	5,425	7,875	8,400	
	Accrued Payroll	1,377	-	-	-	-	
	Disability	977	912	1,051	1,310	1,458	
	Health	50,634	64,345	70,757	68,118	76,247	
	Life	581	393	425	542	595	
	Dental	1,787	1,925	2,079	2,123	2,161	
Workers Compensation	9,440	7,233	7,761	9,821	10,931		

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
	Worker Compensation/Seasonal	-	363	-	375	375	
	General Employees	8,868	8,908	9,326	9,979	10,567	
	401K	4,434	4,453	4,663	4,791	5,071	
	FICA	13,081	13,805	14,456	15,465	16,381	
	FICA Seasonal	-	1,286	-	1,285	1,285	
	Medicare	3,059	3,228	3,380	3,618	3,831	
	Office Supplies & Materials	36	300	300	315	315	
	Medical/Chemical	67	300	300	315	315	
	Clothing And Uniforms	2,235	2,250	2,250	2,350	2,350	
	Fleet Fuel	10,057	17,887	18,676	11,976	12,445	
	Other Operating Supplies	15,190	2,950	2,950	5,100	5,100	
	Machinery,Vehicle & Equipment Parts	124	1,033	1,033	1,033	1,033	
	Water,Sewer,Irrigation Line Repair Parts	3,812	8,000	8,360	8,360	8,610	
	General Maint Supplies	2,795	12,300	12,854	12,850	12,850	
	Small Items Of Equipment \$100 - \$5,000	895	3,700	3,700	3,700	3,800	
	Postage	3	30	30	30	30	
	In-House Copying	238	-	-	-	-	
	Outside Printing	699	250	250	350	350	
	Publications, Subscriptions, and Dues	-	300	300	50	50	
	Electric	2,860	4,860	4,860	5,000	5,200	
	Natural Gas	-	5,304	5,304	5,500	5,700	
	Telephone	1,698	2,730	2,730	2,100	2,100	
	Other Professional Services - White collar	840	12,000	12,000	2,100	2,100	
	Equipment Maintenance Charges	10,197	10,450	10,920	5,616	6,009	
	Other Repair Maintenance Services	-	300	300	310	310	
	Registration	95	150	150	1,025	1,025	
	Other Purchased Services - Blue Collar	103	3,099	3,099	10,300	10,300	
	Rent	2,640	3,148	3,148	3,200	3,200	
<b>Service and Meters Total</b>		<b>386,125</b>	<b>443,092</b>	<b>446,014</b>	<b>456,335</b>	<b>484,699</b>	
Transmission-Reservoir	Regular Employees	368,025	325,078	380,215	409,718	433,949	
	Salaries & Wages - Seasonal	21,177	17,500	18,200	19,300	19,300	
	Overtime-Regular	41,308	22,505	23,293	24,000	24,725	
	Accrued Payroll	1,092	-	-	-	-	
	Disability	1,594	1,332	1,712	2,152	2,393	
	Health	72,294	81,893	90,055	86,695	97,041	
	Life	940	562	669	861	950	
	Dental	2,280	2,450	2,646	2,702	2,751	
	Workers Compensation	17,640	10,798	12,433	17,618	19,614	
	Worker Compensation/Seasonal	-	1,610	1,610	1,700	1,700	
	General Employees	14,474	13,003	15,207	16,389	17,358	
	401K	7,237	6,502	7,605	7,866	8,333	

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
	FICA	25,209	20,154	23,573	25,403	26,905	
	FICA Seasonal	-	1,339	1,393	1,450	1,450	
	Medicare	5,896	4,714	5,511	5,941	6,292	
	Office Supplies & Materials	1,791	2,262	2,262	2,350	2,350	
	Medical/Chemical	34,511	37,015	38,680	43,780	45,100	
	Clothing And Uniforms	5,198	5,790	6,060	6,250	6,400	
	Gas And Diesel Fuel	41	-	-	-	-	
	Fleet Fuel	16,277	31,969	33,369	18,161	18,871	
	Other Operating Supplies	5,391	4,000	4,000	5,550	5,700	
	Machinery,Vehicle & Equipment Parts	1,153	3,600	3,600	3,800	3,800	
	Water,Sewer,Irrigation Line Repair Parts	10,128	12,000	12,360	12,900	12,900	
	General Maint Supplies	29,554	22,000	22,000	23,000	23,000	
	Street & Traffic Repair and Maintenance Supplies	1,584	1,000	1,000	1,600	1,600	
	Plant Materials	816	1,000	1,000	1,050	1,050	
	Small Items Of Equipment \$100 - \$5,000	4,375	6,204	6,204	5,400	5,400	
	Postage	56	10	10	50	50	
	In-House Copying	679	170	170	725	725	
	Outside Printing	152	142	142	150	150	
	Publications, Subscriptions, and Dues	335	814	814	825	825	
	Electric	160,917	243,280	243,280	250,000	257,500	
	Natural Gas	5,034	7,210	7,210	7,210	7,400	
	Telephone	13,796	13,070	13,070	13,800	14,200	
	Other Utility	647	574	574	680	680	
	Other Professional Services - White collar	-	2,737	2,737	2,800	2,800	
	Machine, Vehicle, Equipment	2,601	1,000	1,000	2,700	2,700	
	Equipment Maintenance Charges	23,132	18,499	19,050	25,834	27,642	
	Buildings	-	2,000	2,000	850	875	
	Streets, Roads, Traffic Lights	-	2,000	2,000	1,000	655	
	Other Repair Maintenance Services	718	1,093	1,093	1,450	2,550	
	Hotel & Motel	216	-	-	-	-	
	Meals	99	-	-	-	-	
	Mileage	20	-	-	-	-	
	Registration	7,594	5,283	5,283	8,050	8,050	
	Other Purchased Services - Blue Collar	10,565	7,775	7,775	10,750	10,750	
	Rent	2,663	4,125	4,125	4,300	4,300	
<b>Transmission-Reservoir Total</b>		<b>919,205</b>	<b>946,062</b>	<b>1,024,990</b>	<b>1,076,810</b>	<b>1,130,784</b>	
Distribution	Regular Employees	667,416	650,480	844,886	1,012,180	1,064,647	Operations re-organization moved positions here
	Termination Leave Payout	1,558	-	-	-	-	
	Overtime-Regular	119,052	120,000	124,200	129,925	133,850	
	Accrued Payroll	(1,712)	-	-	-	-	

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
	Disability	2,945	2,665	3,242	4,656	5,182	
	Health	158,357	175,485	205,840	210,544	235,670	
	Life	1,723	1,139	1,302	1,893	2,074	
	Dental	5,668	5,250	6,048	6,562	6,682	
	Workers Compensation	30,747	23,831	27,745	37,968	42,265	
	General Employees	26,280	26,018	28,792	35,486	37,587	
	401K	12,398	13,011	14,397	17,034	18,038	
	FICA	45,399	40,327	44,631	55,001	58,261	
	Medicare	10,617	9,429	10,437	12,865	13,622	
	Office Supplies & Materials	509	1,543	1,543	1,600	1,600	
	Medical/Chemical	4,879	1,234	1,234	1,300	1,300	
	Clothing And Uniforms	13,823	13,210	13,210	14,000	14,000	
	Gas And Diesel Fuel	137	-	-	-	-	
	Fleet Fuel	44,945	73,775	76,884	50,877	55,532	
	Other Operating Supplies	4,103	3,568	3,568	3,750	3,750	
	Machinery,Vehicle & Equipment Parts	3,701	9,153	9,153	9,700	9,700	
	Water,Sewer,Irrigation Line Repair Parts	3,955	12,000	13,230	13,400	13,400	
	General Maint Supplies	22,390	20,000	20,000	21,300	21,300	
	Street & Traffic Repair and Maintenance Supplies	10,695	26,125	26,125	20,600	20,600	
	Plant Materials	-	70	70	70	70	
	Small Items Of Equipment \$100 - \$5,000	2,710	6,200	6,200	6,325	6,325	
	Postage	35	45	45	45	45	
	In-House Copying	2,553	4,068	4,068	4,150	4,150	
	Outside Printing	169	356	356	365	365	
	Publications, Subscriptions, and Dues	941	311	311	325	325	
	Electric	3,913	5,868	6,337	6,600	6,600	
	Natural Gas	4,823	4,223	4,223	4,400	4,400	
	Telephone	5,867	6,420	6,420	6,650	6,650	
	Other Utility	-	60	60	60	60	
	Other Professional Services - White collar	19,633	32,740	35,356	31,000	31,000	
	Machine, Vehicle, Equipment	760	3,000	3,000	3,125	3,125	
	Equipment Maintenance Charges	95,058	74,000	76,000	95,471	102,154	
	Buildings	1,458	120	120	120	120	
	Streets, Roads, Traffic Lights	18,719	51,742	54,070	51,500	51,500	
	Other Repair Maintenance Services	445	1,000	1,000	1,050	1,050	
	Mileage	545	500	500	515	515	
	Registration	11,032	5,500	6,143	11,800	11,800	
	Other Purchased Services - Blue Collar	41,270	17,000	17,500	30,500	30,500	
	Rent	1,337	1,500	1,500	1,550	1,550	
<b>Distribution Total</b>		<b>1,400,854</b>	<b>1,442,966</b>	<b>1,699,746</b>	<b>1,916,262</b>	<b>2,021,364</b>	

Inventory	Inventory	324,847	232,158	232,158	275,000	275,000	Offset by inventory sales
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Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
<b>Inventory Total</b>		<b>324,847</b>	<b>232,158</b>	<b>232,158</b>	<b>275,000</b>	<b>275,000</b>	
<b>Non-Potable Operations</b>							
	Regular Employees	142,420	189,442	153,139	158,731	168,119	
	Salaries & Wages - Seasonal	23,783	18,400	18,400	18,950	19,500	
	Overtime-Regular	8,211	8,000	8,000	8,250	8,500	
	Accrued Payroll	(1,528)	-	-	-	-	
	Disability	586	777	689	834	927	
	Health	40,071	46,796	38,595	37,155	41,589	
	Life	351	328	273	337	372	
	Dental	695	1,400	1,134	1,158	1,179	
	Workers Compensation	6,977	6,764	5,468	6,826	7,600	
	Worker Compensation/Seasonal	-	1,058	1,058	1,100	1,100	
	General Employees	5,288	7,577	6,126	6,350	6,724	
	401K	2,644	3,790	3,063	3,048	3,228	
	FICA	10,155	11,745	9,495	9,842	10,423	
	FICA Seasonal	-	1,408	1,408	1,500	1,500	
	Medicare	2,375	2,746	2,221	2,302	2,439	
	Office Supplies & Materials	20	422	422	450	450	
	Medical/Chemical	737	3,300	3,300	2,150	2,150	
	Clothing And Uniforms	1,890	4,540	4,540	4,650	4,800	
	Fleet Fuel	10,389	16,665	17,394	11,498	11,948	
	Other Operating Supplies	1,137	1,028	1,028	1,050	1,050	
	Machinery,Vehicle & Equipment Parts	2,093	11,490	11,490	12,000	12,000	
	Water,Sewer,Irrigation Line Repair Parts	2,215	1,340	1,340	1,400	1,400	
	General Maint Supplies	10,968	17,168	17,168	17,700	18,200	
	Street & Traffic Repair and Maintenance Supplies	21	2,159	2,159	2,250	2,250	
	Plant Materials	51	514	514	530	560	
	Small Items Of Equipment \$100 - \$5,000	13,290	6,500	6,500	6,800	6,800	
	Postage	-	100	100	100	100	
	In-House Copying	149	-	-	-	-	
	Outside Printing	-	93	93	100	100	
	Publications, Subscriptions, and Dues	-	450	450	475	475	
	Electric	207,281	395,443	427,078	440,000	440,000	
	Telephone	3,755	6,680	6,680	6,900	6,900	
	Other Utility	-	31	31	35	35	
	Other Professional Services - White collar	-	411	411	425	425	
	Equipment Maintenance Charges	12,118	22,648	25,164	16,848	18,027	
	Grounds	-	514	514	525	525	
	Buildings	-	2,159	2,159	2,250	2,250	
	Other Repair Maintenance Services	3,566	10,620	10,620	11,000	11,000	
	Registration	2,500	5,000	5,000	5,200	5,200	
	Other Purchased Services - Blue Collar	10,311	9,250	9,250	11,000	11,000	

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
	Rent	2,654	2,196	2,196	2,300	2,300	
	Transportation/Vehicles	34,147	50,000	-	-	-	
<b>Non-Potable Operations Total</b>		<b>561,320</b>	<b>870,952</b>	<b>804,670</b>	<b>814,019</b>	<b>833,145</b>	
Water Resources	Regular Employees	542,161	908,315	1,054,040	704,765	749,152	Vacancies not budgeted
	Termination Leave Payout	15,457	-	-	-	-	
	Overtime-Regular	66	-	-	-	-	
	Accrued Payroll	1,158	-	-	-	-	
	Disability	2,391	3,726	4,741	3,849	4,307	
	Health	56,998	128,680	154,371	100,902	114,067	
	Life	1,320	1,460	1,758	1,415	1,576	
	Dental	1,683	3,763	4,442	2,929	2,978	
	Workers Compensation	15,731	21,767	26,373	21,943	24,712	
	General Employees	22,313	36,332	42,161	28,748	30,541	
	401K	9,562	18,167	21,081	13,739	14,599	
	FICA	34,796	56,316	65,351	43,971	46,733	
	Medicare	8,138	13,171	15,285	10,285	10,930	
	Office Supplies & Materials	444	515	515	540	540	
	Medical/Chemical	20	-	-	-	-	
	Other Operating Supplies	1,767	1,000	1,000	1,060	1,060	
	General Maint Supplies	91	-	-	-	-	
	Small Items Of Equipment \$100 - \$5,000	5,063	17,500	17,500	17,500	1,800	
	Postage	9	-	-	-	-	
	Advertising	504	-	-	-	-	
	Outside Printing	55	-	-	-	-	
	Publications, Subscriptions, and Dues	2,711	1,200	1,200	2,700	2,700	
	Electric	25,754	45,000	45,000	55,000	55,000	
	Water/Sewer/Stormwater	1,520	1,729	1,791	1,850	1,900	
	Natural Gas	-	-	-	-	-	
	Telephone	6,125	6,508	6,703	6,900	7,100	
	Legal	275,768	300,000	300,000	300,000	300,000	
	Architectural/Engineering	292,444	300,000	300,000	300,000	300,000	
	Other Professional Services - White collar	1,691	-	-	-	-	
	Hotel & Motel	2,004	-	-	2,000	2,000	
	Meals	372	-	-	-	-	
	Mileage	5,368	7,000	7,000	7,000	7,000	
	Other Travel	1,890	1,240	1,240	1,240	1,240	
	Registration	14,702	10,100	10,100	10,100	10,100	
	Other Purchased Services - Blue Collar	6	1,658	1,658	1,750	1,750	
	Assessment Fees	3,149,320	3,621,000	3,978,000	2,920,000	2,920,000	Original Windy Gap debt payment completed in 2016
	Grants-Outside Public Agency	1,800	-	-	-	-	

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
<b>Water Resources Total</b>		<b>4,501,201</b>	<b>5,506,147</b>	<b>6,061,310</b>	<b>4,560,186</b>	<b>4,611,785</b>	
Bellvue Filter Plant	Regular Employees	545,064	567,860	527,852	640,191	678,052	Filling vacant operator position
	Salaries & Wages - Seasonal	13,860	26,000	52,000	52,000	52,000	
	Overtime-Regular	47,844	4,000	4,000	4,000	4,000	
	Accrued Payroll	2,013	-	-	-	-	
	Disability	2,327	2,327	2,378	3,362	3,739	
	Health	74,214	116,990	115,785	117,657	131,698	
	Life	1,350	954	917	1,327	1,464	
	Dental	2,705	3,500	3,402	3,667	3,734	
	Workers Compensation	24,371	20,275	18,845	27,527	30,650	
	Worker Compensation/Seasonal	-	658	658	658	658	
	General Employees	21,325	22,712	21,112	25,609	27,120	
	401K	9,978	11,357	10,559	12,293	13,018	
	FICA	35,606	35,208	32,727	39,692	42,039	
	FICA Seasonal	-	875	875	875	875	
	Medicare	8,327	8,235	7,654	9,284	9,832	
	Office Supplies & Materials	642	1,200	1,200	1,200	1,200	
	Medical/Chemical	640,879	731,451	820,000	826,000	826,000	
	Clothing And Uniforms	3,671	3,500	3,500	4,050	4,050	
	Gas And Diesel Fuel	1,752	-	-	-	-	
	Fleet Fuel	7,159	16,206	16,784	7,749	8,052	
	Other Operating Supplies	721	2,050	2,050	2,050	2,050	
	Machinery,Vehicle & Equipment Parts	10,432	23,137	23,137	23,137	23,137	
	Water,Sewer,Irrigation Line Repair Parts	485	1,025	1,025	1,025	1,025	
	General Maint Supplies	31,381	15,420	15,420	31,000	31,000	
	Street & Traffic Repair and Maintenance Supplies	-	150	150	2,000	150	
	Plant Materials	52	250	250	250	250	
	Small Items Of Equipment \$100 - \$5,000	8,324	18,800	18,800	18,800	18,800	
	Postage	5	100	100	100	100	
	Advertising	-	100	100	500	500	
	In-House Copying	185	350	350	500	500	
	Outside Printing	-	150	150	150	150	
	Publications, Subscriptions, and Dues	175	600	600	600	600	
	Electric	123,149	145,000	155,000	155,000	162,750	
	Natural Gas	5,998	41,200	41,200	41,200	41,200	
	Telephone	6,633	7,200	7,200	15,000	15,000	
	Other Utility	1,156	2,500	2,500	2,500	2,500	
	Other Professional Services - White collar	5,803	7,910	7,910	7,910	7,910	
	Machine, Vehicle, Equipment	5,258	-	-	-	-	
	Equipment Maintenance Charges	5,353	10,800	10,800	10,108	10,816	
	Buildings	2,123	2,050	2,050	2,200	2,200	

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
	Streets, Roads, Traffic Lights	-	500	500	500	500	
	Other Repair Maintenance Services	40	4,100	4,100	10,000	10,000	
	Hotel & Motel	107	-	-	-	-	
	Meals	9	-	-	-	-	
	Mileage	362	-	-	-	-	
	Registration	1,135	9,000	9,000	9,000	9,000	
	Other Purchased Services - Blue Collar	106,948	160,000	90,000	120,000	120,000	
	Rent	1,343	3,000	3,000	3,000	3,000	
<b>Bellvue Filter Plant Total</b>		<b>1,760,263</b>	<b>2,028,700</b>	<b>2,035,640</b>	<b>2,233,671</b>	<b>2,301,319</b>	
High Mountain Reservoirs	Regular Employees	186,636	175,829	184,911	264,786	280,446	
	Salaries & Wages - Seasonal	4,163	13,520	13,520	14,560	14,560	
	Overtime-Regular	652	5,000	5,000	5,000	5,000	
	Accrued Payroll	635	-	-	-	-	
	Disability	748	721	832	1,390	1,546	
	Health	41,316	35,097	38,595	49,540	55,452	
	Life	478	295	321	550	606	
	Dental	1,350	1,050	1,134	1,544	1,572	
	Workers Compensation	8,424	6,277	6,602	11,386	12,678	
	General Employees	7,300	7,033	7,397	10,592	11,216	
	401K	3,650	3,517	3,698	5,084	5,384	
	FICA	10,933	10,901	11,464	16,418	17,388	
	Medicare	2,557	2,549	2,682	3,840	4,068	
	Office Supplies & Materials	883	600	600	600	600	
	Medical/Chemical	8	1,125	1,125	1,125	1,125	
	Clothing And Uniforms	1,725	915	915	943	972	
	Gas And Diesel Fuel	1,492	-	-	-	-	
	Fleet Fuel	10,844	20,364	21,261	13,036	13,547	
	Other Operating Supplies	2,762	2,783	2,783	2,869	2,957	
	Machinery,Vehicle & Equipment Parts	11,531	14,579	14,579	15,030	15,495	
	General Maint Supplies	6,072	17,781	17,781	18,330	18,896	
	Street & Traffic Repair and Maintenance Supplies	470	338	338	338	338	
	Small Items Of Equipment \$100 - \$5,000	200	1,000	1,000	1,000	1,000	
	Postage	-	100	100	100	100	
	Outside Printing	-	600	600	600	600	
	Publications, Subscriptions, and Dues	-	300	300	300	300	
	Electric	5,222	2,929	2,929	3,019	3,112	
	Telephone	6,437	7,417	7,417	7,807	8,218	
	Other Utility	177	-	-	-	-	
	Other Professional Services - White collar	9,494	177,878	7,878	8,292	8,548	
	Machine, Vehicle, Equipment	4,876	-	-	-	-	
	Equipment Maintenance Charges	11,269	10,528	10,966	11,232	12,018	

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
	Buildings	416	10,721	10,721	10,721	10,750	
	Meals	499	-	-	-	-	
	Registration	50	-	-	-	-	
	Other Purchased Services - Blue Collar	138,835	150,000	-	-	-	
	Rent	3,105	7,595	7,595	7,830	8,072	
	Grants-Outside Public Agency	16,667	30,000	-	-	-	
<b>High Mountain Reservoirs Total</b>		<b>501,877</b>	<b>719,342</b>	<b>385,044</b>	<b>487,862</b>	<b>516,564</b>	
Water Conservation Program	Regular Employees	157,305	178,090	187,046	185,875	196,869	
	Salaries & Wages - Seasonal	44,878	42,850	42,850	42,850	42,850	
	Overtime-Regular	3,204	4,000	4,000	4,000	4,000	
	Accrued Payroll	818	-	-	-	-	
	Disability	699	730	841	977	1,086	
	Health	38,868	43,286	47,601	45,825	51,293	
	Life	395	307	333	397	438	
	Dental	1,420	1,295	1,399	1,428	1,454	
	Workers Compensation	1,407	3,300	3,456	2,203	2,451	
	General Employees	6,114	7,123	7,482	7,436	7,873	
	401K	2,691	3,562	3,741	3,569	3,780	
	FICA	11,846	11,042	11,597	11,525	12,206	
	Medicare	2,770	2,582	2,713	2,696	2,856	
	Office Supplies & Materials	4,010	1,200	1,200	1,200	1,200	
	Medical/Chemical	9	-	-	-	-	
	Clothing And Uniforms	875	300	300	300	300	
	Fleet Fuel	1,341	1,805	1,885	1,405	1,460	
	Other Operating Supplies	53,568	37,000	37,000	37,000	37,000	
	Machinery,Vehicle & Equipment Parts	157	150	150	150	150	
	Water,Sewer,Irrigation Line Repair Parts	3,757	370	370	370	370	
	General Maint Supplies	2,746	127	127	127	127	
	Street & Traffic Repair and Maintenance Supplies	49	500	500	500	500	
	Plant Materials	2,500	4,000	4,000	4,000	4,000	
	Small Items Of Equipment \$100 - \$5,000	682	1,000	1,000	1,000	1,000	
	Postage	619	2,000	2,000	2,000	2,000	
	Advertising	17,646	15,000	15,000	15,000	15,000	
	Outside Printing	9,457	10,000	10,000	10,000	10,000	
	Publications, Subscriptions, and Dues	15,170	8,000	8,000	8,000	8,000	
	Telephone	3,139	2,000	2,000	2,000	2,000	
	Other Utility	-	200	200	200	200	
	Architectural/Engineering	50,500	60,000	60,000	60,000	60,000	
	Other Professional Services - White collar	3,290	4,000	4,000	4,000	4,000	
	Equipment Maintenance Charges	4,173	2,000	2,000	3,369	3,605	
	Grounds	167	500	500	500	500	

Budget Category	Account	Actual	Budget			Notes	
		2015	2015	2016	2017		2018
	Hotel & Motel	1,168	-	-	-	-	
	Meals	314	-	-	-	-	
	Air Travel	678	-	-	-	-	
	Mileage	2,258	-	-	-	-	
	Other Travel	191	-	-	-	-	
	Registration	3,212	5,000	5,000	5,000	5,000	
	Other Purchased Services - Blue Collar	11,561	3,000	3,000	3,000	3,000	
	Rent	1,480	-	-	-	-	
	Rebates	49,532	85,000	85,000	85,000	85,000	
	Grants-Outside Public Agency	-	7,500	7,500	7,500	7,500	
<b>Water Conservation Program Total</b>		<b>516,663</b>	<b>548,819</b>	<b>563,791</b>	<b>560,402</b>	<b>579,068</b>	
Boyd Lake Filter Plant	Regular Employees	521,278	472,574	557,384	475,147	503,250	Water Quality Advisor retirement (a succession program overfilled position)
	Salaries & Wages - Seasonal	48,936	41,217	41,217	50,000	50,000	
	Overtime-Regular	5,573	-	-	-	-	
	Overtime Seasonal	-	525	525	5,000	5,000	
	Accrued Payroll	1,617	-	-	-	-	
	Disability	2,282	1,936	2,510	2,497	2,776	
	Health	102,809	93,592	115,785	99,080	110,904	
	Life	1,314	790	962	997	1,101	
	Dental	2,726	2,800	3,402	3,088	3,144	
	Workers Compensation	25,397	17,395	19,804	20,430	22,750	
	Worker Compensation/Seasonal	-	2,600	2,600	2,600	2,600	
	General Employees	20,652	18,901	22,294	19,009	20,127	
	401K	9,429	9,451	11,151	9,125	9,661	
	FICA	33,138	29,300	34,558	29,460	31,199	
	FICA Seasonal	-	3,459	3,459	3,459	3,459	
	Medicare	7,750	6,853	8,083	6,892	7,299	
	Office Supplies & Materials	1,055	411	411	900	900	
	Medical/Chemical	670,006	746,165	839,644	839,644	839,644	
	Clothing And Uniforms	2,801	2,500	2,500	3,500	3,500	
	Fleet Fuel	7,974	12,105	12,613	8,913	9,261	
	Other Operating Supplies	2,063	2,000	2,000	2,000	2,000	
	Machinery, Vehicle & Equipment Parts	8,411	8,000	8,000	12,000	12,000	
	Water, Sewer, Irrigation Line Repair Parts	95	-	-	-	-	
	General Maint Supplies	21,817	20,000	20,000	26,000	26,000	
	Street & Traffic Repair and Maintenance Supplies	670	-	-	-	-	
	Plant Materials	86	-	-	-	-	
	Small Items Of Equipment \$100 - \$5,000	4,751	8,000	8,000	11,000	11,000	
	Postage	68	-	-	-	-	

Budget Category	Account	Actual	Budget			Notes	
		2015	2015	2016	2017		2018
	In-House Copying	399	300	300	300	300	
	Publications, Subscriptions, and Dues	87	500	500	500	500	
	Electric	277,953	333,649	376,581	395,410	415,180	
	Water/Sewer/Stormwater	6,569	3,000	3,000	3,000	3,000	
	Telephone	2,783	4,000	4,000	4,000	4,000	
	Other Utility	431	1,100	1,100	1,100	1,100	
	Other Professional Services - White collar	-	6,000	6,000	6,000	6,000	
	Machine, Vehicle, Equipment	1,022	5,000	5,000	6,000	6,000	
	Equipment Maintenance Charges	7,766	9,000	9,000	10,108	10,816	
	Buildings	1,887	-	-	-	-	
	Hotel & Motel	-	600	600	600	600	
	Meals	113	600	600	600	600	
	Mileage	567	800	800	800	800	
	Other Travel	18	-	-	-	-	
	Registration	1,685	7,100	7,100	7,100	7,100	
	Tuition	400	-	-	-	-	
	Other Purchased Services - Blue Collar	180,398	221,668	141,668	222,000	222,000	Sludge hauling costs increasing
	Rent	2,704	1,541	1,541	2,000	2,000	
<b>Boyd Lake Filter Plant Total</b>		<b>1,987,481</b>	<b>2,095,432</b>	<b>2,274,692</b>	<b>2,290,259</b>	<b>2,357,571</b>	
Water Quality	Publications, Subscriptions, and Dues	20,000	10,000	10,000	10,000	10,000	
	Architectural/Engineering	183,346	218,075	218,075	301,650	317,200	
	Other Purchased Services - Blue Collar	21,008	16,541	16,541	17,350	18,250	
	Rent	321	-	-	-	-	
<b>Water Quality Total</b>		<b>224,675</b>	<b>244,616</b>	<b>244,616</b>	<b>329,000</b>	<b>345,450</b>	
<b>Water Fund 404 Total</b>		<b>14,427,416</b>	<b>16,737,817</b>	<b>17,227,202</b>	<b>16,783,746</b>	<b>17,337,270</b>	

# Sewer Operating Budget

2017-2018

## Detail Expenditures for Sewer Fund 401

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
Engineering	Regular Employees	61,676	73,314	41,489	121,175	127,696	Engineer moved to Sewer, Chief Eng filled
	Termination Leave Payout	401	-	-	-	-	
	Accrued Payroll	(652)	-	-	-	-	
	Disability	313	411	373	681	760	
	Health	17,538	12,869	14,152	13,633	15,393	
	Life	177	160	140	238	264	
	Dental	316	385	416	405	404	
	Workers Compensation	812	3,581	577	3,408	3,824	
	General Employees	2,773	4,013	3,319	5,015	5,290	
	401K	1,386	2,006	1,660	2,390	2,520	
	FICA	4,008	6,219	5,145	7,597	8,008	
	Medicare	937	1,455	1,204	1,777	1,873	
	Office Supplies & Materials	277	200	200	300	300	
	Other Operating Supplies	565	200	200	300	300	
	Small Items Of Equipment \$100 - \$5,000	5,015	1,500	1,500	1,500	1,500	
	Postage	-	600	600	200	200	
	Advertising	-	300	300	300	300	
	Outside Printing	-	100	100	100	100	
	Publications, Subscriptions, and Dues	17,836	20,506	20,506	20,506	20,506	
	Telephone	606	750	750	750	750	
	Other Professional Services - White collar	-	10,000	10,000	10,000	10,000	
	Registration	53	1,060	1,060	1,060	1,060	
<b>Engineering Total</b>		<b>114,036</b>	<b>139,629</b>	<b>103,691</b>	<b>191,335</b>	<b>201,048</b>	
Sewer Administration	Regular Employees	73,361	73,979	78,045	137,883	146,038	Operations Manager filled
	Accrued Payroll	602	-	-	-	-	
	Disability	313	304	351	723	806	
	Health	3,348	10,529	11,579	16,101	18,023	
	Life	177	120	132	277	307	
	Dental	73	315	341	501	511	
	Workers Compensation	285	179	1,116	290	322	
	General Employees	2,808	2,959	3,121	5,515	5,842	
	401K	1,404	1,479	1,562	2,647	2,802	
	FICA	4,086	4,587	4,838	8,548	9,053	
	Medicare	986	1,072	1,133	2,000	2,117	
	Office Supplies & Materials	3	100	100	100	100	
	Other Operating Supplies	35	-	-	-	-	
	Small Items Of Equipment \$100 - \$5,000	31,155	35,898	-	-	-	- 2015 budget was one-time radio replacement
	Postage	60	230	230	230	230	

Budget Category	Account	Actual	Budget			Notes
		2015	2015	2016	2017	
	Publications, Subscriptions, and Dues	1,363	1,285	1,285	1,400	1,400
	Telephone	519	215	215	550	550
	Other Professional Services - White collar	8,641	17,480	17,480	17,480	17,480
	Meals	34	90	90	90	90
	Air Travel	187	-	-	-	-
	Mileage	854	800	800	850	850
	Other Travel	24	-	-	-	-
	Registration	695	1,500	1,500	1,500	1,500
	Bank/Investment Charges	57,675	75,000	75,000	75,000	75,000
<b>Sewer Administration Total</b>		<b>188,687</b>	<b>228,121</b>	<b>198,918</b>	<b>271,685</b>	<b>283,021</b>
Utility Construction Insp	Regular Employees	47,339	118,596	94,694	82,404	86,816
	Termination Leave Payout	2,736	-	-	-	-
	Overtime-Regular	1,937	-	-	-	-
	Accrued Payroll	(711)	-	-	-	-
	Disability	215	485	426	464	518
	Health	11,735	23,397	19,296	15,915	17,910
	Life	137	199	163	167	186
	Dental	317	700	567	482	486
	Workers Compensation	1,315	2,219	2,358	1,389	1,561
	General Employees	2,155	4,744	3,789	3,416	3,604
	401K	1,077	2,371	1,893	1,627	1,716
	FICA	3,507	7,353	5,871	5,169	5,448
	Medicare	820	1,721	1,373	1,209	1,275
	Office Supplies & Materials	59	150	150	150	150
	Medical/Chemical	46	-	-	-	-
	Clothing And Uniforms	13	740	740	740	740
	Other Operating Supplies	401	150	150	150	150
	General Maint Supplies	94	-	-	-	-
	Small Items Of Equipment \$100 - \$5,000	729	525	525	525	525
	In-House Copying	196	150	150	150	150
	Outside Printing	16	25	25	25	25
	Publications, Subscriptions, and Dues	-	441	441	441	441
	Telephone	881	750	750	750	750
	Machine, Vehicle, Equipment	-	-	-	-	-
	Equipment Maintenance Charges	125	-	-	1,693	1,812
	Hotel & Motel	-	250	250	500	500
	Meals	113	-	-	-	-
	Air Travel	-	150	150	150	150
	Other Travel	18	-	-	-	-
	Registration	280	1,610	1,610	1,985	1,610
<b>Utility Construction Insp Total</b>		<b>75,550</b>	<b>166,726</b>	<b>135,371</b>	<b>119,501</b>	<b>126,523</b>

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
WPCF Administration	Regular Employees	194,966	187,828	297,980	310,361	322,802	
	Salaries & Wages - Seasonal	5,028	12,480	12,480	12,480	12,480	
	Termination Leave Payout	1,758	-	-	-	-	
	Overtime-Regular	78	-	-	-	-	
	Accrued Payroll	374	-	-	-	-	
	Disability	878	769	891	1,105	1,229	
	Health	31,207	35,097	38,595	37,155	41,589	
	Life	520	311	340	435	480	
	Dental	985	1,050	1,134	1,158	1,179	
	Workers Compensation	6,219	5,373	5,665	6,663	7,410	
	Worker Compensation/Seasonal	-	790	790	790	790	
	General Employees	7,814	7,514	7,919	8,415	8,912	
	401K	3,812	3,756	3,960	4,039	4,278	
	FICA	11,728	11,645	12,274	13,043	13,814	
	FICA Seasonal	-	954	954	954	954	
	Medicare	2,743	2,724	2,870	3,051	3,231	
	Office Supplies & Materials	522	1,920	1,920	1,920	1,920	
	Medical/Chemical	-	180	180	180	180	
	Clothing And Uniforms	1,633	3,060	3,060	3,060	3,060	
	Fleet Fuel	257	612	639	439	456	
	Other Operating Supplies	842	1,000	800	825	825	
	General Maint Supplies	15	100	100	100	100	
	Small Items Of Equipment \$100 - \$5,000	5,873	7,390	1,540	2,800	1,600	
	Postage	-	50	50	50	50	
	Advertising	-	700	700	400	400	
	In-House Copying	994	1,650	1,650	1,650	1,650	
	Outside Printing	-	250	700	400	400	
	Publications, Subscriptions, and Dues	11,960	10,415	10,325	13,651	13,651	
	Telephone	2,432	3,200	3,200	3,200	3,200	
	Other Utility	193	-	-	-	-	
	Legal	-	-	-	5,000	5,000	
	Architectural/Engineering	31,250	-	-	15,000	15,000	Reflecting recent needs for engineering consulting
	Other Professional Services - White collar	17,490	19,100	19,100	31,200	31,200	Higher software maintenance fees, add'l hours for SCADA programmer
	Machine, Vehicle, Equipment	-	-	-	-	-	
	Equipment Maintenance Charges	1,788	800	800	1,011	1,082	
	Buildings	148	500	500	500	500	
	Other Repair Maintenance Services	-	355	355	355	355	
	Hotel & Motel	908	920	2,130	1,920	1,920	
	Meals	68	567	708	769	769	

Budget Category	Account	Actual	Budget			Notes
		2015	2015	2016	2017	
	Air Travel	221	400	800	900	900
	Mileage	69	593	593	548	548
	Other Travel	89	70	140	170	170
	Registration	280	1,375	2,125	2,970	2,970
	Other Purchased Services - Blue Collar	24,667	25,675	25,675	28,030	28,030
	Rent	28	-	-	-	-
<b>WPCF Administration Total</b>		<b>369,839</b>	<b>351,173</b>	<b>463,642</b>	<b>516,697</b>	<b>535,084</b>
Laboratory	Regular Employees	174,519	185,761	196,239	203,045	215,055
	Accrued Payroll	667	-	-	-	-
	Disability	760	762	882	1,066	1,185
	Health	26,496	35,097	38,595	37,155	41,589
	Life	441	309	338	420	464
	Dental	1,248	1,050	1,134	1,158	1,179
	Workers Compensation	6,468	6,334	6,693	7,696	8,559
	General Employees	6,876	7,430	7,849	8,121	8,603
	401K	3,438	3,716	3,925	3,899	4,129
	FICA	10,187	11,518	12,167	12,588	13,333
	Medicare	2,382	2,693	2,845	2,945	3,118
	Office Supplies & Materials	80	650	650	650	650
	Medical/Chemical	9,729	12,700	12,700	13,080	13,400
	Clothing And Uniforms	220	800	800	800	800
	Other Operating Supplies	149	255	255	255	255
	Machinery, Vehicle & Equipment Parts	160	600	600	600	600
	General Maint Supplies	29	550	550	550	550
	Small Items Of Equipment \$100 - \$5,000	558	8,640	8,640	8,890	9,150
	Postage	-	20	20	20	20
	In-House Copying	74	-	-	-	-
	Outside Printing	23	135	135	135	135
	Publications, Subscriptions, and Dues	111	732	732	750	750
	Other Professional Services - White collar	3,900	4,200	4,200	4,300	4,400
	Machine, Vehicle, Equipment	249	-	-	1,740	1,740
	Equipment Maintenance Charges	127	1,650	1,650	-	-
	Hotel & Motel	178	300	450	450	450
	Meals	-	237	225	232	232
	Mileage	94	224	380	390	390
	Registration	708	1,195	945	1,000	1,000
	Other Purchased Services - Blue Collar	19,094	38,510	38,510	39,310	39,310
	Rent	1,269	2,500	2,500	2,500	2,500
<b>Laboratory Total</b>		<b>270,235</b>	<b>328,568</b>	<b>344,609</b>	<b>353,745</b>	<b>373,546</b>
Maintenance	Regular Employees	270,561	269,254	282,160	345,186	365,598

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
	Termination Leave Payout	705					
	Overtime-Regular	4,141	2,000	2,000	4,500	4,500	
	Accrued Payroll	(1,656)					
	Disability	1,139	1,105	1,271	1,811	2,016	
	Health	46,980	58,495	64,325	68,118	76,247	
	Life	682	456	494	719	795	
	Dental	1,663	1,750	1,890	2,123	2,161	
	Workers Compensation	10,356	9,181	9,621	13,271	14,762	
	General Employees	10,513	10,769	11,285	13,807	14,624	
	401K	5,256	5,386	5,643	6,627	7,021	
	FICA	15,868	16,694	17,494	21,403	22,666	
	Medicare	3,711	3,905	4,090	5,006	5,300	
	Office Supplies & Materials	46	320	320	250	250	
	Medical/Chemical	16,226	29,145	29,145	21,590	57,990	2018 increase is for purchase of media for larger gas scrubber
	Clothing And Uniforms	1,624	4,280	4,280	3,420	3,420	
	Fleet Fuel	7,385	11,491	11,963	5,932	6,164	
	Other Operating Supplies	1,190	1,750	1,750	3,050	3,050	
	Machinery,Vehicle & Equipment Parts	57,046	57,035	63,570	64,320	82,320	2018 increase is due to warranties expiring on equipment, more parts purchased in house
	Water,Sewer,Irrigation Line Repair Parts	749	1,700	1,700	1,700	1,700	
	General Maint Supplies	19,968	35,955	35,955	36,875	36,875	
	Plant Materials	738	12,300	12,300	6,000	12,300	
	Small Items Of Equipment \$100 - \$5,000	4,402	15,600	10,100	10,000	8,000	
	Postage	65	300	300	150	150	
	Advertising	-	200	200	200	200	
	In-House Copying	175	-	-	-	-	
	Publications, Subscriptions, and Dues	87	1,360	1,360	958	958	
	Telephone	984	864	864	1,000	1,000	
	Other Utility	2,479	4,700	4,700	4,700	4,700	
	Other Professional Services - White collar	2,242	11,100	6,600	11,600	6,600	
	Machine, Vehicle, Equipment	12,178	34,200	34,200	56,900	46,900	2017 increase for 2 centrifuge gear box overhaul
	Equipment Maintenance Charges	2,997	4,400	4,400	3,982	4,261	
	Grounds	1,400	2,500	2,500	9,600	4,100	
	Buildings	1,595	6,660	6,660	6,700	6,700	
	Streets, Roads, Traffic Lights	-	6,600	6,600	6,600	20,000	2018 chip seal for roads within the plant
	Hotel & Motel	436	600	600	600	600	
	Meals	-	172	225	300	311	
	Air Travel	209	500	-	450	450	

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
	Mileage	-	62	62	65	65	
	Registration	1,970	3,430	1,655	3,115	3,190	
	Other Purchased Services - Blue Collar	3,970	7,395	7,395	7,245	7,245	
	Rent	15,264	5,000	5,000	12,000	12,000	
<b>Maintenance Total</b>		<b>525,346</b>	<b>638,614</b>	<b>654,677</b>	<b>761,873</b>	<b>847,189</b>	
Operations	Regular Employees	524,996	522,982	550,164	471,031	498,890	
	Termination Leave Payout	805	-	-	-	-	
	Overtime-Regular	1,141	3,000	3,000	3,000	3,000	
	Accrued Payroll	(365)	-	-	-	-	
	Disability	2,164	2,141	2,479	2,475	2,752	
	Health	118,002	105,291	115,785	99,080	110,904	
	Life	1,399	876	950	990	1,092	
	Dental	3,404	3,150	3,402	3,088	3,144	
	Workers Compensation	19,979	17,833	18,757	17,850	19,857	
	General Employees	21,152	20,917	22,005	18,844	19,953	
	401K	10,542	10,458	11,007	9,046	9,577	
	FICA	30,790	32,426	34,110	29,204	30,929	
	Medicare	7,201	7,585	7,978	6,832	7,235	
	Office Supplies & Materials	80	400	400	400	400	
	Medical/Chemical	293,464	309,942	349,942	353,477	358,477	
	Clothing And Uniforms	1,256	2,400	2,400	2,800	2,800	
	Fleet Fuel	571	1,853	1,935	888	923	
	Other Operating Supplies	1,545	2,300	2,300	2,300	2,300	
	Machinery, Vehicle & Equipment Parts	200	1,000	1,000	1,000	1,000	
	General Maint Supplies	818	1,220	1,220	1,250	1,280	
	Small Items Of Equipment \$100 - \$5,000	250	19,000	10,105	15,700	13,700	
	Advertising	-	200	200	200	200	
	In-House Copying	159	-	-	-	-	
	Outside Printing	-	45	45	45	45	
	Publications, Subscriptions, and Dues	199	2,710	2,710	1,096	1,096	
	Electric	385,110	445,292	445,292	467,556	490,934	
	Natural Gas	39,054	22,050	32,050	43,000	47,300	
	Telephone	2,137	2,340	2,340	2,400	2,400	
	Machine, Vehicle, Equipment	342	750	750	2,250	2,250	
	Equipment Maintenance Charges	1,294	4,480	4,480	1,011	1,082	
	Buildings	-	1,200	1,200	4,000	4,000	
	Hotel & Motel	-	883	1,783	1,520	1,520	
	Meals	-	638	895	780	756	
	Air Travel	-	-	-	450	450	
	Mileage	-	402	475	341	476	
	Other Travel	-	40	40	40	40	

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
	Registration	369	3,890	3,890	3,965	3,965	
	Other Purchased Services - Blue Collar	141,555	155,000	155,000	181,560	191,560	Increase in biosolids hauling cost
	Rent	1,347	1,440	1,440	1,550	1,550	
<b>Operations Total</b>		<b>1,610,959</b>	<b>1,706,134</b>	<b>1,791,529</b>	<b>1,751,019</b>	<b>1,837,837</b>	
<b>Industrial Pretreatment</b>	Regular Employees	183,919	185,761	196,239	196,690	208,324	
	Accrued Payroll	709	-	-	-	-	
	Disability	815	762	882	1,033	1,148	
	Health	41,165	35,097	38,595	37,155	41,589	
	Life	481	309	338	408	451	
	Dental	1,344	1,050	1,134	1,158	1,179	
	Workers Compensation	7,025	6,334	6,693	7,455	8,291	
	General Employees	7,414	7,430	7,849	7,867	8,334	
	401K	3,290	3,716	3,925	3,777	4,000	
	FICA	10,604	11,518	12,167	12,194	12,916	
	Medicare	2,480	2,693	2,845	2,853	3,020	
	Office Supplies & Materials	171	400	400	400	400	
	Medical/Chemical	722	1,025	1,025	1,025	1,025	
	Clothing And Uniforms	86	950	950	950	950	
	Gas And Diesel Fuel	10	-	-	-	-	
	Fleet Fuel	425	976	1,019	336	349	
	Other Operating Supplies	802	2,800	2,800	2,550	2,550	
	Machinery, Vehicle & Equipment Parts	292	330	330	350	350	
	General Maint Supplies	261	400	400	400	400	
	Small Items Of Equipment \$100 - \$5,000	12,029	14,546	870	2,865	1,000	
	Postage	-	700	700	700	700	
	Advertising	483	6,250	6,250	8,250	8,250	
	In-House Copying	73	-	-	100	100	
	Outside Printing	23	300	300	300	300	
	Publications, Subscriptions, and Dues	159	590	590	678	678	
	Telephone	1,045	900	900	1,100	1,100	
	Other Professional Services - White collar	3,140	3,700	3,700	3,950	3,950	
	Equipment Maintenance Charges	955	980	980	864	924	
	Buildings	-	-	-	1,200	1,200	
	Other Repair Maintenance Services	-	1,070	1,070	1,070	1,070	
	Hotel & Motel	546	400	400	1,840	1,840	
	Meals	93	240	240	520	520	
	Air Travel	560	550	550	850	900	
	Mileage	69	400	400	400	400	
	Other Travel	266	100	100	260	260	
	Registration	695	800	800	2,010	2,010	
	Other Purchased Services - Blue Collar	12,259	24,170	24,170	18,000	18,000	

Budget Category	Account	Actual	Budget				Notes
		2015	2015	2016	2017	2018	
	Rent	2,112	2,230	2,230	2,400	2,400	
	Grants-Outside Public Agency	-	-	-	2,500	2,500	
<b>Industrial Pretreatment Total</b>		<b>296,523</b>	<b>319,477</b>	<b>321,841</b>	<b>326,458</b>	<b>343,378</b>	
Sewer Collection	Regular Employees	564,605	562,974	590,681	626,659	663,720	Budget combined with Collection Maintenance and Pumping Stations
	Termination Leave Payout	14,977	-	-	-	-	
	Overtime-Regular	12,164	12,422	12,422	23,100	23,750	
	Accrued Payroll	(4,470)	-	-	-	-	
	Disability	2,413	2,308	2,659	3,288	3,662	
	Health	132,177	146,237	160,813	154,813	173,288	
	Life	1,423	980	1,061	1,343	1,472	
	Dental	3,540	4,375	4,725	4,825	4,912	
	Workers Compensation	30,814	23,408	28,397	35,873	39,927	
	General Employees	22,225	22,517	23,625	25,066	26,549	
	401K	10,417	11,262	11,813	12,031	12,739	
	FICA	35,147	34,902	36,620	38,851	41,153	
	Medicare	8,220	8,158	8,566	9,090	9,621	
	Office Supplies & Materials	575	2,781	2,781	2,781	2,850	
	Medical/Chemical	38,569	55,566	57,747	43,725	45,050	
	Clothing And Uniforms	4,133	6,841	7,089	7,300	7,525	
	Fleet Fuel	37,558	65,417	68,034	34,315	38,856	
	Other Operating Supplies	1,764	2,588	2,588	2,660	2,740	
	Machinery, Vehicle & Equipment Parts	22,152	43,175	43,175	33,170	34,160	
	Water, Sewer, Irrigation Line Repair Parts	4,836	9,306	9,306	8,860	9,125	
	General Maint Supplies	11,383	12,763	12,763	12,880	13,275	
	Street & Traffic Repair and Maintenance Supplies	-	2,060	2,060	11,670	12,025	
	Plant Materials	-	160	160	160	160	
	Small Items Of Equipment \$100 - \$5,000	5,865	11,544	11,544	15,300	15,800	
	Postage	-	22	22	20	20	
	Advertising	-	287	287	290	290	
	In-House Copying	499	350	350	350	350	
	Outside Printing	17	300	300	300	300	
	Publications, Subscriptions, and Dues	460	496	496	500	515	
	Electric	38,922	45,590	49,260	44,065	45,400	
	Water/Sewer/Stormwater	10,052	-	-	-	-	
	Natural Gas	2,062	6,500	6,670	6,775	7,000	
	Telephone	4,562	5,600	5,600	5,775	5,950	
	Other Utility	281	480	480	480	500	
	Other Professional Services - White collar	1,745	1,500	1,500	1,500	1,500	
	Machine, Vehicle, Equipment	805	-	-	13,550	14,000	
	Equipment Maintenance Charges	26,251	61,050	63,310	41,649	44,565	

Budget Category	Account	Actual	Budget			Notes
		2015	2015	2016	2017	
	Grounds	2,015	3,625	3,625	2,075	2,150
	Buildings	163	2,369	2,369	2,400	2,500
	Streets, Roads, Traffic Lights	-	3,015	3,015	7,450	7,700
	Other Repair Maintenance Services	-	579	579	600	600
	Hotel & Motel	1,500	-	-	-	-
	Meals	471	285	285	300	300
	Air Travel	1,512	-	-	-	-
	Other Travel	319	-	-	-	-
	Registration	6,987	7,600	7,600	9,825	10,100
	Other Purchased Services - Blue Collar	6,542	7,005	7,005	9,100	9,350
	Rent	7,486	23,950	24,250	29,200	30,100
<b>Sewer Collection Total</b>		<b>1,073,138</b>	<b>1,212,347</b>	<b>1,275,632</b>	<b>1,283,964</b>	<b>1,365,549</b>
<b>401 - Sewer Total</b>		<b>4,524,313</b>	<b>5,090,789</b>	<b>5,289,910</b>	<b>5,576,277</b>	<b>5,913,175</b>