

Quarterly Strategic and Operational Report

Q3 – 2018

Eugene Water & Electric Board

October 23, 2018

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Eugene Water & Electric Board

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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
Annual Operating Budget	\$212.7M	\$18.9M
Annual Capital Budget	\$49.7M	\$19.6M

Executive Summary

The Management of Eugene Water & Electric Board (EWEB) is pleased to report the preliminary, unaudited results of the third quarter and 2018 fiscal year-to-date to our governing Commissioners and the public.

EWEB's organizational values of safety, reliability, and responsibility continue to be demonstrated priorities, although some strategic refinements were made in the third quarter. The EWEB Commissioners specifically identified EWEB's role in carbon reduction as inclusive within our stated values, which has triggered a number of programs to promote efficient electrification for EVs and heat pump conversions.

EWEB's water and electric utilities are required to report financial performance separately, and both utilities continue to demonstrate more disciplined cost controls, while making strategic investments. Electric operating revenue is \$11.5 million favorable this year compared to budget, primarily due to favorable water conditions used in hydroelectric production. Water operating revenue is also favorable by approximately \$1.5 million, primarily due to retail consumption during the dry summer. Year-end impact from operations on reserves is forecasted to be favorable to budget by \$4 million and \$2 million for the electric and water utilities, respectively.

Most financial metrics remain within Board guidelines except for Debt as a percentage of Net Book Value for the Electric Utility and Rate of Return for the Water Utility. Both of these metrics improve as debt-financed capital projects are commissioned, and consumption tracks to normal levels.

Reliability for both the water and electric delivery systems continue to be within target and strong compared to Northwest averages, although electric reliability degraded slightly in the third quarter due to some uncontrolled trees, dried out cross arms, and underground failures. An equipment failure (Potential Transformer) caused an outage in the McKenzie Valley in early September. There were a few water main breaks, the largest being on Norckenzie Road just north of the Beltline, and one EWEB-caused boil notice to a single customer.

EWEB responded to 58,000 customer interactions in the third quarter, and dramatically improved our response times. Since expanding our Call Center hours beginning on July 23, the team has responded to 687 calls during those hours and has reduced call wait times to less than a minute.

While statistically our safety metrics are slightly worse than last year, they are within our outstanding five-year average. Our eleven (11) OSHA recordable accidents tracks our 3-year average, while the total lost time metric of 50 days (YTD) is trending higher than 2017, but below 2015 and 2016.

EWEB made progress in strategic areas in the quarter, including the commissioning of the first distributed neighborhood emergency water/electric station. At Kalapuya H.S., we prepared for the launch of the emergency water site in October, while at Howard Elementary we commissioned our first microgrid energy system. Additionally, EWEB completed our upgrade of our customer service policies and procedures, along with our deployment planning, for our first route-based

smart meter installations schedule for the fourth quarter. Prior installations were limited to O&M repairs, or Opt-In customers.

Overall, EWEB continues to work on building organizational and customer confidence through the achievement of sustainable results. We appreciate your support.

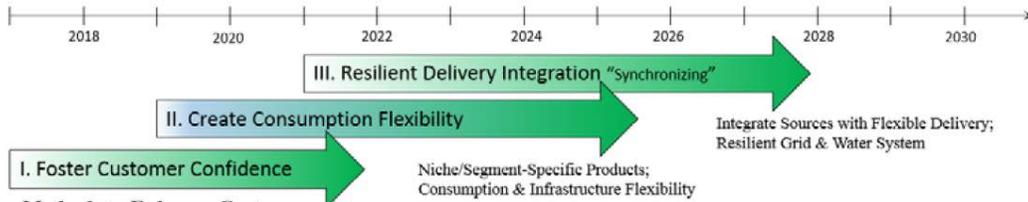
A handwritten signature in blue ink, appearing to read "Frank Lawson".

Frank Lawson, General Manager

Strategic Summary

10-Year Strategic Priorities

1. *Emergency Preparedness & Disaster Recovery*
2. *Electric Resource Choices*



Methods to Enhance Customer

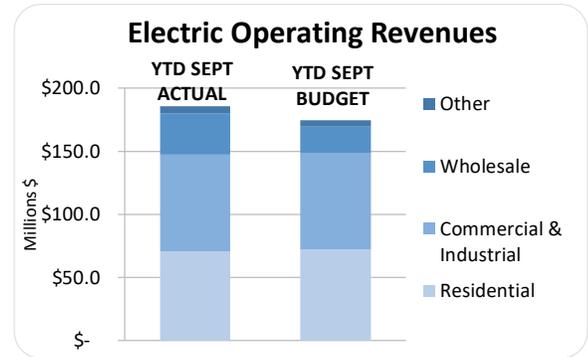
Confidence: 2017-2020+

1. **Consistent Performance (Safe & Reliable)**
2. **Cost Improvement**
3. **Service/Responsiveness**
4. **Open and Transparent Communications**

Operating Revenue & Consumption

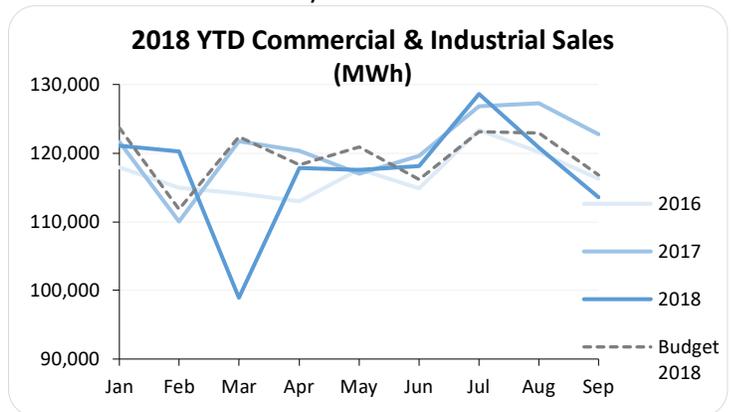
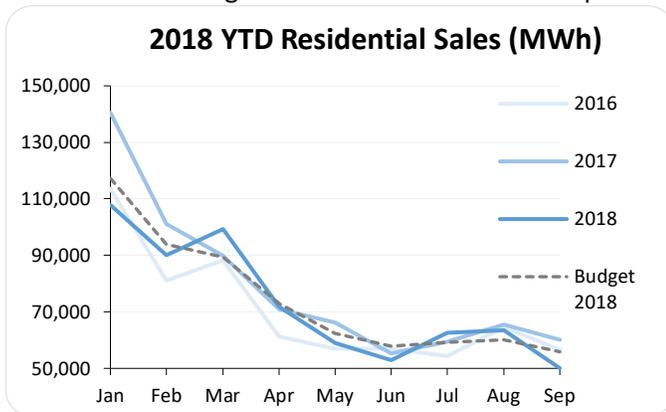
Electric Operating Revenues

Total Electric Utility **operating revenue** exceeds budget by \$11.5 million. Retail revenue is slightly unfavorable by 1% (\$1.2 million) compared to year-to-date budget. **Wholesale and other revenue** had a favorable \$12.7 million variance, driven by higher than expected water for hydro generation in the Columbia River Basin and increased prices in July. The favorable variance in wholesale sales is partially offset by the unfavorable purchased power variance related to portfolio balancing activities.



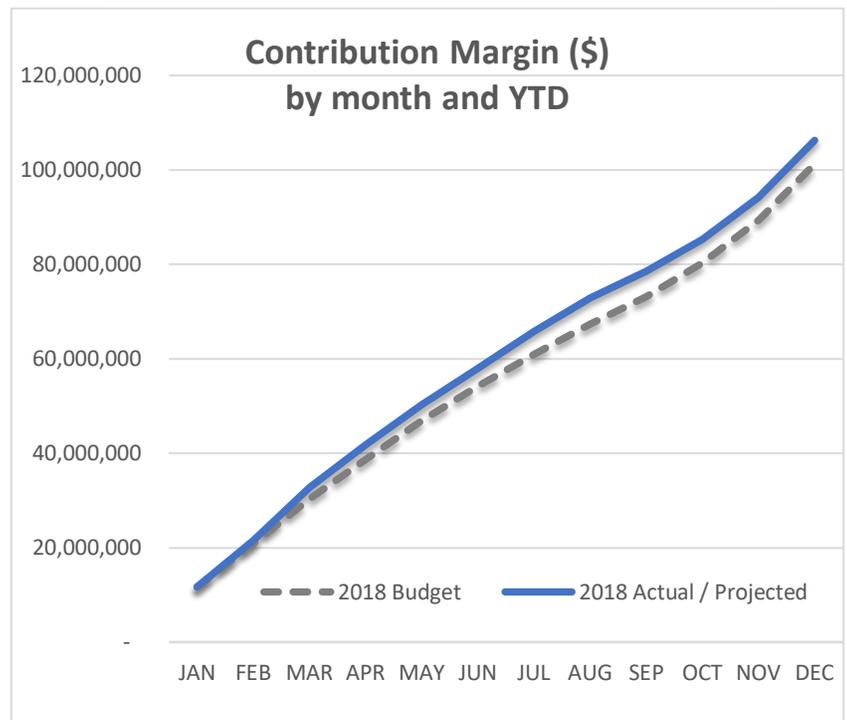
Electric Retail Sales by Consumption

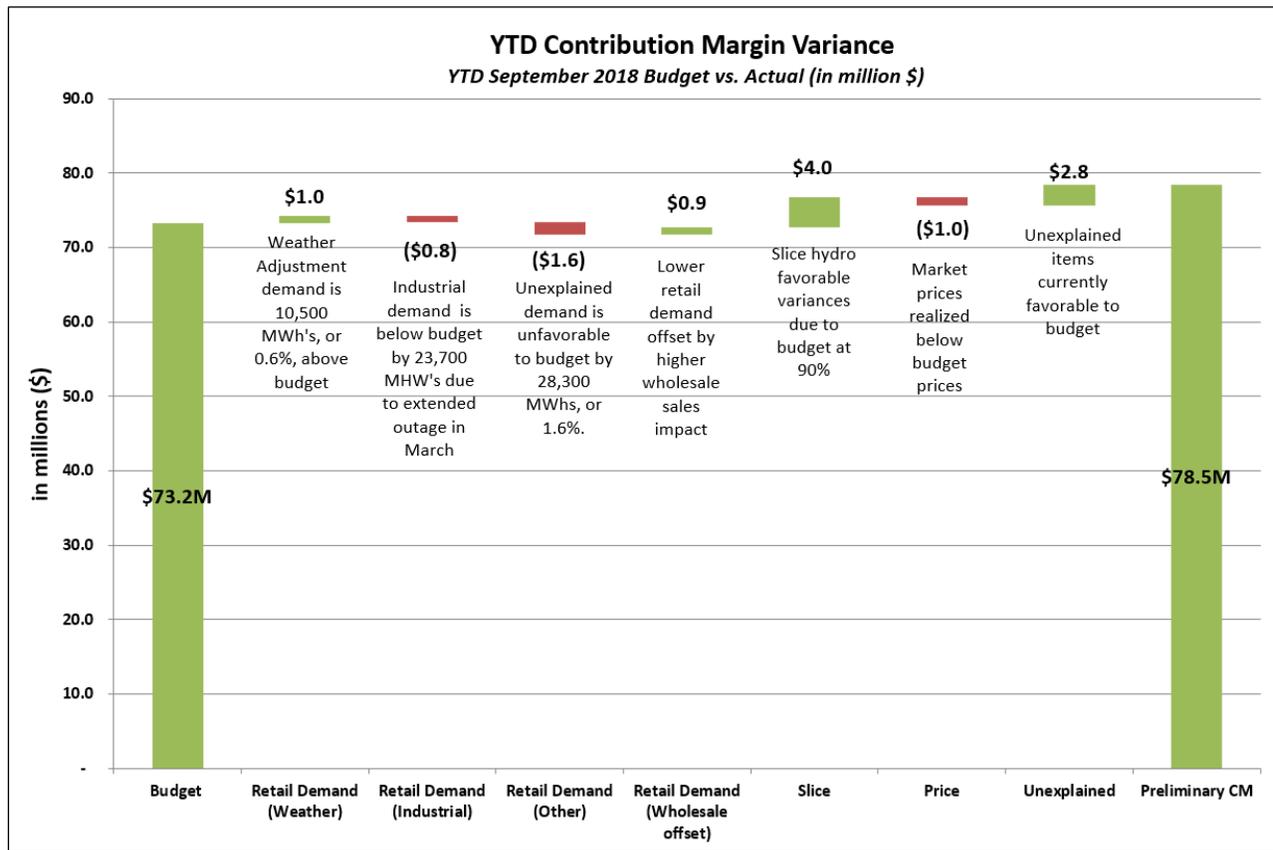
Retail consumption is lower than budget in September due to an unfavorable degree day variance, but is tracking with the year-to-date budget due to offsetting degree day variances. Lower heating degree days in January and May were offset by higher cooling degree days in July and August. Commercial and Industrial sales had a large decrease in March due to an industrial customer's extended outage. Generally, EWEB is financially indifferent to extended outages from this customer due to the contractual requirement to take its full Bonneville Power Administration (BPA) allocation. Changes from scheduled usage are valued at market index prices to make EWEB whole on any volumetric variances.



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.



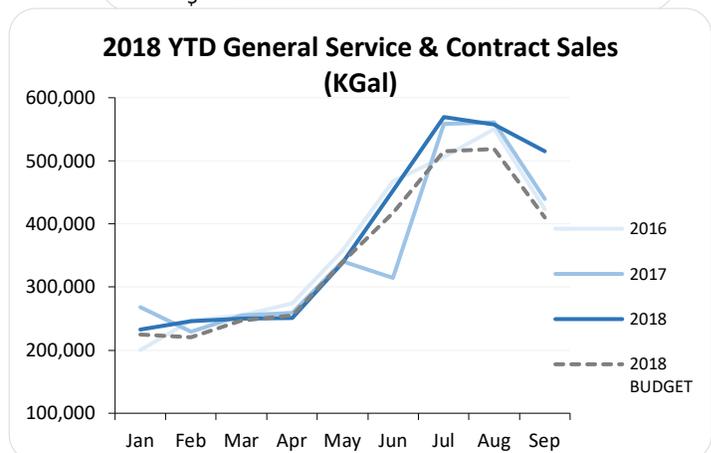
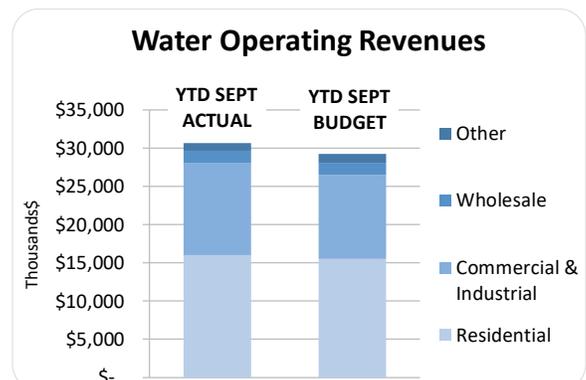
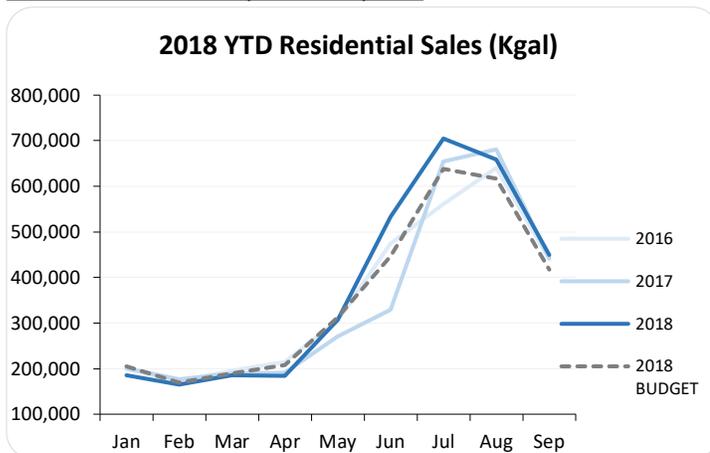


Year-to-date contribution margin was \$5.3 million above budget at the end of the third quarter primarily due to strong water flows in the Columbia River Basin which resulted in higher revenues from EWEB's Bonneville Power Administration's slice contract.

Water Operating Revenue

The Water Utility had a favorable \$1.5 million budget variance in total operating revenues through September 2018. **Retail revenue** had a favorable variance of \$1.6 million and is approximately 6% above budget. **Wholesale and other revenue** are tracking with budget expectations. 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

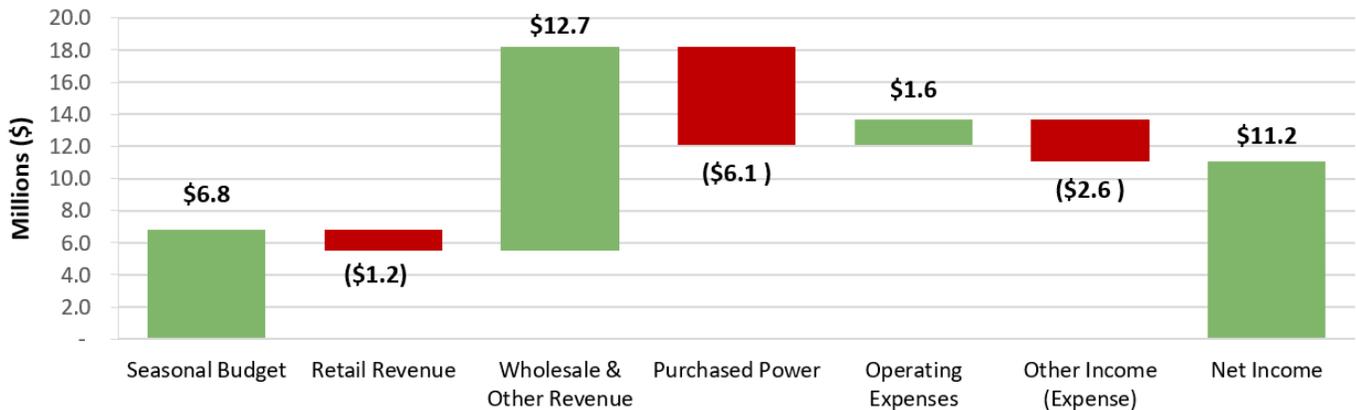


Electric Utility Financial Report

Financials

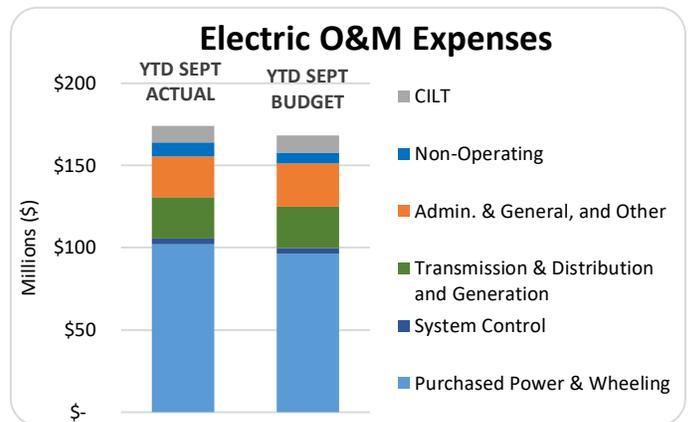
For the nine months ended September 30, 2018, net income for the Electric Utility is \$11.2 million, 165% of the year-to-date budget. For comparability purposes, the budget has been modified to reflect seasonal fluctuations in revenue, purchased power, and wheeling.

Electric Utility Net Income Variance
YTD September 2018 Budget vs. Actual (in Millions)



Electric Operating Expenses

Overall, **operating expenses** had an unfavorable variance of \$4.5 million when compared to budget. This variance was primarily driven by purchased power which had an unfavorable variance of \$6.1 million due to portfolio balancing activities. Most of the increase in purchase power costs took place in July and August due to an increase in market prices which was offset by an increase in wholesale sales. The customer information system (CIS) project costs have moved to Operating & Maintenance (O&M) expense. Net of the requested vendor reimbursement, this has an unfavorable impact of \$900,000. The offsetting favorable operating expense variances were primarily due to year-to-date non-labor savings and a \$1.1 million variance for reclassification of downtown fiber work from O&M to capital. **Non-operating expenses** had an unfavorable variance of \$1.9 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 Electric Utility's projected department variance for non-labor spending is approximately \$800,000 unfavorable. Customer Solutions' favorable variance is primarily driven by customer care payments that trend higher near the end of the year. The Electric division variance is unfavorable due to unbudgeted pole assessment and treatment, additional tool and equipment expense for new hires, contract work for outage management, and fiber expense. Energy's favorable variance to budget is due to a delay in the Manufactured Gas Plant (MGP) remediation work. The positive budget variance is largely offset however due to additional FERC requirements for dam safety, canal inspection and emergent maintenance work after the budget was approved. The deferral of the MGP work also has associated revenue impacts as that work is offset by reimbursements. Information Services' cancellation of the CIS project shifted capital costs to O&M non-labor for the Electric Utility. The remainder of the unfavorable variance is due to

emergent project work for software and services supporting Enterprise Telecomm and meter infrastructure replacement. Management has identified savings in professional/technical services and training budgets to partially offset this variance. Water is currently favorable to straight line budget, but forecasting a negative variance due to additional contract labor assistance needed in the Utility Support Services' department.

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

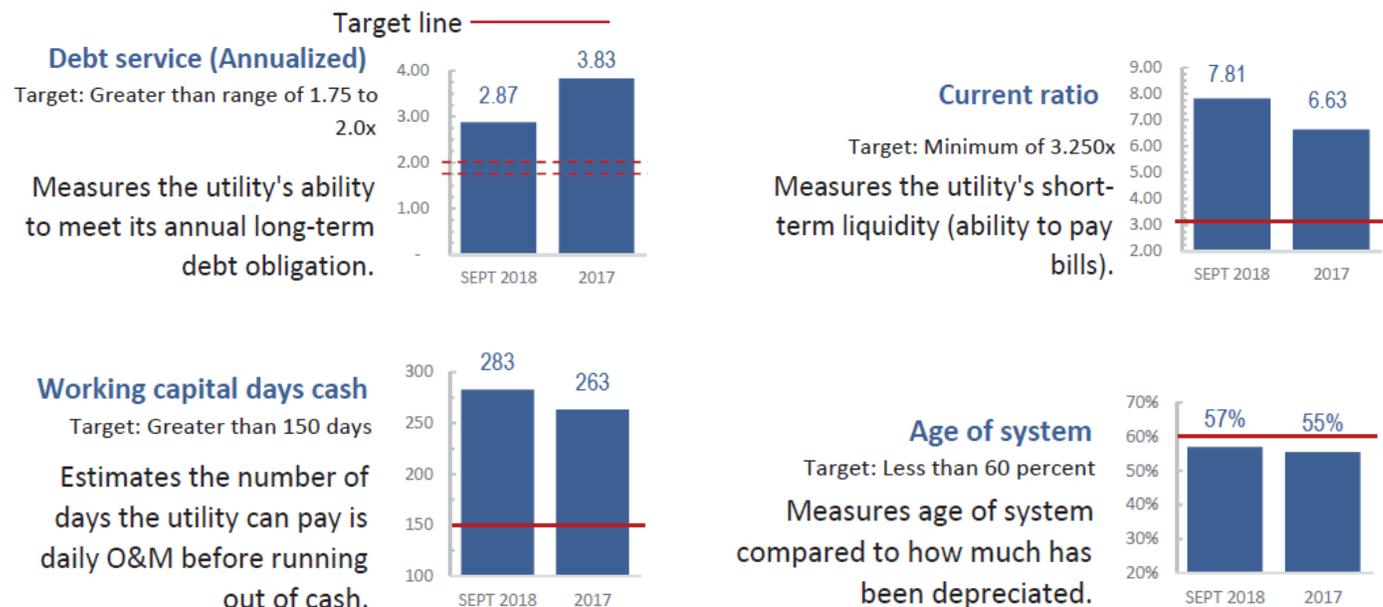
(Excludes Labor, Revenues, and Power costs)

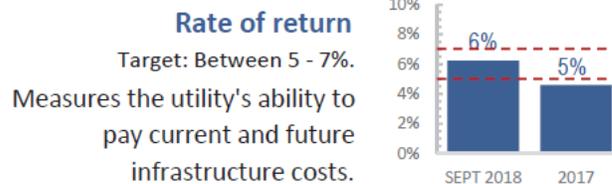
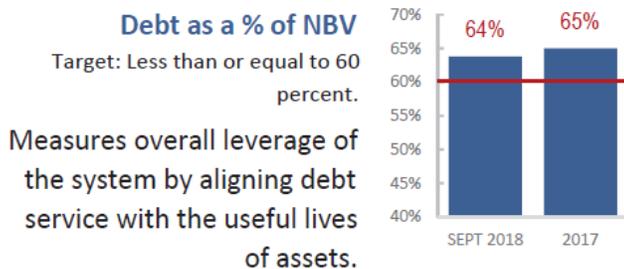
Division	2018 Working Budget	2018 SEPTEMBER YTD Working Budget	2018 SEPTEMBER Actuals	% of Actual to Budget	2018 YTD Variance to Straight Line Budget	2018 YTD Reported Variance
Customer Solutions	5,215,000	3,911,000	2,694,000	51.7%	1,217,000	230,000
Electric (Includes Bldg. Ops & Security)	9,130,000	6,847,000	7,261,000	79.5%	(414,000)	(593,000)
Energy (Includes Environmental)	9,326,000	6,995,000	6,583,000	70.6%	412,000	94,000
Finance Cust. Operations	440,000	330,000	313,000	71.1%	17,000	8,000
Financial Services	2,552,000	1,914,000	1,747,000	68.5%	167,000	(6,000)
General Manager	134,000	101,000	92,000	68.7%	9,000	-
Human Resources	804,000	603,000	521,000	64.8%	82,000	(6,000)
Information Services	3,039,000	2,279,000	2,925,000	96.2%	(646,000)	(477,000)
Water (Includes Fleet and Utility Support Svc.)	1,600,000	1,200,000	1,108,000	69.3%	92,000	(46,000)
Grand Total	32,240,000	24,180,000	23,244,000	72.1%	936,000	(796,000)

Electric Capital

Year-to-date capital spending was \$23 million or 61% of the annual budget. The majority of capital costs incurred are for Type 1 Distribution Renewal and Replacement including spending for transformers, network protectors and meters. Year-to-date Type 2 capital spending is lower than expected due to the impact of the CIS Replacement project which was moved from capital to O&M in June. The Type 2 capital budget also includes upgrading the meter infrastructure, which is scheduled to ramp up in the 4th quarter. For further detail on Electric Capital Spending, see *Appendix C - EL1 Report*.

Electric Financial Strength Measurements





As of September 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 (4% 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 \$12 million, plant in service increased by \$20 million, or some combination of the two. The \$12.4 million debt service payment made in August reduced Debt as a % of NBV from 66% to 64%. There is currently \$30.8 million in Construction Work in Process and \$33.1 million in Preliminary Surveys for Carmen-Smith relicensing. Achieving the metric will be dependent on when this work is placed in service, future bond issuances, and debt repayment schedules. If the Electric Utility places 100% of the 2018 capital budget into service and issues no new debt, the Debt as a % of NBV would decrease to 61%.

Electric Reserve Levels

The Rate Stabilization Fund balance remains well above Board target and includes approximately \$21.5 million designated to reduce future borrowing for capital projects. Working cash balances are still above target after debt service payments of \$12.4 million in August. The Board discusses the use of reserves above target each spring after the year-end financial audit. The Board will also discuss the use of reserves above targets at the November 2018 Board meeting. Proposed uses will consider payment of pension and other obligations. September balances are presented below:

Electric Utility Schedule of Cash Reserves

	FINANCIAL POLICY	TARGET	BALANCE
	REFERENCE		9/30/2018
Working Cash	Rate Sufficiency	\$ 36,000,000	\$ 52,230,218
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 ⁽¹⁾	Capital Reserve	22,000,000	29,737,815
Rate Stabilization Fund ⁽²⁾	Rate Stability	5,000,000	37,048,759
Pension & Post-Retirement Medical Fund		-	16,142,929
Business Growth & Retention Loan Fund		-	1,986,168
DESIGNATED FUNDS TOTAL		\$ 47,720,000	\$ 105,772,350
CASH & DESIGNATED FUNDS TOTAL		\$ 83,720,000	\$ 158,002,568

⁽¹⁾The Capital Improvement Reserve includes \$4.7 million designated to fund 2018 capital work and 2019 meter installation costs.

⁽²⁾The Rate Stabilization Fund includes \$21.5 million designated to reduce future borrowing.

Electric Utility Financial Outlook

The Electric Utility is forecasting an addition to reserves for the year of \$15.9 million, compared to a budgeted reserve addition of \$11.6 million. This is driven by a forecasted favorable Contribution Margin of \$5.1 million partially offset by \$800,000 in unfavorable non-labor O&M. Retail revenue is tracking with the year-to-date budget. A strong hydro year and conservative budget assumptions are driving higher than budgeted wholesale revenues which are partially offset by increased purchased power costs. Additionally, the spill injunction has been less impactful than originally anticipated due to the strong water supply in the Columbia River Basin. The spill injunction could have more financial impact in lower water supply years when BPA is required to spill for fish passage when they would otherwise store water.

The 2018 budget included \$500,000 in savings from position vacancies. At the end of September, the Electric Utility has realized \$1.3 million in vacancy savings in both capital and O&M and is projected to reach \$1.5 million in total vacancy savings by the end of the year. However, vacancy savings have been offset by overtime, CIS reclassification related to labor, and the creation of an Advanced Meter Services (AMS) department to assist with the meter infrastructure replacement project.

Expensing the CIS project will increase electric O&M costs. EWEB issued a Notice of Termination to the CIS vendor in May 2018. Termination negotiations with the vendor are underway. The shift from capital to O&M results in an anticipated unfavorable impact to electric O&M of approximately \$2.3 million, including costs-to-date (net of requested vendor reimbursement) as well as labor and overhead previously budgeted as capital. This unfavorable impact to O&M is offset by a favorable impact to capital spending.

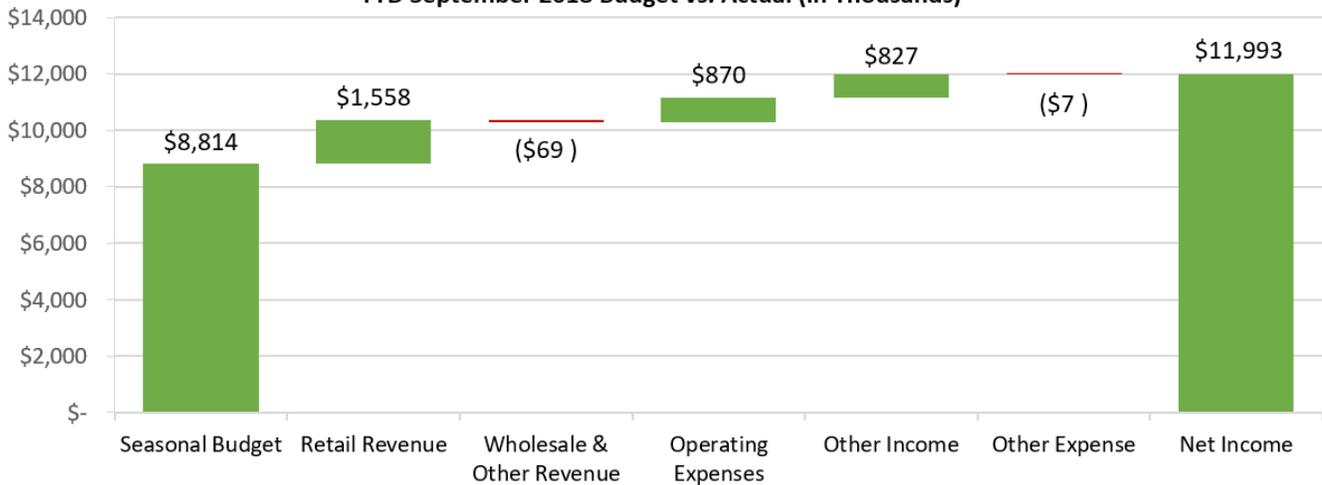
Year-to-date capital spending is at 61% of budget. A 20% - 25% shortfall in capital spending in 2018 would reduce the overhead allocations by \$800,000 to \$1 million because overhead expenses are not transferred from O&M to capital until work is performed. Some capital projects have lower overhead transfers due to the type of project, which can impact the overhead transferred to capital as well. Last year's shortfall was 21%. See *Appendix A - Electric Utility Financial Statement* for an interim summary statement.

Water Utility Financial Report

Financials

For the nine months ended September 30, 2018, net income for the Water Utility is \$12.0 million. This is \$3.2 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 Utility Net Income Variance
YTD September 2018 Budget vs. Actual (in Thousands)



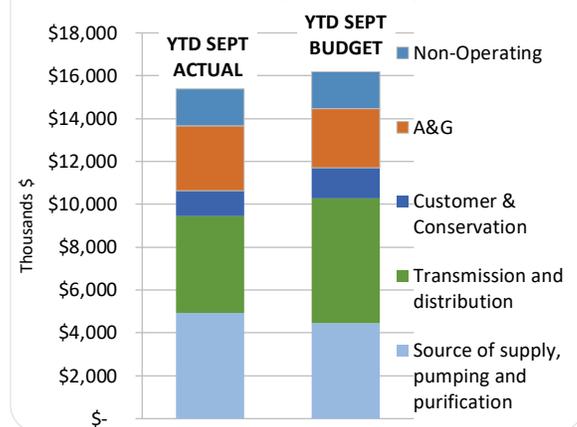
Water Operating Expenses

Through the end of September, 75% of the annual budget year has passed. Water O&M expense is at 71% of the annual budget through September. The \$870,000 favorable budget variance in **operating expenses** results from unallocated budget for contingencies (\$600,000). The overall favorable variance is also driven by positive variances in professional and maintenance services and contracted labor. **Non-operating revenues** have a favorable variance of \$827,000 primarily due to a gain on the sale of the riverfront property (\$760,000). And **non-operating expenses** are in line with budget expectations as of September.

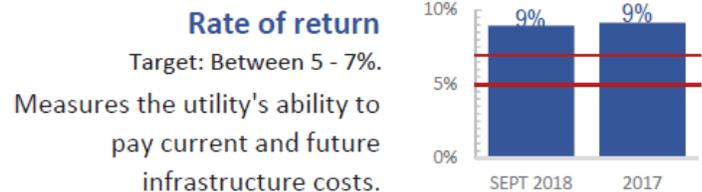
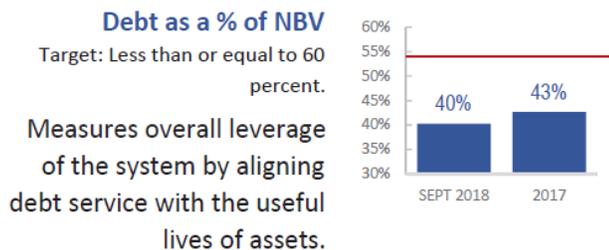
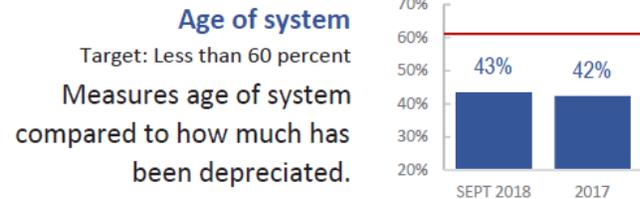
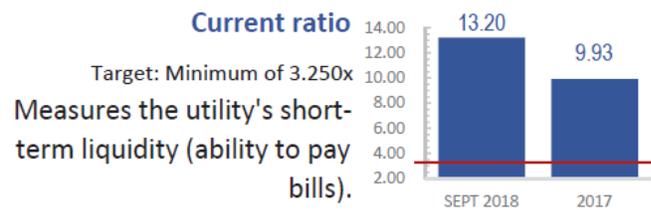
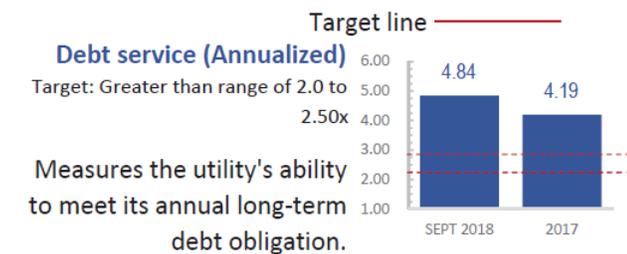
Water Capital

Year-to-date capital spending is \$8.9 million or 65% of the annual budget. Type 2 capital spending is lower due to the timing of major projects, like the Hayden Bridge disinfection system, as well as the impact of the CIS Replacement project which was moved from capital to O&M in June. See *Appendix C - EL1 Report*

Water Utility O&M Expenses



Water Financial Strength Measurements



Other than the rate of return, all ratios are performing better than Board targets. The rate of return is dependent on operating income and net utility plant in service and continues to be above the target ceiling at 9%. Following the February rate decrease, this metric should move toward the targeted range (5%-7%). It remains elevated due to positive variances from operating revenues and expenses, as well as, the steady pace of capital closeout activity.

Operations & Maintenance Budget Monitoring

The Water Utility is projecting a favorable non-labor department variance of \$171,000 to budget. Water Operations' spending is greater during the summer months. Maintenance, construction, and professional services historically ramp up mid-year and begin to wind down heading into the 4th quarter. Water Operations is expecting to be favorable to budget by year-end largely due to savings in professional services and contract labor.

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

(Excludes Labor and Revenues)

Division	2018 Working Budget	2018 SEPTEMBER YTD Working Budget	2018 SEPTEMBER Actuals	% of Actual to Budget	2018 YTD Variance to Straight Line Budget	2018 YTD Reported Variance
Customer Solutions	593,000	444,000	260,000	43.8%	184,000	21,000
Electric (Includes Bldg. Ops & Security)	465,000	349,000	298,000	64.1%	51,000	17,000
Energy (Includes Environmental)	67,000	50,000	46,000	68.7%	4,000	33,000
Finance - Cust. Operations	97,000	73,000	64,000	66.0%	9,000	2,000
Financial Services	547,000	411,000	330,000	60.3%	81,000	(3,000)
General Manager	30,000	22,000	13,000	43.3%	9,000	-
Human Resources	177,000	132,000	114,000	64.4%	18,000	(1,000)
Information Services	660,000	495,000	642,000	97.3%	(147,000)	(105,000)
Water (Includes Fleet and Utility Support Svc.)	5,451,000	4,088,000	3,610,000	66.2%	478,000	207,000
Grand Total	8,087,000	6,064,000	5,377,000	66.5%	687,000	171,000

Water Reserve Levels

Working cash balances are still above target after making debt service payments in August (\$3.3 million). The Board discusses the use of reserves above target each spring after the year-end financial audit. The Board will also discuss the use of reserves above targets at the November 2018 Board meeting. Proposed uses will consider payment of pension and other obligations. September balances are presented below:

Water Utility Schedule of Cash Reserves

	FINANCIAL POLICY		BALANCE
	REFERENCE	TARGET	9/30/2018
Working Cash	Rate Sufficiency	\$ 3,400,000	\$ 9,036,618
DESIGNATED FUNDS			
Operating Reserve	Rate Stability	\$ 1,000,000	\$ 1,012,184
Self-Insurance Reserve	Rate Stability	280,000	288,712
Capital Improvement Reserve ⁽¹⁾	Capital Reserve	7,000,000	12,286,926
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	\$ 26,643,008
CASH & DESIGNATED FUNDS TOTAL		\$ 12,680,000	\$ 35,679,626

⁽¹⁾The Capital Improvement Reserve includes \$2.5 million designated to fund meter installation costs in 2019 and 2020.

Water Utility Financial Outlook

The Water Utility has a \$2.4 million favorable net operating income variance to budget. Water revenues have continued to exceed budget. Through September 30, 2018, operating revenue is favorable by more than \$1.5 million. Operating expenses are \$870,000 favorable to budget, which has improved since last month.

The 2018 budget included \$150,000 in savings from position vacancies, and through the end of September 2018 \$400,000 has been realized. The Water Utility is projecting vacancy savings to be approximately \$450,000 by the end of

2018. However, vacancy savings have been offset by overtime, CIS reclassification related to labor, and the creation of an Advanced Meter Services (AMS) department to assist with the meter infrastructure replacement project.

Non-labor savings, excluding contingency, are projected to be \$170,000 favorable. The contingency fund balance is \$800,000, which will help cushion the impact of cancelling the CIS software purchase contract. The anticipated unfavorable impact to water O&M is approximately \$500,000, including the reclassification 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.

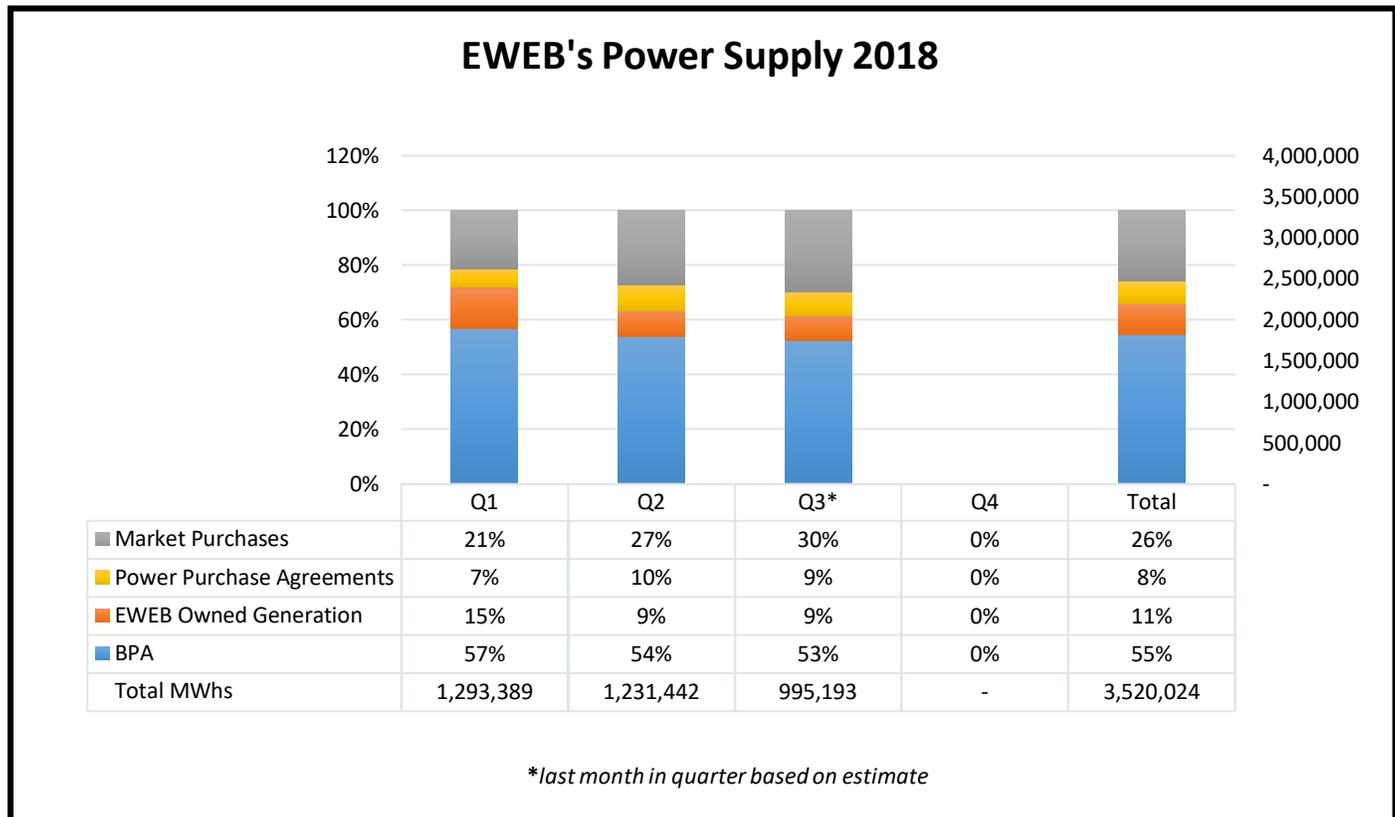
Currently, operating expenses are projected to be \$470,000 under budget by end of 2018. However, a 20% - 25% shortfall in capital spending in 2018 would reduce the favorable variance by \$400,000 to \$500,000 because overhead expenses are not transferred from O&M to capital until work is performed. Some capital projects have lower overhead transfers due to the type of project, which can impact the overhead transferred to capital as well. Last year's shortfall was 23%.

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 third quarter, EWEB generation totaled 995,193 MWhs with 53% supplied by the Bonneville Power Administration (BPA), 9% from EWEB-owned generation, and the remainder from power purchases.



Generally during the third quarter of the year, EWEB has most or all electric generation units available but experiences diminishing output during the quarter due to both a decrease in stream flows and a decrease in summer winds. The thermal plants generally operate well during the third quarter. This year we are completing the first of two consecutive capital construction outages at the Carmen Powerhouse, and the Carmen plant was offline during the quarter. It is expected to return to service in November. In addition, due to a lack of fuel (water) only one of the two Leaburg units operated during the quarter, and we were forced to cease generation at Trail Bridge due to forest fire activity near the BPA transmission line at Cougar. Finally, the Stone Creek Plant was offline for the month of September for planned Portland General Electric work at their Oak Grove Substation. The output from Stone Creek ties in to the regional grid at Oak Grove. As a result, our production of hydroelectricity was below plan. The steam plants experienced minor outages, but exceeded the planned availability and the wind farms operated above plan for availability and output.

Q3 2018 Generation Reliability by Fuel Type

Generation Type	Availability Factor	Forced Outage Factor	Notes
Target	> 90%	< 3.00%	
Wind	94.93%	N/A	Meeting plan.
Hydro	22.40%	6.60%	Carmen plant offline. One Leaburg unit offline due to lack of water. Trail Bridge offline for a month due to forest fire. Stone Creek offline in Sept due to planned PGE work.
Thermal	98.46%	1.27%	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 and Trail Bridge) and collectively. The Leaburg units have a higher FOF due to a lack of fuel (water) in the lower McKenzie that caused us to shut down one of the turbines for the entire quarter. Trail Bridge isn't meeting plan due to the extended disruption caused by the Terwilliger fire near Cougar. The availability factor (AF) for EWEB-owned hydroelectric facilities didn't meet the target due to the extended work outage affecting both Carmen units and the lack of water for normal operations at Leaburg.

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 in March and the planned major maintenance overhaul of the unit in May. The Wauna (WGA) turbine is also not meeting plan for forced outages due to a maintenance outage during Q2, but it is expected to get back within the target before the end of the year.

The year-to-date capacity factor for our hydro facilities is 25.47, largely affected by the Carmen plant outage, and for our thermal facilities is 46.83, largely driven by the extended IP outages.

September 2018 Generation YTD Report



Parms: Plant Management Control = No, Include Deratings = No, Gross = Yes, Data Last Loaded Date: 10/3/2018

Unit	Year	Month	AF	FOF	GCF	GOF
CSU1	2018	09	38.09	0.28	15.95	53.64
CSU2	2018	09	34.51	0.31	3.32	62.64
TBU1	2018	09	91.94	6.88	47.40	51.87
LBU1	2018	09	67.23	25.79	54.91	81.68
LBU2	2018	09	82.80	10.99	75.37	91.02
WVU1	2018	09	94.87	0.00	70.83	74.66
STCU1	2018	09	89.99	0.07	57.45	63.84
EWEB Hydro	2018	09	51.87	2.63	25.47	65.47
IPU4	2018	09	63.25	14.97	48.61	76.86
WGAU1	2018	09	91.37	3.90	45.57	49.87
EWEB Therm	2018	09	79.70	8.50	46.83	58.76
HW	2018	9	95.62			
FC	2018	9	94.19			
Wind	2018	9	94.75			

Electric Delivery Reliability

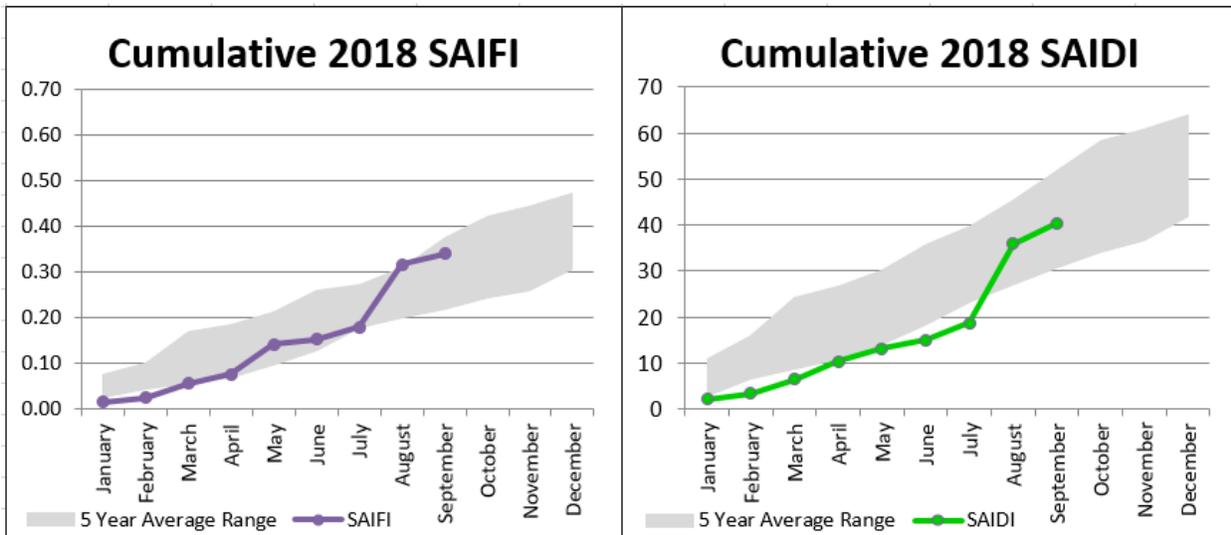
EWEB tracks electric system reliability using Institute of Electrical Electronic Engineers (IEEE) metrics, including System Average Interruption Frequency Index (SAIFI) & System Average Interruption Duration Index (SAIDI). Outage rates in August and September increased significantly from January through June. Mainly due to uncontrolled trees, dried out cross-arms and underground cable. However, we are still tracking well with our 5 year averages and our Northwest reliability metrics. A couple substation outages also affected the overall numbers, the Spring Creek construction wiring error and the Thurston PT failure. See Appendix E – Electric Reliability Index Report.

Third Quarter Outages

Total # of outages	Total # of customers interrupted	Total outage minutes
57	2,095	423,244

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	0.340	0.282	0.30	
SAIDI (minutes)	40.42	38.86	32.40	



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
PCOP = Potential Customer Outages Prevented

Month	Planned (line miles)	Completed (line miles)	% Completed	PCOP	Status
June	23.33	17.5	75%	3,307	●
July	23.3	17.43	75%	4,735	●
August	23.3	12.24	*52%	4,476	●
September	23.3	24.0	103%	4,350	●
YTD totals	210	207	98%	32,817	●

*Due to heavy climb (can't work from bucket trucks), increase of customer requests and quite a few crane jobs that were very time consuming jobs to complete.
PCOP = Potential Customer Outages Prevented

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.

Yearend Electric capital spending is expected to be around %100. Approximately \$3.0 million dollars spending from the canceled CIS project were shifted into other Information Service projects, Fleet purchases, the ROC/HQ consolidation and various Type 1 Distribution renewal and replacement projects.

Note: Target Cost Performance Index (CPI) is 1.0. CPI>1.0 represents slower than expected project spending rate; CPI<1.0 represents a faster than expected spending rate – when compared to straight line budget approximation (% of year complete).

Project Execution – 2018 Capital Improvement Plan performance
(Data through September)

Type 1: Replacement and Renewal

\$10.4M spent (budget \$12.49M, includes pre-capitalized equipment) 83% dollars spent
CPI – 0.90 (.04 spending rate increase over last month)
\$14.7M YE Projection (118%).

Type 2: Large Capital Projects

\$4.7M spent (budget \$11.6M¹) 40% dollars spent.
CPI – 1.87 (0.04 increase in spending rate over last month)
\$9.5M YE Projection (81%)

Type 3: Carmen Smith

\$8.2M spent year to date (budget \$13.8M) 59% dollars spent.
CPI – 1.27
\$12.5M YE Projection (91%)

Total:

\$35.3M spent year to date (budget \$37.9M) 93% dollars spent
CPI – 0.8
\$36.9M YE Projection (98%)

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. Staff has met individually with Commissioners to gather feedback on suggested resource planning principles and to discuss the Pacific Northwest’s supply adequacy situation, which may affect EWEB’s future resource strategy. Between now and 2021, some of EWEB’s power supply resources are up for renegotiation or renewal/expiration. EWEB is assessing the value of these resources in the Utility’s supply portfolio. Generally, between now and 2021, EWEB’s “long” resource position will likely contract somewhat and bring the Utility closer to load-resource balance, which is generally positive for customers.

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. Work during the third quarter focused on installing the new valves and welding them in place. This work is largely complete. We expect the new valves to be tested during the second half of October and the Carmen Plant returned to service in early November.

During a site inspection in July, FERC dam safety staff from Portland documented a concern regarding sinkholes present in the native material that forms the bottom of Carmen Diversion Reservoir. EWEB subsequently completed a bathymetric survey of the lake bottom and found minor changes in several sinkholes from the previous survey conducted in 2016, and the addition of a new sinkhole that wasn’t identified in 2016. We then completed two types of geophysical testing at the reservoir and conducted a dye test at the sinkholes using divers.

As a result of the initial findings from the bathymetry, EWEB lowered the level of Carmen Diversion to a minimal pool elevation of 2621 feet. Normal pool is 2625 feet, and for most of the year, we have been operating at 2626 feet or above due to the Carmen power tunnel outage. The FERC has since directed EWEB to keep the elevation of the reservoir at or below 2621 feet until they give us permission to go higher. We continue to work with the FERC on additional investigation work and a plan for both winter operations and long-term mitigation of the sinkhole concerns raised by the FERC. This

¹ Board approved budget is currently \$11.4M per May True Up approval. However, a decision has been made by finance to transfer funds from O&M to Capital to cover the ROC Consolidation Project, which was recently determined to be capital rather than O&M. The transfer is pending, however the numbers in this report reflect the \$250k transfer.

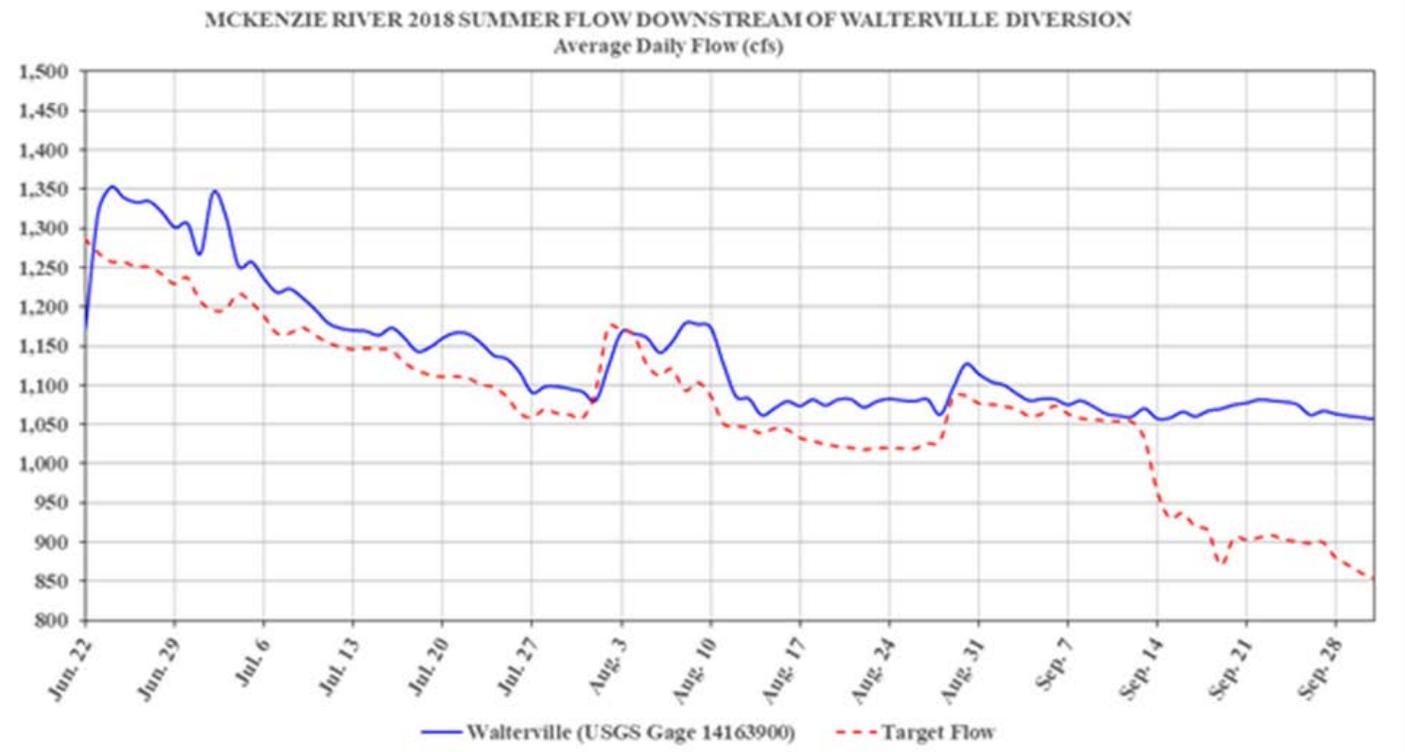
work is expected to continue through 2018 and 2019 before resolving. The Carmen power plant is scheduled to operate from roughly November through March before being taken offline for the second year of powerhouse construction. The results of the additional investigation work may reveal conditions that result in additional outage time ahead of the March offline date.

Staff also continue to make good progress on power plant modernization work planned for 2019 through 2021. Staff have issued the request for bids for the planned 2019 Carmen substation work and will bring the resulting contract to the Board as early as the December Board meeting if the bid opening in mid-November and subsequent contractor qualification reviews proceed smoothly. 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.

FERC is actively processing the license application for Carmen-Smith with issuance expected in late 2018 or early 2019. Staff are currently planning for the engineering and deployment of several major environmental and aquatic improvements required by the license.

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 than we are putting in the Walterville power canal. The license requirement for instream flow in this reach is 1,000 cubic feet per second (cfs), and EWEB tries to maintain a minimum of 1,050 cfs throughout the year. 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. Results so far indicate that the operational changes were likely beneficial to fish migration, but the costs incurred from lost generation (roughly \$50,000) exceeded initial estimates (\$34,000) due to higher than expected power prices.



Leaburg

Following the annual FERC dam safety inspection of the Leaburg and Waltherville projects in September, FERC dam safety personnel from the Portland Regional office directed EWEB to dewater the Leaburg Canal in response to their concerns regarding seepage and sediment piping along a stretch of the canal downstream of Cogswell Creek. Responding to FERC's directive, EWEB notified residents in the area of FERC's concerns and EWEB's planned dewatering. Staff worked extensively with the nearby ODFW salmon hatchery as they assessed their operational water needs and planned for the inevitable reduction in flow to the hatchery which would result from the FERC-mandated dewatering of the canal. EWEB staff conducted twice-daily inspections of the seepage area, and planned for the dewatering of the canal. Canal dewatering took place in early October. Investigation, design preparation and repair of the canal are expected to occur during the fourth quarter of 2018.

Electric Master Planning

A draft master plan is underway with a targeted completion date by Q2 2019. Some additional detailed analytical assessments will be contracted to complete portions of this work. Originally the draft master plan was due to be completed in 2018. During the 2018 Capital true up process, Board members requested independent audit of the capital process. Our Master plan work will now include Asset Management process development and audit by an independent contract. Initial scoping of a detailed Asset Management Plan has been initiated, and will start with a study of a single asset and review of overall approach.

Holden Creek Substation

The Holden Creek substation, located on Hwy 126 near Leaburg, construction and commissioning has been completed, and tie into the Bonneville Power Administration's Thurston-Cougar 115kV transmission line completed in late April. The substation will remain in this state until mid-2019. Planning and procurement is underway to add an additional distribution power transformer to the station to increase resiliency of this site and to provide a backup source in the event of a transformer failure to the upriver customers. Following this addition, the Leaburg Substation will be re-configured with load placed added, and generator circuits fed to Holden Creek. This work is currently designed and under contract and will be completed Q2/Q3 2019.

Spring Creek Substation

The Spring Creek substation, located on northwest Eugene, underwent extensive reliability (Type 1) upgrades this summer to outdoor equipment and all the feeder getaway cables. Equipment replaced included two Transmission 115 kV circuit breakers, eight 115 kV disconnects, four new 115 kV PTs and relay and control upgrades in the control house. The substation outages for construction allowed the opportunity to update 10,860 feet of Distribution feeder getaway cables. The upgrades significantly increased the reliability for the 4150 Spring Creek substation customers.

Improving Distribution Customer Construction Turn around Times

In late summer of 2018, the electric operations planning group identified a backlog of customer capital, PUC and renewal and replacement work. To reduce the back log, and customer wait times (6 weeks), the planning group identified the need to have crews work overtime to catch up. Line Tech crews were asked on a voluntary basis to work overtime to accomplish these tasks. In addition, we added one contract line tech crew to the work schedule starting in September.

The Line Tech crews worked a total of six overtime days, which consisted of five Fridays and one Saturday. There was eleven customer capital job completed, eight renewal and replacement jobs completed, and one school shut down for the alternate water source project. Customers are not charged overtime rates.

Since the completion of this overtime work, and the contract line tech crew coming on board, we have reduced our customer capital wait time from six to three weeks, and PUC work is back on schedule.

See Appendix C - EL1 Report for Electric, Water & Shared Services 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

Bi-weekly routine cyanotoxin sampling continues to show low levels of cyanotoxins (i.e., cylindrospermopsin) in Blue River and Cougar Reservoirs, but not detected at the raw water intake. Water Quality Lab staff have setup and trained on the new ELISA cyanotoxin analytical testing equipment and will receive the first environmental samples on 10/15/18. EWEB provided comments on the proposed cyanotoxin monitoring rules from Oregon Health Authority and expect to see another draft version for review the week of 10/22/18. One major surprise in the proposed rules was adding the use of genetic testing to determine if a cyanobacteria bloom has the propensity to produce toxins based on presence of toxin genes. This new testing would be in addition to ELISA and require outside lab services.

Water Quality staff completed compliance sampling for lead/copper in EWEB customer homes. EWEB staff tested water samples from 50 customer homes for lead and copper as part of OHA compliance reporting. EWEB is in compliance with all requirements of the lead/copper rule.

EWEB staff are working with the U.S. Forest Service (USFS) and Oregon State University (OSU) to design a study to assess water quality impacts from the Terwilliger Fire and determine if wildfires influence harmful algal bloom dynamics in subsequent years. EWEB/OSU sampling teams will target the first 4 major storm events to sample storm runoff from two creek tributaries in burned areas that discharge into Cougar Reservoir, as well as sampling Cougar Reservoir, South Fork McKenzie below the dam, and the McKenzie River to assess impacts from the fire.

EWEB staff are working with the Region 2 HazMat Team and McKenzie Fire & Rescue to plan the 2018 spill drill for 10/18/18. This year's hypothetical scenario involves a release of 5,000 gallons of diesel fuel at Hendricks Bridge from a tanker truck accident that will lead to shutting down the Hayden Bridge intake for a few hours to allow the main slug of the plume to flow by the intake. Approximately 10 different agencies will be involved in the spill drill.

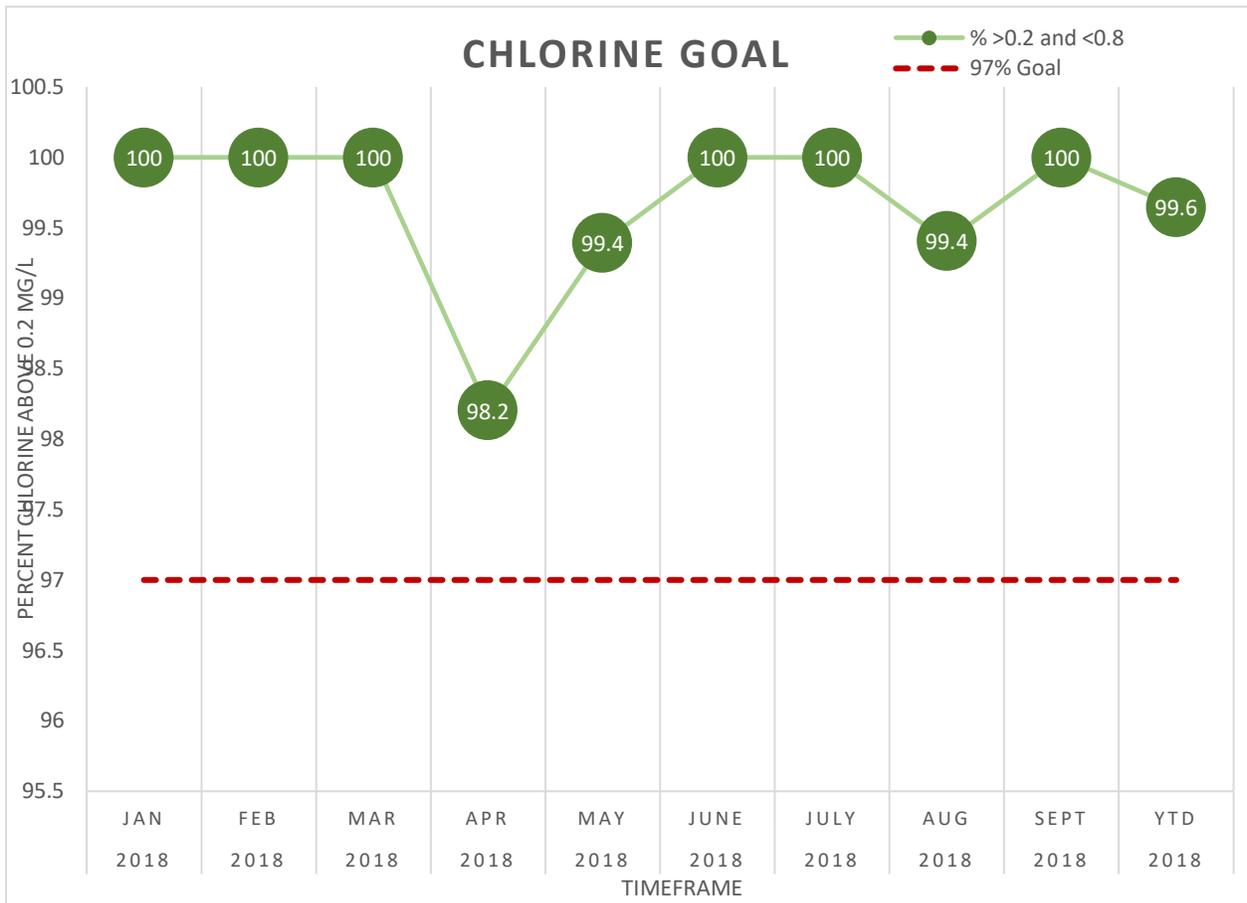
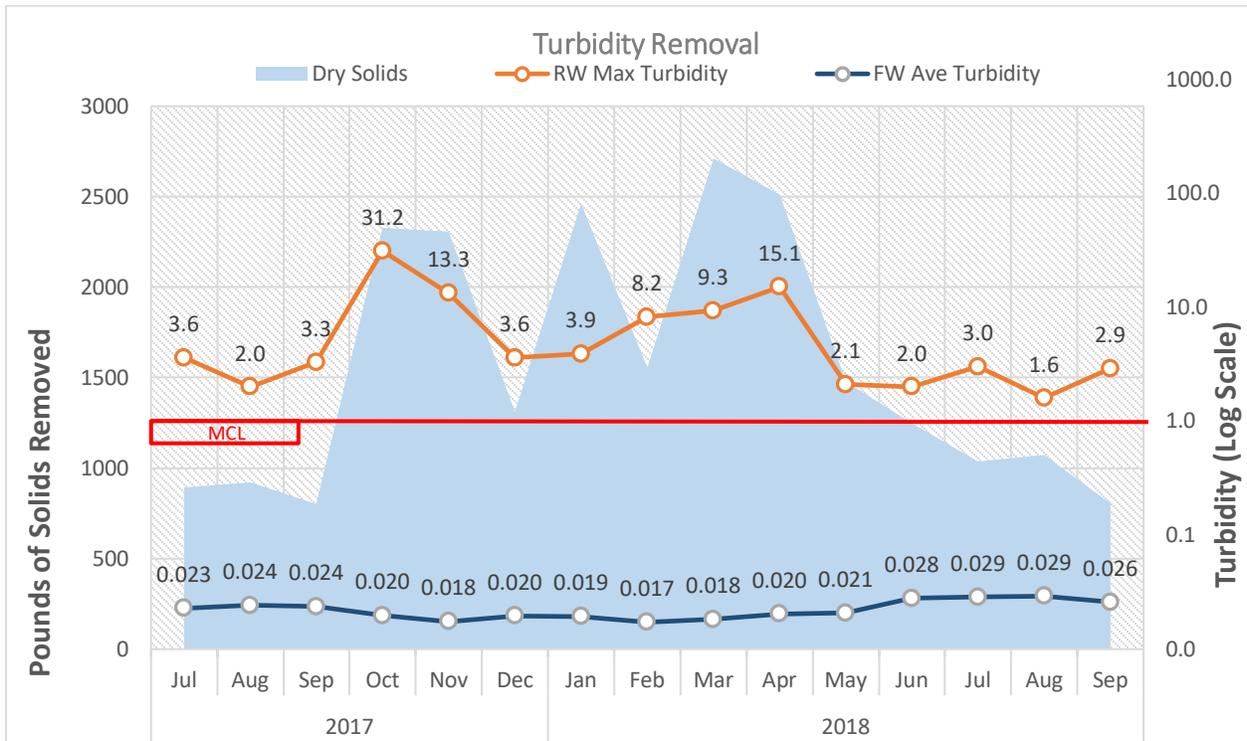
The Source Protection Septic System Assistance Program was successfully transferred to Customer Solutions for continued administration. This makes it easier for EWEB customers living in the McKenzie Valley to access this program and provides better consistency with other EWEB customer assistance programs.

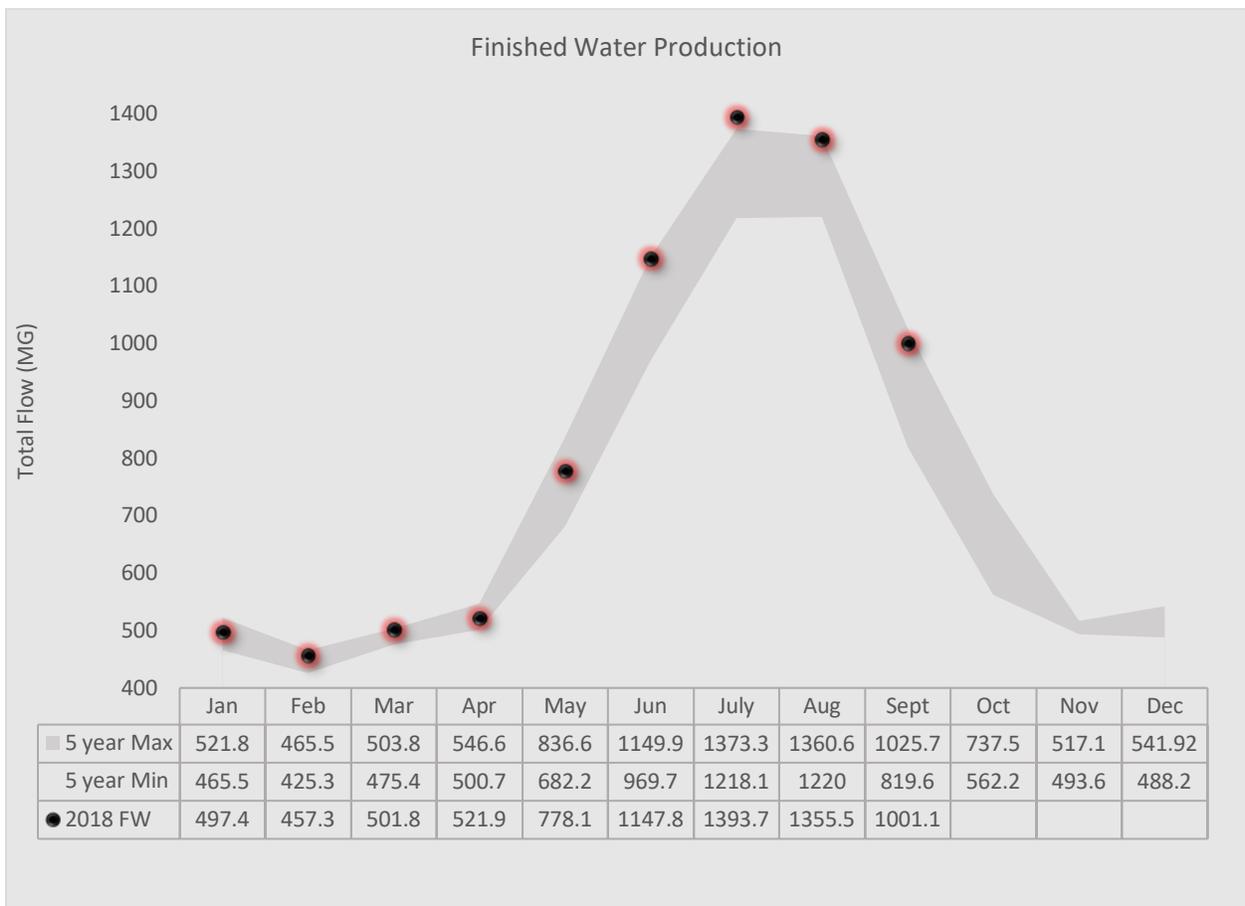
Water Production

The Water Research Foundation collaborative project, 'Impact of Intermittent Operation on Biofilter Performance' has been given notice to proceed. Baseline data has been accumulating since April and the initial test phase for the pilot project will begin in November. The pilot filter has been biologically active since May.

During the 3rd quarter water production outperformed 2015 in finished water flow. 2018 is on track to be our biggest production year since 2009. Summer maintenance activities concluded in September and the current focus is on the impending fire impacts and residual algae die off.

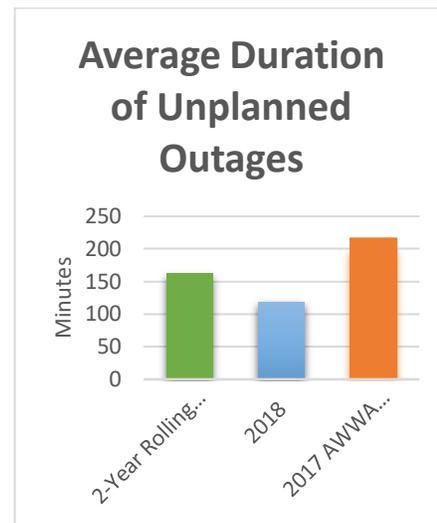
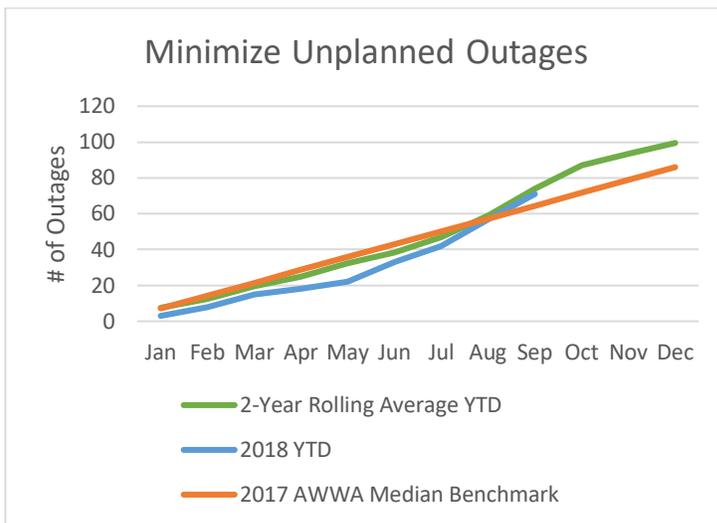
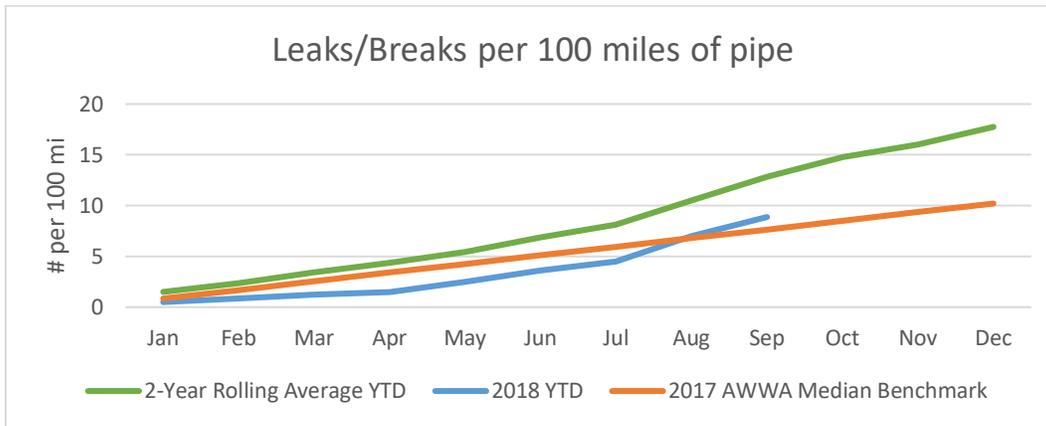
Performance charts for treatment efficiency and finished water output for the Hayden Bridge Filtration Plant are shown below.





Water Delivery Reliability

Goal	Unit	AWWA Median Benchmark	YTD Results
<i>Ensure Reliability of Water Products</i>			
Leaks and Breaks per 100 Miles of Pipe	#	10.2	8.875
Minimize Unplanned Outages	#	86	71
Average Duration of Unplanned Outages	Minutes	216	118
Boil Water Notices	# of Notices	None caused by EWEB	1



Significant Outages

There was one significant outage event in Water Operations for Q3. It was a large main break on Norckenzie Road just north of Beltline on July 5th. Water Operations was able to isolate the break and repair by end of business on the same day. The break was initially large enough that water pooled in a neighboring parking lot and eventually entered the building at 1040 Green Acres Road.

There was one boil notice in Q3 that affected a single service. As part of a scheduled water outage for a main replacement, a mapping error for one service caused us to depressurize a section of main with one customer connected, before the customer’s service was shut down. The customer was notified of the boil water procedure and the boil notice was lifted within less than 24 hours.

In Q3, there was an increase of water leaks and breaks due to the temperature change and rain, although minimal. The temperature change and rain causes the soils to shift, which causes main breaks. These times of the year are known as the shoulder months and happen every Spring and Fall. We routinely see an uptick of leaks in the beginning of every shoulder season.

Water Regulatory Compliance

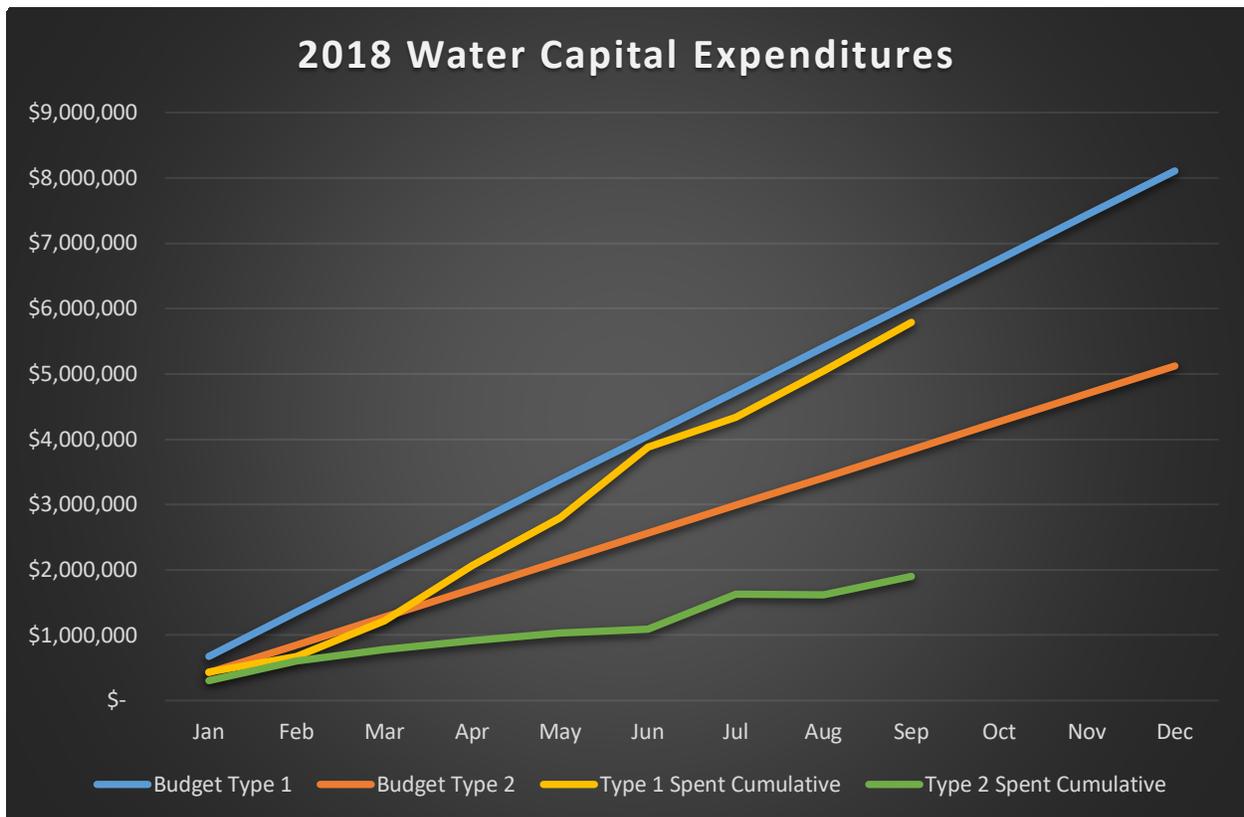
The 2018 Oregon Health Authority (OHA) Water System Survey was completed and there were three significant deficiencies noted in the report.

- Water submitted to OHA the corrective action plan on September 7th for the deficiencies noted. The plan was accepted and approved by OHA at that time.

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 have started as well as a large main replacement 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 fourth 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 have begun which will raise expenditures in this area in the fourth quarter. Lastly, the cancelation of the CIS project resulted in a significant reduction in Type 2 Spending.



Blackstart Assessment - Lower McKenzie River projects

During Q1, a consultant to EWEB completed an assessment of both the Leaburg and Waltherville hydroelectric plants for their ability to accommodate blackstart capabilities. The consultant found that the Leaburg plant currently has blackstart capability, but the study also identified that emergency loads identified by EWEB were slightly higher than the output available from Leaburg. Further studies to determine capabilities of the Weyco #4 generator for black start and load capabilities have been scoped with the study to be completed in Q1 2019. The Weyco #4 generator is co-owned/operated with International Paper (IP), with negotiations just starting for contract renewal, so the results from the study may be included in the new agreements with IP.

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, EWEB has been continuing to improve our Outage Management process. The new process was tested during a “Blue Sky” drill September 20th with a storm scenario with all of the Electric ICS structure. The drill identified some process gaps and slow work flow areas. Another “Blue Sky” drill has been scheduled for November 15, 2018 to test the process changes after the September 20, 2018 “Blue Sky” drill.

A new and improved external website includes a new Customer facing Outage map that will allow customers to view information and estimated time of restoration about their outage, as well as safety and restoration information. Customer facing outage information improvements position EWEB to execute fully integrated public information campaigns during major outages.

Distributed/Neighborhood Emergency Stations

Over the next five years, EWEB will deploy distributed “neighborhood” emergency stations for water distribution and independent electric operation (a.k.a. Microgrid). In 2018, EWEB began working with two local school districts to design and construct two “neighborhood” emergency stations, including both water and electric infrastructure.

The two schools chosen to start with were Kalapuya in the Bethel School District and Howard Elementary in the 4J School District. Kalapuya is a water only emergency station and was completed in September and unveiled with a public demonstration day, October 6th, which was well attended. The Howard MicroGrid Project is complete and in service now. The water supply is 90% complete. A public demonstration project is being planned for spring 2019 to demonstrate the electric and water emergency functions.

Electric Neighborhood Microgrid Project (Howard Elementary)

Commissioning complete		9/4/2018	10/5/18	Final Commissioning is complete and staff are arranging training and completing final punch list items. The well pump and control panel will be installed in the spring after which a functional exercise will be completed.
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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 were required in the equipment which we have implemented during the third quarter. Our second round of testing is currently underway.

Hayden Bridge Emergency Generators

Emergency back-up generators for the Hayden Bridge Treatment Plant and Intake have been delivered and construction of the installations is on-going. This back-up generation will be of sufficient capacity to deliver about 20 mgd, and have fuel capacity to run 24 hours (full load) without being re-fueled.

Proactive Mitigation of Illegal Camping above Hayden Bridge Intake

Illegal camp inspections increased to once a week in the 3rd quarter 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. EWEB staff greatly appreciate the efforts and response to camp cleanups from Willamalane and City of Springfield staff. Camps were noticed and cleaned up within 48 hours of identification and illegal camping activity above EWEB's intake has significantly decreased as a result of these weekly inspections/cleanups. A larger part of this decrease in camping activity is due to Willamalane and City of Springfield staff efforts.

(Data is for camps only above Hayden Bridge intake, not EWEB property overall)

of EWEB inspections: 21

of camps found: 32

of camps cleaned up: 32

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

In the third quarter EWEB supported 58,000 customer interactions, approximately 900 per day.



Customer Response Metrics

Measure			Comments
GOAL	TARGET	Q3	
Call Center			
Maintaining or improving the Call Center Average Speed of Answer	< 90 seconds	●	Avg Speed Answer Q3: 59 sec
Maintaining or improving the Call Center Abandonment Rate	< 7%	●	Abandon rate Q3: 3.7%
Meter Reading			
Maintaining or improving the meter reading accuracy rate	>99.96	●	YTD accuracy Jan-Aug: 99.964

Credit & Collections

Net write-offs through August totaled \$296,000. For the same time period, the 2017 write-offs were \$208,000. Collection efforts were down in 2017 for two primary reasons. After the December 2016 ice storm, collection efforts were suspended for a few months due to the high volume of estimated bills and in September 2017 through December 2017 credit and collections staff were assisting with the implementation of a new connect/disconnect process. The 2018 budget for uncollectible accounts is \$480,000, and net write-offs are anticipated to be within budget.

Customer Operations Initiatives

- The Customer Service call center expanded phone hours in the evening effective July 23. New phone hours of operation are 9:00am-6:30pm. The team receives between 10-30 calls during the extra hour each evening, and has taken a total of 687 calls since the launch.
- The call center teamed with Information Services to allow credit card processing for customers who call in. Although we offer an automated pay-by-phone system and an online payment portal, many customers prefer the assistance a customer service analyst can provide. EWEB went live with this service on October 8th.

Meter Infrastructure Upgrade Project

EWEB is upgrading meters through 2021 in order to provide customers with better service, build a more resilient community and create a cleaner energy future. The newly formed Advanced Meter Services department continues developing skills with new technology and supporting the route-based meter upgrade project which officially started in October. The installation rate will ramp up in the fourth quarter which will provide opportunities to refine deployment process, address inventory levels, & train staff. Communications staff has prepared extensive deployment related materials including: bill stuffers, deployment maps, door hangers, and informational brochures, as well as updating the website.

Meter Report

Electric meters installed as of July 1: 7,722	Water meters installed as of July 1: 1,635
Electric meters installed as of Oct 1: 9,751	Water meters installed as of Oct 1: 2,076
Electric meters installed per week during Sept: 170 <i>(three-year deployment target: 520 per week)</i>	Water meters installed per week during Sept: 54 <i>(three-year deployment target: 369 per week)</i>

The average percentage of register reads retrieved from opt-in meters each day was 96.2%, this is up slightly from the second quarter due to installation of meters on the system. The total percentage of automatic billing reads automatically delivered to the customer information system last month was 97.9%, similar to the second quarter.

The following operations characteristics are representative of quarterly activities.

- According to Dispatch staff, restoration time for smart electric meter outages has improved by approximately 10 minutes.
- Staff are developing leak detection analytics to better understand typical usage patterns and customer preferences.
- All front line staff in Customer Operations, Water Operations, & Electric Operations have been educated on deployment customer experience expectations.

Customer Experience Improvement Project

In Q3, the Customer Experience Improvement project began. The goal of this project is to evaluate our policies, processes, and procedures to improve and simplify how we serve our customer owners. EWEB partnered with the Whitlock Consulting Group to conduct the evaluation. This evaluation was conducted with the input of over 40 employees and was balanced by the strategic plan and enhancing customer confidence.

Approximately 100 opportunities for improving our customers' experience were identified which were ranked by customer impact, operational impact, and level of effort required to implement the change. The evaluation focused on the following improvement areas:

- Changes to policies or procedures that can be implemented in the near term. For example, allowing customers to sign up for Budget Billing at any point in the year.
- Improvements to existing EWEB systems through configuration or minor software development. For example, improving the integration between our payment processor and our internal billing system allowing the same day posting of payments.
- Improvements that require system replacements or upgrades. For example, allow on-line service requests that include validations and integrate to our customer information system.

In December, staff will present the Board more information on next steps for the Customer Experience project.

Customer Confidence

Determined to align practices and policy with the Customer Confidence initiative of the Strategic Plan, staff continue to improve the day-to-day interactions with customers, increasing responsiveness, being innovative, and adapting to the ever changing landscape of customer needs and values. By working cooperatively with customers, making well informed-strategic decisions, and honoring our commitments, EWEB has begun the long and essential process of becoming a trusted asset of the community. Evidence for the success in restoring Customer Confidence comes from the cooperation of key accounts in resiliency projects, collaboration on carbon and smart growth projects, and the many small successes going untold every day.

Business Growth & Retention

During Q3, EWEB Customer Relationship Managers began working with a cross functional team to recommend updates to the Business Growth & Retention Program in order to simplify and increase access to customer financing options, and provide a clear framework for the rate rider credit in terms of project eligibility and alignment with EWEB's overall Strategic Plan.

Service, Responsiveness and Transparent Communication

During Q3, EWEB continued integrated communication and public information campaigns aimed at building and enhancing customer trust and confidence, supporting EWEB's strategic initiatives, and keeping customers informed of Utility events and news.

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 customers.

Through Q3, we have provided over \$480,000 to the Community, primarily through board approved intergovernmental agreement education grants.

Additionally, EWEB staff have volunteered over 500 hours of their personal time providing much needed support to various causes in the community. Run to Stay Warm occurs in Q4 and over 50 EWEB staff have already signed up to support this annual event.

Over 250 hours of EWEB sponsored staff time have been provided as a service to the Community year to date. These hours are a combination of paid time as well as many hours devoted outside of the regular work day by salaried employees. Ambassador events are typically initiated by EWEB, educational in nature and have included presentations to University of Oregon classes and student groups, participation in the Salmon Watch program, presentations to many neighborhood associations within EWEB's service territory, and EWEB's Customer Open House event.

Thanks to the EWEB Board of Commissioners for their work and support at many of these events – both as volunteers and EWEB Ambassadors.

The attached spreadsheet lists sponsorships, donations, grants, event participation and other contributions through Q3 2018, categorized by interest area and type of giving.

Appendix F – EL3 Community Investment Report

EWEB Communications and Marketing Content, Channels and Metrics:

EWEB's primary channels for communicating with customers continue to be website (eweb.org), social media, earned media and the Pipeline newsletter. During Q3, our content focused primarily on the following topics:

Smart Meters

Communications staff began implementing the Smart Meter Phase II Communication Plan: Support Meter Installation. This included developing print materials (brochure, postcards, and door-hangers), creating automated call messages, updating website content and leading customer experience training for EWEB staff.

Electrification / Smart Load Growth / Carbon Reduction / Climate Change

EWEB revamped its "Commitment to the Environment" and "Power Resources" web pages in Q3 with the objective of increasing community awareness of EWEB's clean power resources and to improve customer opinions of EWEB's ongoing efforts to protect the environment, specifically related to carbon and fossil fuel reduction. At the September BRING Home & Garden Tour, which EWEB co-hosted, EWEB promoted current gas-to-electric conversion incentives. Marketing and communication efforts included articles in the Tour Book, KLCC underwriting messaging, and social media.

Residential electric tier price collapse

During the third quarter, staff executed a customer outreach and education communication plan on the residential electric tier price collapse as part of the Affordability Initiative. The communications plan included integrated digital tactics and broad outreach to local media, which broadcasted and printed multiple news items.

Emergency preparedness

EWEB once again used September's National Preparedness Month to emphasize messaging related to personal emergency preparedness, particularly emergency water storage.

Other topics included:

- Outage reports
- Energy & water efficiency programs (including Green Grass Gauge)
- Smart electrification (including EV rebates)
- Greenpower grants
- EWEB in the community (BRING Home & Garden Tour, Lane County Fair, Run to Stay Warm, Utility Career Day)
- Stormwater/wastewater fees
- EWEB's proactive approach to cyanotoxin monitoring
- Carmen-Smith modernization
- Riverfront property transfer
- Septic system rebates
- EWEB's strategic plan progress (Op-Ed)

Metrics by channel:

Social Media

	Facebook	Twitter
Total posts	90	55
Total Impressions	152,422	128,000

eweb.org

Users	Total Page views	Ave. Time on Page	Bounce Rate*
81,099	293,720	1:31	46%

*Bounce rate tracks how many users enter and exit the site on the same page. Forty percent and below is considered excellent, with 41-55% roughly average for most websites.

Earned Media

	TV/radio	Print
Discreet news stories	11	5

Ease of Doing Business

The Customer Relationship Management group is coordinating with the Advanced Meter Services team to help facilitate smooth roll out of smart meters for key account customers, and to help identify quality assurance measures to ensure accuracy and continuity of billing.

Additional Customer Relationship Management efforts are being focused on implementing development-related process improvements as described to the Board during the October meeting, including eliminating the need for performance bonds for most electric service extensions projects, reducing water System Development Charges for housing units under 800 square feet, easing the cost burden for new capacity in the downtown network, and establishing criteria for a community development fund to support local agencies serving limited income customers with utility service costs.

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, Eugene Science Center, Friends of Trees and St. Vincent de Paul. In August, 2018, St. Vincent de Paul decided to abandon its plans to build a group home on leased land and instead engaged in a search for alternate locations. St. Vincent de Paul notified EWEB that the project has been put on hold and would not occur in 2018. As a result, EWEB awarded that Greenpower Grant to the Pearl Buck Center, which was the next runner up in the vote tally. Through Q3 2018, Greenpower customers have contributed \$176,497 to EWEB’s Greenpower Program.

2018 GreenPower™ Grant Winners

<p>Eugene Science Center: 32.5-kilowatt photovoltaic array with battery back-up</p> <p>Friends of Trees: Volunteers will plant 600 trees in west Eugene for cooling and carbon sequestration</p> <p>Pearl Buck Center, Inc.: 24-kilowatt photovoltaic array</p>
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Limited Income Benefactors

EWEB offers several types of support as part of our limited income program. During Q3 EWEB Business Line Management concluded an in-depth review and analysis of existing Limited Income offerings. As a result, EWEB is currently negotiating improved contractual terms with partnering agencies to deliver the greatest benefits to our limited income customers. Staff is currently developing a replacement customer education program with an increased emphasis on conservation and efficiency. Program content will be provided to customers in-home, by EWEB staff.

Through the third quarter, EWEB has disbursed 58% of Customer Care and 70% of Customer Care Plus funds. With these funds, EWEB has provided year-to-date assistance to 1755 customers through the ECC program and 1045 under ECCP. This is on target, and there is typically more activity in Q4. This year in particular, Q4 will include additional payments to facilitate the sunset of the ECCP as we meet EWEBs financial obligation to enrolled participants.

2018 Limited Income Payments to Customers

	Q1	Q2	Q3	Total YTD	Allocated	% YTD
Customer Care	\$233,695	\$65,151	\$61,264	\$360,110	\$623,781	58%
Customer Care Plus	\$51,646	\$44,900	\$42,650	\$139,196	\$200,000	70%
Total Payments	<u>\$285,341</u>	<u>\$110,051</u>	<u>\$103,914</u>	<u>\$499,306</u>	<u>\$823,781</u>	<u>61%</u>

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. Under the “A Fossil-free World Starts at Home” campaign, the “Clean Power Promotion” was created, offering customers additional incentives for switching to an energy efficient heat pump system. The promotion went from January 1st, 2018 through March 31st, yielding 19 conversions. During the second quarter, a pilot program was developed to provide additional incentives for carbon reduction efforts to non-profits and government institutions. Participants of this program have been 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.

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 in an ongoing and continued campaign YTD. The campaign provides EWEB customers \$3,000 off MSRP for the purchase of a 2018 Leaf EV. During Q2, EWEB partnered with the University of Oregon on the rEV UP Eugene EV workshops to provide education about electric vehicles. These workshops were part of the ongoing Clean Ride rebate, which continues to provide customers with incentives to purchase electric vehicles. This program has had 46 participants (11 went through rEV UP Eugene) YTD vs. 14 in total for 2017. EWEB also took the lead in the creation of an EV Coalition with neighboring utilities, which met for the first time in June. A total of eight utilities are part of this coalition with the purpose of coordinating efforts regarding Electric Vehicles and EV infrastructure adoption in the region. EWEB continues to collaborate with local and regional organizations to promote electric vehicles and the installation of EV charging stations within EWEB’s service area (UO & COE). EWEB representatives are currently partnering with UBER to identify value added opportunities and promote adoption of EV vehicles. Additional activities include:

Quarter 3

- In the end of Q3, EWEB re-adjusted residential new construction incentives. So far 8 new DHP projects have signed up. A local contractor communicated expecting 10 more before the end of the year.
- In partnership with Forth and Lane Regional Air Protection Agency (LRAPA), EWEB provided an EV ride and drive event to promote the adoption of EVs. Several dealerships from the area participated.
- Communications began with Tesla on their residential battery system to begin work on interconnection guidelines.

Quarter 4

- EWEB staff is exploring incentive options for the conversion of the City of Eugene’s Echo Hollow Pool upgrade to a more efficient heat pump system. This potential partnership would involve all three pool projects the City has announced during the next 2 years.
- EWEB is also exploring targeting EV adoption for limited income customers by partnering with limited income housing agencies and Zipcar to provide access to electric vehicles to qualified customers.
- EWEB is beginning work on new electrification approaches, including a new construction campaign for an “All Electric Home”. This work has already began with UO Builds, a program under the UO focused on building homes for limited income families. The work will also involve showcasing these homes at the Lane County Tour of Homes.
- EWEB staff is exploring the potential installation of DC fast charging in a partnership with CoE and ODOT.
- Commercial programs for conversions and new construction are also being upgraded to provide more competitive incentives. This also involves looking at manufacturing in the industrial side.
- EWEB will create incentives for at-work and public electric vehicle charging infrastructure.
- EWEB is creating a standard electrification and energy efficiency incentive for new multi-family, low income apartments. On the EE side, this would eliminate the need for custom BPA process requiring energy modeling.

Finally, EWEB looks forward to the completion of several large Smart Growth projects in 2018-2019 including the removal of a gas boiler at Ya-Po-Ah Terrace and replacing it with high efficiency variable refrigerant flow heat pumps. EWEB staff is pursuing multiple electrification and conversion opportunities, including several smaller commercial conversion and new construction projects, and collaboration with multi-tenant housing projects to help developers choose low carbon, efficient electric heating options.

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.

EWEB energy savings activity is at 74% of annual target at the end of the third quarter. Peak savings, a “minimum” target, has already been met. At the end of Q3, 966 total customer projects were completed in all sectors combined.

As of Q3 2018, EWEB received \$2.4 million in reimbursements from BPA, with a total of 8,000 MWh in reportable savings.

	Q1	Q2	Q3	Total	Target	% YTD
Energy Savings, MWh	3,377	3,234	1,831	8,442	11,388	74%
Peak Savings, MW	0.97	0.84	0.54	2.35	1.20	196%
BPA reimbursements		\$ 424,556	2,005,927	\$ 2,430,483	\$ 2,437,604	100%
BPA reimbursed MWh		1,219	6,629	7,847		
Growth, MWh	(94)	(110)	(99.03)	(303)	no target	
Peak Growth, MW	(0.05)	(0.04)	(0.04)	(0.13)	no target	

Strategic Projects and Initiatives Currently Underway

Strategic Projects

Automated Meter Infrastructure (AMI)

After the July Board direction to complete AMI Deployment by the end of 2021, Information Services (IS) worked with Advanced Meter Services (AMS) to identify the most critical remaining AMI Project work needed for mass deployment. This effort was organized into the AMI Phase I project. This phase of the project focused on completing system integrations and automations between the AMI system and the Customer Information System (CIS). The majority of Phase I work was completed by October.

The scope for AMI Phase II has been finalized and work has begun. The goal of Phase II is to enhance our AMI related IS infrastructure. Phase II activities include infrastructure upgrades to the Regional Network Interface (RNI), a rewrite of the Start/Stop Application, and improvements to our test environments. This phase ensures we keep our AMI system up to date and allows IS to be more responsive to AMI related requests.

Major Systems Replacement

Wide Area Network (WAN) Replacement

EWEB's WAN, formerly known as Metro Ethernet, is approaching its end of life and is due for replacement. The WAN connects EWEB's assets (substations, pump stations, water treatment plant, etc.) to our data centers. This will not be a 'like for like' replacement project. Instead, the network will be simplified improving reliability and security. Network simplification also provides an opportunity to reduce O&M costs as there will not be as many devices to support. This project will take 18 to 24 months to complete.

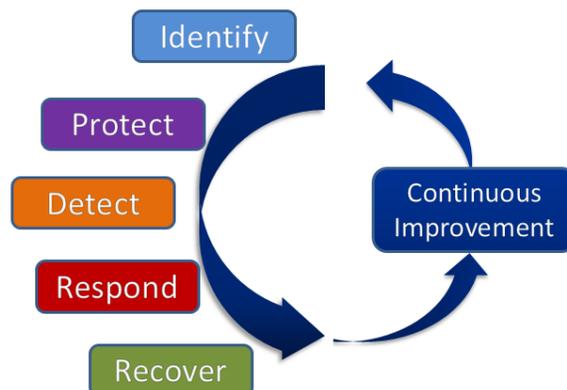
IS Operations

Cyber Security and Compliance

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

EWEB's Cyber Security program:

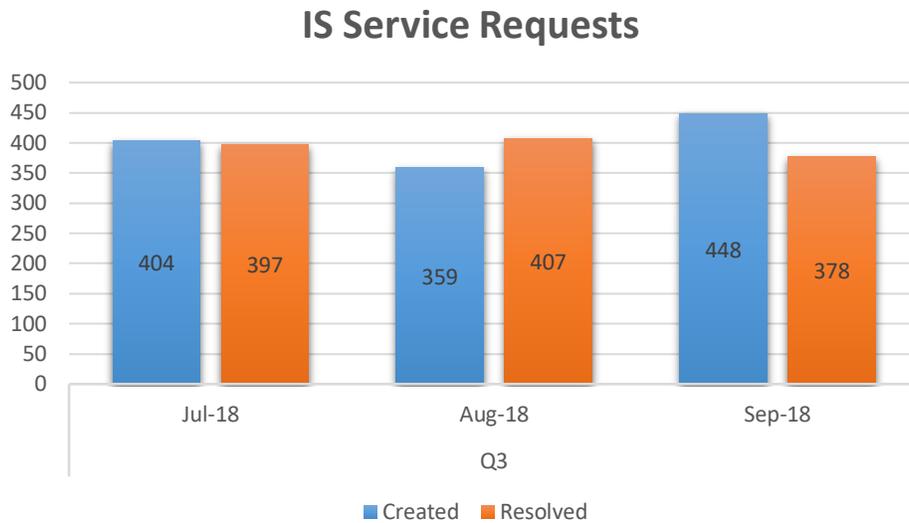
- **Identifies** risk by understanding the threats posed to the Utility and implementing protections that address the risk.
- **Protects** the Utility through antivirus, firewalls, regular training and maintenance.
- **Detects** attacks through firewalls, intrusion detection, and other defensive measures.
- **Responds** to attacks via incident management that mitigates the impact and improves future responses.
- **Recovers** from incidents via planned processes.



There was a substantial effort in Q3 to prepare for the North American Electric Reliability Corporation’s (NERC) audit of our Critical Infrastructure Protection (CIP) program. EWEB partnered with Navigant to review our approach to the audit and the evidence required by NERC for the audit. The majority of the Audit work will take place in November and December.

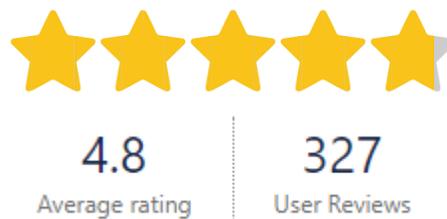
IS Service Operations

One of the most basic, but important, metric for IS is how well the division is responding to service requests from users. These request range from a new laptop to the creation of a report. The following chart shows the amount of service requests created per month and the amount resolved:



Overall, in Q3 IS was able to keep up with service requests. There was an increase of requests in September due to AMI related work. IS will continue to monitor the volume of work and make resource adjustments as necessary to continue to be responsive to our requestors.

In addition to monitoring the volume of work, it is equally important to monitor the satisfaction of the resolution to each request. When a request is closed a brief survey is sent to the requestor asking them to rank their satisfaction on a scale of one (lowest) to five (highest). The following is the satisfaction rating for Q3:



Asset Management & Capital Planning

Type 1 IT capital spending is on track, with more detail contained in *Appendix C - EL1 Report for Electric, Water & Shared Services*.

IS has been partnering with the Electric and Water utilities to reallocate unspent Type 2 Capital to Type 1 maintenance projects. This is why the amount spent appears higher than the original budget.

Property Management

Headquarters Building

Staff continue to negotiate with EGI/Philips on the terms of a new multi-year 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.

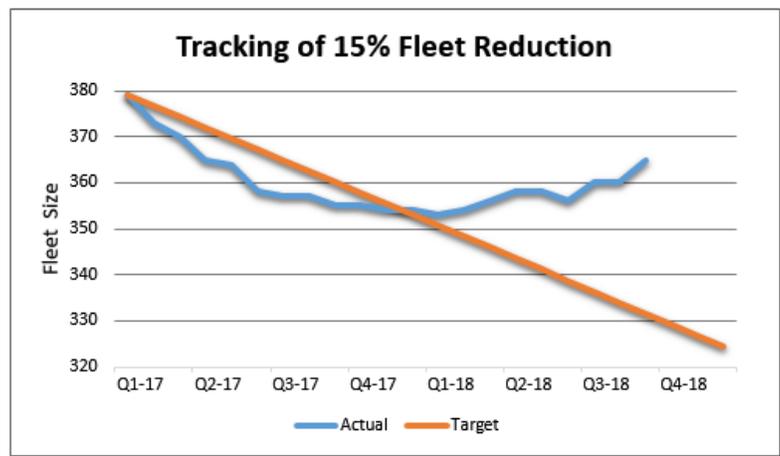
Riverfront Property

Staff continue to work with the City of Eugene on finalizing the details of the Riverfront Park parcel conveyance to the City that was authorized at the May Board meeting. Staff expect the conveyance to be completed by the end of the year.

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 224.44 metric tons of CO2 emissions (15.3% over state mandated fuels)
- Used 45,210 gallons of alternative fuel (29.7% 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 (Q3-2018), the Utility has obtained 3.7% 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.

Division	Q1-2017	Q3-2018	Difference	Reduction	Increase
Customer Services	34	28	-6	17.6%	---
Electric	149	150	+1	---	0.7%
Finance	7	7	0	---	---
Generation	59	54	-5	8.5%	---
H/R	-	1	+1	---	100%
Water	130	125	-5	3.8%	---
	379	365	-14	3.7%	

Continuous Improvement

As technological advances and cultural shifts drastically change the way society thinks, acts, and speaks, many organizations are struggling to keep up. They are working harder, longer, and spending more money, with little success in gaining a competitive advantage. The goal is to create a proactive and sustainable Continuous Improvement (CI) culture at EWEB. Implementation goals for this transformation are:

- Develop a CI program that is focused and driven by the voice of the customer
- Define a structure that aligns with a customer driven strategy
- Develop a CI centered culture and capabilities through awareness, desire, knowledge, ability and reinforcement
- Develop the organization to continuously optimize process and problem solve effectively
- Develop the organization to invest time, resources, and energy in a robust Continuous Improvement (CI) Program that enables change and improvement in the organization’s processes and culture
- Embed a CI culture into the organization’s DNA, which will allow it to remain current and nimble enough to successfully change with, rather than react to, market conditions

- Develop the organization to be one that works to improve efficiencies and reduce costs while removing waste from the system

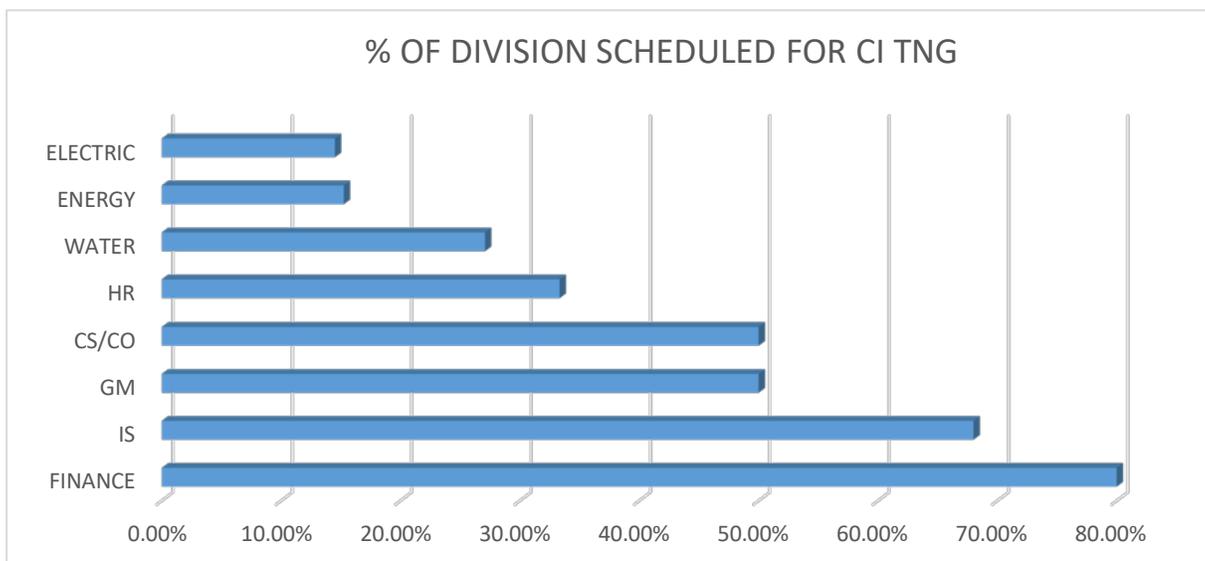
The initiative to develop a culture of Continuous Improvement at EWEB started late in Q4 of 2017 upon hiring the Continuous Improvement Program Manager (Frank Vaughan). Vaughan has served in various management, continuous improvement and engineering roles throughout the United States and has lived in Oregon since 2006. Vaughan is a US Air Force veteran who joined EWEB in November of 2017, and is currently serving as the Continuous Improvement Program Manager. Vaughan is a board member for Emerald Valley High Performance Enterprise Consortium (EVHPEC). EVHPEC is a Lane County Network supporting businesses to increase competitiveness by sharing and applying best practices in continuous improvement. He received an Associate of Applied Science in Aerospace Physiology from Air University, a Bachelor of Science in Industrial Technology at Southern Illinois University, and an MBA from Northwest Christian University in Eugene, Oregon.

The first quarter of 2018 was spent planning and communicating to create awareness and desire in the organization. The first three Continuous Improvement cohorts (A, B & C) kicked off in April/May 2018. The remaining cohorts for 2018 include D, E, and F, G and H. Currently there are 126 employees signed up and scheduled for Continuous Improvement training cohorts to be complete by end of Q1 2019, which is 26.6% of the total EWEB staff. The 2019 schedule will have approximately 144 seats available for training. There are currently 44 students signed up to start CI cohorts in 2019. The total number of students signed up as of 9/28/2018 is 144 team members or 30.5% of the EWEB Team.

The CI curriculum includes eight sessions over a three month period which include:

- Session 1 – Continuous Improvement (CI) overview
- Session 2 – CI Basics, Principles and Culture
- Session 3 – 8 Wastes & Value Added vs. Non Value-Added
- Session 4 – Root Cause Analysis & Brainstorming
- Session 5 – Process Mapping
- Session 6 – Problem Solving & Critical Thinking
- Session 7 – Quick & Easy Improvement
- Session 8 - 5S/Visual Management

** Students have the option to work with a CI mentor between sessions to utilize methods and tools learned in class.

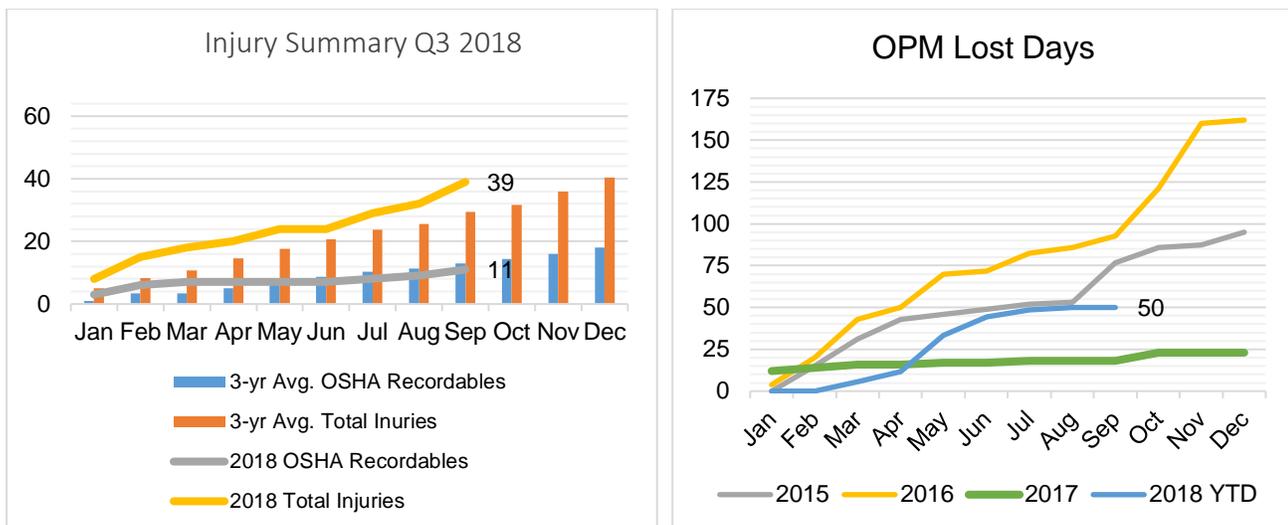


Workforce

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 metrics for both total and OSHA recordable injuries is on track with 2017 experience. While YTD total injuries at 39 are up compared to the 3-year average of 29, YTD recordable injuries (11) are tracking well against the 3-year average (13). Lost days climbed sharply last quarter due to several protracted injury recovery periods but are leveling out this quarter as treatment for these injuries winds down.



The number of SAIF recorded workers' compensation injuries is currently less than projected for 2018 (1/1/2018-12/31/2018):

- Projected for 2018 = 32 (Estimated claims by October = 26)
- Actual to date for 2018 = 19
- The 3 year average for claims is 24

While we continue to leverage restricted duty when possible, time loss days has increased over last year, at 247 days, up from 155 days in 2017. However, the time loss metric at 50 days is tracking below the 3-year average of 62 days.

The formal worker's compensation experience review and insurance renewal occurs in Q4 but we expect an improved modification rate and a reduced annual premium. Premium rate determination is based on multiple factors including:

- claims experience, severity (cost) and frequency, calculated on a 3-year average
- annual actual time loss and participation in the Employee at Injury Program
- preventative safety and wellness efforts to mitigate claim severity and time-loss

Years 2015 and 2016 were relatively high-experience years. 2015 will drop off and even though 2016 remains, the removal of 2015 coupled with extraordinary 2017 results will favorably impact the 3-year average calculation. EWEB also leverages a negotiated reimbursing plan design feature as a means to control worker's compensation insurance premiums. EWEB reimburses SAIF for the cost of "non-disabling" claims. Since EWEB reimburses these costs, they are not included in EWEB's annual claims experience. The amount EWEB will reimburse won't be known until year-end but for reference, the 2017 reimbursement was just over \$17,000.

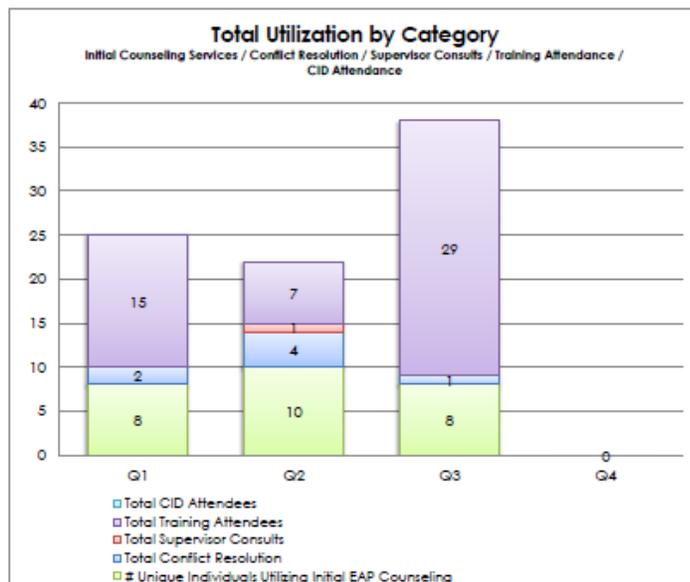
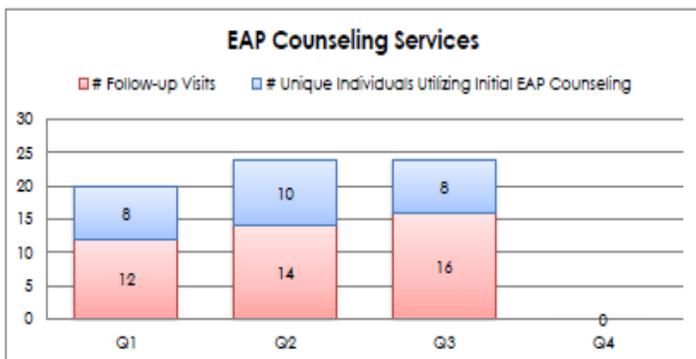
Ongoing partnerships with occupational health and physical therapy providers have yielded process refinements reducing waiting time delays, enabling injured workers to be seen promptly for early intervention and ongoing medical

appointments, ultimately reducing time loss. EWEB continued its participation in the Employee at Injury Program which reimburses a percentage of wages for light-duty assignments.

EWEB also received a SAIF dividend payment of nearly \$98,000. Employers having loss-ratios below 60% are rewarded with a dividend payment – EWEB’s loss ratio is just over 15%.

Employee engagement in safety activities remains very good. Some examples of suggestions that came from EWEB Operations crews which have led to improved equipment or work processes include purchasing new rollers and ropes for the installation of high-voltage conductor and making cut resistant gloves readily available to crews working with sharp products or tools.

EWEB continues to identify and implement approaches to create awareness and understanding around psychological safety. To that end, EWEB is bringing a new training opportunity to employees, Mental Health First Aid at Work. The class will teach participants how to recognize and support an individual who may be experiencing a mental health or substance use concern or crisis and connect them with appropriate employee resources. EWEB is renewing its efforts to create awareness around mental health benefits and the Employee Assistance Program (EAP). Usage information for the year appears in the tables below.



Safety Training

Indicator	Q1	Q2	Q3	Total	2017 Total
Training Hours Delivered	1288	890	647	2825	3228
Good Catch Reports	3	8		11	
Executive Site Visits	-	47	13	60	
Safety Meetings	-	17	3	20	
Site Visits	-	30	10	40	

Safety training for the year is on track with operational plans and also includes added topics designed to support emerging organizational initiatives. A few examples from this quarter follow:

To support the deployment of AMI meters, the safety team is partnering with the Automated Meter Services team to analyze work processes and field practices to identify potential occupational risks as a means to prevent injuries. Body mechanics training and field visits by EWEB’s physical therapy contractor are planned for late Q4 and Q1, 2019.

Planned DOT/CDL Compliance Audit activities are currently in process with the delivery of onsite CDL operator training, both classroom and hands-on, occurring in Q4 2018. Driver files and EWEB's documentation process have been updated. The schedule for an internal DOT/CDL audit in 2019 is being prepared.

Workforce Composition

Workforce composition metrics appear below and do indicate any notable trend.

Workforce Statistics					
	Q1 2018	Q2 2018	Q3 2018	YTD Total	2017 Year End
No. of Employees	466	470	474		459
New Employee Hires	15	16	13	44	40
Promotions	7	5	11	23	15
Reclassifications	7	2	3	12	*
Total Employee Exits	8	12	9	29	94
Non-Retirement Voluntary Exits	6	7	6	19	31
Involuntary Exits	1	2	2	5	13
Retirements	1	3	1	5	50
Total Attrition Rate	1.7%	2.56%	1.9%	6.17%	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	30%	2%	48%	50%
Male	70%	98%	52%	50%
Minority	13%	9%	13%	9%
Non-Minority	82%	88%	87%	91%
Non-Classified*	5%	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	6.12%
	30 - 39 years	22.15%
	40 - 49 years	33.76%
	50 - 59 years	30.17%
	60+ years	7.81%
Average Age	46 years	

Attrition

Total attrition is in line with other utilities at 6.17%. Voluntary exits remain stable, tracking with the 3-year quarterly average of approximately 5. 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 surveyed NWPPA member-utilities for more comparable attrition data. Those average 3-year attrition rates appear in the table below.

3-year Average Attrition Rate (2015-2017)				
	Voluntary Non-Retirement	Retirement	Involuntary	Total
NWPPA Utilities	1.92%	2.57%	0.70%	7.56%
EWEB 3-year avg*	4.25%	5.94%	2.05%	12.47%
EWEB YTD 2018	4.04%	1.06%	1.06%	6.17%

**EWEB's 3-year average includes 2017 reductions and early retirements from EVRI*

Compensation & Benefits/Oregon Pay Equity Act Compliance

Compensation and Benefits programs remain competitive. MAPT Compensation mid-points and benefits packages are within 5% +/- comparator avg. Any market-driven adjustments are made as benchmark re-pricing occurs (every 3 years, with ongoing outlier monitoring). There were no salary exceptions at hire, further indication the EWEB compensation rates are sufficiently competitive to attract qualified job candidates. Specifically pertaining to electric operations jobs, the NW Public Power Association (NWPPA) annual Northwest Lineman's Survey results were published at the end of Q2. 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 November in preparation for re-bargaining EWEB's annual adjustment factor (discussed in the Labor Relations section below).

A required workforce pay-equity study is underway in preparation for compliance with a 2019 legislative standard. BOLI released initial rules in September, with a 2-week written comment period. EWEB worked with legal counsel to prepare and submit comments. Analysis and gathering supporting documentation is in process and on track to be completed in November 2018, with plans for any resulting adjustments to be implemented by year-end, prior to 2019 annual merit increases or salary range modifications.

Workforce Management

Employee Relations; BOLI Complaints

EWEB received disposition from BOLI regarding two discrimination complaints, one filed in Q4 of 2017 and another filed in Q1 of this year. BOLI dismissed both complaints, citing insufficient evidence to support the complainants' allegations.

Workforce Performance

Workforce performance metrics remain within goal – 80% at the skilled rating. Results from mid-year reviews, completed at the end of July, show a healthy bell-curve with 82% skilled, 8% exceptionally skilled and, 10% developing. No underperforming employees were identified at mid-year.

There have been 16 corrective interventions so far in 2018, tracking below 2017 which concluded with 28 for the year and at this rate, well below the 3-year average of 37 annually. Q3 saw 2 probationary terminations, one from an MAPT employee and one from an IBEW employee which is equal to the 2017 year-end total.

IBEW Labor Relations

Labor relations remain good. There have been no grievances filed this quarter and in fact, only one this year, which was later withdrawn. EWEB and IBEW met to negotiate new language pertaining to the collection of union dues and fees. The parties exchanged language proposals and tentatively agreed on changes. The IBEW is vetting the language with their attorney and awaiting approval or redirection from their leadership.

The Union filed a "demand to bargain" in response to the discontinuation of a Water Division clothing allowance. Discussions with the IBEW around this have been productive. The resolution will be more generous for workers but will also satisfy the Utility's desire for uniform dress requirements for field workers, making EWEB field personnel easily identifiable to customers and also ensuring their professional appearance.

Bargaining a new pay rate index to replace the discontinued regional CPI-U&W is scheduled for December.

Major Workforce Initiatives

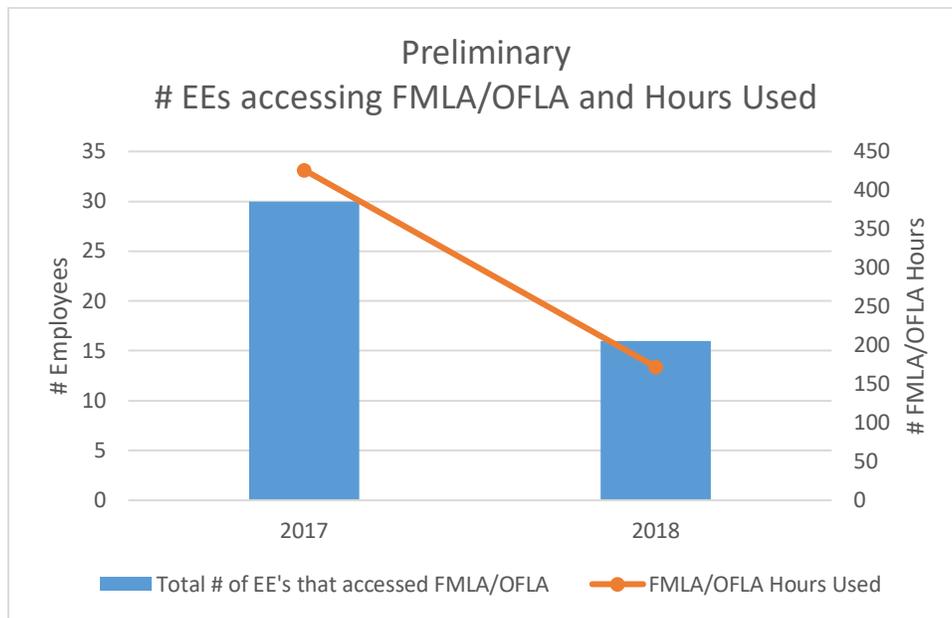
Wellness

The Wellworks Program has had good first-year results. October 31st is the submission deadline for participation. At this writing, 26% of employees have completed the necessary requirements to be eligible for the Level I, \$500 VEBA incentive, up from 14% in Q2. Of those, 70% have completed the requirements to be eligible for the additional Level II, \$250 incentive. Final participation numbers may rise a bit as the program draws to a close and employees submit the last of their required documentation. The Utility intends to renew the program in 2019.

The combined Health & Safety Expo and Family Day were successful events. The redesigned expo was well-attended, with 42% of employees participating in at least one session. A post-event survey told us the new “conference-style” format was well-received, with the majority of respondents indicating the sessions were informative, worthwhile and clearly linked to EWEB’s strategic values and initiatives. The Expo included a flu shot clinic and a blood drive. 54 employees filled every available slot to donate blood. Interest in blood donation was so high that additional opportunities are planned for late 2018 and more frequent opportunities are planned for 2019. 103 employees got flu shots at the Expo and another 70 flu shots were administered at follow-up clinics.

Outsource Leave Management

Leave management (OFLA/FMLA & OSLA administration) was outsourced to The Standard effective September 1, 2018. It is EWEB’s intent to ensure that employees receive the appropriate entitlement to legally-protected leave. Outsourcing the management of these leaves enables better legal compliance, ensures better employee privacy and reduces the potential for inappropriate usage. While some employees clearly would have preferred that we continue to handle this leave administration in-house, it is very complex, labor intensive and staffing is inadequate to appropriately support it. Outsourcing is very inexpensive at under \$15,000 per year. Employee feedback has been mostly positive so far with respect to The Standard’s customer service, access and usability of their system. The Standard has agreed to provide employees with leave packets within 24-hours of case initiation. They also conduct interaction surveys and surveys at the conclusion of leave. This information, along with quarterly protected leave usage data will become the metrics to measure the effectiveness of the outsourced service. The chart below represents only the first month of experience and indicates a sharp decline in the rate of claims filed for September 2018 as compared to 2017.



UltiPro (HR information management system)

Implementation of Ultipro modules continues in its planned sequence. In Q3, the process for VEBA enrollments as well as COBRA and FSA enrollments and changes was implemented. This eliminated historically manual processes with these vendors. The business process for maintaining retiree benefits was optimized, including new Retiree Life Events to simplify data entry and maintenance for benefits staff. The process for probationary reviews was automated including reminder deadlines and automated distribution of reviews based on a standard schedule. Electronic open-enrollment is on track for implementation in October.

Organizational Development

With the supervisory position descriptions and competencies complete, evaluation of supervisor development opportunities is underway with the intent to advertise training opportunities in 2019.

The Utility has introduced a number of rotational or temporary “stretch” assignments as a means to provide employees with exposure to new roles including, supervision, working on special teams and, managing projects. These assignments often create subsequent additional “downstream” opportunities for others to back-fill as well. The assignments are happening all around the Utility – a few examples of participating departments include: Electric Operations, Physical Security, Distribution Engineering, Finance, Accounting, Automated Meter Services, and Power Resources.

In addition to rotations, EWEB introduced an internal “job shadow” opportunity to encourage interest in an upcoming job posting in Distribution Engineering. The event, scheduled in late October will be comprised of an overview presentation about the job and will also include an in-office and in-field job shadow opportunity. At this writing, 14 employees from around the Utility have enrolled.

EWEB is exploring strategies to address a regional shortage of workers in a handful of skilled/craft operations jobs. For example, EWEB offered a first-ever “signing bonus” in a job posting for Journey Meter Technician. Candidates holding this journey certification are in short supply throughout the Northwest and offering such a bonus is becoming common throughout the region. EWEB has taken forward steps to address this worker shortage in the future by creating a path to apprenticeship but a near-term solution was required. At this writing, a journey-qualified candidate has been identified and is now undergoing pre-hire processing.

Benefits Utilization

Health insurance plan utilization rates continue their positive trend. Those results, coupled with EWEB’s efforts to educate on and reward healthy behaviors, yielded a very favorable utilization and renewal review process. The premium renewal rate will be a 2% increase, coming in significantly lower than the projected 6%.

Following an RFP process, EWEB renewed its contract with USI Insurance Services for benefits brokerage services.

Healthiest Employer

EWEB received the results of its Q2 application for consideration in Oregon's Healthiest Employer and America's Top 100 Healthiest Employer awards. We are pleased to report that EWEB was awarded 3rd place in its size category for Oregon's Healthiest Employer and was ranked 47th in America's Top 100.



Willamette Basin Review

Municipal water providers in the Willamette Basin have been seeking access to the stored water in the federal Willamette Valley Project (WVP) reservoirs since the late 1980's, recognizing that traditional surface water rights in the basin would eventually be fully appropriated. The stored water in the WVP constitutes the overwhelming majority of remaining water supply available to water providers in the Willamette basin to meet future demands.

A process began in the 1990's to allocate federal stored water for authorized uses, including municipal water supply, industrial use, and irrigation. That process was interrupted by the ESA listing of several fish species. Subsequent recovery plans for these species call for the allocation and release of federal stored water to benefit fish and wildlife. In the past few years, The U.S. Army Corps of Engineers (USACE) has undertaken a review and study of the water allocation necessary to implement the Biological Opinion completed by the National Oceanic and Atmospheric Administration (NOAA) for species recovery in the Willamette Basin. USACE is in parallel evaluating current and future water demands in the Willamette Basin and will consider allocating federal stored water for use by irrigators and municipal water providers.

EWEB has intervened in the past few months, along with other Willamette Basin water providers, to ensure that a future allocation of federal stored water specifically for municipal use is completed, rather than the USACE allocating the necessary water for fish and wildlife and then allocating the remainder of water into a single "multi-purpose" allocation. EWEB supports the type of transparency and certainty provided through an allocation specifically for municipal use in the basin. Additionally, EWEB has coordinated with other water providers to ensure that the allocation for municipal use is based on sound generally accepted methodologies for projecting future municipal water demand in the basin.

EWEB has enlisted the assistance of the Oregon Congressional Delegation in pursuit of a successful outcome on an issue pivotal to the long-term growth and economic development needs of the Willamette Basin. Congressman Peter DeFazio in particular has been effective recently in facilitating productive dialogue between the stakeholders in the Willamette Basin Review towards an approach that could provide transparency and certainty for municipal water providers, as well as overall optimal environmental, social and economic benefits from the management of federal stored water in the WVP.

Additional steps will be necessary to achieve future municipal access, including revision of the out of date cost methodology for federal stored water contracts. EWEB staff will continue to work closely with Congressman DeFazio, the League of Oregon Cities, and the Oregon Water Utilities Council to advance these tasks towards completion.

Quarterly Contracts

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

1. Beecher Carlson (\$225,000)-Commercial Insurance Broker Services (5 years)
2. City of Eugene (\$360,000)-Water Pipeline Crossings on Pedestrian Bridges over Amazon Creek (One Time)
3. H&J Construction (\$426,500)-Drain and Pond Improvements at Hayden Bridge Water Filtration Plant (One Time)
4. Halvorson Contracting (\$1,540,000)-Roosevelt Operations Center (ROC) Consolidation Project-Interior Remodel (One Time)
5. Kronsberg Electric (\$475,000) – Standby Power Improvements at Hayden Bridge (One Time)
6. Kronsberg Electric (\$260,000) – Standby Power Improvements at Leaburg (One Time)
7. Michels Power (\$552,000) – Construction Services at Leaburg Substation (One Time)
8. Mythics (\$750,000) – Oracle Software and Services (2 years)
9. Owen Equipment Company (\$400,000)-Hydro Excavator (One Time)
10. Pacific Excavation (\$2,411,000) – On-site Hypochlorite Disinfection Housing Improvements (One Time)
11. Pacific Excavation (\$545,000)- North Bertelsen Road Water Replacement (One Time)
12. Key operational contracts for maintenance, repairs, and capital projects work including:
 - o Delta Sand & Gravel (\$750,000)-Rock Material (5 years)
 - o Fastenal (\$450,000)-Vendor Managed Stores Materials including consumables and small tools (5 years)
 - o ALS Environmental, Eurofins Eaton Analytical, and Test America (now bought out by Eurofins) (\$582,000)- Water Quality Testing (5 years)
 - o Altec (\$360,000)- Knuckle Boom Crane (One Time)
 - o HD Fowler Company (\$2,200,000)- Water Meter Boxes and Lids for routine operation and AMI deployment (5 years)
 - o LCOG (\$800,000)-GIS Support Services (10 years)
 - o LCOG (\$706,500)-Technical Assistance Activities related to Property Management Systems (2 contracts-one through 10/31/19 and one over 5 years)

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

Purchasing tracks the annual changes in contract pricing. The year to date changes for 2018 is an increase of 2.1%, our goal is to limit increases to 1%. Several of our contracts have had substantial price increases due to labor, metals, chemicals, and wood product industry increases. When prices are requested to be increased, Purchasing staff require substantiating documentation demonstrating the reason for the price change.

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 an appointed Special Master while the Court of Appeals deliberated.

PERS Litigation: The hearing of EWEB's case before the Oregon Supreme Court has postponed until mid-January, 2019.

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 oral arguments are scheduled to be presented to the Court of Appeals in December 2018.

Compliance

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

Compliance Violations

1. Two violations of procurement thresholds were self-reported separately to the Board on the quarterly contract report.
2. River ramping violation at Carmen-Smith, self-reported to FERC. No fines or penalties are associated with this violation.

Public Records Requests

During Q3 2018, EWEB received 12 public record requests; two are still in progress. Of these, four were for Purchasing records, two for Water Utility records, two for calendars, one for historical records, one for cost records, one for recent publications, and one for wage data.

WECC/NERC Audit

EWEB received its 90-day Notice of NERC Compliance Audit on September 11th from The Western Electricity Coordinating Council (WECC). The 2-week Audit is comprised of an off-site review of evidence, and an on-site verification, between December 10th and 21st. The 2018 Audit Scope includes (15) CIP Requirements and (10) O&P requirements, and spans the 45-month period January 14, 2015 through September 11, 2018.

EWEB SME's have submitted their Final Draft documentation, evidence, and Reliability Standard Audit Worksheets (RSAWs) that align with the audit scope to Navigant Consulting. Navigant is performing a final QA review of all audit documentation and providing feedback as it is available.

Final Audit documentation, evidence, and RSAWs are due to WECC on November 9th.

In addition to the identified audit scope, the WECC Audit Team will review any requirements that EWEB self-reported as a Potential Non-compliance (PNC), and is classified as an Open Enforcement Action. Also, any new PNC identified during the audit, may be the basis for the Audit Team to expand the scope audit scope to include additional Registered Functions, Reliability Standards, and/ or Requirements.

Glossary

AF: Availability Factor. Multiplied by 100, this factor indicates the percentage of time that the generating units were available for operation.

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

CSU1 and CSU2 - Carmen-Smith unit 1 & 2

FC - Foot Creek

FERC: Federal Energy Regulatory Commission

FCRPS: Federal Columbia River Power System

FOF: Forced Outage Factor. Multiplied by 100, this factor indicates the percentage of time that the generating units were forced offline due to an unplanned event.

GCF: Gross Capacity Factor. Multiplied by 100, this factor indicates the percentage of megawatt hours generated relative to the maximum number of megawatt hours that could have been generated if the generating unit had been operating continuously at full capacity.

GIS: Geographical Information System

GOF: Gross Output Factor. Multiplied by 100, this factor indicates the percentage of megawatt hours generated relative to the maximum number of megawatt hours that could have been generated if the generating unit had been operating at full capacity when available to generate.

HW - Harvest Wind

ICS: Incident Command System

IP: International Paper

KPI: Key Performance Indicator

LBU1 and LBU2 - Leaburg unit 1 & 2

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

STC - Stone Creek

TB - Trail Bridge

WGA: Western Generation Agency (WGA) is the name of the intergovernmental entity formed by EWEB and Clatskanie People's Utility District (CPUD). The WGA steam turbine generator is located at the Georgia Pacific paper mill named Wauna.

WV – Walterville

Appendix

Appendix A: Electric Financial Statements

Appendix B: Water Financial Statements

Appendix C: EL1 Report for Electric, Water & Shared Services

Appendix D: Contracts Awarded Report

Appendix E: Electric Reliability Index Report

Appendix F: 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)	Nine Months Ended September 30,		YTD Budget Comparison	
	2018	2017	Budget \$	Variance
Operating revenues	\$ 185.8	\$ 190.1	\$ 174.3	\$ 11.5
Operating expenses	171.4	168.8	166.9	(4.5)
Net operating income (loss)	14.4	21.3	7.4	7.0
Non-operating revenues	5.3	6.7	6.0	(0.7)
Non-operating expenses	8.5	21.5	6.6	(1.9)
Income before capital contributions	11.2	6.5	6.8	4.4
Capital Contributions	4.5	5.3	2.7	1.8
Increase/(Decrease) in net position	\$ 15.7	\$ 11.8	\$ 9.5	\$ 6.2

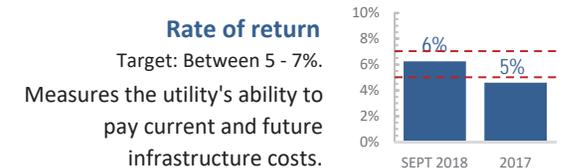
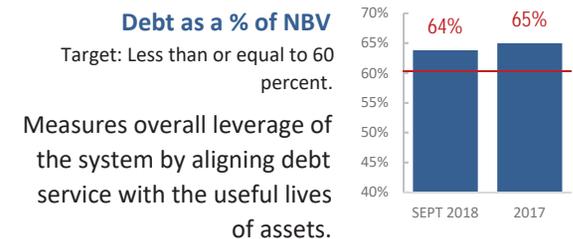
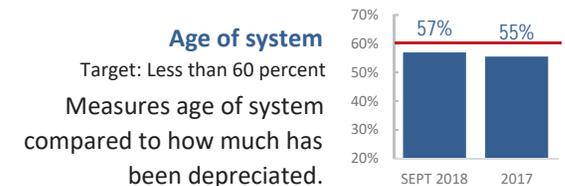
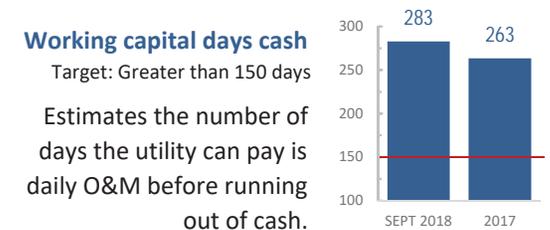
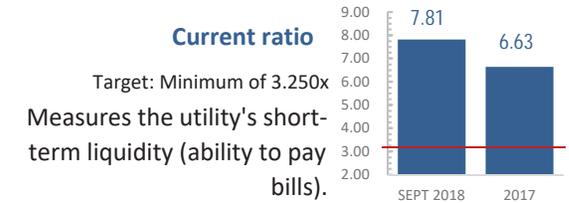
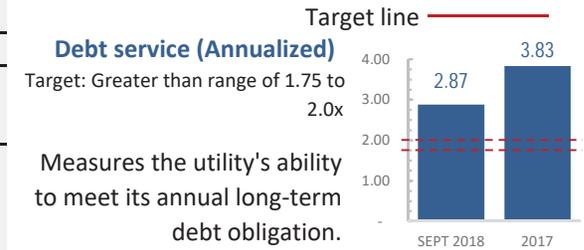
ELECTRIC CONDENSED STATEMENT OF NET POSITION (Unaudited)

(In millions)	September 30,		December 31,
	2018	2017	2017
Current assets	\$ 246.7	\$ 231.4	\$ 241.9
Net utility plant	360.8	352.0	353.9
Other assets	94.6	97.5	104.3
Total assets	702.2	680.9	700.1
Deferred outflows of resources	32.3	54.5	33.4
Total assets and deferred outflows	\$ 734.5	\$ 735.4	\$ 733.5
Current liabilities	\$ 31.6	\$ 30.3	\$ 36.5
Long-term debt	201.4	212.2	211.6
Other liabilities	71.2	89.0	70.9
Total liabilities	304.2	331.5	319.0
Deferred inflows of resources	8.1	4.9	7.9
Total net position	422.3	399.1	406.6
Total liabilities, deferred inflows, and net position	\$ 734.5	\$ 735.4	\$ 733.5

ELECTRIC CONDENSED CAPITAL BUDGET COMPARISON (Unaudited)

(In millions)	YTD	Annual Working Budget	
	9/30/2018	Budget \$	% of Budget
Type 1 - General capital	\$ 11.6	\$ 12.3	94.3%
Type 2 - Rehabilitation and expansion	3.2	11.4	28.1%
Type 3 - Strategic projects	8.2	13.8	59.4%
Total capital	\$ 23.0	\$ 37.5	61.3%

FINANCIAL STRENGTH MEASUREMENTS



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

(In thousands)	Nine Months Ended September 30,		YTD Budget Comparison	
	2018	2017	Budget \$	Variance
Operating revenues	\$ 30,700	\$ 30,138	\$ 29,211	\$ 1,489
Operating expenses	18,313	18,276	19,183	870
Net operating income (loss)	12,387	11,862	10,028	2,359
Non-operating revenues	1,308	488	481	827
Non-operating expenses	1,702	5,096	1,695	(7)
Income before capital contributions	11,993	7,254	8,814	3,179
Capital Contributions	2,422	2,430	1,159	1,263
Increase/(Decrease) in net position	\$ 14,415	\$ 9,684	\$ 9,973	\$ 4,442

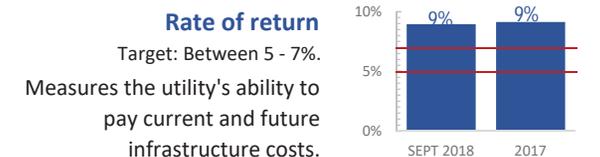
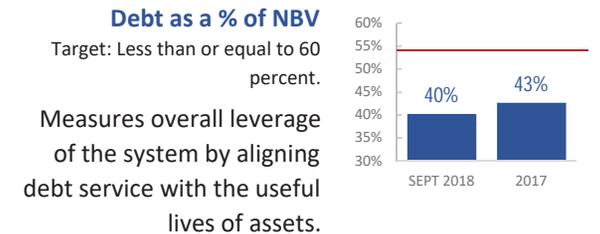
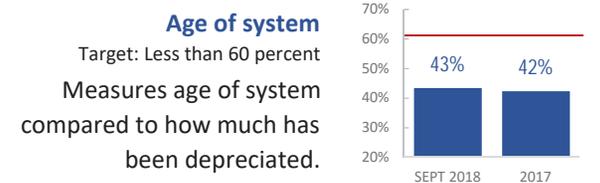
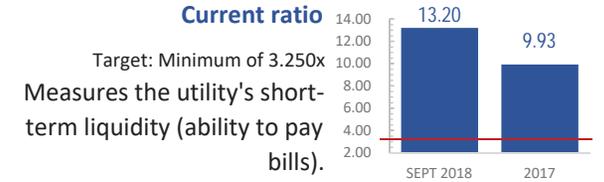
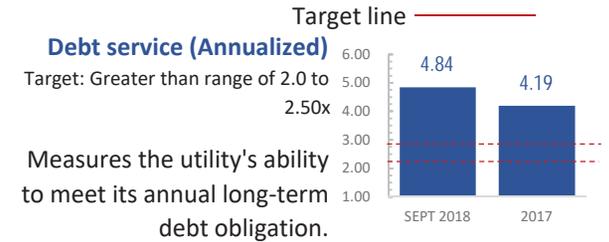
WATER CONDENSED STATEMENT OF NET POSITION (Unaudited)

(In millions)	September 30,		December 31,
	2018	2017	2017
Current assets	\$ 59.3	\$ 52.1	\$ 54.6
Net utility plant	170.4	165.3	165.4
Other assets	6.7	4.2	6.9
Total assets	236.4	221.6	226.9
Deferred outflows of resources	6.7	11.5	6.9
Total assets and deferred outflows	\$ 243.1	\$ 233.1	\$ 233.8
Current liabilities	\$ 4.5	\$ 4.1	\$ 5.6
Long-term debt	61.4	65.7	65.5
Other liabilities	15.5	19.3	15.4
Total liabilities	81.4	89.1	86.5
Deferred inflows of resources	1.7	1.0	1.7
Total net position	160.0	143.0	145.6
Total liabilities, deferred inflows, and net position	\$ 243.1	\$ 233.1	\$ 233.8

WATER CONDENSED CAPITAL BUDGET COMPARISON (Unaudited)

(In thousands)	YTD	Annual Working Budget	
	9/30/2018	Budget \$	% of Budget
Type 1 - General capital	\$ 6,825	\$ 8,107	84.2%
Type 2 - Rehabilitation and expansion	1,901	5,221	36.4%
Type 3 - Strategic projects	198	400	49.4%
Total capital	\$ 8,923	\$ 13,728	65.0%

FINANCIAL STRENGTH MEASUREMENTS



Capital "EL1" Report: Electric, 2018-Q3

Type 1 - General Capital				2018 - Q3						Note - Changes from previous report(s) are in BOLD		
Capital Category	Budget	YTD Actual	Year-End Projection	Status/Comments								
Electric Infrastructure - Generation	\$1,900,000	\$744,709	\$1,600,000	<ul style="list-style-type: none"> LB lake debris boom installation complete in April, LB forebay sluice gate replacement complete in October, and LB Dam standby generator to complete by year end. Stone Creek relay and exciter replacement execution is nearing completion, though Stone controls upgrade postponed to 2019. The Smith Dam Debris Boom project postponed to 2019 due to contractor submittals not meeting design requirements. - ZINNIKER 								
Electric Infrastructure - Substations	\$1,550,000	\$1,226,393	\$1,377,000	<ul style="list-style-type: none"> RTU replacements at Bethel and Adams have been completed with the Oakway RTU replacement in progress, with commissioning to be completed in the last week of October. One substation battery bank replacement is planned to be completed in Q4 at Waltherville Power Plant. Spring Creek substation work was completed on schedule and at a lower cost than estimated; resulting in an underspend to the overall budget of \$173k. - NICE 								
Electric Infrastructure - Telecom	\$225,000	\$126,294	\$170,000	<ul style="list-style-type: none"> 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, with a small splice occurring in the Roosevelt area, and renewal of fiber splicing and testing equipment being purchased. Customer Driven work is expected to end at approximately 60% of targeted based on historical performance. LRIG work has been deferred due to staffing constraints, however some upgrades to the existing radio equipment (counter and UPS batteries) has been completed. - NICE 								
Electric Infrastructure - Transmission & Distribution	\$7,100,000	\$5,911,389	\$7,860,000	<ul style="list-style-type: none"> Customer reimbursable work is forecasted on track and consistent with historical performance, with spending expected to slow in December. Enhancements and additions to the distribution system are on track, with the Spring Creek/Irvington Feeder project in progress. This project actual has come in lower than expected. Renewal and replacement work is expected result in an average. 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. Additionally ~\$300k of materials in preparation for the Currin-Alvey transmission line rebuild will be purchased. - RUDLER 								
<p>These categories match the Capital Improvement Plans (CIPs) submitted by Water & Electric.</p> <p>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.</p> <p>Type 2 projects have "discrete" scopes, schedules (launch through completion), and cost over \$1MM during the project life.</p>												
Type 2 Rehabilitation & Expansion Projects				2018 - Q3			Project Total			Schedule		
Project	Budget	YTD Actual	Year-End Projection	Initial Plan	To-Date Actual	Project-End Projection	Start	Initial Planned Completion	Projected Completion	Status/Comments		
Leaburg Dam Roll Gate Hoists	\$0	\$55,157	\$55,147	\$5,150,000	\$6,754,711	\$7,000,000	Jul-2012	Nov-2014	Oct-2018	<ul style="list-style-type: none"> All three hoist systems released for full automatic operation in 2017. Final payments to contractors have been completed and punch list items underway. Potential repair of worn gate teeth under investigation for 2018 implementation. Limited spending expected. -ZINNIKER 		
Downtown Fiber Network	\$1,400,000	\$211,602	\$1,000,000	\$2,100,000	\$731,705	\$2,100,000	Mar-2017	Dec-2018	Mar-2018	<ul style="list-style-type: none"> Work on some smaller segments of the system have been underway. A 4-6 week delay is expected in completing these connections due to staffing constraints associated with the apparatus crew and comm shop availability. Half of the system connections are signed up, however it is not expected that all will be completed by year end. It is still expected that spending will be lower than originally estimated, with some already planned roll over for final connections to occur in Q1 2019. -NICE 		
Advanced Meters (Electric)	\$1,900,000	\$1,230,626	\$2,940,000	\$6,638,000	\$2,187,626	\$15,600,000	Oct-2013	Dec-2025	Dec-2021	<ul style="list-style-type: none"> Project implementation has been accelerated from a 8 year deployment to a 3 year to accomplish strategic objectives by EOY 2021. Additional meters are under procurement and route based deployment started in October. Projection also includes \$150k in labor for implementation field staff. An additional \$1M in meter procurement has been accelerated from 2019 in order to stage for 2019 deployments, and to mitigate risk of supplier lead time fluctuations. Meter deliveries are expected to arrive in November. - MCELROY 		
Electric Master Plan	\$50,000	\$15,624	\$79,000	\$1,250,000	\$144,837	\$700,000	Jul-2016	Dec-2016	Mar-2019	<ul style="list-style-type: none"> Spending shown accounts for coordination and planning associated with purchase of property for Thurston substation expansion. Purchase expected to occur in 2019. Some spending for lot line adjustments are expected to occur in 2018. Delay in purchase does not effect critical path of the substation expansion. Also shown are costs for surveying of future Willow Creek to Jensen line for preparation of execution within the 10 year plan. -NICE 		
Upriver Re-Configuration/Holden Ck. Substation	\$810,000	\$503,965	\$515,000	\$3,000,000	\$5,896,700	\$8,000,000	Jan-2014	Oct-2015	Sep-2019	<ul style="list-style-type: none"> Holden Creek substation construction and commissioning has been completed, and tie into the Thurston-Cougar 115kV transmission line was completed in late April. Planning is in progress now for addition of a second distribution system transformer to increase reliability for upriver customers for this station. Procurement of a switchgear expansion and a new transformer are underway. No spending associated with this is expected for the remainder of 2018. Follow up work to complete commissioning and tie in with Holden Creek and reconfiguration of Leaburg Substation will occur in 2019. New increased end of project total accounts for additional transformer, switchgear and Leaburg substation reconfiguration. -NICE 		
Downtown Distribution Network	\$1,500,000	\$1,149,311	\$1,324,000	\$15,000,000	\$6,817,429	\$20,000,000	Sep-2010	Dec-2015	Dec-2028	<ul style="list-style-type: none"> Replacement of a failed vault at 10th and Pearl has been completed. Costs came in under expected, resulting in an underspend of \$176k. This vault was found during inspections to have visible cracking, and has functionally failed. Work included 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. Additionally, two network protectors are planned for installation at the Jail in 2018 and are currently in the planning phase. -NICE 		
Grid Edge Demonstration Project	\$1,250,000	\$1,021,540	\$1,291,000	\$1,200,000	\$1,162,528	\$1,330,000	May-2016	Jun-2017	Mar-2019	<ul style="list-style-type: none"> Site will be 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. Installation of a 500kW output, 1MWh battery system was Oct. 2018. Staff are working on final punch list items with targeted completion early Spring 2019. Budget overage due to change orders, controller safety feature and some well work. A site functional drill is being planned for Spring 2019. -NICE 		
ROC Consolidation	\$700,000	\$404,737	\$1,172,000	\$2,000,000	\$404,737	\$3,500,000	Mar-2018	Dec-2020	Dec-2020	<ul style="list-style-type: none"> The ROC consolidation projects has been determined to be classified as capital. Of the \$2M project (\$1.6M bid + 28% OH), it is expected that "50% of the work is to be completed in 2018, with electric paying 75% of the cost. With this, the project includes \$768k for this purpose; the final project estimate has been increased to include this change. The final spending depends on realized scope changes and actual contractor start date. Costs also include a parking lot expansion at ROC to accommodate additional vehicles after consolidation. Construction started in late June and completed in September. Some final minor punch list items remain. \$50k is included for the Electric Company's share of the Hayden Bridge Backup Dispatch building costs for this year, associated with the design phase. -NICE 		
Distribution Resiliency Upgrades	\$0	\$8,765	\$357,000	\$1,860,000	\$8,765	\$1,860,000	Aug-2018	Dec-2020	Dec-2020	<ul style="list-style-type: none"> 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. An additional \$190k of non reimbursable will be completed as an opportunistic efficiency while FEMA work is in progress. -RUDLER 		
<p>The FERC is actively reviewing the Final License Application and to date there are no outstanding issues. We anticipate license issuance in late 2018 or early 2019 however there is really no way to accurately forecast the actual issuance timing. Carmen Powerhouse renewal efforts continue with major commissioning activities on the turbine shaftoff valves wrapping up in early November. Procurement of equipment for rebuilding the substation in 2019 is under contract and the installation contract request for bids has been issued. GE Turbine Generator design work is proceeding on schedule for the first unit rehaul in 2020. Alternatives analysis for fish passage and planning for other recreation and environmental improvements required by the license is now in progress. -ZINNIKER, BOYLE</p>												
Type 3 - Strategic Projects & Programs				2018 - Q3			Project Total			Schedule		
Project	Budget	YTD Actual	Year-End Projection	Initial Plan	To-Date Actual	Project-End Projection	Start	Initial Planned Completion	Projected Completion	Status/Comments		
Carmen Smith License Implementation	\$13,850,000	\$8,168,666	\$12,500,000	\$135,000,000	\$51,307,948	\$129,500,000	May-2009	Dec-2021	Dec-2025	<ul style="list-style-type: none"> The FERC is actively reviewing the Final License Application and to date there are no outstanding issues. We anticipate license issuance in late 2018 or early 2019 however there is really no way to accurately forecast the actual issuance timing. Carmen Powerhouse renewal efforts continue with major commissioning activities on the turbine shaftoff valves wrapping up in early November. Procurement of equipment for rebuilding the substation in 2019 is under contract and the installation contract request for bids has been issued. GE Turbine Generator design work is proceeding on schedule for the first unit rehaul in 2020. Alternatives analysis for fish passage and planning for other recreation and environmental improvements required by the license is now in progress. -ZINNIKER, BOYLE 		
Total Electric Capital (Excluding Shared Services)	\$32,235,000	\$20,778,778	\$32,240,147	\$173,198,000								

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

Management Notes: The overall Electric Capital Budget (excluding shared services) expenditure rate is lower than actual to date (64% spending vs. 75% of year). Type 1 expenditures predicted at year end is at 102% of budget vs. actual, with about 74% spent through Q3. Type 2 spending is at 60% at the end of Q3, and projected expenditures at year end are at 115%. This overage has been planned with the main driver being accelerated spending of AMI to meet company goals, and to spend surplus capital funds after the cancellation of the CIS project. Carmen Smith spending is expected to be at 90% of budgeted at year end with 59% spent through Q3. Year end projections of total expenditures vs. budget for Type 1 & Type 2 work combined is predicted to be 107% excluding Shared Services and Type 3, and 100% including Type 3 (Carmen) for the overall Electric Division Budget (with precap materials included).

Water Capital Projects Quarterly Status Report
2018-Q3

Appendix C

Type 1 - General Capital

Project	2018 - Q3			Status/Comments
	Budget	YTD Actual	Year-End Projection	
Source - Water Intakes & Filtration Plant	\$815,000	\$243,866	\$900,000	● 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. Costs still running high.
Mains - Replacements, Improvements, & Trans.	\$4,069,001	\$2,674,956	\$4,006,000	● Largest component in this area is main replacements. Several large projects currently in construction will push the year end projection close to the budget amount.
Services	\$1,545,001	\$1,699,191	\$1,900,000	● Includes both reimbursable and non reimbursable service work. We are projecting an overage in our service work this year, likely due to the robust economy.
Pump Stations and Reservoirs	\$1,174,000	\$1,449,860	\$1,722,000	● 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. Costs are coming in higher than original estimates on several jobs resulting in an overage in this area.
	\$7,603,002	\$6,067,872	\$8,528,000	112%

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 - Q3			Project Total			Schedule			Status/Comments
	Budget	YTD Actual	Year-End Projection	Initial Plan	To-Date Actual	Project-End Projection	Start	Initial Planned Completion	Projected Completion	
Hayden Bridge Disinfection System Replacement	\$2,052,000	\$324,298	\$2,500,000	\$3,645,000	\$625,242	\$4,500,000	2017	YE-2018	Q2-2019	● Replacement of gas chlorine system with on-site liquid hypochlorite system. Project is in construction. Budget reduction included in 2018 Capital True Up with some funds shifted to 2019. Overall project costs are about 20% higher than initially planned. This is due to higher than estimated equipment and construction costs. Value engineering efforts are occurring to reduce the overall cost of the project. (Initial Plan - 2015 CIP)
Distribution System Scada/PLC Upgrades	\$56,000	\$6,617	\$7,000	\$3,079,780	\$597,726	\$650,000	2013	YE-2016	YE-2018	● Multi-Year upgrade project to upgrade 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	\$632,871	\$1,050,000	\$1,728,000	\$744,537	\$1,300,000	2015	YE-2017	Q4-2018	● Construction is nearing completion. Delays in design process pushed the completion date to Q4 2018. Budget addition/carryover included in 2018 Capital True Up. (Initial Plan - 2015 CIP)
40th Ave Reservoir No. 1	\$100,000	\$22,424	\$60,000	\$10,250,000	\$22,424	\$10,250,000	2018	Q4-2021	Q4-2021	● Design of new base level reservoir on EWEB property off 40th St (Elliot Site). This is the first of a series of new seismically robust reservoirs to be built and is part of the distributed storage concept recommended in the 2015 water master plan. (Initial Plan - 2019 CIP)
Advanced Meters (Water)	\$600,000	\$1,157,645	\$1,500,000	NA	\$1,157,645	TBD	2018	YE-2026	YE-2026	● New Subproject to reflect shift to Opt-Out Advanced Meter Infrastructure. Includes 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	\$88,845	\$150,000	NA	\$0	\$600,000	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 a new building at Hayden Bridge for backup dispatch, trading, and data. A separate heading will be added for the Hayden Bridge Facility beginning in 2019 when significant work begins.
	\$4,293,000	\$2,232,700	\$5,267,000							123%

Type 3 - Strategic Projects & Programs

Project	2018 - Q3			Project Total			Schedule			Status/Comments
	Budget	YTD Actual	Year-End Projection	Initial Plan	To-Date Actual	Project-End Projection	Start	Initial Planned Completion	Projected Completion	
Emergency Water Supply	\$400,000	\$197,527	\$300,000	TBD	\$197,527	TBD	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. As of Q3, one site is operational and a second is almost complete.

Total Water Capital (Excluding Shared Services)	\$12,296,002	\$8,498,100	\$14,095,000	69%	year end actual to budget	113%	year end projection to budget
Type 1, 2 Capital (Excluding Shared Services)	\$11,896,002	\$8,300,572	\$13,795,000	70%	year end actual to budget	116%	year end projection to budget

Management Notes: Through the third quarter, Type 1 work is tracking well while Water Type 2 projects are tracking low. Several large equipment pre-purchase contracts will be completed soon with construction contracts following which will increase expenditures in this area. Overall, at year end, Water's Type 1 and Type 2 projects are both anticipated to exceed the budget limit. There are several reasons for these projected overages including higher than estimated construction costs on several projects; a larger than anticipated number of services; and the purchase of pre-capitalized water meters which are included in the Advanced Meters Subproject. We will monitor these projected overages closely as year end approaches and prepare a budget amendment if necessary.

Capital "EL1" Report: Shared Services, 2018-Q3

Type 1 - General Capital

Capital Category	2018 - Q3			Status/Comments
	Budget	YTD Actual	Year-End Projection	
General Plant - Information Technology (I.T.)	\$1,210,000	\$2,232,407	\$2,900,000	● IS has been receiving capital reallocation from Engineering for Infrastructure projects.
General Plant - Buildings & Land Management	\$476,000	\$434,902	\$476,000	● The Elevator Project is complete. (Wahto) Over eighty percent of the ROC Comm Tower project is complete. Next steps include finalizing permits, completing outstanding grounding tasks, installing and testing back-up power systems, installing and testing Building Management System, installing security systems and end to end final testing. The management of the project has recently been handed over from Engineering to Information Systems. Information Systems is building out a task list and a project schedule for the remaining blocks of work. The schedule and an estimated date of completion should be published in early November, 2018. (Moe)
General Plant - Electric & Water Fleet Capital	\$386,000	\$646,476	\$1,319,978	● (Added \$ 758,769 to replace knuckle-boom crane and full sized vac-truck (electric) & \$122,500 to purchase additional used mid-sized Vac-truck (water)) -Lentsch

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

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 - Q3			Project Total			Schedule			Status/Comments
	Budget	YTD Actual	Year-End Projection	Initial Plan	To-Date Actual	Project-End Projection	Start	Initial Planned Completion	Projected Completion	
AMI Information Technology & Integration	\$113,000	\$34,949	\$200,000	\$6,475,700	\$5,405,008	\$6,475,700	May-2015	Dec-2017	May-2018	● Additional Capital was spent to develop the integrations and automations needed to support AMI mass deployment by the end of 2021.
Customer Information System (CIS) Replacement	\$3,815,000	(\$237,178)	(\$237,178)	\$9,700,000	\$1,022	\$11,150,000	Sep-2016	Aug-2018	mid to late-2019	● CIS Replacement Project cancelled due to vendor issues. Funds moved to O&M (Barton) The negative amount is due to costs from the prior year moved to O&M. (Bach)
WAN (Wide Area Network)	\$768,000	\$0	\$600,000	\$3,000,000	\$0	\$3,000,000	Sep-2018	Jun-2022	Jun-2022	● Project was start was pulled forward to 2018. Expected completion should be 2022 as originally planned and we are on target for scope, schedule and budget. (Knabe)

Total Shared Services Capital (This Report)

\$ 6,768,000.00 \$3,111,555 \$5,258,800 77.70%

Q3 2018, Quarterly Contracts Awarded Report

Appendix D

Contract Execution	Contractor	City, State	Description	Contract Amount	Contract Term	Contract Process	Executive Team Manager
7/20/2018	David Evans and Associates	Vancouver, WA	2018 Bathymetric & Topographic Survey of Carmen Reservoir	\$ 40,300.00	7/27/2018	*QBS-Direct Negotiation	Susan Ackerman
7/30/2018	Landmark Ford	Tigard, OR	Two (2) 1/2 Ton Pickups	\$ 55,690.51	One-time purchase	Quotes	Mel Damewood
8/8/2018	Wildish Building Co.	Eugene, Oregon	Breezeway at Ice Cap Campground Restrooms	\$ 87,972.00	One-time purchase	Informal ITB	Susan Ackerman
8/9/2018	Jensen Drilling Company	Eugene, Oregon	Howard Elementary Water Well Drilling	\$ 85,750.00	11/1/2018	Informal ITB	Mel Damewood
8/9/2018	EDMS Inc., A Mailing Solutions Company	Springfield, OR	Smart Meter Deployment Postcard	\$ 40,000.00	12/31/2021	Quotes	Rene Gonzalez
8/10/2018	Concept Systems Inc	Albany, OR	Ignition Screen Development	\$ 99,752.00	9/28/2019	Consulting-Direct Negotiation	Mel Damewood
8/13/2018	Osmose	Peachtree, GA	Steel Structures Inspection	\$ 134,687.20	12/1/2018	Quotes	Rod Price
8/13/2018	Cadmus Group	Waltham, MA	Distributed Energy Resources Forecasting Tool	\$ 86,920.00	12/31/2018	Consulting-Direct Negotiation	Susan Ackerman
8/15/2018	Electric Reliability (Vertiv)	Milwaukie, OR	Stone Creek Electric Work	\$ 57,230.00	One-time purchase	Informal ITB	Susan Ackerman
8/16/2018	**Badger Meter	Milwaukee, WI	AMI Water Meters	\$ 68,560.00	One-time purchase	Quotes	Mel Damewood
8/21/2018	Oregon Dept. of Fish and Wildlife	Salem, OR	Upper McKenzie Basin Bull Trout Conservation & Monitoring	\$ 125,105.00	8/20/2013	IGA-Direct Negotiation	Rod Price
8/21/2018	TriAxis/David Evans	Corvallis, OR	Alvey-Currin 115kV Transmission Line Rebuild Design	\$ 45,000.00	12/15/2018	*QBS-Direct Negotiation	Rod Price
8/27/2018	Hydro GeoPhysics	Richland, WA	Carmen Diversion Self Potential & Electrical Resistivity Imaging	\$ 48,583.00	11/30/2018	*QBS-Direct Negotiation	Susan Ackerman
9/10/2018	EES Consulting	Kirland, WA	Power Trading Business Case Analysis	\$ 47,915.00	12/31/2018	Formal RFP	Susan Ackerman
9/12/2018	Water Research Foundation	Denver, CO	Research Grant to Support "Impact of Intermittent Operation on Biofilter Performance" Study	\$ 100,000.00	12/31/2019	Grant	Mel Damewood
9/12/2018	Evans, Elder, Brown & Seubert-Crow Property Purchase Buyers Agent	Eugene, Oregon	Acquisition of Property for Crow Substation	Negotiated with Seller Agent	2/20/2019	Real Estate Transaction-Direct Negotiation	Rod Price
9/17/2018	Association of State Dam Safety Officials (ASDSO)	Lexington, KY	Independent Audit - Peer Review for Dam Safety	\$ 102,000.00	3/31/2019	Consulting-Direct Negotiation	Susan Ackerman
9/27/2018	**Badger Meter	Milwaukee, WI	AMI Water Meters	\$ 114,369.00	One-time purchase	Quotes	Mel Damewood

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.

**There were two one-time quotes requested for Badger Meters while a formal Bid solicitation is under development for ongoing orders of these water meters. Purchasing has been working with Operations on refining the requirements for these meters associated with the smart meter deployment.

Small Procurement Coverage Report

In September 2018, EWEB had a breach of the direct negotiation threshold for engineering services. The contract for the Mechanical System Design for the ROC Consolidation was initially under \$100,000, due to project design revisions and required support for a second competitive process for the construction work, this contract increased to \$116,650, which is over the \$100,000 threshold allowed for direct negotiation.

In September 2018, EWEB had a breach of the \$10,000 direct negotiation threshold to extend fiber communication services to the Stone Creek Power Project. Initially this project was thought to be exempt from a competitive process due to the service being a government regulated priced service, however after further review, staff determined that the service is not a government regulated price. Staff determined that the local service provider has the infrastructure and proximity to the project to extend and enhance service with minimal effort and cost where alternative service providers would have to extend their fiber service for tens of miles to provide service to our facilities, however prior to determining the pricing or establishing a sole source, the work was authorized and complete. The total project was \$17,716.

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



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

ENGINEERING / DISTRIBUTION RELIABILITY



TO: Commissioners Brown, Carlson, Mital, Simpson and Helgeson
FROM: Tom Ossowski, Electric Systems Engineering
DATE: October 4, 2018
SUBJECT: Electric System Reliability Report – September 2018

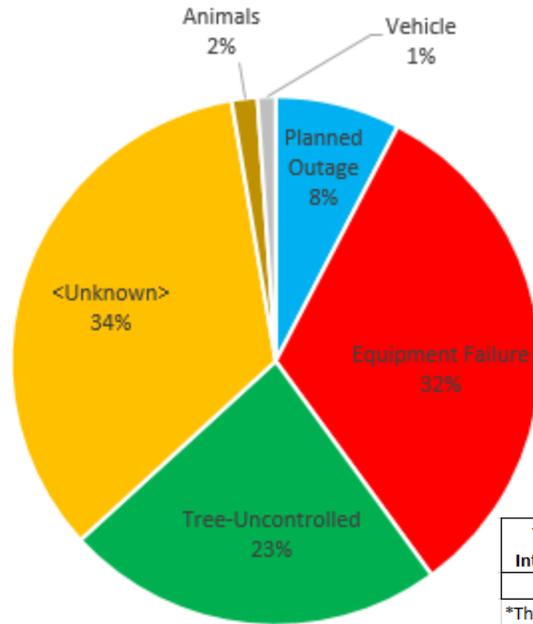
Executive Summary

It was a fairly quiet month for outages compared to August. The most dramatic event was the catastrophic failure of a potential transformer on the 115kV bus at Thurston Substation causing the entire substation to trip off line which not only affected EWEB customers, but SUB and Lane Electric’s as well. The other large outages were a broken crossarm causing a feeder out of Willamette Substation to trip and tree limbs tripped out a couple of large taps.

Outage Performance Details

Index	YTD Actual	YTD 5 Year Average	Pacific Northwest APPA City Average YTD	Dashboard
SAIFI	0.340	0.282	0.30	
SAIDI (minutes)	40.42	38.86	32.40	

September 2018 Interruption Minutes by Outage Cause

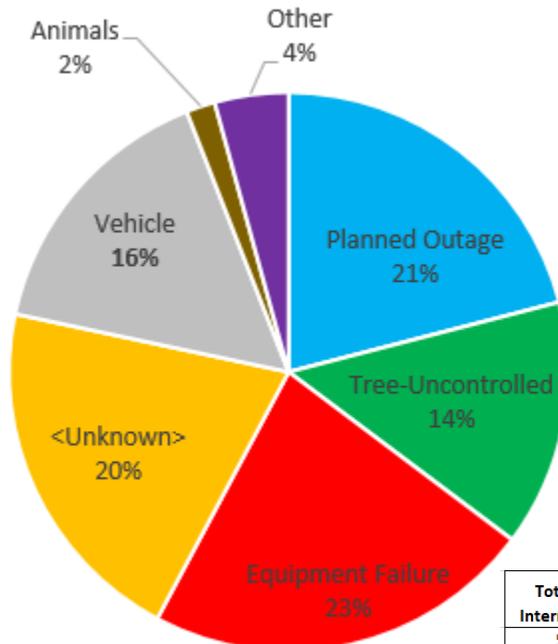


Total # of Interruptions	Total # of Customer Interruptions	*Total Interruption Minutes
57	2,095	423,244

*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.

■ Planned Outage ■ Equipment Failure ■ Tree-Uncontrolled ■ <Unknown> ■ Animals ■ Vehicle

2018 Year to Date Interruption Minutes by Outage Cause

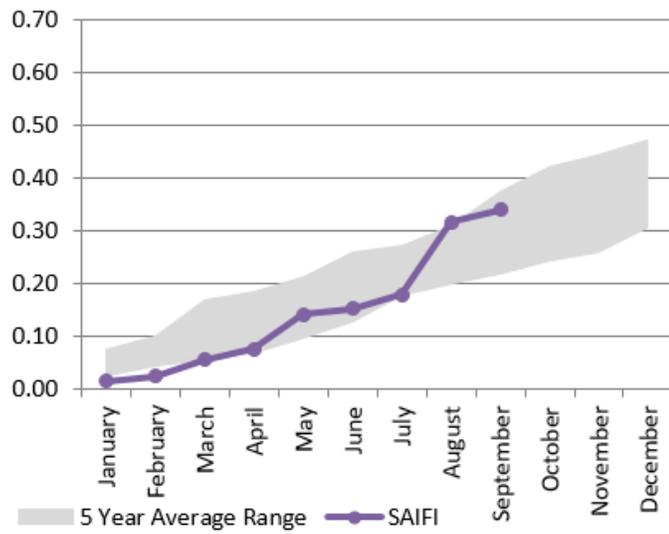


Total # of Interruptions	Total # of Customer Interruptions	*Total Interruption Minutes
529	31,640	3,625,861

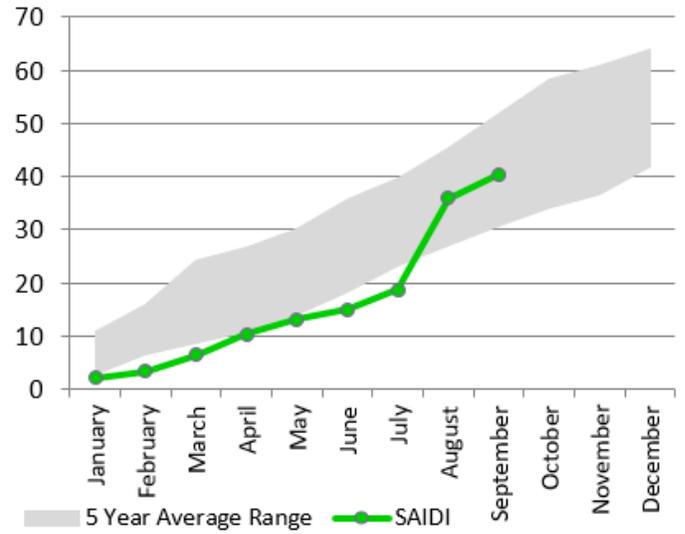
*The pie chart is based on interruption minutes which is the total of the (interruption duration)x(# of customers interrupted) for all the interruptions for the month.

■ Planned Outage ■ Tree-Uncontrolled ■ Equipment Failure ■ <Unknown> ■ Vehicle ■ Animals ■ Other

Cumulative 2018 SAIFI



Cumulative 2018 SAIDI



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
SAIFI	0.016	0.009	0.030	0.021	0.066	0.012	0.026	0.138	0.022
Less Planned Interruptions	-	-	-	-	-	-	-	-	-
5 Year Monthly Average	0.047	0.021	0.029	0.015	0.031	0.042	0.032	0.029	0.037
Year To Date	0.016	0.025	0.056	0.077	0.142	0.154	0.180	0.318	0.340
Year To Date Average	0.047	0.068	0.097	0.112	0.143	0.185	0.217	0.245	0.282
SAIDI	2.06	1.27	3.15	3.88	2.82	1.81	3.73	17.15	4.54
Less Planned Interruptions	-	-	-	-	-	-	-	-	-
5 Year Monthly Average	5.67	4.66	3.68	2.48	3.33	5.03	4.58	4.53	4.90
Year To Date	2.06	3.33	6.48	10.35	13.17	14.99	18.72	35.87	40.42
Year To Date Average	5.67	10.32	14.01	16.49	19.82	24.85	29.43	33.96	38.86
CAIDI	127.31	136.91	103.28	187.68	42.97	156.90	144.35	124.05	202.03
Less Planned Interruptions									
5 Year Monthly Average	122.30	229.24	150.37	174.18	128.04	127.48	197.92	161.76	144.66
Year To Date	127.31	130.82	115.82	135.20	92.65	97.48	104.23	112.85	118.74
Year To Date Average	122.30	175.77	167.30	169.02	160.83	155.27	161.36	161.41	159.55
# Customers	92226	92226	92226	92226	92226	92248	92223	93172	93168
# Interruptions	1490	858	2809	1905	6050	1067	2386	12882	2095

Community Investment through Q3 2018

Sponsorships, Donations, Grants								
QTR	AGENCY	EVENT/DESCRIPTION	PAYMENT DATE	EVENT DATE	AMOUNT	INVESTMENT AREA	CATEGORY	NOTES
Q3	Bromiley Family	Donation to family of deceased utility worker	10/10/18	N/A	\$590	PEOPLE: Safety Net	Discretionary	\$1000 total donated between employee donations and CI fund.
	Foundation for Water & Energy Education / Grant Recipient	Hydropower and STEM Career Academy Travel and Registration - Student Grant	08/30/18	06/18 - 06/22	\$300	ECONOMIC: Education	Discretionary	http://www.eweb.org/about-us/news/a-week-at-a-hydropower-and-stem-career-academy
	Bethel School District	Jul-Dec 2018 Education Grant	08/09/18	N/A	\$38,500	ECONOMIC: Education	Board Directed	
	McKenzie School District	Jul-Dec 2018 Education Grant	08/09/18	N/A	\$10,500	ECONOMIC: Education	Board Directed	
	Springfield School District	Jul-Dec 2018 Education Grant	08/09/18	N/A	\$23,500	ECONOMIC: Education	Board Directed	
	McKenzie Watershed Council & Salmon Stewards of Lane County	Salmon Watch Program - Field trips to Carmen-Smith spawning channel	N/A	Sept	Staff time and incidental cost	ECONOMIC: Education	Discretionary	EWEB provides access to the Carmen-Smith spawning channel in support of the Salmon Watch program. Field trips occur in the last 2 weeks of September. Topics include: water quality, macroinvertebrates, salmon biology and riparian habitat.
	Lane Community College	Scholarship Grant	07/27/18	N/A	\$25,000	ECONOMIC: Education	Board Directed	No scholarships were awarded for the 2018/2019 Fall term. The program application process remains open to encourage a larger candidate pool for Winter term. If no qualifying student applications are received for Winter term enrollment, grant funds will be reverted. The program is scheduled to be re-evaluated in June 2019.
	BRING reThink Education Program	2018 Community Education	07/23/18	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. Sponsorship for this program will discontinue in 2019.
	Eugene 4J School District	Jul-Dec 2018 Education Grant	07/17/18	N/A	\$123,500	ECONOMIC: Education	Board Directed	
	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		
					Q3 SUBTOTAL	\$227,390		
Q2	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.
					Q2 SUBTOTAL	\$21,385		
Q1	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	
					Q1 SUBTOTAL	\$235,125		
					Q1 - Q3 TOTAL	\$483,900		
Upcoming and/or committed								
Sponsorships, Donations, Grants								
AGENCY	EVENT/DESCRIPTION	PAYMENT DATE	EVENT DATE	AMOUNT	INVESTMENT AREA	CATEGORY	NOTES	
Eugene Science Center	Greenpower grant winner - will receive up to \$50,000	TBD	N/A	\$50,000	ENVIRONMENTAL: Greenpower Program	Customer Voluntary	Installation of 32.5-kilowatt photovoltaic array coupled with lithium ion batteries to showcase solar energy through education and exhibits, provide energy cost savings and reduce emissions.	
Friends of Trees	Greenpower grant winner - will receive up to \$50,000	TBD	N/A	\$50,000	ENVIRONMENTAL: Greenpower Program	Customer Voluntary	West Eugene Living Roadways Project - volunteers will plant and care for 600 trees and native shrubs along major roadways in areas of West Eugene to provide cooling and carbon sequestration.	
Pearl Buck Center	Greenpower grant winner - will receive up to \$50,000	TBD	N/A	\$50,000	ENVIRONMENTAL: Greenpower Program	Customer Voluntary	West First Street facility will receive a 24-kilovolt solar array to reduce carbon dioxide emissions, lower operating costs and provide educational value.	
				Total	\$150,000			

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)	
EWEB	Customer Open House	N/A	10/16/18	Staff Time	ENVIRONMENTAL: Water Quality/Reliability	Discretionary (Water Ops)	
Bethel School District & Kalapuya High School	Emergency Water Station Event at Bethel Farms	N/A	10/06/18	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
EWEB Customer Care Program (Q4)	Run to Stay Warm	N/A	11/17-11/18	N/A	PEOPLE: Safety Net	N/A	TBA
McKenzie Watershed Alliance (Q3)	McKenzie River Clean-Up	N/A	07/07/18	N/A	ENVIRONMENTAL: Water Quality/Reliability	N/A	16 volunteers = 48 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	YTD = 123 volunteer hours (Q1 - 39, Q2 - 28.75, Q3 - 55.25)

EWEB employees, friends and families have volunteered over 500 hours YTD

EWEB Ambassador Efforts and Events

AGENCY	EVENT/DESCRIPTION	PAYMENT DATE	EVENT DATE	AMOUNT	INVESTMENT AREA	CATEGORY	NOTES
Placeholder - St. Paul Parish School	Water and Electricity usage curriculum	N/A	TBA	N/A	ECONOMIC: Education	N/A	Request from teacher for speakers/resources to support curriculum.
EWEB Customer Care Program (Q4)	Run to Stay Warm	N/A	11/17-11/18	N/A	PEOPLE: Safety Net	N/A	3 Cash Handling Staff required each day. Hours to be updated post-event.
Elevate Lane County	Middle School Career Expo	N/A	10/25/18	N/A	ECONOMIC: Education	N/A	Free to participate - HR will staff.
EWEB	Customer Open House	N/A	10/16/18	N/A	ECONOMIC: Education	N/A	Approximately 50 Staff and Commissioners provided information and services to attendees at EWEB's Fall Open House from 5 to 7 pm = approx. 100 hrs.
N/A	Public Power Week 5th Grade Poster Contest	N/A	10/08-10/15	N/A	ECONOMIC: Education	N/A	Staff and Commissioners presented awards to 5 students who submitted the top 5 winning entries. 1 EWEB Ambassador + Commissioner at each presentation = approx. 5 hrs.
Various Neighborhood Associations	Neighborhood Association meeting presentations	N/A	Ongoing	N/A	ECONOMIC: Education	N/A	Multiple staff members attending and presenting at various neighborhood organizations to share info on EWEB latest projects, initiatives and programming. 12 different general meetings to date - 1-3 EWEB Ambassadors + Commissioner at each meeting = approx. 12 to 36 hrs. to date.
Friendly Area Neighbors	Map Your Neighborhood Meeting	N/A	09/30/18	N/A	ECONOMIC: Education	N/A	Emergency Preparedness - 1 EWEB Ambassador = 1 hr
Academy of Arts & Academics High School	Hydro power presentation	N/A	09/27/18	N/A	ECONOMIC: Education	N/A	1 EWEB Ambassador - 3 hrs.
University of Oregon	Generation staff presentation to U of O Geophysics class	N/A	09/28/18	N/A	ECONOMIC: Education	N/A	2 EWEB Ambassadors = 4 hrs.
McKenzie Watershed Council & Salmon Stewards of Lane County	Salmon Watch Program	N/A	09/17-09/26	N/A	ECONOMIC: Education	N/A	3 EWEB Ambassadors = approx. 21 hrs.
University of Oregon	Generation staff presentation at Carmen-Smith to U of O student hikers program through Office of Sustainability	N/A	09/17/18	N/A	ECONOMIC: Education	N/A	1 EWEB Ambassador - 1 hrs.
BRING	Home & Garden Tour and EV Expo	N/A	09/09/18	N/A	ECONOMIC: Education	N/A	3 EWEB Ambassadors = approx. 12 hrs.
Friendly Area Neighbors Picnic	Neighborhood Organization Picnic	N/A	07/22/18	N/A	ECONOMIC: Education	N/A	Booth with info on Emergency Preparedness, Electric Vehicles and more. 1 EWEB Ambassador = 4 hrs.
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. 19 EWEB Ambassadors (3 hr. shifts) = 57 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.
University of Oregon	Generation staff provided a tour of the Leaburg project and Q&A to a U of O student group interested in generation and renewable energy	N/A	05/18/18	N/A	ECONOMIC: Education		2 EWEB Ambassadors = 6 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.

EWEB Ambassadors have provided over 250 hours of educational and other services to the Community YTD