Quarterly Strategic and Operational Report

Q2 – 2018

Eugene Water & Electric Board

August 1, 2018

Quarterly Strategic and Operational Report
Q2 - 2018
Eugene Water & Electric Board

Frank Lawson. CEO/General Manager
Susan Ackerman, Chief Energy Officer
Matt Barton, Chief Information Officer
Mel Damewood, Chief Water Engineering & Operations Officer
Sue Fahey, Chief Financial Officer
Lena Kostopulos, Chief Workforce Officer
Rod Price, Chief Electric Engineering & Operations Officer
Rene Gonzalez, Customer Solutions Manager
Julie McGaughey, Customer Operations Manager

Table of Contents

General Information 1
Executive Summary 1
Strategic Initiatives 3
Operating Revenue & Consumption 4
Electric Utility Financial Report 6
Water Utility Financial Report 10
Energy & Electric Operations 13
Water Operations 18
Emergency Preparedness and Resiliency 23
Customer Services & Programs 26
Information & Technology 31
Enterprise Operations 33
Workforce 34
Government & Legislative Affairs 41
Enterprise Risk Management 42
Glossary 44
Appendix 45

General Information

		Electric	Water
Service territory	236 square miles		
Miles of line or pipe		13,000	800
Substations/Pump Stations		35	27
Water Storage		-	23 reservoirs (89 MGal, Capacity)
Number of customers	200,000 population served	93,000	61,000
Annual Operating Budget		$212.7M	$18.9M
Annual Capital Budget		$49.7M	$19.6M

Executive Summary

The Management of Eugene Water & Electric Board is pleased to report the results of the second quarter and first half of 2018 to our governing Commissioners and the public. These results are preliminary unaudited, and may be refined.

Safety, reliability, and affordability continue to be organizational priorities. While statistically our safety metrics are slightly worse than last year, they are within our outstanding five-year average. In the second quarter, we incorporated changes to our strategic plan to ensure that health and safety include both the physical and psychological wellbeing of our workforce and the public.

Operationally, water quality and delivery standards were achieved, with breaks and unplanned outages below target. Water Operations staff provided a terrific response by aiding Salem Water with equipment and people during their cyanobacteria outbreak. Water quality achievements included specific efforts to monitor and treat for cyanobacteria presence in the McKenzie River. No cyanotoxins reached EWEB's finished water. So far in 2018, electric delivery reliability is the best in five years primarily driven by favorable weather conditions, and proactive tree trimming and maintenance work. EWEB's wind generating resources met availability targets greater than 90%, however our hydroelectric plant availability was well below target due to planned outages and capital work, including improvements at Carmen-Smith.

Electric operating revenue exceeded anticipated budget by $3.1 million during the first half of 2018, primarily driven by strong wholesale sales from additional Columbia River hydro flows, offset by soft industrial retail sales as our largest customer shutdown for two weeks in March. Additionally, warm weather in January and May impacted electric retail sales. Water net income was $2.2 million favorable for the year-to-date (YTD) compared to the seasonally-shaped budget, primarily due to cost controls providing a favorable $1.1 million variance.

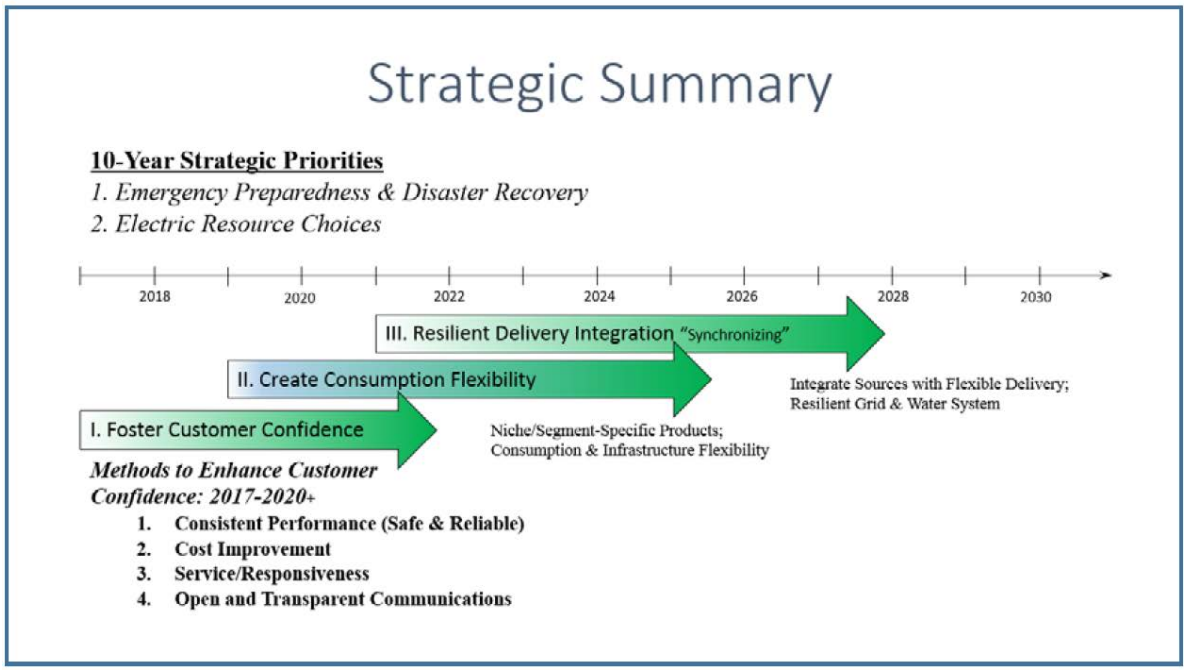
Strategically, EWEB made progress in two areas, the first included the planning and design of the initial two distributed neighborhood emergency water/electric stations along with the signing of two Intergovernmental Agreements with Bethel School District and Eugene 4J School District. Second was the necessary review and Board approval of customer service policies designed to make it easier for customers to interact with us. The Board of Commissioners accelerated this review because of their decision to shift our metering deployment approach from "opt-in" to "opt-out" based on the role of metering in EWEB's ability to achieve our strategic goals over the next decade. The rollout of these meters is now planned to be complete by the end of 2021. Modifications to the strategic plan as part of its annual review included the specific inclusion of greenhouse gas reductions as part of EWEB's core values, which will guide our decisions.

At the end of the Q2, EWEB had 470 employees, and a 2.56% attrition rate for the quarter. Most new hires during Q2 were in Customer Service, which started seeing improved operational response to customers by the end of the quarter, achieving hold-time goals in June. The beginning of 2018 saw the launch of a new EWEB wellness program, Wellworks™, with participation expected to increase throughout the year. The number of injuries increased in Q1, although the severity was well below historic levels. Multiple preventative trainings are scheduled throughout this year including ODOT/CDL related training, body mechanics, and dog attack prevention.

Overall, EWEB continues to work on an organizational culture built on integrity and respect, with an emphasis on achieving sustainable results. We appreciate your support.

Frank Lawson, General Manager

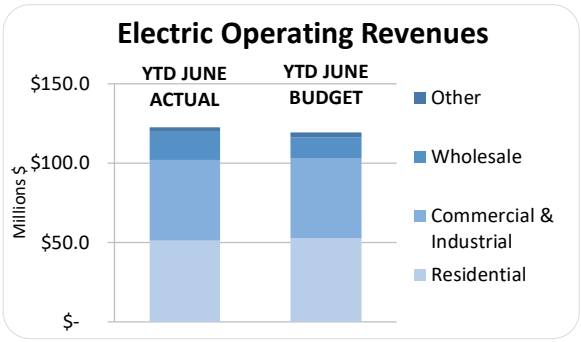
Strategic Initiatives



Operating Revenue & Consumption

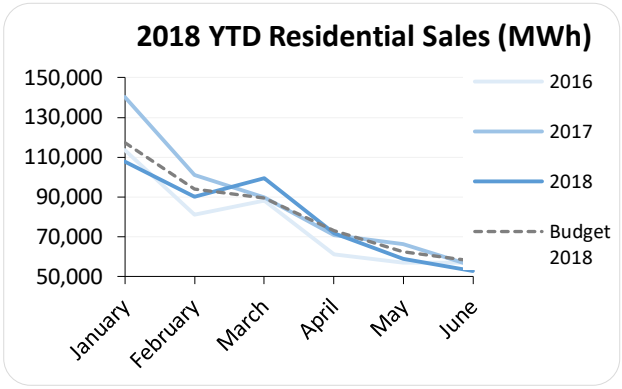
Electric Operating Revenues

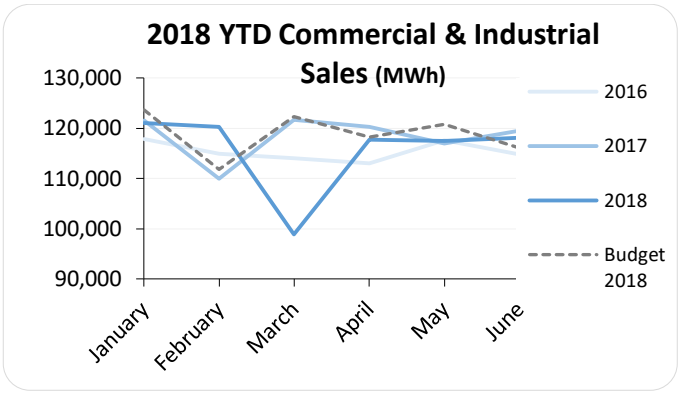
Total Electric Utility **operating revenue** exceeds budget by $3.1 million. Overall, retail revenue is $1.5 million unfavorable when compared to budget. This is due to warmer weather in January and May as well as a large industrial customer's extended outage in March. Wholesale and other revenue has a favorable $4.6 million variance driven by higher than expected water for hydro generation in the Columbia River Basin. Wholesale market prices, however, remain lower than the 2018 budget.



Electric Retail Sales by Consumption

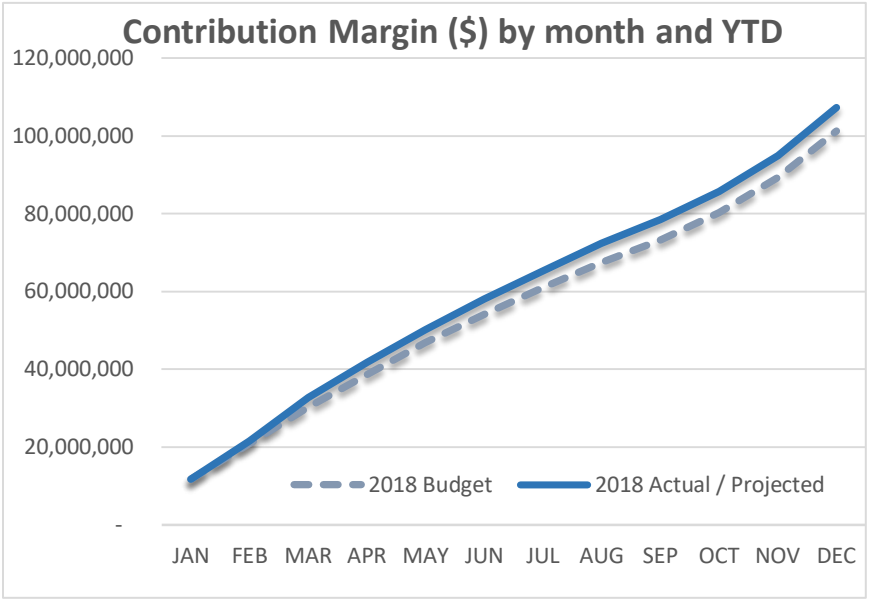
As mentioned above, residential consumption was under budget in January and May due to warmer than usual weather. Commercial and Industrial sales had a large decrease in March due to an industrial customer's extended outage.



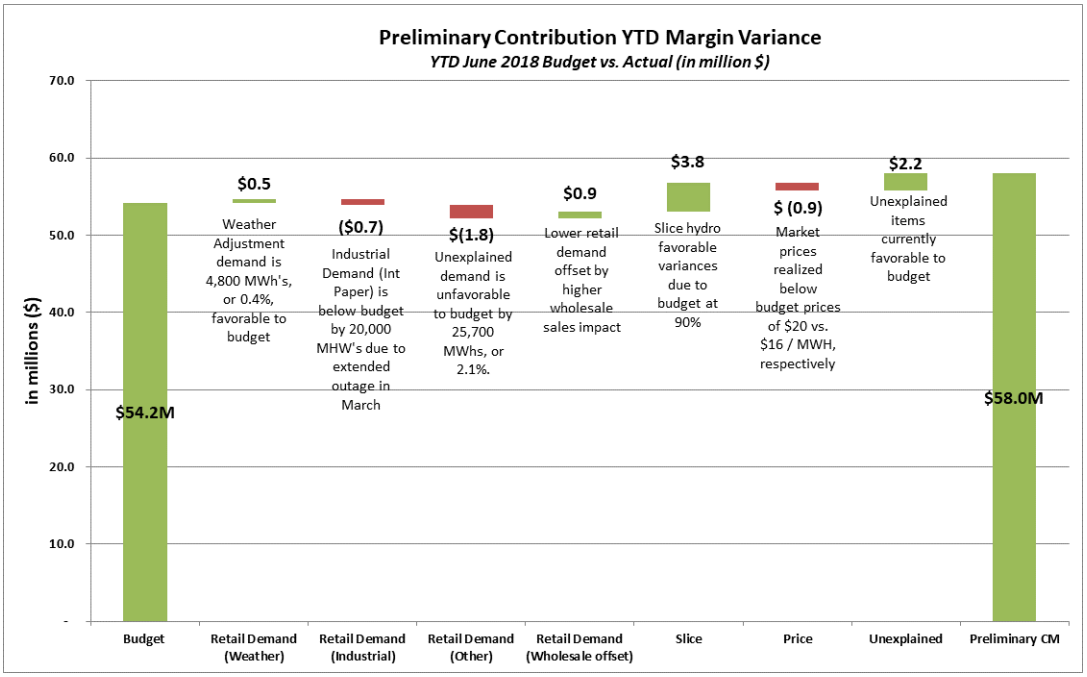


Electric Wholesale & Contribution Margin

The Electric Utility contribution margin represents the amount power sales exceed power expenses. The three main drivers of contribution margin volatility are 1) retail and wholesale sales, which depend largely on weather and economic conditions, 2) hydroelectric production which is weather dependent, and 3) power prices which are market driven. The risks associated with these volatile factors are managed through a variety of mechanisms, including conservative budgeting assumptions which assume revenue that is $2.7 million less than expected conditions, a power hedging program that ensures fixed prices up to 90% of the expected hydro level, and maintaining power reserves.

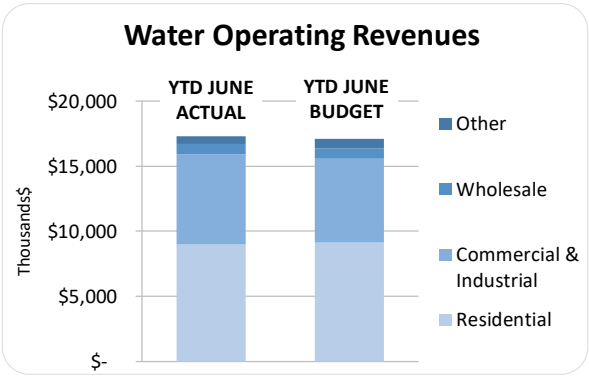


Year-to-date contribution margin was $3.8 million above budget at the end of the second quarter primarily due to strong water flows in the Columbia River Basin which resulted in higher revenues from EWEB's Bonneville Power Administration's slice contract.

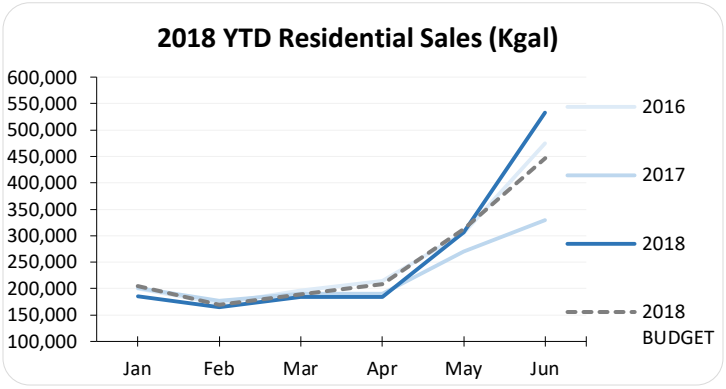


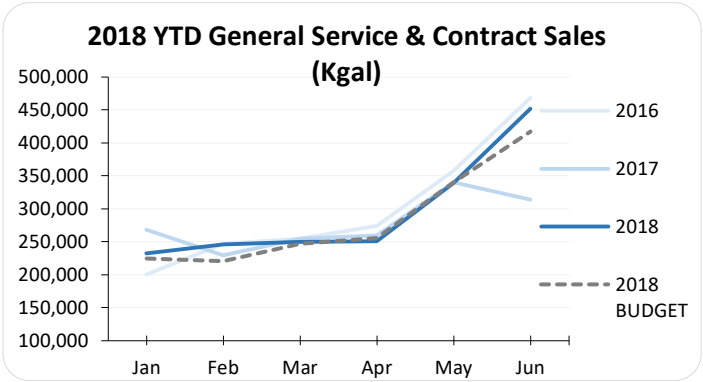
Water Operating Revenue

The Water Utility had a positive $190,000 budget variance in total operating revenues through the second quarter of 2018. **Retail revenue** had a favorable variance of approximately $360,000 and is in line with the budget (about 2% above). **Wholesale and other revenue** had an unfavorable $170,000 variance mostly due to a decrease in customer billable work (other revenue) during the winter months. Wholesale sales includes sales to the Water Districts, City of Veneta, as well as sales to the Willamette Water Company.



Water Retail Sales by Consumption

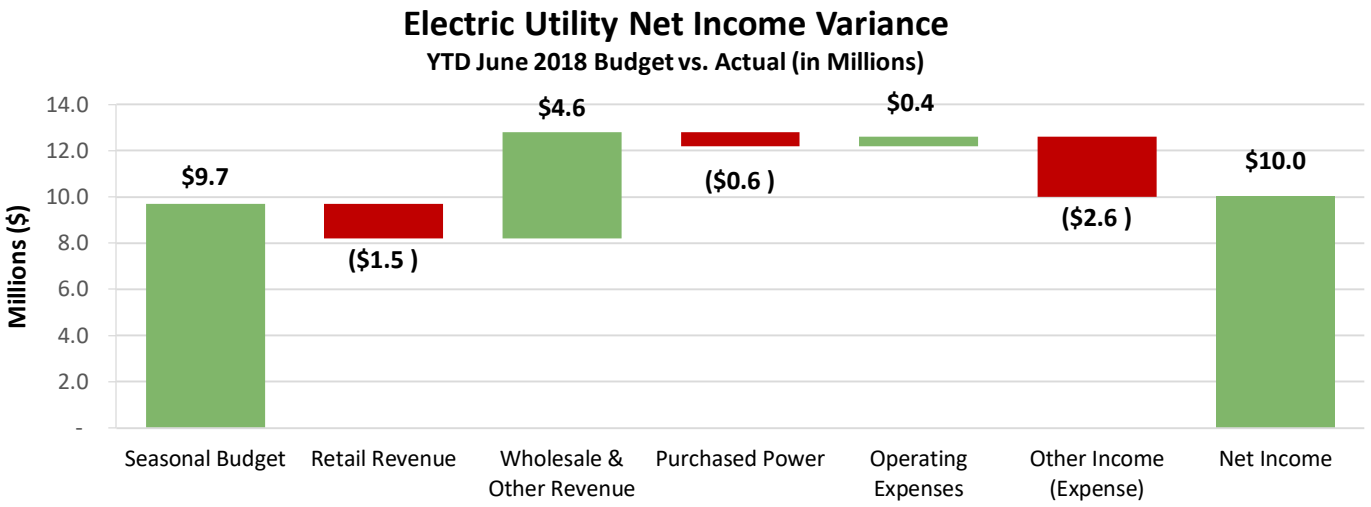




Electric Utility Financial Report

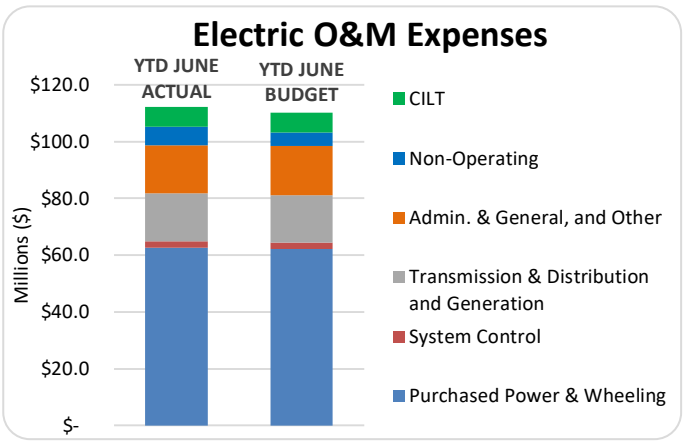
Financials

For the six months ended June 30, 2018, net income for the Electric Utility is $10 million, 103% of the year-to-date budget. For comparability purposes, the budget has been modified to reflect seasonal fluctuations in revenue, purchased power, and wheeling.



Electric Operating Expenses

Overall, **operating expenses** are tracking with the year-to-date budget. However, within certain categories there are significant variances. Purchased power has an unfavorable variance of $600,000 due to portfolio balancing activities. The write-off of the Customer Information System (CIS) spending, net of requested vendor reimbursement, had an unfavorable impact of $900,000 (see Electric Utility Financial Outlook below). Offsetting favorable operating expense variances are primarily due to labor savings, as well as a favorable $1.1 million variance caused by the reclassification of downtown fiber work from O&M to capital. **Non-operating expenses** have an unfavorable variance of $2 million, primarily due to the loss on sale of the riverfront property.



Operations & Maintenance (O&M) Expense Budget Monitoring

As noted in the chart below, the year-end projected department variance reported is $290,000. Customer Solutions' favorable variance is primarily driven by customer care payments that trend higher near the end of the year, along with school grants which are paid out during the second half of the year. The Energy division variance is primarily a result of delays in joint agency environmental spending pending settlement negotiations, partially offset by FERC canal maintenance requirements. Information Services had a write-off this quarter for the CIS project totaling $330,000 in non-labor for the Electric Utility. Emergent project work for software and services supporting Enterprise Telecomm and Advanced Metering Infrastructure (AMI) occurred the first half of the year but Management has identified savings in professional/technical services and training budgets to help absorb emergent costs.

Electric Operations & Maintenance (O&M) Expense Budget Monitoring

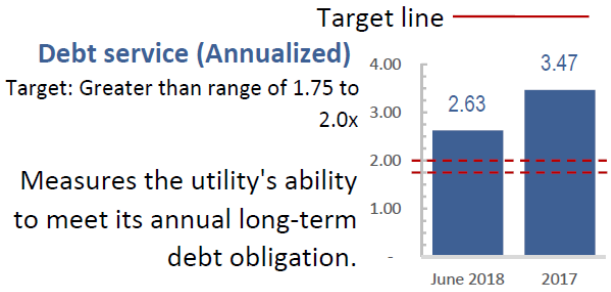
(Excludes Labor, Revenues, and Power costs)

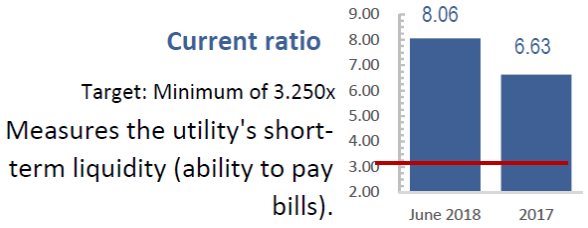
Division	2018 Working Budget	2018 JUNE YTD Working Budget	2018 JUNE Actuals	% of Actual to Budget	2018 YTD Variance to Straight Line Budget	2018 YTD Reported Variance
Customer Solutions	5,249,000	2,625,000	1,966,000	37.5%	659,000	-
Electric (Includes Bldg. Ops & Security)	9,130,000	4,565,000	4,662,000	51.1%	(97,000)	(176,000)
Energy (Includes Environmental)	9,336,000	4,668,000	4,681,000	50.1%	(13,000)	800,000
Finance Cust. Operations	440,000	220,000	229,000	52.0%	(9,000)	-
Financial Services	2,552,000	1,276,000	1,285,000	50.4%	(9,000)	22,000
General Manager	134,000	67,000	69,000	51.5%	(2,000)	-
Human Resources	804,000	402,000	347,000	43.2%	55,000	-
Information Services	3,039,000	1,519,000	2,071,000	68.1%	(552,000)	(329,000)
Water (Includes Fleet and Utility Support Svc.)	1,600,000	800,000	705,000	44.1%	95,000	(27,000)
Grand Total	**32,284,000**	**16,142,000**	**16,015,000**	**49.6%**	**127,000**	**290,000**

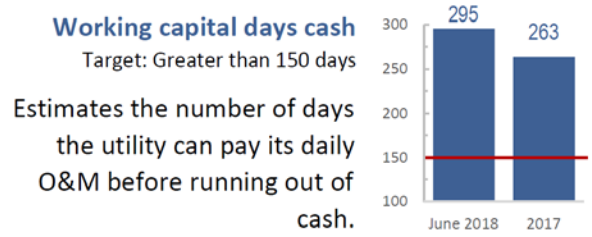
Electric Capital

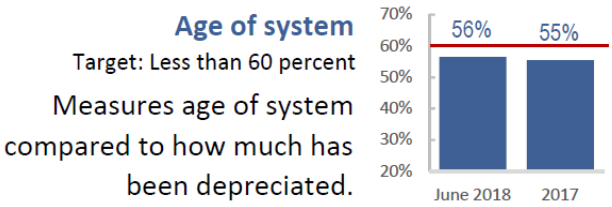
Year-to-date capital spending was $12.6 million or 33% of the annual budget. The majority of capital costs incurred were for Type 1 Distribution Renewal and Replacement, Type 2 Downtown Network, and Type 3 Carmen-Smith Relicensing. Management expects that Type 1 and Type 2 projects will be under budget at year's end by $2 to $3 million primarily due to the deferral of the CIS Replacement Project. Capital work related to the CIS Replacement project was written off in June. For further detail on Electric Capital Spending, see *Appendix C - EL1 Report*.

Electric Financial Strength Measurements





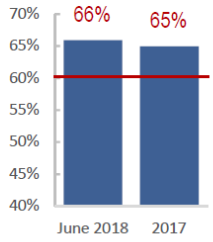




Debt as a % of NBV

Target: Less than or equal to 60 percent.

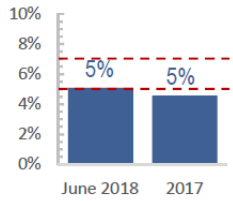
Measures overall leverage of the system by aligning debt service with the useful lives of assets.



Rate of return

Target: Between 5 - 7%.

Measures the utility's ability to pay current and future infrastructure costs.



As of June 2018, all ratios other than the Debt as a % of Net Book Value are within the performance standards. The primary reason for this leverage ratio being outside the performance standard (6% above desired maximum) is the timing of borrowing relative to the pace of utility plant placed in service. To attain the target, debt must be reduced by $20 million, plant in service increased by $31 million, or some combination of the two. There is currently $24 million in construction work in process and $33 million in preliminary surveys for Carmen-Smith relicensing. Achieving the metric will be dependent on when this work is placed in service and future bond issuances.

Electric Reserve Levels

At the July meeting, the Board approved transfers of the riverfront property sale proceeds. The Electric Utility will allocate proceeds to the Rate Stabilization Fund to reduce future borrowings. Working cash balances are well above target and will be used to make debt service payments in August ($12.4 million). Additionally, the Board will discuss use of reserves above target at the November Board meeting. June balances are:

Electric Utility Schedule of Cash Reserves

		FINANCIAL POLICY REFERENCE	TARGET	BALANCE 6/30/2018
	Working Cash	Rate Sufficiency	**$ 36,000,000**	**$ 64,993,648**
	DESIGNATED FUNDS			
	Operating Reserve	Rate Stability	$ 2,000,000	$ 2,082,704
	Self-Insurance Reserve	Rate Stability	1,720,000	1,773,975
	Power Reserve	Rate Stability	17,000,000	17,000,000
	Capital Improvement Reserve	Capital Reserve	22,000,000	29,342,111
	Rate Stabilization Fund	Rate Stability	5,000,000	31,298,759
	Pension & Post-Retirement Medical Fund		-	16,142,929
	Business Growth & Retention Loan Fund		-	1,986,168
	DESIGNATED FUNDS TOTAL		**$ 47,720,000**	**$ 99,626,646**
	CASH & DESIGNATED FUNDS TOTAL		**$ 83,720,000**	**$ 164,620,294**

For more information on the funds held in reserve, please see EWEB's Financial Policies.

Electric Utility Financial Outlook

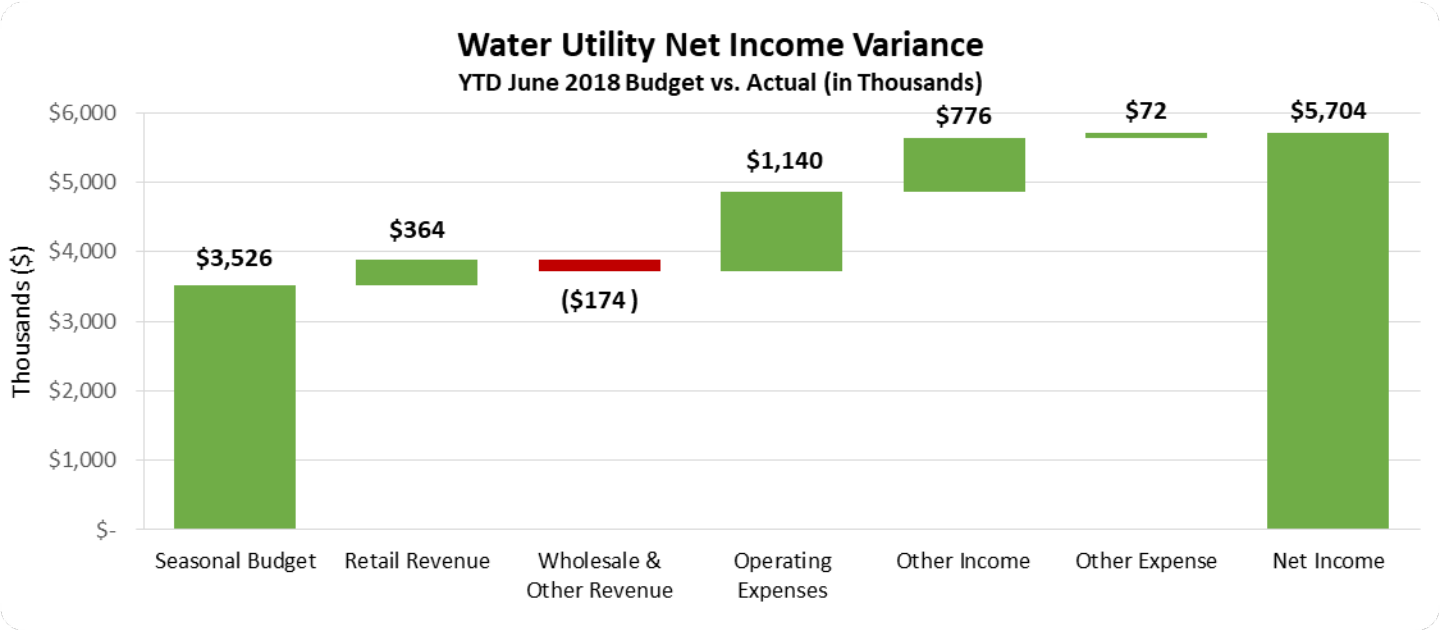
The Electric Utility is forecasting a favorable Contribution Margin of $6.3 million. While retail revenues are forecast to be at budget, a strong hydro year and conservative budget assumptions are driving higher than budgeted wholesale revenues. The 2018 budget included $500,000 in savings from position vacancies. At the end of June, the Electric Utility has realized $900,000 in savings and is projected to reach $1,300,000 in total vacancy savings by the end of the year. Vacancy savings for the second half of the year is expected to lag behind savings in the first half due to filling unbudgeted positions to staff the accelerated meter rollout. Non-labor is expected to be favorable by the end of the year. The favorable variance from the deferral of the Manufactured Gas Plant (MGP) clean-up work of $1.2 million will be partially offset by FERC mandated dam safety expenses of $265,000 that were not known at time of budget. MGP expenses are largely offset by revenue and there is little impact to net income. The write-off of the CIS project will increase electric O&M costs. EWEB issued a Notice of Termination to the CIS vendor in May 2018. The payment and reimbursement claims are under negotiation. The anticipated unfavorable impact to electric O&M is approximately $2.3 million, including the

write-off for costs-to-date (net of vendor reimbursement) as well as labor and overhead previously budgeted as capital that will now shift to O&M. The unfavorable impact to O&M could also increase if capital spending is below budget because overhead O&M expenses are allocated to capital based on actual spending. See *Appendix A - Electric Utility Financial Statement* for an interim summary statement.

Water Utility Financial Report

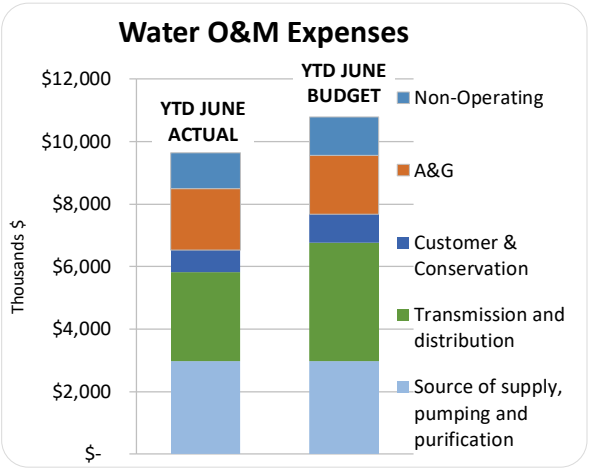
Financials

For the six months ended June 30, 2018, net income for the Water Utility is $5.7 million. This is $2.2 million favorable when compared against the budget, which is seasonally-shaped for revenue. Within the Water Utility, revenue and maintenance activities peak in the summer months while production and delivery costs remain fairly constant throughout the year.



Water Operating Expenses

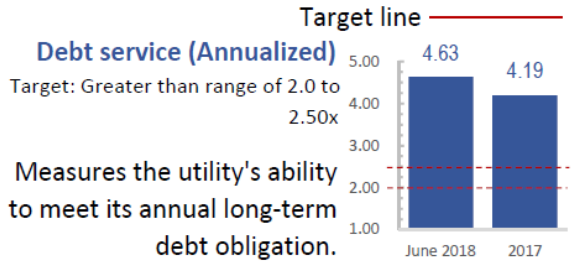
Through the end of June, half of the annual budget year has passed. Water O&M expense is at 45% of the annual budget for the period ended June 30, 2018. The $1.1 million favorable budget variance in **operating expenses** results from positive variances in professional services and construction services. Anticipated spending in these areas is expected to be greater in the second half of the year. The overall positive variance is also driven by unallocated budget for contingencies ($310,000). **Non-operating revenues** have a favorable variance of $776,000 primarily due to a gain on the sale of the riverfront property ($760,000). **Non-operating expenses** are in line with budget expectations as of June.

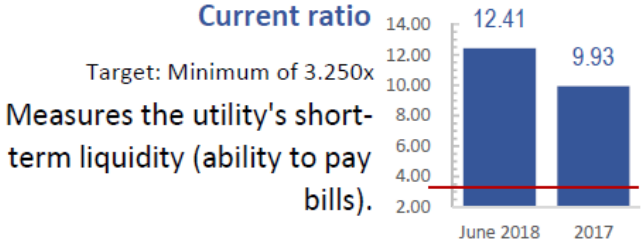


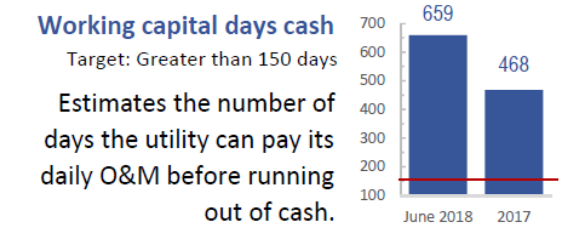
Water Capital

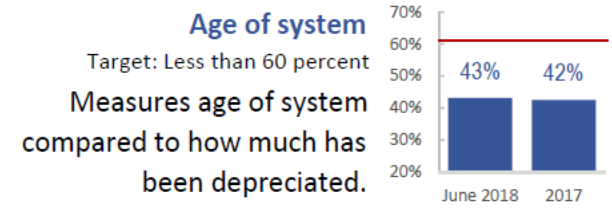
Net utility plant in service at June 30, 2018 increased $4.0 million when compared to the balance at June 30, 2017. This is a result of addressing critical aging infrastructure in the distribution system, such as main improvements, pump station upgrades, and projects related to the Hayden Bridge Water Treatment Plant. The majority of capital spending occurs in the summer months. At the end of June, the Water Utility's capital budget is 40% spent. Type 2 capital spending is lower due to the seasonality of construction work as well as the impact of the CIS Replacement project which was written off in June. See *Appendix C - EL1 Report*

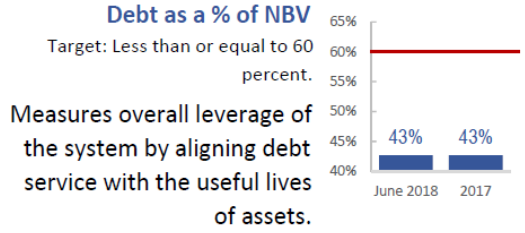
Water Financial Strength Measurements

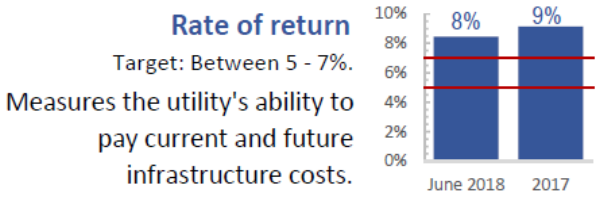












Other than the rate of return, all ratios are performing better than Board targets. The rate of return continues to be above the target ceiling at 8%. Following the February rate decrease, this metric should continue to move toward the targeted range (5%-7%) as the year progresses.

Operations & Maintenance Budget Monitoring

The Water Utility is projecting a favorable non-labor department variance of $247,000 to budget. Water Operations, where spending is not linear, accounts for most of that. Maintenance, construction, and professional services historically ramp up mid-year. Additionally, there are energy consumption savings at Hayden Bridge.

Water Operations & Maintenance (O&M) Expense Budget Monitoring

(Excludes Labor and Revenues)

Division	2018 Working Budget	2018 JUNE YTD Working Budget	2018 JUNE Actuals	% of Actual to Budget	2018 YTD Variance to Straight Line Budget	2018 YTD Reported Variance
Customer Solutions	600,000	300,000	173,000	28.8%	127,000	-
Electric (Includes Bldg. Ops & Security)	465,000	233,000	184,000	39.6%	49,000	44,000
Energy (Includes Environmental)	67,000	33,000	22,000	32.8%	11,000	37,000
Finance - Cust. Operations	97,000	48,000	43,000	44.3%	5,000	-
Financial Services	547,000	274,000	231,000	42.2%	43,000	4,000
General Manager	30,000	15,000	15,000	50.0%	-	-
Human Resources	177,000	88,000	76,000	42.9%	12,000	-
Information Services	660,000	330,000	455,000	68.9%	(125,000)	(72,000)
Water (Includes Fleet and Utility Support Svc.)	5,451,000	2,726,000	2,134,000	39.1%	592,000	234,000
Grand Total	**8,094,000**	**4,047,000**	**3,333,000**	**41.2%**	**714,000**	**247,000**

Water Reserve Levels

At the July meeting, the Board approved transfers of the riverfront property sale proceeds. The Water Utility will use proceeds to pay down intercompany debt. Working cash balances are well above target and will be used to make debt service payments in August ($3.3 million). Additionally, the Board will discuss use of reserves above target at the November Board meeting. June balances are:

Water Utility Schedule of Cash Reserves

		FINANCIAL POLICY REFERENCE	TARGET	BALANCE 6/30/2018
	Working Cash	Rate Sufficiency	**$ 3,400,000**	**$ 8,855,401**
DESIGNATED FUNDS				
	Operating Reserve	Rate Stability	$ 1,000,000	$ 1,012,184
	Self-Insurance Reserve	Rate Stability	280,000	288,712
	Capital Improvement Reserve	Capital Reserve	7,000,000	11,592,061
	Rate Stabilization Fund	Rate Stability	1,000,000	1,307,263
	Pension & Post-Retirement Medical Fund		-	5,071,312
	Alternate Water Supply Fund		-	6,377,023
	Other Designated Funds		-	299,588
	DESIGNATED FUNDS TOTAL		**$ 9,280,000**	**$ 25,948,143**
	CASH & DESIGNATED FUNDS TOTAL		**$ 12,680,000**	**$ 34,803,544**

For more information on the funds held in reserve, please see EWEB's Financial Policies.

Water Utility Financial Outlook

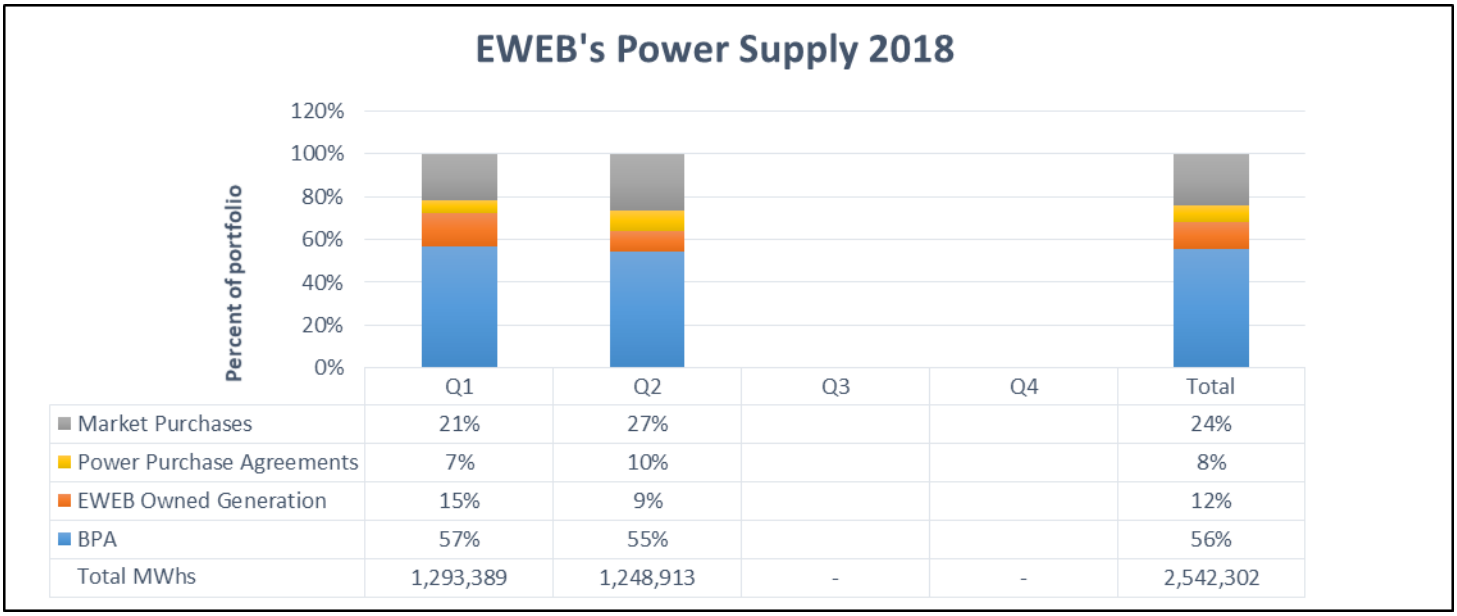
The Water Utility has a $1.3 million favorable net operating income variance to budget. Water revenues have driven slightly above budget this month, adding $190,000 to the favorable variance. Operating expenses are $1.1 million favorable to budget. Some of the Water Utility spending tends to be cyclical, peaking in the summer, and non-labor expenses are expected to be $240,000 below budget by the end of the year. The 2018 budget included $150,000 in savings from position vacancies, and through the end of June 2018 more than $250,000 has been realized. The Water Utility is projecting vacancy savings to be approximately $325,000 by the end of 2018. Additionally, the $600,000 contingency fund will help cushion the impact of writing-off the CIS project. The anticipated unfavorable impact to Water O&M is approximately $500,000, including the write-off for costs-to-date (net of requested vendor reimbursement) as well as labor and overhead previously budgeted as capital that will now shift to O&M. Operating expenses are projected to be $590,000 favorable by end-of-year. However, this projection could shift if capital spending is below budget because overhead O&M expenses are allocated to capital based on actual spending. See *Appendix B - Water Utility Financial Statement* for an interim summary statement.

Energy & Electric Operations

EWEB owns and operates generation, transmission, and distribution equipment and systems for the sale and delivery of electricity to our customer-owners (local consumers) and other electricity resellers (wholesale). Continuing to provide electricity safely, reliably, and affordably is our operational priority.

Energy Production/Generation

In the second quarter, EWEB generation totaled 1,248,913 MWhs with 55% supplied by the Bonneville Power Administration (BPA), 9% from EWEB-owned generation, and the remainder from power purchases.



	Q1	Q2	Q3	Q4	Total
Market Purchases	21%	27%			24%
Power Purchase Agreements	7%	10%			8%
EWEB Owned Generation	15%	9%			12%
BPA	57%	55%			56%
Total MWhs	1,293,389	1,248,913	-	-	2,542,302

Due to expected energy market conditions, EWEB Generation schedules a significant amount of annual maintenance for the second quarter of every year. The region generally experiences low power prices during the second quarter due to an oversupply of hydro, wind and solar energy. In addition, this year we are completing the first of two consecutive capital construction outages at the Carmen Powerhouse, and the Carmen plant went offline in April. Consequently, all of our owned hydroelectric facilities and both of our steam turbine thermal generators underwent planned maintenance or capital outages during the second quarter. Both thermal units also had unplanned outages resulting from incidents at their respective paper mills. As a result of these planned and unplanned outages, the availability of the EWEB-owned electric generation resources was well below target for hydroelectric and thermal resources. However, as is typical for this time of year, EWEB wind resources were available and performed well when not in forced curtailment from BPA.

Q2 2018 Generation Reliability by Fuel Type

Generation Type	Availability Factor	Forced Outage Factor	Notes
Target	**> 90%**	**< 3.00%**	
Wind	93.20%	N/A	Meeting plan.
Hydro	35.97%	0.60%	All hydro facilities had planned maintenance or capital work outages during Q2.
Thermal	53.90%	14.85%	Both thermal plants experienced planned and unplanned outages during Q2.

For 2018 year-to-date performance, EWEB owned hydroelectric facilities are meeting the forced outage factor (FOF) target both individually (except Leaburg Unit 1) and collectively. Leaburg Unit 1 has a higher FOF due to a lack of fuel (water) in the lower McKenzie that caused us to shut down one of the turbines at Leaburg during the second half of June. The availability factor (AF) for EWEB-owned hydroelectric facilities didn't meet the target due to the extended work outage affecting both Carmen units. The other facilities, other than Leaburg Unit 1 (fuel) are meeting AF targets.

Year-to-date AF and FOF for the steam turbine generator at International Paper are well below targets due to both the extended mill outage associated with the hydraulic oil spill and response and the planned major maintenance overhaul of the unit. The Wauna (WGA) turbine is also not meeting plan due to a maintenance outage during Q2, but is expected to get back within targets before the end of the year.

The year-to-date capacity factor for our hydro facilities is 32.61, largely affected by the Carmen plant outage, and for our thermal facilities is 43.45, largely driven by the extended IP outages.

June 2018 Generation YTD Report

Parms: Plant Management Control = No, Include Deratings = No, Gross = Yes, Data Last Loaded Date: 4/23/2018

Unit	Year	Month	AF	FOF	GCF	GOF
CSU1	2018	06	57.46	0.43	24.06	53.64
CSU2	2018	06	52.05	0.46	5.00	62.64
TB	2018	06	97.59	0.63	55.15	57.01
LBU1	2018	06	84.83	4.65	71.21	83.95
LBU2	2018	06	90.64	0.00	85.48	94.30
WV	2018	06	92.81	0.00	87.05	93.80
STC	2018	06	98.58	0.11	68.08	69.06
EWEBHydro	2018	06	66.85	0.61	32.61	68.94
IP	2018	06	44.90	22.59	36.23	80.69
WGA	2018	06	88.10	4.78	48.58	55.14
EWEBTherm	2018	06	70.16	12.18	43.45	61.93
HW	2018	06	95.48			
FC	2018	06	93.27			
Wind	2018	06	94.38			

Electric Delivery Reliability

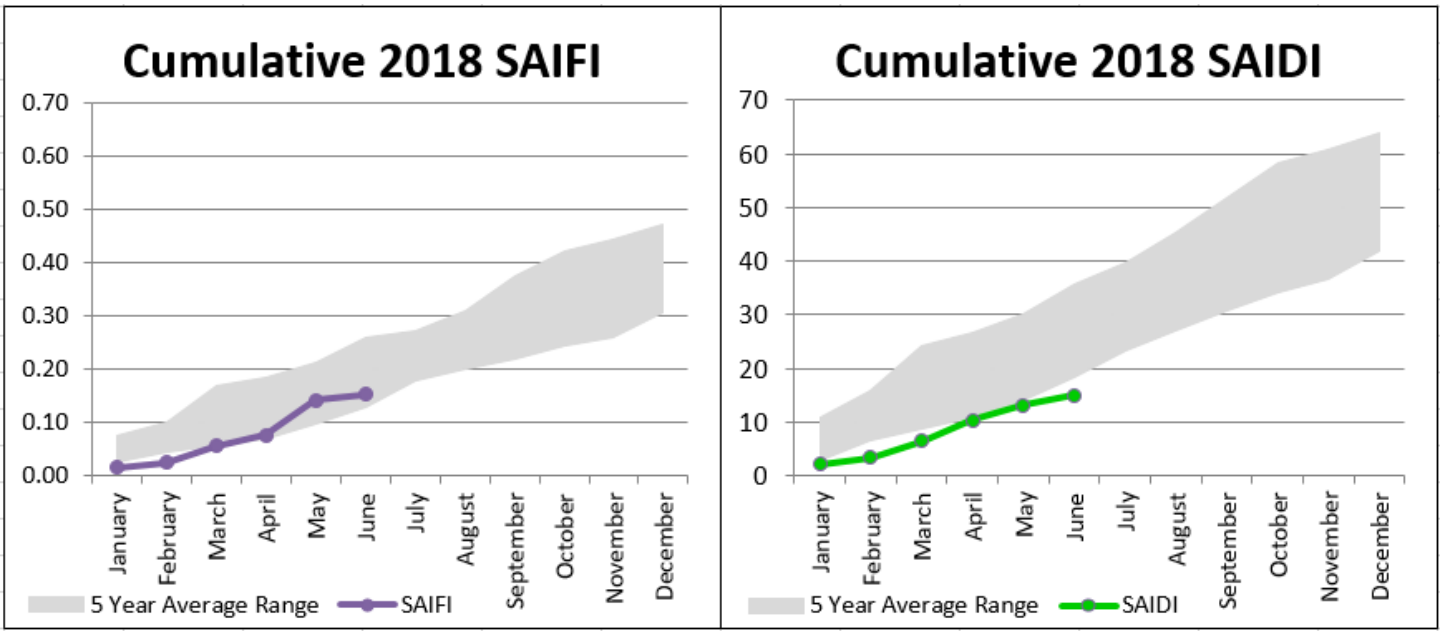
EWEB tracks electric system reliability using Institute of Electrical Electronic Engineers (IEEE) metrics, including System Average Interruption Frequency Index (SAIFI) & System Average Interruption Duration Index (SAIDI). At the end of the second quarter, electric system reliability was within target and the lowest in the past five years primarily due to mild weather. For more detail on reliability metrics, see *Appendix E – Reliability Index Report*.

Second Quarter Outages

Total # of outages	Total # of customers interrupted	Total outage minutes
60	1,067	167,415

System Average Interruption Frequency Index (SAIFI) & System Average Interruption Duration Index (SAIDI) Outage Performance Details

Index	YTD Actual	YTD 5 Year Average	Pacific Northwest APA City Average YTD	Dashboard
SAIFI	0.154	0.185	0.20	
SAIDI (minutes)	14.99	24.85	21.60	



Proactively, EWEB continues to pursue activities and projects to prevent outages, including those related to equipment maintenance adherence, tree and vegetation management, and special outage prevention projects.

Electric Line Tree and Vegetation Management

Month	Planned	Completed	% Completed	PCOP	Status
January	23.33	23.1	99%	5,118	
February	23.33	14.37	62%		
March	23.33	16.77	72%	1,797	
April	23.33	23.0	99%	2,128	
May	23.33	58.18	249%	6,906	
June	23.33	17.5	75%	3,307	
YTD	139.98	152.92	109%	19,256	

*** PCOP = Potential Customer Outages Prevented - trees trimmed that could potentially cause outages**

Asset Management & Planning

As of December 2017, the Electric Utility manages approximately $760 million of assets (plant-in-service), including generation, transmission, and distribution infrastructure.

Integrated Electric Resource Planning (IERP)

The goal of an IERP is to develop a plan for making decisions impacting our future generating resources. Staff is developing a schedule of work and engagement processes to complete the next IERP for publication in late 2021. The IERP will identify and evaluate long-term portfolio alternatives bringing the best fit between supply, customer consumption, affordability and EWEB's strategic direction, to prepare the utility and the Board for making decisions about future resource choices. This planning work includes modeling and analysis of potential load strategies and supply characteristics.

Staff's attention in the next year will be devoted to "capability building" within the analytical team, for purposes of the 2021 IERP. This involves (1) developing analytical tools to support consumption side program evaluation and development, power generation and power markets analytics, and (2) participating in Pacific Northwest (PNW) market forums and policy development about evolving wholesale market products and rules.

In June, Staff updated EWEB's 2011 IERP. We found that this plan, with its focus on conservation to meet load growth needs, continues to work well for the Utility. EWEB's loads continue to flatten, which is characteristic for many (but not all) regional utilities. High levels of renewable power production have meant that wholesale energy prices continue to be low at most times, although more recently, summer peak demand has pushed up on-peak prices significantly. We do not expect current high prices to last past the summer cooling season.

Carmen-Smith

The Carmen Power Plant was taken offline in April to facilitate the replacement of the plant's two 114-inch turbine shutoff valves. Since beginning the outage, the old original valves have been removed and the new valves are in place and being installed. Work is progressing nicely and as anticipated. The work is projected to wrap up and the plant returned to service in October 2018.

In April, the Biological Opinion from the National Marine Fisheries Service was issued to the FERC. The Clean Water Act Section 401 Certification from the Oregon Department of Environmental Quality is now expected during the third quarter of 2018. The 401 certificate is the last document needed by the FERC prior to Carmen-Smith license issuance. In anticipation of license issuance in either late 2018 or early 2019, staff are planning for the engineering and deployment of several major environmental and aquatic improvements required by the license. R2 Environmental Consultants are currently evaluating multiple options for the location of the Trail Bridge Trap and Haul Facility with their final report due at the end of the third quarter.

Staff also continue to make good progress on plant modernization work planned for 2019 through 2021. Staff anticipate bidding the planned 2019 Carmen power plant substation work during the fourth quarter of 2018. This contract will be brought to the Board in the first quarter of 2019 for approval. Our turbine/generator contractor continues to make good and appropriate progress on the design of the new turbine runners and rewind of the generators at the Carmen Powerhouse. Single unit outages for the turbine/generator work are scheduled for 2020 and 2021.

Walterville

In April, staff determined that 2018 was likely to be a below median flow year on the lower McKenzie River. In accordance with a Record of Decision (ROD) signed by General Manager Lawson earlier this year, staff subsequently implemented a low flow operating regime for the Walterville Hydroelectric Project. In accordance with the ROD, operational staff are leaving ten percent more flow in the Walterville bypass reach of the McKenzie that we are putting in the Walterville power canal. This low flow procedure was put into place following the June maintenance outage for the Walterville plant (when the canal was offline) and will continue through October. Initial results from the new operating regime are positive for fish migration without a significant loss of electric generation.

International Paper Steam Turbine/Generator

EWEB's steam turbine generator underwent a periodic major maintenance overhaul during the second quarter and was offline for most of the quarter. In accordance with the Joint Operating Agreement between International Paper (IP) and EWEB, IP provided the project management and oversight of the major maintenance work this time. EWEB had that role last time (2011) and will again at the next major maintenance in five to seven years. No significant unanticipated issues were found during the maintenance outage, but a number of items were confirmed for repair or replacement during the next major maintenance. Staff used these findings to support the 10-year capital plan approved by the Board in July. Following the outage, the IP turbine was returned to service without issue.

Electric Master Planning

A draft master plan is underway with a targeted completion date by December. Some additional detailed analytical assessments will be contracted to complete portions of this work. Contracted work will include a review of the capital plan by an independent source as requested by the Board.

A study by Black & Veatch was completed in February. The first phase included a feasibility study for powering in-town critical loads from the Leaburg power plant and upgrades required at Leaburg to allow for unit blackstart. The next phase is currently in the planning stage and will consist of determining actual load values and possibilities for curtailment, additional stability studies, transmission system switching procedures and investigation at the Seneca power plant.

Initial scoping of a detailed Asset Management Plan has been initiated, and will pause until Q3 following the draft Electric Master Plan.

Holden Creek Substation

The Holden Creek substation, located on Hwy 126 near Leaburg, construction and commissioning is complete, and tie into the Bonneville Power Administration's Thurston-Cougar 115kV transmission line was complete in late April. Upriver distribution circuits are planned to be added to the station in late July.

From mid-August to mid-October, the Leaburg substation will be reconfigured to remove distribution supply equipment, and to prepare the generation feeds for tie into the Holden Creek Substation. Design and procurement of materials and a contractor is complete with award planned for the contractor at the August board meeting. Control room and generator connection changes will take place in summer 2019 which will complete work around the Holden Creek Substation Construction.

See *Appendix C - EL1 Report* for capital project details.

Water Operations

EWEB owns and operates intake, treatment, transmission, and distribution equipment and systems for the sale and delivery for clean drinking water to our customer-owners (local consumers) and other water resellers (wholesale, water districts). Continuing to provide water safely, reliably, and affordably is our operational priority.

Source Protection, Water Quality and Public Safety

The McKenzie Watershed Emergency Response System (MWERS) web application was completed and beta tested in March 2018 and has been rolled-out to internal EWEB Departments (Hayden Bridge, Environmental, and Source Protection) as well as an initial group of first responders and other agencies (McKenzie Fire, Eugene/Springfield Fire, Region 2 HazMat Team, City of Springfield, Springfield Utility Board, Rainbow Water, Army COE, and Lane County Sheriff). Trainings were successful and additional enhancements/fixes were identified and addressed.

Routine algal bloom and toxin monitoring identified cyanotoxins in the McKenzie River. On May 30, 2018, EWEB detected cylindrospermopsin in the raw water at the intake at low levels (see http://www.eweb.org/outages-and-safety/water-safety-in-your-home-or-business/drinking-water-quality/algae-blooms). Once laboratory results were received, EWEB staff notified the Oregon Health Authority and initiated increased sampling intervals to every 2-3 days for raw and finished water (we requested a rush, or 2-day turnaround on these samples). Analytical results were published on EWEB's website to provide our customers direct access to this information and avoid any potential confusion given the situation with Salem's water supply. No detections of cyanotoxins were found in the treated drinking water and toxins ceased being detected in the raw water on June 16, 2018.

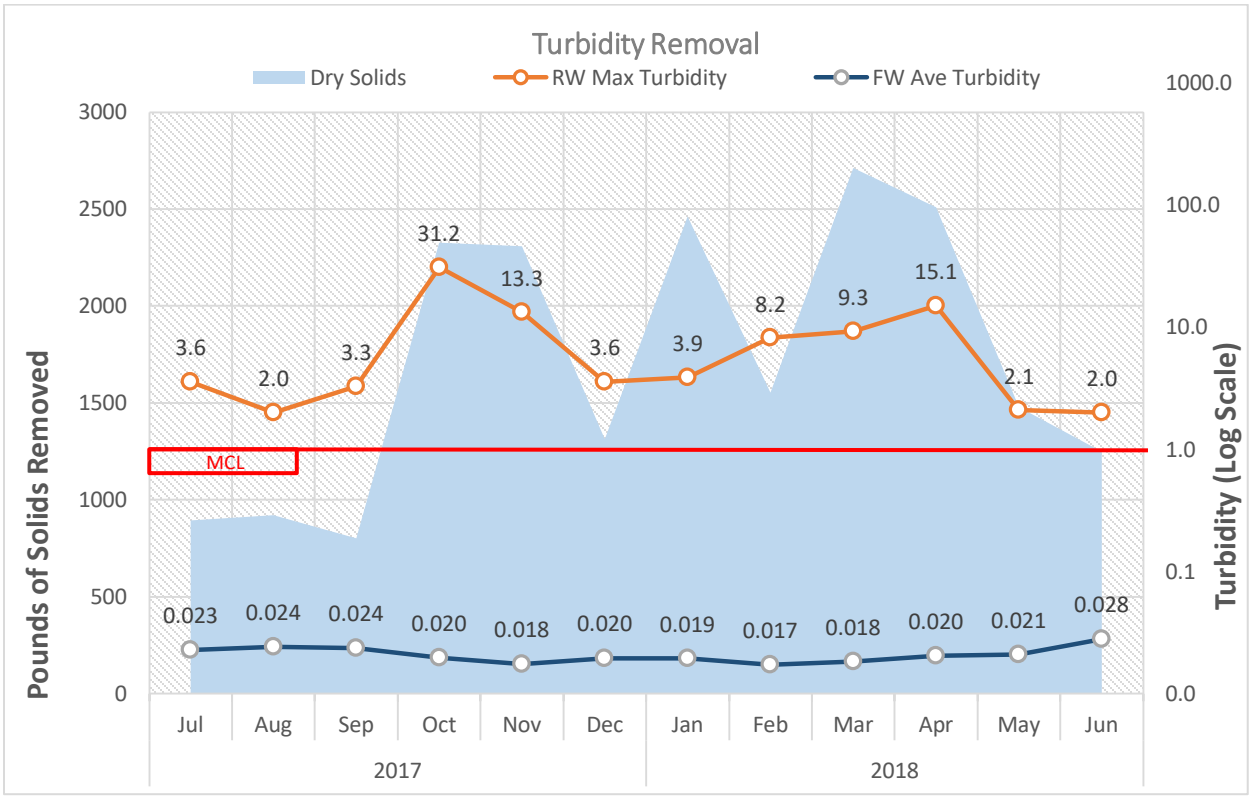
Now that cyanotoxins have been detected in the McKenzie River, EWEB is increasing its analytical capabilities at its Water Quality Lab to include an ability to test for cyanotoxins. EWEB ordered analytical equipment that will allow its Water Quality Lab to run an EPA-approved method for specific cyanotoxins. This will provide EWEB with the ability to get same day results 7 days a week and conduct more extensive testing during harmful algal blooms at a fraction of the cost. The equipment was received on 7/3/2018 and staff will begin training by end of July.

Water Production

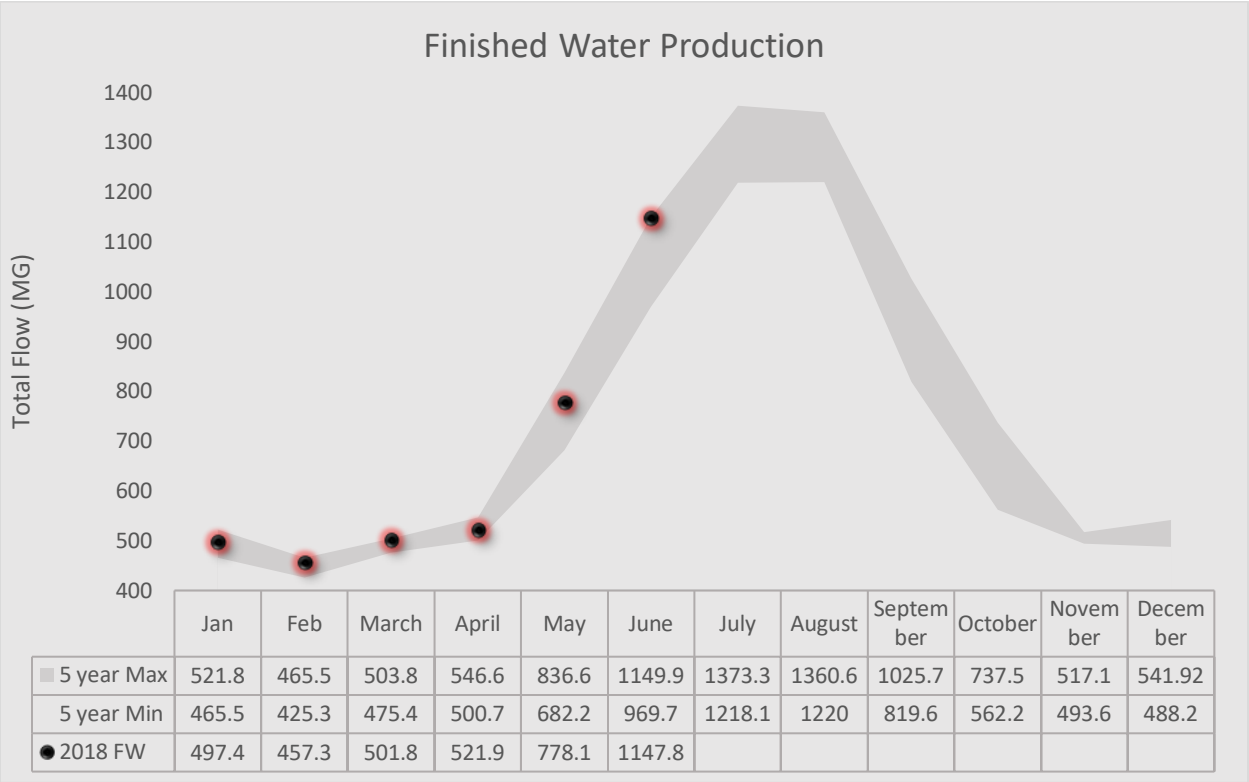
Treatment operations made several proactive moves to mitigate cyanotoxin levels on June 6th. Operators modified treatment by adding powdered activated carbon to the pre-filtration process and adjusting disinfection strategies to prevent potential toxins from entering the finished water. Samples for analysis were collected at the end of each unit process and no toxins were detected. Based on these results, no further process changes were made until the plant was returned to normal operations on June 25th after results of the third consecutive clear sample at our intake.

The Water Research Foundation has accepted the collaborative project, 'Impact of Intermittent Operation on Biofilter Performance'. The project will identify operational efficiencies for biofiltration at Hayden Bridge. Contract negotiation is expected to be wrapped up in July.

Performance charts for treatment efficiency and finished water output for the Hayden Bridge Filtration Plant are shown below.


Turbidity Removal
Dry Solids
RW Max Turbidity
FW Ave Turbidity
Pounds of Solids Removed
Turbidity (Log Scale)
3000
2500
2000
1500
1000
500
0
1000.0
100.0
10.0
1.0
0.1
0.0
MCL
3.6
2.0
3.3
31.2
13.3
3.6
3.9
8.2
9.3
15.1
2.1
2.0
0.023
0.024
0.024
0.020
0.018
0.020
0.019
0.017
0.018
0.020
0.021
0.028
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
2017
2018

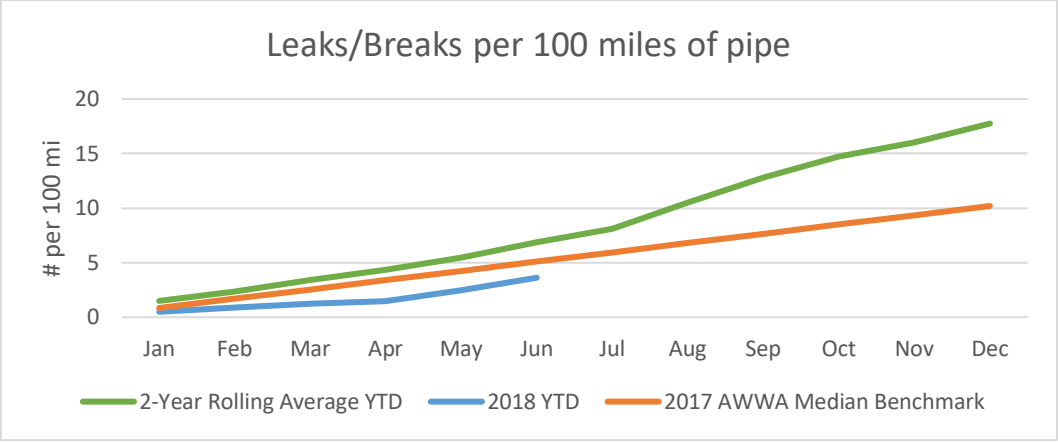

CHLORINE GOAL
% >0.2 and <0.8
97% Goal
PERCENT CHLORINE ABOVE 0.2 MG/L
101
100
99
98
97
96
95
100
100
100
98.2
99.4
100
99.6
JAN 2018
FEB 2018
MAR 2018
APR 2018
MAY 2018
JUNE 2018
YTD 2018
TIMEFRAME

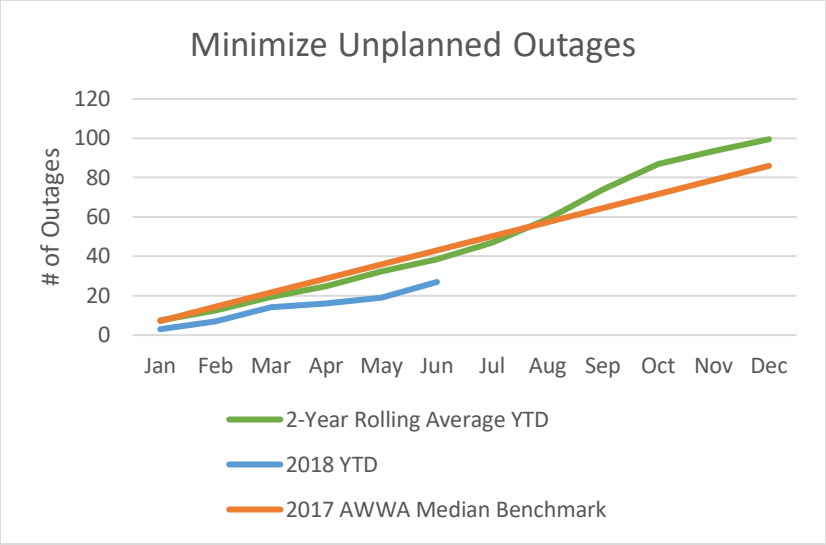


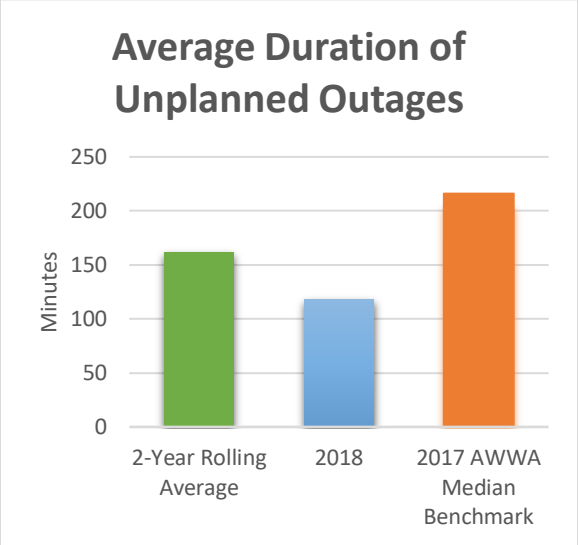
	Jan	Feb	March	April	May	June	July	August	September	October	November	December
5 year Max	521.8	465.5	503.8	546.6	836.6	1149.9	1373.3	1360.6	1025.7	737.5	517.1	541.92
5 year Min	465.5	425.3	475.4	500.7	682.2	969.7	1218.1	1220	819.6	562.2	493.6	488.2
2018 FW	497.4	457.3	501.8	521.9	778.1	1147.8						

Water Delivery Reliability

Goal	Unit	AWWA Median Benchmark	YTD Results
Ensure Reliability of Water Products			
Leaks and Breaks per 100 Miles of Pipe	#	10.2	3.6
Minimize Unplanned Outages	#	86	27
Average Duration of Unplanned Outages	Minutes	216	118
Boil Water Notices	# of Notices	None caused by EWEB	0







Significant Outages

There was 1 significant outage event in Water Operations for Q2. It was a main break on Donald near Fox Hollow that caused an unplanned outage and then boil notice (non-EWEB caused) for 182 customers in the late afternoon on June 16th. Water Ops was able to get the break isolated and repaired by early morning on June 17th. The boil notice was lifted on June 18th.

Water Regulatory Compliance

The 2018 Oregon Health Authority (OHA) Water System Survey (*Appendix F)* has been completed and there are 3 significant deficiencies noted in the report.

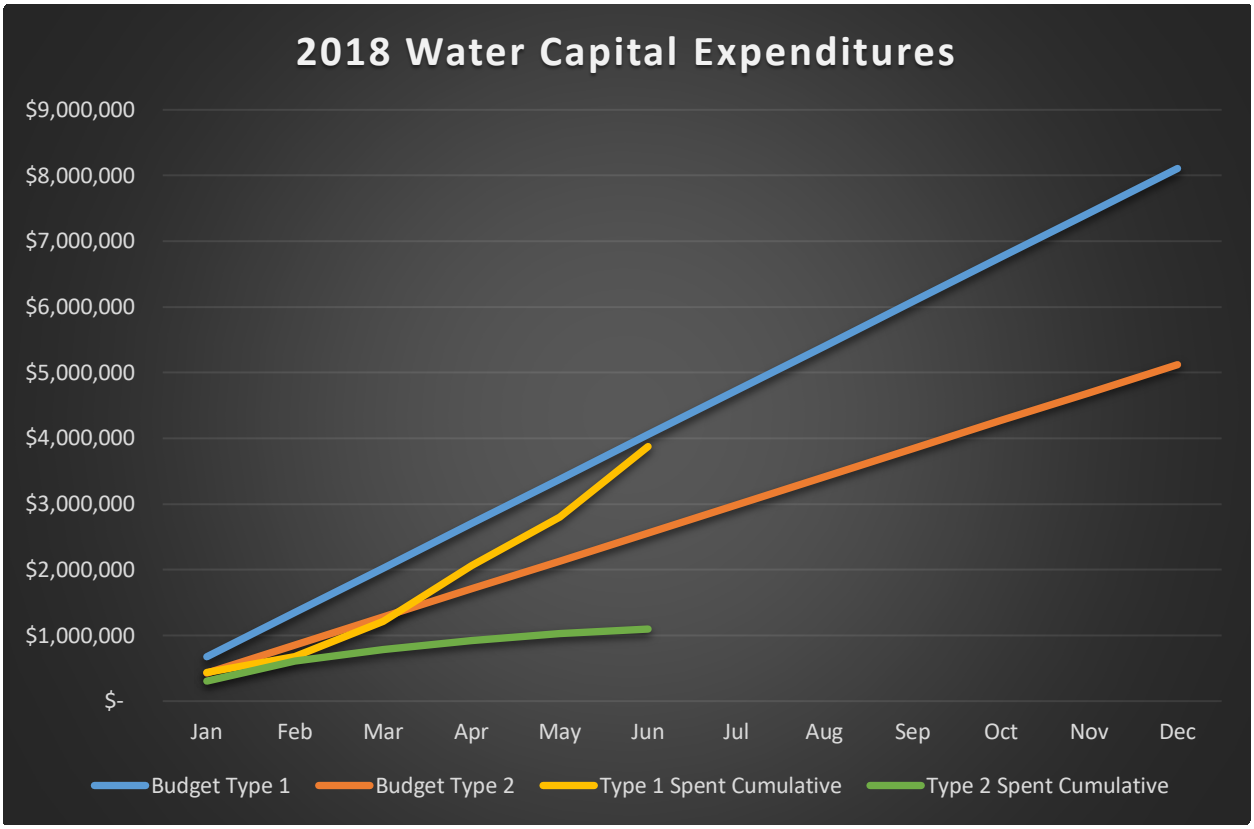
1. **Finished water storage not water tight:** This is referring to the College Hill 607 reservoir. This is a known issue that was called out in the 2015 survey. The reservoir is scheduled to be decommissioned in 2023 and we have a state approved interim sampling/action and inspection plan in place until then. The reservoir roof is inspected weekly and repaired as needed.
2. **Filter aid polymer was not delivered by the supplier with proof of NSF Standard 60 certification:** EWEB contacted the vendor and asked them to rectify the error. Filter aid polymer with NSF Standard 60 certification labeling has since been delivered and proof of delivery has been forwarded to OHA. This deficiency was corrected before the date of the water system survey report.
3. **Hawkins 607 and City View 800 East reservoir vent screens not small enough:** Hawkins 607 has #4 expanded metal only in the screen covers. These are covers only for vandalism protection. The screen on the inside is ¼" which was legal at the time of construction. At this time, there does not need to be a correction. City View 800 East has screens under the vandalism cover that were legal at the time of construction. Both of the City View 800 reservoirs are scheduled to receive new vents in 2019. They will be compliant with current regulations.

All of this will be detailed in our response to OHA, which should be complete by early August.

Asset Management & Planning

Type 1 work is proceeding with costs approaching the straight line budget for this time of year. Principal Type 1 work to date has been for pipelines with a minor amount of pump station work. Several larger treatment plant projects will start soon which will continue to increase expenditures in this area.

Costs are below the straight line budget for Type 2 work. This will continue into the third quarter when a significant amount of pre-purchased equipment is scheduled to arrive. The construction of both the new standby power and disinfection facilities at Hayden Bridge will also begin in the third and fourth quarters raising the expenditures to budget levels.


2018 Water Capital Expenditures
$9,000,000
$8,000,000
$7,000,000
$6,000,000
$5,000,000
$4,000,000
$3,000,000
$2,000,000
$1,000,000
$-
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Budget Type 1
Budget Type 2
Type 1 Spent Cumulative
Type 2 Spent Cumulative

Emergency Preparedness and Resiliency

Blackstart Assessment - Lower McKenzie River projects

During Q1, a consultant to EWEB completed an assessment of both the Leaburg and Walterville hydroelectric plants for their ability to accommodate blackstart capabilities. The consultant found that the Leaburg plant currently has blackstart capability. It was installed as part of the 2002/2003 plant work completed following relicensing of the project. However, it does not appear that the system was commissioned or tested. The study scope also included a modeling study to determine if the Leaburg Generators could power critical loads in Eugene following a wide area outage. It was concluded that the identified load was slightly higher than the available generation after accounting for line losses, parasitic load and reactive power needs.

Staff are currently working with the consultant to identify the scope of work for a follow up study to complete a test plan and procedure for the Leaburg blackstart testing, and to gather additional data for the critical load study. Additionally, the study will include investigation of possible automated solutions that could be included for load shedding and switching on an emergency basis. This will consist of EWEB learning more about individual critical customer loads in order to determine what loads can be curtailed by a change in operation under emergency conditions. This effort will include both Systems Engineering and Customer Solutions. The launch of this next study phase with the consultant is expected to occur in early Q3, and is planned for completion in late Q1 of 2019.

Outage Management

Generation updated the Incident Command System (ICS) portion of its Emergency Action Plan (EAP) to incorporate and embed the ICS structure into the plans. This was completed during Q1 2018. The next step will be to make generation-specific improvements to the ICS process to facilitate ICS process use in the event of a dam safety emergency.

From an electric delivery perspective, Phase II of the Outage Management Systems (OMS) project is moving ahead well. The focus is clearly on team continuity and communication. Teams are well on their way to creating repeatable process. Each ICS officer has reviewed their respective role, documented, and refined team responsibilities. Individual “Charters” have been approved and now the team focus is on proper sub-committee staffing, and additional training needs.

The last two sessions with the core team were used to map out process and reduce redundancy. Each session has been productive. Individual “Primary” officers are working on integration between teams. A “Blue Sky” drill has been scheduled for September 20, 2018 to test the new process.

Distributed/Neighborhood Emergency Station(s)

Over the next five years, EWEB will deploy at least five (5) distributed “neighborhood” emergency stations for water distribution and independent electric operation (a.k.a. microgrid). In 2018, EWEB is working with two local school districts to design and construct two “neighborhood” emergency stations, including both water and electric infrastructure. Two initial sites are currently in development, Kalapuya Experimental Farm in west Eugene (Bethel) and Howard Elementary near River Road (4J). Intergovernmental Agreements (IGA) have been finalized and executed with both the Bethel School District and the Eugene 4J School District for these sites. Both sites have existing solar, are relatively new construction in excellent condition, and have water well availability on site. Water Engineering is leading the development of the Kalapuya site with Systems Engineering in a support role (well and water distribution equipment to be installed in 2018, electrical backup power in 2019). Systems Engineering is leading the Howard development with Water Engineering in a support role. This site will include both microgrid and provision for water well installation in 2019. Below is a summary of the progress milestones for the Howard Project:

Electric Neighborhood Microgrid Project

Milestone	Status	Planned Date	Actual Date	Comments
Determine site location/preliminary design		1/1/2018	1/11/18	Howard Elementary Selected
4j IGA Agreement		3/3/2018	7/9/18	IGA was signed prior to start of construction and no delays were experienced.
Advertise and Award Design Build RFP		3/3/2018	3/3/2018	Awarded to Worley Parsons.
Design		5/1/2018	6/7/18	100% design completed. The completion date shown is later than anticipated because the scope was increased during design to include the water well for installation in 2018 instead of 2019. This delay did not result in a critical path delay.
Procurement		7/1/2018	TBD	Equipment delivery as planned on track however different than original plan. Batteries to be delivered mid-August following concrete pad completion to avoid storage and charging as well as multiple placements.
Installation		8/30/2018	TBD	A non-critical path delay has been experienced due to additional permitting time that may be needed, however this does not affect the overall commissioning date. Construction started on non-permit elements the week of July 9th with overall substantial completion expected to be delayed by approximately 1 week.
Commissioning		9/4/2018	TBD	Schedule on track, however final commissioning expected to be delayed by approximately 10 days.

Mobile Treatment

In conjunction with distributed neighborhood emergency stations, Water Engineering is working on a mobile treatment trailer that underwent initial raw water at the Hayden Bridge intake during the first quarter. Preliminary results indicated that a few changes will be required in the equipment which will be implemented during the third quarter.

Hayden Bridge Emergency Generators

Emergency back-up generators for the Hayden Bridge Treatment Plant and Intake have been delivered for installation in Q3. This back-up generation will be of sufficient capacity to deliver about 20 mgd, and fuel capacity to run 24 hours (full load) without being re-fueled. EWEB has received bids for installation and will be approved in Q3.

City Of Salem Assistance

During May and June, the City of Salem requested EWEB provide up to two emergency distribution trailers under the Oregon Water/Wastewater Agency Response Network (OWARN). EWEB's trailers were developed as part of the 2012 Emergency Water Supply Plan. The trailers were very effective in distributing water. EWEB delivered the trailers, set up the distribution piping, and trained City of Salem staff and volunteers, who operated the trailers for nearly one month as Salem worked through its Cyanotoxin issues. Salem will pay EWEB for the use of the trailer and training. One item of learning, which was a goal of the 2012 plan, was that operation of the trailers can be done by volunteers effectively while EWEB staff focus on restoration of the system during an emergency.

Proactive Mitigation of Illegal Camping

Illegal camp inspections increased to once every two weeks in Q2 in close coordination with Willamalane and City of Springfield. Camps were identified and put into the LCOG web application to track activity; cleanups occurred within 48 hours of identification. In May, City of Springfield began weekly inspections and cleanups. The NW Youth Corps was contracted by the City of Springfield and began vegetation management activities to remove blackberry and other heavy

undergrowth in the Springfield Oxbow area in late June. EWEB is contributing funds to support the vegetation management work.

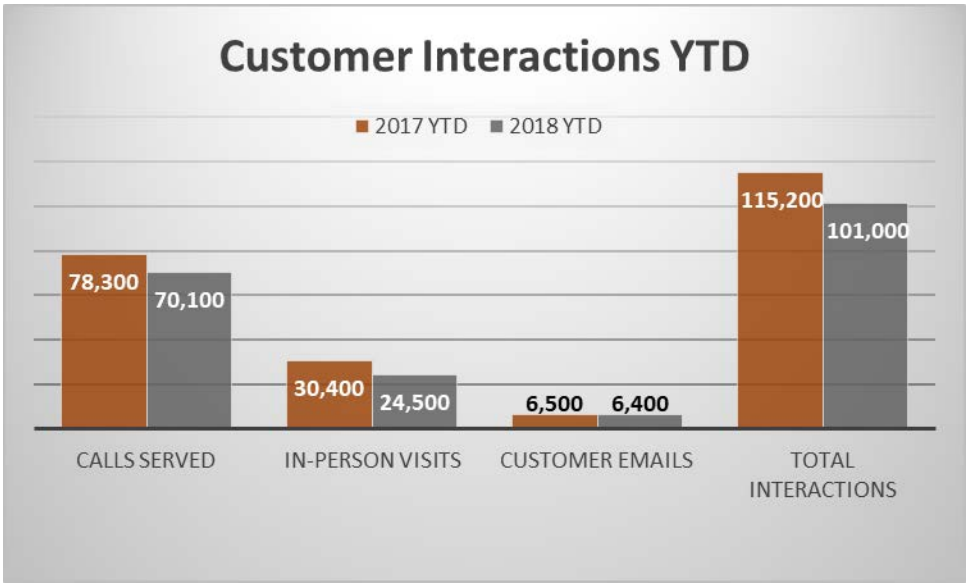
# of EWEB inspections: 11
# of camps found: 21
# of camps cleaned up: 20

Customer Services & Programs

EWEB serves approximately 200,000 people in the Eugene metro area and the McKenzie River valley. Customer Operations manages responsive services including customer initiated support using telephone, email, digital media, or in-person contact; and includes the development and support of products and services including energy/water efficiency, limited income support, design services, and special programs like GreenPower™.

Operational Metrics

Direct customer interaction response times greatly improved against performance goals when new Customer Service Analysts were hired in May. In the second quarter EWEB supported 53,000 customer interactions, approximately 830 per day.



Customer Response Metrics

Measure				Comments
GOAL	**TARGET**	**Q1**	**Q2**	
Call Center				
Maintain or improve the Call Center Average Speed of Answer	< 90 seconds	🔴	🟡	Q2 Avg Speed Answer: 140 sec. With addtl CSAs, June: 60 sec
Maintain or improve the Call Center Abandonment Rate	< 7%	🔴	🟡	Q2 Abandon rate: 9.4% With addtl CSAs, June: 3.8%
Meter Reading				
Maintaining or improving the meter reading accuracy rate	>99.96	🟢	🟢	QTD Accuracy: 99.97

Credit & Collections

Net write-offs through June totaled $221,000. For the same time period, the 2017 write-offs were $157,000. After the December 2016 ice storm, collection efforts were suspended for a few months due to the high volume of estimated bills which is the primary contributor to the difference. The 2018 budget for uncollectible accounts is $480,000.

Advanced Metering Infrastructure (AMI)

The Board approved customer service policy revisions that facilitate deploying smart meters in June. Accelerated deployment was approved by the Board in July, and the target completion is the end of 2021. An Advanced Meter Services department has been formed, and as of July the supervisor, engineer, meter data analysts and support team have been hired. Communications staff is preparing educational and advance notice materials to begin deploying meters by meter reading route in October 2018.

AMI Meter Report

Electric meters installed as of April 1: 5,124	Water meters installed as of April 1: 979
Electric meters installed as of July 1: 7,722	Water meters installed as of July 1: 1,635
Electric meters installed per week during June: 246 (three-year deployment target: 520 per week)	Water meters installed per week during June: 50 (three-year deployment target: 369 per week)

The average percentage of register reads retrieved from opt-in meters each day was 95.4%, this is down slightly from the first quarter due to installation of meters in communication-challenged locations. The total percentage of automatic billing reads automatically delivered to CIS last month was 98.4%, similar to the first quarter. The following operations characteristics are representative of quarterly activities.

- Electric meter deployment of a large number of meters to a few communication-challenged locations (meter rooms in underground parking garages) has resulted in significant troubleshooting time by the analyst and meter technicians. In contrast, mass deployment of about 700 meters in early June to locations with good communication resulted in almost no issues.
- Water meter deployment is ramping slowly pending additional labor resources.
- Notable smart-meter related events:
  - Meter sent in repeated high-voltage alarms. Troubleshooter determined that the distribution transformer needed to be replaced. Transformer replaced next day avoiding future power outage.
  - Meter sent in a tamper and a power fail alarm, with no associated service order or service request. Electric meter shop investigated. The meter's seal was cut and there was no display. A new meter was installed.
  - 52 water leaks detected in the second quarter with 72 leaks detected year-to-date which represents over 7% of the meters. Estimated annual water savings from leak repairs is 94 million gallons.

Customer Operations Initiatives

- The Board approved an updated Customer Service Policy in June to better support customer usability and smart meter deployment.
- Customer Service post-call transactional surveys went live in May. Customers completed 56 surveys in Q2. Scores for Customer Service Analyst knowledge, courtesy, and overall satisfaction remain high (average score 4.8 out of 5), and we have received additional feedback that will help enhance our customer-owners experience going forward.
- The Customer Service call center will expand phone hours in the evening effective July 23. New hours of operation will be 9:00am-6:30pm. Lobby hours will remain 9:00am-5:30pm.

Business Growth & Retention

In the first quarter, the Customer Relationship Management group (formerly Key Accounts) was restructured to better identify and maximize opportunities and to provide proactive, personalized service to major customers. Key accounts were

selected and assigned, and in the second quarter, Customer Relationship Managers began proactive communication outreach with key account customers, and are currently in the process of creating customized business plans for customers to identify short and long term mutual benefit opportunities.

Also in the first quarter, a new team of Business Line Managers was created, who are responsible for identifying opportunities to review, analyze and enhance current EWEB offerings and to create new products and services that will benefit customers and enhance their business relationship with EWEB. Current work activities include the refined pursuit of Limited Income and Electrification opportunities, as well as enhancements to EWEB's Septic Assistance Program.

Service, Responsiveness and Transparent Communication

EWEB is executing an integrated communication and public information campaign focused on EWEB's affordability initiative, budget, prices, efficiency measures, including eweb.org newsroom articles, social media campaigns, bill insert, Pipeline cover story, and earned media coverage. During the first and second quarters, an AMI Communication Blueprint was developed to guide EWEB's outreach strategy for successful project implementation. During the second quarter, EWEB Customer Solutions hosted a luncheon with Eugene developers and representatives from the building industry to discover opportunities to enhance responsiveness and quality of service. Enhancements to increase simplicity and effectiveness of working with construction/developers are being developed, and we are exploring options to create value added opportunities and partnerships to obtain information that will enable us to further simplify and improve business processes.

Public Relations and Community Involvement

The Board requested that Management provide a quarterly report of donations, sponsorships and grants.

Guidelines are in place to ensure consistency and transparency for how we invest our customers' dollars for the betterment and well-being of the community we serve. In 2018, we are striving to provide strong alignment between EWEB's discretionary community investment criteria and the Strategic Plan. While we continue to advocate for all of the same worthy causes, sponsorship dollars will be focused on initiatives that are both closely connected to EWEB's core mission and provide the broadest benefit to our customer-owners.

Through Q2, we have provided over $250,000 to the Community, primarily through Board approved intergovernmental agreement education grants which were paid in the first quarter.

In continued efforts to align EWEB Community Investments with the Strategic Plan, Management has taken a close look at education spending to further refine our commitments and ensure sponsorship dollars are focused on maximizing the broadest benefits for all of our customer-owners. Details of this effort are outlined in the Record of Decision submitted as correspondence at the August 7, 2018 board meeting.

Additionally, EWEB staff have volunteered almost 330 hours of their time providing much needed support to the Special Olympics of Oregon and Food for Lane County.

New this quarter is a look at *EWEB Ambassador Efforts and Events*. EWEB Ambassadors represent the Utility at a variety of educational and community events throughout the year (paid time). Ambassadors promote EWEB products and services, advocate for the Utility (and public power/water), and are knowledgeable about day-to-day operations, and current and future projects. Almost 20 hours of EWEB paid staff time have been provided as a service to the Community this quarter.

The attached spreadsheet lists sponsorships, donations, grants, event participation and other contributions through Q2 2018, categorized by interest area and type of giving.

Workplace Giving Program

EWEB's annual Workplace Giving Program offers employees the opportunity to donate to their favorite causes and charities, including the United Way of Lane County and EarthShare of Oregon, through automatic payroll deduction or one-time giving. This year over $15,000 was raised for 71 different organizations.

Appendix G - EL3 Community Investment Report

Products & Services

Modernization Products

EWEB is developing the enterprise-wide processes necessary to operationalize and market products and services enabled by advanced meters, including advanced outage notification, consumption portal, and leak detection.

Financial Products

In order to increase customer participation, we have expanded Greenpower Grants eligibility to include projects focused on reducing or offsetting carbon emissions, including projects that support conversion from fossil fuel to clean energy sources. In May, three local nonprofits were awarded Greenpower grants worth up to $50,000 from EWEB's Greenpower program. During Q1 and Q2, 1,704 residential and 213 commercial customers contributed $123,661 to EWEB's Greenpower Program.

2018 GreenPower™ Grant Winners

Eugene Science Center: 32.5-kilowatt photovoltaic array with battery back-up
Friends of Trees: Volunteers will plant 600 trees in west Eugene for cooling and carbon sequestration
St. Vincent de Paul of Lane County: Photovoltaic array to serve the Youth House for Boys

EWEB's Septic Financial Assistance Program is currently being reviewed by staff to identify opportunities for enhancement in alignment with EWEB's Strategic Plan. During Q1 and Q2, 111 participants received incentives for septic maintenance, and the average incentive was $281. During the same period, total allocation was $31,142.

Limited Income Benefactors

EWEB offers several types of support as part of our limited income program. During the first quarter, an in-depth review and analysis of existing Limited Income offerings was conducted. As a result, EWEB is presently evaluating various options to enhance and simplify Limited Income programs in the near future, with an increased emphasis on conservation and efficiency. Through mid-year, EWEB has disbursed 48% of Customer Care and 40% of Customer Care Plus funds.
This is on target, and there is typically more activity in Q4.

2018 Limited Income Payments to Customers

Customer Care	Q1	Q2	Total YTD	Allocated	% YTD
Customers Served	1174	311			
Total Payments	$ 233,695	$ 65,151	$ 298,846	$ 623,781	48%
Customer Care Plus					
Customers Served	456	449			
Total Payments	$ 42,921	$ 36,700	$ 79,621	$ 200,000	40%

Electrification / Smart Load Growth / Carbon Reduction / Climate Change

In early 2018, EWEB launched a new marketing campaign and promotion aimed at encouraging customers to convert from fossil fuels. "A Fossil-free World Starts at Home" is an ongoing campaign aimed at supporting local and regional carbon goals, and promoting EWEB's clean portfolio. During the second quarter, a pilot program was developed to provide additional incentives for carbon reduction efforts by non-profits and government institutions. Current participants are the City of Eugene and the University of Oregon. In addition, EWEB increased residential new construction incentives aimed at efforts to reduce carbon and conserve energy. EWEB representatives consistently participate in the City of Eugene's

Climate Action Plan strategic meetings which address challenges and opportunities around transportation and building and energy workgroups. EWEB is currently exploring options to further support carbon reduction efforts in the transportation sector.

Finally, in Q2 EWEB continued the development of incentives aimed to make electric vehicles more accessible to increase adoption rate. EWEB partnered with Nissan to promote adoption of electric vehicles. During Q2, rEV UP Eugene EV workshops were completed and the Clean Ride rebate continues to provide customers incentives to purchase electric vehicles. This program has had 21 participants YTD vs. 14 in total for 2017. EWEB led the creation of an EV coalition with neighboring utilities, and had their first meeting in June. A total of eight utilities are part of this coalition to coordinate efforts regarding EV and EV infrastructure adoption in the region. EWEB continues to collaborate with local and regional organizations to promote EV's and to promote the installation of EV charging stations within EWEB service area (UO & COE). EWEB representatives are currently partnering with UBER to identify value added opportunities and promote adoption of EV vehicles.

Customer Solutions Field Services (Conservation & Energy/Water Efficiency)

EWEB spends over $2.5 million annually on energy and water conservation and efficiency projects. We continue to increase efficiencies and to simplify energy efficiency processes to save time, reduce overhead and deliver more conservation dollars directly to customers. Improvements include streamlining the commercial lighting rebate process and leveraging the BPA lighting calculator. In addition, consolidating and aligning residential and commercial HVAC offerings, which saves time and money for contractors and customers.

During Q2, EWEB in partnership with the University of Oregon and the City of Eugene, conducted 190 home energy assessments for rental properties. This is the Home Energy Score (HES) program's second year. The 2018 HES program includes water efficiency and leak detection.

EWEB energy savings activity is at 58% of target midway through the year. Peak savings, a minimum target, has already been met. 589 total customer projects were completed in all sectors combined.

There is still over $2 million in remaining BPA reimbursement for 2018, but this is normal as there is a lag between project completion and BPA reporting. EWEB is on target for being able to collect the full amount from BPA.

2018 Energy Savings Accomplishments

	Q1	Q2	Total	Target	% YTD
Energy Savings, MWh	3,377	3,234	6,611	11,388	58%
Peak Savings, MW	0.97	0.84	1.81	1.20	151%
BPA reimbursements*		$ 424,556	$ 424,556	$ 2,437,604	17%
BPA reimbursed kWh		1,219	1,219		
Growth, MWh**	(94)	(110)	(204)	no target	
Peak Growth, MW	-0.05			no target	

*There is a lag between EE accomplishments and BPA reporting

**Does not include 6,869 MWh from MWMC generator shutoff.

Information & Technology

Strategic Projects and Initiatives Currently Underway

Strategic Projects

Customer Information System Replacement (CIS-R)

In the first quarter, EWEB began functional testing of the system to ensure that the system conforms to all requirements. Late in the quarter, testing revealed some potential issues with system and applications security with the Cayenta system and architecture.

In the second quarter, EWEB confirmed Cayenta's security did not meet the requirements stated in the RFP. EWEB presented these issues to Cayenta with the hope of resolving them. During this time Cayenta was unable to make significant progress on resolving the issues.

Cayenta's failure to make adequate progress toward the proposed solutions during the time between April 11 and May 11, 2018 led Management to decide to terminate the contract. On May 11, 2018, EWEB issued Cayenta a 90-day notice to terminate the contract.

Technology Re-Prioritization

The cancelation of Cayenta provides an opportunity to step back and reprioritize EWEB's technological roadmap. In Q3, the Executive Team will attend a technology summit to develop a new roadmap.

Previous roadmaps focused on the order of major system replacements. For example; replace CIS, then Financials, then WAM, etc. This approach was useful from a capital planning perspective. However, it lacked a utility wide vision for our technological future.

The intent of the Q3 Technology Summit is to develop a new roadmap and vision focused on what capabilities to implement over the next three to five years. While it is still important to develop capital plans for major system replacements, this new approach will allow for more flexibility and creativity in how we leverage current and future systems. In other words, EWEB will have a better defined plan and way to measure the success of investments in our technology. This plan will be developed by the end of August.

Cyber Security

No cyber security issues were reported in the quarter, and we continue to maintain a diligent preventative program.

As EWEB systems become more interconnected and we will increase our dependence on the information they provide. However, the modern threat landscape works directly against that goal. Almost daily, there is a new and more sophisticated threat designed to interrupt, destroy, or hold hostage our systems.

Our Cyber Security Program seeks the following objectives:

- Safeguard EWEB's Corporate and Industrial Control Systems and their associated data by averting threats
- Harden critical infrastructure through detective and protective measures
- Prepare for recovery from attack
- Enable usability while ensuring security by effectively implementing controls and proper risk evaluation

One example of hardening our critical infrastructure is improving our ability to prevent and recover from ransomware. Ransomware is a type of malicious software that threatens to publish the victim's data or perpetually block access to it unless a ransom is paid. While some simple ransomware may lock the system in a way which is not difficult for a knowledgeable person to reverse, more advanced malware uses a technique called crypto viral extortion, in which it encrypts the victim's files, making them inaccessible, and demands a ransom payment to decrypt them.

In 2016, IS implemented a standard that separates our workstation and server networks to protect against ransomware and other malware. If a workstation is infected it has a greatly reduced chance of infect a server where the data is stored because the threat cannot easily navigate the network. Since this implementation we've had two ransomware attacks which were unsuccessful at encrypting EWEB's data.

To further expand our ransomware protection, planning is underway to begin implementation of ransomware protection for workstations and servers. This implementation will begin in Q3 and conclude by the end of the year. This new protection monitors and prevents ransomware behavior. For example; it will prevent massive file encryption.

Asset Management & Capital Planning

Type 1 IT capital spending is on track, with more detail contained in *Appendix C - EL1 Report.*

Due to the cancelation of Cayenta, Type 2 spending targets are off. Information Services is working with the Water and Electric Utilities to find the highest and best use of this capital.

Major Systems Replacement

System replacement plan on target. Upcoming activities include:

- Improvements to EWEB's Identity and Permission Management Systems
- Wireless (WiFi) Infrastructure Replacement. This also adds WiFi at the Carmen-Smith Campus
- Virtual Machine (VM) Cluster Refresh
    - Reduce from 11 servers to 7 which saves licensing costs
    - Eliminate Complexity of Blade Server Infrastructure

Enterprise Operations

Property Management

Headquarters Building

With the help of Evans, Elder, Brown, and Seubert, staff have been working with EGI/Philips to negotiate the terms of a new lease agreement for portions of the EWEB Headquarters building. An agreement in principle has been reached. A new lease is expected to be executed shortly.

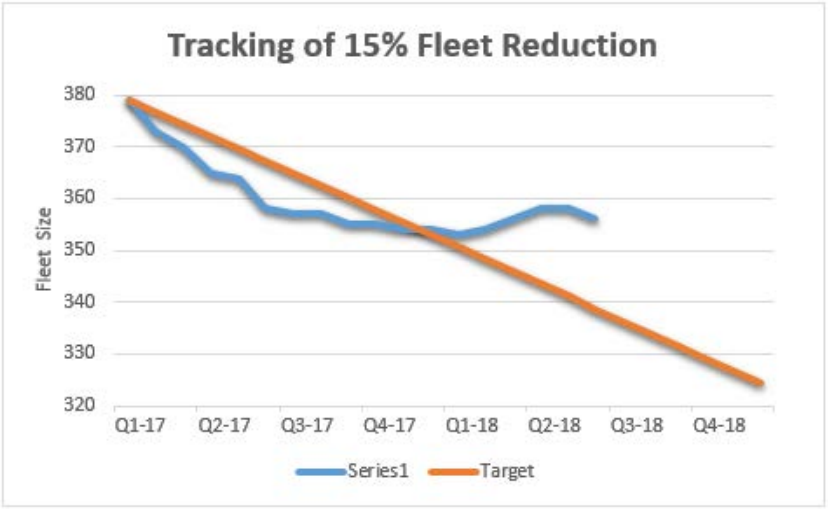
Riverfront Property

The Riverfront surplus property sale to the City of Eugene was finalized on April 17, 2018. Staff are working with the City of Eugene to finalize the details of the Riverfront Park parcel conveyance that was authorized at the May Board meeting.

Fleet Services

Carbon reduction goal; under Oregon State's renewable fuels mandate, gasoline sold in the state must be blended with 10% ethanol (E10) and diesel fuel sold in the state must be blended with at least 5% biodiesel (B5). EWEB's Fleet Services has been exceeding these mandates by blending higher levels of low carbon, alternative fuels such as ethanol and hydrogenation-derived renewable diesel in support of the Utility's sustainability goals.

- YTD, reduced 146.94 metric tons of CO2 emissions (15.0% over state mandated fuels)
- Used 29,645 gallons of alternative fuel (29.2% over state mandated fuels)



Asset optimization/Fleet Reduction; as part of the affordability initiative, by Q4 2018 EWEB has targeted a 15% reduction to the size of its fleet as compared to Q1 2017 levels. To date, the Utility has obtained 6.1% of that goal. The fleet size has reduced in some areas, while others have increased due to department realignments and the recent ramp up of AMI. Fleet Services continues to monitor vehicle and equipment use and provides utilization and fuel usage reports to the user departments on a quarterly basis.

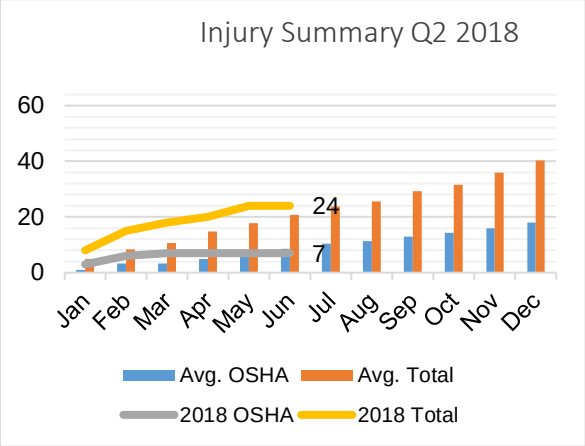
Workforce

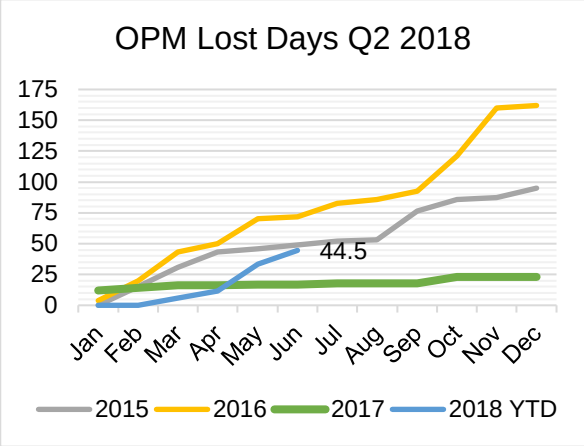
Overall, Human Resources performance indicators are positive. Operational plans are progressing as scheduled with good results. HR metric indicators are positive and there are no extraordinary or unanticipated developments driving concerns in any particular HR functional area or in the workforce arena in general.

Safety

The number and frequency of both total and OSHA recordable injuries is on track with 2017. YTD total injuries are 24, compared to a 3-year average of 21. YTD recordable injuries total 7 with none in the last quarter. Our 3-year average YTD is 9. Lost days numbers, although still within the 3-year average, have climbed this quarter due to several protracted injury recovery periods but are expected to level out as treatment for these injuries winds down. In 2018, 5 injured workers have worked light-duty assignments, totaling of 650 days.

EWEB leverages light-duty as a strategy to limit the number of days lost due to injury. Light-duty reduces the amount of time-loss payments SAIF (worker's compensation insurance provider) would otherwise be making to the employee, reducing EWEB's total paid loss rate, having the effect of containing premium increases. The Employer at Injury Program (EAIP) reimburses EWEB for 40% of wages paid for up to 66 days for each light-duty assignment. Even with EWEB's low injury rates, reimbursements over the last three years have averaged approximately $50,000 per year. Finally, there is considerable research indicating injured workers have better recovery and return-to-work rates when they are able to remain in the workforce, even when engaged in work tasks unrelated to their regular jobs.

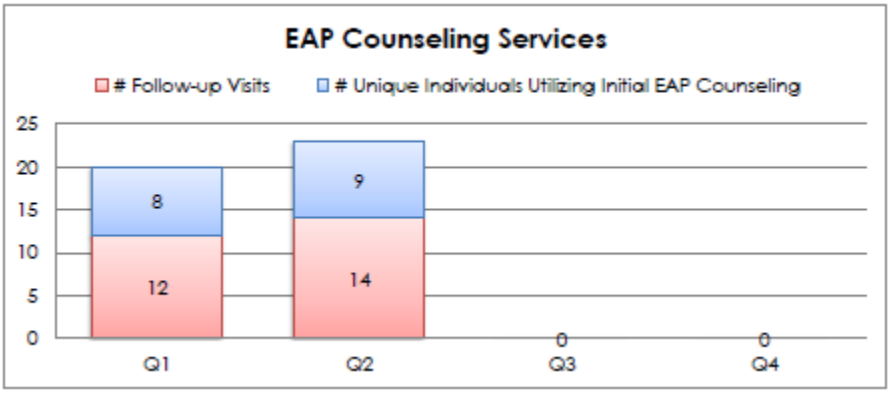


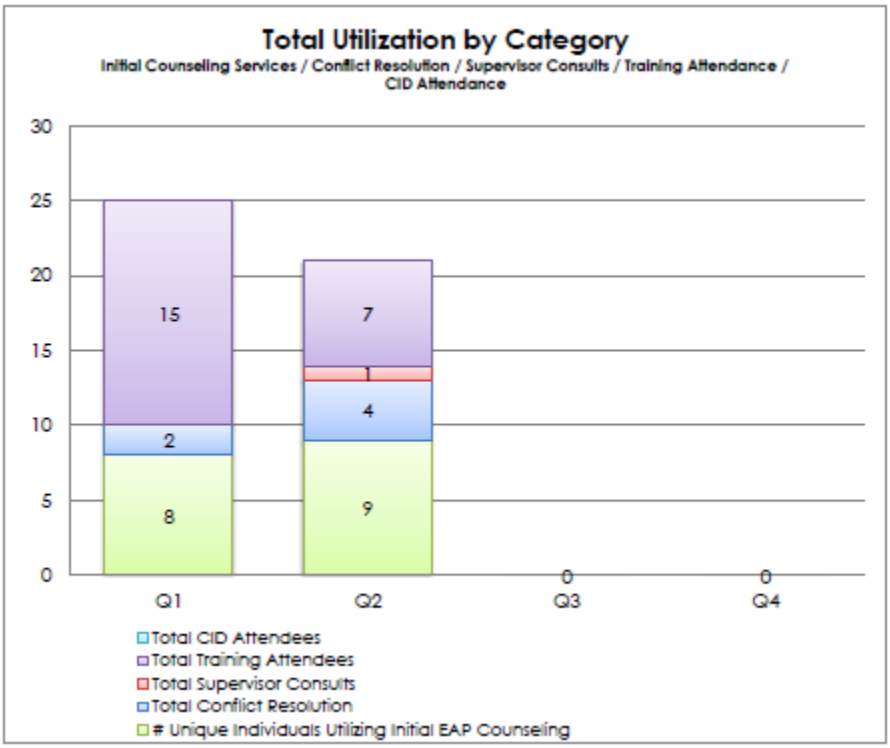


EWEB's value proposition around safety is firmly ingrained throughout the Utility and is continually reinforced through monthly department safety meetings and an active Safety Committee which includes representatives from around the Utility. EWEB attributes its success in the safety arena to all its employees, who participate fully in making safe work practices a priority. That level of participation and "buy-in" can be partly attributed to the visible support of leadership through the long-standing existence of the Safety Working Group, chartered by the General Manager. The group, comprised of Executives, Managers and safety staff meets monthly to review incidents and trends and, to drive organization-wide safety programming. This year, Executives are stepping up their involvement further by visiting crews at jobs sites and dropping into department safety meetings to learn how they can be of service to employees, both from a safety and workforce engagement perspective.

An important development this quarter is that psychological safety has been added to EWEB's Strategic Plan Values. This was raised to the General Manager by Diversity Team representatives who rightly pointed out that emotional and psychological health are critical aspects of well-being, and essential to a productive, safe and engaged workplace. EWEB employees, just as our customers, are confronted with life events, biases and a host of others stresses that can challenge and distract us. Recognizing that the term "psychological safety" is open to interpretation, EWEB leaders are beginning

the dialogue about how best to translate and apply the concept to our daily work interactions. The Employee Assistance Program (EAP) usage information for the year, reflected in the tables below, supports this direction.





EWEB's proactive stance to ensure the safety of its workers is another contributor to our excellent safety record. EWEB's safety program includes robust training and compliance components covering both planned and emerging topics. For years, the program has included near-miss reporting and proactive correction measures. To reinforce the idea that this kind of reporting is positive, welcome and won't result in any negative outcome for the reporting employee, the program has been re-named "Good Catch." Employees are encouraged to their voice concerns and challenge what they see. In illustration, a water department employee was recently rewarded with a Core Values award and 4.0 hours of leave for pointing out a discrepancy between EWEB instruction and AWWA best practices regarding safety procedures while working in confined spaces. Just as with any other identified hazard, EWEB commits to respond to the initiator of a good catch report and to investigate and resolve their concern within the quarter. EWEB's safety team worked with WEI (Western Energy Institute) to establish this target. EWEB is has begun gathering performance data against this target and will report on this metric at year-end.

Beyond responding to good catches reports, EWEB continues its long history of encouraging and implementing employee suggestions to enhance worker safety. In this quarter for example, after witnessing an injury occurring when an employee lifted a heavy tire, a fleet mechanic identified and suggested the purchase of an assistive device that would improve the

ergonomics of this frequent task, making it safer and easier to perform. EWEB made the purchase and the supervisor recognized the employee for his great suggestion.

Indicator	Q1	Q2	Total	2017 Total
Training Hours Delivered	1288	890	**2178**	**3228**
Good Catch Reports	3	8	**11**	
Executive Site Visits	-	40	**40**	
Safety Meetings	-	13	**13**	
Site Visits	-	27	**27**	

Training topics and intervention strategies are determined by tracking accident & injury information in utility and construction occupations along with EWEB's accident, injury and close call investigations and analysis. EWEB's operational and strategic initiatives are also evaluated from a safety perspective to identify opportunities for accident and injury prevention measures. A few examples from this quarter follow:

Identification of at-risk groups and implementation of mitigation measures continues. We are still moving forward on meter reading equipment upgrades as the transition to AMI gets underway. There is new safety focus connected to AMI implementation coordinating efforts between Customer Service, Meter Reading, and Meter Shop with emphasis on process mapping and ensuring productive and safe interactions with customers through conflict de-escalation tactics. Body mechanics training opportunities are scheduled for all employees in Q3 & Q4 2018.

A review of vehicle incidents showed an increasing number of rear-end collisions to EWEB vehicles, 5 over the last two years. Other utilities and large profile vehicle users report similar patterns, likely attributable to distracted drivers. To increase the visibility of EWEB vehicles, reflective chevron striping has been added to the rear panels of EWEB trucks. Those installations are 86% complete.

Other safety activities for the quarter include planning is for the Health & Safety Expo, which promises to be a great event. The format of the Expo has been revised and will take on a "conference" flavor with morning and afternoon key-note speakers, demonstrations and a variety of educational break-out sessions for employees to choose from. The format was tested in a limited delivery to operations groups last year with good results. Based on that feed-back, we anticipate the renewed event, planned for September, will be well-received.

Planned DOT/CDL Audit Work activities are in process. A service proposal has been received and approved for delivery of onsite CDL operator training, both classroom and hands-on, in Q4 2018. Driver files and documented process are currently being updated. The 2019 Internal DOT/CDL Audit preparation is scheduled for Q4 2018.

<u>Workforce Composition</u>

EWEB workforce composition metrics have changed only slightly following 2017 early retirements with EWEB minority workforce representation numbers still leading those of Lane County labor statistics. EWEB continues to lag in the employment of females overall, largely due to the high number of trade, labor and craft jobs, occupations which characteristically have low female-to-male ratios.

Workforce Statistics				
	Q1 2018	Q2 2018	YTD Total	2017 Year End
No. of Employees	466	470		459
New Employee Hires	15	16	31	40
Promotions	7	5	12	15
Reclassifications	7	2	9	*
Total Employee Exits	8	12	20	94
Non-Retirement Voluntary Exits	6	7	13	31
Involuntary Exits	1	2	3	13
Retirements	1	3	4	50
Total Attrition Rate	1.7%	2.56%	2.58%	19%

**Did not track reclassifications in 2017 due to the reorganization as a result of the affordability initiative*

Gender & Minority Demographics				
	EWEB	IBEW	Oregon**	Lane County**
Female	31%	2%	48%	50%
Male	69%	98%	52%	50%
Minority	12%	9%	13%	9%
Non-Minority	82%	88%	87%	91%
Non-Classified*	6%	3%	-	-

**Disclosure of minority status is voluntary; "Non-Classified" represents those employees who did not disclose minority status.*
***As of Q3 2017*

Age Demographics	Age Range	% Empl.
	20 - 29 years	5.74%
	30 - 39 years	23.40%
	40 - 49 years	32.98%
	50 - 59 years	30.85%
	60+ years	7.02%
Average Age	46 years	

Attrition

Total attrition remains low at 2.56%. Voluntary exits this quarter (7) are slightly higher than the 3-year quarterly average of approximately 5, with this quarter at 1.49%. Although utilities historically have among the lowest attrition rates in comparison to other industries, the Center for Energy Workforce Development reports non-retirement attrition is on the rise, ranging from 10 to 15% across all energy sectors across the country. EWEB is surveying NWPPA members for more comparable attrition data and should be able to report this in Q3. We expect the overall attrition rate to come in under 5% as public employers, generally having pension plans, boast rates much lower than those experienced by private companies.

Sexual Harassment Prevention Training for EWEB Leaders

This training was intended for executives, managers, supervisors, and leads and was completed in Q2 with all but one individual completing the 4-hour program. The training was well-received and feedback suggests that a similar program should be developed for employees.

Compensation & Benefits/Oregon Pay Equity

Compensation and Benefits programs remain competitive. MAPT Compensation mid-points and benefits packages are within 5% +/- comparator avg. Corrections made in 2017; benchmark re-pricing every 3 years with ongoing monitoring for any anomalies. 0 salary exception rates. Specifically pertaining to electric operations jobs, the NW Public Power Association (NWPPA) annual Northwest Lineman's Survey results have just been published. A cursory review indicates that EWEB's line tech pay rate, the benchmark rate for all other job categories, is at the 75th percentile as compared to all participating utilities. A deeper dive into utilities comparable to EWEB in size and customer classes will be conducted in Q3 in preparation for re-bargaining EWEB's annual adjustment factor (discussed in the Labor Relations section below).

A required workforce pay-equity study is slowly getting underway in preparation for compliance with a 2019 legislative standard. The pace of the study is intentionally stalled. BOLI rule-making standards have yet to be released, including which specific compensable items beyond wages will be included. With no standard criteria, it isn't possible to commence much work beyond developing the most basic reporting tools and examining base pay and the comparable worth of EWEB job classifications. At this writing, EWEB's understanding with respect to compliance for 2019 is that employers will be required to create an articulated plan to address any found irregularities.

Workforce Management

Employee Relations; BOLI complaints & investigations underway

EWEB is awaiting disposition or further direction from BOLI regarding two discrimination complaints, one filed in Q4 of 2017 and another filed in Q1 of this year. EWEB has provided detailed responses to each complaint and has also provided secondary responses to BOLI follow-up questions.

Performance: Employee performance ratings reported in Q1 for year 2017 with "skilled" ratings being awarded to approximately 80% of the workforce. Associated salary adjustments followed in April as did scheduled adjustments for represented workers.

Mid-year reviews are underway and will be completed in July.

There have been 14 corrective performance interventions so far in 2018, tracking closing with 2017 which concluded with 28 for the year and at this rate, below the 3-year average of 37 annually. These included 3 disciplinary step progressions, 2 terminations and 1 decision-making leave suspension, the final progressive disciplinary step before discharge.

IBEW Labor Relations

Labor relations remain good. One grievance has been filed so far this year but was later withdrawn.

EWEB will be opening its Collective Bargaining Agreement with the IBEW to renegotiate contract language as impacted by, 1.) The US Supreme Court ruling regarding Janus v. AFSCME as it pertains to the payroll deduction of "fair share" fees, and, 2. The discontinuation of the regional CPI-U&W index regarding wages as it pertains to the calculation for scheduled wage increases for represented workers.

Major Workforce Initiatives

Wellness

The Wellworks Program launched and Web portal opened January 2018. The program has been well-received and 56% of employees have logged in. As of this writing, 14% of employees have completed the necessary requirements to be eligible for the Level One $500 VEBA incentive, up from 9% in Q1. Of those, 28% have completed the requirements to be eligible for the additional Level Two $250 incentive. Participation is anticipated to steadily increase throughout the year as employees get through appointments with health care and dental providers and as more opportunities to earn participation points occur. The second Wellness Challenge is being announced in July and will run throughout the month of August. A year-long communications plan is underway in partnership with Wellworks to maintain interest in the program and to support participation goals.

Outsource Leave Management

The project is going as planned and is on track to launch in September. At this writing, associated document and policy review is complete and interfaces are built and being tested. The process to transfer open leave claims is underway and will be completed in time to ensure a smooth transition. Change management communications continue in written form and with employee education sessions being delivered in every work unit. These sessions are in process and will be completed in August.

Ultipro

Implementation of Ultipro modules continues in its planned sequence. Ultipro Onboarding has been successfully launched and allows new hires to receive offer letters electronically and to complete forms and paperwork in advance of their first day on the job. This enables more productive orientation time and ensures that new hires are aware of and understand policy expectations immediately. Work to enhance the onboarding experience will continue with features planned for supervisor use. Ultipro goal setting was piloted with the Executive Team with positive results and with a wider release planned for the future. Performance management was transferred to Ultipro in time for mid-year reviews which should be completed in July.

Organizational Development

EWEB U marketing campaign underway to increase awareness & utilization

EWEB renewed its agreement with Skillsoft, the vendor for EWEB-U for one-year. We continue to monitor its use and to market courses. Throughout 2018, EWEB-U will be used to support new hire onboarding, policy education and compliance training and tracking. The platform is effective for these uses but we would like to see greater voluntary use of EWEB-U as a developmental resource. To date, 22% appear to have accessed the platform for this purpose. While this number does not necessarily reflect course completion, it does suggest that employees are using EWEB-U to access books, articles, videos and targeted technical instruction. One hindrance to the platform's use may be that users can be somewhat overwhelmed by the sheer number of course options. To that end, there are plans to work with the vendor to curate and create a more manageable list of recommended courses.

Supervisory Development Project

This project continues to be on track with the development of a benchmark "EWEB supervisor" job description and accompanying competencies, now completed.

Executives have reviewed and endorsed the benchmark "EWEB Supervisor" description. They also completed a process to capture and document occupationally specific duties which will be the basis for market pricing. Executives have gone through a validation exercise to ensure job requirements are current and consistently applied. Now that competencies have been reviewed and adopted, training and developmental needs assessment and planning can begin. So far, the project has been well-received and worked well. Supervisors have appreciated the opportunity to be involved in jointly clarifying their roles and determining the requirements and competencies necessary for their success. A similar approach will be used to develop a benchmark "manager" position description and associated competencies.

The next phase of the project will be to identify training and developmental opportunities and tactics to support the newly adopted competencies. The competencies will also be used for 2019 performance goal-setting discussions for supervisors and managers.

Benefits Utilization

Benefits utilization data lags EWEB reporting timelines so the following reflects Q1 results. Medical plan utilization continues to run below expectations. Paid claims tracked lower than paid premiums, a favorable utilization rate in terms of forecasting premium rate increases. Professional services accounts for 40% of claims. The next two highest claims categories were pharmacy and hospital outpatient services respectively. Predictably, retirees continue to experience higher utilization than active employees. Dental, historically a significantly under-utilized benefit continues to experience higher utilization this year with paid claims running about $10K higher than paid premiums. This was expected and is a sign that preventative visits are up in response to the dental aspect of the wellness initiative. Diagnostic services was the

largest dental claims category, with crowns and preventative services as the next two highest categories. Retirees under age 65 are experiencing higher claims activity than active employees and Medicare-eligible retirees. Vision claims experience is running well below its expected rate. Paid claims were significantly lower than paid premiums. Overall, plans are on track to align with the 8% anticipated premium rate increase reflected in the long-term financial plan. Renewal information is expected sometime in early Q3.

Government & Legislative Affairs

Legislative/Carbon Policy

In the waning days of the 2018 short legislative session in February, proponents of the unsuccessful Oregon carbon cap and trade bill were frustrated by assertions that the legislation was too complex, needed more time, or had not been vetted enough and needed more process. In response, the legislature took action on two key measures to address these concerns going into the 2019 legislative session leading to a great deal of activity this year.

First, the legislature created a Carbon Policy Office (CPO) within the executive branch, staffed by the Governor's office and the Oregon Department of Environmental Quality (DEQ). Informally, several other state agencies have earmarked staff to support the CPO on issue-specific work groups and public meetings or process to prepare a more refined cap and trade proposal for consideration in the 2019 legislative session. Furthermore, the legislature earmarked $1.7 million to fund the work of the CPO, including authority to contract with consultants and private entities to conduct expert analysis and studies on topics such as how to best address "leakage" (i.e. how to minimize the possibility of emissions and economic activity simply moving beyond Oregon's borders without compromising the integrity of the program's environmental goals.) The CPO has formed a diverse mix of formal and informal ad hoc work groups to delve into different elements of the design of an Oregon Cap and Trade program and correct, refine, or fill in blanks (items that would otherwise be left to administrative rulemaking by state agencies) in the 2018 legislation. EWEB staff has been invited to and already participated in the meetings of two of these work groups (Point of Regulation in the Electric Sector and Impacts on Low Income Utility Customers) and expects even more participation in additional work groups (Allowance Allocation and Offsets) as 2019 draws closer.

Second, in February the legislature formed a special Joint House/Senate Interim Committee on Carbon Reduction, including the Senate President, Speaker of the House, the Chairs and Minority Vice Chairs of both the Senate and House Energy and Environment Committees, and 8 additional legislators 4 from each party. The committee is meeting monthly in 2018, receiving presentations from subject matter experts in both state government and the private sector on considerations for designing a cap and trade program. Additionally, this joint committee is consulting with the CPO and also conducting conversations amongst the members of the committee towards setting forth an initial set of principles to be used in designing the program, to guide to design of a straw proposal that will be the initial basis of legislation to be drafted prior to the 2019 session.

The activity of the CPO and the Joint Committee are indicative of an unprecedented level of focus and priority for the legislature in formulating a market based economy wide carbon reduction policy. While it is difficult at this time to project the outcome of this effort, the likelihood of Oregon enacting such a policy is the highest it has been since 2008 when Oregon was an active participant in the development of the Western Climate Initiative (WCI).
EWEB staff will continue to actively participate in the work of the Oregon CPO and the Joint Committee on Carbon Reduction through 2018 and the 2019 Legislative Session.

Enterprise Risk Management

Federal Energy Regulatory Commission (FERC) review of EWEB's Dam Safety Program

During the second quarter, staff started holding monthly coordination meetings with FERC PRO (Portland Regional Office) dam safety staff to facilitate a better working relationship and improved communication. In addition, staff solicited proposals from three organizations for assisting EWEB with the PRO-requested audit of EWEB's dam safety program. Staff provided the FERC with a plan and schedule to implement the dam safety audit beginning in the fourth quarter of 2018. We are currently awaiting FERC approval of that plan/schedule and formal proposals from two entities to complete the work.

Quarterly Contracts

The following contracts exceeded $150,000 in the past quarter and were approved by the Board:

1. Process Solutions ($1,285,000) - Equipment purchase for the On-Site Sodium Hypochlorite Disinfection System at Hayden Bridge
2. Key operational contracts for maintenance, repairs, and capital projects work including:
    - Westates Flagging ($750,000) - maintenance work traffic control and flagging
    - Ferguson Waterworks ($860,000) - brass fittings
    - Anixter ($1,350,000) and WESCO Distribution ($3,900,000) - primary and secondary conductor
    - Northstar Chemical ($630,000) - water treatment chemical Liquid Caustic Soda Membrane

The Quarterly Contract Report includes all contracts that value between $40,000 and $150,000, and is attached as *Appendix D - Quarterly Contracts Report.*

In May 2018, EWEB issued a notice of contract termination for the Customer Information System Replacement. The contract was terminated due to concerns over the functionality of the software security features.

Legal Matters

EWEB v. MWH et al: In 2015 EWEB filed a complaint claiming breach of contract and negligence by contractors responsible for the design, engineering and construction of certain upgrades to the roll gates and hoists at Leaburg Dam. In July the Court of Appeals ruled in EWEB's favor on the question of venue and that the case should proceed in trial court with all parties. Parties were engaged in discovery through appointed Special Master while the Court of Appeals deliberated.

PERS Litigation: The Oregon Supreme Court accepted EWEB's petition. EWEB's legal counsel worked with Amici representatives to prepare and submit required briefs. The matter is scheduled to go before the Court on November 2nd.

Central Lincoln PUD v. Oregon Department of Energy et al.: EWEB has joined with other utilities, including cooperatives and people's utility districts, to challenge aspects of the Energy Supplier Assessments imposed by the Oregon Department of Energy (ODOE). ODOE has appealed the trial court's decision and has been granted an extension to file their reply brief until August 2018.

Sensus USA, Inc. v. EWEB: On April 30, 2018, Sensus USA, Inc. filed a complaint against EWEB seeking injunctive relief in an attempt to prevent EWEB from disclosing certain details of a public contract between the parties in response to a public record request. The litigation was closed when Sensus filed a Notice of Voluntary Dismissal with prejudice on May 25, 2018.

Compliance

During the past quarter, the following compliance violations were discovered and/or self-reported.

Compliance Violations

1. Finance is not fully compliant with ORS 294.135 regarding EWEB's investment policy by not having it readopted annually by the Board. Staff is scheduled to present the policy to the Board at the September 2018 Board meeting. There is no penalty associated with noncompliance.
2. Three NERC potential non-compliance events were self-reported to WECC in May. WECC's response is anticipated to be received by year-end.
3. Annual report to the Oregon Department of Energy was submitted late. No fines were associated with this event.

Public Records Requests

During Q2 2018, EWEB received and responded to 15 public record requests. Of these, 10 were for Purchasing documents, two for Property documents, two for utility bills, and one for wage data.

WECC/NERC Audit

EWEB is preparing for a fall 2018 onsite WECC/NERC audit of our compliance with Operations and Planning (O&P) standards, as part of FERC Order 693. During the first quarter, EWEB enlisted the service of a third-party consultant to assess our system control processes, and some will need updates. During the second quarter, the contractor completed the Critical Infrastructure Protection (CIP) Internal Controls Evaluation, as well as complete the Compliance Assessment for O&P and CIP. In general, the consultant identified our NERC compliance program as around Level 2 on a scale of 1-5. Plans to address process and procedures needed to move from Level 2 to Level 3 have been put into place. These updates will occur in Q3 with the rest of the Audit preparations for the on-site audit scheduled in early December of 2018.

Glossary

BLM: Business Line Manager
CI: Continuous Improvement
CIA: Contributions in Aid of Construction
CIS: Customer Information System
CIP: Capital Improvement Plan
CIP: Critical Infrastructure Protection
CRM: Customer Relationship Manager
FERC: Federal Energy Regulatory Commission
FCRPS: Federal Columbia River Power System
GIS: Geographical Information System
ICS: Incident Command System
IP: International Paper
KPI: Key Performance Indicator
NERC: North American Electric Reliability Corporation
PERS: Public Employees Retirement System
PUC: Public Utility Commission
RCP: Retail Cash Payment
RMC: Risk Management Committee
SAIDI: System Average Interruption Duration Index
SAIFI: System Average Interruption Frequency Index

Appendix

Appendix A: Electric Financial Statements
Appendix B: Water Financial Statements
Appendix C: EL1 Report for Electric, Water & Shared Services
Appendix D: Contracts Quarterly Report
Appendix E: Reliability Index Report
Appendix F: OHA Water System Survey
Appendix G: EL3 Report Community Investment Sponsorships

Disclaimer: The unaudited financial statements provided in this report are intended for management purposes only.

ELECTRIC CONDENSED STATEMENT OF REVENUES, EXPENSES, & CHANGES IN NET POSITION (Unaudited)

(In millions)

	Six Months Ended June 30,		YTD Budget Comparison	
	2018	2017	Budget $	Variance
Operating revenues	$ 122.4	$ 129.7	$ 119.3	$ 3.1
Operating expenses	109.1	109.9	108.9	(0.2)
Net operating income (loss)	13.3	19.8	10.4	2.9
Non-operating revenues	3.4	5.9	4.0	(0.6)
Non-operating expenses	6.7	19.8	4.7	(2.0)
Income before capital contributions	10.0	5.9	9.7	0.3
Capital Contributions	3.8	4.2	1.8	2.0
Increase/(Decrease) in net position	$ 13.8	$ 10.1	$ 11.5	$ 2.3

ELECTRIC CONDENSED STATEMENT OF NET POSITION (Unaudited)

(In millions)

	June 30,		December 31,
	2018	2017	2017
Current assets	$ 255.2	$ 198.5	$ 241.9
Net utility plant	356.5	351.4	353.9
Other assets	97.1	99.6	104.3
Total assets	708.8	649.5	700.1
Deferred outflows of resources	32.6	55.5	33.4
Total assets and deferred outflows	$ 741.4	$ 705.0	$ 733.5
Current liabilities	$ 31.6	$ 32.3	$ 36.5
Long-term debt	210.4	180.7	211.6
Other liabilities	71.1	89.1	70.9
Total liabilities	313.1	302.1	319.0
Deferred inflows of resources	7.9	5.5	7.9
Total net position	420.4	397.5	406.6
Total liabilities, deferred inflows, and net position	$ 741.4	$ 705.0	$ 733.5

ELECTRIC CONDENSED CAPITAL BUDGET COMPARISON (Unaudited)

(In millions)

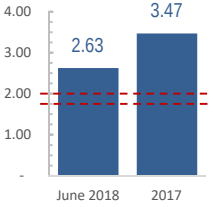
	YTD	Annual Working Budget	
	6/30/2018	Budget $	% of Budget
Type 1 - General capital	$ 6.4	$ 12.3	51.9%
Type 2 - Rehabilitation and expansion	1.6	11.4	13.7%
Type 3 - Strategic projects	4.6	13.9	33.1%
Total capital	$ 12.6	$ 37.6	33.4%

FINANCIAL STRENGTH MEASUREMENTS

Debt service (Annualized)

Target: Greater than range of 1.75 to 2.0x

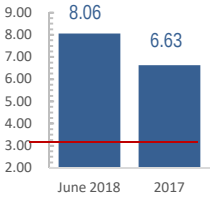
Measures the utility's ability to meet its annual long-term debt obligation.



Current ratio

Target: Minimum of 3.250x

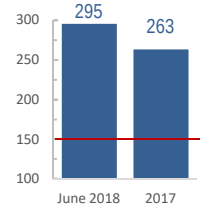
Measures the utility's short-term liquidity (ability to pay bills).



Working capital days cash

Target: Greater than 150 days

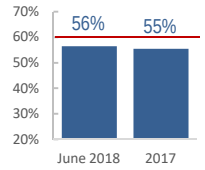
Estimates the number of days the utility can pay its daily O&M before running out of cash.



Age of system

Target: Less than 60 percent

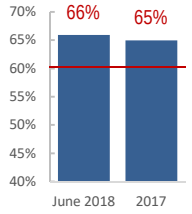
Measures age of system compared to how much has been depreciated.



Debt as a % of NBV

Target: Less than or equal to 60 percent.

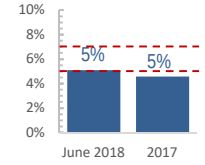
Measures overall leverage of the system by aligning debt service with the useful lives of assets.



Rate of return

Target: Between 5 - 7%.

Measures the utility's ability to pay current and future infrastructure costs.



WATER CONDENSED STATEMENT OF REVENUES, EXPENSES, & CHANGES IN NET POSITION (Unaudited)

(In thousands)	Six Months Ended June 30,		YTD Budget Comparison	
	2018	2017	Budget $	Variance
Operating revenues	$ 17,313	$ 16,995	$ 17,124	$ 189
Operating expenses	11,558	11,945	12,699	1,141
Net operating income (loss)	5,755	5,050	4,425	1,330
Non-operating revenues	1,097	314	321	776
Non-operating expenses	1,148	4,499	1,220	72
Income before capital contributions	5,704	865	3,526	2,178
Capital Contributions	1,955	2,039	773	1,182
Increase/(Decrease) in net position	$ 7,659	$ 2,904	$ 4,299	$ 3,360

WATER CONDENSED STATEMENT OF NET POSITION (Unaudited)

(In millions)	June 30,		December 31,
	2018	2017	2017
Current assets	$ 58.0	$ 48.9	$ 54.6
Net utility plant	168.7	164.7	165.4
Other assets	6.7	4.2	6.9
Total assets	233.4	217.8	226.9
Deferred outflows of resources	6.8	11.5	6.9
Total assets and deferred outflows	$ 240.2	$ 229.3	$ 233.8
Current liabilities	$ 4.7	$ 4.8	$ 5.6
Long-term debt	65.2	68.0	65.5
Other liabilities	15.4	19.3	15.4
Total liabilities	85.3	92.1	86.5
Deferred inflows of resources	1.7	1.0	1.7
Total net position	153.2	136.2	145.6
Total liabilities, deferred inflows, and net position	$ 240.2	$ 229.3	$ 233.8

WATER CONDENSED CAPITAL BUDGET COMPARISON (Unaudited)

(In thousands)	YTD	Annual Working Budget	
	6/30/2018	Budget $	% of Budget
Type 1 - General capital	$ 4,388	$ 8,107	54.1%
Type 2 - Rehabilitation and expansion	1,097	5,221	21.0%
Type 3 - Strategic projects	94	400	23.6%
Total capital	$ 5,580	$ 13,728	40.6%

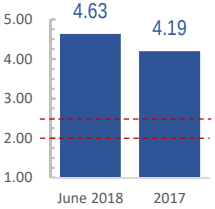
FINANCIAL STRENGTH MEASUREMENTS

Target line

Debt service (Annualized)

Target: Greater than range of 2.0 to 2.50x

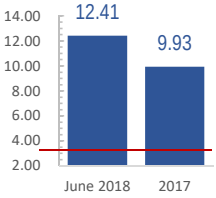
Measures the utility's ability to meet its annual long-term debt obligation.



Current ratio

Target: Minimum of 3.250x

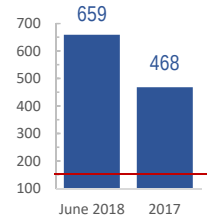
Measures the utility's short-term liquidity (ability to pay bills).



Working capital days cash

Target: Greater than 150 days

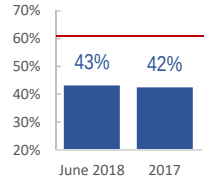
Estimates the number of days the utility can pay its daily O&M before running out of cash.



Age of system

Target: Less than 60 percent

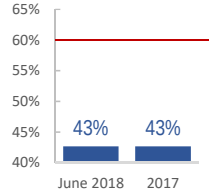
Measures age of system compared to how much has been depreciated.



Debt as a % of NBV

Target: Less than or equal to 60 percent.

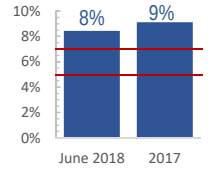
Measures overall leverage of the system by aligning debt service with the useful lives of assets.



Rate of return

Target: Between 5 - 7%.

Measures the utility's ability to pay current and future infrastructure costs.



Capital "EL1" Report: Electric, 2018-Q2

Type 1 - General Capital

Note - Changes from previous report(s) are in **BOLD**

Capital Category	2018 - Q2 Budget	YTD Actual	Year-End Projection	Status/Comments
Electric Infrastructure - Generation	$1,900,000	$328,820	$2,038,000	LB lake debris boom installed during April outage; work under contract for summer and fall construction includes LB forebay sluice gate replacement, LB dam emergency generator replacement, Smith Dam log boom construction, Stone Creek relay and exciter replacement. Smith log boom design still awaiting FERC approval and at risk of postponement to 2019, thus reducing 2018 spending by $400k. -ZINNIKER
Electric Infrastructure - Substations	$1,550,000	$571,204	$1,450,000	Type 1 Projects currently tracking on planned schedule. RTU replacement at Bethel and Adams have been completed, with an Oakway replacement planned for September. One substation battery bank replacement is planned to be completed throughout the year and into Q3 with additional isolated cell replacements. Spring Creek substation work is on schedule and currently 50% complete with construction. Work consists of 115kV breaker, switch, relay, and PT replacements. One substation fence replacement is expected to be completed in Q3, Willakenzie substation. - NICE
Electric Infrastructure - Telecom	$225,000	$51,184	$202,000	Consists of EWEB driven and Customer Driven fiber work, as well as upgrades associated with LRIG. EWEB driven work is currently tracking below expected trajectory, Customer Driven work is expected to be completed on target based on historical performance, and LRIG work has been deferred due to staffing constraints. Purchase of fiber splicing and testing equipment will occur this year to replace equipment which is at end of life.- NICE
Electric Infrastructure - Transmission & Distribution	$7,100,000	$3,632,208	$7,474,000	Customer reimbursable work is forecasted on track per this years performance. Historically this budget has been over estimated and was adjusted at the May true up. Enhancements and additions to the distribution system are on track, with the Spring Creek/Irvington Feeder project at 50% complete. This project actual has come in lower than expected and staff are determining what other work could be accelerated to use this 2018 surplus. Renewal and replacement work is expected result in an overage with the current trajectory of $1.1M. This has been due to completion of some 2017 planned switch replacements that occurred in early 2018 and acceleration of some replacement work to use surplus funds as a result of the CIS project cancellation. The remaining 2018 planned Renewal and Replacement work is on track. Pre capitalized transformers are included in this total, however $250k of meter spending is now accounted for in the Advanced Meter line below in the Type 2 section. - BRECKENRIDGE

These categories match the Capital Improvement Plans (CIPs) submitted by Water & Electric.

Type 1 - General Capital is budgeted Year-by-Year for recurring capital expenditures from January through December. Type 1 Capital includes categorized collections of projects of less than $1 million. Typical examples include "pole replacements" as part of Transmission & Distribution. This work typically involves many small projects that up to $1.2-$1.7 million per year.

Type 2 projects have "discrete" scopes, schedules (launch through completion), and cost over $1MM during the project life.

Type 2 Rehabilitation & Expansion Projects

Project	2018 - Q2 Budget	YTD Actual	Year-End Projection	Project Total: Initial Plan	To-Date Actual	Project-End Projection	Schedule: Start	Initial Planned Completion	Projected Completion	Status/Comments
Leaburg Dam Roll Gate Hoists	$0	$55,157	$55,157	$5,150,000	$6,754,711	$7,000,000	Jul-2012	Nov-2014	Oct-2018	All three hoist systems released for full automatic operation in 2017. Final payments to contractors have been completed. No additional capital spending expected in 2018. -ZINNIKER
Downtown Fiber Network	$1,400,000	$49,330	$1,400,000	$2,100,000	$569,433	$2,100,000	Mar-2017	Dec-2018	Mar-2019	Work on some smaller segments of the system have been underway in Q2, with 32/125 connections complete. 32 additional requests are signed up in the queue. A 4-6 week delay is expected in completing these connections due to staffing constraints associated with the apparatus crew and comm shop availability. It is still expected that planned spending will be completed by year end, with some already planned roll over for final connections to occur in early 2019. -NICE
Advanced Meters (Electric)	$1,900,000	$880,196	$3,050,000	$6,638,000	$1,837,196	$15,600,000	Oct-2013	Dec-2025	Dec-2021	Project implementation has been accelerated from an 8 year deployment to a 3 year to accomplish strategic objectives by EOY 2021. Additional meters are under procurement and meters are being deployed on an consistent basis with planning underway for acceleration. Projection also includes $150k in labor for implementation staff. An additional $1M in meter procurement will be accelerated from 2019 in order to stage for accelerated deployment and use surplus capital funding from the CIS project cancellation.-NICE
Electric Master Plan	$50,000	$14,896	$20,000	$1,250,000	$144,109	$700,000	Jul-2016	Dec-2016	Mar-2019	Spending shown accounts for coordination and planning associated with purchase of property for Thurston substation expansion. Purchase expected to occur in 2019. Delay in purchase does not effect critical path of the substation expansion. -NICE
Upriver Re-Configuration/Holden Ck. Substation	$810,000	$372,804	$1,060,000	$3,000,000	$5,765,539	$6,680,000	Jan-2014	Oct-2015	Oct-2019	Holden Creek substation construction and commissioning has been completed, and tie into the Thurston-Cougar 115kV transmission line was completed in late April. Upriver distribution circuits will be added to the station load in early August. Demolition of a portion of the Leaburg Substation is planned to start mid-August, which will remove distribution supply equipment, and to prepare the generation feeds for tie into the Holden Creek Substation. Completion of this work is scheduled for mid-October. Design will be completed in Q4 2018 for control room and generator feed changes which will ultimately take place in summer 2019. -NICE
Downtown Distribution Network	$1,500,000	$739,503	$1,479,000	$15,000,000	$6,407,621	$20,000,000	Sep-2010	Dec-2015	Dec-2028	Phase I preparations for replacement of a failed vault at 10th and Pearl is complete, and phase II to replace this vault will be taking place starting in August. This vault was found during inspections to have visible cracking, and has functionally failed. Work includes re-conductoring the supply feed, re-configuration of the system to allow for de-energization of the vault, replacement of the vault, and repair of the roadway and underground facilities in the vicinity. A majority of this work has been accelerated from future plans and completed as an opportunity with the emergent failed vault replacement. This project scope and progress is on track, and spending has been less than anticipated. Surplus funds for this budget will be used to accelerate two network protector replacement projects from 2019. -NICE
Grid Edge Demonstration Project	$1,250,000	$485,676	$1,250,000	$1,200,000	$626,664	$1,250,000	May-2016	Jun-2017	Sep-2018	Construction activities to install a 500kW output, 1MWh battery energy storage system (microgrid) has began at Howard Elementary. This site is part of EWEB's emergency water supply program by tying this backup power source in with an onsite well for community water distribution after a large scale disaster or long term outage. Work is being performed by a contractor under a design-build turnkey project. Project completion is planned for September 2018. -NICE
ROC Consolidation	$700,000	$52,303	$700,000	$2,000,000	$52,303	$2,000,000	Mar-2018	Dec-2020	Dec-2020	Projection includes $600k for a parking lot expansion at ROC to accommodate additional vehicles after consolidation. Construction started in late June with completion expected in Q3. $100k is included for the Electric Company's share of the Hayden Bridge Backup Dispatch building costs for this year. Costs for facilities at Hayden Bridge are very preliminary and will be further refined this year as design progresses. -NICE
Distribution Resiliency Upgrades	$0	$6,505	$409,000	$1,862,000	$6,505	$1,862,000	Jul-2018	Dec-2020	Dec-2020	Approval has been received for FEMA 406 Hazard Mitigation work reimbursement. Designs for all overhead work has been completed with designs in progress for overhead to underground conversion at Oakway. Construction will be accelerated to this year from 2019 for select projects to spend surplus funds available after cancellation of the CIS project. An additional $190k of work will be completed that is not reimbursable as an opportunistic efficiency while FEMA work is in progress. -BRECKENRIDGE

Type 3 - Strategic Projects & Programs

Project	2018 - Q2 Budget	YTD Actual	Year-End Projection	Project Total: Initial Plan	To-Date Actual	Project-End Projection	Schedule: Start	Initial Planned Completion	Projected Completion	Status/Comments
Carmen Smith License Implementation	$13,850,000	$4,605,001	$12,783,000	$135,000,000	$47,744,283	$129,500,000	May-2009	Dec-2021	Dec-2025	The Project End Projection has been updated to reflect the 2016 Settlement Agreement. One regulatory filing still remains outstanding, so there is no certainty regarding license issuance date. Carmen Powerhouse renewal efforts are underway with major construction activities ongoing since May. The turbine shutoff valve installations remain on track to be complete by the end of October with the plant returning to operation in November 2018. Procurement of equipment for rebuilding the substation in 2019 is underway and design documents for the installation contract are on schedule to be completed in the Fall of 2018. GE was design work is proceeding on schedule for the first unit rehab in 2020. Alternatives analysis for fish passage and planning for other recreation and environmental improvements required by the anticipated license has begun. -ZINNIKER, BOYLE

Total Electric Capital (Excluding Shared Services)	**$32,235,000**	**$11,844,787**	**$33,370,157**	**$173,200,000**						

1. Budget amounts are adjusted to reflect changes presented and approved by the Board on May 1, 2018 (True Up)

Management Notes: The overall Electric Capital Budget (excluding shared services) expenditure rate is lower than actual to date (37% spending vs. 50% of year). Type 1 expenditures predicted at year end is at 104% of budget vs. actual, with about 43% spent through Q2. Type 2 spending ended at 35% at the end of Q2, and projected expenditures at year end are at 124%. This overage has been planned with the main driver being accelerated spending of AMI to meet company goals, and spend surplus capital funds after the cancellation of the CIS project. Carmen Smith spending is expected to be at 92% of budgeted at year end with 33% spent through Q2. Year end projections of total expenditures vs. budget for Type 1 & Type 2 work combined is predicted to be 111% excluding Shared Services and Type 3, and 104% including Type 3 (Carmen) for the overall Electric Division budget (with precap materials included).

Appendix C

Capital "EL1" Report: Water, 2018-Q2

Type 1 - General Capital

Project	2018 - Q2 Budget	YTD Actual	Year-End Projection	Status/Comments
Source - Water Intakes & Filtration Plant	**$815,000**	**$158,877**	$800,000	Three primary projects at Hayden Bridge for 2018: Solids/Pond Improvements, Basin Railing and Access Improvements, and Finished Water Flow Meter Replacements. The 2018 Capital True-Up provides additional budget due to revised estimates and carryover.
Mains - Replacements, Improvements, & Trans.	**$4,069,000**	**$2,090,483**	$3,500,000	Largest componet in this area is main replacements. This item is tracking low so far. Cost reporting does lag however, so we will be watching this number closely
Services	**$1,545,000**	**$1,125,673**	$2,000,000	Includes both reimbursable and non reimbursable service work. Service work is running high this year with the rapid pace of development.
Pump Stations and Reservoirs	**$1,174,000**	**$920,054**	$1,600,000	Work this year includes upgrades at Santa Clara, Dillard 975, and Crenshaw pump stations and well as improvements to the Crest 800 and 975 reservoirs. While the 2018 Capital True Up provided additional budget due to revised estimates, costs have come in higher than anticipated resulting in an anticipated overage.
	$7,603,000	$4,295,087	$7,900,000	104%

These categories will match the Capital Improvement Plans (CIPs) submitted by Water & Electric.

Type 1 - General Capital is budgeted Year-by-Year for recurring capital expenditures from January through December. Type 1 Capital includes categorized collections of projects of less than $1 million. Typical examples include "main replacements". This work typically involves dozens of jobs that add up to $3.5-4.5 million per year.

Type 2 projects have "discrete" scopes, schedules (launch through completion), and cost over $1MM during the project life, and project life can span multiple years

.

Type 3 projects are large strategic programs with long term impacts.

Type 2 Rehabilitation & Expansion Projects

Project	2018 - Q2 Budget	YTD Actual	Year-End Projection	Project Total: Initial Plan	To-Date Actual	Project-End Projection	Schedule: Start	Initial Planned Completion	Projected Completion	Status/Comments
Hayden Bridge Disinfection System Replacement	**$2,052,000**	**$277,587**	$2,000,000	$3,645,000	$578,531	$4,500,000	2017	YE-2018	Q2-2019	Replacement of gas chlorine system with on-site liquid hypochlorite system. Installation design complete and major equipment has been purchased. Budget reduction included in 2018 Capital True Up with some funds shifted to 2019. Overall, project costs are about 20% higher than intial plan. This is primarily due to higher than estimated construction and equipment costs. This overage will affect the 2019 budget and will be accomodated through adjustments in the 2019 CIP. Value engineering efforts are also occuring to reduce the overall cost of the project. (Initial Plan - 2015 CIP)
Distribution System Scada/PLC Upgrades	**$56,000**	**$6,285**	$50,000	$3,079,780	$597,394	$650,000	2013	YE-2016	YE-2018	Multi-Year upgrade project to upgade communications and control at pump stations. Going forward this work will be incorporated into planned standard pump station Type 1 work. (Initial Plan 2013 CIP)
Hayden Bridge Standby Power Improvements	**$1,150,000**	**$242,892**	$1,000,000	$1,728,000	$354,558	$1,300,000	2015	YE-2017	Q3-2018	Construction contract in place and all major equipment is on site. Budget addition/carryover included in 2018 Capital True Up. (Initial Plan - 2015 CIP)
Advanced Meters (Water)	**$600,000**	**$514,230**	$800,000	NA	$514,230	$17,000,000	2018	NA	YE-2021	New Subproject to reflect shift to Opt-Out Advanced Meter Infrastructure. Incudes cost of pre-capitalized meters. In 2018, unit costs will be fine tuned so that accurate long term projections can be made. Budget increase included in 2018 Capital True-Up.
ROC Consolidation	**$335,000**	**$11,480**	$335,000	NA	$11,480	$1,190,400	Q1-2018	YE-2020	YE-2020	New sub-project for the ROC Consolidation. 2018 costs include a parking lot expansion at ROC to accommodate additional vehicles and design efforts for sor space in a new building at Hayden Bridge for backup dispatch, trading, and data. Costs for facilities at Hayden Bridge are preliminary and will be further refined this year as design progresses. Budget increase included in 2018 Capital True-Up.
	$4,193,000	**$1,052,474**	**$4,185,000**	100%						

Type 3 - Strategic Projects & Programs

Project	2018 - Q2 Budget	YTD Actual	Year-End Projection	Project Total: Initial Plan	To-Date Actual	Project-End Projection	Schedule: Start	Initial Planned Completion	Projected Completion	Status/Comments
Emergency Water Supply	**$400,000**	**$94,384**	$400,000	NA	$94,384	$4,000,000	Q1-2018	YE-2028	YE-2028	New Sub-Project for Emergency Water Supply Program. Budget reduction included in 2018 Capital True-Up and reflects actual projected costs for establishment of emergency distributed sites based on work to date.

Total Water Capital (Excluding Shared Services)	$12,196,000	$5,441,945	$12,485,000	45%	year to date actual to budget	102%	Year End Projection to Budget
Type 1, 2 Capital (Excluding Shared Services)	$11,796,000	$5,347,561	$12,085,000	45%	year to date actual to budget	102%	Year End Projection to Budget

Management Notes: Overall Water's Type 1 projects are tracking well. Our Main Replacements and Improvements is at approximately 50% of budget spent. Our service work is at 75% of budget spent so we will be watching this area closely. On the Water Type 2 projects, we are tracking low in the first quarter however several construction contracts will be begin soon at Hayden Bridge which should bring up the Type 2 spending significantly as the year progresses. In total we are projecting a slight overage for the year. This will be watched closely as the year progresses to ensure expenditures stay within budget limits. With respect to our large Type 2 projects, the Hayden Bridge Disinfection system is projected to cost about 20% more than originally estimated. Value engineering efforts are occuring to help minimize this overage going forward.

Appendix C

Capital "EL1" Report: Shared Services, 2018-Q2

Type 1 - General Capital

Note - Changes from previous report(s) are in **BOLD**

Capital Category	2018 - Q2 Budget	2018 - Q2 YTD Actual	2018 - Q2 Year-End Projection	Status	Status/Comments
General Plant - Information Technology (I.T.)	**$1,210,000**	**$555,869**	**$2,306,000**		**IS Capital spending is on track. Both Utilities are evaluating plans to utilize Capital from the canceled CIS-R Project to move forward maintenance work. Year End Project reflects some Type 2 funds being reallocated to Type 1. Expect these figures to change in the Q3 EL-1 based on the updated plans. (Barton)**
General Plant - Buildings & Land Management	**$476,000**	**$411,493**	**$529,000**		**ROC tower - YTD spending includes internal labor and payment to tower and building manufacturer. Additional internal funds to be spent for completion. (Marshall/Wolfe)**
General Plant - Electric& Water Fleet Capital	**$386,000**	**$49,900**	**$383,019**		**Electric - est. $213,671 to be spent in 2018. Water - est. $169,348 to be spent in 2018. (Lentsch)**

In the future, these categories will match the Capital Improvement Plans (CIPs) submitted by Water & Electric.

Type 1 - General Capital is budgeted Year-by-Year for recurring capital expenditures from January through December. Type 1 Capital includes categorized collections of projects of less than $1 million. Typical examples include "pole replacements" as part of Transmission & Distribution. This work typically involves many small projects that add up to $1.2-$1.7 million per year.

Type 2 projects have "discrete" scopes, schedules (launch through completion), and cost over $1MM during the project life.

Type 2 Rehabilitation & Expansion Projects

Project	2018 - Q2 Budget	2018 - Q2 YTD Actual	2018 - Q2 Year-End Projection	Project Total Initial Plan	Project Total To-Date Actual	Project Total Project-End Projection	Schedule Start	Schedule Initial Planned Completion	Schedule Projected Completion	Status	Status/Comments
AMI Shared IT Networking	**$113,000**	**$20,537**	**$87,000**	$6,475,700	$5,390,596	**$6,475,700**	May-2015	Dec-2017	May-2018		The capital project is complete and will be finished this month. All assets are in production. Project total includes AMI Meters which has now been separated out from this line item.
Customer Information System (CIS) Replacement	**$4,565,000**	**($238,200)**	**$0**	$9,700,000	$0	**$11,150,000**	Sep-2016	Aug-2018	mid to late-2019		**EWEB issued a Notice of Termination in May 2018, the payment and reimbursement claims are under negotiation. (Gorsegnor/Barton)**
Information Technology Type 2	**$18,000**	$0	**$0**	$0	$0	**$0**					**Move funds to Plant IT Type I**
Total Shared Services Capital (This Report)	**$ 6,768,000.00**	**$799,599**	**$3,305,019**	**48.83%**							

Q2 2018, Quarterly Contracts Awarded Report

Appendix D

Contract Execution	Contractor	City, State	Description	Contract Amount	Contract Term	Contract Process	Executive Team Manager
4/11/2018	US West Electric	Myrtle Creek, OR	Dillard 975 Pump Station Electrical Upgrades	$ 63,650	One time purchase	Infomal Quote	Mel Damewood
4/16/2018	McKenzie River Surveying & Mapping	Eugene, OR	Surveying Services & Support	$ 85,000	3/31/2019	QBS Direct Negotiation*	Susan Ackerman
4/19/2018	Northwest Capital Management	Portland, OR	Deferred Compensation Benefits Consulting	$ 125,000	4/18/2023	Direct Negotiation	Lena Kostopulos
4/24/2018	Cascade Truck & Body	Eugene, OR	Steel Super Structure Service Body w/Specified Accessories	$ 77,454	One time purchase	Informal Quote	Mel Damewood
4/24/2018	Pacific Truck Colors	Tualatin, OR	Steel Service Body w/Specified Accessories	$ 47,000	One time purchase	Informal Quote	Mel Damewood
5/1/2018	Potelco Inc.	Sumner, WA	Construction Inspection Services	$ 60,000	7/31/2018	QBS Direct Negotiation*	Rod Price
5/15/2018	OBEC Consulting Engineers	Eugene, OR	On-Call Inspection Services	$ 80,000	5/14/2023	QBS Direct Negotiation*	Mel Damewood
5/17/2018	Hendrickson Well Drilling, Inc.	Cottage Grove, OR	Well Drilling at Ice Cap Creek Campground	$ 54,000	6/15/2018	Informal Quote	Susan Ackerman
6/5/2018	Armadillo Boring Company	Salem, OR	Garfield Street Water Main Replacement: Railroad Crossing Bore	$ 93,986	One time purchase	Informal Quote	Mel Damewood
6/5/2018	Oregon Department of Transportation	Salem, OR	Blanton Radio Tower Sublease Agreement	revenue $125,000	5/30/2022	Direct Negotiation	Rod Price
6/11/2018	Voith Hydro	York, PA	Walterville Runner Caviation Repair	$ 57,444	8/10/2018	Informal Quote	Susan Ackerman

EWEB association for all above contracts = None

*Qualification Based Selection (QBS) is required based on current statutes and EWEB Public Contracting Rules for consultants who provide architectural, engineering, land surveying, and related services. The selection process for contracts on this report requires selection from pre-qualified firms, contract values are based on negotiations and reviewed for appropriate effort and rate schedules.

Questions? Please contact: Sarah Gorsegner, 541-685-7348

Appendix E

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

ENGINEERING / DISTRIBUTION RELIABILITY

Rely on us.

TO: Commissioners Brown, Carlson, Mital, Simpson and Helgeson

FROM: Tom Ossowski, Electric Systems Engineering

DATE: July 16, 2018

SUBJECT: Electric System Reliability Report – June 2018

Executive Summary

The outage statistics continue to be good with both SAIDI and SAIFI below our 5 year average. The cause of the largest number of outage minutes is "Tree – Uncontrolled" which are trees or limbs from trees that are not trimmed by EWEB as part of its tree trimming program.

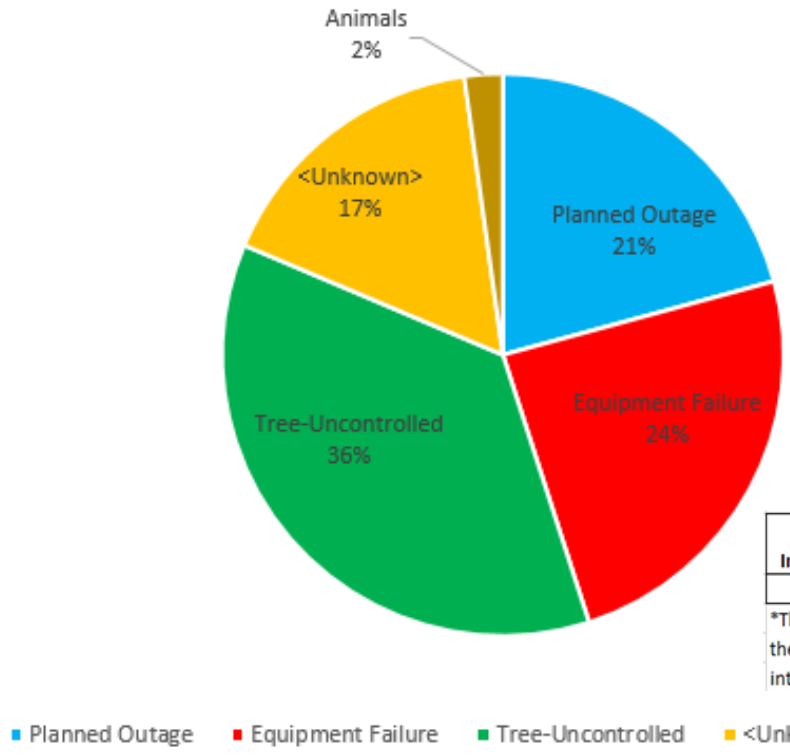
Tree trimming is ahead of schedule for the year to date which affects 19,257 customers. The PUC corrections continue to track well ahead of schedule.

In all, outage prevention work this year has affected 24,421 customers.

Outage Performance Details

Index	YTD Actual	YTD 5 Year Average	Pacific Northwest APPA City Average YTD	Dashboard
SAIFI	0.154	0.185	0.20	
SAIDI (minutes)	14.99	24.85	21.60	

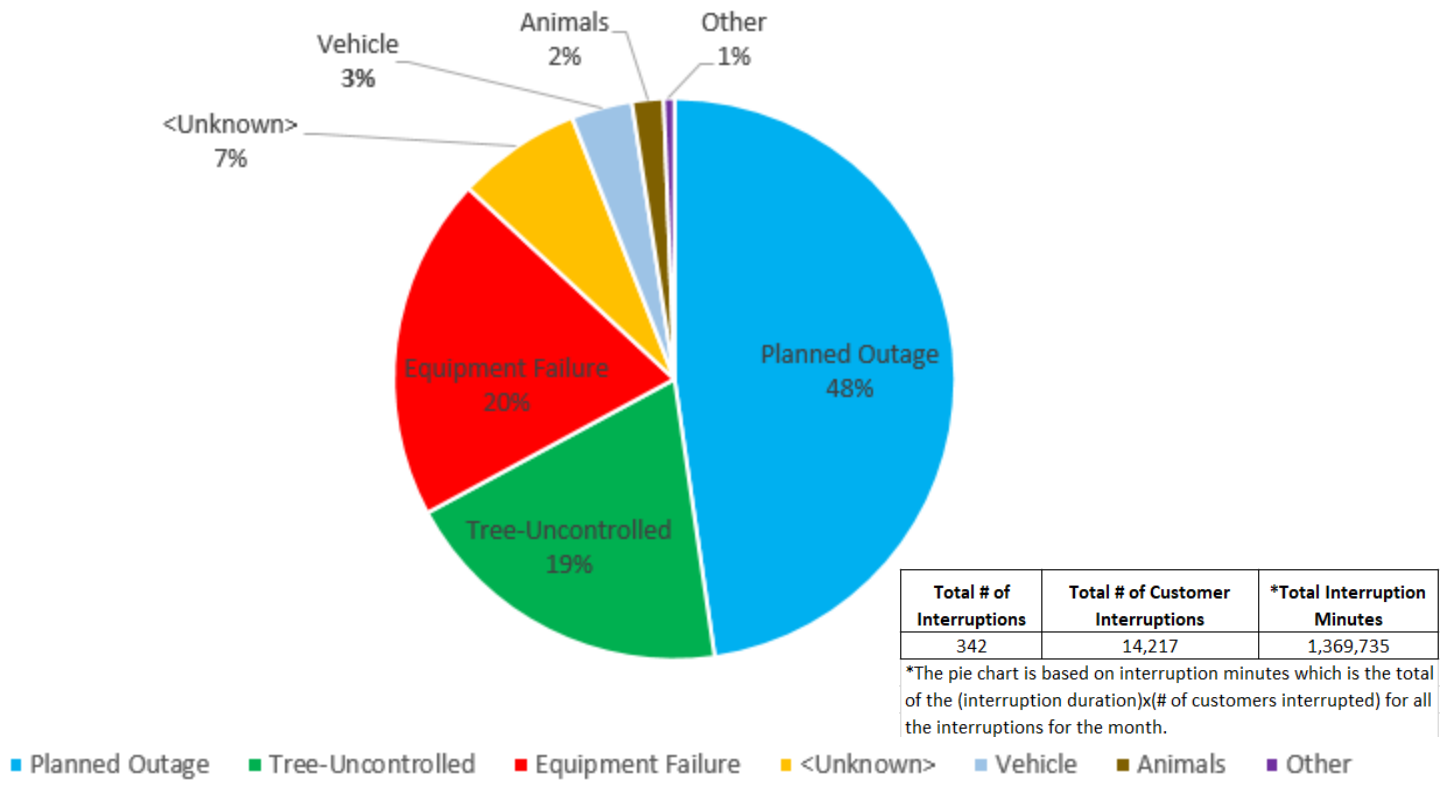
June 2018 Interruption Minutes by Outage Cause



Total # of Interruptions	Total # of Customer Interruptions	*Total Interruption Minutes
60	1,067	167,415

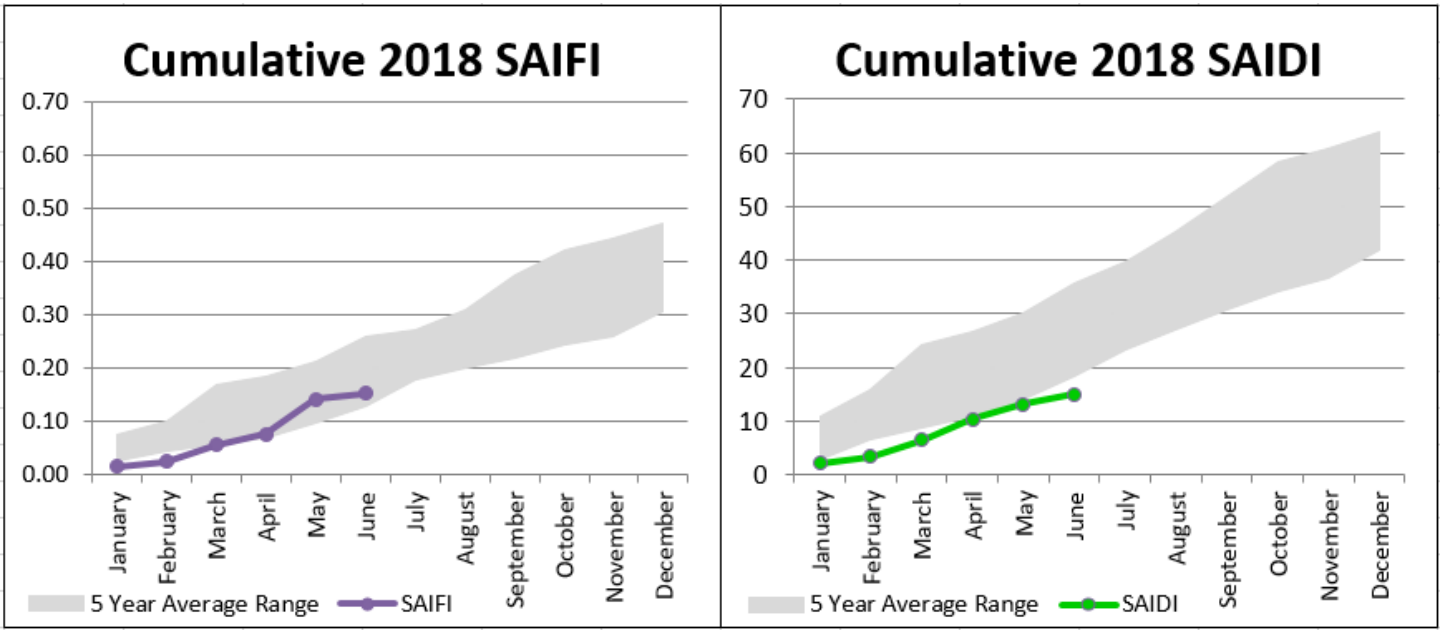
*The pie chart is based on interruption minutes which is the total of the (interruption duration)x(# of customers interrupted) for all the interruptions for the month.

2018 Year to Date Interruption Minutes by Outage Cause



Total # of Interruptions	Total # of Customer Interruptions	*Total Interruption Minutes
342	14,217	1,369,735

*The pie chart is based on interruption minutes which is the total of the (interruption duration)x(# of customers interrupted) for all the interruptions for the month.



	Jan	Feb	Mar	Apr	May	Jun
SAIFI	0.016	0.009	0.030	0.021	0.066	0.012
Less Planned Interruption:	-	-	-	-	-	-
5 Year Monthly Average	0.047	0.021	0.029	0.015	0.031	0.042
Year To Date	0.016	0.025	0.056	0.077	0.142	0.154
Year To Date Average	**0.047**	**0.068**	**0.097**	**0.112**	**0.143**	**0.185**
SAIDI	2.06	1.27	3.15	3.88	2.82	1.81
Less Planned Interruption:	-	-	-	-	-	-
5 Year Monthly Average	5.67	4.66	3.68	2.48	3.33	5.03
Year To Date	2.06	3.33	6.48	10.35	13.17	14.99
Year To Date Average	**5.67**	**10.32**	**14.01**	**16.49**	**19.82**	**24.85**
CAIDI	127.31	136.91	103.28	187.68	42.97	156.90
Less Planned Interruption:						
5 Year Monthly Average	122.30	229.24	150.37	174.18	128.04	127.48
Year To Date	127.31	130.82	115.82	135.20	92.65	97.48
Year To Date Average	**140.00**	**140.00**	**140.00**	**140.00**	**140.00**	**140.00**
# Customers	92226	92226	92226	92226	92226	92248
# Interruptions	1490	858	2809	1905	6050	1067
# Unplanned Interruptions	-	-	-	-	-	-

2018 Outage Prevention and Resiliency Details

Maintenance – PUC Compliant Poles

June Actual	YTD Actual	YTD Planned	Year Planned	Dashboard
110	908	700	1,400	

Tree Trimming

Line Miles				Total Customers Risk Reduced		Dashboard
June Actual	YTD Actual	YTD Planned	Year Planned	June	YTD	
17.5	149.9	140	280	3,307	19,257	

Resiliency Projects

Holden Creek Substation (replacing Leaburg substation) – 95% Complete:
The 115kV bus was energized in late April with the completion of the connection to the BPA 115kV Blue River-Thurston Line. Distribution load will be transferred to the station from Leaburg Substation in July. The distribution supply half of Leaburg Substation will be removed and rebuilt this summer, with the remaining part of Leaburg Substation, which connect to the power plant, being removed and Leaburg generation circuits moved to Holden Creek in 2019.

Substation RTU replacements

As part of EWEB's RTU (Remote Terminal Unit) Asset Replacement Plan, the obsolete RTU's at the following substations will be replaced with EWEB's standard SEL RTU and HMI (in-substation user interface screen):

- Bethel – 100% Complete
- Adams – 100% Complete
- Oakway – 40% Complete

Spring Creek Substation Upgrade – 50% Complete

Two old oil-filled 115 kV transmission circuit breakers will be replaced with modern circuit breakers and seven 115 kV switches will also be replaced due to end of life. All of the protection relays will be replaced with current, standard equipment. Also the old XLP insulation 15 kV underground feeder get-away cables (cables from substation breakers to the first distribution switch) will be replaced with EPR insulated 15 kV cable with a 40 year warranty. Spring Creek substation was chosen for work this year because several equipment asset plans show the equipment at end of life. This substation has select feeders which are not able to be back fed from another substation, just this substation's sister transformer. To avoid outage risk to the connected customers, a summer outage will occur to replace this equipment, with this work coordinated together for one outage. The feeder cable replacement work by internal line crews is coordinated with this project as an opportunistic benefit while the station is out for these upgrades and regular maintenance. Three of the six feeder cable replacements are complete and phase 1 of the substation portion of the project to be complete at the end of July.

WEYCO 3 Substation 115kV Switch Replacements– 95% Complete

Three 115 kV switches will be replaced with new switches. These switches are end of life, and have shown signs of deterioration by way of increased difficulty to actuate. This station has a high customer economic impact if a failure is experienced. Project is in closeout.

Substation Battery Bank Replacements– 10% Complete

Battery banks will be replaced at Walterville and two other substations yet to be determined based on testing results. Replacements will occur in the third and fourth quarters.

Live Front Distribution Switch Replacements– 75% Complete

Six live front switches will be replaced with the new standard deadfront switches. All XLP insulated cable terminated at these switches will also be replaced with EPR insulated 15 kV cable with a 40 year warranty. This replacement has safety benefits for internal staff during switching operations, and is a preventative replacement to avoid equipment failure which causes customer outages. So far this year, four live front switches have been replaced. The last two switch replacements are planned for October.

PUBLIC HEALTH DIVISION
Drinking Water Services
Kate Brown, Governor

Oregon Health Authority

444 A Street
Springfield, OR 97477
Ph. (541) 726-2587
Fax (541) 726-2596
http://healthoregon.org/dwp

19 July 2018

Ray Leipold
Eugene Water and Electric Board
3957 Hayden Bridge Rd.
Springfield, OR. 97477

RE: Water System Survey
Eugene Water and Electric Board (#OR4100287)

Dear Mr. Leipold:

Thank you for your time and assistance in conducting a Water System Survey at Eugene Water and Electric Board (EWEB) on April 5th, May 3rd, and May 4th of 2018. The main purpose of the survey is to evaluate the entire water system in terms of supplying safe drinking water to the public. I have enclosed a copy of the report for your records. Please let me know if any corrections need to be made.

The first page of the report lists significant deficiencies and rule violations in the system that will have to be corrected as soon as possible. EWEB must submit a written corrective action plan by 7 September 2018 describing how and when the deficiencies/violations will be corrected. Once the deficiencies and rule violations are corrected, EWEB will need to send written verification that they have been corrected and the dates of correction.

These significant deficiencies and rule violations were noted during the survey:

1. Finished Water Storage is not watertight (OAR 333-061-0076(4)(e)): Drinking Water Services was informed by the Eugene Water & Electric Board (EWEB) that the roof joints on the College Hill 607 reservoir have failed allowing water to enter the reservoir (see memorandum regarding College Hill 607 Reservoir Roof Leakage, dated December 5, 2012). The leaking roof joints are considered a significant deficiency since the roof is no longer watertight. OHA Drinking Water Services (DWS) understands the reservoir is scheduled for replacement in 2023.

2. Filter aid polymer was not delivered by the supplier (Cascade Columbia) in a container with proof of NSF Standard 60 certification. This deficiency was corrected before the date of this letter.
3. The vent screens in use on Hawkins 607 and City View 800 E are 4-mesh expanded metal. These are an avenue for potential contamination via animal entry. Additionally, AWWA is working on a standard for 24-mesh screens to align with the Recommended Standards for Water Works from the Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers (aka 10-State Standards) which state in Part 7 on finished water storage that vents "shall, on ground-level structures, open downward with the opening at least 24 inches above the roof or sod and covered with twenty-four mesh non-corrodible screen." Please address these screens in the corrective action plan.

In addition, I have the following comments and recommendations:

- Replace or retrofit all box covered vents on all applicable reservoirs. The box covered vents are currently designed so that they cannot be removed for inspection without cutting through the box (e.g. Shasta 800).
- Continue the regular inspection and maintenance of the gutter-drain style hatches (e.g. Bilco-type hatches) on all applicable reservoirs so that debris does not clog up the drain and allow contaminants to enter the finished water reservoir. Reconsider whether scouring pads are appropriate as a rodent screen where applied. As these hatches need replacement, convert to a design that involves a shoe-box style hatch cover.
- Participate in the Area Wide Optimization Program (AWOP).
- One of the Crest reservoir tanks has a weeping concrete wall which may need repair.
- The Shasta 975 hatch seal may not be fully surrounding.

The Drinking Water Program has established criteria for determining whether a system should be considered to have "outstanding performance." Systems that are designated outstanding performers may have their water system survey frequency reduced from every 3 years to every 5 years. Although EWEB did not

meet the established criteria, please review the enclosed handout to see what steps you can take in the future towards receiving this designation.

Thank you for your time and assistance in conducting this survey. If there are any questions, or EWEB would like this information in an alternate format, you are welcome to contact me at (541) 726-2587 extension 57 or via email at james.r.macpherson@state.or.us.

Sincerely,

Jay MacPherson, Ph.D., P.E.
Oregon Health Authority, Drinking Water Services

Enclosure - Outstanding Performer Information

cc: EWEB (PWS ID: #4100287) Master File, OHA-DWS Portland
EWEB (PWS ID: #4100287), OHA-DWS Springfield

Community Investment through Q2 2018

Appendix G

Sponsorships, Donations, Grants

AGENCY	EVENT/DESCRIPTION	PAYMENT DATE	EVENT DATE	AMOUNT	INVESTMENT AREA	CATEGORY	NOTES
Eugene 4J School District	Solar Challenge Grant for 4J, Bethel and Springfield School Districts	04/19/18	06/09/18	$19,550	ENVIRONMENTAL: Greenpower Program	Customer-Funded	Previously funded from Education Grants but in response to Greenpower participant survey results, this project is now funded by the Greenpower program.
Howard Elementary	Annual Tech Trot	04/19/18	05/10/18	$500	ECONOMIC: Education	Discretionary	Proceeds are used to lower or eliminate the technology fee for students at Howard Technology Immersion School.
Equity & Community Consortium	Communities of Color Networking Event (EWEB Sponsored First Friday)	04/19/18	05/04/18	$1,335	PEOPLE: Diversity	Discretionary (Diversity)	Food and Entertainment provided by EWEB
Willamette High School	EWEB Electrathon Race	02/01/18	03/17/18	$1,225	ECONOMIC: Education	Discretionary	
Lane County Fair	Co-Sponsorship of Lane County Fair Comfort Station Water Booth	02/08/18	07/18-07/22	$900	ENVIRONMENTAL: Water Quality/Reliability	Discretionary	Booth Fee / Use of EWEB drinking water fountain w/chiller
BRING reThink Education Program	2018 Community Education	02/01/18	N/A	$2,000	ECONOMIC: Education	Discretionary	In-classroom Presentations and Field Trip Tours of Lane County's Glenwood Central Receiving Station and Short Mountain Landfill
Bethel School District	Jan-June 2018 Education Grant	01/02/18	N/A	$38,500	ECONOMIC: Education	Board Directed	
Lane Community College	Jan-June 2018 Education Grant	01/02/18	N/A	$35,000	ECONOMIC: Education	Board Directed	
McKenzie School District	Jan-June 2018 Education Grant	01/02/18	N/A	$10,500	ECONOMIC: Education	Board Directed	
Springfield School District	Jan-June 2018 Education Grant	01/02/18	N/A	$23,500	ECONOMIC: Education	Board Directed	
Eugene 4J School District	Jan-June 2018 Education Grant	01/02/18	N/A	$123,500	ECONOMIC: Education	Board Directed	
			Total Q2	**$256,510**			

Upcoming and/or committed

Sponsorships, Donations, Grants

AGENCY	EVENT/DESCRIPTION	PAYMENT DATE	EVENT DATE	AMOUNT	INVESTMENT AREA	CATEGORY	NOTES
Foundation for Water & Energy Education	Hydropower and STEM Career Academy Travel and Registration - Student Grant	Pending	06/18 - 06/22	$300	ECONOMIC: Education	Discretionary	http://www.eweb.org/about-us/news/a-week-at-a-hydropower-and-stem-career-academy
Lane Education Service District (ESD) (Q3)	Construction and Utilities Career Day	07/12/18	09/27/18	$1,000	ECONOMIC: Education	Discretionary	
Oregon Environmental Council (Q3)	50th Anniversary Celebration	07/05/18	10/05/18	$2,500	ENVIRONMENTAL: Water Quality/Reliability	Discretionary	
BRING reThink Education Program	2018 Community Education	Pending	N/A	$2,000	ECONOMIC: Education	Discretionary	In-classroom Presentations and Field Trip Tours of Lane County's Glenwood Central Receiving Station and Short Mountain Landfill
Bethel School District	Jul-Dec 2018 Education Grant	Pending	N/A	$38,500	ECONOMIC: Education	Board Directed	
McKenzie School District	Jul-Dec 2018 Education Grant	Pending	N/A	$10,500	ECONOMIC: Education	Board Directed	
Springfield School District	Jul-Dec 2018 Education Grant	Pending	N/A	$23,500	ECONOMIC: Education	Board Directed	
Eugene 4J School District	Jul-Dec 2018 Education Grant	Pending	N/A	$123,500	ECONOMIC: Education	Board Directed	
Lane Community College	Scholarship Grant	Pending applicants	N/A	Up to $25,000	ECONOMIC: Education	Board Directed	Pending scholarship applicants - none received to date
			Total	**$226,800**			

Water Truck Deployment

AGENCY	EVENT/DESCRIPTION	PAYMENT DATE	EVENT DATE	AMOUNT	INVESTMENT AREA	CATEGORY	NOTES
EWEB Customer Care Program (Q4)	Run to Stay Warm	N/A	11/18/18	Staff Time	ENVIRONMENTAL: Water Quality/Reliability	Discretionary (Water Ops)	
Eugene Marathon	Eugene Marathon	N/A	04/29/18	Staff Time	ENVIRONMENTAL: Water Quality/Reliability	Discretionary (Water Ops)	

Volunteer Efforts and Events (Unpaid)

AGENCY	EVENT/DESCRIPTION	PAYMENT DATE	EVENT DATE	AMOUNT	INVESTMENT AREA	CATEGORY	NOTES
McKenzie Watershed Alliance (Q3)	McKenzie River Clean-Up	N/A	07/07/18	N/A	ENVIRONMENTAL: Water Quality/Reliability	N/A	16 volunteers = 36.5 hrs
Butte to Butte (Q3)	Butte to Butte	N/A	07/04/18	N/A	ENVIRONMENTAL: Water Quality/Reliability	N/A	18 volunteers = 45 hrs ($150 in supplies)
Special Olympics Oregon	Bocce Regional Competition	N/A	06/16/18	N/A	PEOPLE: Diversity	N/A	74 volunteers = 301 hrs
Lane Blood Center	Blood Drive	N/A	05/24/18	N/A	PEOPLE: Emergency Preparedness	N/A	At ROC
United Way & Connected Lane County	BookFest Book Drive	N/A	04/16-04/30	N/A	ECONOMIC: Education	N/A	BookFest provided 913 kids with 5,478 donated books to take home with them to encourage reading over the summer
Food for Lane County	FFLC Volunteer Night	N/A	Ongoing	N/A	PEOPLE: Safety Net	N/A	67.75 hours YTD

EWEB Ambassador Efforts and Events (Paid)

AGENCY	EVENT/DESCRIPTION	PAYMENT DATE	EVENT DATE	AMOUNT	INVESTMENT AREA	CATEGORY	NOTES
Friendly Area Neighbors Picnic	Neighborhood Organization Picnic	N/A	07/22/18	N/A		N/A	Booth with info on Emergency Preparedness, Electric Vehicles and more. 1 EWEB Ambassador = 3 hours
Lane County Fair	Co-Sponsorship of Lane County Fair Comfort Station Water Booth	N/A	07/18-07/22	N/A	ENVIRONMENTAL: Water Quality/Reliability	N/A	Co-host Comfort Station - distribute water to fair-goers. 16 EWEB Ambassadors (3 hr shifts) = 48 hrs
Springfield Public Schools	Solar Car Race and Renewable Energy Source Presentations (Hamlin Middle School)	N/A	06/08/18	N/A	ECONOMIC: Education	N/A	Host EWEB booth about renewables and Power Portfolio. 1 EWEB Ambassador = 2 hrs
Bethel School District	KidWind Challenge	N/A	04/20/18	N/A	ECONOMIC: Education	N/A	Interview/Judge Entries 5 EWEB Ambassadors = 17.5 hrs