



# City of Polk City, Iowa

## Water Enterprise Fund: Rate & Revenue Sufficiency Study

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## Table of Contents

- I. Water Utility Cash Flow
  - Base Case
  - Base Case – Adjusted for GO Debt
  
- II. Water Rate Study Analysis
  - Billing Data Key Metrics
  - Water Production & Water Purchased
  - Revenue Requirements (FY 2021 Budget)
  - Rate Structure Options & Considerations
  - Cost of Water Comparison
  - Future Requirements
  - Discussion Items
  
- III. Appendix
  - Cash Flow – Option 1
  - Cash Flow – Option 2



# Water Utility Cash Flow: Base Case

**CITY OF POLK CITY, IOWA**

**Water Enterprise Fund**

BASE CASE

**EXHIBIT 1**

<i>Growth Assumptions</i>	
Water Sales Growth	1.00%
Customer Growth (Meters per Year)	75
Operating Expenses	Various

<i>WATER REVENUE ADJUSTMENTS</i>						
1-Jun-16	10.00%	1-Apr-20	7.00%	1-Apr-24	6.00%	
1-Apr-17	10.00%	1-Apr-21	6.00%	1-Apr-25	5.50%	
1-Apr-18	9.96%	1-Apr-22	6.00%			
1-Apr-19	10.03%	1-Apr-23	6.00%			

		Audited	Audited	Audited	Budget	Budget	Projected	Projected	Projected	Projected	Projected
		FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
<b>Water Rates</b>	1	6/1/2016	4/1/2017	4/1/2018	4/1/2019	4/1/2020	4/1/2021	4/1/2022	4/1/2023	4/1/2024	4/1/2025
First 1,000 gallons (Minimum Bill)	2	\$10.34	\$11.37	\$12.51	\$13.71	\$14.67	\$15.55	\$16.48	\$17.47	\$18.52	\$19.54
Rate per 1,000 gallons	3	\$4.13	\$4.54	\$5.00	\$5.50	\$5.89	\$6.24	\$6.61	\$7.01	\$7.43	\$7.84
Availability Fee for Irrigation Meters	4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Irrigation/Garden Rate per 1,000 gallons	5	\$5.40	\$5.94	\$6.53	\$7.18	\$7.68	\$8.14	\$8.63	\$9.15	\$9.70	\$10.23
Average Monthly Bill (4,100 gals)	6	\$23.14	\$25.44	\$28.01	\$30.76	\$32.93	\$34.89	\$36.97	\$39.20	\$41.55	\$43.84
Change in Average Monthly Bill	7	\$2.12	\$2.30	\$2.57	\$2.75	\$2.17	\$1.97	\$2.08	\$2.23	\$2.35	\$2.29
Average Number of Regular Meters	8	1,725	1,828	1,920	1,971	2,046	2,121	2,196	2,271	2,346	2,421
Average Number of Irrigation Meters	9	219	232	247	247	426	451	476	501	526	551
<b>WATER SALES (1,000 GALLONS)</b>					Projected Irrigation Water Sales Based on 90% of the 3 year average						
Regular Water Sales	10	90,267	94,634	95,463	109,783	110,881	111,989	113,109	114,240	115,383	116,537
Irrigation Water Sales	11	21,010	28,142	23,708	27,264	19,778	19,778	19,778	19,778	19,778	19,778
Subtotal Water Sales	12	111,277	122,776	119,171	137,047	130,659	131,768	132,888	134,019	135,161	136,315
<b>Average \$\$ Per 1,000 Gallons</b>	<b>13</b>	<b>\$5.51</b>	<b>\$6.41</b>	<b>\$7.05</b>	<b>\$7.75</b>	<b>\$8.29</b>	<b>\$8.79</b>	<b>\$9.32</b>	<b>\$9.88</b>	<b>\$10.47</b>	<b>\$11.05</b>
<b>OPERATING REVENUES</b>											
Sale of Water	14	\$612,641	\$787,248	\$839,635	\$1,062,393	\$1,083,162	\$1,158,238	\$1,238,512	\$1,324,105	\$1,415,137	\$1,506,280
Irrigation Availability Fee	15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Irrigation Meter Sales	16	18,406	23,256	22,407	18,000	18,000	18,000	18,000	18,000	18,000	18,000
Sales Tax/Water Excise Tax	17	41,389	53,797	49,075	62,094	63,308	67,696	72,388	77,391	82,711	88,038
Hookup Charges	18	91,095	69,400	115,500	75,000	80,000	80,000	35,000	35,000	35,000	35,000
Late Charges/Penalties	19	1,688	1,463	1,630	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Other Misc. Revenue	20	22,871	19,792	16,579	16,000	13,000	13,000	13,000	13,000	13,000	13,000
<b>Total Operating Revenues</b>	<b>21</b>	<b>\$788,089</b>	<b>\$954,955</b>	<b>\$1,044,826</b>	<b>\$1,235,487</b>	<b>\$1,259,470</b>	<b>\$1,338,934</b>	<b>\$1,378,900</b>	<b>\$1,469,495</b>	<b>\$1,565,848</b>	<b>\$1,662,318</b>

**CITY OF POLK CITY, IOWA**  
**Water Enterprise Fund**

BASE CASE

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<i>WATER REVENUE ADJUSTMENTS</i>						
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	Audited	Audited	Audited	Budget	Budget	Projected	Projected	Projected	Projected	Projected
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
<b>DMWW Rate/1,000 Gallons</b>	<b>Apr-17</b>	<b>Apr-18</b>	<b>Apr-19</b>	<b>Apr-20</b>	<b>Apr-21</b>	<b>Apr-22</b>	<b>Apr-23</b>	<b>Apr-24</b>	<b>Apr-25</b>	<b>Apr-26</b>
With Storage Rate 22	\$3.84	\$4.03	\$4.31	\$4.44	\$4.66	\$4.89	\$5.13	\$5.39	\$5.66	\$5.94
Purchased Capacity Rate 23	\$1.85	\$1.98	\$2.12	\$2.33	\$2.45	\$2.70	\$2.97	\$3.27	\$3.60	\$3.96
Purchased Water Percentage 24	65%	62%	59%	60%	60%	60%	60%	60%	60%	60%
<b>Average \$\$ per 1,000 Gallons Purchased 25</b>	<b>\$2.71</b>	<b>\$3.78</b>	<b>\$3.17</b>	<b>\$2.90</b>	<b>\$2.96</b>	<b>\$3.28</b>	<b>\$3.61</b>	<b>\$3.97</b>	<b>\$4.35</b>	<b>\$4.74</b>
Total Water Purchased (DMWW) 26	89,253	104,897	105,508	102,785	97,994	98,826	99,666	100,514	101,371	102,236
Total Water Produced (Polk City) 27	47,172	63,639	73,664	68,523	65,329	65,884	66,444	67,009	67,581	68,157
Total Water 28	136,425	168,536	179,172	171,308	163,324	164,710	166,110	167,523	168,951	170,394
Unaccounted for Water 29	18%	27%	33%	25%	25%	25%	25%	25%	25%	25%
<b>OPERATING EXPENSES 30</b>		34%	2%	27%	2%	5%	6%	6%	6%	6%
Administration 31	\$95,095	\$90,406	\$142,392	\$336,242	\$398,367	\$411,055	\$424,183	\$437,766	\$451,821	\$466,365
Repair & Maintenance 32	29,460	33,597	41,881	35,500	21,000	21,000	21,000	21,000	21,000	21,000
DMWW Purchased Water 33	241,960	396,891	334,500	297,970	290,153	323,727	359,923	398,819	440,469	484,896
Sales Tax/Excise Tax Expense 34	48,300	52,926	48,235	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Other Operational Expenses 35	57,077	56,434	77,575	99,400	80,000	78,750	81,093	83,534	86,076	88,726
Total Operating Expense 36	\$471,892	\$630,254	\$644,583	\$819,112	\$839,520	\$884,532	\$936,199	\$991,118	\$1,049,366	\$1,110,988
<b>NET OPERATING REVENUES 37</b>	\$316,196	\$324,701	\$400,243	\$416,376	\$419,950	\$454,402	\$442,702	\$478,377	\$516,482	\$551,331
Interest on Reserves 38	0	0	0	0	0	0	0	0	0	0
<b>Net Revenues for Debt Service 39</b>	\$316,196	\$324,701	\$400,243	\$416,376	\$419,950	\$454,402	\$442,702	\$478,377	\$516,482	\$551,331

**CITY OF POLK CITY, IOWA**

**Water Enterprise Fund**

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<b>Net Revenues for Debt Service</b> 40	\$316,196	\$324,701	\$400,243	\$416,376	\$419,950	\$454,402	\$442,702	\$478,377	\$516,482	\$551,331
<b>Water Debt Service</b>										
Proposed Water Rev Bonds (2022) 41	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$276,951	\$277,505	\$277,925
Subtotal Revenue Debt 42	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$276,951	\$277,505	\$277,925
Series 2018 G.O. Bonds (Berwick Capacity) 43	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0
<b>Total Water Debt</b> 44	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$276,951	\$277,505	\$277,925
<b>Debt Service Coverage</b>										
<b>Net Revenues/ Revenue Debt</b> 45	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	1.73	1.86	1.98
Net Revenues / All Debt 46	N.A.	N.A.	N.A.	N.A.	42.00	N.A.	N.A.	1.73	1.86	1.98
<b>NET CASHFLOW AFTER DEBT</b> 47	\$316,196	\$324,701	\$400,243	\$416,376	\$409,950	\$454,402	\$442,702	\$201,427	\$238,977	\$273,406
Capital Expenditures 48	(139,936)	(290,483)	(54,051)	(226,000)	(429,500)	(207,500)	(3,599,900)	(210,740)	(208,564)	(272,920)
Transfer (out)/in 49	0	0	0	0	0	0	0	0	0	0
Bond Proceeds 50	0	0	0	0	0	0	3,330,035	0	0	0
Transfer (to) from Restricted/Designated 51	7,609	1,787	649	0	0	0	(280,035)	0	0	0
Other Cash Sources/(Uses) 52	0	(1)	0	0	0	0	0	0	0	0
<b>Annual Surplus/ (Deficit)</b> 53	\$183,869	\$36,005	\$346,841	\$190,376	(\$19,550)	\$246,902	(\$107,198)	(\$9,313)	\$30,413	\$486
Unrestricted Beg. Cash Balance 54	\$30,031	\$213,900	\$249,905	\$596,746	\$787,121	\$767,572	\$1,014,474	\$907,276	\$897,963	\$928,376
<b>Unrestricted End. Cash Balance</b> 55	\$213,900	\$249,905	\$596,746	\$787,121	\$767,572	\$1,014,474	\$907,276	\$897,963	\$928,376	\$928,862
<b>Cash Balance as % of Operating Exp.</b> 56	45%	40%	93%	96%	91%	115%	97%	91%	88%	84%
<b>Restricted/Designated Funds</b>										
Water Deposits 57	\$45,737	\$43,950	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301
Bond Debt Service Reserve Fund 58	\$0	\$0	\$0	\$0	\$0	\$0	\$280,035	\$280,035	\$280,035	\$280,035
Bond Debt Service Sinking Fund 59	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Restricted Bond Proceeds 60	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Restricted/Designated</b> 61	\$45,737	\$43,950	\$43,301	\$43,301	\$43,301	\$43,301	\$323,336	\$323,336	\$323,336	\$323,336
<b>Total Cash</b> 62	\$259,637	\$293,855	\$640,047	\$830,422	\$810,873	\$1,057,775	\$1,230,612	\$1,221,298	\$1,251,711	\$1,252,197
<b>Water Capital Outlays:</b>										
Eastside Elevated Storage	0	0	0	0	0	0	3,050,000	0	0	0
Creekview Estates - Upside Water Main	0	200,000	0	0	0	0	0	0	0	0
Water Tower painting	0	0	0	0	0	0	290,000	0	0	0
Miscellaneous	226,000	229,500	207,500	229,500	207,500	259,900	210,740	208,564	272,920	
<b>Total</b>	\$226,000	\$429,500	\$207,500	\$429,500	\$207,500	\$3,599,900	\$210,740	\$208,564	\$272,920	

<b>Deferred Capital Outlays:</b>	2020 Costs
New Well	250,000
Plant Upgrade for New Wells	250,000

**City of Polk City, Iowa**

**Water Enterprise Fund**

**Operational Expenses**

		Audit	Audit	Audit	Audit	Budget	Budget	Projected	Projected	Projected	Projected	Projected	Expense
		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Growth
Salary	1	59,280	59,600	51,780	85,033	247,965	272,439	280,612	289,031	297,701	306,632	315,831	3%
Part-Time Salaries	2	0	0	0	607	10,000	2,000	2,000	2,000	2,000	2,000	2,000	0%
Overtime	3	3,444	1,937	2,382	2,618	2,600	3,000	3,090	3,183	3,278	3,377	3,478	3%
Vac/Sick/Holiday	4	0	0	0	0	0	0	0	0	0	0	0	0%
City Share FICA	5	5,730	4,472	3,902	6,371	18,969	21,224	21,861	22,517	23,192	23,888	24,604	3%
City Share IPERS	6	7,016	5,406	4,792	8,286	23,408	26,190	26,976	27,785	28,619	29,477	30,361	3%
Group Insurance	7	16,700	16,355	16,809	30,433	23,000	59,314	62,280	65,394	68,663	72,097	75,701	5%
Workers Compensation	8	2,122	2,344	3,078	2,416	3,500	3,200	3,232	3,264	3,297	3,330	3,363	1%
Unemployment	9	245	62	478	354	300	500	505	510	515	520	526	1%
Clothing Allowance	10	781	1,003	1,168	720	1,000	1,500	1,500	1,500	1,500	1,500	1,500	0%
Subscriptions	11	1,484	1,478	2,840	3,274	2,500	2,500	2,500	2,500	2,500	2,500	2,500	0%
Training - Water	12	1,188	1,788	3,072	2,280	3,000	4,000	4,000	4,000	4,000	4,000	4,000	0%
Travel & Conference	13	0	650	105	0	0	2,500	2,500	2,500	2,500	2,500	2,500	0%
Repair/Maintenance (Buildings)	14	8,690	7,222	9,588	7,285	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0%
Buildings/Grounds Op. Maintenance	15	4,352	4,502	4,588	3,886	5,000	5,000	5,000	5,000	5,000	5,000	5,000	0%
Vehicle Operations	16	954	2,328	1,262	2,125	2,000	2,500	2,500	2,500	2,500	2,500	2,500	0%
Vehicle Repairs	17	2,431	2,767	2,996	2,853	3,500	3,500	3,500	3,500	3,500	3,500	3,500	0%
Operational Equipment Repair	18	18,325	12,643	15,163	25,733	15,000	0	0	0	0	0	0	0%
Utilities - Water	19	17,592	17,093	20,080	21,260	20,000	20,000	21,000	22,050	23,153	24,310	25,526	5%
Telephone Services	20	1,905	1,641	1,610	1,679	2,500	2,500	2,625	2,756	2,894	3,039	3,191	5%
Other Maintenance	21	0	0	0	0	0	0	0	0	0	0	0	0%
Advertising	22	0	237	0	0	0	0	0	0	0	0	0	0%
Court Costs/Record	23	0	0	0	77	0	0	0	0	0	0	0	0%
Engineering Fees	24	2,404	0	5,235	2,509	5,000	5,000	5,000	5,000	5,000	5,000	5,000	0%
Insurance (Veh/Bldg/Liab)	25	7,321	7,513	7,924	7,095	8,000	8,000	8,200	8,400	8,600	8,800	9,000	\$200
Attorney Fees	26	0	0	0	0	0	0	0	0	0	0	0	\$0
Purchase of Water	27	251,432	241,960	396,891	334,500	297,970	290,153	323,727	359,923	398,819	440,469	484,896	Formula
Printing & Publication	28	320	483	40	0	400	0	0	0	0	0	0	0%
Rent/Lease (Equip/Vehicle)	29	0	251	0	0	0	0	0	0	0	0	0	0%
Sales Tax	30	30,643	48,300	52,926	48,235	50,000	50,000	50,000	50,000	50,000	50,000	50,000	0%
Technology Services	31	952	594	199	1,327	2,500	3,500	100	200	300	400	500	\$100
Technology - G.I.S.	32	15,842	0	0	0	0	0	0	0	0	0	0	0%
Laboratory Testing	33	13,768	4,971	2,747	3,372	4,000	4,000	4,000	4,000	4,000	4,000	4,000	0%
Refunds	34	1,238	2,489	1,770	1,409	0	0	0	0	0	0	0	0%
Sub Contract Work	35	1,098	6,703	967	1,595	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0%
Minor Equipment	36	10,156	6,635	4,587	2,432	16,000	23,500	23,500	23,500	23,500	23,500	23,500	0%
Meters	37	27,635	18,926	24,969	10,667	35,000	40,000	44,000	48,400	53,240	58,564	64,420	10%
Office Supplies	38	170	363	541	913	500	500	500	500	500	500	500	0%
Operating Supplies	39	14,545	8,838	9,213	10,195	12,000	12,000	12,600	13,230	13,892	14,586	15,315	5%
Postage	40	2,559	3,554	1,550	3,350	3,000	3,500	3,605	3,713	3,825	3,939	4,057	3%
Misc. Supplies & Eq	41	3,865	2,489	2,157	2,697	3,000	3,000	3,000	3,000	3,000	3,000	3,000	0%

**City of Polk City, Iowa**

**Water Enterprise Fund**

**Operational Expenses**

		Audit	Audit	Audit	Audit	Budget	Budget	Projected	Projected	Projected	Projected	Projected	Expense
		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Growth
New Vehicle	42	50,649	33,332	14,102	4,297	90,000	56,000	30,000	78,000	24,000	16,500	75,000	schedule
Heavy Motorized Equip	43	0	0	0	0	0	25,000	25,000	25,000	25,000	25,000	25,000	0%
Office Equipment	44	75	0	0	2,262	4,000	4,000	4,000	4,000	4,000	4,000	4,000	0%
Shop Equipment	45	0	0	1,144	440	24,500	4,000	4,120	4,244	4,371	4,502	4,637	3%
Repairs & Replacement	46	89,594	81,044	29,931	54,051	85,000	85,000	85,000	85,000	85,000	85,000	85,000	0%
DMWW Connection	47	0	0	216,894	0	0	0	0	0	0	0	0	0%
<b>Subtotal</b>		676,504	611,972	919,479	698,634	1,045,112	1,069,020	1,092,032	1,196,099	1,201,858	1,257,930	1,383,908	4%
Less DMWW Purchases	48	(251,432)	(241,960)	(396,891)	(334,500)	(297,970)	(290,153)	(323,727)	(359,923)	(398,819)	(440,469)	(484,896)	
Less Local Capital Outlays	49	(178,036)	(139,936)	(290,483)	(54,051)	(226,000)	(229,500)	(207,500)	(259,900)	(210,740)	(208,564)	(272,920)	
Net Local Operating Expenses	50	\$247,037	\$230,075	\$232,105	\$310,082	\$521,142	\$549,367	\$560,805	\$576,276	\$592,299	\$608,897	\$626,091	
		Audit	Audit	Audit	Unaudited	Budget	Projected						
		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2024-25	
Administration	51	97,989	95,095	90,406	142,392	336,242	398,367	411,055	424,183	437,766	451,821	466,365	
Repair & Maintenance	52	34,753	29,460	33,597	41,881	35,500	21,000	21,000	21,000	21,000	21,000	21,000	
DMWW Purchases	53	251,432	241,960	396,891	334,500	297,970	290,153	323,727	359,923	398,819	440,469	484,896	
Sales Tax/Excise Tax	54	30,643	48,300	52,926	48,235	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
Other Operational Expenses	55	83,652	57,220	55,177	77,575	99,400	80,000	78,750	81,093	83,534	86,076	88,726	
Capital Outlays	56	178,036	139,936	290,483	54,051	226,000	229,500	207,500	259,900	210,740	208,564	272,920	
Total Expenses	57	676,504	611,972	919,479	698,634	1,045,112	1,069,020	1,092,032	1,196,099	1,201,858	1,257,930	1,383,908	



**City of Polk City, Iowa**

Proposed Water Revenue Bonds, Series 2022

**EXHIBIT 3**

<b>SOURCES &amp; USES</b>	
<b>SOURCES</b>	
Par Amount of Bonds	3,415,000.00
Accrued Interest	
Existing Debt Service Reserve	
	-----
Total Sources	3,415,000.00
<b>USES</b>	
Deposit to Construction Account	3,050,000.00
Deposit to Reserve Account	280,034.50
Capitalized Interest Account	0.00
Municipal Bond Insurance	
Underwriters' Discount (\$10.00 per bond)	34,150.00
Costs of Issuance	47,500.00
Accrued Interest	
Rounding Amount	3,315.50
	-----
Total Uses	3,415,000.00
<b>ASSUMPTIONS</b>	
Dated Date	7/1/2022
Delivery Date	7/1/2022
First Interest Date	12/1/2022
First Principal Date	6/1/2023
Last Principal Date	6/1/2037

Arbitrage Yield      2.62604%  
 TIC                    2.76431%  
 AIC                    2.95996%  
 Average Life            8.36 Years

<b>DEBT SERVICE SCHEDULE</b>						
Date	Principal	Coupon	Interest	Debt Service	Annual Debt Service	
12/1/2022			36,037.71	36,037.71		
0.92 6/1/2023	200,000	2.270%	43,245.25	243,245.25	279,282.96	
12/1/2023			40,975.25	40,975.25		
1.92 6/1/2024	195,000	2.280%	40,975.25	235,975.25	276,950.50	
12/1/2024			38,752.25	38,752.25		
2.92 6/1/2025	200,000	2.290%	38,752.25	238,752.25	277,504.50	
12/1/2025			36,462.25	36,462.25		
3.92 6/1/2026	205,000	2.300%	36,462.25	241,462.25	277,924.50	
12/1/2026			34,104.75	34,104.75		
4.92 6/1/2027	210,000	2.320%	34,104.75	244,104.75	278,209.50	
12/1/2027			31,668.75	31,668.75		
5.92 6/1/2028	215,000	2.380%	31,668.75	246,668.75	278,337.50	
12/1/2028			29,110.25	29,110.25		
6.92 6/1/2029	220,000	2.440%	29,110.25	249,110.25	278,220.50	
12/1/2029			26,426.25	26,426.25		
7.92 6/1/2030	225,000	2.500%	26,426.25	251,426.25	277,852.50	
12/1/2030			23,613.75	23,613.75		
8.92 6/1/2031	230,000	2.560%	23,613.75	253,613.75	277,227.50	
12/1/2031			20,669.75	20,669.75		
9.92 6/1/2032	235,000	2.610%	20,669.75	255,669.75	276,339.50	
12/1/2032			17,603.00	17,603.00		
10.92 6/1/2033	240,000	2.660%	17,603.00	257,603.00	275,206.00	
12/1/2033			14,411.00	14,411.00		
11.92 6/1/2034	250,000	2.710%	14,411.00	264,411.00	278,822.00	
12/1/2034			11,023.50	11,023.50		
12.92 6/1/2035	255,000	2.750%	11,023.50	266,023.50	277,047.00	
12/1/2035			7,517.25	7,517.25		
13.92 6/1/2036	265,000	2.790%	7,517.25	272,517.25	280,034.50	
12/1/2036			3,820.50	3,820.50		
14.92 6/1/2037	270,000	2.830%	3,820.50	273,820.50	277,641.00	
12/1/2037						
15.92 6/1/2038						
12/1/2038						
16.92 6/1/2039						
12/1/2039						
17.92 6/1/2040						
12/1/2040						
18.92 6/1/2041						
12/1/2041						
19.92 6/1/2042						
	-----	-----	-----	-----	-----	-----
	3,415,000		751,599.96	4,166,599.96	4,166,599.96	

Scale : MMD 3/6/20 plus 65 bps for Pricing & 100 bps for Timing



# **Water Utility Cash Flow: Base Case – Adjusted for GO Debt**

**CITY OF POLK CITY, IOWA**  
**Water Enterprise Fund**

BASE CASE - ADJUSTED FOR GO DEBT

EXHIBIT 1

<i>Growth Assumptions</i>	
Water Sales Growth	1.00%
Customer Growth (Meters per Year)	75
Operating Expenses	Various

<i>WATER REVENUE ADJUSTMENTS</i>					
1-Jun-16	10.00%	1-Apr-20	7.00%	1-Apr-24	8.00%
1-Apr-17	10.00%	1-Apr-21	9.00%	1-Apr-25	8.00%
1-Apr-18	9.96%	1-Apr-22	9.00%		
1-Apr-19	10.03%	1-Apr-23	8.50%		

	Audited	Audited	Audited	Budget	Budget	Projected	Projected	Projected	Projected	Projected	
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	
<b>Water Rates</b>	1	6/1/2016	4/1/2017	4/1/2018	4/1/2019	4/1/2020	4/1/2021	4/1/2022	4/1/2023	4/1/2024	4/1/2025
First 1,000 gallons (Minimum Bill)	2	\$10.34	\$11.37	\$12.51	\$13.71	\$14.67	\$15.99	\$17.43	\$18.91	\$20.42	\$22.05
Rate per 1,000 gallons	3	\$4.13	\$4.54	\$5.00	\$5.50	\$5.89	\$6.42	\$7.00	\$7.60	\$8.21	\$8.87
Availability Fee for Irrigation Meters	4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Irrigation/Garden Rate per 1,000 gallons	5	\$5.40	\$5.94	\$6.53	\$7.18	\$7.68	\$8.37	\$9.12	\$9.90	\$10.69	\$11.55
Average Monthly Bill (4,100 gals)	6	\$23.14	\$25.44	\$28.01	\$30.76	\$32.93	\$35.89	\$39.13	\$42.47	\$45.87	\$49.55
Change in Average Monthly Bill	7	\$2.12	\$2.30	\$2.57	\$2.75	\$2.17	\$2.96	\$3.24	\$3.34	\$3.40	\$3.68
Average Number of Regular Meters	8	1,725	1,828	1,920	1,971	2,046	2,121	2,196	2,271	2,346	2,421
Average Number of Irrigation Meters	9	219	232	247	247	426	451	476	501	526	551
<b>WATER SALES (1,000 GALLONS)</b>						Projected Irrigation Water Sales Based on 90% of the 3 year average					
Regular Water Sales	10	90,267	94,634	95,463	109,783	110,881	111,989	113,109	114,240	115,383	116,537
Irrigation Water Sales	11	21,010	28,142	23,708	27,264	19,778	19,778	19,778	19,778	19,778	19,778
Subtotal Water Sales	12	111,277	122,776	119,171	137,047	130,659	131,768	132,888	134,019	135,161	136,315
<b>Average \$\$ Per 1,000 Gallons</b>	13	<b>\$5.51</b>	<b>\$6.41</b>	<b>\$7.05</b>	<b>\$7.75</b>	<b>\$8.29</b>	<b>\$9.04</b>	<b>\$9.85</b>	<b>\$10.69</b>	<b>\$11.55</b>	<b>\$12.47</b>
<b>OPERATING REVENUES</b>											
Sale of Water	14	\$612,641	\$787,248	\$839,635	\$1,062,393	\$1,083,162	\$1,191,180	\$1,308,943	\$1,432,660	\$1,561,111	\$1,699,847
Irrigation Availability Fee	15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Irrigation Meter Sales	16	18,406	23,256	22,407	18,000	18,000	18,000	18,000	18,000	18,000	18,000
Sales Tax/Water Excise Tax	17	41,389	53,797	49,075	62,094	63,308	69,621	76,504	83,735	91,243	99,352
Hookup Charges	18	91,095	69,400	115,500	75,000	80,000	80,000	35,000	35,000	35,000	35,000
Late Charges/Penalties	19	1,688	1,463	1,630	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Other Misc. Revenue	20	22,871	19,792	16,579	16,000	13,000	13,000	13,000	13,000	13,000	13,000
<b>Total Operating Revenues</b>	21	<b>\$788,089</b>	<b>\$954,955</b>	<b>\$1,044,826</b>	<b>\$1,235,487</b>	<b>\$1,259,470</b>	<b>\$1,373,802</b>	<b>\$1,453,447</b>	<b>\$1,584,395</b>	<b>\$1,720,354</b>	<b>\$1,867,199</b>

**CITY OF POLK CITY, IOWA**  
**Water Enterprise Fund**

BASE CASE - ADJUSTED FOR GO DEBT

EXHIBIT 1

<i>Growth Assumptions</i>	
Water Sales Growth	1.00%
Customer Growth (Meters per Year)	75
Operating Expenses	Various

<i>WATER REVENUE ADJUSTMENTS</i>						
1-Jun-16	10.00%	1-Apr-20	7.00%	1-Apr-24	8.00%	
1-Apr-17	10.00%	1-Apr-21	9.00%	1-Apr-25	8.00%	
1-Apr-18	9.96%	1-Apr-22	9.00%			
1-Apr-19	10.03%	1-Apr-23	8.50%			

	Audited	Audited	Audited	Budget	Budget	Projected	Projected	Projected	Projected	Projected
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
	Apr-17	Apr-18	Apr-19	Apr-20	Apr-21	Apr-22	Apr-23	Apr-24	Apr-25	Apr-26
<b>DMWW Rate/1,000 Gallons</b>										
With Storage Rate 22	\$3.84	\$4.03	\$4.31	\$4.44	\$4.66	\$4.89	\$5.13	\$5.39	\$5.66	\$5.94
Purchased Capacity Rate 23	\$1.85	\$1.98	\$2.12	\$2.33	\$2.45	\$2.70	\$2.97	\$3.27	\$3.60	\$3.96
Purchased Water Percentage 24	65%	62%	59%	60%	60%	60%	60%	60%	60%	60%
<b>Average \$\$ per 1,000 Gallons Purchased 25</b>	<b>\$2.71</b>	<b>\$3.78</b>	<b>\$3.17</b>	<b>\$2.90</b>	<b>\$2.96</b>	<b>\$3.28</b>	<b>\$3.61</b>	<b>\$3.97</b>	<b>\$4.35</b>	<b>\$4.74</b>
Total Water Purchased (DMWW) 26	89,253	104,897	105,508	102,785	97,994	98,826	99,666	100,514	101,371	102,236
Total Water Produced (Polk City) 27	47,172	63,639	73,664	68,523	65,329	65,884	66,444	67,009	67,581	68,157
Total Water 28	136,425	168,536	179,172	171,308	163,324	164,710	166,110	167,523	168,951	170,394
Unaccounted for Water 29	18%	27%	33%	25%	25%	25%	25%	25%	25%	25%
<b>OPERATING EXPENSES 30</b>		34%	2%	27%	2%	5%	6%	6%	6%	6%
Administration 31	\$95,095	\$90,406	\$142,392	\$336,242	\$398,367	\$411,055	\$424,183	\$437,766	\$451,821	\$466,365
Repair & Maintenance 32	29,460	33,597	41,881	35,500	21,000	21,000	21,000	21,000	21,000	21,000
DMWW Purchased Water 33	241,960	396,891	334,500	297,970	290,153	323,727	359,923	398,819	440,469	484,896
Sales Tax/Excise Tax Expense 34	48,300	52,926	48,235	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Other Operational Expenses 35	57,077	56,434	77,575	99,400	80,000	78,750	81,093	83,534	86,076	88,726
Total Operating Expense 36	\$471,892	\$630,254	\$644,583	\$819,112	\$839,520	\$884,532	\$936,199	\$991,118	\$1,049,366	\$1,110,988
<b>NET OPERATING REVENUES 37</b>	\$316,196	\$324,701	\$400,243	\$416,376	\$419,950	\$489,270	\$517,249	\$593,277	\$670,988	\$756,211
Interest on Reserves 38	0	0	0	0	0	0	0	0	0	0
<b>Net Revenues for Debt Service 39</b>	\$316,196	\$324,701	\$400,243	\$416,376	\$419,950	\$489,270	\$517,249	\$593,277	\$670,988	\$756,211

**CITY OF POLK CITY, IOWA**  
**Water Enterprise Fund**

BASE CASE - ADJUSTED FOR GO DEBT

EXHIBIT 1

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Customer Growth (Meters per Year)	75
Operating Expenses	Various

<i>WATER REVENUE ADJUSTMENTS</i>					
1-Jun-16	10.00%	1-Apr-20	7.00%	1-Apr-24	8.00%
1-Apr-17	10.00%	1-Apr-21	9.00%	1-Apr-25	8.00%
1-Apr-18	9.96%	1-Apr-22	9.00%		
1-Apr-19	10.03%	1-Apr-23	8.50%		

	Audited	Audited	Audited	Budget	Budget	Projected	Projected	Projected	Projected	Projected
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
<b>Net Revenues for Debt Service</b> 40	\$316,196	\$324,701	\$400,243	\$416,376	\$419,950	\$489,270	\$517,249	\$593,277	\$670,988	\$756,211
<b>Water Debt Service</b>										
Proposed Water Rev Bonds (2022) 41	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$276,951	\$277,505	\$277,925
Subtotal Revenue Debt 42	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$276,951	\$277,505	\$277,925
Series 2018 G.O. Bonds (Berwick Capacity) 43	\$0	\$0	\$0	\$0	\$10,000	\$68,127	\$133,878	\$204,245	\$205,495	\$201,595
<b>Total Water Debt</b> 44	\$0	\$0	\$0	\$0	\$10,000	\$68,127	\$133,878	\$481,196	\$483,000	\$479,520
<b>Debt Service Coverage</b>										
<b>Net Revenues/ Revenue Debt</b> 45	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	2.14	2.42	2.72
Net Revenues / All Debt 46	N.A.	N.A.	N.A.	N.A.	42.00	7.18	3.86	1.23	1.39	1.58
<b>NET CASHFLOW AFTER DEBT</b> 47	\$316,196	\$324,701	\$400,243	\$416,376	\$409,950	\$421,143	\$383,371	\$112,081	\$187,988	\$276,692
Capital Expenditures 48	(139,936)	(290,483)	(54,051)	(226,000)	(429,500)	(207,500)	(3,599,900)	(210,740)	(208,564)	(272,920)
Transfer (out)/in 49	0	0	0	0	0	0	0	0	0	0
Bond Proceeds 50	0	0	0	0	0	0	3,330,035	0	0	0
Transfer (to) from Restricted/Designated 51	7,609	1,787	649	0	0	0	(280,035)	0	0	0
Other Cash Sources/(Uses) 52	0	(1)	0	0	0	0	0	0	0	0
<b>Annual Surplus/ (Deficit)</b> 53	<b>\$183,869</b>	<b>\$36,005</b>	<b>\$346,841</b>	<b>\$190,376</b>	<b>(\$19,550)</b>	<b>\$213,643</b>	<b>(\$166,529)</b>	<b>(\$98,659)</b>	<b>(\$20,576)</b>	<b>\$3,771</b>
Unrestricted Beg. Cash Balance 54	\$30,031	\$213,900	\$249,905	\$596,746	\$787,121	\$767,572	\$981,215	\$814,686	\$716,027	\$695,451
<b>Unrestricted End. Cash Balance</b> 55	<b>\$213,900</b>	<b>\$249,905</b>	<b>\$596,746</b>	<b>\$787,121</b>	<b>\$767,572</b>	<b>\$981,215</b>	<b>\$814,686</b>	<b>\$716,027</b>	<b>\$695,451</b>	<b>\$699,223</b>
<b>Cash Balance as % of Operating Exp.</b> 56	<b>45%</b>	<b>40%</b>	<b>93%</b>	<b>96%</b>	<b>91%</b>	<b>111%</b>	<b>87%</b>	<b>72%</b>	<b>66%</b>	<b>63%</b>
<b>Restricted/Designated Funds</b>										
Water Deposits 57	\$45,737	\$43,950	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301
Bond Debt Service Reserve Fund 58	\$0	\$0	\$0	\$0	\$0	\$0	\$280,035	\$280,035	\$280,035	\$280,035
Bond Debt Service Sinking Fund 59	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Restricted Bond Proceeds 60	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Restricted/Designated</b> 61	<b>\$45,737</b>	<b>\$43,950</b>	<b>\$43,301</b>	<b>\$43,301</b>	<b>\$43,301</b>	<b>\$43,301</b>	<b>\$323,336</b>	<b>\$323,336</b>	<b>\$323,336</b>	<b>\$323,336</b>
<b>Total Cash</b> 62	<b>\$259,637</b>	<b>\$293,855</b>	<b>\$640,047</b>	<b>\$830,422</b>	<b>\$810,873</b>	<b>\$1,024,516</b>	<b>\$1,138,021</b>	<b>\$1,039,363</b>	<b>\$1,018,787</b>	<b>\$1,022,558</b>
<b>Water Capital Outlays:</b>										
Eastside Elevated Storage	0	0	0	0	0	0	3,050,000	0	0	0
Creekview Estates - Upside Water Main	0	200,000	0	0	200,000	0	0	0	0	0
Water Tower painting	0	0	0	0	0	0	290,000	0	0	0
Miscellaneous	226,000	229,500	207,500	229,500	229,500	207,500	259,900	210,740	208,564	272,920
<b>Total</b>	<b>\$226,000</b>	<b>\$429,500</b>	<b>\$207,500</b>	<b>\$429,500</b>	<b>\$429,500</b>	<b>\$207,500</b>	<b>\$3,599,900</b>	<b>\$210,740</b>	<b>\$208,564</b>	<b>\$272,920</b>
<b>Deferred Capital Outlays:</b>										
	2020 Costs									
New Well	250,000									
Plant Upgrade for New Wells	250,000									



# Water Rate Study Analysis

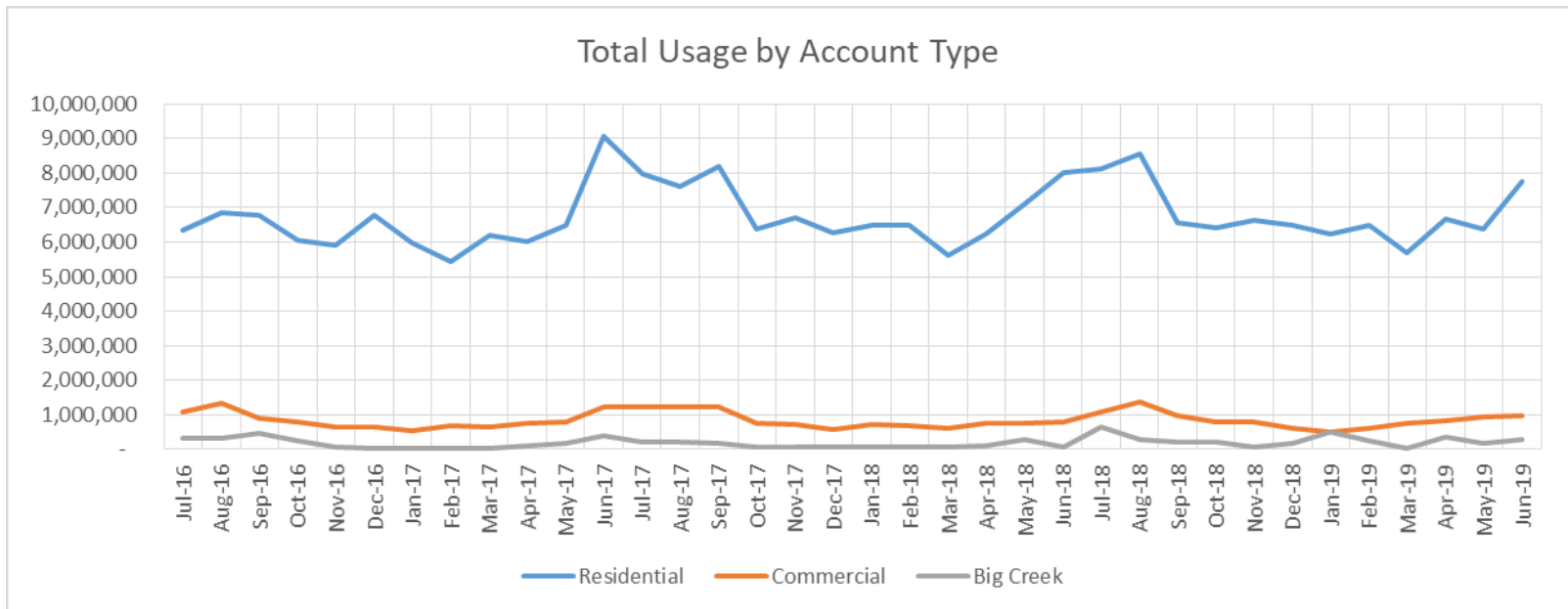


# Billing Data Key Metrics



## Billing Data Evaluated

- ◆ Monthly Detail from July 2016 through June 2019
- ◆ 2,775 Accounts
- ◆ Data Evaluated by Account Type (Residential vs Commercial)
- ◆ Data Evaluated by Meter Type (Regular vs Irrigation/Garden)
- ◆ Data Evaluated by Usage Trends
- ◆ Average Usage, Max Usage and Peaking Ratio's Identified



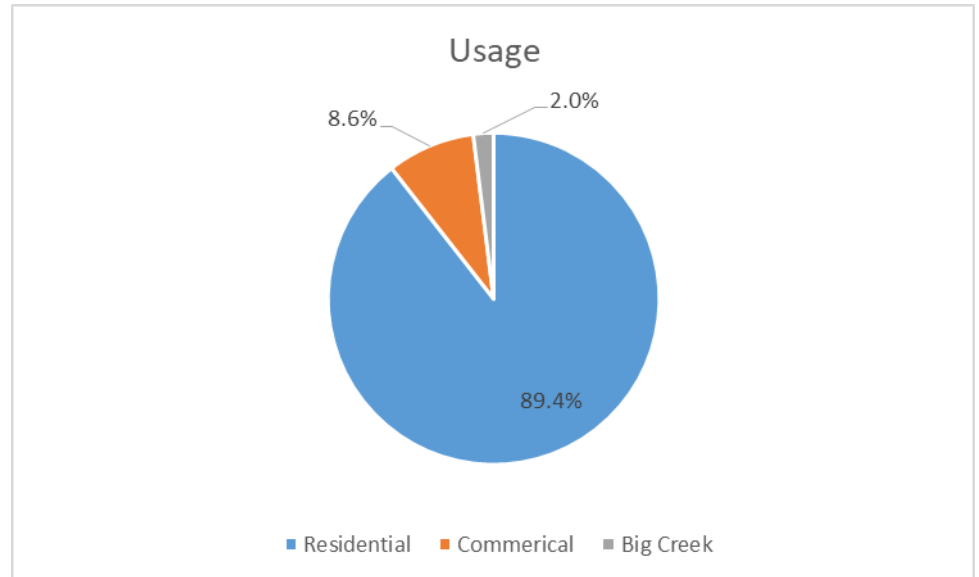
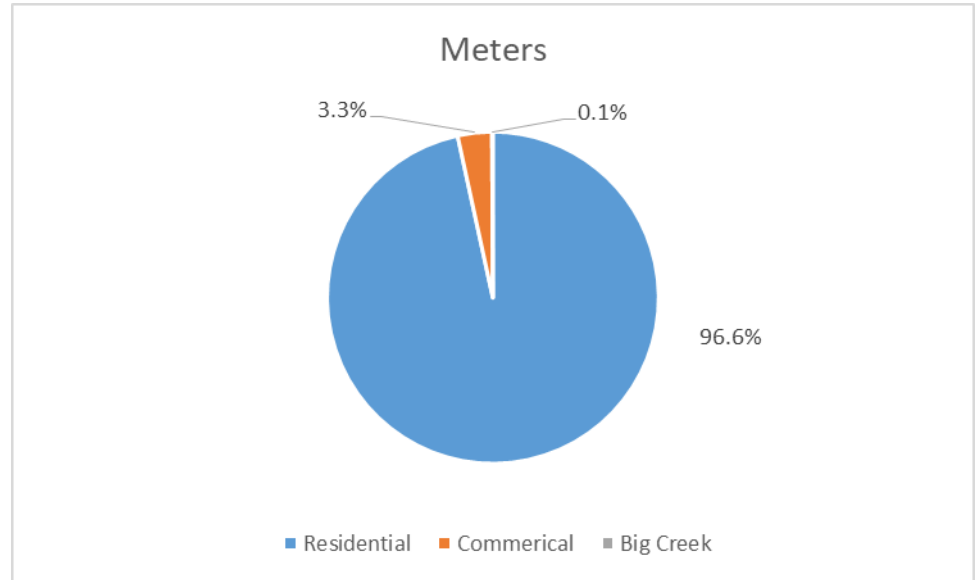




## Accounts by Customer Type

- ◆ June 2019
  - 2,315 Residential Meters
  - 80 Commercial Meters
  - 2 Government Meters
  
- 2,397 Total Meters

- ◆ Usage % is Average over 36 Months

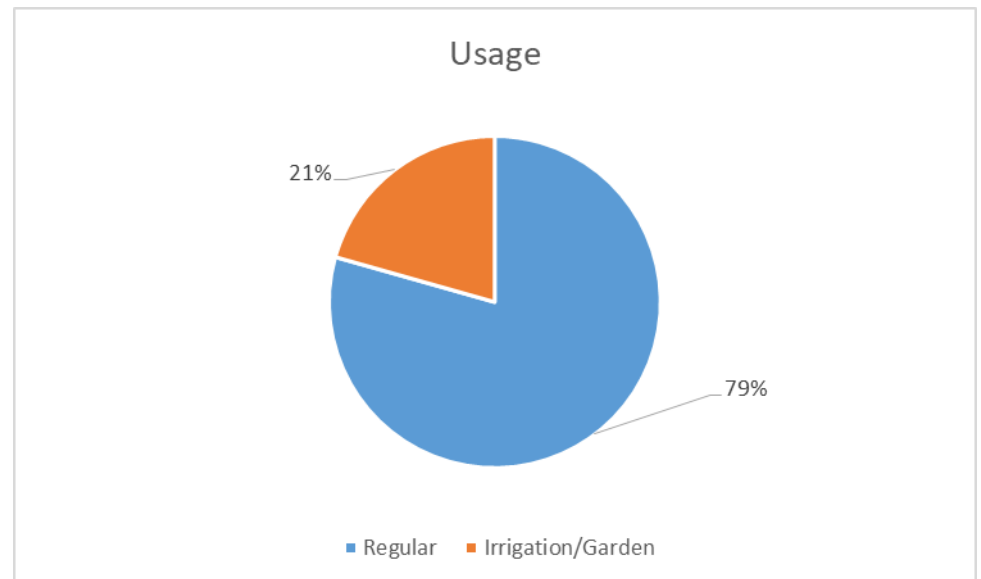
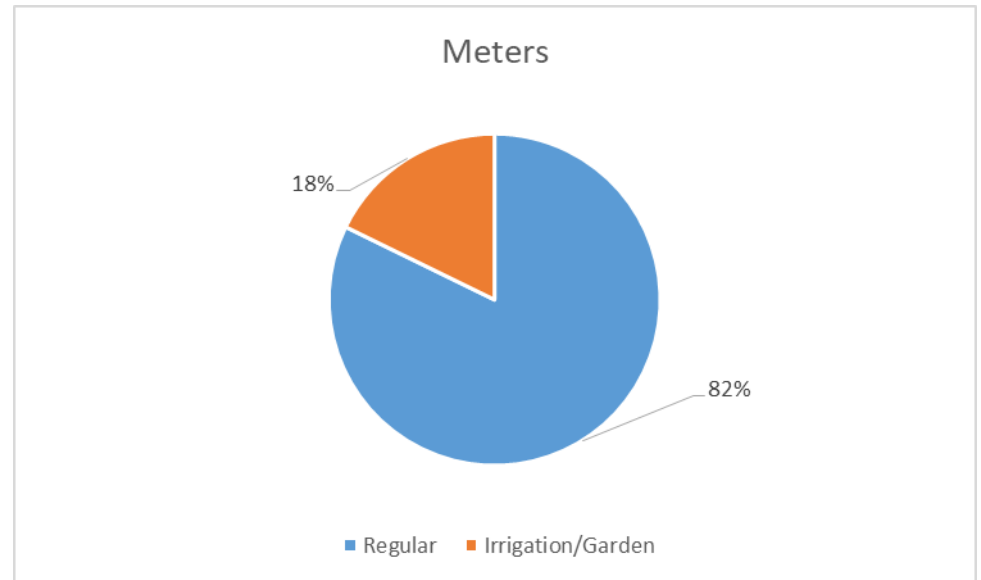




## Accounts by Meter Type

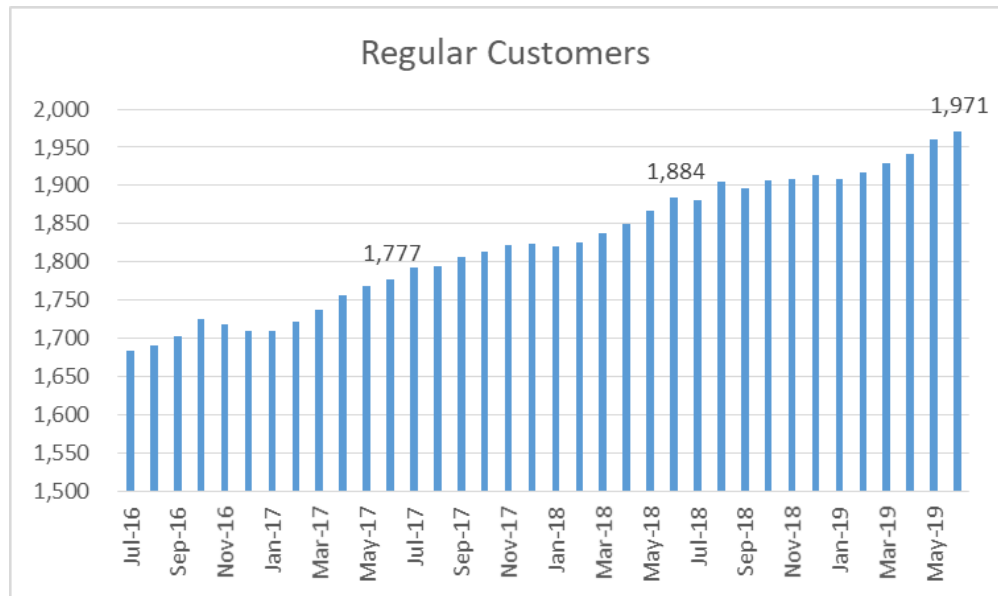
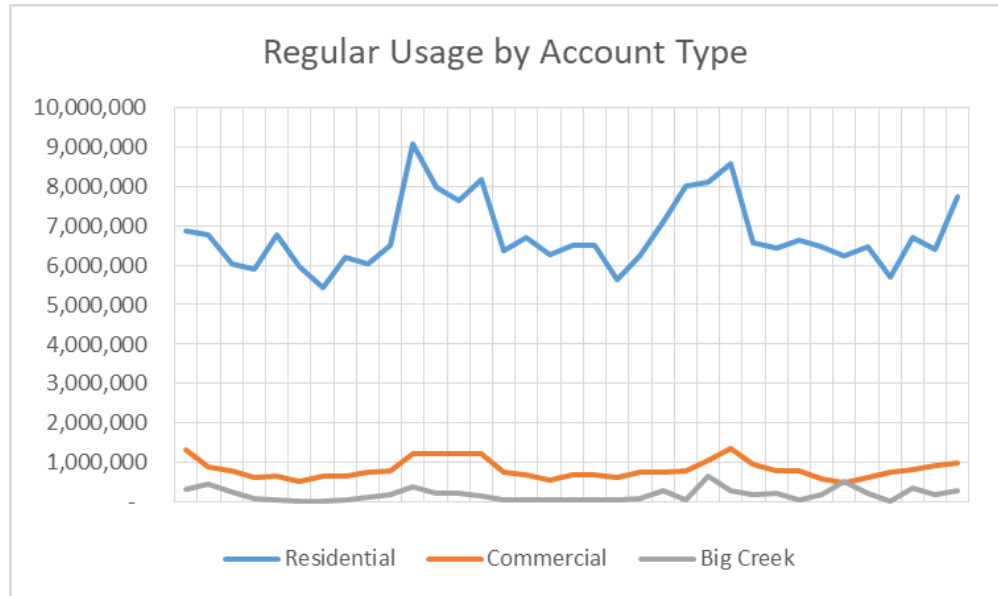
- ◆ June 2019
  - 1,971 Regular Meters
  - 426 Irrigation/Garden Meters
- 2,397 Total Meters

- ◆ Usage % is Average over 36 Months





## Regular Customers (Non-Irrigation)

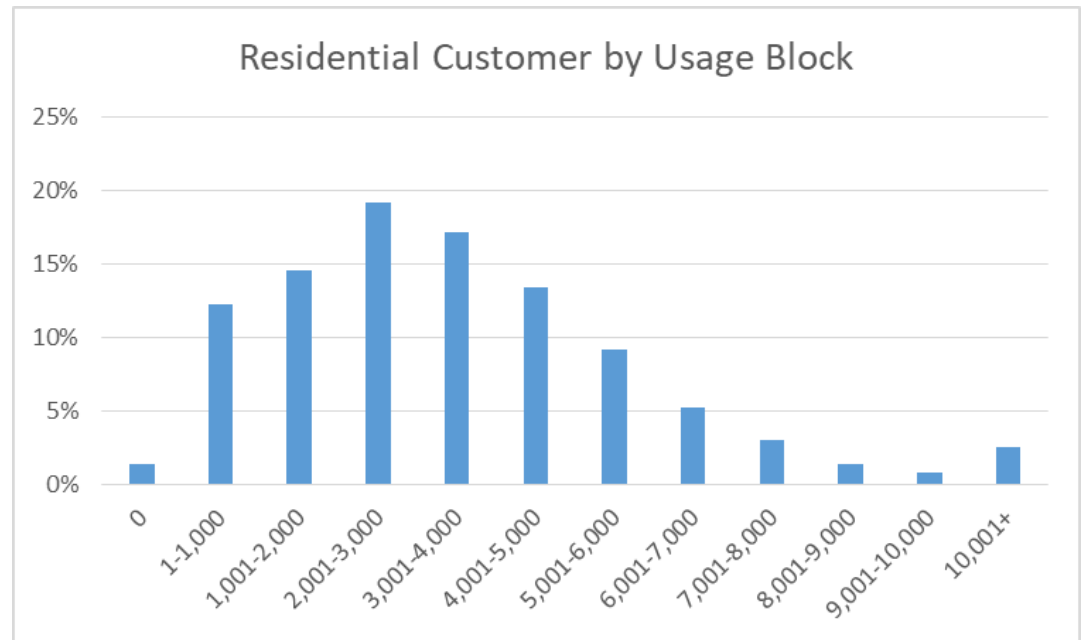




## Regular Customers - (Non-irrigation)

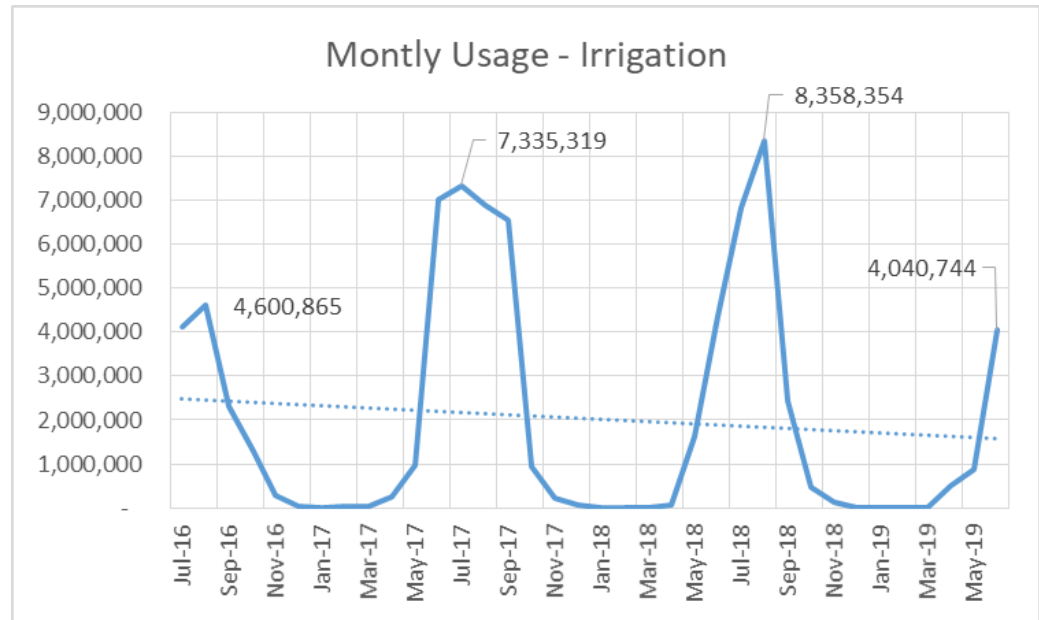
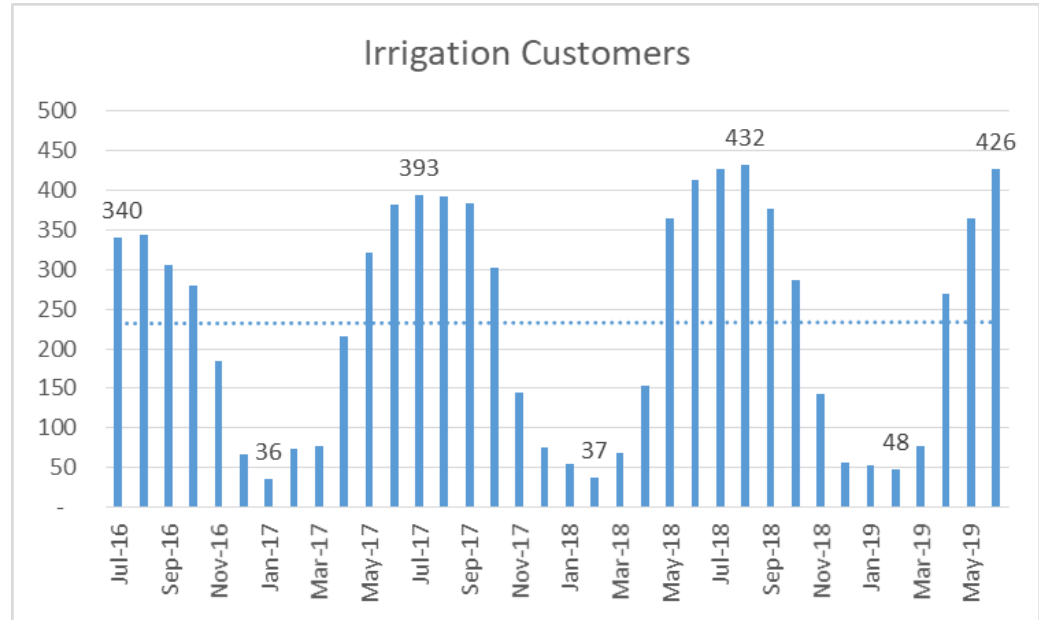
- ◆ Average Usage – 4,100 gallons/Month
- ◆ Average Peaking Factor – 2.25x

<u>Block</u>	<u>Count</u>	<u>Percentage</u>
1-1,000	15	0.5%
1-1,000	330	12.0%
1,001-2,000	408	14.8%
2,001-3,000	533	19.3%
3,001-4,000	483	17.5%
4,001-5,000	356	12.9%
5,001-6,000	256	9.3%
6,001-7,000	143	5.2%
7,001-8,000	80	2.9%
8,001-9,000	36	1.3%
9,001-10,000	24	0.9%
10,001-15,000	48	1.7%
15,001-20,000	21	0.8%
20,001-30,000	11	0.4%
30,001-40,000	5	0.2%
40,001-50,000	-	0.0%
50,001-100,000	2	0.1%
100,000+	5	0.2%
	<u>2,756</u>	





# Irrigation Customers

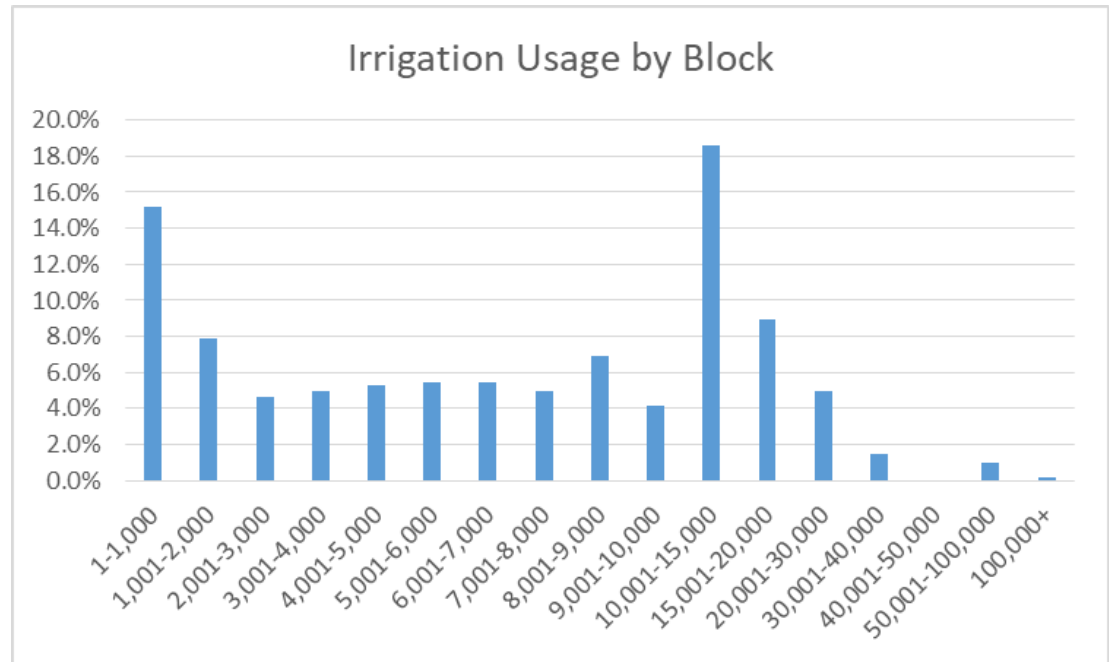




# Irrigation

- Average Usage – 9,209 gallons/Month
- Average Peaking Factor – 3.16x (only months with data)
- Average Peaking Factor – 13.74x (all 36 months)

<u>Block</u>	<u>Count</u>	<u>Percentage</u>
1-1,000	95	15.2%
1,001-2,000	49	7.9%
2,001-3,000	29	4.6%
3,001-4,000	31	5.0%
4,001-5,000	33	5.3%
5,001-6,000	34	5.4%
6,001-7,000	34	5.4%
7,001-8,000	31	5.0%
8,001-9,000	43	6.9%
9,001-10,000	26	4.2%
10,001-15,000	116	18.6%
15,001-20,000	56	9.0%
20,001-30,000	31	5.0%
30,001-40,000	9	1.4%
40,001-50,000	-	0.0%
50,001-100,000	6	1.0%
100,000+	1	0.2%
	<u>624</u>	

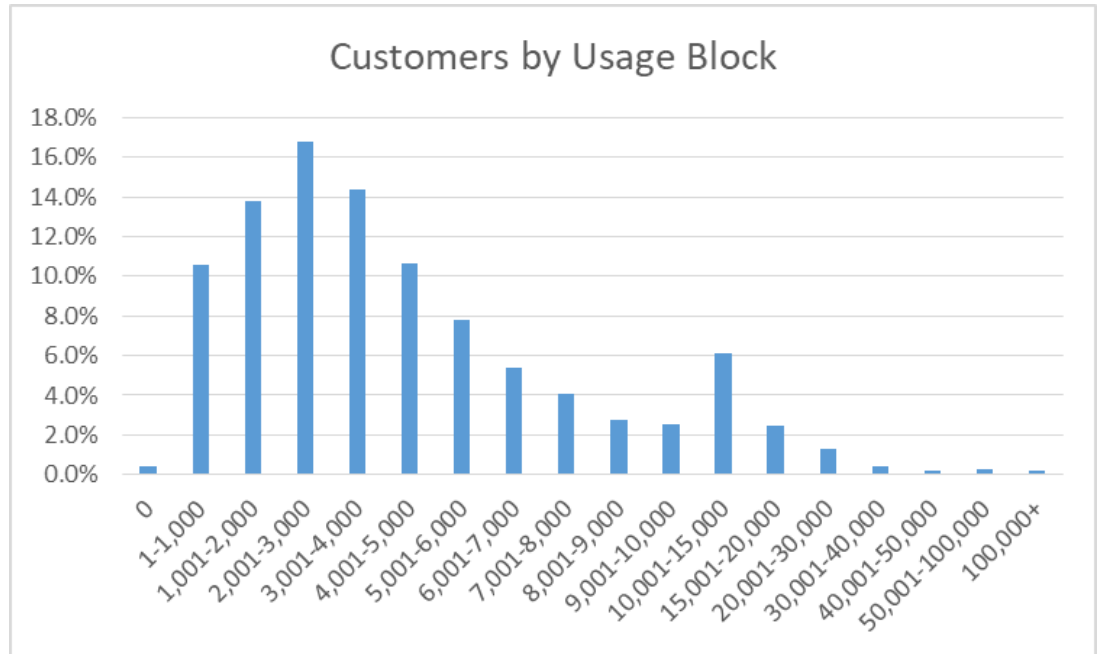


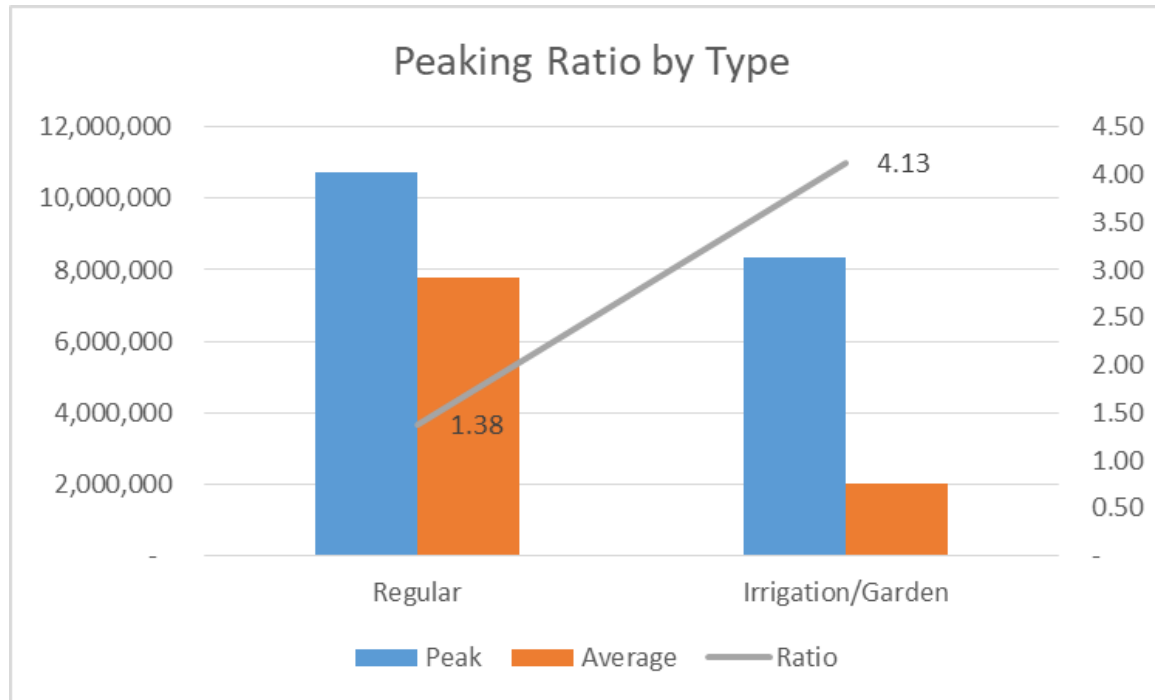


## Total System Metrics

- ◆ Average Usage – 5,411 gallons/month
- ◆ Average Peaking Factor – 2.53x

<u>Block</u>	<u>Count</u>	<u>Percentage</u>
0	12	0.4%
1-1,000	294	10.6%
1,001-2,000	382	13.8%
2,001-3,000	466	16.8%
3,001-4,000	398	14.3%
4,001-5,000	295	10.6%
5,001-6,000	216	7.8%
6,001-7,000	149	5.4%
7,001-8,000	114	4.1%
8,001-9,000	77	2.8%
9,001-10,000	70	2.5%
10,001-15,000	169	6.1%
15,001-20,000	68	2.5%
20,001-30,000	36	1.3%
30,001-40,000	12	0.4%
40,001-50,000	5	0.2%
50,001-100,000	7	0.3%
100,000+	<u>5</u>	0.2%
	<b>2,775</b>	





	<u>Regular</u>	<u>Irrigation/Garden</u>
Peak	10,729,041	8,358,354
Average	7,787,893	2,023,882
Ratio	1.38	4.13





## Top Users

<u>Description</u>	<u>Average</u>	<u>Peak</u>	<u>Ratio</u>
Golf Course *	322,139	570,963	1.77
State Park	204,359	653,169	3.20
Nursing Home	167,562	330,129	1.97
Golf Course *	132,290	371,239	2.81
Car Wash	100,148	168,061	1.68
Church/Daycare	61,408	405,775	6.61
School	46,823	85,086	1.82
Convenience Store	40,390	139,400	3.45
Hotel	37,223	70,384	1.89
Golf Course *	33,867	94,745	2.80

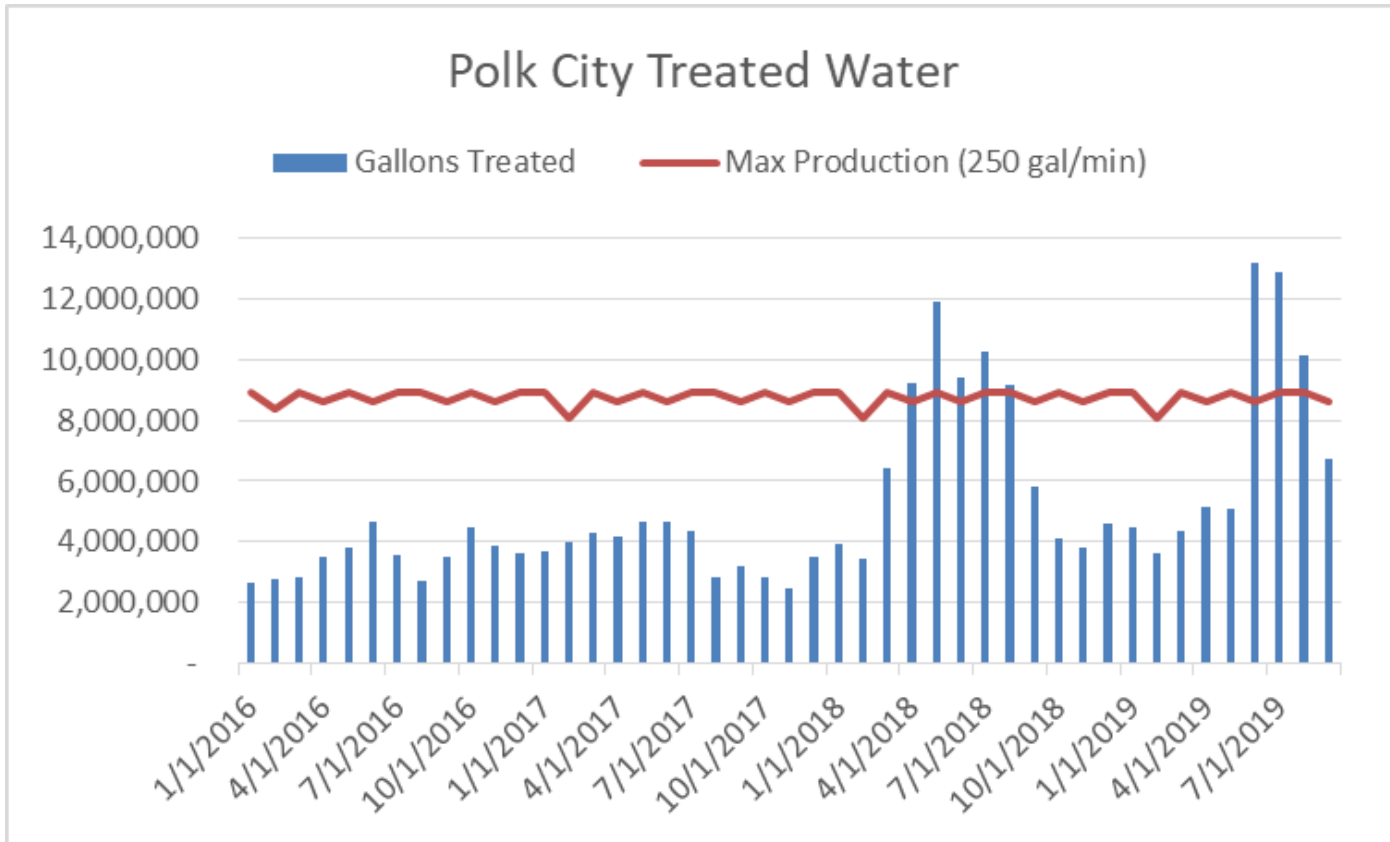
\* Irrigation Meter



# Water Production & Water Purchased



## Treated Water





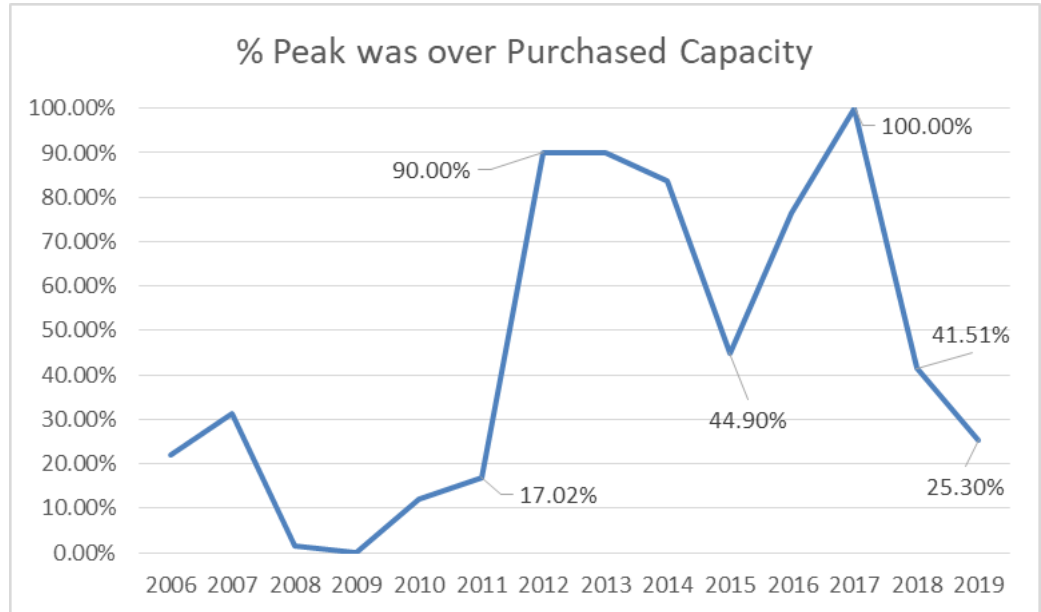
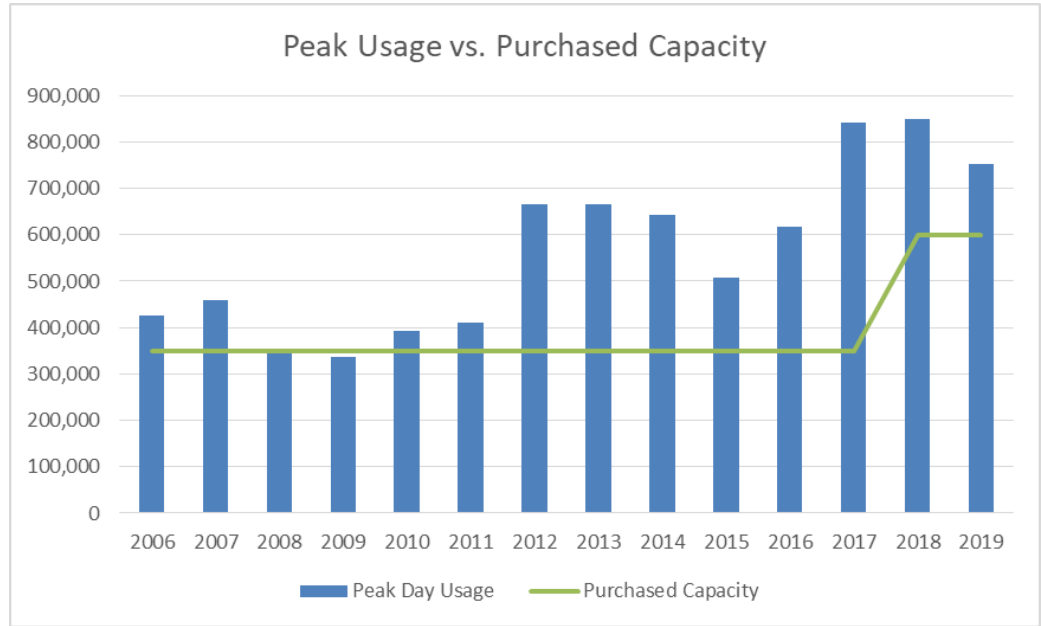
## Treated Water - Costs

	<u>Fiscal Year 2019</u>
Water Production Costs	\$108,861
Water Production	73,663,720
Cost per Kgal	\$1.48



# Purchased Water

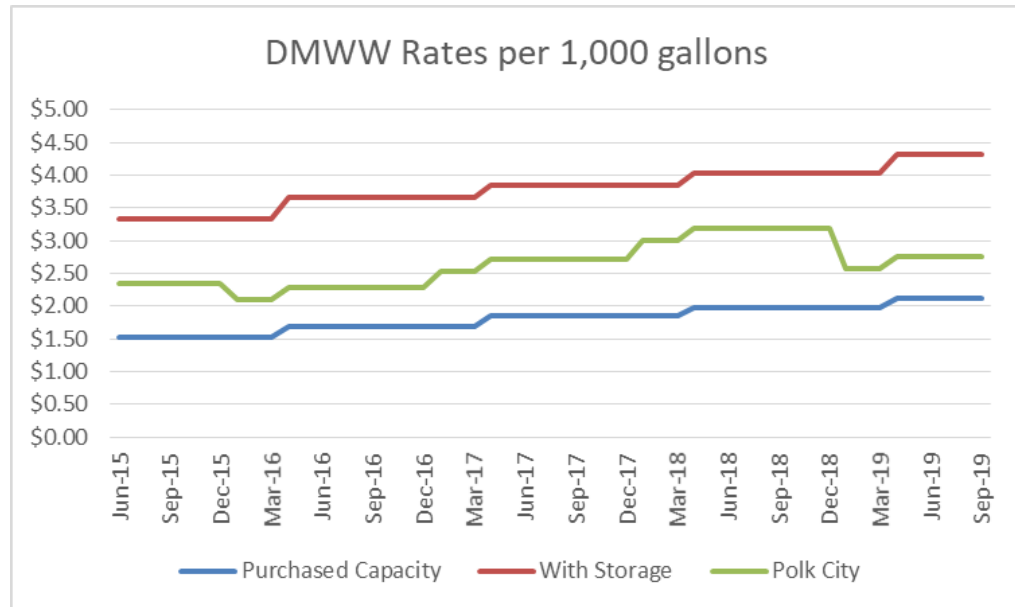
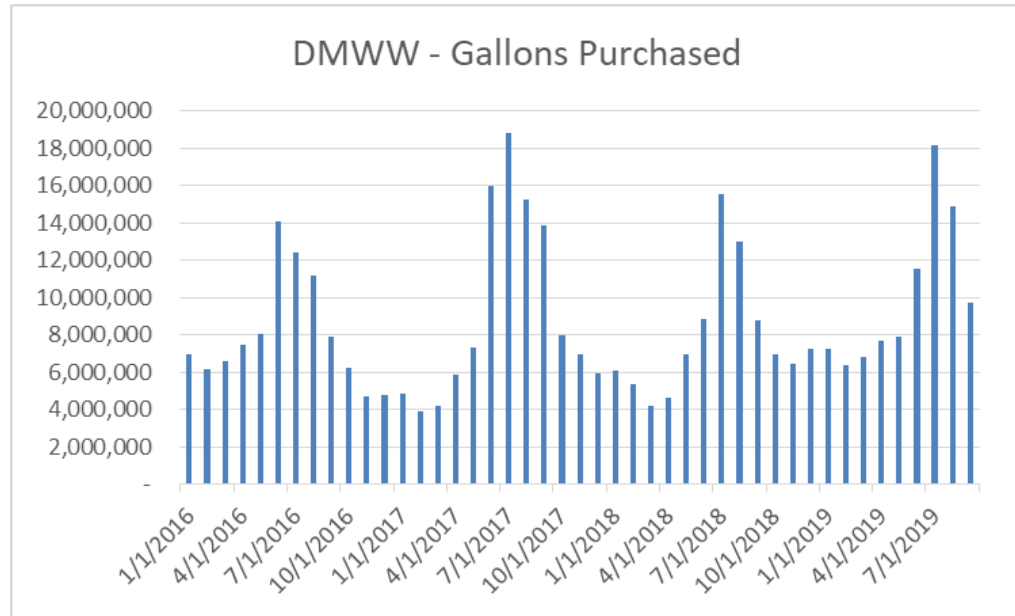
<u>Calendar Year</u>	<u>Purchased Capacity</u>	<u>Peak Day Date</u>	<u>Peak Day Usage (gals)</u>
2006	350,000	6/19/2006	427,016
2007	350,000	6/16/2007	459,302
2008	350,000	7/16/2008	355,341
2009	350,000	7/27/2009	336,623
2010	350,000	8/29/2010	392,352
2011	350,000	8/26/2011	409,557
2012	350,000	7/22/2012	665,016
2013	350,000	7/14/2013	664,990
2014	350,000	8/3/2014	643,325
2015	350,000	8/16/2015	507,133
2016	350,000	7/23/2016	617,142
2017	350,000	6/11/2017	841,551
2018	600,000	7/22/2018	849,039
2019	600,000	7/14/2019	751,795





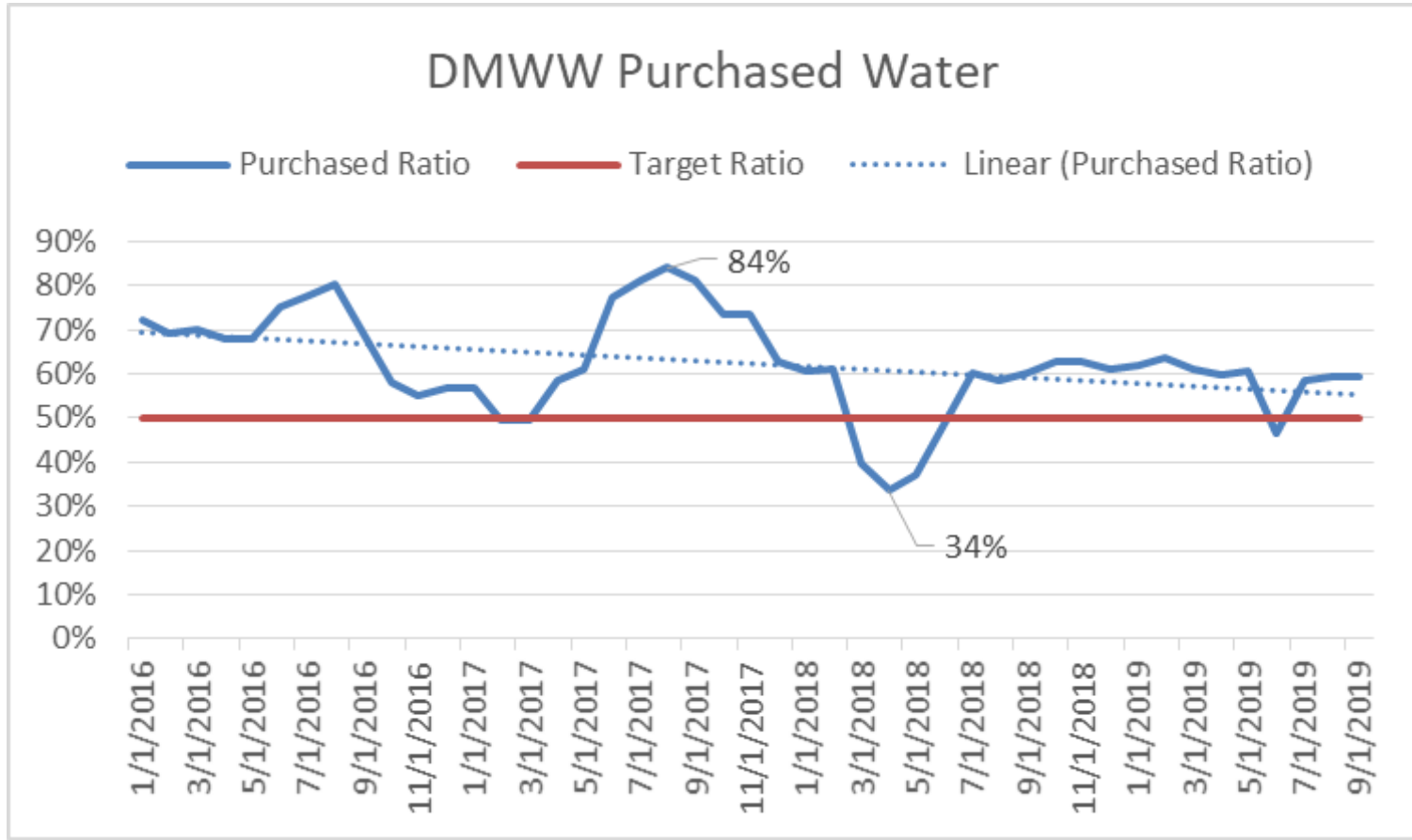
# Purchased Water

Fiscal Year	Additional Cost
2016	\$78,751
2017	\$73,094
2018	\$115,591
2019	\$108,363





# Total Water





## Treated Water – Proposed Improvements

	<u>Fiscal Year 2019</u>		
Water Production Costs	\$108,861		
Water Production	73,663,720	Well/Plant Upgrades	\$500,000
Cost per Kgal	\$1.48	Kgals to pay for improvements	337,339
DMWW Blended Rate	\$2.96		
Savings Per Kgal	\$1.48		

	<u>% Improvement</u>	<u>Additional Kgals</u>	<u>Payback (years)</u>
	10%	7,366	45.79
	15%	11,050	30.53
250 Current (GPM)	20%	14,733	22.90
350 Projected (GPM)	25%	18,416	18.32
40% Improvement	30%	22,099	15.26
	35%	25,782	13.08
	40%	29,465	11.45
	45%	33,149	10.18
	50%	36,832	9.16





# Revenue Requirements (FY 2021 Budget)



## Revenue Requirements (FY 2021)

	<u>FY 2021</u>
DMWW	\$290,200
City Operating	\$546,000
City Capital	\$230,000
Debt Service*	<u>\$10,000</u>
	\$1,076,200

\* Annual debt service for Berwick capacity (2018 GO Bonds) is \$204,895 in FY 2021.



## System Assumptions

### Meters

Regular	1,971	
Irrigation	<u>426</u>	
Total	2,397	

### Usage (kgal)

Regular	95,463	
Irrigation	<u>23,708</u>	
Total Usage	119,171	
Exclude Base Usage	(23,652)	20%
Billed Usage (FY 2019)	95,519	



## Revenue Requirements – Cost per Meter

	<u>FY 2021</u>	<u>Annually*</u>	<u>Monthly*</u>
DMWW	\$290,200	\$147.23	\$12.27
City Operating	\$546,000	\$277.02	\$23.08
City Capital	\$230,000	\$116.69	\$9.72
Debt Service	<u>\$10,000</u>	<u>\$5.07</u>	<u>\$0.42</u>
	\$1,076,200	\$546.02	\$45.50
Other Revenues	\$113,000	\$57.33	\$4.78
Assumptions	1,971	*Regular Meters	



## Revenue Requirements – Cost per 1,000 Gallons (“kgal”)

	<u>FY 2021</u>	<u>\$/kgal*</u>	<u>Monthly**</u>
DMWW	\$290,200	\$2.44	\$9.98
City Operating	\$546,000	\$4.58	\$18.78
City Capital	\$230,000	\$1.93	\$7.91
Debt Service	<u>\$10,000</u>	<u>\$0.08</u>	<u>\$0.34</u>
	\$1,076,200	\$9.03	\$37.03
Other Revenues	\$113,000	\$0.95	\$0.08

119,171 \* Assumes Total Consumption (kgal)  
95,463 Regular (kgal)  
23,708 Irrigation (kgal)

\*\* Assumes 4,100 gallons per meter per month



# Rate Structure Options & Considerations



## Current Rate Structure

	<u>Base Rate</u>	<u>Per Kgal</u>	
Regular	\$13.71	\$5.50	
Irrigation	\$0.00	\$7.18	131%

### Assumptions:

	<u>Meters</u>	<u>Usage</u>
Regular	1,971	95,519
Irrigation	426	23,708
Total	2,397	119,227

	<u>Base</u>	<u>Usage</u>	<u>Total</u>	<u>%</u>
<u>Revenues</u>				
Regular	\$324,269	\$395,269	\$719,537	81%
Irrigation	\$0	\$170,223	\$170,223	19%
Total	\$324,269	\$565,492	\$889,761	
	36%	64%		

Projected Revenues	\$889,761
2021 Requirements	<u>\$1,076,200</u>
Difference	(\$186,439)
Meeting Revenue Requirements	No
Additional Revenues Budgeted	\$113,000



## Current Rate Structure plus 7% for FY 2021

	<u>Base Rate</u>	<u>Per Kgal</u>	
Regular	\$14.67	\$5.89	
Irrigation	\$0.00	\$7.68	130%

### Assumptions:

	<u>Meters</u>	<u>Usage</u>
Regular	1,971	95,519
Irrigation	<u>426</u>	<u>23,708</u>
Total	2,397	119,227

<u>Revenues</u>	<u>Base</u>	<u>Usage</u>	<u>Total</u>	<u>%</u>
Regular	\$346,975	\$423,297	\$770,271	81%
Irrigation	<u>\$0</u>	<u>\$182,077</u>	<u>\$182,077</u>	19%
Total	\$346,975	\$605,374	\$952,349	
	36%	64%		

Projected Revenues	\$952,349
2021 Requirements	<u>\$1,076,200</u>
Difference	(\$123,851)
Meeting Revenue Requirements	No

Additional Revenues Budgeted      \$113,000





## Option 1 – Increase Irrigation Rate 40%

	<u>Base Rate</u>	<u>Per Kgal</u>	
Regular	\$14.67	\$5.89	
Irrigation	\$0.00	\$10.75	183%

### Assumptions:

	<u>Meters</u>	<u>Usage</u>
Regular	1,971	95,519
Irrigation	536	23,708
Total	2,507	119,227

<u>Revenues</u>	<u>Base</u>	<u>Usage</u>	<u>Total</u>	<u>%</u>
Regular	\$346,975	\$423,297	\$770,271	75%
Irrigation	\$0	\$254,908	\$254,908	25%
Total	\$346,975	\$678,205	\$1,025,180	
	34%	66%		

Projected Revenues	\$1,025,180
2021 Requirements	<u>\$1,076,200</u>
Difference	(\$51,020)
Meeting Revenue Requirements	No
Additional Revenues Budgeted	\$113,000



## Option 2 – Increase Irrigation Rate 40% & Implement a Irrigation Base Rate

	<u>Base Rate</u>	<u>Per Kgal</u>	
Regular	\$14.67	\$5.89	
Irrigation	\$5.00	\$10.75	183%

Assumptions:

	<u>Meters</u>	<u>Usage</u>
Regular	1,971	95,519
Irrigation	536	23,708
Total	2,507	119,227

<u>Revenues</u>	<u>Base</u>	<u>Usage</u>	<u>Total</u>	<u>%</u>
Regular	\$346,975	\$423,297	\$770,271	73%
Irrigation	\$32,160	\$254,908	\$287,068	27%
Total	\$379,135	\$678,205	\$1,057,340	
	36%	64%		

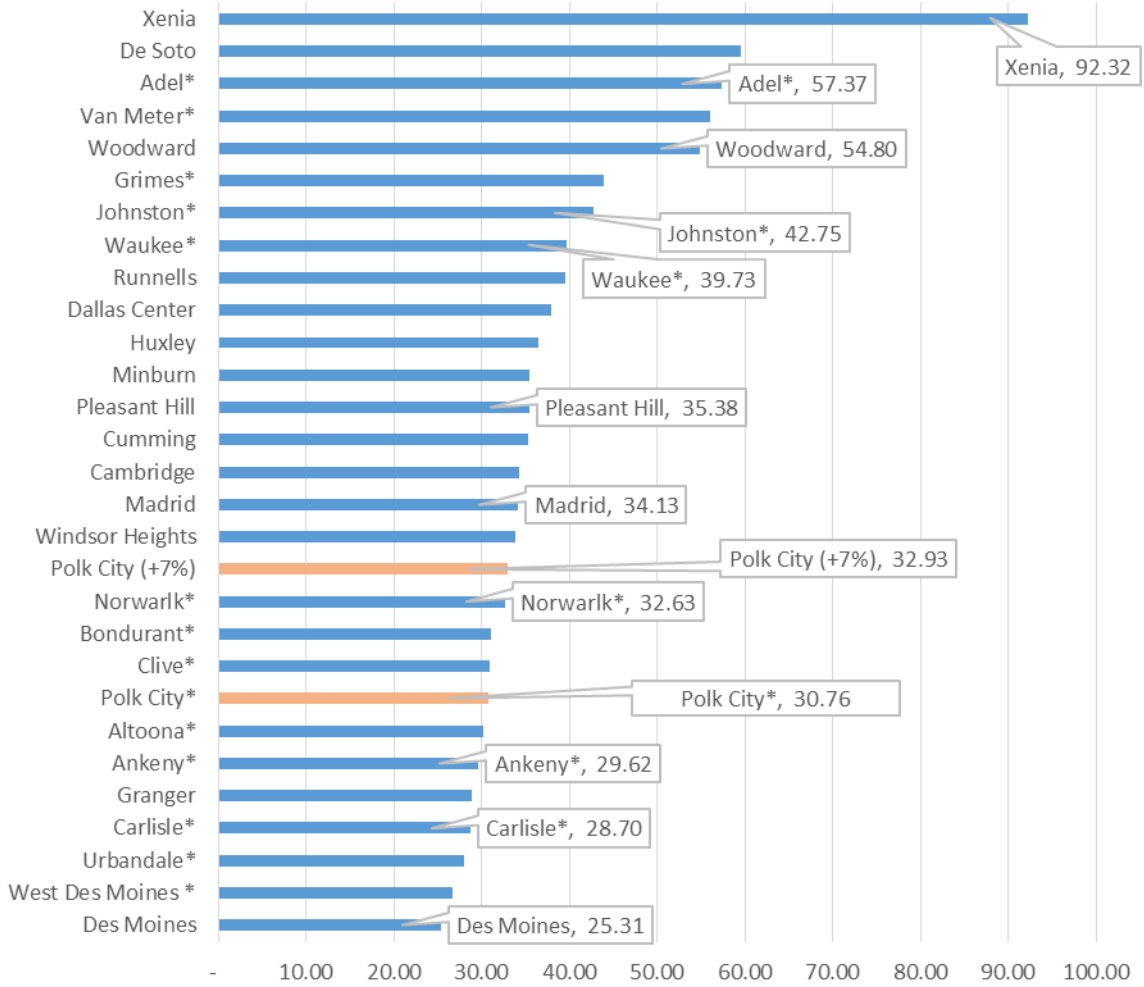
Projected Revenues	\$1,057,340
2021 Requirements	\$1,076,200
Difference	(\$18,860)
Meeting Revenue Requirements	Yes
Additional Revenues Budgeted	\$113,000



# Cost of Water Comparison



## Monthly Water Bill Residential 5/8" meter using 4,100 gallons per month



4,100 gallons

Des Moines	25.31
West Des Moines *	26.64
Urbandale*	27.99
Carlisle*	28.70
Granger	28.94
Ankeny*	29.62
Altoona*	30.26
<b>Polk City*</b>	<b>30.76</b>
Clive*	30.87
Bondurant*	31.11
Norwarlk*	32.63
<b>Polk City (+7%)</b>	<b>32.93</b>
Windsor Heights	33.88
Madrid	34.13
Cambridge	34.30
Cumming	35.31
Pleasant Hill	35.38
Minburn	35.48
Huxley	36.50
Dallas Center	37.97
Runnells	39.58
Waukee*	39.73
Johnston*	42.75
Grimes*	43.85
Woodward	54.80
Van Meter*	55.98
Adel*	57.37
De Soto	59.59
Xenia	92.32



# Discussion



## Discussion Items

- How much is irrigation usage increasing the cost to the system?
- Berwick Capacity currently funding with Property Taxes (2018 GO Bonds)
- Connection Fees
  - What should the City project for Future years?
  - Where should these Revenues be applied?
- Future Capital Needs
  - \$230,000 annual capital needs
  - Elevated Storage
  - Water Tower painting
- Regional Water ??



# Water Utility Cash Flow: Option 1

**CITY OF POLK CITY, IOWA**  
**Water Enterprise Fund**

OPTION 1 - Increase Irrigation (40%)

EXHIBIT 1

<i>Growth Assumptions</i>	
Water Sales Growth	1.00%
Customer Growth (Meters per Year)	75
Operating Expenses	Various

<i>WATER REVENUE ADJUSTMENTS</i>					
1-Jun-16	10.00%	1-Apr-20	7.00%	1-Apr-24	7.50%
1-Apr-17	10.00%	1-Apr-21	8.00%	1-Apr-25	7.00%
1-Apr-18	9.96%	1-Apr-22	8.00%		
1-Apr-19	10.03%	1-Apr-23	8.00%		

	Audited	Audited	Audited	Budget	Budget	Projected	Projected	Projected	Projected	Projected
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
<b>Water Rates</b>										
1 6/1/2016		4/1/2017	4/1/2018	4/1/2019	4/1/2020	4/1/2021	4/1/2022	4/1/2023	4/1/2024	4/1/2025
First 1,000 gallons (Minimum Bill) 2	\$10.34	\$11.37	\$12.51	\$13.71	\$14.67	\$15.84	\$17.11	\$18.48	\$19.87	\$21.26
Rate per 1,000 gallons 3	\$4.13	\$4.54	\$5.00	\$5.50	\$5.89	\$6.36	\$6.87	\$7.42	\$7.98	\$8.54
Availability Fee for Irrigation Meters 4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Irrigation/Garden Rate per 1,000 gallons 5	\$5.40	\$5.94	\$6.53	\$7.18	\$10.36	\$11.19	\$12.09	\$13.06	\$14.04	\$15.02
Average Monthly Bill (4,100 gals) 6	\$23.14	\$25.44	\$28.01	\$30.76	\$32.93	\$35.56	\$38.41	\$41.48	\$44.61	\$47.73
Change in Average Monthly Bill 7	\$2.12	\$2.30	\$2.57	\$2.75	\$2.17	\$2.63	\$2.85	\$3.08	\$3.13	\$3.13
Average Number of Regular Meters 8	1,725	1,828	1,920	1,971	2,046	2,121	2,196	2,271	2,346	2,421
Average Number of Irrigation Meters 9	219	232	247	247	426	471	516	561	606	651
<b>WATER SALES (1,000 GALLONS)</b>						Projected Irrigation Water Sales Based on 90% of the 3 year average				
Regular Water Sales 10	90,267	94,634	95,463	109,783	110,881	111,989	113,109	114,240	115,383	116,537
Irrigation Water Sales 11	21,010	28,142	23,708	27,264	19,778	19,778	19,778	19,778	19,778	19,778
Subtotal Water Sales 12	111,277	122,776	119,171	137,047	130,659	131,768	132,888	134,019	135,161	136,315
<b>Average \$\$ Per 1,000 Gallons 13</b>	<b>\$5.51</b>	<b>\$6.41</b>	<b>\$7.05</b>	<b>\$7.75</b>	<b>\$8.29</b>	<b>\$8.95</b>	<b>\$9.67</b>	<b>\$10.44</b>	<b>\$11.22</b>	<b>\$12.01</b>
<b>OPERATING REVENUES</b>										
Sale of Water 14	\$612,641	\$787,248	\$839,635	\$1,062,393	\$1,141,706	\$1,237,865	\$1,343,567	\$1,457,699	\$1,575,051	\$1,695,686
Irrigation Availability Fee 15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Irrigation Meter Sales 16	18,406	23,256	22,407	18,000	18,000	18,000	18,000	18,000	18,000	18,000
Sales Tax/Water Excise Tax 17	41,389	53,797	49,075	62,094	66,730	72,350	78,528	85,199	92,058	99,109
Hookup Charges 18	91,095	69,400	115,500	75,000	80,000	80,000	35,000	35,000	35,000	35,000
Late Charges/Penalties 19	1,688	1,463	1,630	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Other Misc. Revenue 20	22,871	19,792	16,579	16,000	13,000	13,000	13,000	13,000	13,000	13,000
<b>Total Operating Revenues 21</b>	<b>\$788,089</b>	<b>\$954,955</b>	<b>\$1,044,826</b>	<b>\$1,235,487</b>	<b>\$1,321,436</b>	<b>\$1,423,215</b>	<b>\$1,490,095</b>	<b>\$1,610,898</b>	<b>\$1,735,109</b>	<b>\$1,862,795</b>



**CITY OF POLK CITY, IOWA**  
**Water Enterprise Fund**

OPTION 1 - Increase Irrigation (40%)

EXHIBIT 1

<i>Growth Assumptions</i>	
Water Sales Growth	1.00%
Customer Growth (Meters per Year)	75
Operating Expenses	Various

<i>WATER REVENUE ADJUSTMENTS</i>					
1-Jun-16	10.00%	1-Apr-20	7.00%	1-Apr-24	7.50%
1-Apr-17	10.00%	1-Apr-21	8.00%	1-Apr-25	7.00%
1-Apr-18	9.96%	1-Apr-22	8.00%		
1-Apr-19	10.03%	1-Apr-23	8.00%		

	Audited	Audited	Audited	Budget	Budget	Projected	Projected	Projected	Projected	Projected
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
	Apr-17	Apr-18	Apr-19	Apr-20	Apr-21	Apr-22	Apr-23	Apr-24	Apr-25	Apr-26
<b>DMWW Rate/1,000 Gallons</b>										
With Storage Rate 22	\$3.84	\$4.03	\$4.31	\$4.44	\$4.66	\$4.89	\$5.13	\$5.39	\$5.66	\$5.94
Purchased Capacity Rate 23	\$1.85	\$1.98	\$2.12	\$2.33	\$2.45	\$2.70	\$2.97	\$3.27	\$3.60	\$3.96
Purchased Water Percentage 24	65%	62%	59%	60%	60%	60%	60%	60%	60%	60%
<b>Average \$\$ per 1,000 Gallons Purchased 25</b>	<b>\$2.71</b>	<b>\$3.78</b>	<b>\$3.17</b>	<b>\$2.90</b>	<b>\$2.96</b>	<b>\$3.28</b>	<b>\$3.61</b>	<b>\$3.97</b>	<b>\$4.35</b>	<b>\$4.74</b>
Total Water Purchased (DMWW) 26	89,253	104,897	105,508	102,785	97,994	98,826	99,666	100,514	101,371	102,236
Total Water Produced (Polk City) 27	47,172	63,639	73,664	68,523	65,329	65,884	66,444	67,009	67,581	68,157
Total Water 28	136,425	168,536	179,172	171,308	163,324	164,710	166,110	167,523	168,951	170,394
Unaccounted for Water 29	18%	27%	33%	25%	25%	25%	25%	25%	25%	25%
<b>OPERATING EXPENSES 30</b>		34%	2%	27%	2%	5%	6%	6%	6%	6%
Administration 31	\$95,095	\$90,406	\$142,392	\$336,242	\$398,367	\$411,055	\$424,183	\$437,766	\$451,821	\$466,365
Repair & Maintenance 32	29,460	33,597	41,881	35,500	21,000	21,000	21,000	21,000	21,000	21,000
DMWW Purchased Water 33	241,960	396,891	334,500	297,970	290,153	323,727	359,923	398,819	440,469	484,896
Sales Tax/Excise Tax Expense 34	48,300	52,926	48,235	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Other Operational Expenses 35	57,077	56,434	77,575	99,400	80,000	78,750	81,093	83,534	86,076	88,726
Total Operating Expense 36	\$471,892	\$630,254	\$644,583	\$819,112	\$839,520	\$884,532	\$936,199	\$991,118	\$1,049,366	\$1,110,988
<b>NET OPERATING REVENUES 37</b>	\$316,196	\$324,701	\$400,243	\$416,376	\$481,916	\$538,683	\$553,896	\$619,779	\$685,743	\$751,807
Interest on Reserves 38	0	0	0	0	0	0	0	0	0	0
<b>Net Revenues for Debt Service 39</b>	\$316,196	\$324,701	\$400,243	\$416,376	\$481,916	\$538,683	\$553,896	\$619,779	\$685,743	\$751,807

**CITY OF POLK CITY, IOWA**  
**Water Enterprise Fund**

OPTION 1 - Increase Irrigation (40%)

EXHIBIT 1

<i>Growth Assumptions</i>	
Water Sales Growth	1.00%
Customer Growth (Meters per Year)	75
Operating Expenses	Various

<i>WATER REVENUE ADJUSTMENTS</i>					
1-Jun-16	10.00%	1-Apr-20	7.00%	1-Apr-24	7.50%
1-Apr-17	10.00%	1-Apr-21	8.00%	1-Apr-25	7.00%
1-Apr-18	9.96%	1-Apr-22	8.00%		
1-Apr-19	10.03%	1-Apr-23	8.00%		

	Audited	Audited	Audited	Budget	Budget	Projected	Projected	Projected	Projected	Projected
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
<b>Net Revenues for Debt Service</b> 40	\$316,196	\$324,701	\$400,243	\$416,376	\$481,916	\$538,683	\$553,896	\$619,779	\$685,743	\$751,807
<b>Water Debt Service</b>										
Proposed Water Rev Bonds (2022) 41	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$276,951	\$277,505	\$277,925
Subtotal Revenue Debt 42	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$276,951	\$277,505	\$277,925
Series 2018 G.O. Bonds (Berwick Capacity) 43	\$0	\$0	\$0	\$0	\$10,000	\$68,127	\$133,878	\$204,245	\$205,495	\$201,595
<b>Total Water Debt</b> 44	\$0	\$0	\$0	\$0	\$10,000	\$68,127	\$133,878	\$481,196	\$483,000	\$479,520
<b>Debt Service Coverage</b>										
<b>Net Revenues/ Revenue Debt</b> 45	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	2.24	2.47	2.71
Net Revenues / All Debt 46	N.A.	N.A.	N.A.	N.A.	48.19	7.91	4.14	1.29	1.42	1.57
<b>NET CASHFLOW AFTER DEBT</b> 47	\$316,196	\$324,701	\$400,243	\$416,376	\$471,916	\$470,556	\$420,019	\$138,584	\$202,743	\$272,288
Capital Expenditures 48	(139,936)	(290,483)	(54,051)	(226,000)	(429,500)	(207,500)	(3,599,900)	(210,740)	(208,564)	(272,920)
Transfer (out)/in 49	0	0	0	0	0	0	0	0	0	0
Bond Proceeds 50	0	0	0	0	0	0	3,330,035	0	0	0
Transfer (to) from Restricted/Designated 51	7,609	1,787	649	0	0	0	(280,035)	0	0	0
Other Cash Sources/(Uses) 52	0	(1)	0	0	0	0	0	0	0	0
<b>Annual Surplus/ (Deficit)</b> 53	<b>\$183,869</b>	<b>\$36,005</b>	<b>\$346,841</b>	<b>\$190,376</b>	<b>\$42,416</b>	<b>\$263,056</b>	<b>(\$129,881)</b>	<b>(\$72,156)</b>	<b>(\$5,821)</b>	<b>(\$633)</b>
Unrestricted Beg. Cash Balance 54	\$30,031	\$213,900	\$249,905	\$596,746	\$787,121	\$829,537	\$1,092,593	\$962,712	\$890,556	\$884,736
<b>Unrestricted End. Cash Balance</b> 55	<b>\$213,900</b>	<b>\$249,905</b>	<b>\$596,746</b>	<b>\$787,121</b>	<b>\$829,537</b>	<b>\$1,092,593</b>	<b>\$962,712</b>	<b>\$890,556</b>	<b>\$884,736</b>	<b>\$884,103</b>
<b>Cash Balance as % of Operating Exp.</b> 56	<b>45%</b>	<b>40%</b>	<b>93%</b>	<b>96%</b>	<b>99%</b>	<b>124%</b>	<b>103%</b>	<b>90%</b>	<b>84%</b>	<b>80%</b>
<b>Restricted/Designated Funds</b>										
Water Deposits 57	\$45,737	\$43,950	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301
Bond Debt Service Reserve Fund 58	\$0	\$0	\$0	\$0	\$0	\$0	\$280,035	\$280,035	\$280,035	\$280,035
Bond Debt Service Sinking Fund 59	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Restricted Bond Proceeds 60	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Restricted/Designated</b> 61	<b>\$45,737</b>	<b>\$43,950</b>	<b>\$43,301</b>	<b>\$43,301</b>	<b>\$43,301</b>	<b>\$43,301</b>	<b>\$323,336</b>	<b>\$323,336</b>	<b>\$323,336</b>	<b>\$323,336</b>
<b>Total Cash</b> 62	<b>\$259,637</b>	<b>\$293,855</b>	<b>\$640,047</b>	<b>\$830,422</b>	<b>\$872,838</b>	<b>\$1,135,894</b>	<b>\$1,286,048</b>	<b>\$1,213,892</b>	<b>\$1,208,071</b>	<b>\$1,207,438</b>
<b>Water Capital Outlays:</b>										
Eastside Elevated Storage	0	0	0	0	0	0	3,050,000	0	0	0
Creekview Estates - Upside Water Main	0	200,000	0	0	200,000	0	0	0	0	0
Water Tower painting	0	0	0	0	0	0	290,000	0	0	0
Miscellaneous	226,000	229,500	207,500	226,000	229,500	207,500	259,900	210,740	208,564	272,920
<b>Total</b>	<b>\$226,000</b>	<b>\$429,500</b>	<b>\$207,500</b>	<b>\$226,000</b>	<b>\$429,500</b>	<b>\$207,500</b>	<b>\$3,599,900</b>	<b>\$210,740</b>	<b>\$208,564</b>	<b>\$272,920</b>

**Deferred Capital Outlays:** 2020 Costs  
 New Well 250,000  
 Plant Upgrade for New Wells 250,000



# Water Utility Cash Flow: Option 2

**CITY OF POLK CITY, IOWA**  
**Water Enterprise Fund**

OPTION 2 - Increase Irrigation (40%) & Irrigation Availability

EXHIBIT 1

<i>Growth Assumptions</i>	
Water Sales Growth	1.00%
Customer Growth (Meters per Year)	75
Operating Expenses	Various

<i>WATER REVENUE ADJUSTMENTS</i>					
1-Jun-16	10.00%	1-Apr-20	7.00%	1-Apr-24	7.00%
1-Apr-17	10.00%	1-Apr-21	7.50%	1-Apr-25	7.00%
1-Apr-18	9.96%	1-Apr-22	7.50%		
1-Apr-19	10.03%	1-Apr-23	7.00%		

	Audited	Audited	Audited	Budget	Budget	Projected	Projected	Projected	Projected	Projected	
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	
<b>Water Rates</b>	1	6/1/2016	4/1/2017	4/1/2018	4/1/2019	4/1/2020	4/1/2021	4/1/2022	4/1/2023	4/1/2024	4/1/2025
First 1,000 gallons (Minimum Bill)	2	\$10.34	\$11.37	\$12.51	\$13.71	\$14.67	\$15.77	\$16.95	\$18.14	\$19.41	\$20.77
Rate per 1,000 gallons	3	\$4.13	\$4.54	\$5.00	\$5.50	\$5.89	\$6.33	\$6.80	\$7.28	\$7.79	\$8.34
Availability Fee for Irrigation Meters	4	\$0.00	\$0.00	\$0.00	\$0.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00
Irrigation/Garden Rate per 1,000 gallons	5	\$5.40	\$5.94	\$6.53	\$7.18	\$10.36	\$11.14	\$11.98	\$12.82	\$13.72	\$14.68
Average Monthly Bill (4,100 gals)	6	\$23.14	\$25.44	\$28.01	\$30.76	\$32.93	\$35.39	\$38.03	\$40.71	\$43.56	\$46.62
Change in Average Monthly Bill	7	\$2.12	\$2.30	\$2.57	\$2.75	\$2.17	\$2.46	\$2.64	\$2.68	\$2.85	\$3.07
Average Number of Regular Meters	8	1,725	1,828	1,920	1,971	2,046	2,121	2,196	2,271	2,346	2,421
Average Number of Irrigation Meters	9	219	232	247	247	482	527	572	617	662	707
<b>WATER SALES (1,000 GALLONS)</b>						Projected Irrigation Water Sales Based on 90% of the 3 year average					
Regular Water Sales	10	90,267	94,634	95,463	109,783	110,881	111,989	113,109	114,240	115,383	116,537
Irrigation Water Sales	11	21,010	28,142	23,708	27,264	19,778	19,778	19,778	19,778	19,778	19,778
Subtotal Water Sales	12	111,277	122,776	119,171	137,047	130,659	131,768	132,888	134,019	135,161	136,315
<b>Average \$\$ Per 1,000 Gallons</b>	13	<b>\$5.51</b>	<b>\$6.41</b>	<b>\$7.05</b>	<b>\$7.75</b>	<b>\$8.29</b>	<b>\$8.91</b>	<b>\$9.58</b>	<b>\$10.25</b>	<b>\$10.97</b>	<b>\$11.74</b>
<b>OPERATING REVENUES</b>											
Sale of Water	14	\$612,641	\$787,248	\$839,635	\$1,062,393	\$1,141,706	\$1,232,594	\$1,331,607	\$1,432,235	\$1,541,261	\$1,658,881
Irrigation Availability Fee	15	\$0	\$0	\$0	\$0	\$28,944	\$31,620	\$34,320	\$37,020	\$39,720	\$42,420
Irrigation Meter Sales	16	18,406	23,256	22,407	18,000	18,000	18,000	18,000	18,000	18,000	18,000
Sales Tax/Water Excise Tax	17	41,389	53,797	49,075	62,094	66,730	72,042	77,829	83,711	90,083	96,957
Hookup Charges	18	91,095	69,400	115,500	75,000	80,000	80,000	35,000	35,000	35,000	35,000
Late Charges/Penalties	19	1,688	1,463	1,630	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Other Misc. Revenue	20	22,871	19,792	16,579	16,000	13,000	13,000	13,000	13,000	13,000	13,000
<b>Total Operating Revenues</b>	21	<b>\$788,089</b>	<b>\$954,955</b>	<b>\$1,044,826</b>	<b>\$1,235,487</b>	<b>\$1,350,380</b>	<b>\$1,449,256</b>	<b>\$1,511,756</b>	<b>\$1,620,966</b>	<b>\$1,739,064</b>	<b>\$1,866,258</b>

**CITY OF POLK CITY, IOWA**  
**Water Enterprise Fund**

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<i>Growth Assumptions</i>	
Water Sales Growth	1.00%
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<i>WATER REVENUE ADJUSTMENTS</i>					
1-Jun-16	10.00%	1-Apr-20	7.00%	1-Apr-24	7.00%
1-Apr-17	10.00%	1-Apr-21	7.50%	1-Apr-25	7.00%
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	Audited	Audited	Audited	Budget	Budget	Projected	Projected	Projected	Projected	Projected
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
	Apr-17	Apr-18	Apr-19	Apr-20	Apr-21	Apr-22	Apr-23	Apr-24	Apr-25	Apr-26
<b>DMWW Rate/1,000 Gallons</b>										
With Storage Rate 22	\$3.84	\$4.03	\$4.31	\$4.44	\$4.66	\$4.89	\$5.13	\$5.39	\$5.66	\$5.94
Purchased Capacity Rate 23	\$1.85	\$1.98	\$2.12	\$2.33	\$2.45	\$2.70	\$2.97	\$3.27	\$3.60	\$3.96
Purchased Water Percentage 24	65%	62%	59%	60%	60%	60%	60%	60%	60%	60%
<b>Average \$\$ per 1,000 Gallons Purchased 25</b>	<b>\$2.71</b>	<b>\$3.78</b>	<b>\$3.17</b>	<b>\$2.90</b>	<b>\$2.96</b>	<b>\$3.28</b>	<b>\$3.61</b>	<b>\$3.97</b>	<b>\$4.35</b>	<b>\$4.74</b>
Total Water Purchased (DMWW) 26	89,253	104,897	105,508	102,785	97,994	98,826	99,666	100,514	101,371	102,236
Total Water Produced (Polk City) 27	47,172	63,639	73,664	68,523	65,329	65,884	66,444	67,009	67,581	68,157
Total Water 28	136,425	168,536	179,172	171,308	163,324	164,710	166,110	167,523	168,951	170,394
Unaccounted for Water 29	18%	27%	33%	25%	25%	25%	25%	25%	25%	25%
<b>OPERATING EXPENSES 30</b>		34%	2%	27%	2%	5%	6%	6%	6%	6%
Administration 31	\$95,095	\$90,406	\$142,392	\$336,242	\$398,367	\$411,055	\$424,183	\$437,766	\$451,821	\$466,365
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Sales Tax/Excise Tax Expense 34	48,300	52,926	48,235	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Other Operational Expenses 35	57,077	56,434	77,575	99,400	80,000	78,750	81,093	83,534	86,076	88,726
Total Operating Expense 36	\$471,892	\$630,254	\$644,583	\$819,112	\$839,520	\$884,532	\$936,199	\$991,118	\$1,049,366	\$1,110,988
<b>NET OPERATING REVENUES 37</b>	\$316,196	\$324,701	\$400,243	\$416,376	\$510,860	\$564,724	\$575,557	\$629,848	\$689,698	\$755,271
Interest on Reserves 38	0	0	0	0	0	0	0	0	0	0
<b>Net Revenues for Debt Service 39</b>	\$316,196	\$324,701	\$400,243	\$416,376	\$510,860	\$564,724	\$575,557	\$629,848	\$689,698	\$755,271

**CITY OF POLK CITY, IOWA**  
**Water Enterprise Fund**

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Operating Expenses	Various

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1-Apr-18	9.96%	1-Apr-22	7.50%		
1-Apr-19	10.03%	1-Apr-23	7.00%		

	Audited	Audited	Audited	Budget	Budget	Projected	Projected	Projected	Projected	Projected
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
<b>Net Revenues for Debt Service</b> 40	\$316,196	\$324,701	\$400,243	\$416,376	\$510,860	\$564,724	\$575,557	\$629,848	\$689,698	\$755,271
<b>Water Debt Service</b>										
Proposed Water Rev Bonds (2022) 41	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$276,951	\$277,505	\$277,925
Subtotal Revenue Debt 42	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$276,951	\$277,505	\$277,925
Series 2018 G.O. Bonds (Berwick Capacity) 43	\$0	\$0	\$0	\$0	\$10,000	\$68,127	\$133,878	\$204,245	\$205,495	\$201,595
<b>Total Water Debt</b> 44	\$0	\$0	\$0	\$0	\$10,000	\$68,127	\$133,878	\$481,196	\$483,000	\$479,520
<b>Debt Service Coverage</b>										
<b>Net Revenues/ Revenue Debt</b> 45	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	2.27	2.49	2.72
Net Revenues / All Debt 46	N.A.	N.A.	N.A.	N.A.	51.09	8.29	4.30	1.31	1.43	1.58
<b>NET CASHFLOW AFTER DEBT</b> 47	\$316,196	\$324,701	\$400,243	\$416,376	\$500,860	\$496,597	\$441,680	\$148,652	\$206,698	\$275,751
Capital Expenditures 48	(139,936)	(290,483)	(54,051)	(226,000)	(429,500)	(207,500)	(3,599,900)	(210,740)	(208,564)	(272,920)
Transfer (out)/in 49	0	0	0	0	0	0	0	0	0	0
Bond Proceeds 50	0	0	0	0	0	0	3,330,035	0	0	0
Transfer (to) from Restricted/Designated 51	7,609	1,787	649	0	0	0	(280,035)	0	0	0
Other Cash Sources/(Uses) 52	0	(1)	0	0	0	0	0	0	0	0
<b>Annual Surplus/ (Deficit)</b> 53	<b>\$183,869</b>	<b>\$36,005</b>	<b>\$346,841</b>	<b>\$190,376</b>	<b>\$71,360</b>	<b>\$289,097</b>	<b>(\$108,220)</b>	<b>(\$62,088)</b>	<b>(\$1,866)</b>	<b>\$2,831</b>
Unrestricted Beg. Cash Balance 54	\$30,031	\$213,900	\$249,905	\$596,746	\$787,121	\$858,481	\$1,147,579	\$1,039,358	\$977,271	\$975,405
<b>Unrestricted End. Cash Balance</b> 55	<b>\$213,900</b>	<b>\$249,905</b>	<b>\$596,746</b>	<b>\$787,121</b>	<b>\$858,481</b>	<b>\$1,147,579</b>	<b>\$1,039,358</b>	<b>\$977,271</b>	<b>\$975,405</b>	<b>\$978,236</b>
<b>Cash Balance as % of Operating Exp.</b> 56	<b>45%</b>	<b>40%</b>	<b>93%</b>	<b>96%</b>	<b>102%</b>	<b>130%</b>	<b>111%</b>	<b>99%</b>	<b>93%</b>	<b>88%</b>
<b>Restricted/Designated Funds</b>										
Water Deposits 57	\$45,737	\$43,950	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301	\$43,301
Bond Debt Service Reserve Fund 58	\$0	\$0	\$0	\$0	\$0	\$0	\$280,035	\$280,035	\$280,035	\$280,035
Bond Debt Service Sinking Fund 59	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Restricted Bond Proceeds 60	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Restricted/Designated</b> 61	<b>\$45,737</b>	<b>\$43,950</b>	<b>\$43,301</b>	<b>\$43,301</b>	<b>\$43,301</b>	<b>\$43,301</b>	<b>\$323,336</b>	<b>\$323,336</b>	<b>\$323,336</b>	<b>\$323,336</b>
<b>Total Cash</b> 62	<b>\$259,637</b>	<b>\$293,855</b>	<b>\$640,047</b>	<b>\$830,422</b>	<b>\$901,782</b>	<b>\$1,190,880</b>	<b>\$1,362,694</b>	<b>\$1,300,606</b>	<b>\$1,298,740</b>	<b>\$1,301,571</b>
<b>Water Capital Outlays:</b>										
Eastside Elevated Storage	0	0	0	0	0	0	3,050,000	0	0	0
Creekview Estates - Upside Water Main	0	200,000	0	0	200,000	0	0	0	0	0
Water Tower painting	0	0	0	0	0	0	290,000	0	0	0
Miscellaneous	226,000	229,500	207,500	226,000	229,500	207,500	259,900	210,740	208,564	272,920
<b>Total</b>	<b>\$226,000</b>	<b>\$429,500</b>	<b>\$207,500</b>	<b>\$226,000</b>	<b>\$429,500</b>	<b>\$207,500</b>	<b>\$3,599,900</b>	<b>\$210,740</b>	<b>\$208,564</b>	<b>\$272,920</b>

**Deferred Capital Outlays:** 2020 Costs  
 New Well 250,000  
 Plant Upgrade for New Wells 250,000