



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital
FROM: Mel Damewood, Engineering Manager
DATE: July 3, 2013
SUBJECT: Water and Electric 10-Year Capital Improvement Plans (CIP)
OBJECTIVE: Approval of CIP

Issue Statement

On July 16, 2013 Board Meeting, EWEB management will present to the Board the 10-Year (2014-2023) Electric and Water Capital Improvement Plans (CIPs) for approval. Management is requesting Board approval of the first five (5) years of each CIP and the 2014 capital budgets, in accordance with Board Policy EL1.

Background

On April 2, 2013, EWEB staff presented to the Board a revised 5-year CIP for both Water and Electric. This revised CIP included some significant reductions in the respective CIP's. Since April, staff has met with Board members to review the Electric and Water Utility's direction and strategy with the CIP's, outlining engineering's recommendations of prioritization, taking into account factors such as safety, reliability, and other triple bottom line attributes to reach a balanced CIP.

The CIPs presented herein include the proposed 2014 capital budget, a 5-year annual expenditure schedule (2014-2018), and a 10-year overall outlook (2014-2023). Spending is classified by three types, including the following:

Type 1 – General Capital: Common capital renewal projects done to maintain the system (e.g. transformer or breaker replacements, valve replacements). General Capital is funded through operational margins ("rate-funded") and reserves.

Type 2 – Infrastructure Rehabilitation & Expansion Projects: Medium to large projects that rebuild or expand the capabilities of the system (e.g. new substation or transmission line). Type 2 projects may be funded through operational margins ("rate funded") or through long-term bonds.

Type 3 – Strategic Programs: Large strategic projects that provide long-term, system-wide benefits (e.g. AMI, Carmen-Smith Re-Licensing, Second Source). Type 3 projects are generally bond-funded.

Discussion

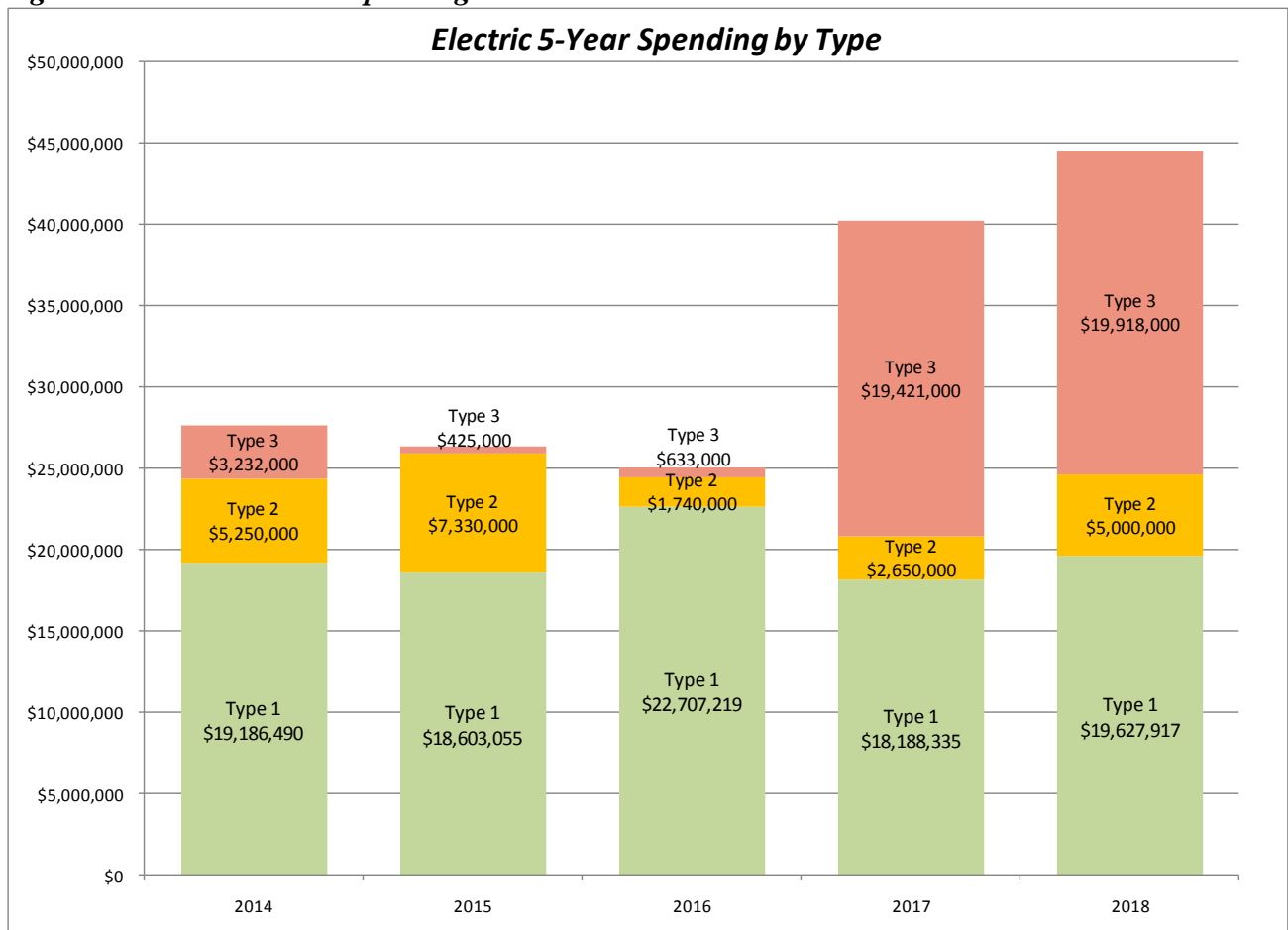
Electric CIP & 2014 Budget

The Electric Utility Capital Improvement Plan (Electric CIP) proposes investments in assets used to deliver electricity and associated services to the customers in our service territory. As proposed, the Electric CIP includes 5-year total expenditures of \$163.9MM, with a funding total of \$179.3MM. Funding includes \$121.3MM from rate-funded operations, with the remainder coming from long-term bonds. Included in the funding is an initial capital reserve balance of \$13.5MM, with a projected balance of \$15.4MM at the end of 2018.

The 5-year view of the Electric CIP is included as Attachment A. The 5-Year spending trend by-type is as follows, which shows an average *Type 1-General Capital* spending of \$19.7MM over the five-year period.

Figure 1, below, outlines the annual spending of the first 5 years of the CIP by type. The goal is to smooth out the Type 1 spending in order to have a predictable and consistent renewal and replacement program that supports EWEB's reliability and regulatory obligations.

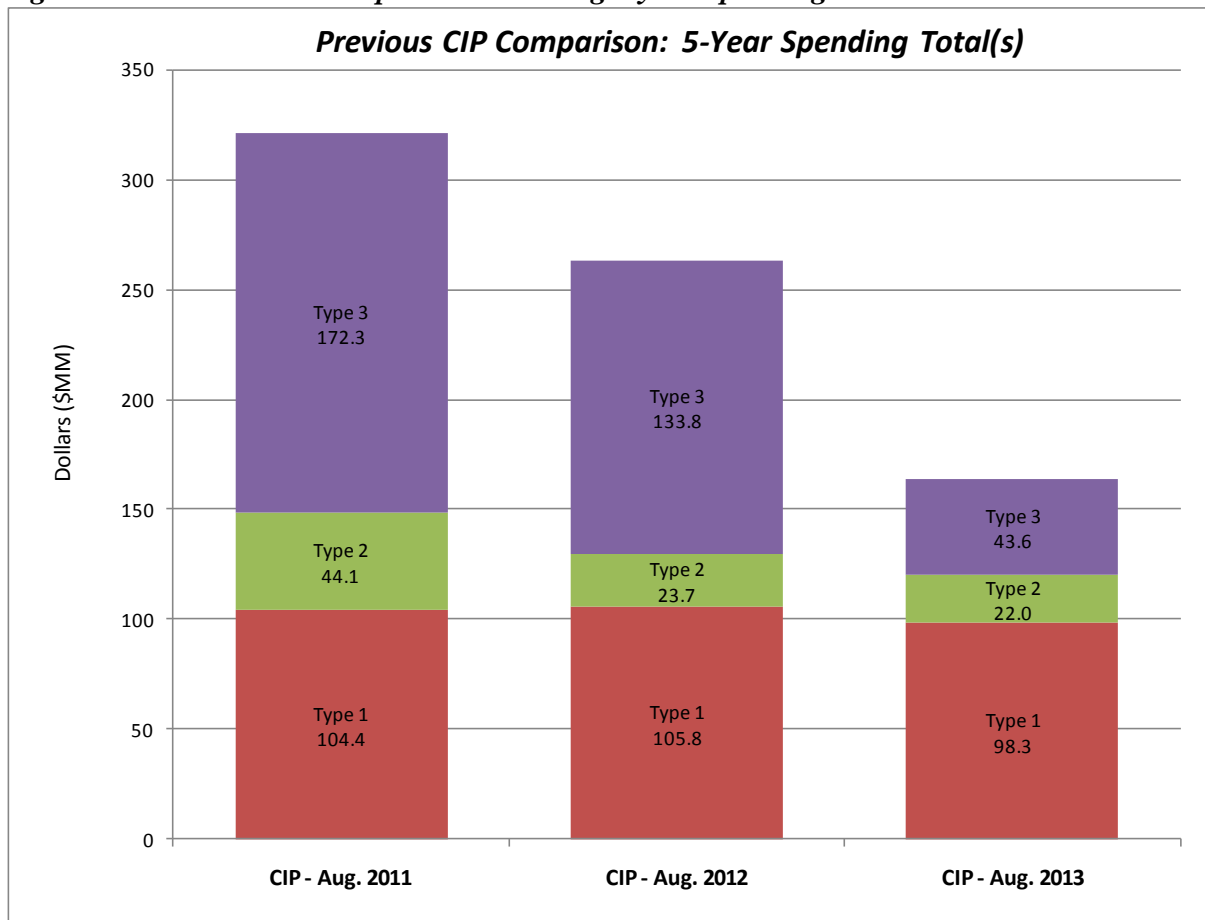
Figure 1 - Electric 5-Year Spending



The proposed Electric CIP 5-year expenditures of \$163.9MM reflect reductions of \$99MM from the 2012 5-year plan, and \$157MM from the 2011 5-year plan. Figure 2 below, outlines the reductions in the overall CIP for the past two years.

The *Type 1-General Capital* expenditures remain stable throughout the 5-year plan, totaling \$98.3MM with a high in 2016 of \$22.7MM. The *Type 2-Infrastructure Rehabilitation & Expansion Capital* expenditures total \$22MM over the 5-year period, and include the Downtown Network Re-Build Project and some planned upriver transmission work commencing in 2017. *Type 3-Strategic Projects & Programs* expenditures total \$43.6MM over the 5-year period, and include Carmen-Smith Re-Licensing and AMI Meters.

Figure 2 - Electric CIP Comparison – Rolling 5 year Spending Totals



2014 Electric Capital Budget

The Electric Utility 2014 capital budget contains expenditures of \$27,668,490 with funding of \$42,069,320. Funding sources includes an initial estimated capital reserve balance of \$13,548,000, and operational rate-based sources of \$20,039,320. The remaining sources are from previously acquired bond funds. The 2014 budget does not contain spending or contribution in aid associated with the customer-funded LTD EmX project, which is expected to execute in 2014 and 2015.

The \$27.7MM in 2014 spending is a \$22.3MM reduction from last year's forecasted 2014 spending of \$50.0MM, mostly due to deferments in Carmen-Smith Relicensing & AMI, along with approximately \$4MM of other electric infrastructure reductions.

A major project contained in the 2014 capital budget is the downtown network rebuilding project at \$5MM, with the yearly focus being on upgrading the primary (12kV) portion of the network and initial work driven by design/architecture decisions being made this summer.

Other noteworthy projects included in 2014 are WAM (work/asset management & mobile work management segments) at \$3MM, the Leaburg No.2 Rollgate hydraulic motor replacement at \$1.2MM, live-front switch replacements at \$561K, transmission breaker replacements at \$500K, and a continuation of infrastructure replacement strategies including pole and conductor replacements and PUC-driven neutral installation.

Also included in the 2014 electric capital budget is a project to relocate/replace the Leaburg substation to a location capable of connection to the nearby BPA transmission line. This relocation facilitates the potential replacement of 14 circuit-miles of the aging EWEB 69kV transmission line between Walterville and Leaburg.

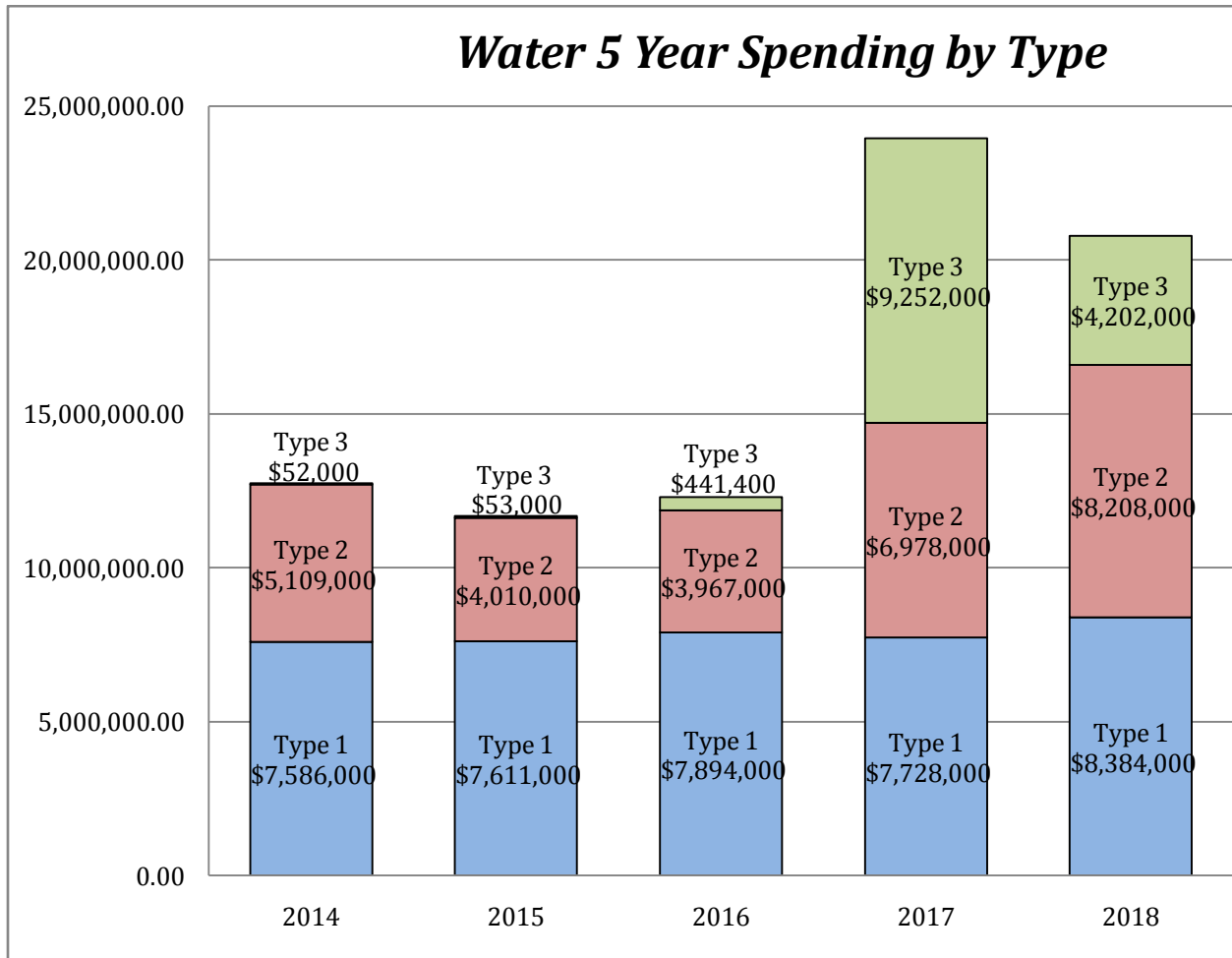
For fiscal analysis, the Electric CIP is presented with and without Advanced Meter Infrastructure (AMI). AMI includes approximately \$11.9MM in bond-funded meter costs, mostly delayed until 2017, along with \$7.5MM in rate-funded operational & support systems (\$6.2MM in 2015-16). Without AMI, all of the aforementioned expenditures and funding are eliminated, replaced with approximately \$1MM/year additional rate-funded electric meter replacement costs. The Electric CIP without AMI is shown in Attachment B.

Water CIP & 2014 Budget

The Water Utility Capital Improvement Plan (Water CIP) proposes investments totaling between \$12 million and \$24 million per year between 2014 and 2018. As illustrated in Figure 3 below, spending is in the \$12 million range for the first three years then increases in 2017 and 2018. The increases in these years are driven by Type 2 and 3 costs. Type 1 costs remain relatively stable in the \$7-8 million dollar range for the next five years.

For Type 2, the increases in 2017 and 2018 are primarily due to startup of our water transmission system upgrades. For Type 3 in 2017 almost all of the costs are associated with Advanced Metering Instrumentation (AMI). In 2018 the Type 3 costs still have some AMI portion but are mostly due to Second Source work.

Figure 3 - Water 5-Year Spending



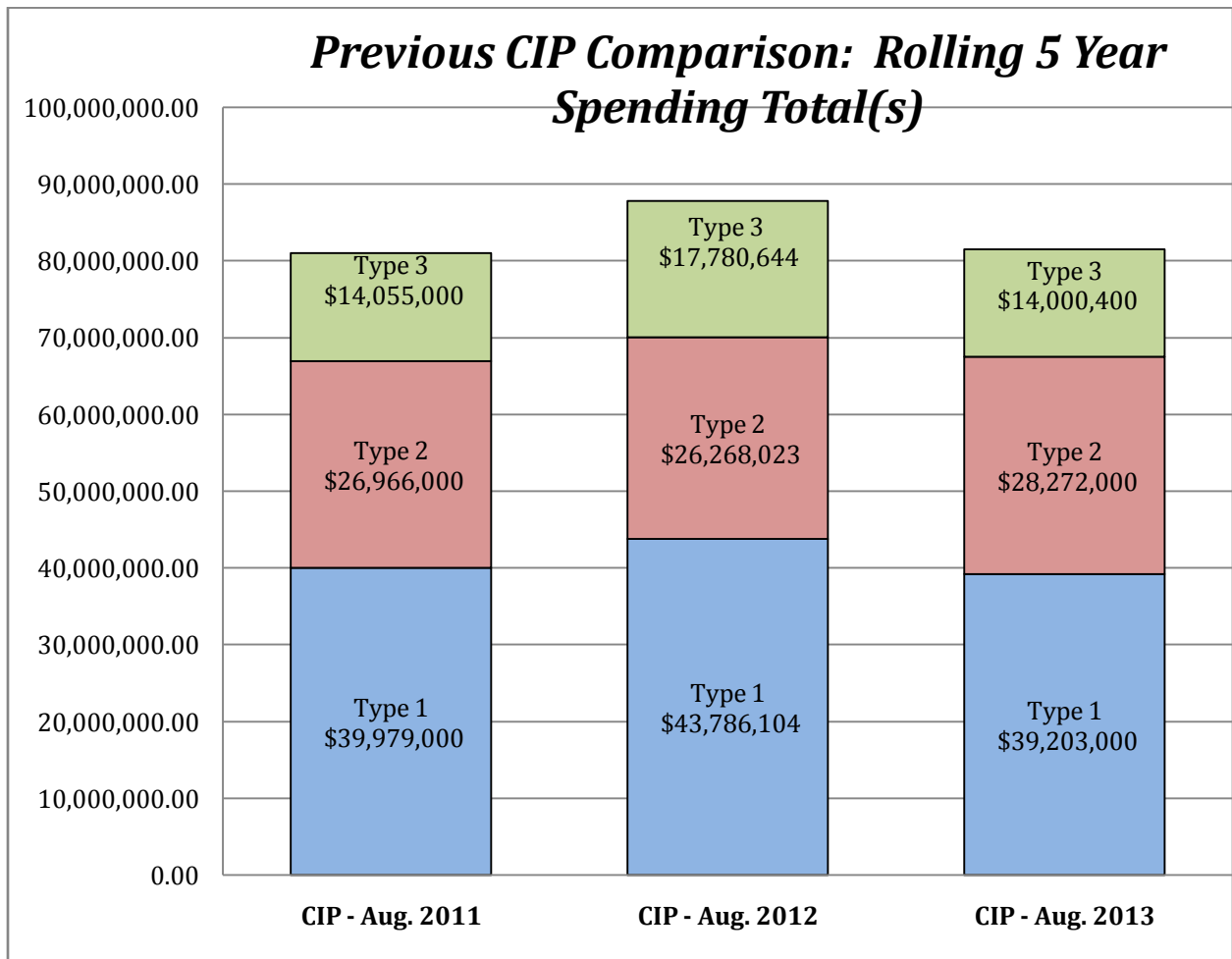
A comparison of the rolling five year Water CIP total by project type for the last three years is shown in Figure 4, below.

For Type 1, costs increased in the 2012 due to the addition of the water SCADA (System Control and Data Acquisition) system replacement program. These costs then decreased in the 2013 CIP as the SCADA project was scaled back along with other Type 1 reductions.

For Type 2, costs were stable in the 2011 and 2012 CIP's then an increase is shown in 2013. This is due to rollover of unspent, bond funds for the Hayden Bridge Raw Water Intake Improvements.

Type 3 costs fluctuated over the last 3 years, primarily due to changes in AMI and second source estimates.

Figure 4 - Water CIP Comparison – Rolling 5 year Spending Totals



A tabulation of the complete proposed 2014 -2023 CIP is included as Attachment C. Note that a line item is shown in Attachment C for the LTD EmX project. No costs are included at this time. This work has yet to be defined and will be reimbursed.

2014 Water Capital Budget

In 2014, expenditures totaled \$12,746,000 with available estimated funding of \$17,109,000. Funding sources include an initial capital reserve balance of \$3,475,600, rate sources of \$7,300,000, and the balance from previously acquired bond funds.

The \$12,746,000 in 2014 spending is approximately \$440,000 less than that proposed last year for 2014. This decrease is a result of significant reductions in the water SCADA and main replacement programs which were offset in part by increases in other projects, primarily WAM.

With respect to actual projects planned for 2014, significant projects are summarized below by project Type.

Type 1.

- Main Replacement Program. Similar to previous years the most significant Type 1 work will be associated with our main replacement program. This program will again be focused on keeping ahead of the City Street Rebuild program.
- Water Distribution System Control System Upgrade. As we scaled back the replacement of the water supervisory control and data acquisition (SCADA) system, we have ramped up the replacement of our pump station control and communication systems. 2014 will be the first year of significant work on this.
- WAM. Originally not budgeted for 2014, significant work is now anticipated to occur on this program.

Type 2.

- Hayden Bridge Intake Improvements. In 2014, the second phase of this project will be completed with the rehabilitation of Intake 2. Currently, upgrades are being completed at Intake 1. The work at Intake 2 will include seismic upgrades, new in-river intake screens, and mechanical upgrades.
- Willamette 800 Reservoir Upgrade. This work includes structural and other improvements to one of the Willamette 800 reservoirs.

Type 3.

Little Type 3 work is planned for 2014, just a minor continuation of the planning efforts for second source.

Similar to the Electric CIP, the Water CIP is presented with and without Advanced Meter Infrastructure (AMI). AMI for water includes approximately \$9.6MM in bond-funded meter costs, mostly delayed until 2017, along with \$1.4MM in rate-funded operational & support systems. Without AMI, all of the aforementioned expenditures and funding are eliminated, replaced with approximately \$600,000 in additional rate-funded water meter replacement costs. The Water CIP without AMI is shown in Attachment D.

TBL Assessment

Most individual projects contained within the CIP have undergone or will undergo (depending on year implemented) a TBL assessment at their appropriate level. While scrutinizing the overall reductions to the CIP over the last year, both Water and Electric looked at a prioritization process that placed an emphasis on safety and reliability factors as well as other social, environmental and financial attributes. This process was discussed with the Board at our April 2nd meeting as well as during 1:1's with board members.

Recommendation

In accordance with EL1, management recommends approval of the first five years of both the 2014 Water and Electric Utility 10-Year Capital Improvement Plan, with AMI included, and the capital budget for 2014 as outlined in the first year of the CIP. Approving this version of the CIP does not commit the Board to AMI, it allows staff to continue to financially plan and manage appropriately for that project.

Requested Board Action

Approval of the first five years of both the 2014 Water and Electric Utility 10-Year Capital Improvement Plan, with AMI included, and the capital budget for 2014 as outlined in the first year of the CIP.

If you have any questions please contact Mel Damewood, Engineering Manager at 541-685-7145 or email mel.damewood@eweb.org

Electric Capital Improvement Plan (2014-2013)***Type 1 - General Capital***

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>10-Year Total</u>	
Source of Funds:												
Capital Reserve Balance	\$13,548,000	\$14,400,830	\$16,547,775	\$15,360,556	\$16,982,221	\$15,449,304	\$13,218,090	\$11,204,773	\$12,187,648	\$11,548,294	\$13,548,000	(1)
Customer Contributions	\$1,324,320	\$1,360,000	\$1,400,000	\$1,440,000	\$1,480,000	\$1,520,000	\$1,570,000	\$1,620,000	\$1,670,000	\$1,720,000	\$15,104,320	
Electric Rates	\$18,640,000	\$19,290,000	\$19,970,000	\$20,670,000	\$21,390,000	\$22,140,000	\$22,910,000	\$23,710,000	\$24,540,000	\$25,400,000	\$218,660,000	
Interest Earnings on Reserve Fund	\$75,000	\$100,000	\$150,000	\$200,000	\$225,000	\$250,000	\$275,000	\$300,000	\$325,000	\$350,000	\$2,250,000	
LTD West Site EMX											\$0	
Total Funds:	\$33,587,320	\$35,150,830	\$38,067,775	\$37,670,556	\$40,077,221	\$39,359,304	\$37,973,090	\$36,834,773	\$38,722,648	\$39,018,294	\$249,562,320	
Expenditures:												
Electric Infrastructure - Generation	\$1,840,000	\$920,000	\$520,000	\$1,450,000	\$2,450,000	\$3,870,000	\$5,350,000	\$3,000,000	\$1,990,000	\$650,000	\$22,040,000	
Electric Infrastructure - Substations & Telecom	\$3,075,000	\$3,590,000	\$4,120,000	\$3,590,000	\$3,970,000	\$3,680,000	\$4,260,000	\$3,980,000	\$6,470,000	\$6,010,000	\$42,745,000	
Electric Infrastructure - Transmission & Distribution	\$8,320,000	\$7,730,000	\$8,910,000	\$7,960,000	\$6,930,000	\$7,510,000	\$9,280,000	\$9,030,000	\$7,590,000	\$7,800,000	\$81,060,000	
Shared IT infrastructure	\$641,960	\$1,795,340	\$1,432,683	\$1,376,780	\$1,576,478	\$1,288,220	\$1,126,966	\$902,820	\$1,164,400	\$2,031,040	\$13,336,687	
Electric specific technology improvements	\$510,000	\$150,000	\$1,180,000	\$65,000	\$0	\$314,000	\$3,211,208	\$630,000	\$0	\$100,000	\$6,160,208	
AMI network and IT work	\$300,000	\$2,691,828	\$3,497,867	\$334,560	\$626,882	\$444,440	\$1,198,520	\$456,740	\$0	\$0	\$9,550,837	
WACFR - Work, Asset, Customer and Financials	\$2,753,847	\$0	\$1,298,466	\$1,640,000	\$2,152,500	\$0	\$0	\$0	\$0	\$102,500	\$7,947,313	
General Plant - Buildings & Land Management	\$764,800	\$586,860	\$451,000	\$410,000	\$492,000	\$533,000	\$514,960	\$492,000	\$471,500	\$656,000	\$5,372,120	
General Plant - Electric Fleet Capital	\$980,883	\$1,139,027	\$1,297,203	\$1,361,995	\$1,430,057	\$1,501,555	\$1,576,663	\$1,655,565	\$1,738,454	\$1,825,531	\$14,506,932	
LTD West Site EMX											\$0	
Total - Type 1 Expenditures	\$19,186,490	\$18,603,055	\$22,707,219	\$18,188,335	\$19,627,917	\$19,141,215	\$26,518,317	\$20,147,125	\$19,424,354	\$19,175,071	\$202,719,097	

Type 2 - Infrastructure Rehabilitation & Expansion Programs

Source of Funds:												
Type 2 - Rate-Funded (incl. in Type 1 Funds above)				\$2,500,000	\$5,000,000	\$7,000,000	\$250,000	\$4,500,000	\$7,750,000	\$3,500,000	\$30,500,000	
Type 2 - Bond Funded	\$5,250,000	\$7,330,000	\$1,740,000	\$150,000	\$0	\$2,000,000	\$0	\$0	\$4,200,000	\$6,450,000	\$27,120,000	
Expenditures:												
Type II - Infrastructure Re-Build - Generation	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$0	\$0	\$4,200,000	\$6,450,000	\$12,650,000	
Type II - Infrastructure Re-Build - Substations & Telecom	\$250,000	\$250,000	\$150,000	\$150,000			\$250,000	\$3,000,000	\$2,750,000		\$6,800,000	
Type II - Infrastructure Re-Build - Transmission & Distribution	\$5,000,000	\$7,080,000	\$1,590,000	\$2,500,000	\$5,000,000	\$7,000,000	\$0	\$1,500,000	\$5,000,000	\$3,500,000	\$38,170,000	
Total - Type 2 Expenditures	\$5,250,000	\$7,330,000	\$1,740,000	\$2,650,000	\$5,000,000	\$9,000,000	\$250,000	\$4,500,000	\$11,950,000	\$9,950,000	\$57,620,000	

Type 3 - Strategic Projects & Programs

Source of Funds:												
Advance Meter Infrastructure Bonds			\$306,000	\$10,710,000	\$918,000						\$11,934,000	
Carmen Smith Relicensing Dedicated Funds	\$3,232,000	\$425,000	\$327,000	\$8,511,000	\$19,000,000	\$27,182,000	\$30,512,000	\$39,064,000	\$10,214,000	\$2,765,000	\$141,232,000	
Power Reserve (or Developer) Funds				\$200,000							\$200,000	
Total - Type 3 Funds:	\$3,232,000	\$425,000	\$633,000	\$19,421,000	\$19,918,000	\$27,182,000	\$30,512,000	\$39,064,000	\$10,214,000	\$2,765,000	\$153,366,000	
Expenditures:												
AMI Deployment - Meter Acquisition Costs			\$306,000	\$10,710,000	\$918,000						\$11,934,000	
Carmen Smith License Implementation	\$3,232,000	\$425,000	\$327,000	\$8,511,000	\$19,000,000	\$27,182,000	\$30,512,000	\$39,064,000	\$10,214,000	\$2,765,000	\$141,232,000	
Riverfront Decommissioning				\$200,000							\$200,000	
Total - Type 3 Expenditures:	\$3,232,000	\$425,000	\$633,000	\$19,421,000	\$19,918,000	\$27,182,000	\$30,512,000	\$39,064,000	\$10,214,000	\$2,765,000	\$153,366,000	

Total Funds	\$42,069,320	\$42,905,830	\$40,440,775	\$57,241,556	\$59,995,221	\$68,541,304	\$68,485,090	\$75,898,773	\$53,136,648	\$48,233,294	\$430,048,320	
Total Expenditures	\$27,668,490	\$26,358,055	\$25,080,219	\$40,259,335	\$44,545,917	\$55,323,215	\$57,280,317	\$63,711,125	\$41,588,354	\$31,890,071	\$413,705,097	
YE Capital Reserve Balance	\$14,400,830	\$16,547,775	\$15,360,556	\$16,982,221	\$15,449,304	\$13,218,090	\$11,204,773	\$12,187,648	\$11,548,294	\$16,343,223	\$16,343,223	

Balance at year end
2023

Note (1) - Capital Reserve Uses Starting Value

Electric Capital Improvement Plan (2014-2023); Excluding AMI***Type 1 - General Capital***

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>10-Year Total</u>	
Source of Funds:												
Capital Reserve Balance	\$13,548,000	\$13,700,830	\$17,509,603	\$18,759,351	\$19,622,849	\$17,591,306	\$14,645,257	\$12,636,408	\$12,846,149	\$10,940,025	\$13,548,000	(1)
Customer Contributions	\$1,324,320	\$1,360,000	\$1,400,000	\$1,440,000	\$1,480,000	\$1,520,000	\$1,570,000	\$1,620,000	\$1,670,000	\$1,720,000	\$15,104,320	
Electric Rates	\$18,640,000	\$19,290,000	\$19,970,000	\$20,670,000	\$21,390,000	\$22,140,000	\$22,910,000	\$23,710,000	\$24,540,000	\$25,400,000	\$218,660,000	
Interest Earnings on Reserve Fund	\$75,000	\$100,000	\$150,000	\$200,000	\$225,000	\$250,000	\$275,000	\$300,000	\$325,000	\$350,000	\$2,250,000	
LTD West Site EMX											\$0	
Total Funds:	\$33,587,320	\$34,450,830	\$39,029,603	\$41,069,351	\$42,717,849	\$41,501,306	\$39,400,257	\$38,266,408	\$39,381,149	\$38,410,025	\$249,562,320	
Expenditures:												
Electric Infrastructure - Generation	\$1,840,000	\$920,000	\$520,000	\$1,450,000	\$2,450,000	\$3,870,000	\$5,350,000	\$3,000,000	\$1,990,000	\$650,000	\$22,040,000	
Electric Infrastructure - Substations & Telecom	\$3,075,000	\$3,590,000	\$4,120,000	\$3,590,000	\$3,970,000	\$3,680,000	\$4,260,000	\$3,980,000	\$6,470,000	\$6,010,000	\$42,745,000	
Electric Infrastructure - Transmission & Distribution	\$9,320,000	\$8,760,000	\$9,970,900	\$9,052,727	\$8,055,509	\$8,669,274	\$10,474,052	\$10,259,874	\$8,856,770	\$9,104,773	\$92,523,879	
Shared IT infrastructure	\$641,960	\$1,795,340	\$1,432,683	\$1,376,780	\$1,576,478	\$1,288,220	\$1,126,966	\$902,820	\$1,164,400	\$2,031,040	\$13,336,687	
Electric specific technology improvements	\$510,000	\$150,000	\$1,180,000	\$65,000	\$0	\$314,000	\$3,211,208	\$630,000	\$0	\$100,000	\$6,160,208	
AMI network and IT work	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
WACFR/WAM - Work, Asset, Customer and Financials	\$2,753,847	\$0	\$1,298,466	\$1,640,000	\$2,152,500	\$0	\$0	\$0	\$0	\$102,500	\$7,947,313	
General Plant - Buildings & Land Management	\$764,800	\$586,860	\$451,000	\$410,000	\$492,000	\$533,000	\$514,960	\$492,000	\$471,500	\$656,000	\$5,372,120	
General Plant - Electric Fleet Capital	\$980,883	\$1,139,027	\$1,297,203	\$1,361,995	\$1,430,057	\$1,501,555	\$1,576,663	\$1,655,565	\$1,738,454	\$1,825,531	\$14,506,932	
LTD West Site EMX											\$0	
Total Expenditures	\$19,886,490	\$16,941,227	\$20,270,252	\$18,946,502	\$20,126,544	\$19,856,049	\$26,513,849	\$20,920,259	\$20,691,124	\$20,479,844	\$204,632,139	

Type 2 - Infrastructure Rehabilitation & Expansion Programs

Source of Funds:												
Type 2 - Rate-Funded (incl. in Type 1 Funds above)				\$2,500,000	\$5,000,000	\$7,000,000	\$250,000	\$4,500,000	\$7,750,000	\$3,500,000	\$30,500,000	
Type 2 - Bond Funded	\$5,250,000	\$7,330,000	\$1,740,000	\$150,000	\$0	\$2,000,000	\$0	\$0	\$4,200,000	\$6,450,000	\$27,120,000	
Expenditures:												
Type II - Infrastructure Re-Build - Generation	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$0	\$0	\$4,200,000	\$6,450,000	\$12,650,000	
Type II - Infrastructure Re-Build - Substations & Telecom	\$250,000	\$250,000	\$150,000	\$150,000			\$250,000	\$3,000,000	\$2,750,000		\$6,800,000	
Type II - Infrastructure Re-Build - Transmission & Distribution	\$5,000,000	\$7,080,000	\$1,590,000	\$2,500,000	\$5,000,000	\$7,000,000	\$0	\$1,500,000	\$5,000,000	\$3,500,000	\$38,170,000	
Total Expenditures	\$5,250,000	\$7,330,000	\$1,740,000	\$2,650,000	\$5,000,000	\$9,000,000	\$250,000	\$4,500,000	\$11,950,000	\$9,950,000	\$57,620,000	

Type 3 - Strategic Projects & Programs

Source of Funds:												
Advance Meter Infrastructure Bonds			\$0	\$0	\$0						\$0	
Carmen Smith Relicensing Dedicated Funds	\$3,232,000	\$425,000	\$327,000	\$8,511,000	\$19,000,000	\$27,182,000	\$30,512,000	\$39,064,000	\$10,214,000	\$2,765,000	\$141,232,000	
Power Reserve (or Developer) Funds				\$200,000							\$200,000	
Total Funds:	\$3,232,000	\$425,000	\$327,000	\$8,711,000	\$19,000,000	\$27,182,000	\$30,512,000	\$39,064,000	\$10,214,000	\$2,765,000	\$141,432,000	
Expenditures:												
AMI Deployment - Meter Acquisition Costs			\$0	\$0	\$0						\$0	
Carmen Smith License Implementation	\$3,232,000	\$425,000	\$327,000	\$8,511,000	\$19,000,000	\$27,182,000	\$30,512,000	\$39,064,000	\$10,214,000	\$2,765,000	\$141,232,000	
Riverfront Decommissioning				\$200,000							\$200,000	
Total Expenditures:	\$3,232,000	\$425,000	\$327,000	\$8,711,000	\$19,000,000	\$27,182,000	\$30,512,000	\$39,064,000	\$10,214,000	\$2,765,000	\$141,432,000	

Total Funds	\$42,069,320	\$42,205,830	\$41,096,603	\$49,930,351	\$61,717,849	\$70,683,306	\$69,912,257	\$77,330,408	\$53,795,149	\$47,625,025	\$418,114,320	
Total Expenditures	\$28,368,490	\$24,696,227	\$22,337,252	\$30,307,502	\$44,126,544	\$56,038,049	\$57,275,849	\$64,484,259	\$42,855,124	\$33,194,844	\$403,684,139	
YE Capital Reserve Balance	\$13,700,830	\$17,509,603	\$18,759,351	\$19,622,849	\$17,591,306	\$14,645,257	\$12,636,408	\$12,846,149	\$10,940,025	\$14,430,181	\$14,430,181	

Balance at year end
2023

Note (1) - Capital Reserve Uses Starting Value

Attachment C: 2014 -2023 Water CIP

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>10 Year Total</u>
Type I. General Capital											
Source of Funds:											
Capital Reserve Balance - Prior Year End	\$ 3,475,607	\$ 4,363,035	\$ 5,516,099	\$ 6,637,046	\$ 8,230,107	\$ 9,432,827	\$ 7,401,037	\$ 8,344,114	\$ 8,114,460	\$ 8,482,629	\$ 69,996,962
Customer Contributions	\$ 772,500	\$ 795,675	\$ 819,545	\$ 844,132	\$ 869,456	\$ 895,539	\$ 922,405	\$ 950,078	\$ 978,580	\$ 1,007,937	\$ 8,855,847
Water Rates	\$ 7,300,000	\$ 7,519,000	\$ 7,745,000	\$ 7,977,000	\$ 8,216,000	\$ 8,462,000	\$ 8,716,000	\$ 8,977,000	\$ 9,246,000	\$ 9,523,000	\$ 83,681,000
SDC	\$ 400,000	\$ 450,000	\$ 450,000	\$ 500,000	\$ 500,000	\$ 550,000	\$ 600,000	\$ 650,000	\$ 700,000	\$ 700,000	\$ 5,500,000
Interest Earnings on Reserve Fund											
Total Funds	\$ 11,948,107	\$ 13,127,710	\$ 14,530,644	\$ 15,958,178	\$ 17,815,563	\$ 19,340,367	\$ 17,639,442	\$ 18,921,191	\$ 19,039,040	\$ 19,713,566	\$ 168,033,808

Expenditures:											
Water Infrastructure - Intake and Hayden Bridge	\$ 103,000	\$ 106,090	\$ 109,273	\$ 196,964	\$ 376,764	\$ 1,910,484	\$ 1,106,886	\$ 1,140,093	\$ 1,174,296	\$ 1,209,525	\$ 7,433,375
Water Infrastructure - Pump Stations & Reservoirs	\$ 1,160,738	\$ 803,027	\$ 799,800	\$ 767,518	\$ 558,689	\$ 1,470,989	\$ 245,975	\$ 253,354	\$ 260,955	\$ 268,783	\$ 6,589,827
Water Infrastructure - Trans & Distribution Mains	\$ 3,936,701	\$ 4,177,930	\$ 4,309,825	\$ 4,381,156	\$ 4,419,454	\$ 5,999,337	\$ 5,362,250	\$ 6,789,888	\$ 6,341,198	\$ 6,531,434	\$ 52,249,171
Water Infrastructure - Services & Meters	\$ 612,850	\$ 629,114	\$ 646,676	\$ 666,076	\$ 686,058	\$ 706,640	\$ 727,839	\$ 749,675	\$ 772,165	\$ 795,330	\$ 6,992,423
Water Infrastructure - Meter Replacement	\$ 515,000	\$ 530,450	\$ 218,545	\$ 225,102	\$ 579,637	\$ 597,026	\$ 614,937	\$ 633,385	\$ 652,387	\$ 671,958	\$ 5,238,427
Water Infrastructure - General Plant and Instrumentation LTD/EMX	\$ 41,200	\$ 42,436	\$ 43,709	\$ 45,020	\$ 46,371	\$ 71,643	\$ 73,792	\$ 76,006	\$ 78,286	\$ 80,635	\$ 599,100
Shared IT Infrastructure	\$ 119,040	\$ 365,660	\$ 292,617	\$ 302,220	\$ 346,137	\$ 282,780	\$ 241,980	\$ 198,180	\$ 255,600	\$ 390,690	\$ 2,794,904
WACFR - Work, Asset, Customer, and Financials	\$ 604,503	\$ -	\$ 285,029	\$ 360,000	\$ 472,500	\$ -	\$ -	\$ -	\$ -	\$ 22,500	\$ 1,744,532
Facilities Capital	\$ 165,200	\$ 126,140	\$ 49,000	\$ 90,000	\$ 108,000	\$ 117,000	\$ 113,040	\$ 108,000	\$ 225,000	\$ 144,000	\$ 1,245,380
Fleet Capital	\$ 327,540	\$ 459,140	\$ 590,741	\$ 620,869	\$ 652,533	\$ 685,812	\$ 720,789	\$ 757,549	\$ 796,184	\$ 836,789	\$ 6,447,946
AMI Network and IT Work - Non Meter	\$ -	\$ 371,377	\$ 548,312	\$ 73,440	\$ 137,609	\$ 97,560	\$ 87,840	\$ 100,260	\$ -	\$ -	\$ 1,416,398
Total Expenditures	\$ 7,585,772	\$ 7,611,364	\$ 7,893,526	\$ 7,728,365	\$ 8,383,753	\$ 11,939,271	\$ 9,295,329	\$ 10,806,390	\$ 10,556,070	\$ 10,951,644	\$ 92,751,483

Type II. Infrastructure Rehabilitation & Expansion Programs

Source of Funds:											
Project Bonds: Water Infrastructure Re-build Program	\$ 5,109,000	\$ 4,010,000	\$ 3,967,000	\$ 6,978,000	\$ 8,208,000	\$ 9,433,000	\$ 9,532,000	\$ 4,180,000	\$ 913,000	\$ 941,000	\$ 53,271,000
Expenditures:											
Water Infrastructure - Intake and Hayden Bridge	\$ 3,409,300	\$ 2,259,717	\$ 3,256,326	\$ 1,406,886	\$ 1,507,056	\$ 1,910,484	\$ 1,967,798	\$ 2,026,832	\$ -	\$ -	\$ 17,744,400
Water Infrastructure - Pump Stations & Reservoirs	\$ 1,699,500	\$ 1,750,485	\$ 710,273	\$ 3,545,353	\$ 3,222,782	\$ 3,940,373	\$ 3,874,103	\$ 2,153,509	\$ 913,341	\$ 940,741	\$ 22,750,459
Water Infrastructure - Trans & Distribution Mains	\$ -	\$ -	\$ -	\$ 2,025,916	\$ 3,477,822	\$ 3,582,157	\$ 3,689,622	\$ -	\$ -	\$ -	\$ 12,775,517
Total Expenditures	\$ 5,108,800	\$ 4,010,202	\$ 3,966,599	\$ 6,978,155	\$ 8,207,660	\$ 9,433,013	\$ 9,531,522	\$ 4,180,341	\$ 913,341	\$ 940,741	\$ 53,270,376

Type III. Strategic Projects/Programs

Source of Funds:											
AMI Meter Infrastructure Bonds	\$ -	\$ -	\$ 332,000	\$ 9,139,000	\$ 725,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,196,000
Other Bonds	\$ 52,000	\$ 53,000	\$ 109,000	\$ 113,000	\$ 3,478,000	\$ 23,881,000	\$ 24,597,000	\$ -	\$ -	\$ -	\$ 52,283,000
Total Funds	\$ 52,000	\$ 53,000	\$ 441,000	\$ 9,252,000	\$ 4,203,000	\$ 23,881,000	\$ 24,597,000	\$ -	\$ -	\$ -	\$ 62,479,000
Expenditures:											
AMI Deployment	\$ -	\$ -	\$ 174,100	\$ 4,804,000	\$ 380,250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,358,350
Meter Body Replacement	\$ -	\$ -	\$ 158,100	\$ 4,335,000	\$ 344,250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,837,350
Second Source	\$ 51,500	\$ 53,045	\$ 109,273	\$ 112,551	\$ 3,477,822	\$ 23,881,046	\$ 24,597,477	\$ -	\$ -	\$ -	\$ 52,282,714
Total Expenditures	\$ 51,500	\$ 53,045	\$ 441,473	\$ 9,251,551	\$ 4,202,322	\$ 23,881,046	\$ 24,597,477	\$ -	\$ -	\$ -	\$ 62,478,414
Total Funds	\$ 17,109,107	\$ 17,190,710	\$ 18,938,644	\$ 32,188,178	\$ 30,226,563	\$ 52,654,367	\$ 51,768,442	\$ 23,101,191	\$ 19,952,040	\$ 20,654,566	
Total Expenditures	\$ 12,746,072	\$ 11,674,611	\$ 12,301,598	\$ 23,958,071	\$ 20,793,735	\$ 45,253,330	\$ 43,424,329	\$ 14,986,731	\$ 11,469,411	\$ 11,892,385	\$ 208,500,272
YE Capital Reserve Balance	\$ 4,363,035	\$ 5,516,099	\$ 6,637,046	\$ 8,230,107	\$ 9,432,827	\$ 7,401,037	\$ 8,344,114	\$ 8,114,460	\$ 8,482,629	\$ 8,762,181	

Attachment D: 2014 -2023 Water CIP - No AMI

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>10 Year Total</u>
Type I. General Capital											
Source of Funds:											
Capital Reserve Balance - Prior Year End	\$ 3,475,607	\$ 4,363,035	\$ 5,887,476	\$ 7,229,117	\$ 8,557,965	\$ 9,897,795	\$ 7,963,564	\$ 8,994,481	\$ 8,865,088	\$ 9,233,256	\$ 74,467,384
Customer Contributions	\$ 772,500	\$ 795,675	\$ 819,545	\$ 844,132	\$ 869,456	\$ 895,539	\$ 922,405	\$ 950,078	\$ 978,580	\$ 1,007,937	\$ 8,855,847
Water Rates	\$ 7,300,000	\$ 7,519,000	\$ 7,745,000	\$ 7,977,000	\$ 8,216,000	\$ 8,462,000	\$ 8,716,000	\$ 8,977,000	\$ 9,246,000	\$ 9,523,000	\$ 83,681,000
SDC	\$ 400,000	\$ 450,000	\$ 450,000	\$ 500,000	\$ 500,000	\$ 550,000	\$ 600,000	\$ 650,000	\$ 700,000	\$ 700,000	\$ 5,500,000
Interest Earnings on Reserve Fund											
Total Funds	\$ 11,948,107	\$ 13,127,710	\$ 14,902,021	\$ 16,550,249	\$ 18,143,421	\$ 19,805,334	\$ 18,201,970	\$ 19,571,558	\$ 19,789,668	\$ 20,464,194	\$ 172,504,231

Expenditures:											
Water Infrastructure - Intake and Hayden Bridge	\$ 103,000	\$ 106,090	\$ 109,273	\$ 196,964	\$ 376,764	\$ 1,910,484	\$ 1,106,886	\$ 1,140,093	\$ 1,174,296	\$ 1,209,525	\$ 7,433,375
Water Infrastructure - Pump Stations & Reservoirs	\$ 1,160,738	\$ 803,027	\$ 799,800	\$ 767,518	\$ 558,689	\$ 1,470,989	\$ 245,975	\$ 253,354	\$ 260,955	\$ 268,783	\$ 6,589,827
Water Infrastructure - Trans & Distribution Mains	\$ 3,936,701	\$ 4,177,930	\$ 4,309,825	\$ 4,381,156	\$ 4,419,454	\$ 5,999,337	\$ 5,362,250	\$ 6,789,888	\$ 6,341,198	\$ 6,531,434	\$ 52,249,171
Water Infrastructure - Services & Meters	\$ 612,850	\$ 629,114	\$ 646,676	\$ 666,076	\$ 686,058	\$ 706,640	\$ 727,839	\$ 749,675	\$ 772,165	\$ 795,330	\$ 6,992,423
Water Infrastructure - Meter Replacement	\$ 515,000	\$ 530,450	\$ 546,364	\$ 562,754	\$ 579,637	\$ 597,026	\$ 614,937	\$ 633,385	\$ 652,387	\$ 671,958	\$ 5,903,898
Water Infrastructure - General Plant and Instrumentation	\$ 41,200	\$ 42,436	\$ 43,709	\$ 45,020	\$ 46,371	\$ 71,643	\$ 73,792	\$ 76,006	\$ 78,286	\$ 80,635	\$ 599,100
LTD/EMX	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Shared IT Infrastructure	\$ 119,040	\$ 365,660	\$ 292,617	\$ 302,220	\$ 346,137	\$ 282,780	\$ 241,980	\$ 198,180	\$ 255,600	\$ 390,690	\$ 2,794,904
WACFR - Work, Asset, Customer, and Financials	\$ 604,503	\$ -	\$ 285,029	\$ 360,000	\$ 472,500	\$ -	\$ -	\$ -	\$ -	\$ 22,500	\$ 1,744,532
Facilities Capital	\$ 165,200	\$ 126,140	\$ 49,000	\$ 90,000	\$ 108,000	\$ 117,000	\$ 113,040	\$ 108,000	\$ 225,000	\$ 144,000	\$ 1,245,380
Fleet Capital	\$ 327,540	\$ 459,140	\$ 590,741	\$ 620,869	\$ 652,533	\$ 685,812	\$ 720,789	\$ 757,549	\$ 796,184	\$ 836,789	\$ 6,447,946
AMI Network and IT Work - Non Meter	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures	\$ 7,585,772	\$ 7,239,987	\$ 7,673,032	\$ 7,992,578	\$ 8,246,144	\$ 11,841,711	\$ 9,207,489	\$ 10,706,130	\$ 10,556,070	\$ 10,951,644	\$ 92,000,555

Type II. Infrastructure Rehabilitation & Expansion Programs

Source of Funds:											
Project Bonds: Water Infrastructure Re-build Program	\$ 5,109,000	\$ 4,010,000	\$ 3,967,000	\$ 6,978,000	\$ 8,208,000	\$ 9,433,000	\$ 9,532,000	\$ 4,180,000	\$ 913,000	\$ 941,000	\$ 53,271,000
Expenditures:											
Water Infrastructure - Intake and Hayden Bridge	\$ 3,409,300	\$ 2,259,717	\$ 3,256,326	\$ 1,406,886	\$ 1,507,056	\$ 1,910,484	\$ 1,967,798	\$ 2,026,832	\$ -	\$ -	\$ 17,744,400
Water Infrastructure - Pump Stations & Reservoirs	\$ 1,699,500	\$ 1,750,485	\$ 710,273	\$ 3,545,353	\$ 3,222,782	\$ 3,940,373	\$ 3,874,103	\$ 2,153,509	\$ 913,341	\$ 940,741	\$ 22,750,459
Water Infrastructure - Trans & Distribution Mains	\$ -	\$ -	\$ -	\$ 2,025,916	\$ 3,477,822	\$ 3,582,157	\$ 3,689,622	\$ -	\$ -	\$ -	\$ 12,775,517
Total Expenditures	\$ 5,108,800	\$ 4,010,202	\$ 3,966,599	\$ 6,978,155	\$ 8,207,660	\$ 9,433,013	\$ 9,531,522	\$ 4,180,341	\$ 913,341	\$ 940,741	\$ 53,270,376

Type III. Strategic Projects/Programs

Source of Funds:											
AMI Meter Infrastructure Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Bonds	\$ 52,000	\$ 53,000	\$ 109,000	\$ 113,000	\$ 3,478,000	\$ 23,881,000	\$ 24,597,000	\$ -	\$ -	\$ -	\$ 52,283,000
Total Funds	\$ 52,000	\$ 53,000	\$ 109,000	\$ 113,000	\$ 3,478,000	\$ 23,881,000	\$ 24,597,000	\$ -	\$ -	\$ -	\$ 52,283,000
Expenditures:											
AMI Deployment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meter Body Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Second Source	\$ 51,500	\$ 53,045	\$ 109,273	\$ 112,551	\$ 3,477,822	\$ 23,881,046	\$ 24,597,477	\$ -	\$ -	\$ -	\$ 52,282,714
Total Expenditures	\$ 51,500	\$ 53,045	\$ 109,273	\$ 112,551	\$ 3,477,822	\$ 23,881,046	\$ 24,597,477	\$ -	\$ -	\$ -	\$ 52,282,714
Total Funds	\$ 17,109,107	\$ 17,190,710	\$ 18,978,021	\$ 23,641,249	\$ 29,829,421	\$ 53,119,334	\$ 52,330,970	\$ 23,751,558	\$ 20,702,668	\$ 21,405,194	
Total Expenditures	\$ 12,746,072	\$ 11,303,234	\$ 11,748,904	\$ 15,083,283	\$ 19,931,626	\$ 45,155,770	\$ 43,336,489	\$ 14,886,471	\$ 11,469,411	\$ 11,892,385	\$ 197,553,645
YE Capital Reserve Balance	\$ 4,363,035	\$ 5,887,476	\$ 7,229,117	\$ 8,557,965	\$ 9,897,795	\$ 7,963,564	\$ 8,994,481	\$ 8,865,088	\$ 9,233,256	\$ 9,512,809	