



# MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

*Rely on us.*

TO: Commissioners Helgeson, Brown, Mital, Simpson and Carlson  
FROM: Rodney Price, Engineering Manager  
DATE: July 12, 2017  
SUBJECT: Electric and Water 10-Year Capital Improvement Plans (CIPs)  
OBJECTIVE: Board Action – Approval of 2018 Water and Electric 10 Year CIP

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## Issue

On July 11, 2017, EWEB management will present to the Board the 10-Year (2018-2027) 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 2018 water and electric capital budgets.

## Background

During the April 2017 Board Meeting, EWEB staff presented to the Board a revised 5-year CIP for both Electric and Water. The revised CIPs included changes to reflect revised estimates, emergent priorities, and project deferrals which affected the CIP since it was first approved in July of 2016. This true up included mostly a detailed look at the 2016-2017 years. The CIP's presented herein includes the updated 2017 capital budget, as well as a more detailed review of the 10-year overall outlook (2018-2027).

The 10 year CIP was reviewed and updated with the following guidelines per latest strategic directions:

1. Reliability:
  - Replacement of aging infrastructure. Setting yearly total capital spending targets based on ratio of 1.5 to 2.0 for capital investment dollars to yearly depreciation rates. Yearly depreciation rates are approximately \$7.0 million (MM) per year for water and \$23MM per year for electric. (Replacement Ratio).
  - A focus on Water and Electric Capital Master Plans.
2. Resiliency: A focus on projects that contribute water and electric system emergency preparedness, disruption management, and disaster recovery.
3. Responsibility (controlling rates, reflecting customer values):
  - Increasing the Electric Year-End capital reserves target from \$20MM to \$22MM as approved at the June 6, 2017 meeting. Water reserve targets remained the same as previous plans, \$7MM.
  - Setting yearly total spending limits based on no general rate changes through 2020.

- Focus on strategic projects important to customers, examples are Grid Edge and emergency water sources.

Similar to previous capital board memos, spending is classified by three types, including the following:

**Type 1** capital is a collection of routine capital work under specific categories (Transmission, Distribution, Buildings). This work is funded through rates. Examples of Type 1 capital include pole replacements, water main replacements, etc.

**Type 2** capital is for discrete projects with defined time periods and lifetime expenditures over \$1 million. Depending on the project, this work can be funded through either rate or bond funds. Examples of Type 2 capital include the Downtown Electric Network, and Hayden Bridge Filter Improvements.

**Type 3** capital is for large strategic programs with long-term impacts. These programs are generally bond-financed and include examples like Carmen-Smith Re-Licensing.

## **Discussion**

### ***Electric Utility***

#### 2018-2027 Electric CIP

The proposed 2018-2027 Electric CIP includes 10-year total expenditures of \$324 million, compared to \$349 million in last year's 2017-2026 CIP. Much of the decrease from the previous plan is due to the reduction of \$28.5MM in Type 1 projects, due to revised projections for customer driven work, and \$7.3M reductions in Type 3 Carmen project, due to favorable changes to the turbine generator upgrade estimates. However, Type 1 and 3 reductions are somewhat offset by a 10-year increase in Type 2 projects of \$10.5MM that reflect a focus on the electric master plan and resiliency.

Major factors that could affect the 10-year capital plan include: residential and commercial growth in the west part of Eugene and the rate of meters deployed for the AMI project.

Changes in the Urban Growth Boundary near the airport, and increasing development in the industrial area west of Eugene, could create major Transmission and Distribution (T&D) projects that would increase Type 2 capital spending. These changes are identified in the current draft Electric Master Plan, but funding is not included in the current 10 year plans pending further information.

The current capital plan includes \$750,000 per year in Type 2 funds to purchase AMI electric meters. This is enough money to purchase approximately 6,000 meters per year, or a 15-year deployment to upgrade most of EWEB's 90,000 electric meters. Decisions about the desired pace of AMI meter deployment will include impacts on the 10-year CIP.

#### 2018 Electric Capital Budget and First Five Years.

The Electric 2018 budget, as well as the complete ten-year 2018-2027 CIP, is included as Attachment 1. In the short term, the new projections for 2018 totals are slightly higher, \$34.9MM as

compared to previous estimate of \$32.3MM. The increase is due mostly to the delay in the Carmen turbine shutoff valve (TSV) project, which will push about \$7.2M from 2017 into 2018. However there is a shift within the Type 1 projects to offset most of the increased spending for Carmen, including revised projections for shared services.

In support of overall increase in spending on the T & D infrastructure within Type 1 and 2, the shared services for IT and Fleet have been reduced by \$1.5MM for 2018 and approximately \$7.5M over the 10 year CIP period.

The 5-Year totals through 2022 of \$197.5MM are down slightly from \$205.8MM from the previous plan. The \$8.3MM total reductions are mainly the net result of \$15.8MM in Type 1 reduced projections for customer driven work and shared services and increases in Type 2 of \$4.8MM for T &D strategic projects and the increase of \$2.5MM for the Carmen TSV.

Projects in Type 1 will target reducing average age by replacing old cable and upgrading substation equipment and updating distribution studies and plans and to improve reliability by adding loop feeds and optimizing switch points to reduce number of customers interrupted by any one event.

Projects in Type 2 category will continue to target the updates to the up-river substation and transmission portion of the EWEB electric system. These updates will reduce average infrastructure age significantly along with improving access from the Eugene area to the up-river generation assets. Other Type 2 focus areas include systematic updates to the downtown network and careful buildout of EWEB's downtown fiber system in partnership with other agencies.

#### Electric Capital Reserves

With no rate changes through the 10-year period, the year-end electric capital reserve balance ranges between \$20.4MM to \$23.4MM, the small variance a result of covering large Type 2 Strategic Projects that span multiple years.

### ***Water Utility***

#### 2018-2027 Water CIP

The proposed 2018-2027 Water CIP includes 10-year total expenditures of \$157.8 million, compared to \$228.5 million in last year's 2017-2026 CIP. Much of the \$70.7MM decrease from the previous plan is due to the reduction of \$20.7MM in Type 1 projects, due to revised work projections on the Distribution system along with reduced shared services, and \$54.3MM reduction in Type 3 due to the potential rescheduling of the Willamette Treatment Plant. However, as with the Electric system, Type 1 and 3 reductions are somewhat offset by a 10 year increase in Type 2 projects of \$4.4MM. These increases reflect the direction in the water master plan to update pump stations and reservoirs to increase resiliency.

Reductions in the Water CIP spending are partially a result of aligning water master planning and the Replacement Ratio to 2.4 from 3.4 per the previous plan. Typical water utility number for the average Replacement Ratio is around 2.0, meaning two dollars for capital is expended for every dollar that is depreciated for the system assets.

Major factors that could affect the 10-year capital plan include strategic decisions around the alternate water sources and emergency response plans for the water utility, as well as unplanned growth. Past plans included approximately \$75MM for an alternate water source treatment plant on the Willamette River, but changes in planning, and opportunities for a regional solution for alternate source, could easily reduce the total needed in the 10-Year Capital Plan.

### 2018 Water Capital Budget and First Five Years.

The 2018 Water budget, as part of the complete ten-year 2018-2027 CIP, is included as Attachment 2. For 2018, the new plan for Type 1, 2 and 3 totals are \$14.6MM as compared to previous estimate of \$21MM. The 2018 \$6.4MM reductions from the previous plan are mostly due to \$1.7MM in Type 1 reductions in Distribution infrastructure and shared services and from reduction of \$4.7MM in Type 3 due to delayed spending on the Willamette treatment plant.

The shared services for IT, Buildings and Lands, and Fleet have been reduced by \$354K in 2018 and approximately \$4.3MM over the 10 year period.

The Water Master Plan will continue to be the focus for projects planned for 2018, with a few significant projects 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. Projects completed under this program will have two main themes: 1) Keeping ahead of the City Street Rebuild Program, and 2) Replacing high risk pipelines.
- Water Meter Replacement Program. Much of the focus will continue to be on the replacement of large meters.

The rest of the Type 1 work is distributed among pump stations, and IT projects, along with fleet expenditures.

#### Type 2:

- Hayden Bridge Filter Disinfection System Replacement. In 2018, construction will begin on a project to replace the gas chlorine system at Hayden Bridge. The new system will generate liquid chlorine on-site.
- Hawkins Hill Reservoir Upgrade: a two year project 2018-2019, will begin to structurally upgrade the 20 million gallon Hawkins Hill Reservoir.

#### Type 3:

- Focus will shift away from the new Willamette Treatment plant to review options to cooperate with other local agencies and funding options. Further one to five year efforts will be focused more on dispersed emergency response sources and critical distribution paths. Approximately \$1M a year is being budgeted as a placeholder for alternate water sources.

### Reserves

The Year-End Reserves vary between \$7.1MM to \$7.3MM, with the end of the 10 year plan having a balance of \$7.4MM.

### **Triple Bottom Line Assessment**

Most individual projects contained within the CIP have undergone or will undergo (depending on year implemented) a TBL assessment at their appropriate level.

### **Recommendation**

Management recommends approval of the first five years of both the 2018 Electric and Water Utility 10-Year CIP and the capital budget for 2018 as outlined in the first year of the CIP.

### **Requested Board Action**

Approval of the first five years of both the 2018 Electric and Water Utility 10-Year CIP and the capital budget for 2018 as outlined in the first year of the CIP.

If you have any questions please contact Mel Damewood, Chief Engineering and Operations Officer at 541-685-7145, email [mel.damewood@eweb.org](mailto:mel.damewood@eweb.org) or Rod Price, Engineering Manager at 541-685-7122, email [rod.price@eweb.org](mailto:rod.price@eweb.org)

cc: Frank Lawson  
Sue Fahey  
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#### Attachments:

1. 2018 -2027 Electric CIP
2. 2018 -2027 Water CIP

Attachment 1

6/2/2017

Electric Capital Improvement Plan: 2018-2027

|   | 2018                | 2019                | 2020                | 2021                | 2022                | 2023                | 2024                | 2025                | 2026                 | 2027                | 5-Year Total 2018-2022 | 5-Year Total 2023-2027 | 10-Year Total        |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|---------------------|------------------------|------------------------|----------------------|
| <b>General Funding</b>  |                     |                     |                     |                     |                     |                     |                     |                     |                      |                     |                        |                        |                      |
| Capital Reserve Balance   | \$22,000,000        | \$23,323,000        | \$23,388,000        | \$20,410,000        | \$22,136,000        | \$22,647,000        | \$22,585,000        | \$22,408,000        | \$22,400,000         | \$23,452,000        |                        |                        |                      |
| Electric Rates - Operational Funding                                | \$18,665,000        | \$18,665,000        | \$19,500,000        | \$19,500,000        | \$19,500,000        | \$18,665,000        | \$18,665,000        | \$18,665,000        | \$18,665,000         | \$18,665,000        |                        |                        |                      |
| Customer-Driven Capital Re-Imbursement                              | \$3,563,000         | \$2,150,000         | \$2,192,000         | \$2,233,000         | \$2,275,000         | \$2,316,000         | \$2,358,000         | \$2,407,000         | \$2,456,000          | \$2,505,000         |                        |                        |                      |
| Residential   | \$720,000           | \$735,000           | \$750,000           | \$765,000           | \$780,000           | \$795,000           | \$810,000           | \$825,000           | \$840,000            | \$855,000           |                        |                        |                      |
| Commercial  | \$1,193,000         | \$1,215,000         | \$1,238,000         | \$1,260,000         | \$1,283,000         | \$1,305,000         | \$1,328,000         | \$1,358,000         | \$1,388,000          | \$1,418,000         |                        |                        |                      |
| Telecom   | \$1,650,000         | \$200,000           | \$204,000           | \$208,000           | \$212,000           | \$216,000           | \$220,000           | \$224,000           | \$228,000            | \$232,000           |                        |                        |                      |
| Grant Funding   | \$215,000           |                     |                     |                     |                     |                     |                     |                     |                      |                     |                        |                        |                      |
| Interest Earnings on Reserve Fund (0.4% of Reserve Balance)         | \$88,000            | \$93,000            | \$94,000            | \$82,000            | \$89,000            | \$91,000            | \$90,000            | \$90,000            | \$90,000             | \$94,000            |                        |                        |                      |
| <b>Total Funds:</b>   | <b>\$44,531,000</b> | <b>\$44,231,000</b> | <b>\$45,174,000</b> | <b>\$42,225,000</b> | <b>\$44,000,000</b> | <b>\$43,719,000</b> | <b>\$43,698,000</b> | <b>\$43,570,000</b> | <b>\$43,611,000</b>  | <b>\$44,716,000</b> |                        |                        |                      |
| <b>Type 1 - General Capital</b>                                     |                     |                     |                     |                     |                     |                     |                     |                     |                      |                     |                        |                        |                      |
| Electric Infrastructure - Generation                                | \$2,020,000         | \$1,367,000         | \$2,395,000         | \$1,585,000         | \$1,115,000         | \$500,000           | \$500,000           | \$500,000           | \$500,000            | \$1,510,000         | \$8,482,000            | \$3,510,000            | \$11,992,000         |
| Customer-Driven Capital Expense                                     | \$2,063,000         | \$2,150,000         | \$2,192,000         | \$2,233,000         | \$2,275,000         | \$2,316,000         | \$2,358,000         | \$2,407,000         | \$2,456,000          | \$2,505,000         | \$10,913,000           | \$12,042,000           | \$22,955,000         |
| Electric Infrastructure - Transmission & Distribution               | \$6,212,000         | \$6,440,000         | \$6,462,000         | \$6,585,000         | \$6,727,000         | \$6,710,000         | \$6,832,000         | \$6,967,000         | \$7,092,000          | \$7,217,000         | \$32,426,000           | \$34,818,000           | \$67,244,000         |
| Telecom Fiber - EWEB Driven   | \$102,000           | \$104,000           | \$346,000           | \$108,000           | \$110,000           | \$112,000           | \$114,000           | \$116,000           | \$118,000            | \$120,000           | \$770,000              | \$580,000              | \$1,350,000          |
| Telecom - Radio   | \$175,000           | \$175,000           | \$0                 | \$0                 | \$0                 | \$0                 | \$200,000           | \$300,000           | \$300,000            | \$300,000           | \$350,000              | \$1,100,000            | \$1,450,000          |
| Information Services (IS) - Shared & Electric                       | \$965,000           | \$1,010,000         | \$1,366,000         | \$1,260,000         | \$660,000           | \$660,000           | \$656,000           | \$652,000           | \$996,000            | \$1,053,000         | \$5,261,000            | \$4,017,000            | \$9,278,000          |
| General Plant - Buildings & Land                                    | \$390,000           | \$238,000           | \$131,000           | \$82,000            | \$82,000            | \$115,000           | \$156,000           | \$164,000           | \$123,000            | \$287,000           | \$923,000              | \$845,000              | \$1,768,000          |
| General Plant - Fleet   | \$510,000           | \$520,000           | \$531,000           | \$541,000           | \$1,104,000         | \$1,126,000         | \$1,149,000         | \$1,172,000         | \$1,195,000          | \$1,219,000         | \$3,206,000            | \$5,861,000            | \$9,067,000          |
| <b>Total Type 1 Net Expenditures</b>                                | <b>\$12,437,000</b> | <b>\$12,004,000</b> | <b>\$13,423,000</b> | <b>\$12,394,000</b> | <b>\$12,073,000</b> | <b>\$11,539,000</b> | <b>\$11,965,000</b> | <b>\$12,278,000</b> | <b>\$12,780,000</b>  | <b>\$14,211,000</b> | <b>\$62,331,000</b>    | <b>\$62,773,000</b>    | <b>\$125,104,000</b> |
| Total Type 1 Net Expenditures not including Customer Rein           |                     |                     |                     |                     |                     |                     |                     |                     |                      |                     |                        |                        |                      |
| <b>Type 2 - Rehabilitation &amp; Expansion Projects</b>             |                     |                     |                     |                     |                     |                     |                     |                     |                      |                     |                        |                        |                      |
| <b>Type 2 - Bond (Non-Rate) Funds Allocated</b>                     |                     |                     |                     |                     |                     |                     |                     |                     |                      |                     |                        |                        |                      |
| Downtown Distribution Network Bonds                                 |                     |                     |                     |                     |                     |                     |                     |                     |                      |                     | \$0                    | \$0                    | \$0                  |
| LTD EmX Project (Electric)  |                     |                     |                     |                     |                     |                     |                     |                     |                      |                     | \$0                    | \$0                    | \$0                  |
| <b>Total Type 2 Bond (Non-Rate) Funds</b>                           | <b>\$0</b>          | <b>\$0</b>          | <b>\$0</b>          | <b>\$0</b>          | <b>\$0</b>          | <b>\$0</b>          | <b>\$0</b>          | <b>\$0</b>          | <b>\$0</b>           | <b>\$0</b>          | <b>\$0</b>             | <b>\$0</b>             | <b>\$0</b>           |
| <b>Type 2 - Rehabilitation &amp; Expansion Project Expenditures</b> |                     |                     |                     |                     |                     |                     |                     |                     |                      |                     |                        |                        |                      |
| Downtown Distribution Network                                       | \$1,026,000         | \$1,000,000         | \$1,000,000         | \$1,000,000         | \$1,000,000         | \$1,000,000         | \$1,000,000         | \$1,000,000         | \$1,000,000          | \$1,000,000         | \$5,026,000            | \$5,000,000            | \$10,026,000         |
| Downtown Fiber Project  | \$1,500,000         | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                  | \$0                 | \$0                    | \$0                    | \$0                  |
| LTD EmX Project (Electric)  |                     |                     |                     |                     |                     |                     |                     |                     |                      |                     |                        |                        |                      |
| Advanced Meters (Electric)  | \$688,000           | \$750,000           | \$750,000           | \$750,000           | \$650,000           | \$650,000           | \$600,000           | \$600,000           | \$600,000            | \$600,000           | \$3,588,000            | \$3,050,000            | \$6,638,000          |
| Generation - Type 2 Strategic Project(s)                            | \$0                 | \$0                 | \$0                 | \$275,000           | \$4,915,000         | \$1,700,000         | \$1,000,000         | \$2,300,000         | \$0                  | \$0                 | \$5,190,000            | \$5,000,000            | \$10,190,000         |
| Grid Edge Demonstration Project                                     | \$320,000           |                     |                     |                     |                     |                     |                     |                     |                      |                     |                        |                        |                      |
| Electric T & D - Type 2 Strategic Project(s)                        | \$1,022,000         | \$535,000           | \$3,875,000         | \$2,260,000         | \$1,300,000         | \$5,135,000         | \$6,705,000         | \$4,685,000         | \$3,565,000          | \$3,890,000         | \$8,992,000            | \$23,980,000           | \$32,972,000         |
| Information Technology - Type 2 Strategic Project(s)                | \$3,600,000         | \$4,709,000         | \$4,076,000         | \$3,410,000         | \$1,415,000         | \$1,110,000         | \$20,000            | \$307,000           | \$2,214,000          | \$845,000           | \$17,210,000           | \$4,496,000            | \$21,706,000         |
| Buildings & Land - Type 2 Strategic Project(s) Total                | \$615,000           | \$1,845,000         | \$1,640,000         | \$0                 | \$0                 | \$0                 | \$0                 | \$0                 | \$0                  | \$0                 | \$4,100,000            | \$0                    | \$4,100,000          |
| <b>Type 2 Capital Expenditures (Bond, Customer, &amp; Rate Fun</b>  | <b>\$8,771,000</b>  | <b>\$8,839,000</b>  | <b>\$11,341,000</b> | <b>\$7,695,000</b>  | <b>\$9,280,000</b>  | <b>\$9,595,000</b>  | <b>\$9,325,000</b>  | <b>\$8,892,000</b>  | <b>\$7,379,000</b>   | <b>\$6,335,000</b>  | <b>\$45,926,000</b>    | <b>\$41,526,000</b>    | <b>\$87,452,000</b>  |
| <b>Type 2 - Rate-Funded Capital Expenditures</b>                    | <b>\$8,771,000</b>  | <b>\$8,839,000</b>  | <b>\$11,341,000</b> | <b>\$7,695,000</b>  | <b>\$9,280,000</b>  | <b>\$9,595,000</b>  | <b>\$9,325,000</b>  | <b>\$8,892,000</b>  | <b>\$7,379,000</b>   | <b>\$6,335,000</b>  | <b>\$45,926,000</b>    | <b>\$41,526,000</b>    | <b>\$87,452,000</b>  |
| <b>Type 1 + Type 2 Rate-Funded Capital Expenditures</b>             | <b>\$21,208,000</b> | <b>\$20,843,000</b> | <b>\$24,764,000</b> | <b>\$20,089,000</b> | <b>\$21,353,000</b> | <b>\$21,134,000</b> | <b>\$21,290,000</b> | <b>\$21,170,000</b> | <b>\$20,159,000</b>  | <b>\$20,546,000</b> | <b>\$108,257,000</b>   | <b>\$104,299,000</b>   | <b>\$212,556,000</b> |
| <b>Type 3 - Strategic Projects &amp; Programs</b>                   |                     |                     |                     |                     |                     |                     |                     |                     |                      |                     |                        |                        |                      |
| <b>Type 3 - Bond (Non-Rate) Funds Allocated</b>                     |                     |                     |                     |                     |                     |                     |                     |                     |                      |                     |                        |                        |                      |
| Carmen-Smith Dedicated Funds  | \$13,700,000        | \$19,880,000        | \$24,560,000        | \$20,630,000        | \$10,470,000        | \$4,930,000         | \$2,270,000         | \$6,080,000         | \$7,770,000          | \$1,400,000         | \$89,240,000           | \$22,450,000           | \$111,690,000        |
| <b>Type 3 - Expenditures</b>  |                     |                     |                     |                     |                     |                     |                     |                     |                      |                     |                        |                        |                      |
| Carmen-Smith Expenditures   | \$13,700,000        | \$19,880,000        | \$24,560,000        | \$20,630,000        | \$10,470,000        | \$4,930,000         | \$2,270,000         | \$6,080,000         | \$7,770,000          | \$1,400,000         | \$89,240,000           | \$22,450,000           | \$111,690,000        |
| <b>Total Expenditures</b>   | <b>\$34,908,000</b> | <b>\$40,723,000</b> | <b>\$49,324,000</b> | <b>\$40,719,000</b> | <b>\$31,823,000</b> | <b>\$26,064,000</b> | <b>\$23,560,000</b> | <b>\$27,250,000</b> | <b>\$27,929,000</b>  | <b>\$21,946,000</b> | <b>\$197,497,000</b>   | <b>\$126,749,000</b>   | <b>\$324,246,000</b> |
| <b>Predicted Year-End Reserve Balance</b>                           | <b>\$23,323,000</b> | <b>\$23,388,000</b> | <b>\$20,410,000</b> | <b>\$22,136,000</b> | <b>\$22,647,000</b> | <b>\$22,585,000</b> | <b>\$22,408,000</b> | <b>\$22,400,000</b> | <b>\$23,452,000</b>  | <b>\$24,170,000</b> | <b>\$111,904,000</b>   | <b>\$115,015,000</b>   | <b>\$226,919,000</b> |
| (a) - Capital Reserve Uses Starting Value                           | \$23,323,000        | \$23,388,000        | \$20,410,000        | \$22,136,000        | \$22,647,000        | \$22,585,000        | \$22,408,000        | \$22,400,000        | \$23,452,000         | \$24,170,000        | End of 2022            | End of 2027            | End of 2027          |
| <b>Transfer to Capital Reserve Needed (\$22MM Target)</b>           |                     |                     |                     | <b>(\$136,000)</b>  |                     |                     |                     |                     | <b>(\$1,452,000)</b> |                     |                        |                        |                      |

**Attachment 2  
Water Capital Improvement Plan: 2018-2027**

| <b>Funds Available</b>                               | <b>2018</b>          | <b>2019</b>          | <b>2020</b>          | <b>2021</b>          | <b>2022</b>          | <b>2023</b>          | <b>2024</b>          | <b>2025</b>          | <b>2026</b>          | <b>2027</b>          | <b>5 Year Total<br/>2018-2022</b> | <b>5 Year Total<br/>2023-2027</b> | <b>10 Year Total</b> |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------------------|-----------------------------------|----------------------|
| Capital Reserve Balance (Includes Bond Funds)- Prior | \$ 12,216,000        | \$ 7,354,000         | \$ 7,389,000         | \$ 7,141,000         | \$ 7,177,000         | \$ 7,213,000         | \$ 7,249,000         | \$ 7,285,000         | \$ 7,321,000         | \$ 7,357,000         |                                   |                                   |                      |
| <b>Annual Revenue</b>                                |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                                   |                                   |                      |
| Customer Contributions                               | \$ 1,133,000         | \$ 1,167,000         | \$ 1,202,000         | \$ 1,238,000         | \$ 1,275,000         | \$ 1,313,000         | \$ 1,353,000         | \$ 1,393,000         | \$ 1,435,000         | \$ 1,478,000         |                                   |                                   |                      |
| Water Rates and Reserves                             | \$ 8,179,000         | \$ 11,982,000        | \$ 13,642,000        | \$ 14,402,000        | \$ 13,043,000        | \$ 14,043,000        | \$ 12,328,000        | \$ 14,264,000        | \$ 16,167,000        | \$ 16,786,000        |                                   |                                   |                      |
| SDC  | \$ 412,000           | \$ 425,000           | \$ 439,000           | \$ 454,000           | \$ 468,000           | \$ 484,000           | \$ 499,000           | \$ 516,000           | \$ 532,000           | \$ 550,000           |                                   |                                   |                      |
| Interest Earnings on Capital Reserve Fund            | 35,000               | 35,000               | 36,000               | 36,000               | 36,000               | 36,000               | 36,000               | 36,000               | 36,000               | 37,000               |                                   |                                   |                      |
| Interest Earnings on Bond Reserve Fund               | 14,000               | 1,000                | -                    |                      |                      |                      |                      |                      |                      |                      |                                   |                                   |                      |
| Subtotal - Annual Revenue                            | \$ 9,773,000         | \$ 13,610,000        | \$ 15,319,000        | \$ 16,130,000        | \$ 14,822,000        | \$ 15,876,000        | \$ 14,216,000        | \$ 16,209,000        | \$ 18,170,000        | \$ 18,851,000        |                                   |                                   |                      |
| <b>Total Funds</b>                                   | <b>\$ 21,989,000</b> | <b>\$ 20,964,000</b> | <b>\$ 22,708,000</b> | <b>\$ 23,271,000</b> | <b>\$ 21,999,000</b> | <b>\$ 23,089,000</b> | <b>\$ 21,465,000</b> | <b>\$ 23,494,000</b> | <b>\$ 25,491,000</b> | <b>\$ 26,208,000</b> |                                   |                                   |                      |

**Expenditures**

**Type 1 - General Capital (rate funded)**

|   |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                      |                      |                      |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|
| Source - Intake and Hayden Bridge         | \$ 577,000          | \$ 223,000          | \$ 120,000          | \$ 124,000          | \$ 128,000          | \$ 131,000          | \$ 135,000          | \$ 139,000          | \$ 144,000          | \$ 148,000          | \$ 1,172,000         | \$ 697,000           | \$ 1,869,000         |
| Distribution - Pump Stations & Reservoirs | \$ 896,000          | \$ 446,000          | \$ 1,278,000        | \$ 248,000          | \$ 777,000          | \$ 621,000          | \$ 640,000          | \$ 659,000          | \$ 678,000          | \$ 699,000          | \$ 3,645,000         | \$ 3,297,000         | \$ 6,942,000         |
| Distribution - Pipelines                  | \$ 4,069,000        | \$ 4,212,000        | \$ 4,338,000        | \$ 4,468,000        | \$ 4,602,000        | \$ 4,740,000        | \$ 4,883,000        | \$ 5,029,000        | \$ 5,180,000        | \$ 5,335,000        | \$ 21,689,000        | \$ 25,167,000        | \$ 46,856,000        |
| Distribution - Services & Meters          | \$ 1,545,000        | \$ 1,591,000        | \$ 1,639,000        | \$ 1,688,000        | \$ 1,739,000        | \$ 1,791,000        | \$ 1,845,000        | \$ 1,900,000        | \$ 1,957,000        | \$ 2,016,000        | \$ 8,202,000         | \$ 9,509,000         | \$ 17,711,000        |
| Information Technology                    | \$ 245,000          | \$ 145,000          | \$ 144,000          | \$ 145,000          | \$ 245,000          | \$ 145,000          | \$ 144,000          | \$ 143,000          | \$ 169,000          | \$ 251,000          | \$ 924,000           | \$ 852,000           | \$ 1,776,000         |
| Buildings & Land                          | \$ 86,000           | \$ 52,000           | \$ 29,000           | \$ 18,000           | \$ 18,000           | \$ 25,000           | \$ 34,000           | \$ 36,000           | \$ 36,000           | \$ 70,000           | \$ 203,000           | \$ 201,000           | \$ 404,000           |
| Fleet                                     | \$ 313,000          | \$ 321,000          | \$ 329,000          | \$ 337,000          | \$ 350,000          | \$ 350,000          | \$ 350,000          | \$ 350,000          | \$ 350,000          | \$ 708,000          | \$ 1,650,000         | \$ 2,108,000         | \$ 3,758,000         |
| <b>Total Type 1 Expenditures</b>          | <b>\$ 7,731,000</b> | <b>\$ 6,990,000</b> | <b>\$ 7,877,000</b> | <b>\$ 7,028,000</b> | <b>\$ 7,859,000</b> | <b>\$ 7,803,000</b> | <b>\$ 8,031,000</b> | <b>\$ 8,256,000</b> | <b>\$ 8,514,000</b> | <b>\$ 9,227,000</b> | <b>\$ 37,485,000</b> | <b>\$ 41,831,000</b> | <b>\$ 79,316,000</b> |

**Type 2 - Rehabilitation & Expansion Projects (rate & bond funded)**

**Rate Funded Type 2 Projects**

|                                 |            |            |            |           |            |            |      |           |            |            |              |            |              |
|---------------------------------|------------|------------|------------|-----------|------------|------------|------|-----------|------------|------------|--------------|------------|--------------|
| Information Technology          | \$ 790,000 | \$ 876,000 | \$ 664,000 | \$ 61,000 | \$ 261,000 | \$ 216,000 | \$ - | \$ 63,000 | \$ 486,000 | \$ 180,000 | \$ 2,652,000 | \$ 945,000 | \$ 3,597,000 |
|                                 | \$ -       | \$ -       | \$ -       | \$ -      | \$ -       | \$ -       | \$ - | \$ -      | \$ -       | \$ -       | \$ -         | \$ -       | \$ -         |
| Subtotal - Rate Funded Projects | \$ 790,000 | \$ 876,000 | \$ 664,000 | \$ 61,000 | \$ 261,000 | \$ 216,000 | \$ - | \$ 63,000 | \$ 486,000 | \$ 180,000 | \$ 2,652,000 | \$ 945,000 | \$ 3,597,000 |

**Bond Eligible Type 2 Projects**

|   |              |              |              |              |              |              |              |              |              |              |               |               |               |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
| Source - Intake and Hayden Bridge         | \$ 3,286,000 | \$ 1,061,000 | \$ 656,000   | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ 5,003,000  | \$ -          | \$ 5,003,000  |
| Distribution - Pump Stations & Reservoirs | \$ 1,663,000 | \$ 2,864,000 | \$ 3,278,000 | \$ 7,879,000 | \$ 5,507,000 | \$ 6,627,000 | \$ 4,919,000 | \$ 6,587,000 | \$ 7,829,000 | \$ 8,063,000 | \$ 21,191,000 | \$ 34,025,000 | \$ 55,216,000 |
| Distribution - Pipelines                  | \$ -         | \$ 318,000   | \$ 1,639,000 | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ 1,957,000  | \$ -          | \$ 1,957,000  |
| Buildings & Lands                         | \$ 135,000   | \$ 405,000   | \$ 360,000   |              |              |              |              |              |              |              | \$ 900,000    | \$ -          | \$ 900,000    |
| Subtotal - Bond Eligible Projects         | \$ 5,084,000 | \$ 4,648,000 | \$ 5,933,000 | \$ 7,879,000 | \$ 5,507,000 | \$ 6,627,000 | \$ 4,919,000 | \$ 6,587,000 | \$ 7,829,000 | \$ 8,063,000 | \$ 29,051,000 | \$ 34,025,000 | \$ 63,076,000 |

|                                  |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                      |                      |                      |
|----------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|
| <b>Total Type 2 Expenditures</b> | <b>\$ 5,874,000</b> | <b>\$ 5,524,000</b> | <b>\$ 6,597,000</b> | <b>\$ 7,940,000</b> | <b>\$ 5,768,000</b> | <b>\$ 6,843,000</b> | <b>\$ 4,919,000</b> | <b>\$ 6,650,000</b> | <b>\$ 8,315,000</b> | <b>\$ 8,243,000</b> | <b>\$ 31,703,000</b> | <b>\$ 34,970,000</b> | <b>\$ 66,673,000</b> |
|----------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|

**Type 3 - Strategic Projects & Programs (bond funded)**

|                          |              |              |              |              |              |              |              |              |              |              |              |              |               |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Alternative Water Supply | \$ 1,030,000 | \$ 1,061,000 | \$ 1,093,000 | \$ 1,126,000 | \$ 1,159,000 | \$ 1,194,000 | \$ 1,230,000 | \$ 1,267,000 | \$ 1,305,000 | \$ 1,344,000 | \$ 5,469,000 | \$ 6,340,000 | \$ 11,809,000 |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|

|                                  |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                      |
|----------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| <b>Total Type 3 Expenditures</b> | <b>\$ 1,030,000</b> | <b>\$ 1,061,000</b> | <b>\$ 1,093,000</b> | <b>\$ 1,126,000</b> | <b>\$ 1,159,000</b> | <b>\$ 1,194,000</b> | <b>\$ 1,230,000</b> | <b>\$ 1,267,000</b> | <b>\$ 1,305,000</b> | <b>\$ 1,344,000</b> | <b>\$ 5,469,000</b> | <b>\$ 6,340,000</b> | <b>\$ 11,809,000</b> |
|----------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|

|                           |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                       |
|---------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|
| <b>Total Expenditures</b> | <b>\$ 14,635,000</b> | <b>\$ 13,575,000</b> | <b>\$ 15,567,000</b> | <b>\$ 16,094,000</b> | <b>\$ 14,786,000</b> | <b>\$ 15,840,000</b> | <b>\$ 14,180,000</b> | <b>\$ 16,173,000</b> | <b>\$ 18,134,000</b> | <b>\$ 18,814,000</b> | <b>\$ 74,657,000</b> | <b>\$ 83,141,000</b> | <b>\$ 157,798,000</b> |
|---------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|

|  |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |  |  |  |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--|--|--|
| <b>Predicted YE Capital Reserve Bal. (Includes Bond Funds)</b> | <b>\$ 7,354,000</b> | <b>\$ 7,389,000</b> | <b>\$ 7,141,000</b> | <b>\$ 7,177,000</b> | <b>\$ 7,213,000</b> | <b>\$ 7,249,000</b> | <b>\$ 7,285,000</b> | <b>\$ 7,321,000</b> | <b>\$ 7,357,000</b> | <b>\$ 7,394,000</b> |  |  |  |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--|--|--|