Quarterly Strategic and Operational Report

Q1 – 2019

Eugene Water & Electric Board

May 1, 2019

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Eugene Water & Electric Board

Frank Lawson, CEO/General Manager
Sue Fahey, Assistant General Manager & Chief Financial Officer
Susan Ackerman, Chief Energy Officer
Matt Barton, Chief Information Officer
Mel Damewood, Emergency Planning Chief
Lena Kostopulos, Chief Workforce Officer
Rod Price, Chief Engineering & Operations Officer
Rene Gonzalez, Customer Solutions Manager
Deborah Hart, Financial Services Manager
Mike McCann, Generation Manager
Julie McGaughey, Customer Operations Manager

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General Information

		Electric	Water
Service territory	236 square miles		
Miles of line or pipe		1,300	800
Substations/Pump Stations		35	27
Water Storage		-	23 reservoirs (89 MGal, Capacity)
Number of customers	200,000 population served	93,000	61,000
Annual Operating Budget, in millions		$212.2	$19.9
Annual Capital Budget, in millions		$37.3	$15.4

Executive Summary

The Management of Eugene Water & Electric Board (EWEB) is pleased to report the preliminary, unaudited results of the first quarter of the 2019 fiscal year to our governing Commissioners and the public.

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. However, although Total Electric Utility operating revenues exceeded the seasonally adjusted budget by $14.7 million, the year-to-date contribution margin variance was $4.1 million unfavorable to budget due to several factors. Below average water flows in the Columbia River Basin resulted in lower power supply from EWEB's Bonneville Power Administration's Slice contract. Regionally, scheduled transmission maintenance and renewable resource unavailability also reduced supply. Unplanned maintenance outages at EWEB-owned generating units resulted in further supply reductions. At the same time, cold weather in February and March increased customer demand for power. Energy prices rose dramatically due to the combination of reduced supply and higher demand which resulted in EWEB purchasing more power than budgeted at significantly higher prices. The Electric Utility maintains $17 million in the power reserve to help mitigate these risks. Based on the aforementioned impacts, along with a $4.3 million storm impact, as of March 31, net income for the Electric Utility is $900,000 compared to a budget expectation of $7.2 million

Water Utility operating revenues are in line with budget expectations through March 2019. Through the end of March, net income for the Water Utility was $1 million compared to a budget expectation of $406,000 for the three month period. The $596,000 favorable budget variance in operating expenses primarily resulted from a $500,000 unallocated contingency budget, as well as positive variances in professional services and construction services. Favorable variances in these areas will likely decline as construction picks up during the summer months.

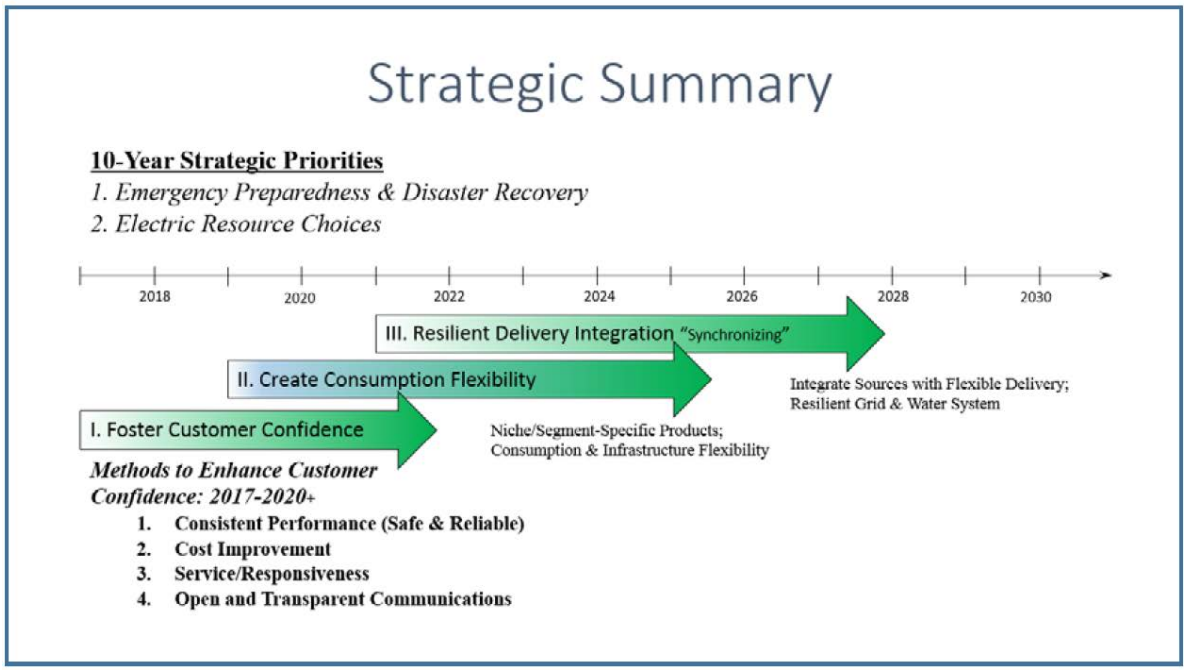
Reserve balances for both the water and electric utilities are above target. The Board is scheduled to review reserves and the highest and best use of cash at the May meeting.

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). Since the intent of this report is to reveal trends in normal daily operation, the storm outages are not included in the reliability data below per the IEEE reliability standard. The SAIFI and SAIDI numbers for the first quarter are at the high end of the 5 year averages.

Overall, EWEB continues to work on building organizational and customer confidence through the transparent communication of our results, included those discussed herein. We appreciate your support.

Frank Lawson, General Manager

Strategic Initiatives



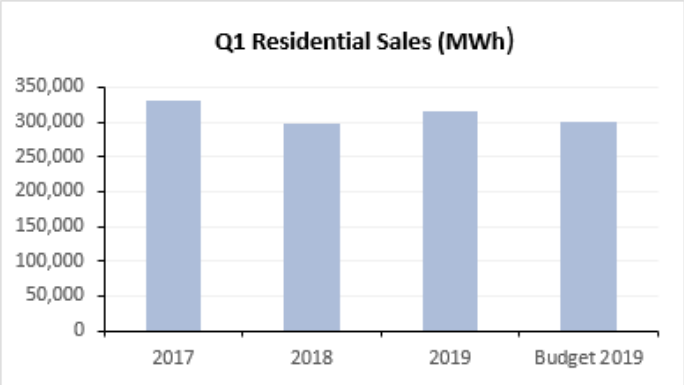
Operating Revenue & Consumption

Electric Operating Revenues

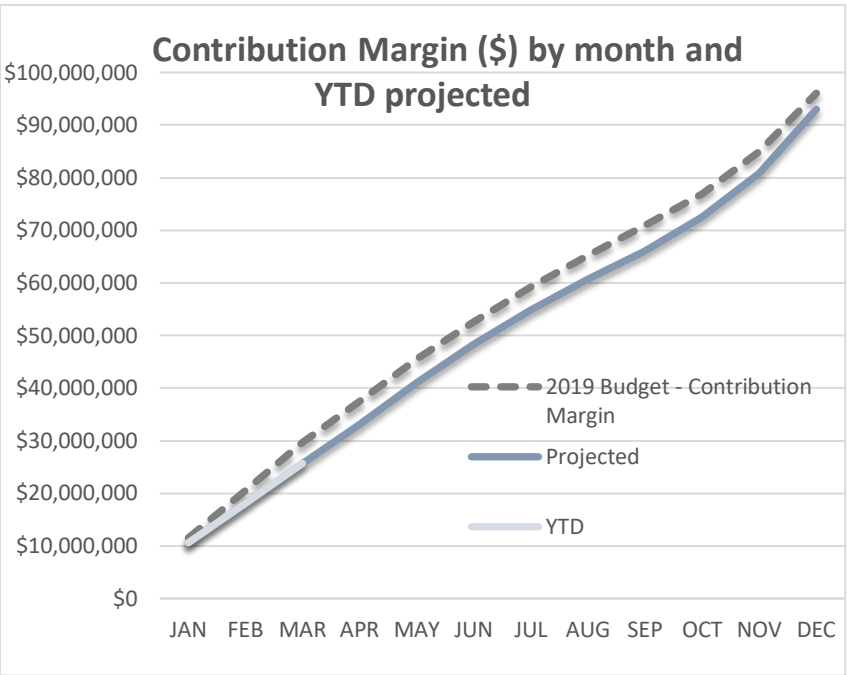
Total Electric Utility operating revenues exceeded the seasonally adjusted budget by $14.7 million. Retail revenue was favorable by 2% ($1.3 million) compared to year-to-date budget. **Wholesale and other revenue** had a favorable $13.4 million variance, driven by higher prices. Prices were approximately 30% greater than budget in January and 300% the budget assumptions for February and March. Higher prices were the result of low regional supply and colder than average temperatures. The favorable variance in wholesale sales was more than offset by an unfavorable purchased power variance. EWEB had to purchase power during this period of increased prices when customer consumption was up.

Electric Retail Sales by Consumption

Retail consumption was up 4% to budget due to colder than average weather in February and March.



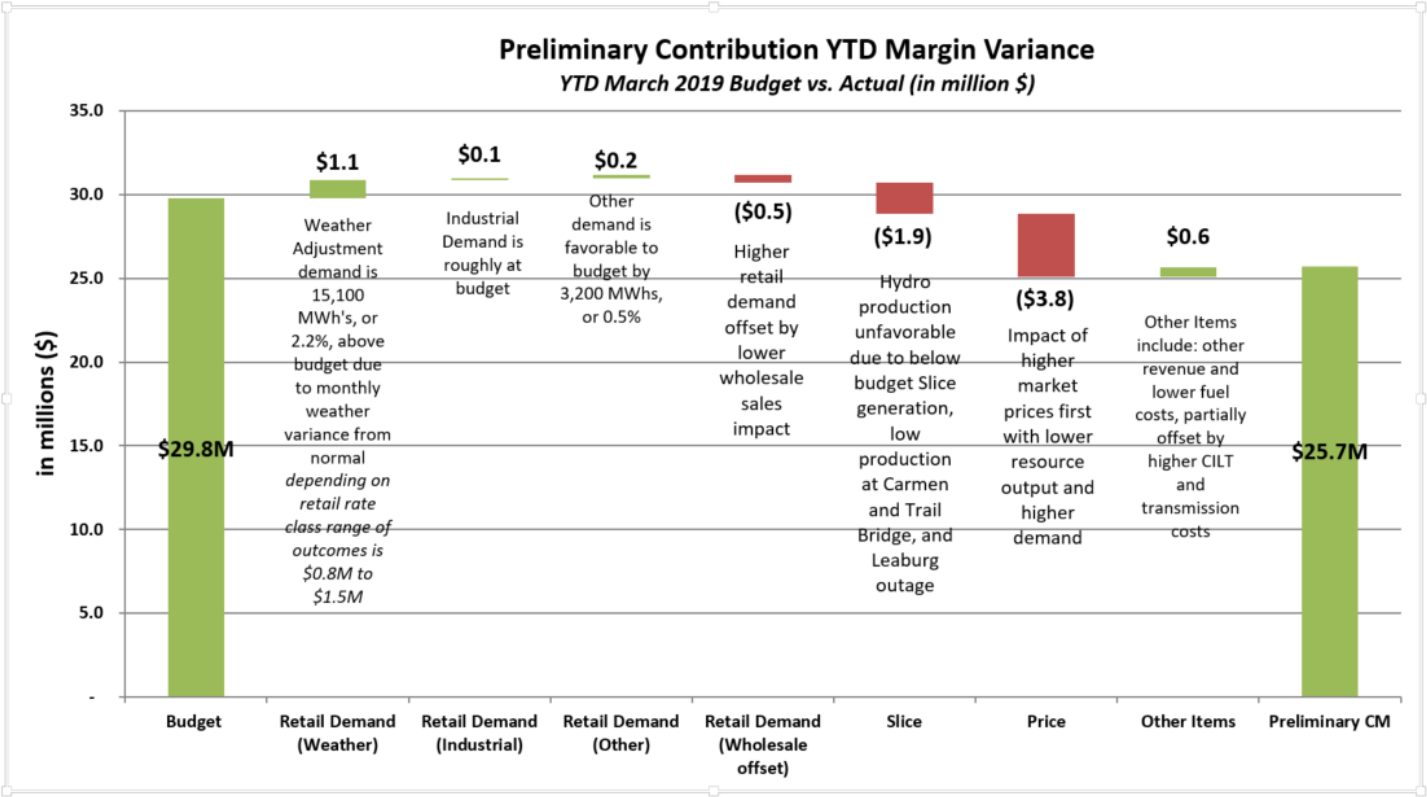
Electric Wholesale & Contribution Margin



The Electric Utility contribution margin represents the amount by which 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 subject to spill requirements, 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 $3 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.

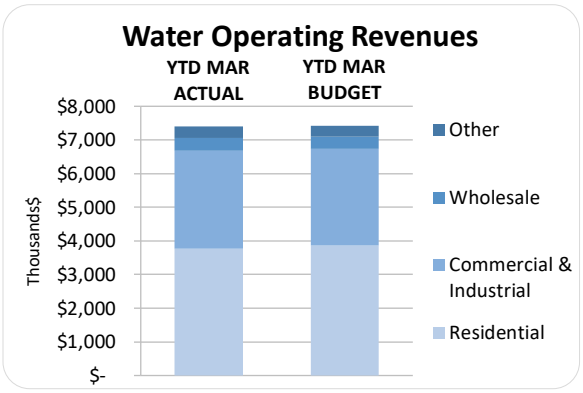
The year-to-date contribution margin variance was $4.1 million unfavorable to budget due to several factors. Below average water flows in the Columbia River Basin resulted in lower power supply from EWEB's Bonneville Power Administration's Slice contract. Regionally, scheduled transmission maintenance and renewable resource unavailability also reduced supply. Unplanned maintenance outages at EWEB-owned generating units resulted in further supply reductions. At the same time, cold weather in February and March increased customer demand for power. Energy prices rose dramatically due to the combination of reduced supply

and higher demand which resulted in EWEB purchasing more power than budgeted at significantly higher prices. The Electric Utility maintains $17 million in the power reserve to help mitigate these risks.



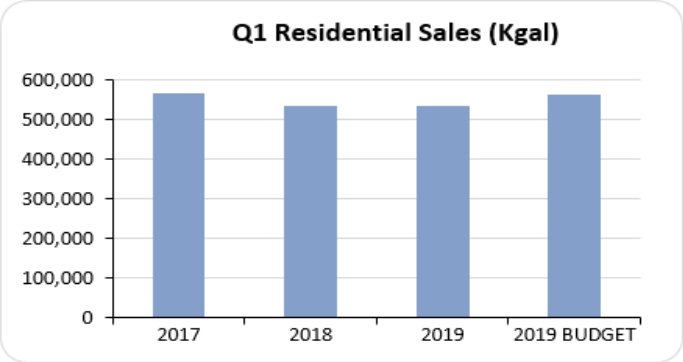
Water Operating Revenues

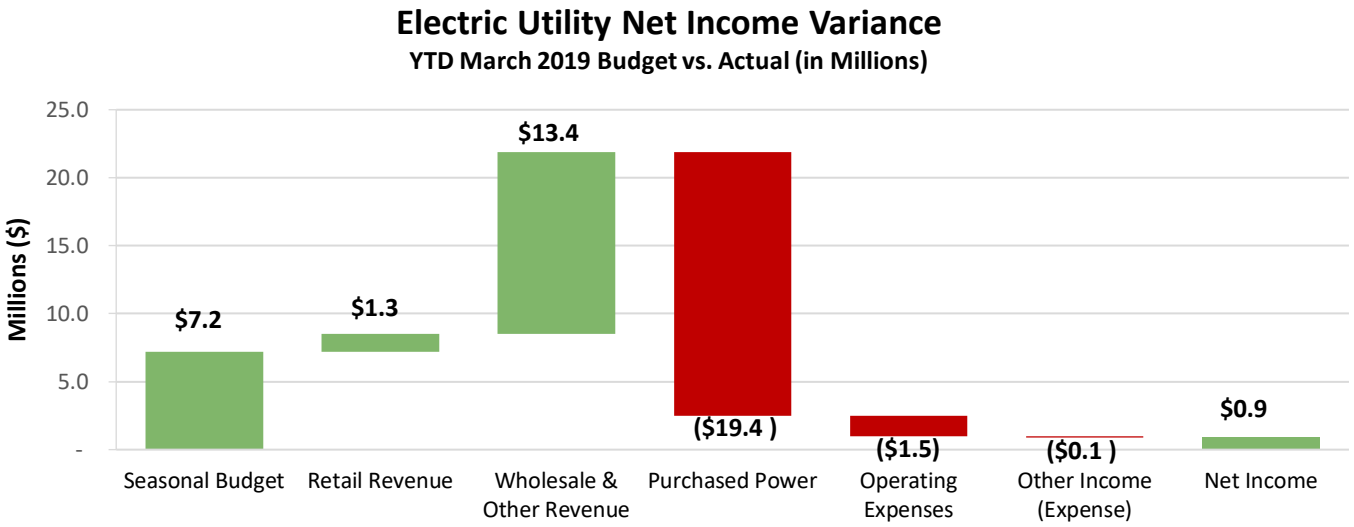
Water Utility operating revenues are in line with budget expectations through March 2019. Residential consumption had a small unfavorable variance to budget which was offset by favorable General Service consumption. As a result **Retail Revenue** is near budget. **Wholesale and other revenue** are also tracking near budget expectations. Wholesale sales includes sales to the Water Districts, City of Veneta, as well as sales to the Willamette Water Company.



The annual budget uses conservative assumptions to help mitigate risk. For 2019, the budget was set at approximately 96% of the 5-year retail consumption average.

Water Retail Sales by Consumption





As of March 31, net income for the Electric Utility is $900,000 compared to a budget expectation of $7.2 million. **Operating expenses** had an unfavorable variance of $20.9 million when compared to budget primarily due to a $19.4 million unfavorable purchased power costs variance as discussed in the Electric Wholesale & Contribution Margin section. Some of the purchased power variance was offset by increased wholesale sales revenue as discussed above under Electric Operating Revenues. The February snow storm, which resulted in 20,000 outages, is the primary reason for the remainder of unfavorable variance. Total storm costs are estimated to be $4.3 million. Staff is assisting the Oregon Office of Emergency Management in pursuing a presidential disaster declaration and FEMA funding. Favorable variances exist year-to-date for deferred work, vacancies and an unallocated contingency fund of $750,000. *See Appendix A - Electric Utility Financial Statement.*

Electric Capital

Year-to-date capital spending is $6.4 million or 17.2% of the annual budget. *See Appendix C - EL1 Report.*

Electric Reserve Levels

Reserve balances are above target. The Board is scheduled to review reserves and the highest and best use of cash at the May meeting. March balances are presented below:

Electric Utility Schedule of Cash Reserves

		FINANCIAL POLICY REFERENCE	TARGET	BALANCE 3/31/2019
	Working Cash	Rate Sufficiency	**$ 36,000,000**	**$ 47,957,000**
	DESIGNATED FUNDS			
	Operating Reserve	Rate Stability	$ 2,000,000	$ 2,083,000
	Self-Insurance Reserve	Rate Stability	1,720,000	1,774,000
	Power Reserve	Rate Stability	17,000,000	17,000,000
	Capital Improvement Reserve[(1)]	Capital Reserve	22,000,000	25,920,000
	Rate Stabilization Fund[(2)]	Rate Stability	5,000,000	37,049,000
	Pension & Post-Retirement Medical Fund		-	-
	Business Growth & Retention Loan Fund		-	1,992,000
	DESIGNATED FUNDS TOTAL		**$ 47,720,000**	**$ 85,818,000**
	CASH & DESIGNATED FUNDS TOTAL		**$ 83,720,000**	**$ 133,775,000**

[(1)]The Capital Improvement Reserve includes $2.2 million designated to fund 2019 meter installation costs.

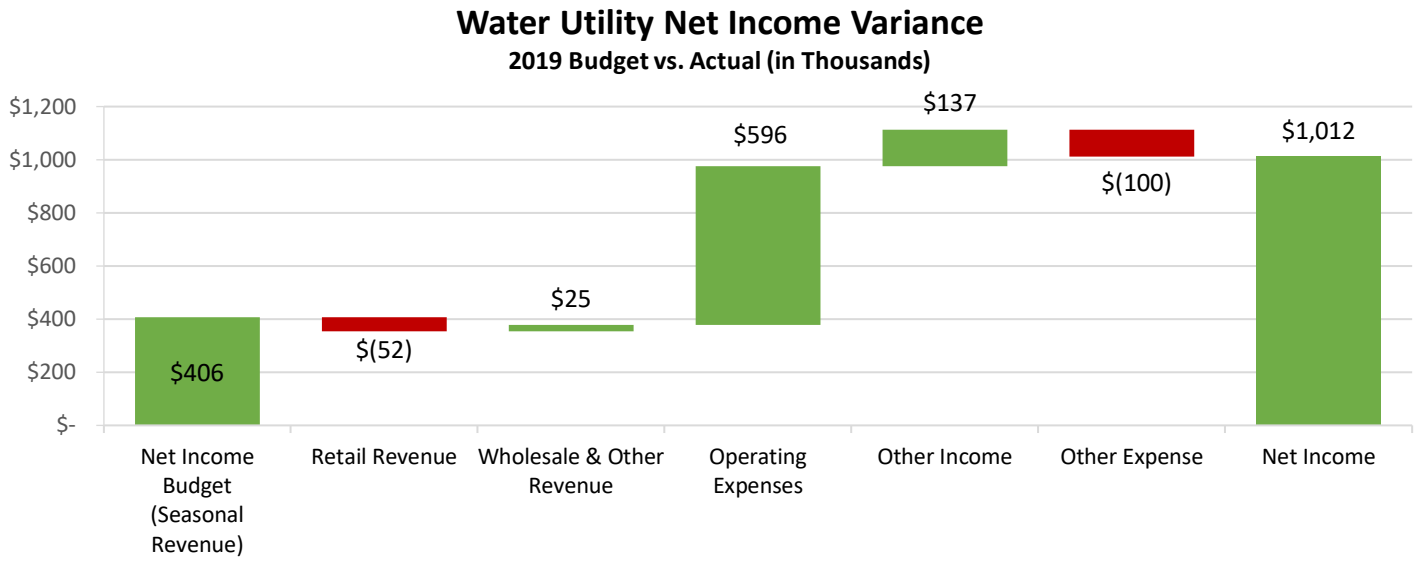
[(2)]The Rate Stabilization Fund includes $21.5 million designated to reduce future borrowing.

Electric Utility Financial Outlook

The Electric Utility budget includes a deposit to reserves of $2.5 million. Cash is forecasted to decrease by $3.0 million at year end due to a net unfavorable $5 million budget variance. The unfavorable variances are primarily a result of a lower than budgeted contribution margin and storm costs. This is partially offset by projected savings from labor vacancies of $1 million.

The Electric Utility has emergent capital projects which may drive capital spending above budget: an additional transformer at the Holden Creek substation for purposes of redundancy, and the ROC Consolidation project for structural expansion, HVAC, and installations to accommodate relocation of dispatch to the Roosevelt Operations Center.

Water Utility Financial Report



Through the end of March, net income for the Water Utility was $1 million compared to a budget expectation of $406,000 for the three month period. The $596,000 favorable budget variance in **operating expenses** primarily resulted from a $500,000 unallocated contingency budget, as well as positive variances in professional services and construction services. Favorable variances in these areas will likely decline as construction picks up during the summer months. **Non-operating revenues** had a favorable variance of $137,000, primarily due to higher interest income as a result of increasing rates. **Non-operating expenses** have an unfavorable variance due to asset retirements from pump station improvements. *See Appendix B - Water Utility Financial Statement.*

Water Capital

First quarter capital spending is $3.7 million or 24% of the approved budget. *See Appendix C - EL1 Report for further details.*

Water Reserve Levels

Reserve balances are above target. The Board is scheduled to review reserves and the highest and best use of cash at the May meeting. March balances are presented below:

Water Utility Schedule of Cash Reserves

		FINANCIAL POLICY REFERENCE	TARGET	BALANCE 3/31/2019
	Working Cash	Rate Sufficiency	**$ 3,400,000**	**$ 9,254,000**
DESIGNATED FUNDS				
	Operating Reserve	Rate Stability	$ 1,000,000	$ 1,012,000
	Self-Insurance Reserve	Rate Stability	280,000	289,000
	Capital Improvement Reserve[(1)]	Capital Reserve	7,000,000	9,875,000
	Rate Stabilization Fund	Rate Stability	1,000,000	1,307,000
	Pension & Post-Retirement Medical Fund		-	-
	Alternate Water Supply Fund		-	6,377,000
	Other Designated Funds		-	283,000
	DESIGNATED FUNDS TOTAL		**$ 9,280,000**	**$ 19,143,000**
	CASH & DESIGNATED FUNDS TOTAL		**$ 12,680,000**	**$ 28,397,000**

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

Water Utility Financial Outlook

Net income is expected to be approximately $1.5 million favorable at year's end. Expense savings of $800,000 is a result of vacancies and contingency funds that are currently unallocated. The remainder of the positive variance is from revenue and is highly dependent on water consumption in the summer months. An average water usage year would result in a $750,000 favorable variance over the more conservative budget.

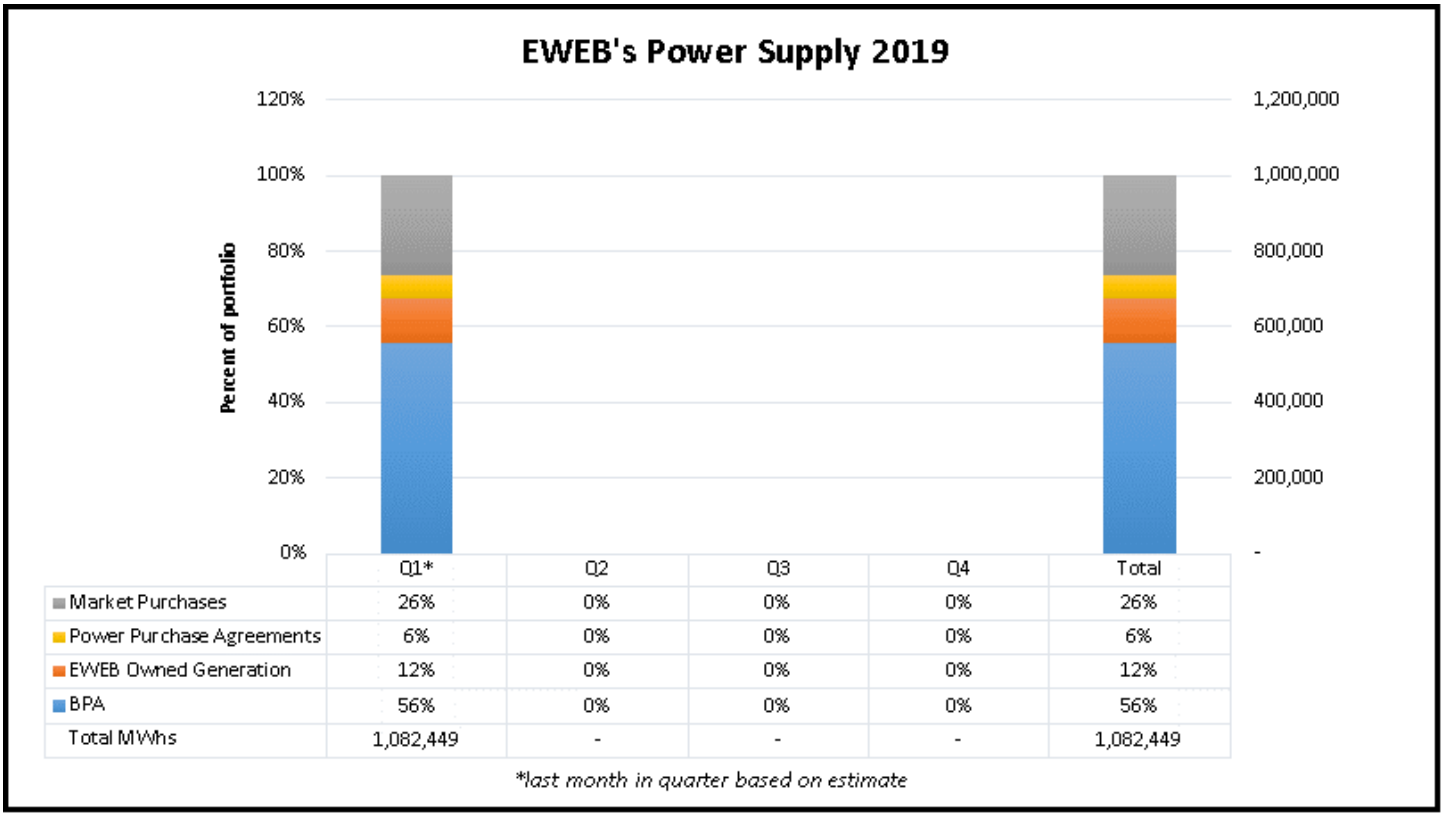
The Water Utility has emergent capital work which is projected to be $2.5 million over budget, primarily for pipeline replacements in conjunction with the City's plan for road work.

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 first quarter of 2019, EWEB energy supply totaled 1,082,449 MWhs with 56% supplied by the Bonneville Power Administration (BPA), 12% from EWEB-owned generation, 6% from power purchase agreements and the remainder from market purchases.



	Q1*	Q2	Q3	Q4	Total
Market Purchases	26%	0%	0%	0%	26%
Power Purchase Agreements	6%	0%	0%	0%	6%
EWEB Owned Generation	12%	0%	0%	0%	12%
BPA	56%	0%	0%	0%	56%
Total MWhs	1,082,449	-	-	-	1,082,449

last month in quarter based on estimate

EWEB's owned electric generating resources were challenged to meet plan expectations in the first quarter of 2019. The quarter started out dry and mild. Both hydroelectric and wind generation were below plan in January. February and March were more typical from a hydro/water perspective, but wind production remained well below normal, and the snow storm at the end of February disrupted power generation on the McKenzie River and at the IP mill in Springfield for up to one week. The two thermal plants operated well during the quarter except when impacted by the winter storm outage. We ended the quarter with projections for what looks to be an average hydro year in the McKenzie and Clackamas basins (Stone Creek) for the remainder of 2019.

The Walterville and Stone Creek hydroelectric plants operated well throughout the quarter, experiencing only minor weather-related outages. The Leaburg project remained offline as we address dam safety concerns identified in a September FERC inspection of the project. Staff and contractors completed a geotechnical investigation of the identified seep area in March and are now analyzing the data in order to develop a repair strategy for the project. Staff now believe that the Leaburg project will be out of operation for most or all of 2019. The Carmen power plant was taken offline at the end of March for the second year of power plant reconstruction. Because this year's work involves rebuilding the project substation, the Trail Bridge powerhouse is also offline. The Carmen and Trail Bridge plants are scheduled to be offline through October.

Q1 2019 Generation Reliability by Fuel Type

Generation Type	Availability Factor (AF)	Forced Outage Factor (FOF)	Notes
Target	**> 90%**	**< 3.00%**	
Wind	91.40%	N/A	Plants are meeting plan for availability but production remains below targets due to low wind conditions and winter weather.
Hydro	68.08%	31.78%	Leaburg units are offline due to canal outage. Carmen, Trail, Walterville and Stone Creek affected by winter storm impacts.
Thermal	94.55%	3.76%	Both thermal plants experienced minor unplanned outages during Q1. IP facility affected by winter storm impacts to the mill.

In total, EWEB-owned hydroelectric facilities did not meet targets for availability (AF) or forced outage factor (FOF) in Q1 of 2019. AF measures the percentage of time a unit is available to produce electricity, and FOF is the percentage of time a unit is unavailable due to unplanned outages. Individually, only Walterville and Stone Creek met the annual availability target, and only Stone Creek met the annual FOF target.

March 2019 Generation YTD Report

Parms: Plant Management Control = No, Include Deratings = No, Gross = Yes, Data Last Loaded Date: 4/3/2019

Unit	Year	Month	AF	FOF	GCF	GOF
CSU1	2019	03	62.62	37.38	3.42	66.66
CSU2	2019	03	80.58	19.07	24.75	45.66
TBU1	2019	03	81.05	18.70	43.86	54.11
LBU1	2019	03	0.00	100.00	0.00	0.00
LBU2	2019	03	0.00	100.00	0.00	0.00
WVU1	2019	03	92.79	7.21	84.87	91.47
STCU1	2019	03	97.28	2.72	47.83	49.17
HYDROELECTRIC	2019	03	68.08	31.78	21.66	55.22
-						
IPU4	2019	03	87.25	8.67	83.78	96.03
WGAU1	2019	03	99.73	0.27	56.75	56.91
THERMAL	2019	03	94.55	3.76	67.98	71.90

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

The Q1/2019 capacity factor, which is the ratio of the energy produced to the total energy that could have been produced, for our hydro facilities was 21.66, largely affected by the ongoing Leaburg outage, the lack of water across the system in January, and the winter storm related outages in February. For our thermal facilities it was 67.98, largely driven by the winter storm outage at IP and the overall high price of natural gas in the region.

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). The big event of the first quarter was the late February snow storm which caused about 20,000 customer outages. Since the intent of this report is to reveal trends in normal daily operation, the storm outages are not included in the reliability data below per the IEEE reliability standard.

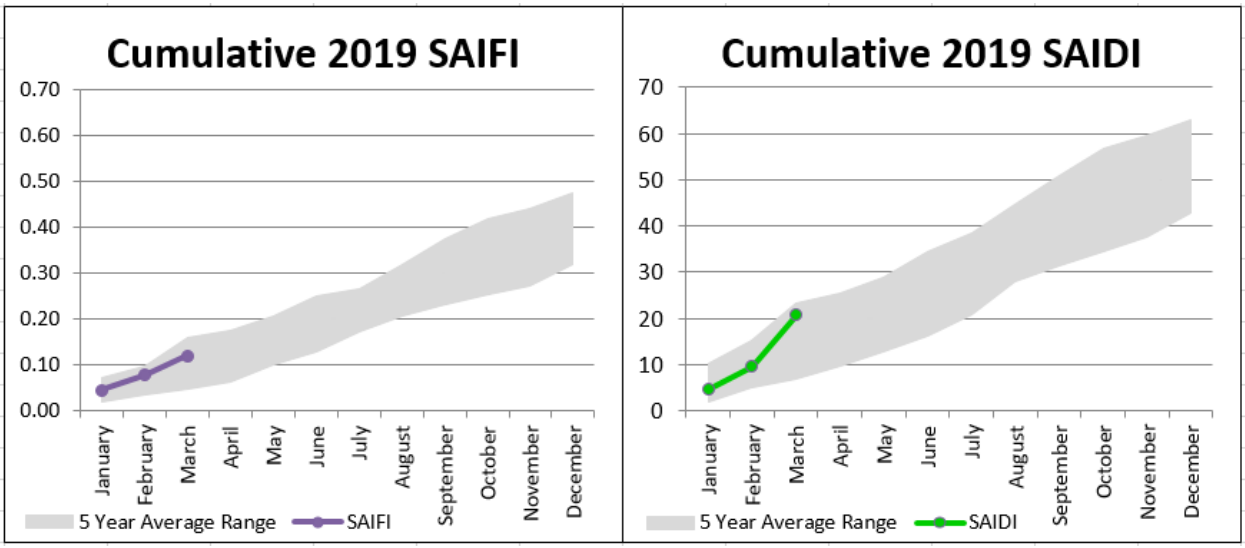
The highlights of the first quarter outages, not related to the snow storm, were the Leaburg feeder 2004 locking out four different times due to tree limbs in the overhead conductors. The other significant outage was an underground cable splice failure which resulted in over 200 customers losing power for 6 hours. The SAIFI and SAIDI numbers for the first quarter are at the high end of the 5 year averages.

2019 Q1 System Average Interruption Frequency Index (SAIFI) Outage Performance Details

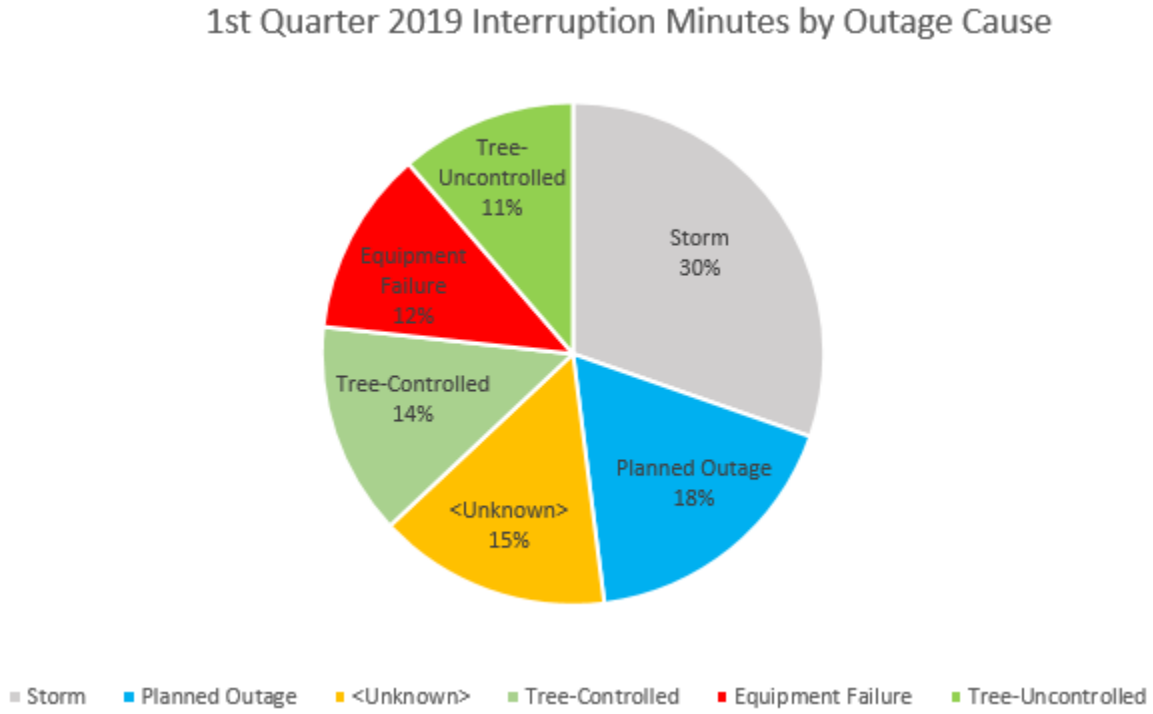
Total # of Interruptions	Total # of customer interruptions	Total outage minutes
215	11,144	1,924,771

2019 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	0.120	0.098	0.10	
SAIDI (minutes)	20.81	13.20	10.80	



Below is a chart of the year-to-date interruptions by causes. The interruptions that fell under the "Storm" category were outages that occurred at the tail end of the storm on days that were not determined to be "Major Event Days" per the IEEE standard so were included in the outage statistics. Sunday February 24 through Thursday February 28 were determined to be "Major Event Days" so all outages that started on these days were not included in the reliability statistics.



2019
Electric Line Tree and Vegetation Management
PCOP = Potential Customer Outages Prevented

Month	Planned (line miles)	Completed (line miles)	% Completed	PCOP	Status
*January	23.3	13.68	58.71%	1,540	
February	23.3	31.8	136.48%	3,405	
March	23.3	30.5	130.90%	6,169	
Q1 Totals	69.9	75.98	108.70%	11,114	
YTD totals	**69.9**	**75.98**	**108.70%**	**11,114**	
*Sent 4 crews to California to help with fire					

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. The prioritization of this work is currently being analyzed through development of detailed asset plan models for equipment based on age, condition, customer impact and other factors. Specific equipment analysis being targeted in 2019 are:

- Substation Circuit Breakers
- Power Transformers
- Underground Cable

Risk based models are being used for this equipment in order to plan equipment replacement of highest internal and external impacts to be completed first. Studies are currently underway with collaboration between Engineering and Customer Solutions to develop accurate and actionable models which detail customer and community risk in terms of cost of outage by duration and including subjective community impact factors. Data has been assembled by substation, and will be assembled in Q2 by feeder as well. This information will be used as a component to refining replacement plans for various equipment and substation rebuilds.

Staff will be drafting the 2020-2029 capital plan in Q2. This will include some influence from the above study findings as well as additional larger strategic projects for reliability, resiliency and load growth.

Capital Project Spending

Quarter one spending is on track for Type 1 and Type 2 compared to the straight line approximation method. Type 3 is currently behind compared to straight line approximation, however will see additional accelerated spending rates in Q3 and Q4 as work is progressed to rebuild the Carmen Substation.

This early in the year, projects are typically low certainty prior to the start of construction, which typically increases in the late spring/early summer. Due to this uncertainty, there are many unknowns around year end spending at this time. Based on available information around project planning and execution progress, there are several pressures which may result in a possible over spend of the capital budget, requiring a proposed capital budget amendment if no action to defer work is taken.

Below is a summary of known pressures which may result in an unfavorable capital variance (additional spending over project budget that may be required shown):

- February Snow Storm Repairs - $390k*
- Smith Dam Intake Rehabilitation - $1.3M
- Smart Meter Comm. Infrastructure - $3.1M
- AMI Software Upgrade - $500k* (electric share only)
- Holden Creek Substation Expansion - $1.8M*
- ROC Consolidation and Remodel - $652k* (electric share only)

**Projects which are considered high certainty (design complete, procurements made and execution in progress).*

Engineering and Finance will work closely to monitor these pressures and project performance on a monthly basis. At which point the pressures are realized, or certainty is high on year end projections, a decision will be made to request a reasonable budget amendment to absorb costs, if required, in order to cover funds for projects where deferral is not possible, or risk of doing so has too high of an impact on reliability, safety or business continuity. Below is a summary of project spending which could be deferred along with associated risk of deferral (spending reduction is shown that would be deferred to 2020 or later):

Project(s)	Amount Deferred	Risk of Deferral
Upriver Distribution System Transformer Replacements	$460k	Would reduce capability to backfeed upriver customers during line outages due to lower voltage capabilities.
In Town Distribution System Enhancements	$400k	Would defer other work in the queue to 2020. Some projects in progress and may result in idle crews while work is designed for next work.
Fleet	$450k	Deferral of bucket truck purchase; would result in possible capability loss of crews as existing equipment is past useful life and needing extensive repairs.
Generation Type 1	$500k	Would result in deferral of high impact work to generation reliability; many projects close to deployment and would result in inefficiencies to project execution, and overall project cost increases.
IT Type 1	$900k	Deferral would result in use of hardware beyond useful lifecycle, and possible business impact. Includes SCADA system upgrade for electric.
Substation	$1M	Most work in progress, only option for deferral would be to cancel order for IP Transformer Replacement (would require payment for work and materials to date to vendor). Deferral of transformer procurement would result in high impact to EWEB and Customer with no usable backup transformer unit.
Transmission	$500k	Deferral of Currin Line Rebuild – would result in continued risk of line failure due to equipment condition and age (would not realize increased resiliency). Would need to cancel contractor bidding in progress, and store materials for an additional year.
Smart Meter Deployment	$2.5M	Deferral of expansion of AMI Comm. System and required AMI software upgrades to support opt out deployment. Deferral would result in critical path delay of project for 1 year, and additional business impacts as additional meter reader staffing would be required as existing comm. Infrastructure becomes over loaded due to inadequate bandwidth.
FEMA Distribution Upgrades	$1M	Would result in possible loss of funding for a portion of the work if deferred past the required completion date as dictated by FEMA; results in no resiliency increase of the distribution system.
Downtown Network Upgrades	$1.5M	Delay replacement of network protectors would delay replacement of currently end of life equipment and provide continued unsafe working conditions for staff in vaults. Delay of network tie switch project results in no increase in resiliency of the downtown network and may result in realized risk of outage to downtown customers with extended outage.
WAM and CIS Upgrades	$1.4M	Deferral would result in continued use of systems beyond useful life with no vendor support. Failure of in place systems would result in high business impact internally (PO/Work order processing) and high customer impact (customer billing and information).
ROC Consolidation and Remodeling	$652k	Would result in costs associated with demobilization of contractor, and continued organizational inefficiencies operating at two facilities. Would result in an overall increase to project cost.
Total Possible to Defer	**$11.61M**	**Risk of deferral of all above projects could result in system, customer and internal business continuity risk.**

Actual amount that will be deferred depends on findings from Finance around acceptable reserve amount that can be utilized to cover any overages.

Below is a summary around current spending levels for the Electric Capital Budget. See Appendix C for full details around capital spending performance and projections.

Project Execution – 2018 Capital Improvement Plan performance (Data through Mar. 31st, 2018; 25% of year):

Total Type 1 and Type 2:

$5.4M spent (budget $22M)
24.5% budget spent
YE Projection - $31.7M (144% of budget, $9.7M overspend)
Error Analysis
Min YE Projection - $26.8M
Max YE Projection - $35.7M

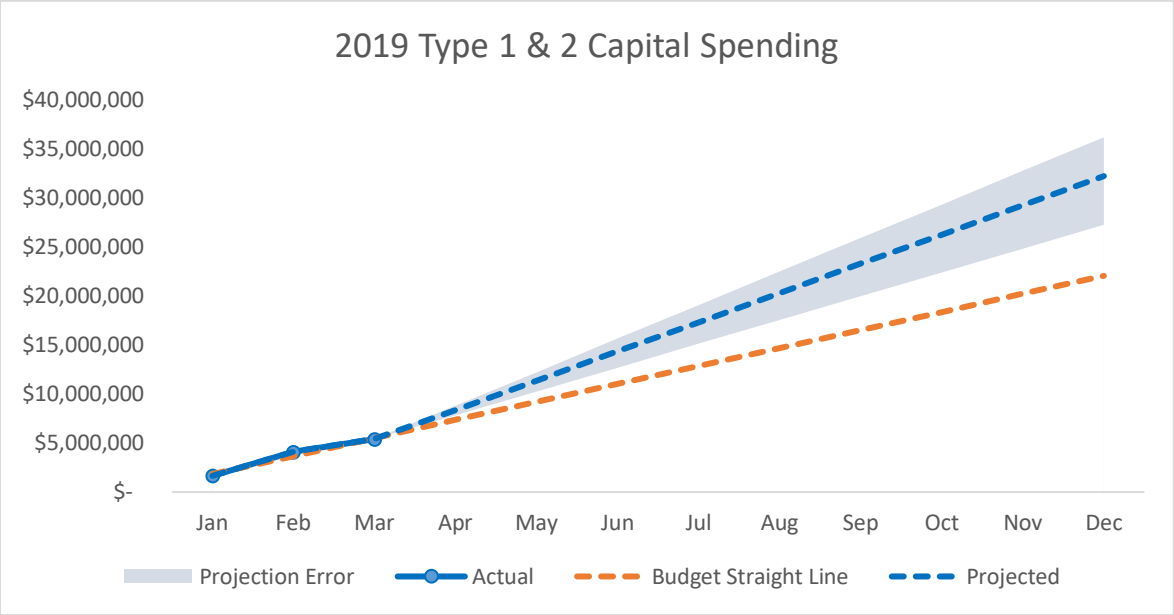
Type 3: Carmen-Smith

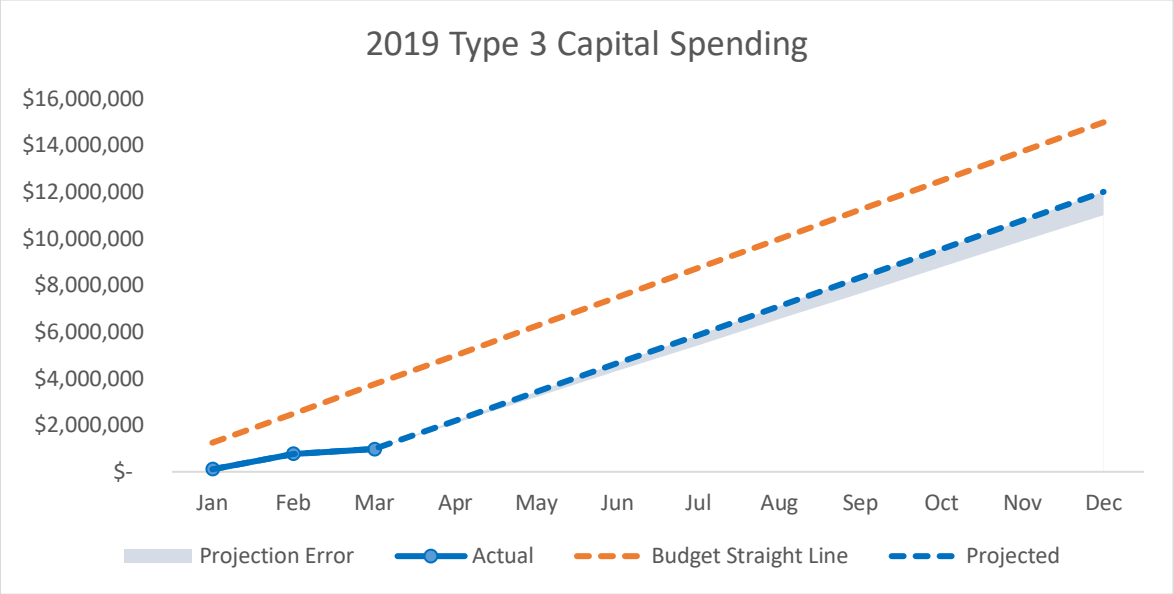
$975k spent year to date (budget $14.98M)
6.5% dollars spent
YE Projection - $12M (80% of budget, $3M underspend)
Error Analysis
Min YE Projection - $11M
Max YE Projection - $12M

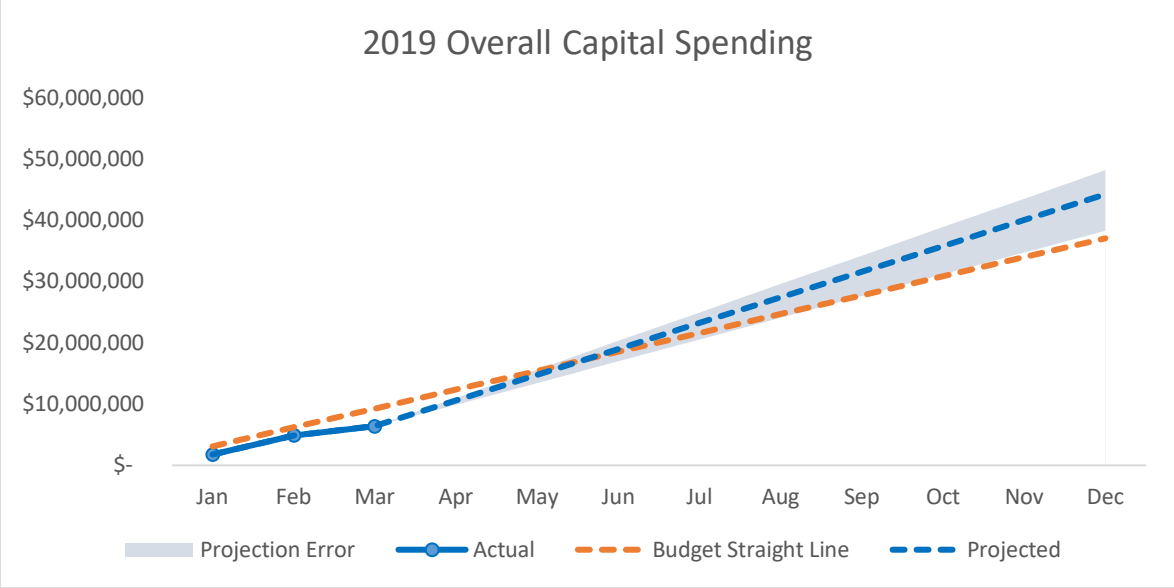
Overall Total:

$6.4M spent year to date (budget $37M)
17.2% dollars spent
YE Projection - $43.7M (118% of budget, $6M overspend)
Error Analysis
Min YE Projection - $37.8M
Max YE Projection - $47.7M

The below figures represent Type 1+2, Type 3, and Overall spending actual spending, projections, and possible minimum and maximum expected spending levels based on available information for the electric capital budget.







Integrated Resource Planning

The Power Planning group provides both qualitative and quantitative coordination and analysis, with the goal of achieving the synchronized load resource balance envisioned in EWEB's long term strategic plan.

As a part of this work, staff will produce the next Integrated Resource Plan (IRP) in late 2021. Between now and 2021, several of EWEB's power supply resources are eligible for renegotiation or renewal/expiration. Power Planning continues to develop, test, and apply a number of analytical tools to determine the value and "fit" of these resources in the EWEB's supply portfolio.

In Q1 2019 Power Planning developed the timeline for the IRP, as detailed below:

Activity	2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Hire E3 for Strategic Consulting												
Develop Project Plan												
Develop Engagement Plans												
Implement Plans												
Configure Tools (Aurora and end-use)												
Validate and Test Tools												
Refine and Maintain Current Assumptions												
Identify Key Questions/Scope												
Identify Industry Trends and Policy												
Develop Futures End-States (Scenarios)												
Complete Initial Portfolio Study												
Risk Screening												
Finalize Portfolio Study												
Develop Reporting & Graphics												
Finalize IERP Document												

More specific Q1 progress includes:

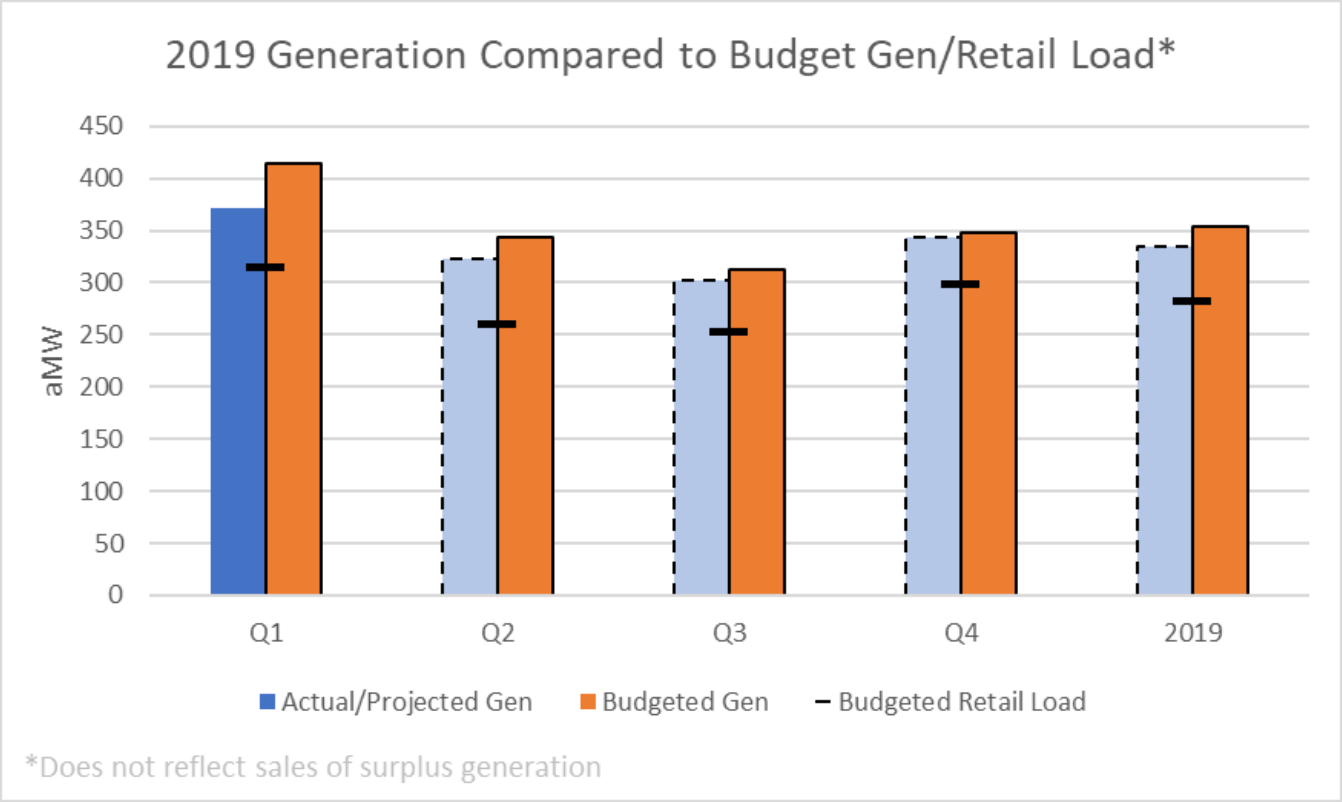
- Hosted E3 with the EWEB Board, staff, and internal stakeholders.
- Continued configuration, testing, and validation of production cost model to represent EWEB-specific resource attributes, costs, current legislation, and policy. These models will be used in upcoming IRP analytics.
- Continued work on an optimization module to create a series of portfolios that can be viewed from a risk and reward perspective. This will enable the team to evaluate the various impacts of potential futures (scenarios).
- Completed development of an end-use load forecasting model to forecast energy efficiency, distributed energy resource (DER), and electrification penetration to predict and evaluate the impact of different futures (scenarios) on hourly consumption.
- Reviewed industry trends and policy around (1) resource sufficiency/resource adequacy and potential impacts on loads and resources, and (2) energy and carbon market changes as they relate to the energy imbalance market (EIM) and possible expansion to a day ahead market.

This work continues to build on feedback Commissioners provided to staff regarding suggested resource planning principles and the Pacific Northwest's supply adequacy situation.

Power Planning

The chart below compares current forecasted generation to budget assumptions[1] for both generation and retail consumption. The darker columns represent final numbers, whereas the lighter columns represent projected values.

[1] EWEB assumes 90% of expected generation, and average retail consumption, for budget purposes.



Note that the above chart does not include trades completed to hedge EWEB's surplus length.

In conformance with SD8 and EWEB's Power Risk Management Procedures, the Power Planning group works to hedge EWEB's budgeted surplus generation, over a period of several years. This process is incremental by design, providing additional protection against periodic market volatility. As of Q1 2019, EWEB's hedged surplus generation is as follows:

Percent of Hedged Surplus Generation by Calendar Year				
Calendar year	**2020**	**2021**	**2022**	**2023**
Initial surplus generation (length in aMW)	67	55	56	49
Percent of hedged surplus	84%	45%	25%	0%
Remaining surplus generation (length in aMW)	11	30	42	49

Oregon RPS Compliance

The chart below reflects EWEB's Oregon RPS compliance for 2018 and projected compliance for 2019. The requirement for 2019 is 15 percent of retail sales less any exempt generating resources which includes BPA and hydro. Compliance is demonstrated by retiring a quantity of renewable energy credits (RECs) equal to the compliance target.

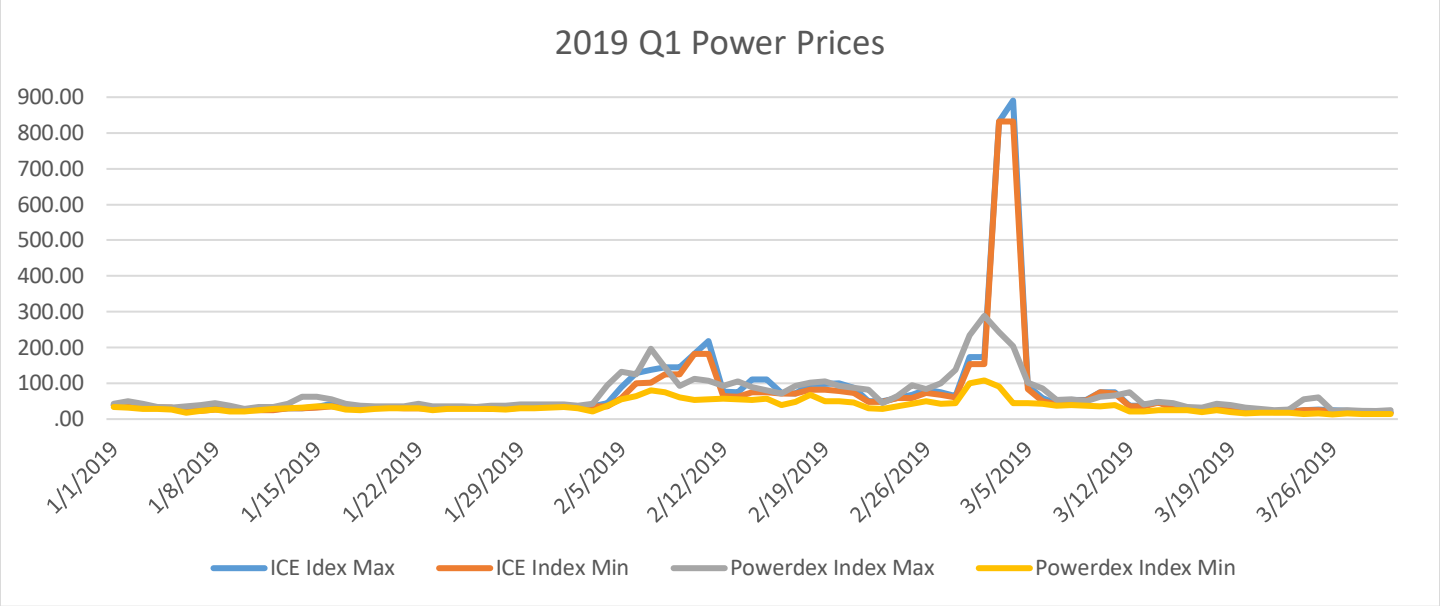
	2018 RPS	***2019 RPS Forecast****	*Q1 - 2019*	*Q2 - 2019**	*Q3 - 2019**	*Q4 - 2019**
Sales to Customers (MWh)	2,412,055	2,475,262	694,239	567,602	555,895	657,526
RPS Requirement	15%	15%	15%	15%	15%	15%
RPS Compliance BEFORE Exemption	361,808	371,289	104,136	85,140	83,384	98,629
Exempt Resources (ER) (MWh)	2,775,612	2,461,651	666,799	634,196	532,651	628,005
Fraction of Retail Sales from ER	115%	99%	96%	112%	96%	96%
Annual REC Compliance AFTER Exemption	0	13,611				

**forecast values*

Based on EWEB's 2019 hydro generation forecast, the projected RECs needed for 2019 compliance is: 13,611.

Trading Floor

During the first quarters of 2019, the Trading Floor managed to balance the EWEB portfolio with abnormal loads and prices. The Day Ahead markets seemed to panic ahead of the flow of energy which sent prices swinging from as high as $890.56MWh to as low as $18.77MWh (ICE Index). The hourly market prices were a little less volatile with the highest price at $288.77MWh and the lowest at $22.71MWh (Powerdex Index). This was due to many factors. Loads were up due to colder temperatures than normal, the fight over gas (heating vs generation) caused by constrained paths which raised gas prices, stream flows were down so hydro was limited, renewables were limited as they tend to be in colder temperatures and scheduled transmission outages reduced the flow of energy into the Pacific Northwest. It was a perfect storm. The Day Ahead Group and the Real Time Group worked together to purchase the additional energy that EWEB needed by staying out of the higher priced markets and balancing the portfolio in the lower priced markets. There was never a shortage of generation during this time; it was just at what price.



Carmen-Smith

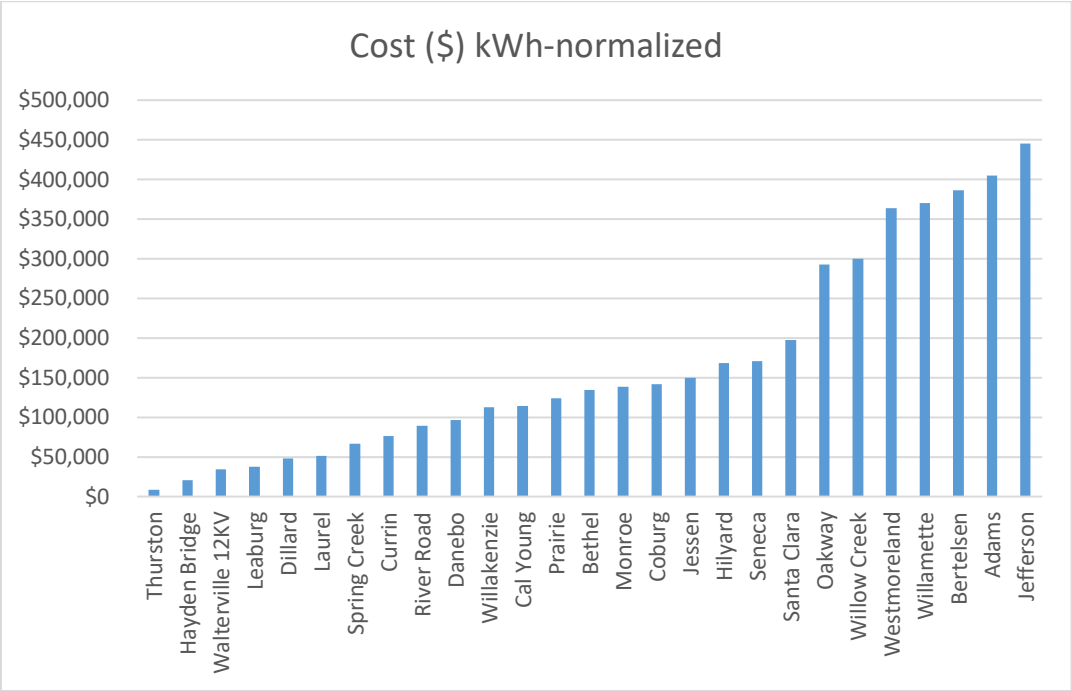
The Carmen plant operated normally during the quarter as staff prepared for the second year of powerhouse reconstruction work, which is scheduled to begin on April 15. The 2019 work focuses on the electrical portion of the facility and includes the replacement of switchgear and a rebuild of the project substation. We expect the Carmen plant to return to service in November 2019. Our turbine/generator contractor continues to make good and appropriate progress on the production of the new turbine runners and preparation for the rewind of the generators at the Carmen Powerhouse. Single unit outages for the turbine/generator work are scheduled for 2020 and 2021.

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, completed two types of geophysical testing at the reservoir and conducted a dye test at the sinkholes using divers. During the first quarter, staff worked with the FERC to develop an approved investigation plan that will ultimately lead to a repair/mitigation strategy for the sinkholes. This work is expected to continue through 2019 before resolving.

According to conversations that staff have had with the FERC licensing program, FERC continues to actively process our license application for Carmen-Smith with issuance expected in the second or third quarter of 2019. Staff are currently planning for the engineering and deployment of several major environmental and aquatic improvements required by the license.

Electric Master Planning

A draft master plan is underway and was targeted for completion by Q2 2019. After review of scope and available resources, the scope has been paired down to model a single asset (underground cable) and build on that model for other assets in 2019. This underground asset study is nearly complete. Additional inputs to the Capital planning effort include outage impacts to customers. We have started a study on the impacts of outages to customer's from a business and monetary costs. Here is a preliminary breakdown per substation.



Next steps are to in the customer impacts study are to cross check the results, add Feeder Level data and add additional customer impact drivers such as First Responder List, Hospitals, Care Facilities, and Life Support Equipment

Holden Creek Substation

Work on the Holden Creek Substation Expansion Project has been started, with groundwork underway. Scope of this project includes addition of a redundant distribution system power transformer as well as associated switchgear and high voltage connections. Work is planned for completion in early Q3. Following execution of this work, the Leaburg substation will begin reconfiguration to demolition existing distribution equipment to prepare for 2020 work to tie the Leaburg Generators into Holden Creek. Staff are currently planning for this work to be executed in late 2019. Additional work associated with the upriver configuration is currently in planning and consists of future expansion of the Thurston substation, addition of voltage regulators for voltage stability and backup feeds during transmission line failures, and conversion of Walterville generator to distributed generation. Following these future projects, the 69kV transmission lines currently in place will be removed.

Improving Distribution Customer Design Process

Distribution Engineering Project customer request information summary for Q1. This data is trending towards 200% of the work expected for this year as it relates to 2018. Here are Q1 key statistics.

- 576 customer inquiries, 85 of these requested high level estimates.
- 100 projects released for construction.
- Average of 63 projects currently waiting on customer information and money to proceed.
- One week average wait time for jobs in design queue.
- The current wait time for jobs in the design queue is 3 weeks.

Distribution Engineering is prioritizing and resourcing staff to accommodate the increased amount of customer requested work that had been received during the first two weeks of April.

Downtown Fiber Update

All in-street microduct work has been completed and only four building microduct service laterals remain. Through the installed microduct air blown fiber is ran using compressed air. To date 53 buildings have been connected with fiber and 27 additional connections are in the que for construction. To serve the 53 connected buildings EWEB is currently leasing 84 individual circuits to primarily private internet providers.

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

The main focus for the 1st quarter of 2019 with source protection and water quality work was continuing to assess the effects of the Terwilliger Fire from winter storm events and other watershed monitoring, preparing for harmful algal bloom season and starting cyanotoxin monitoring in the reservoirs, continuing to implement the Pure Water Partners program, and developing the watershed conservation fund.

EWEB staff continued to maintain water quality monitoring equipment in creeks impacted by the fire, as well as a reference creek not impacted, and in the South Fork McKenzie River as part of the OSU fire study to assess water quality impacts in the upper watershed and determine if wildfires influence harmful algal bloom dynamics in subsequent years. Preliminary data shows significantly higher levels of turbidity, sediment, organic carbon, and to a lesser degree nutrients being mobilized off burned areas when compared to reference sites.

Staff focused on developing documents, website, and communication tools that would be ready for public consumption if a cyanotoxin event impacted drinking water this spring/summer. The WQ Lab has been gearing up to run cyanotoxin testing and started in March running batches of environmental samples from bi-weekly routine cyanotoxin sampling ahead of the 2019 bloom season. Cyanotoxin results (i.e., non-detections) will start to be posted to the website in April.

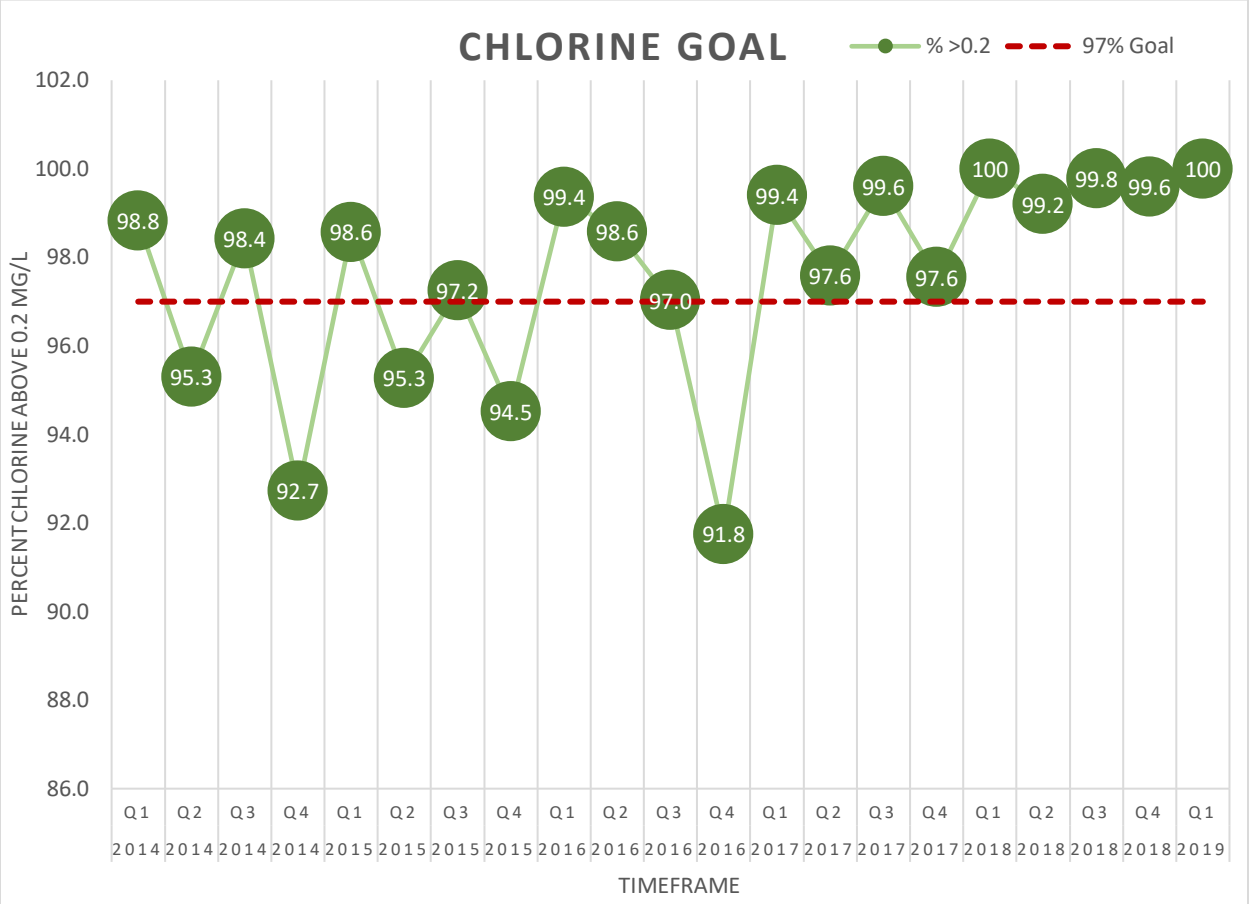
EWEB continues working with a number of partner agencies and organizations to develop a McKenzie Watershed Conservation Fund as part of the Pure Water Partners program using grant funds from the U.S Endowment for Forests and Communities. A number of deliverables were completed, including a governance structure for the Fund, Fund Operations Handbook, and draft Memorandum of Agreement that would be signed by all PWP organizations. PWP partners held a landowner informational workshop in late January 2019 that was well attended and led to a significant number of landowners signing up for initial site visits.

Water Production

Water production has seen normal demand in the first quarter 2019. River water quality was elevated for several storm events with no detriment to finished water quality. Snowfall had little to no impact on production. Chlorine usage is down 33% from Q1 2018. This was anticipated savings from discontinuing pre-chlorination for biofiltration.

The biofiltration pilot study continues and full scale filters are biologically active. Performance monitoring is beginning to see positive results at full scale. EWEB samples and tests over 100 sample stations throughout the city for chlorine (Cl2) residual as a measurement of water quality. EWEB has achieve higher effectiveness in Cl2 residual in the last 3 quarters. This can be attributed to biofiltration. Biomass is now being grown and managed in the filters rather than seeding the distribution system. This reduced growth in distribution pipes has increased the residual in the system as illustrated on the 'Chlorine Goal' graph.

Another performance indicator for Biofiltration is measured as disinfection byproducts (HAA5 and TTHM) which are known carcinogens that are created by combining chlorine and organic materials. We have seen a decline in this indicator the last 3 quarters as well. This can be seen on the 'Running Annual Average' graph for our sample of water at the point of entry to the distribution system.


CHLORINE GOAL
% >0.2
97% Goal
PERCENT CHLORINE ABOVE 0.2 MG/L
102.0
100.0
98.0
96.0
94.0
92.0
90.0
88.0
86.0
98.8
95.3
98.4
92.7
98.6
95.3
97.2
94.5
99.4
98.6
97.0
91.8
99.4
97.6
99.6
97.6
100
99.2
99.8
99.6
100
Q1 2014
Q2 2014
Q3 2014
Q4 2014
Q1 2015
Q2 2015
Q3 2015
Q4 2015
Q1 2016
Q2 2016
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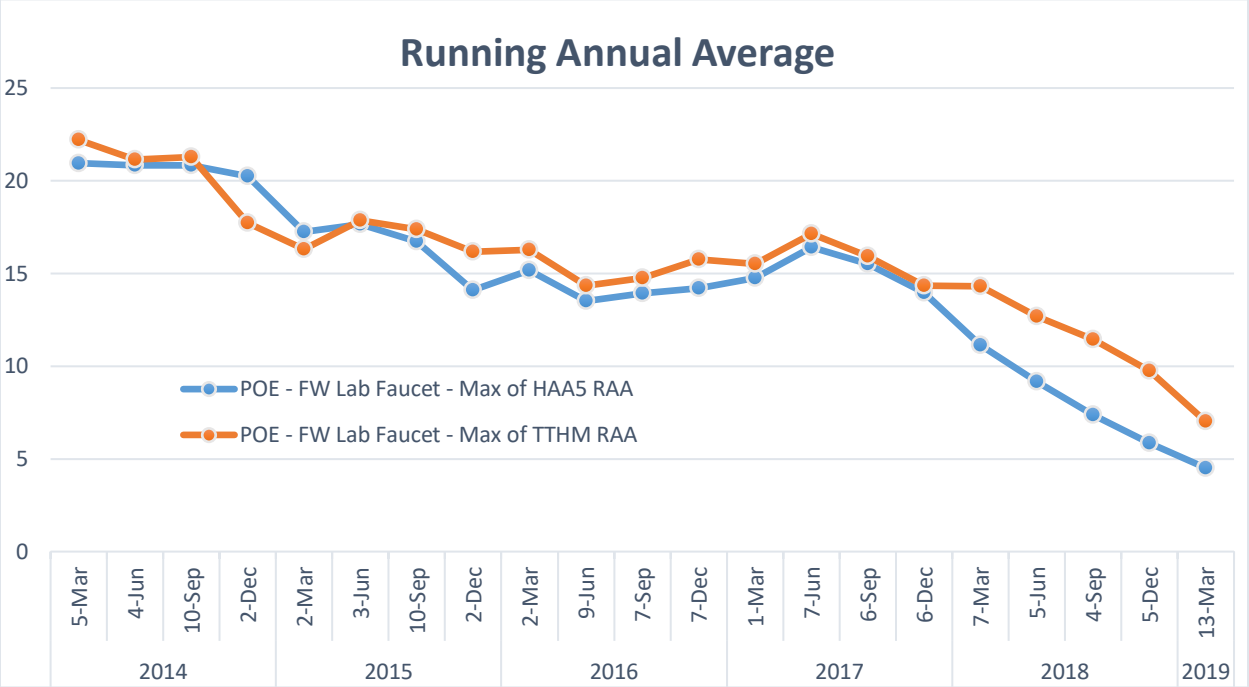
Q1 2018
Q2 2018
Q3 2018
Q4 2018
Q1 2019
TIMEFRAME


Running Annual Average
25
20
15
10
5
0
POE - FW Lab Faucet - Max of HAA5 RAA
POE - FW Lab Faucet - Max of TTHM RAA
5-Mar
4-Jun
10-Sep
2-Dec
2-Mar
3-Jun
10-Sep
2-Dec
2-Mar
9-Jun
7-Sep
7-Dec
1-Mar
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2014
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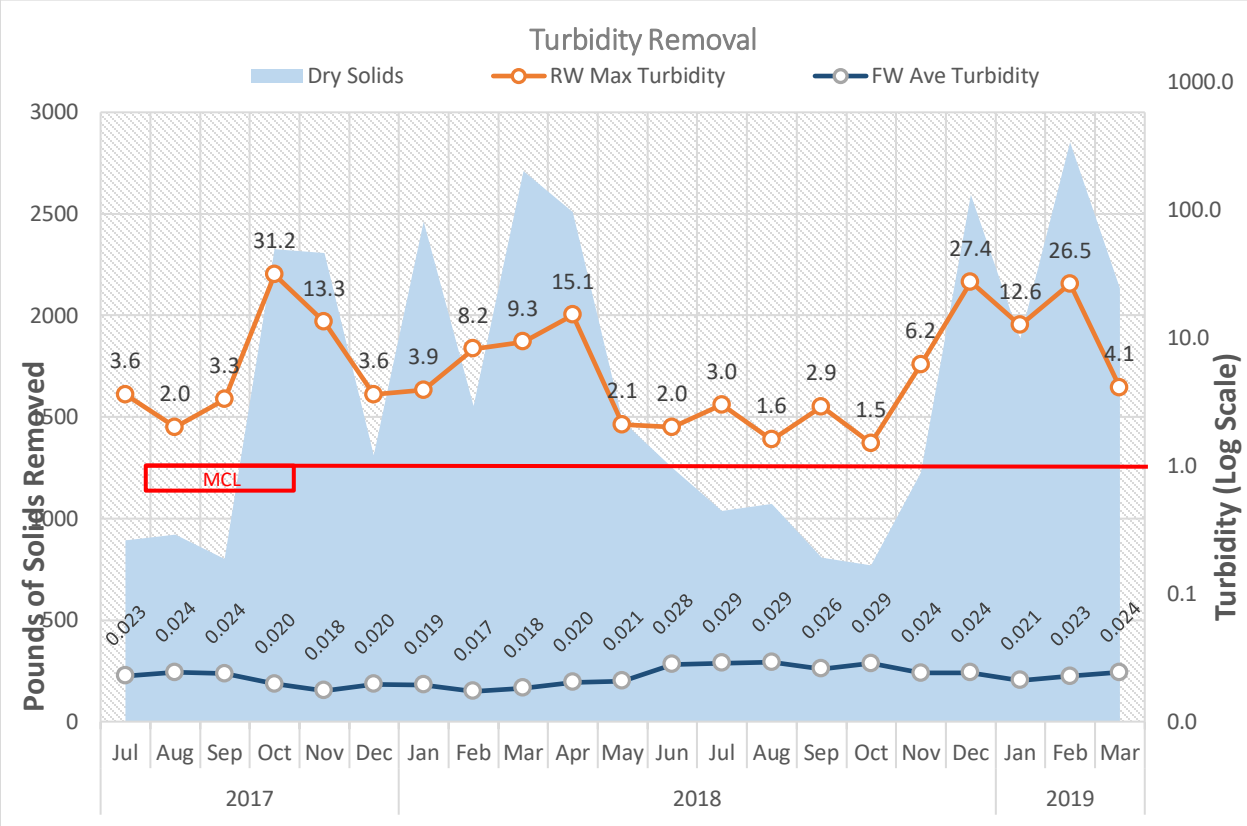
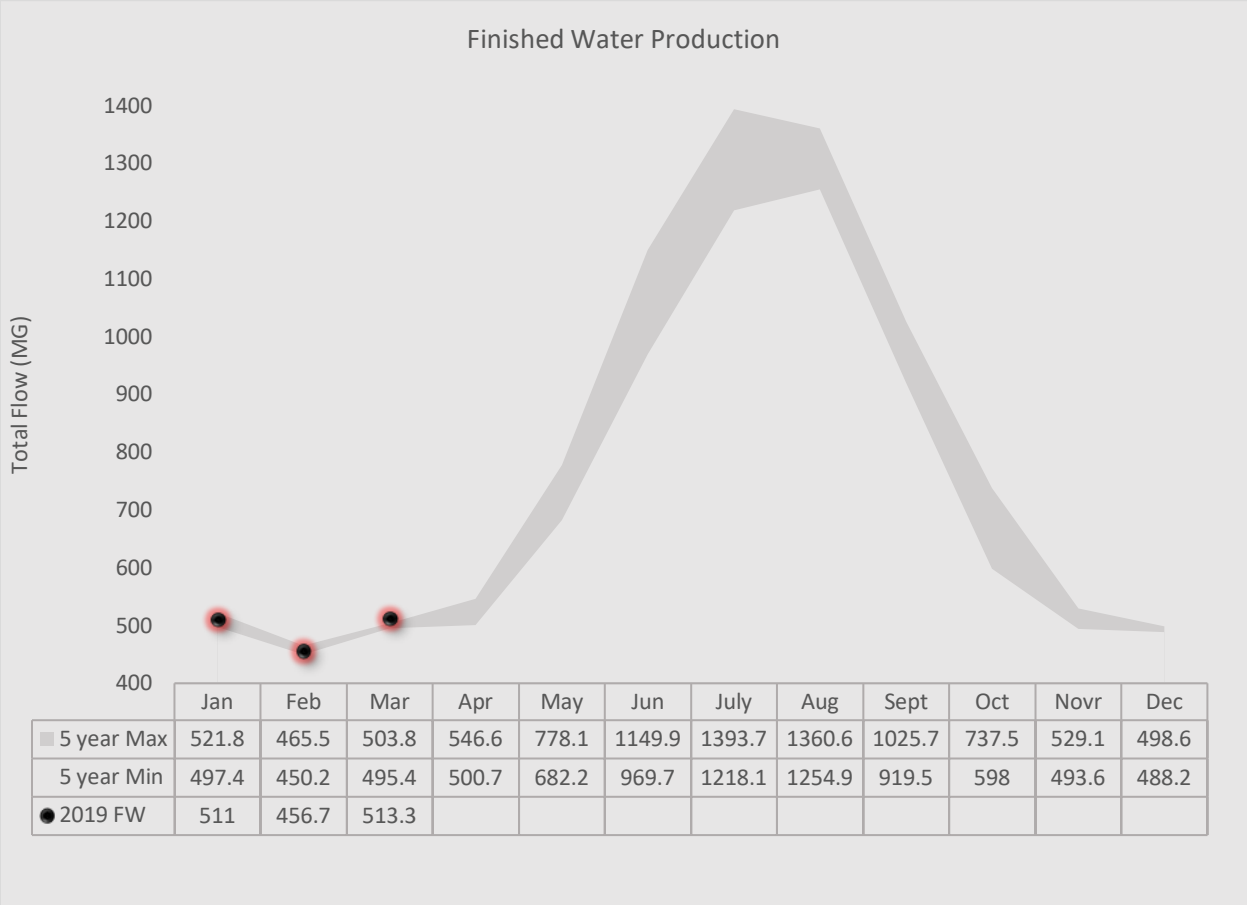
2019

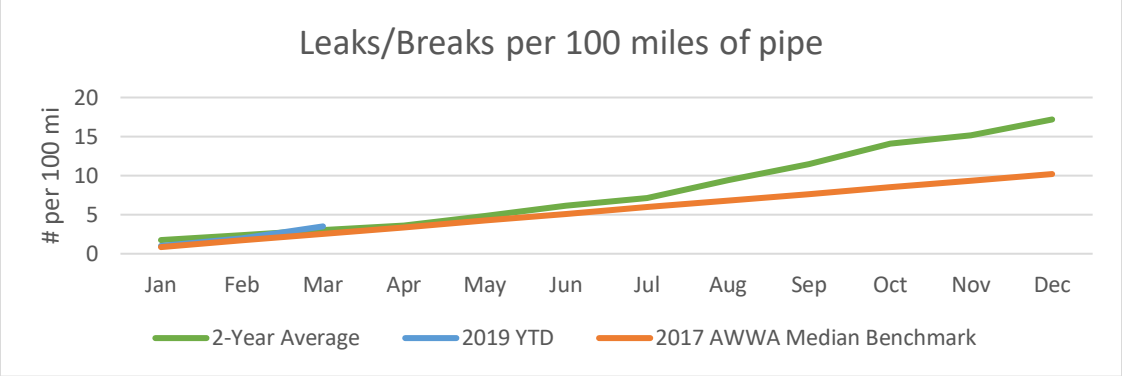


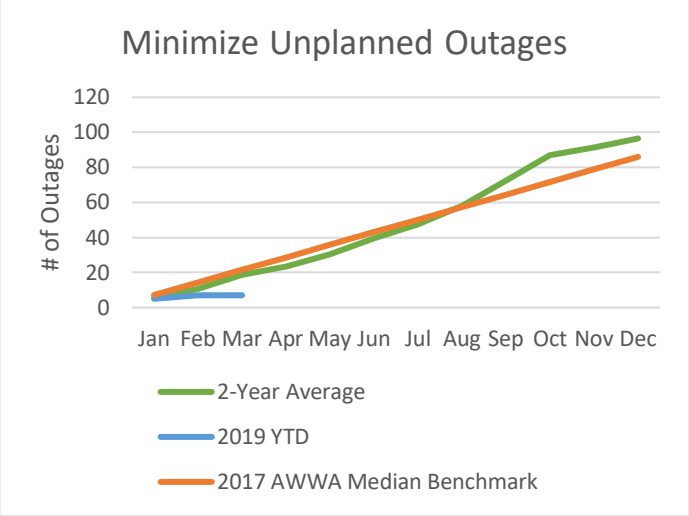


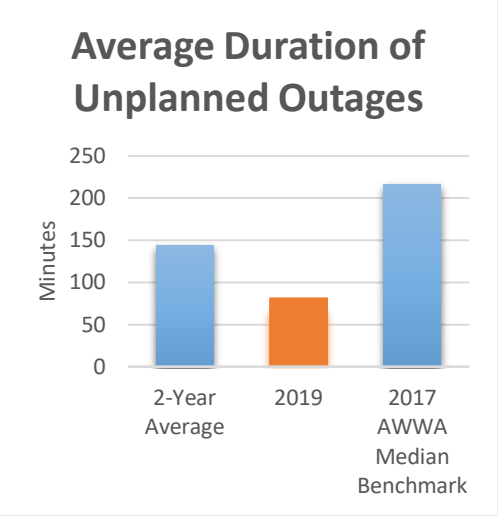
	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Novr	Dec
5 year Max	521.8	465.5	503.8	546.6	778.1	1149.9	1393.7	1360.6	1025.7	737.5	529.1	498.6
5 year Min	497.4	450.2	495.4	500.7	682.2	969.7	1218.1	1254.9	919.5	598	493.6	488.2
2019 FW	511	456.7	513.3									

Water Delivery Reliability

Ensure Reliability of Water Products	Unit	AWWA Median Benchmark	YTD Results
Leaks and Breaks per 100 Miles of Pipe	#	10.2	3.5
Minimize Unplanned Outages	#	86	7
Average Duration of Unplanned Outages	Minutes	216	81
Percentage of Customers who Experience a Planned or Unplanned Water Outage	%	N/A	0.44%
Boil Water Notices	# of Notices	None caused by EWEB	0







Significant Outages and EWEB Caused Boil Notices

Water Operations had no abnormal outages or EWEB caused boil notices during Q1. We did have several routine outages.

Smart Meter Deployment Update

Water Operations has been working closely with the AMS department on the inner departmental communication as it pertains to the smart meter deployment. The reason for this communication is to ensure transparency of the project. A strong emphasis has been placed on both quality and quantity. The weekly deployment numbers have been reduced from approximately 375 to 250 meter installs per week. This allows the workgroup to focus on accurate data while processes and procedures are being reviewed. The reduction in meter installs is anticipated to be temporary, as processes are refined

and confidence grows, we anticipate a higher rate of installs in years 2 and 3. We installed approximately 2,631 smart meters in Q1.

Asset Management & Planning

The Water Utility assets includes the Hayden Bridge intakes and treatment plant; pump stations; reservoirs; and approximately 800 miles of transmission and distribution pipelines. As we manage these assets we generally categorize work according to the following:

1) Compulsory work. This includes customer driven work, pipeline projects resulting from conflicts with City Street Projects, and repair/replacement work for critical facilities. In Q1 of 2019 water is working on several compulsory projects including pipeline and service replacements and several equipment replacement projects at Hayden Bridge.
2) Strategic work. This includes projects to meet the strategic goals of EWEB and the long term work driven by our Water Master Plan. 2019 projects falling into this category include the Emergency Water Distribution Sites and the new disinfection building/system at Hayden Bridge.
3) Opportunity work. This includes such items as pipeline projects completed ahead of street projects when there is no conflict with the street reconstruction. The Willamette Street Pipeline Replacement Project, which the Board recently approved, is an example of this type of project. This project could have been much smaller but the Water Utility elected to utilize the opportunity to replace the entire main at a reduced cost in conjunction with the City's street reconstruction.

Compulsory projects have the highest priority. Strategic and opportunity projects are next and are prioritized based on the long term plans and the resources available to accomplish the work. These resources include both financial and staffing resources.

In addition, because of the sheer number of potential pipeline projects, EWEB uses a risk based model to help prioritize individual projects. This model considers both the likelihood and the consequence of a failure in order to prioritize replacement of pipelines with the greatest potential to impact the Utility and community.

Capital Project Spending

In the first quarter, Type 1 work has primarily been focused on smaller main replacement and improvement work along with some wrap up of Hayden Bridge projects which carried over from 2018. Type 1 work is tracking above the straight-line budget. This is primarily due to close out work on 2018 Type 1 projects which were applied in early 2019. Overall for Type 1 we are projecting a year end overage of about 25%. This is primarily due to the following:

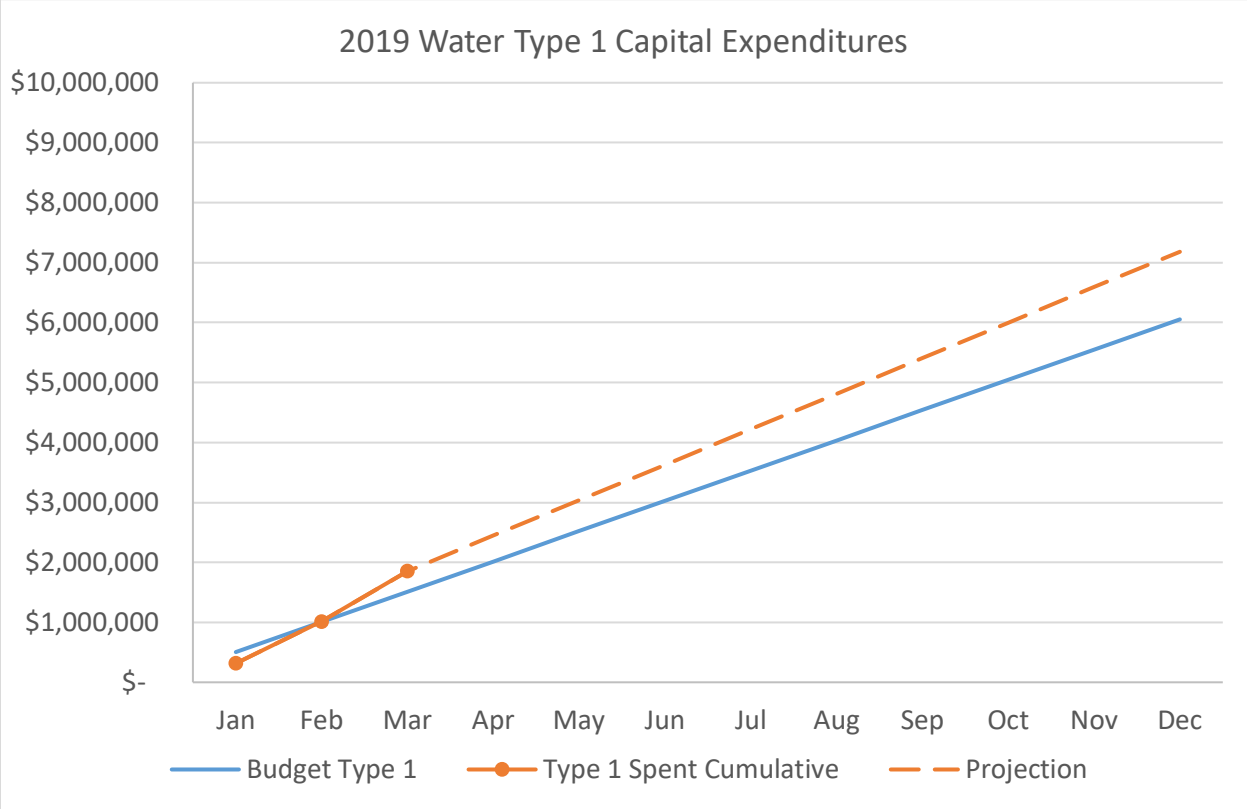
- Higher main replacement work than what was anticipated in mid-2018 when the CIP was first proposed. This is the primary cause for the overage in Type 1 work. In mid-2018, the Water Utility reduced future Type 1 expenditures in this area to help offset some of the costs for the Advanced Metering System. As projects developed, however, it became apparent that the 2019 expenditures in this area will be near 2018 levels. This is due to a combination of compulsory work and opportunity work such as the Willamette Street main replacement project mentioned previously. With many of the projects under way, it will be difficult to change course. The Water Utility will, however, continue to look for ways to control costs.
- Several emergent compulsory projects at Hayden Bridge. These include the replacement of a failing HVAC system at the raw water intakes and the replacement of several failing valves in the filter building.

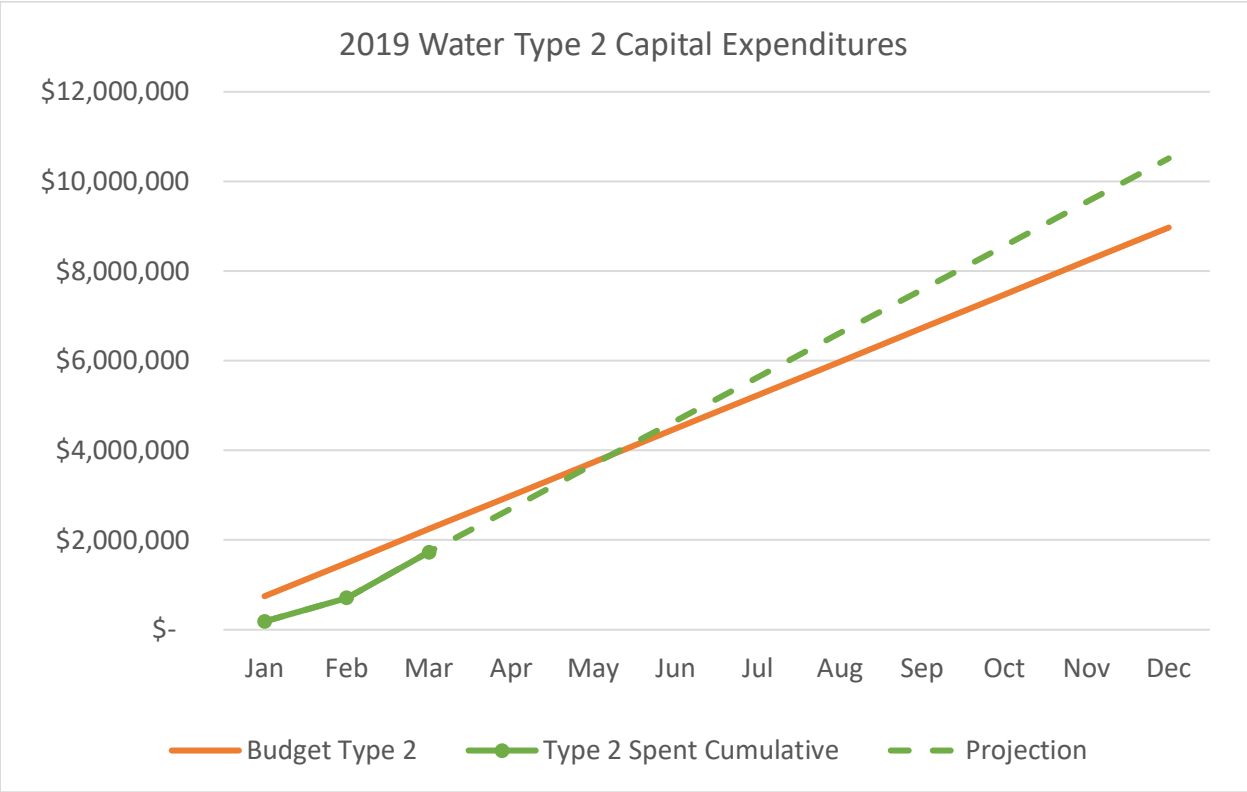
Type 2 expenditures are tracking below the straight-line budget at the end of the first quarter. We anticipate that spending will exceed budget as construction work increases in the second and third quarter. Overall, water is projecting an overage at year end of approximately 9% in Type 2 work. This is primarily due to the following:

- Higher 2019 costs for the Hayden Bridge Disinfection system. Delays in 2018 equipment procurement and construction has pushed much of the costs for this project into 2019.
- Higher than anticipated shared services expenditures associated with ROC remodel and information technology work associated with the Advanced Metering System.

Overall the Water Utility is anticipating a year end overage of about 17% in capital spending. Staff from both Finance and Water are monitoring the budget closely and Board approval will be obtained prior to any spending in excess of the budget.

The figures below show Type 1 and Type 2 actual spending to date, projected spending through year end, and the straight-line budget. Type 3 spending is not shown as it is only 3% of the overall water capital budget. Water is approximately 25% spent on Type 3 work.




2019 Water Type 2 Capital Expenditures
$12,000,000
$10,000,000
$8,000,000
$6,000,000
$4,000,000
$2,000,000
$-
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Budget Type 2
Type 2 Spent Cumulative
Projection

Emergency Preparedness and Resiliency

Blackstart Assessment - Lower McKenzie River projects

During Q1/2018, a consultant to EWEB completed an assessment of both the Leaburg and Walterville hydroelectric plants for their ability to accommodate blackstart capabilities. The consultant found that the Leaburg plant currently has blackstart capability, 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 International Paper (IP) #4 generator and University of Oregon Generator for black start and load capabilities have been scoped with the study to be completed in Q1/2019. The IP #4 generator is owned by EWEB and operated cooperatively with IP.

FEMA Resiliency Projects

The FEMA Hazard Mitigation Project #406 design work to address system resiliency improvements have been ongoing. There is a total of 15 designs under Project #406. Design for 11 of the 15 projects are overhead reconfigurations and had been completed and routed to Electric Operations for installation during Q1. Design for the remaining projects will continue with anticipation of two being completed during Q2 and the last during Q3. Contracts for substructure, inspection, and service work to be solicited during Q2 and Q3 for two projects (Saratoga and Blanton areas)

Outage Management

In 2018 the Outage Management Core Team (OMCT) demonstrated significant gains regarding Incident Command System (ICS) officer work flows, divisions of team responsibility, training, and ICS officer / team bench strength. Additionally, further improvements included the integrated use of the "Responder" tool for system outage and transfer of customer outage information.

In early 2019 EWEB experienced a significant weather event in which closely mirrored the customer outages experienced during the ice storm in 2016. That said, the Incident Command response team demonstrated vast improvements in all aforementioned areas.

Currently the OMCT is working on improvements noted during the "After Action report" from our snow event. Since the assignments have just been scheduled, teams have not made significant progress on items at this writing. Expectations are for a formal progress report in mid - Q2 of 2019.

Distributed/Neighborhood Emergency Stations

Over the next five years, EWEB will deploy at least five (5) distributed "neighborhood" emergency stations for water distribution and independent electric operation (a.k.a. microgrid). In 2018, EWEB worked with two local school districts to design and construct two "neighborhood" emergency stations, including both water and electric infrastructure. Two stations were installed in 2019, at Kalapuya Experimental Farm (Bethel) and Howard Elementary (4J). Both sites have existing solar, are relatively new construction in excellent condition, and have water well availability on site. Both sites are up and running. The Howard site micro grid is operational and collecting data, but lacks remote access making it difficult to collect and analyze data. Additional work is being completed in Q1 and will be complete early Q2 to allow for full remote access, automated load management, and additional functionality. A public event at Howard Elementary is planned on May 11th, to perform a community drill with the water portion of the installation, and provide outreach and display of the electrical portion.

Electric System Seismic Upgrades

Substation seismic retrofits to transformers are being targeted in 2019. Designs are underway on 8 priority transformers which feed community and system critical loads. Additionally, design on EWEB largest transformer is being completed to design an anchoring system for transformer protection in a seismic event. These designs will be completed, with 3-5 installations planned for 2019, and the remaining smaller and largest installation planned for mid-2020. These will increase resiliency of EWEB's power transformers by ensuring the units do not move off of the foundation, or turn over during a large seismic event.

Mobile Treatment

In conjunction with distributed neighborhood emergency stations, water engineering and production complete work on a mobile treatment trailer in 2018. In Q1 of 2019, field testing of the trailer was completed that identified its capabilities and constraints. This testing showed that the trailer was better suited for low turbidity surface water or groundwater under the influence of surface water.

Work for the rest of 2019 will including researching and potentially acquiring equipment to treat higher turbidity surface water. An application was submitted in 2019 for a grant that would potentially provide this equipment however the results of this application are unknown at this time.

Proactive Mitigation of Illegal Camping above Hayden Bridge Intake

The 1st quarter of 2019 did not have much illegal camping activity to report. Illegal camp surveys started in March with one small camp being identified that was subsequently cleaned up by the City of Springfield. Communications with Willamalane and City of Springfield staff ramped up in March to coordinate the 2019 illegal camp season that have led to development of a shared calendar to better coordinate activities and assist each other as needed. Weekly camp surveys will start in April. Camps identified were put into the LCOG web application to track activity; cleanups occurred within 48 hours of identification.

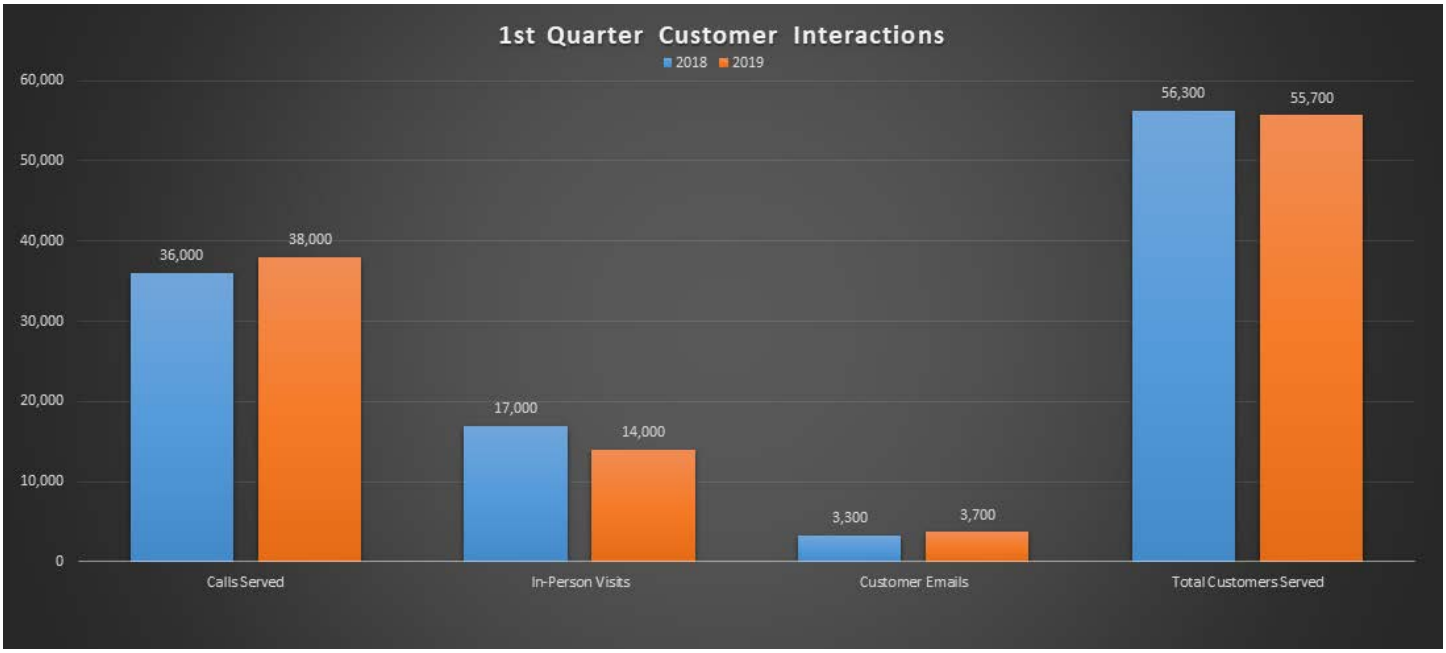
(Data is for camps only above HB intake, not EWEB property overall)
# of EWEB inspections: 2
# of camps found: 1
# of camps cleaned up: 1

Customer Services & Programs

EWEB serves approximately 200,000 people in the Eugene metro area and the McKenzie River valley. Customer Operations manages both responsive services such as customer initiated support using telephone, email, digital media, or in-person contact; and also includes proactive, targeted outreach regarding products and services including energy/water efficiency, limited income support, design services, and special programs such as personal emergency preparedness.

Operational Metrics

In the first quarter EWEB supported 56,000 customer interactions; approximately 880 per day and down slightly from first quarter 2018. The February storm event resulted in higher call and email volumes which were offset by lower in-person visits due to lobby closure for three days. The Call Center team is meeting targets for both Average Speed of Answer and Abandon Call Rate. The metrics below exclude calls to the Electric Outage line prior to it being transferred to the call center the second day of the storm event.



Customer Response Metrics

Measure			Comments
GOAL	TARGET	Q1	
Call Center			
Maintain/Improve Call Center Average Speed of Answer	< 90 seconds	●	Avg Speed Answer Q1: **27 sec**
Maintain/Improve Call Center Abandonment Rate	< 6%	●	Abandon rate Q1: **2.3%**
Meter Reading			
Maintaining or improving the meter reading accuracy rate	>99.96	●	YTD accuracy Jan-Feb: **99.976**

Credit & Collections

The write-off budget for 2019 is $452,000. For Q1 the net write off was $71,000 compared to $87,000 for Q1 2018 and under the forecasted amount. In March, collections staff efforts were redirected to assist with the impact of 14,000 estimated bills due to the February snow storm. Second quarter write-offs are anticipated to increase as a result.

Meter Infrastructure Upgrade Project

EWEB is upgrading meters in order to provide customers with better service, build a more resilient community and create a cleaner energy future with the goal to complete the upgrades by 2021. The installation effort began in October 2018, and work processes across the Utility are continually being improved to ensure the upgrades are performed safely, effectively and efficiently. Information systems and the telecommunications infrastructure are being optimized to accommodate the installation of 150,000 meters. All customer facing communications, including bill stuffers, deployment maps, door hangers, informational brochures and website are being actively managed to support customer choice and timeliness to meter upgrades occurring. The 2019 goal is to upgrade a total of 46,000 meters, and due to process refinements, as well as information systems and telecommunication system optimization, meters installed the first quarter are lagging behind that goal.

2019 Smart Meter Upgrade Project Status

	ELECTRIC	WATER
Total	19,000	6,500
Smart Meters Installed on EWEB System	20% *(includes McKenzie Valley customers, which are not part of route-based deployment at this time)*	10% *(includes Santa Clara & River Road Water Districts)*
Installed in Q1	5,200	2,800
Weekly Deployment Target	520	369
	2.0% of customers have opted-out	

The following characteristics are representative of Q1 2019 work:

- Customer satisfaction surveys indicate that customers are informed and satisfied with project work, i.e. customer notifications and field work.
- AMI impacts during the February snow storm event were small, but significant for training and operational learnings.
- All front line staff continue to be educated on deployment customer experience expectations.
- Leak detection notification, as a marked service, was established. The initial focus is operational readiness and timely customer communications.
- Staff began work to optimize the communication infrastructure in support of meter upgrades.

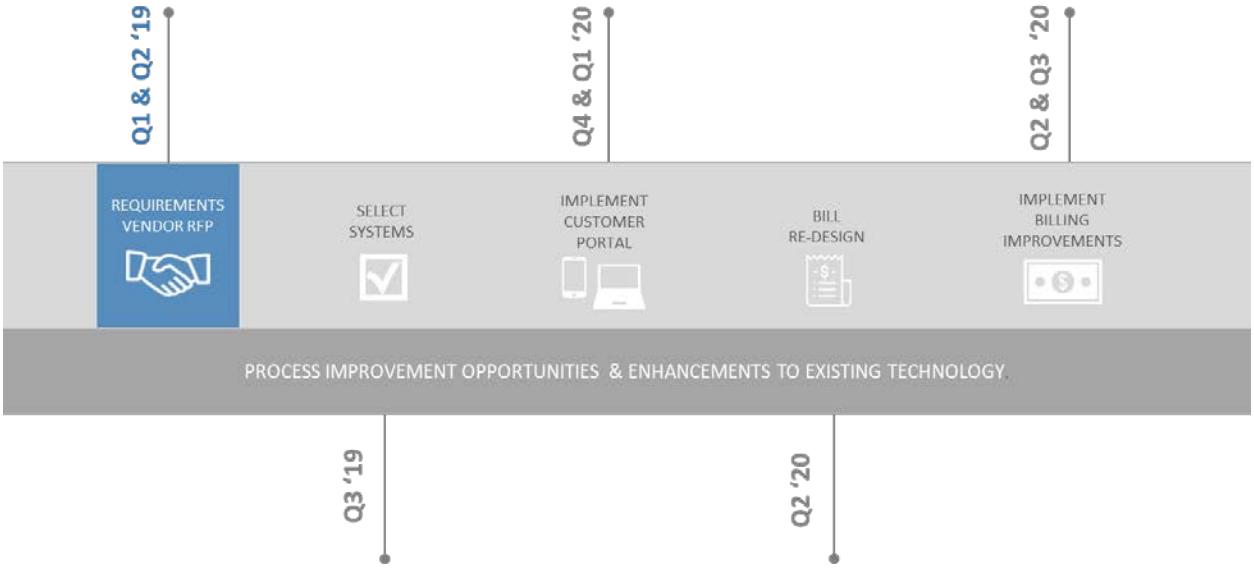
Customer Experience Improvement Project

Fostering customer confidence is among EWEB's top strategic priorities. The mission of the Customer Experience Improvement project is to make it easier for customers to do business with EWEB and improve customer interactions. As a part of achieving this, EWEB is making improvements that deliver services in a manner that meets our customers' expectations.

While several process improvements have been, and will continue to be, made without significant software changes, there are some changes that require system replacements or upgrades. On April 5th, EWEB issued a request for proposals for vendors to provide web based customer self-services, electronic bill presentment (EBPP), payment processing, bill print and mail services.

It is projected that vendor contracts will be finalized in the third quarter. The goal is to begin implementation of a Customer Self-Service Portal in late 2019, and EBPP, bill print and mail services in 2020.

This project is currently on schedule. Major milestones are identified in the timeline below.



Customer Confidence, Service Responsiveness and Transparent Communication

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 collaboration of EWEB staff and agency partners in community resiliency projects, collaboration on carbon and smart growth projects, and the many small successes going untold every day.

Coordination with the Santa Clara and River Road Water Districts to participate in water meter upgrades is progressing. An intergovernmental agreement laying out District and EWEB roles and responsibilities regarding the upgrades has been drafted and is under review by District Board members.

EWEB Communications and Marketing

EWEB continues 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. EWEB's primary channels for communicating with customers continue to be website (eweb.org), social media, earned media and the Pipeline newsletter.

During the February storm, Communications staff integrated all digital channels as well as traditional media outreach to communicate with customers, community leaders, commissioners and staff during and following the storm. Communications staff made over 100 Facebook posts, with an average of 6,000 engagements/day. The Facebook engagements do not include the hundreds of private messenger interactions that occurred. Communications staff made 170 Twitter posts, with an average of 1,500 engagements per day. There were more than 180 TV/Radio stories related to the outages, and 11 print stories published. All Q1 social media metrics below are significantly higher than prior year primarily due to interactions during the storm event.

Metrics by channel (Q1 2018 and 2019):

Social Media

	Facebook		Twitter	
	Q1 2018	Q1 2019	Q1 2018	Q1 2019
Total Posts	70	200	50	200
Total Impressions	136,000	886,000	89,000	495,000

eweb.org

Users		Total Page views		Ave. Time on Page		Bounce Rate*	
Q1 2018	Q1 2019	Q1 2018	Q1 2019	Q1 2018	Q1 2019	Q1 2018	Q1 2019
74,000	131,000	305,000	485,000	1:29	2:05	43%	57%

*Bounce rate tracks how many users enter and exit the site on the same page. Forty percent and below is considered excellent, with 40-55% roughly average for most websites.

Earned Media

	TV/radio	Print
Discreet News Stories 2019	208	14
Discreet News Stories 2018	12	5

In addition to the storm communications, other content focused primarily on the following topics:

Income-based assistance

In mid-March, EWEB launched a new webpage to promote income-based assistance program, including free home energy efficiency audits and income-based rebates and loans. Since launching, the webpage has received over 1,100 views.

Emergency preparedness

During Q1, EWEB continued to promote personal preparedness messaging through all of our available channels. In addition, staff developed a new campaign launched January 2019. "Pledge to Prepare" is a 12-month blueprint to help community members end the year with a two week emergency kit.

Pledge to Prepare	Q1
Total participants	1,500
Engagement (photos received)	70

Smart electrification

In January 2019, EWEB staffed a booth at the Good Earth Home, Garden & Living Show. The booth focused on residential efficiency and EWEB's rebate and loan programs. Programs promoted included electric vehicles, heat pump technologies, efficient lighting and ultra-high efficiency toilets.

Other Q1 2019 topics included transportation electrification rebates, Fix a Leak Month, clean power portfolio, World Water Day, water construction projects, and electric resiliency projects/FEMA grant.

Community Involvement

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. Requests that provide strong alignment between EWEB's discretionary community investment criteria and the Strategic Plan are vetted through the General Manager's office for consideration. Sponsorship dollars are focused on initiatives that are both closely connected to EWEB's core mission and provide the broadest benefit to our customers. Q1 grants were comprised of the bi-annual education grants to the four school districts. In 2019, educational grant programs will be reviewed to strengthen alignment with EWEB's strategic plan.

The attached spreadsheet lists sponsorships, donations, grants, event participation and other contributions for Q1 2019, categorized by interest area and type of giving.

Appendix E – EL3 Community Investment Report.

Ease of Doing Business

In addition to the customer experience initiative noted above, a cross-functional team has reviewed the Business Growth & Retention Program and developed process improvements to simplify administration, increase access to customer financing options, and provide a clear framework for eligibility in alignment with EWEB's Strategic Plan. Public hearings and Board consideration of price modifications consistent with these goals are scheduled for Q2.

Progress is also being made on implementing development-related improvements. The main focus in Q1 was to establish the underlying policy and methodology for a Downtown Network Service Connection Charge. This change is intended to establish more predictability in network infrastructure costs, reduce price disparity between similarly-sized projects, and enable staff to be more responsive to developer requests for high level cost estimates early in their project scoping. Since all customers adding capacity would pay a proportional service connection charge, EWEB's up-front capital investments would be repaid over time. Work continues on a reduced water System Development Charge for housing units under 800 square feet, and establishing criteria for a community development fund to support local agencies serving limited income customers with utility costs.

Limited Income Support

Through Q1 of 2019, EWEB has provided year to date Customer Care bill assistance of $255k, which is 30% of the $850k allocation for 2019 at an administrative cost of 18% of disbursement ($46k year to date). Materials to market home efficiency audits have been developed and will be sent in the second quarter.

2019 Limited Income Payments to Customers

	Allocated	Annual Budget	% of Budget
Customer Care Assistance	$255,000	$850,000	30%

Limited Income programs provided by EWEB have undergone realignment with the Strategic Plan. EWEB educational program content for limited income customers has been redesigned with a focus on conservation, pricing, available programs and resiliency and emergency preparedness.
EWEB strives to reduce the proportion of a customer's income that is required to cover utility expenses, ensuring that the cost of vital services is manageable to customers. The 2019 goal is to reduce non-payment based residential service disruptions by 10% from 2018. In the first quarter, service disruptions were reduced by over 40% compared to the Q1 goal. Weatherization incentives were expanded to promote energy efficiency in rentals, and limited income occupied properties are now eligible to receive the same incentives as owner occupied dwellings. Additionally, staff is improving the level bill program to make it more accessible for customers and increase ease of administration.

Smart Electrification and Carbon Mitigation

During Q1 EWEB staff continued to collaborate with partner agencies and the City of Eugene, including joint working sessions with the City Council on carbon mitigation strategies, and continued work and collaboration on the city's efforts to update its climate action plan.

Current and future electrification and energy efficiency programs are currently being evaluated in a comprehensive approach that addresses regional impacts of carbon emissions, coincidental peak and its potential management through various strategies. Through this approach, electrification and energy efficiency programs can work together to address potential negative impacts of electrification while maximizing its benefits. These efforts are under the umbrella of "Smart Electrification."

EWEB revamped its "Commitment to the Environment" and "Power Resources" web pages with the objective of increasing community awareness of EWEB's clean power resources and to enhance customer knowledge of EWEB's ongoing efforts to protect the environment, specifically related to carbon and fossil fuel reduction.

EWEB staff has initiated cross-functional work to establish and develop a baseline for carbon reduction measurements for primary customers programs in order to track not only consumption and monetary savings, but also the extent to which EWEB programs reduce CO2 at a local and regional level.

Staff continues to work on the development of effective programs and incentives to support transportation electrification that align with EWEB's strategic direction. Programs, efforts and notes include:

- Customer Solutions is involved in ongoing collaboration with the City of Eugene and other local entities on the electrification of the transportation sector.
- In 2018, 1,000 electric vehicles (EV) were registered in EWEB's service territory, compared to 400 and 320 in 2017 and 2016, respectively. EWEB received over 3500 Clean Fuel credits which were sold for $529,000.
- In increasing EV education and awareness, EWEB, in partnership with the City of Eugene and Emerald People's Utility District, will host a Ride and Drive event on June 22nd. The event will provide participants access to electric vehicles, EV experts, and the opportunity for almost 400 test drives.
- In making EVs accessible to our various customer sectors, EWEB continues work in exploring an on-demand ride sharing program with Envoy and St Vincent de Paul.
- EWEB continues to participate in various EV groups, including Forth, a nonprofit organization dedicated to the advancement of electric, smart and shared mobility, and also with the Pacific Northwest Utility Transportation Electrification Collaborative. Staff presented EWEB's EV programs at a Forth event on March 12th. EWEB is working on creating additional incentives to encourage smart electrification of the transportation sector which will be available in the second quarter.
- Energy efficiency is a major component of Smart Electrification. EWEB's incentive program portfolio is currently undergoing review and evaluation to further align offerings with EWEB's Strategic Plan.

Resiliency and Emergency Preparedness

EWEB is committed to delivering safe and reliable power to our customers every day. However, power outages can occur, and a major event such as a severe winter storm, earthquake or wildfire could disrupt utility services for an extended period. The Pledge to Prepare Program noted above helps customers increase their safety and resilience in a power outage. Additionally, EWEB created a Backup Generator Program in Q1 to assist residential customers with the purchase and installation of a backup generator to safely power critical home components during an emergency. Other offerings to support customer resiliency during outages and emergencies include EWEB's Weatherization Programs which include incentives for insulation and windows, crucial to maintaining temperatures during outage events.

Energy and Water Conservation and Efficiency

EWEB has an annual budget of approximately $2.5 million for energy and water conservation and efficiency projects. Procedures are being reviewed to simplify energy efficiency processes to save time, reduce overhead, increase customer satisfaction and deliver more conservation dollars directly to customers. BPA energy efficiency program reimbursements are reported quarterly. At the close of Q1, EWEB will submit the first 2019 reimbursement request, and BPA processing is expected to be completed by mid-May. EWEB is on pace to meet BPA reimbursement goals.

Through Q1 of 2019, EWEB has acquired 19% of the annual energy savings target and 37% of the peak target. For this time of the year, the work is on track and under budget. Year to date, 26% of the residential savings were acquired in Limited Income households (ahead of the 2019 target of 17%), and 12% are in rentals. These categories are not mutually exclusive.

EWEB offers Home Efficiency Audits as part of the Energy Efficiency Education program, which includes site visits to identify opportunities to make customer homes more energy efficient and educate customers on best practices to reduce their energy and water consumption. During the visit, customers also receive emergency preparedness kits to support their resiliency efforts. EWEB's goal is to complete 500 Home Efficiency Audits in 2019. Due to program re-design and inclement weather events in Q1, audits completed during Q1 were lower than expected. Marketing and targeted promotion efforts will be increased in Q2.

	Q1	Annual Target	% YTD
Energy Savings, MWh	1,816	9,500	19%
Peak Savings, MW	0.4	1.20	37%
Limited Income MWh	89		
% of Residential MWh	26%	17%	26%
BPA reimbursements	In Process	$ 2,430,483	In Process
BPA reimbursed MWh			
Home Energy Scores	29		
LI Energy Ed Visits	26	500	5%

Information & Technology

Meter Infrastructure Upgrade Support

In Q1 Information Services (IS) launched a comprehensive review of system requirements, configurations and integrations to support the implementation of 150,000 meters. The goals are to ensure reliable system performance, provide access to user-friendly data in support of management decisions, and provide flexibility for future products and services offered to customers. Business processes will also be reviewed through the lens of continuous improvement to ensure they are effective and efficient. As requirements and business processes are reviewed, updates to system configuration and integrations will be made. The process will be iterative and improvements made incrementally.

IS Operations

Cyber Security and Infrastructure Improvements

In Q1 of 2019 Cyber completed Interviews with EWEB's Executive Team, in order to align Cyber Security priorities with the business. This information was used to create a Cyber Security Charter and to inform the creation of an Information Security Management System to be deployed in 2019. This will create a comprehensive and uniform approach to cyber security across the Utility.

Asset Management & Capital Planning

IS Capital spending is expectedly lower in Q1 as projects from 2018 close. In Q2 and Q3 there will be an uptick in Capital Spending as new projects begin execution. More detail contained in *Appendix C - EL1 Report for Electric, Water & Shared Services.*

Enterprise Operations

Utility Support Services

EWEB's Utility Support Services Team has staged a total of 320 projects for the 1st quarter of 2019 for both Water & Electric and has located a total of 2,794 projects as well. These totals reflect EWEB internal work forces only.

Fleet Services

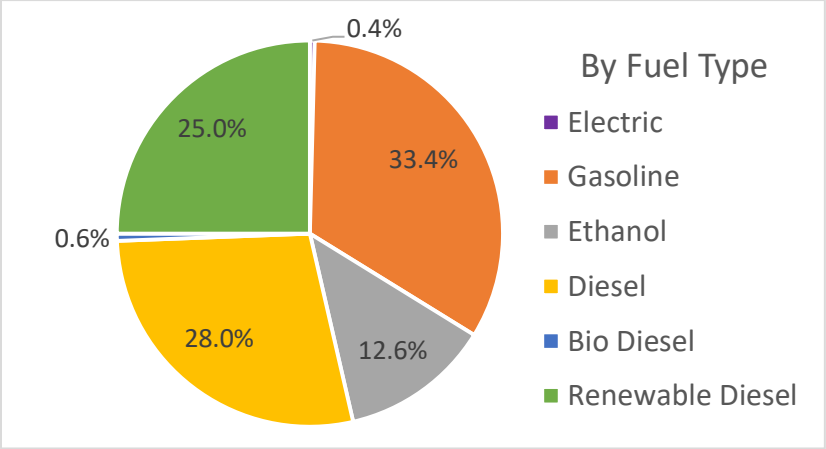
As the Utility continues to be responsible for supporting a sustainable fleet operation, EWEB's Fleet Services continues to track the fleet-related sustainability goals that the Utility introduced back in 2010 by reducing our fossil fuel usage, carbon emissions and waste.

By continuing blending higher levels of low carbon, alternative fuels such as ethanol, biodiesel, and hydrogenation-derived renewable diesel, we have been able support of those goals.

Although over the last 6 months, we have experienced a noticeable increase in demand for those low-carbon intensity (CI) fuels as Oregon's Department of Environmental Quality, Clean Fuels Program continues to mature. With this swing in demand, we have also experienced a rising cost with the price for lower CI transportation fuels.

Operations greenhouse gas (GHG) reduction goal- Fleet Services

- By 2020, reduce all EWEB operations emissions by 25% below 2009 levels
  - Q1, 2019, our overall percentage of CO^2 Reduction was 24.8% (a reduction of 103.5 metric/tons of CO)
- By 2030, reduce fossil fuel use 50%
  - Q1, 2019, our overall percentage of reduction of fossil fuel – 38.6% (15,909 gallons)
- The cost to use alternative fuels in our fleet, averaged an increase of $ .324 a gallon



Note: During Q1, 2019, the Utility experienced a 7.9% increase in volume of fuel that we use over the same period last year. We feel that this increase was mostly due to the increase in utilization of the fleet during the winter storm event last February.

Continuous Improvement

Continuous Improvement Program goals include:

- Create a proactive and sustainable Continuous Improvement (CI) culture at EWEB that is focused and driven by the voice of the customer
- Develop a CI centered culture and capabilities through awareness, desire, knowledge, ability and reinforcement
- 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, emergent conditions.

Additionally, the following are specific 2019 goals:

- Create a CI training program for managers and supervisors to develop skills in managing with CI
- Hire a CI Analyst position to expand the capabilities of the CI department

The first portion of 2019 was spent completing three 2018 cohort group training. Additionally, training for the first two 2019 cohorts began. The curriculum includes eight sessions including classes on CI principles, culture, 8 wastes, root cause analysis, brainstorming, process mapping, problem solving, critical thinking, kaizen, 5S and visual management. Participants are provided the unique opportunity to work with a CI coach between sessions in an effort to gain hands on practical use of tools and methods learned in class.

Temporary support in Q1 from the IS Division has helped to ensure we can react to the majority of requests received for CI support within the business. Communication to create awareness and desire in the organization continues to be a focus, and there has been noticeable growth of enthusiasm and engagement of CI within EWEB as team members are educated, supported, and challenged to question the way things have always been done. 2019 Program goals are on pace for expected completion by the end of the year.

	2018	**2019**
CI - Level I Certified	48	41
Attended sessions (missing a requirement for certification)	27	
Attending active Cohort 2019		36
Signed up & scheduled to attend in 2019		84
Seats Left open in current schedule		16
Potential -Additional open slots in 2019		24
GOAL - LEVEL I CERTIFICATIONS ISSUED	**75**	**201**

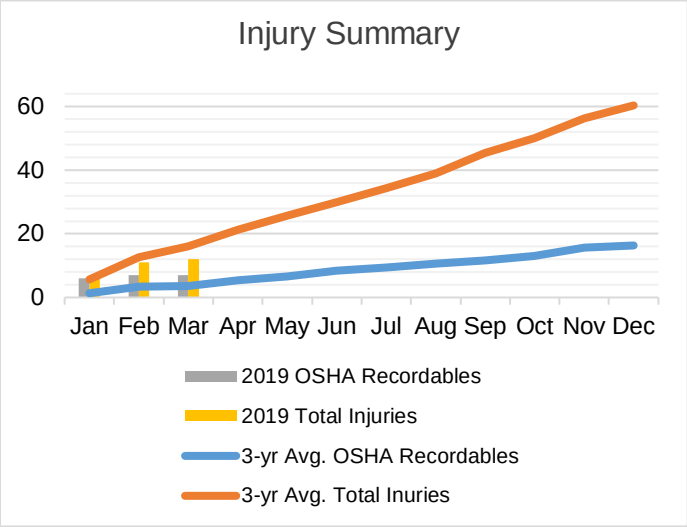
Staff self-reported 81 Continuous Improvement Projects completed in Q1 of 2019. This is up significantly from a total of 49 projects in 2018. These projects range from creating a check list for new hires to improving the cyber security incident response process.

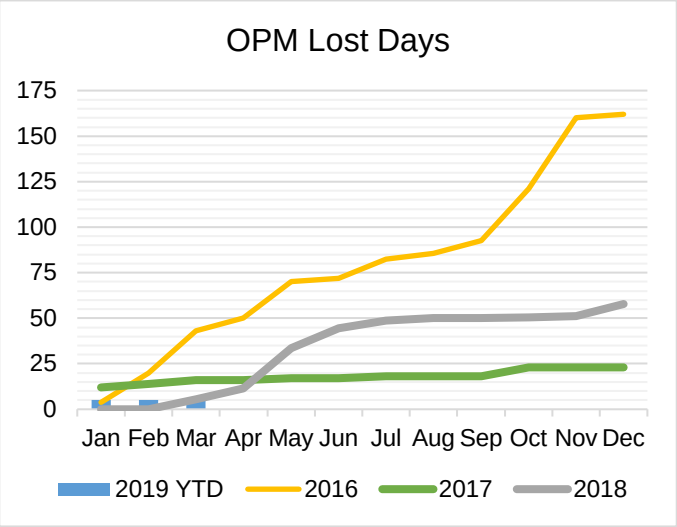
Workforce

Overall, Human Resources performance 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

There are 12 total injuries to date, below the 3-year average of 16. The Utility saw an increase in OSHA recordables at 7 YTD, over the 3-year average of 4. Total time loss, however, at 5.1 days is well below the 3-year average of 21.5 days for the reporting period.





During the February 2019 snow storm event, there were 6 total injuries, four EWEB employees and two contractor, but no OSHA recordable incidents. The four employee injuries were the result of three slip/fall and one "struck-by" incidents, and the two contractor injuries were slip/fall.

Workers' Compensation Insurance Utilization

Workers' compensation premiums are determined by an annual Q3 evaluation of the employer's claims experience, injury history and prevention efforts. The evaluation includes the assignment of a modifier rating. The rating is a premium adjustment driven by frequency and severity of claims and is represented as a plus or minus factor of 1.0, indicating the degree to which the employer's losses were fewer or greater than projected. EWEB's mod rating for plan years 2018 and 2019 came in at 1.04 and 1.02, respectively. Based on claims and injury experience at this writing, it is expected that EWEB will achieve a mod rating of less than 1.0 for plan year 2020, keeping EWEB workers' compensation premiums at very low "select tier" rates.

Safety Training

Indicator	Q1	2018 Total
Training Hours Delivered	679	**3577**
Good Catch Reports	15	**22**
Executive Site Visits	4	**71**
Safety Meetings	2	**23**
Site Visits	2	**48**

Safety continues to work in an integrated fashion with the Utility. As an example, there was notable improvement in interdepartmental coordination and support during the February 2019 snow event. Also, active participation by executives in the EWEB-wide Safety Committee is seen by employees as visible support of the safety culture. Further, management

field visits to operations sites demonstrate leadership commitment to safe work practices and have yielded improved communications and understanding with regard to employee needs for resources, tools and support.

A renewed focus on the Good Catch program is yielding good results, with an increase in the number of Good Catch reports for Q1 2019 (15) over Q1 2018 (7). The increase suggests employee understanding that reporting near misses and potentially hazardous conditions is seen by leadership as a positive action. To facilitate reporting, the safety team has created a new process for submitting Good Catch reports and also for reporting injuries. The monthly summary of these incidents is now posted on the Safety intranet page and accessible to all employees, enabling everyone to see what has been reported and the corrective measures that are being taken. Safety continues its participation in the WEI's Peer Review Leading Indicator Project, which will provide additional "Good Catch" and other utility-based safety benchmarks.

To further EWEB's ability to capture and interpret safety data and to enable enhanced reporting, new software platforms are being evaluated. The requirements gathering phase is complete and an RFP is being developed. This project is a part of the Utility's collective Continuous Improvement effort.

Other notable improvements include:

- The shift to a 16 on/8 off work-shift length during February 2019 ICS Snow event.
- Roll-out AMI-specific ergonomic assessments, work process and body mechanics evaluations, and tool evaluations/review.
- Partnering with regulatory compliance agencies including LUCC, OUNC, PTNW, & OPUC to ensure governed aspects of AMI installs meet safety requirements.
- Continued work on hazard elimination in target work groups including Meter Reading, AMI Installation crews (both water & electric).
- Continued partnering and leadership with utility peers and regulators: OUSC (PUC, OSHA, Utilities) – EWEB Chair 2019; ASSP Cascade Chapter – EWEB President 2019; Regional/Industry Conference SME presentations (WEI, GOSH, LUCC, OUNC)

Health and Wellness

Health Insurance Plan Benefits

EWEB reporting timelines do not align with lagging health insurance utilization data, therefore the following represents Q4-2018 results. Plan utilization for Q4 of 2018 was favorable and should positively impact the 2020 renewal rate consideration. However, whereas health care premiums only increased 2% for 2019, EWEB should be prepared for a larger increase in 2020. This is due to changes in health care regulations which are expected to drive new fees of approximately 2-5% before utilization rates are factored in to the annual plan review.

EWEB is beginning to explore self-insurance for health plans. More utilization information is required to do a meaningful analysis of a self-insured medical plan but there is sufficient data to support moving to self-insured dental. Benefits and Finance will assess moving dental to a self-insurance arrangement for the 2020 plan year. The annual dental benefit cap assures minimal risk and low administrative burden. Had the plan been self-insured during 2018, employees and rate payers would have saved approximately $82,000 in premiums. Experience with the dental plan will provide some additional background to aid in the decision-making process around self-insurance for medical benefits.

EWEB continues its efforts to explore benefits requests from employees and to maintain its position as a desired employer in the region. To that end, additional voluntary employee-paid benefits and discount programs will be added to EWEB's list of employee benefits. Apart from minimal administrative expense, the cost to support these plans will be borne by employees. These include critical illness and accident plans and spouse life insurance plans. EWEB is working with a corporate discounting vendor to ensure employee access to the most robust and appropriate list of employee discount programs available to public employers.

The new benefits offerings will be introduced and promoted during Q2 and Q3 with enrollment to be included in the standard open-enrollment period this fall. New plans and programs will be effective 1/01/2020.

Wellness Programming

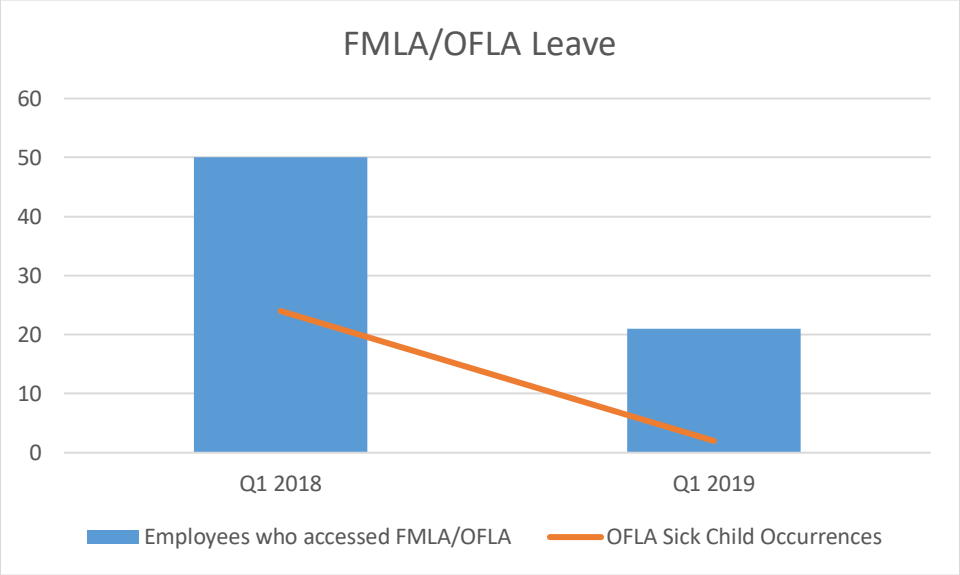
The Wellworks for You program is off to a good start in 2019, with 38% of employees active in the online portal and participating in wellness events. Participation will be further encouraged with promotional emails reminding employees of program requirements from April through June. Targeted emails are scheduled in Q3 2019 to those employees who are missing requirements. Several employee suggestions for additions to the Wellness program have been adopted, including meeting the Intellectual Wellness requirement by joining the EWEB Book Club, getting Environmental Wellness credit for reducing parking congestion by choosing an alternate commuting method and getting Physical Wellness credit for submitting safety "good catches."

A series of five wellness workshops through the EAP is scheduled throughout 2019. The first workshop, a session on Brain Science and Stress, reached maximum attendance capacity at 40 employees. Two of the five sessions will be held in the evening, to accommodate employee feedback from staff whose schedules do not allow for lunchtime attendance. The EAP workshops are part of EWEB's continuing effort to create awareness around EAP benefits and provide a platform and context for EAP practitioners to describe their crisis intervention services.

FMLA/OFLA/OSLA Leave Management

In Q3 2018, EWEB outsourced the management of legally protected and regulated leaves to The Standard. We continue to track experience with the out-sourced service but early indications are that the move was a good decision. The Standard's management of these complex and administratively burdensome leaves has enabled EWEB's legal compliance and protection of confidential employee medical information. Their ability to closely monitor timeline and medical documentation requirements has also had the effect of dramatically reducing unqualified leave usage.

The chart below summarizes FMLA/OFLA and OFLA Sick Child Occurrences in Q1 2018 vs. Q1 2019. Note a continued decline in leave claims filed in the first quarter of the year as well as in OFLA Sick Child utilization.



Employment Trends & Workforce Composition

In January 2019, Human Resources worked closely with the Operations Chief to develop a new organizational structure for Engineering & Operations. The change consolidates Water and Electric operations divisions under a single Operations and Engineering Chief and also adds a third division, Operations Support. Each will have a dedicated manager. The change was communicated by the General Manager in late 2018 and an informational session regarding the new management positions was held to encourage internal applicants.

To the extent possible, filling vacancies in each of the operational areas has been delayed until three new management positions have been recruited and incumbents are in place. At this writing, the recruitment periods have closed and various stages of candidate selection are underway. It is expected that, once in place, each of the respective managers will make some organizational changes which will like drive both internal and external employment opportunities.

The organizational change and holding off on filling vacancies has reduced the average number of recruitments as compared to Q1 of 2018 but this number will steadily increase as recruiting activity resumes.

Recruitment Activity	Q1
Total Recruitments	11
Internal Recruitments	4
External Recruitments	7
Unsuccessful Recruitments	1
Total Applications Received	415
Total Positions Filled	8

Time to Fill	Q1
Avg. Time to Fill (Days)	49.38
Avg. Time to Fill ((Days) from F2F Int.)	33.50
Avg. Time to Fill ((Days) from Req.)	75.75
Recruitments Exceeding 60 day TTF	1
% Recruitments Exceeding 60 days	9.09%

Workforce Statistics		
	Q1 2019	2018 Year End
No. of Employees	471	486
New Employee Hires	4	67
Promotions	4	29
Reclassifications	2	22
Total Employee Exits	18	42
Non-Retirement Voluntary Exits	13	24
Involuntary Exits	3	7
Retirements	2	11
Total Attrition Rate	3.76%	8.84%

Gender & Minority Demographics				
	EWEB	IBEW	Oregon**	Lane County**
Female	31%	2%	49%	51%
Male	69%	98%	51%	49%
Minority	13%	10%	13%	10%
Non-Minority	81%	87%	87%	90%
Non-Classified*	5%	3%	-	-

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

***As of Q1 2018, source U.S. Census Bureau QWI Explorer*

Age Demographics	Age Range	% Empl.
	20 - 29 years	6.17%
	30 - 39 years	22.98%
	40 - 49 years	33.83%
	50 - 59 years	28.51%
	60+ years	8.51%
Average Worker Age	45.6 years	

Attrition

Q1 total attrition is at 3.76% which is a 100% increase from our 2018 Q1 attrition rate of 1.7%, but is tracking in line with our 3-year average of 12.47%.

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	2.72%	0.42%	0.63%	**3.76%**

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

Compensation & Benefits/Oregon Pay Equity Act Compliance

BOLI's Equal Pay Law went into effect as of January 1st, 2019. In order to comply with the law and ensure EWEB employees are paid equitably, an equal pay analysis was completed in 2018. The next step of the compliance process will be a review of all policies related to compensation and benefits to ensure the associated practices and offerings are in line with new legal standards. This work is underway.

Additional salary setting guidance and tools will also be created in 2019 to assist supervisors in compensation management for their employees moving forward that balances both compliance and recognizing performance.

Benchmark re-pricing for the MAPT salary structure s is scheduled for Q3/Q4 2019. Any necessary adjustments will be made to ensure EWEB remains competitive with the external market.

Workforce Performance

2018 annual reviews are complete. We continue to observe performance ratings in a bell curve, with just over 73% of non-probationary employees rated as skilled. The breakdown of ratings follows:

- 0.2% Under-performing
- 13.5% Developing
- 73.3% Skilled
- 13% Exceptional

There were a total of 7 corrective performance interventions in Q1 of 2019, which is tracking on course with the 2018 total of 28 and below the 3-year average of 37 annually. There were 3 probationary terminations in Q1 which is equal to the 3-year average of 3 per year.

Efforts to reduce probationary terminations and also to ensure the greatest success among newly hired employees included a review and update of EWEB selection methods and the introduction of recruitment and selection training. This 4-hour training includes a required course for managers and supervisors and a separate 4-hour voluntary course for employees desiring to be interview panelists. The training has been very well received with classes filling up on the first

day of offer. At this writing, 60 panelists have been trained, with another 120 scheduled. The managers and supervisors course will be delivered in Q2. In addition to the training's focus on EWEB selection philosophy, the updated process and a refresh on the basics, it also includes a module specifically dedicated to implicit bias in selection.

EWEB is also re-tooling its new hire orientation and on-boarding experience. At this writing, a focus group of supervisors is working with Human Resources to identify information that is essential to new-hire success and to sequence the dissemination of the information over the six-month probationary period. Tools are under development across the Utility to ensure the experience from pre-hire though the first year is consistent, and supervisors are meeting regularly with new employees to convey EWEB cultural standards, set expectations and track progress.

Labor Relations

Labor relations continue to be good. Labor Management Committee meetings have been productive with the Union using those forums to surface issues, providing management opportunities to problem-solve and address concerns before grievances materialize. EWEB and IBEW continued to work through multiple contract language amendments and interpretations. A new agreement and process regarding work clothing for operations personnel is an example of the cooperative work occurring between the Union and management. Employees were given an opportunity to try out and make final selections of clothing items within mutually agreed parameters. The new clothing agreement enhances safety by ensuring employees are outfitted in gear that is appropriate for their particular work and clearly identifies them as EWEB workers.

A new wage escalation factor was negotiated in January in response to the discontinuation of the CPI index previously relied upon in the CBA.

There have been no grievances so far this year.

Organizational Development

EWEB partnered with Cascade Health to provide a 7 week Leadership/Supervision Training Series, held at EWEB from January through the end of February. 25 managers and supervisors completed the course. The overwhelming feedback was positive and supervisors stated the training reinforced prior learning and provided additional tools for them to use in supporting their employees. EWEB employees will have an opportunity to attend future deliveries hosted by other local employers.

Rotational assignments and job-shadow opportunities described in last quarter's report continue to work well. EWEB's BOLI-endorsed Joint Apprentice Training Committee (JATC) is functioning well and had one of the five apprentices successfully complete his apprenticeship program.

The General Manager scheduled meetings with every department in the Utility, and has already met with eight workgroups during the first quarter. Additionally, the General Manager and members of the Executive Team met with new employees in Q1. The new hire orientation process was recently enhanced with new approaches to provide a welcoming environment where everyone feels safe, respected, included and understand expectations.

HR Information Management System Enhancements

In Q1 2019, EWEB rolled out new employee Life Event for 457 and Roth that takes advantage of new functionality in Ultipro. Employee data entry has been simplified by moving from 9 plans to 5.

New quarterly absenteeism reports have been created and a user guide to provide managers and supervisors tools to understand and manage attendance issues going forward.

FMLA/OFLA time data entry has been simplified based upon employee feedback.

The Ultipro Model My Pay and Total Comp Statements have been rolled out in order to provide a self-service feature for employees and reduce calls to payroll and benefits.

Government & Legislative Affairs

The 2019 Oregon Legislature continues to deliberate on the Clean Jobs Bill (HB 2020), a proposal to implement a state Carbon Cap and Trade program that would link to the Western Climate Initiative.

The May Board Meeting packet will include a memo summarizing the progress of HB 2020 and other state legislative issues important to EWEB.

Enterprise Risk Management

Q1 2019 Quarterly Contracts

The following new contracts that exceeded $150,000 were approved or authorized by the Board to support strategic initiatives and organization goals:

1. Monitor Mapboard Systems ($342,000)- Real-time System Mapboard for the Dispatch Control Center (1 time)
2. Motorola Solutions, Inc ($326,000)- 2-way Radio Equipment (1 time)
3. Whitlock Consulting Group ($185,000)-Consulting and Customer Experience Initiative RFP development (1 year)
4. Wildish Building Co ($4,577,000)- Carmen-Smith substation construction (1 year)
5. Peak Reliability ($181,000)-Reliability Coordinating Services (1 year)
6. Lane County Human Services Division ($165,000)-Limited Income Energy Assistance Services (5 years)
7. United States Geological Survey ($230,000)-Water Quality Monitoring and Analysis for Source Protection (1 year)

Key operational contracts for maintenance, repairs, safety, and capital projects work included:

1. Sanipac ($165,000)-Solid Waste and Recycling Services (5 years)
2. Nation's Mini-Mix, Inc. ($160,000)-Ready-Mix Concrete (5 years)
3. Tyndale Company Inc ($650,000)-Fire Retardant Apparel (5 years)

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

Key Metric-Limiting Increases to Contract Pricing

Purchasing tracks the annual changes in contract pricing with the goal to limit contract pricing changes to a 1% increase. The contract pricing changes for Q1 2019 was 2.24%. The primary reason for this pricing increase was a 3% increase to the tree trimming contract. When price increases are requested, 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 of 2018, the Court of Appeals ruled in EWEB's favor on the question of venue and that the case should proceed in trial court as between EWEB, the engineer, and two subcontractors. In December 2018, the Lane County Circuit Court directed the parties to schedule a trial date to commence no later than September 1, 2019. Scheduling efforts are underway. A separate arbitration centered on EWEB's claims against the prime contractor will not take place until the trial proceeding is complete. All parties are continuing discovery, including preparation for depositions.

PERS Litigation: The hearing of EWEB's case before the Oregon Supreme Court was completed mid-January and taken under advisement.

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; oral arguments were presented to the Court of Appeals in December 2018, and the matter has been taken under advisement. The Court of Appeals commonly issues written decisions within 12-18 months.

James Zelenka v. EWEB: On November 12, 2018, EWEB was sued for personal injury damages alleged by the plaintiff driver, James Zelenka, arising from a motor vehicle accident involving an EWEB employee which occurred on December 12, 2016.

EWEB's answer has been filed. EWEB has been substituted as the sole defendant in the matter in accordance with the Oregon Tort Claims Act. Discovery is underway, and the trial date has been scheduled for October 8, 2019.

N. Harris Computer Corporation v. EWEB: In May 2018, EWEB issued a letter notice of termination on a vendor contract with Cayenta, a division of N. Harris Computer Corporation, relating to the installation and configuration of a replacement computer information system (CIS). Despite efforts to resolve the conflict by mediation, N. Harris Computer Corporation filed a lawsuit against EWEB on December 17, 2018, asserting Breach of Contract, seeking approximately $740,000. EWEB filed an answer and counter complaint based on misrepresentation, breach of contract, and seeking rescission with restitution for financial damages. Initial discovery is underway.

Compliance

During the past quarter, no compliance violations were discovered and/or self-reported.

Public Records Requests

During Q1 2019 EWEB received seven public record requests. Two requests were for human resources information, two for information about utility decisions, one for water meter information, and two for Purchasing records.

NERC Compliance

EWEB is in the processes of transferring their Transmission Operator (TOP) function to Bonneville Power Administration (BPA). The contract has been signed and is set to take effect on May 1, 2019. WECC confirmed the morning of April 18, 2019 that they have received BPA's TOP certification paperwork and EWEB's TOP deregistration paperwork. The last item that WECC needs to confirm is that BPA is capable of handling the additional footprint. Having BPA perform EWEB TOP functions will result in yearly savings in operations costs and free up FTE to work on other priority work.

The 2018 WECC audit is nearing completion; however, there is 1 Potential Non-Compliance (PNC) that is still being investigated. On April 11, 2019, WECC submitted a data request to continue investigation EWEB's compliance. After the final PNC is closed, depending on the findings, the 2018 WECC Audit should conclude.

PUC Work

PUC operational goals for the Electric Line crews in 2019 are:

- 1200 Compliant poles
- 2500 poles tested and treated
- 10% of the overhead T&D system inspected and corrected.

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: EL3 Report Community Investment Sponsorships

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

APPENDIX A

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

(In millions)

	Three Months Ended March 31,		YTD Budget Comparison	
	2019	2018	Budget $	Variance
Operating revenues	$ 77.1	$ 70.6	$ 62.4	$ 14.7
Operating expenses	75.9	59.7	55.0	(20.9)
Net operating income (loss)	1.2	10.9	7.4	(6.2)
Non-operating revenues	1.5	0.9	2.0	(0.5)
Non-operating expenses	1.8	1.8	2.2	0.4
Income before capital contributions	0.9	10.0	7.2	(6.3)
Capital contributions	2.1	1.4	0.6	1.5
Increase/(Decrease) in net position	$ 3.0	$ 11.4	$ 7.8	$ (4.8)

ELECTRIC CONDENSED STATEMENT OF NET POSITION (Unaudited)

(In millions)

	March 31,		December 31,
	2019	2018	2018
Current assets	$ 222.6	$ 243.5	$ 170.4
Net utility plant	368.2	354.5	367.8
Other assets	101.1	106.0	150.4
Total assets	691.9	704.0	688.6
Deferred outflows of resources	45.0	46.5	45.5
Total assets and deferred outflows	$ 736.9	$ 750.5	$ 734.1
Current liabilities	$ 41.6	$ 32.0	$ 41.1
Long-term debt	200.3	211.0	200.8
Other liabilities	94.0	91.4	94.3
Total liabilities	335.9	334.5	336.2
Deferred inflows of resources	11.9	8.6	11.8
Total net position	389.1	407.4	386.1
Total liabilities, deferred inflows, and net position	$ 736.9	$ 750.5	$ 734.1

ELECTRIC CONDENSED CAPITAL BUDGET COMPARISON (Unaudited)

(In millions)

	YTD	Annual Working Budget	
	3/31/2019	Budget $	% of Budget
Type 1 - General capital	$ 2.7	$ 11.8	22.9%
Type 2 - Rehabilitation and expansion	2.7	10.5	25.7%
Type 3 - Strategic projects	1.0	15.0	6.7%
Total capital	$ 6.4	$ 37.3	17.2%

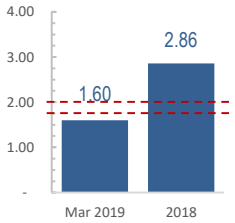
FINANCIAL STRENGTH MEASUREMENTS

Target line

Debt service coverage

Target: Greater than range of 1.75 to 2.0x

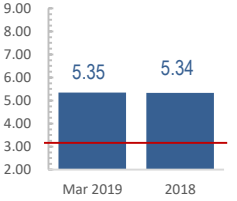
Measures the utility's ability to meet its annual long-term debt obligation.



Current ratio

Target: Minimum of 3.250x

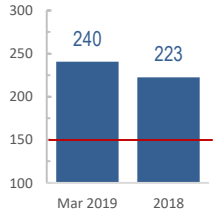
Measures the utility's short-term liquidity (ability to pay bills).



Working capital days cash

Target: Greater than 150 days

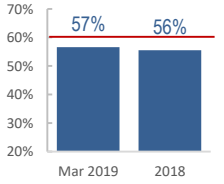
Estimates the number of days the utility can pay its daily O&M before running out of cash.



Age of system

Target: Less than 60 percent

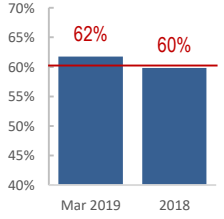
Measures age of system compared to how much has been depreciated.



Debt as a % of NBV

Target: Less than or equal to 60 percent.

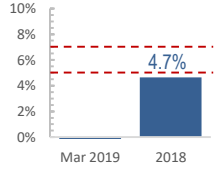
Measures overall leverage of the system by aligning debt service with the useful lives of assets.



Rate of return

Target: Between 5 - 7%.

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



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

(In thousands)	Three Months Ended March 31,		Budget Comparison	
	2019	2018	Budget $	Variance
Operating revenues	$ 7,399	$ 7,748	$ 7,426	$ (27)
Operating expenses	6,118	5,620	6,714	596
Net operating income (loss)	1,281	2,128	712	569
Non-operating revenues	371	58	234	137
Non-operating expenses	640	574	540	(100)
Income before capital contributions	1,012	1,612	406	606
Capital contributions	1,125	1,481	405	720
Increase/(Decrease) in net position	$ 2,137	$ 3,093	$ 811	$ 1,326

WATER CONDENSED STATEMENT OF NET POSITION (Unaudited)

(In millions)	March 31,	
	2019	2018
Current assets	$ 47.4	$ 53.3
Net utility plant	177.8	167.0
Other assets	8.6	7.3
Total assets	233.8	227.6
Deferred outflows of resources	9.6	9.8
Total assets and deferred outflows	$ 243.4	$ 237.4
Current liabilities	$ 4.4	$ 4.0
Long-term debt	61.0	65.3
Other liabilities	20.7	19.8
Total liabilities	86.1	89.1
Deferred inflows of resources	2.5	1.9
Total net position	154.8	146.4
Total liabilities, deferred inflows, and net position	$ 243.4	$ 237.4

WATER CONDENSED CAPITAL BUDGET COMPARISON (Unaudited)

(In thousands)		Annual Working Budget	
	3/31/2019	Budget $	% of Budget
Type 1 - General capital	$ 1,853	$ 6,053	30.6%
Type 2 - Rehabilitation and expansion	1,732	8,972	19.3%
Type 3 - Strategic projects	101	412	24.4%
Total capital	$ 3,686	$ 15,437	23.9%

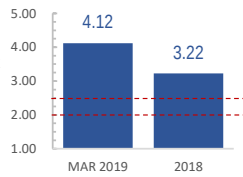
FINANCIAL STRENGTH MEASUREMENTS

Target line

Debt service coverage

Target: Greater than range of 2.0 to 2.50x

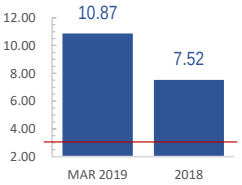
Measures the utility's ability to meet its annual long-term debt obligation.



Current ratio

Target: Minimum of 3.250

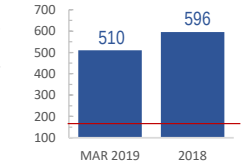
Measures the utility's short-term liquidity (ability to pay bills)



Working capital days cash

Target: Greater than 150 days

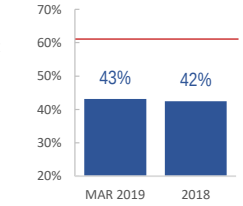
Estimates the number of days the utility can pay its daily O&M before running out of cash.



Age of system

Target: Less than 60 percent

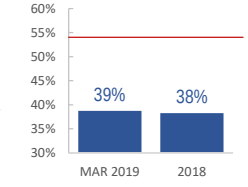
Measures age of system compared to how much has been depreciated.



Debt as a % of NBV

Target: Less than or equal to 60

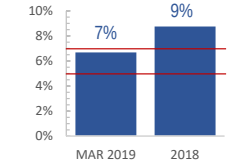
Measures overall leverage of the system by aligning debt service with the useful lives of assets.



Rate of return

Target: Between 5 - 7%.

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



APPENDIX C

Capital "EL1" Report: Electric, 2019-Q1

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

Type 1 - General Capital

Capital Category	2019 - Q1 Budget	YTD Actual	Year-End Projection	Status/Comments
Electric Infrastructure - Generation	$1,657,000	$287,642	$2,800,000	Planned work on schedule. Stone controls upgrade in execution. Likely delay in canal repair to 2020. Additional $1M+ required for emergent canal repair design effort and Smith Reservoir Intake Rehabilitation. Noted yellow due to emergent unfavorable variance. -ZINNIKER
Electric Infrastructure - Substations	$2,000,000	$516,863	$2,000,000	Due to two emergent failures (Thurston 115kV breaker, Prairie Transformer Failure), 2019's planned substation rehab project has been deferred to 2020 (Westmoreland Substation 115kV rebuild and relay replacement). This deferred project design will be completed in 2019 and executed early 2020. Projection also includes procurement of new transformer for Weyco (IP) Substation due to age/condition. This unit will be procured this year, installed spring 2020. Also included is cost for the new Dispatch board (to accommodate the ROC consolidation), and RTU (McKenzie, Willow Creek) and Relay (Coburg, Monroe, Thurston) replacements, as well as a 15kV breaker upgrade at Oakway substation. - NICE
Electric Infrastructure - Telecom	$379,000	$12,540	$857,000	Budget includes EWEB and Customer Driven Fiber work, and Radio system related capital projects. EWEB driven telecom current slower than anticipated (expected YE spend at $60k). Customer driven projection has been raised from $100k to $180k due to riverfront reconfiguration work. Also includes $100k for various MW radio and comm site work, and $517k for installation of the dispatch radio at the ROC comm tower building to accommodate the ROC Consolidation effort. Noted yellow due to emergent unfavorable variance. - NICE
Electric Infrastructure - Transmission & Distribution	$6,500,000	$1,650,078	$7,384,000	Customer reimbursable work is currently tracking above budget based on historical. Planned work (Renewable-Replacement and Enhancement) will see a reduction to accommodate the additional customer work due to resourcing constraints in Distribution Engineering and Crew availability. Specific efforts include Goodpasture Island Loop enhancement, live front switch replacements, a get away cable replacement at Willakenzie Substation, and PUC correction work. Additional project contributing to overage is the Currin-Alvey rebuild which has rolled over from 2018. This budget also includes precapitalized transformer purchases. - FATOOH

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

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

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

Type 2 Rehabilitation & Expansion Projects

Project	2019 - Q1 Budget	YTD Actual	Year-End Projection	Project Total Initial Plan	To-Date Actual	Project-End Projection	Schedule Start	Initial Planned Completion	Projected Completion	Status/Comments
Downtown Fiber Network	$300,000	$119,772	$400,000	$2,100,000	$1,253,195	$2,100,000	Mar-2017	Dec-2018	Jun-2019	YE Projection increased by $100k to account for roll over due to crew resource constraints due to mutual aid efforts. Work planned to continue and be completed. -NICE
Advanced Meters (Electric)	$4,565,000	$1,860,537	$3,471,000	$6,638,000	$5,852,906	$12,000,000	Oct-2013	Dec-2025	Dec-2025	Project implementation has been accelerated to accomplish strategic objectives within target dates per Opt Out deployment approval by the Board. Meters are being deployed on a consistent basis with meter procurements underway. Projection also includes in labor for planning and implementation staff. Meter inventory is currently as acceptable levels to continue deployment at Opt Out rate, therefore orders have been decreased approx. $1.2M. Noted yellow due to emergent favorable variance. -NICE
Electric Master Plan	$0	$9,153	$200,000	$1,250,000	$187,902	$700,000	Jul-2016	Dec-2016	Mar-2019	Spending shown accounts for coordination and planning associated with purchase of property for Thurston substation expansion. Purchase expected to occur in 2019 after a lot line adjustment has taken place, which reduces purchased parcel size to approximately half of current property. This change will reduce risk of EWEB environmental mitigations that may be required, and reduce cost. Delay in purchase does not effect critical path of the substation expansion. -NICE
Upriver Re-Configuration/Holden Ck. Substation	$600,000	$30,948	$2,430,000	$3,000,000	$5,938,810	$7,580,000	Jan-2014	Oct-2015	Dec-2019	Work includes construction and commissioning work to expand the Holden Creek substation (add redundant distribution transformer and expand switchgear) in order to increase reliability to upriver customers; total project cost is $1.8M. Also includes work to decommission part of Leaburg Substation and construct new generator feeds to Holden Creek. Due to staffing constraints for crews that will be involved in commissioning Carmen Substation, project completion will likely be delayed to late Q4 2019, with possible roll over to early 2020. Noted yellow due to emergent unfavorable variance. -NICE
Downtown Distribution Network	$1,000,000	$166,000	$1,500,000	$15,000,000	$7,000,289	$20,000,000	Sep-2010	Dec-2015	Dec-2028	Downtown network projects include various network protector upgrades (6 total, including the Jail feed). Additional work currently in planning is the installation of tie switches to allow for connection of the two downtown network circuits (Willamette and Jefferson Substation Feeds). Currently in initial design and will account for $250k-$500k depending on final options to be selected (manual, local motorized or remote operation). Project will increase resiliency of the system and allow for planned maintenance and restoration at a much reduced time. -NICE
Grid Edge Demonstration Project	$0	$6,373	$130,000	$1,200,000	$1,396,317	$1,400,000	May-2016	Jun-2017	Jun-2019	Final punch list items being completed. Included is a controller retrofit which will allow for additional use cases, automatic islanding and some gaps left from final execution. Also included is funds to install BPA required metering and metering system to allow for seamless bill offset to 4j due to presence of the battery units. -NICE
Distribution Resiliency Upgrades	$1,181,000	$9,680	$1,181,000	$1,862,000	$20,221	$1,862,000	Jan-2019	Dec-2020	Dec-2020	Designs planned for 2019 execution nearing completion for FEMA reimbursed resiliency work. Work packages will be distributed to operations and started in Q2. Will also include select improvements beyond FEMA reimbursed work (approx. $250k) which will be completed as the FEMA work is completed for efficiency of resource usage. -NICE
Backup Dispatch Center at Hayden Bridge	$173,000	$0	$0	$173,000	$0	$1,577,000	Dec-2018	Dec-2019	Dec-2020	Design in progress. Requirements around dispatch and trading floor being gathered and implemented in design. Note that YTD spending will not be shown until project is completed and in closeout via accounting correction. -NICE

Type 3 - Strategic Projects & Programs

Project	2019 - Q1 Budget	YTD Actual	Year-End Projection	Project Total Initial Plan	To-Date Actual	Project-End Projection	Schedule Start	Initial Planned Completion	Projected Completion	Status/Comments
Carmen Smith License Implementation	$14,980,000	$974,513	$12,000,000	$135,000,000	$56,279,516	$129,500,000	May-2009	Dec-2021	Dec-2025	The FERC is still reviewing the Final License Application and to date there are no outstanding issues. We anticipate license issuance during first half of 2019, however there is really no way to accurately forecast the actual issuance timing. Carmen Powerhouse renewal efforts continue with turbine shutoff valve commissioning complete and the generating units returning to operation in November. Fabrication of long lead-time equipment for rebuilding the substation is nearing completion and the installation contract bids were opened in December and approved by the Board in January. GE Turbine Generator design work is proceeding on schedule with factory inspections starting in 2019 in preparation for the first unit rehab in 2020. Alternatives analysis for upstream fish passage design is complete and planning for other recreation and environmental improvements required by the license is now in progress. -ZINNIKER, BOYLE

Total Electric Capital (Excluding Shared Services)	**$33,335,000**	**$5,644,099**	**$34,353,000**	**17%**

Management Notes: The overall Electric Capital Budget (excluding shared services) expenditure rate is lower than actual to date (17% spending vs. 25% of year). Type 1 expenditures predicted at year end is at 124% of budget vs. actual, with about 23% spent through Q1. Type 2 spending is at 29% at the end of Q1, and projected expenditures at year end are at 122%. Main drivers are additional AMI communications infrastructure, Holden Creek Substation, and Smith Reservoir Intake repairs. Carmen Smith spending is expected to be at 80% of budgeted at year end with 7% spent through Q1. Year end projections of total expenditures vs. budget for Type 1 & Type 2 work combined is predicted to be 123% excluding Shared Services and Type 3, and 104% including Type 3 (Carmen) for the overall Electric Division budget (with precap materials included). Engineering and Finance will monitor work progress and spending closely and defer work as possible, or will elect to request a board authorized budget amendment if deferral of work poses too much risk to the utility.

Eugene Water Electric Board

Water Capital Projects Quarterly Status Report
2019-Q1

APPENDIX C

4/26/2019

Type 1 - General Capital

Project	2019 - Q1 Budget	YTD Actual	Year-End Projection	Status/Comments
Source - Water Intakes & Filtration Plant	**$216,300**	**$455,361**	$770,000	Year to date expenditures are primarily due to 2018 projects that reached final completion after year end. Remaining work for 2019 is emergent work at Hayden Bridge including replacement of an HVAC system and several valves in the filter gallery along with piping improvements required for the new biofiltration process.
Mains - Replacements, Improvements, & Trans.	**$2,719,200**	**$775,189**	$4,132,000	Largest componet in this area is main replacements. This item is tracking just above target so far. Going forward, several large projects will push expenditures over budget. When the main replacement/improvement budget was set in mid 2018, it was reduced from previous levels to help offset expenditures for AMS. Since that time, additional emergent and opportunity projects were identified which are increasing anticipated expenditures to pre 2019 levels.
Services	**$1,596,500**	**$368,663**	$1,600,000	Includes both reimbursable and non reimbursable service work.
Pump Stations and Reservoirs	**$999,100**	**$123,977**	$462,000	Work this year includes finishing up work at Santa Clara and Laurel Hill 850 pump stations. New work was reduced to help accomodate overages in other areas but will include reservoir hatch improvements and design of a new pump station for the City View 1150 zone.
	$5,531,100	**$1,723,190**	**$6,964,000**	

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

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

Type 2 Rehabilitation & Expansion Projects

Project	2019 - Q1 Budget	YTD Actual	Year-End Projection	Project Total: Initial Plan	To-Date Actual	Project-End Projection	Schedule: Start	Initial Planned Completion	Projected Completion	Status/Comments
Hayden Bridge Disinfection System Replacement	$1,493,499	$512,911	$2,630,000	$3,645,000	$2,377,331	$4,500,000	2017	YE-2018	Q3-2019	Replacement of gas chlorine system with on-site liquid hypochlorite system. Equipment delivery and construction delays pushed project completion later into 2019. 2019 overage is a result of this delay in the work - unspent 2018 budget. All equipment is on-site and building construction is in progress. (Initial Plan - 2015 CIP)
Hayden Bridge Lab and Backup Services Building	**$309,000**	**$102,000**	$300,000	$2,805,000	$157,147	$3,000,000	Q4-2018	YE-2017	YE-2020	New water quality lab and backup services building for Hayden Bridge. Lab has been in CIP since 2012. It was consolidated with second source project in 2014 then seperated back out in 2017 when second source project was deferred. Backup services portion was added with ROC consolidation efforts. Project currently in design. (Initial Plan - 2012 CIP)
40th Ave (Elliot) Reservoir No. 1	**$515,000**	**$15,072**	$150,000	$10,250,000	$37,813	$10,250,000	2018	YE-2021	YE-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. Project is currently in the preliminary design/planning phase. (Initial Plan - 2019 CIP
Advanced Meters (Water)	**$5,768,000**	**$936,297**	$5,800,000	NA	$3,567,160	TBD	2018	YE-2026	YE-2026	Subproject to reflect shift to Opt-Out Advanced Meter Infrastructure. Incudes cost of pre-capitalized meters.
	$8,085,499	**$1,566,280**	**$8,880,000**							

Type 3 - Strategic Projects & Programs

Project	2019 - Q1 Budget	YTD Actual	Year-End Projection	Project Total: Initial Plan	To-Date Actual	Project-End Projection	Schedule: Start	Initial Planned Completion	Projected Completion	Status/Comments
Emergency Water Supply	**$412,000**	**$100,643**	$300,000	NA	$458,522	TBD	Q1-2018	YE-2028	YE-2028	Emergency Water Supply Program - distributed water delivery sites.

Total Water Capital (Excluding Shared Services)	$14,028,599	$3,390,113	$16,144,000	24%	year to date actual to budget	115%	Year end projection to budget
Total Water Capital Including Shared Services)	$15,437,000		$18,000,000			117%	Year end projection to budget

Management Notes: Overall Water's projects are tracking well for the first quarter at about 24%. Type 1 projects are running a bit high primarily due some close out work for 2018 projects that hit the books in early 2019. On the Water Type 2 projects, we are tracking a bit low in the first quarter however this will pick up as construction increases heading into Q2 and Q3. With respect to year end, overall the water utility is projecting an overage of 15%. This is due to a combination of items including higher than originally anticipated main replacement work along with shift in construction costs from 2018 to 2019 for the Hayden Bridge Disinfection system. This shift in costs was due to 2018 delays in equipment procurement and construction.

APPENDIX C

Capital "EL1" Report: Shared Services, 2019-Q1

Type 1 - General Capital

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

Capital Category	2019 - Q1 Budget	YTD Actual	Year-End Projection	Status	Status/Comments
General Plant - Information Technology (I.T.)	**$533,000**	**$9,304**	**$533,000**	🟢	IS Capital spending is expectedly lower in Q1 as projects from 2018 close. In Q2 and Q3 there will be an uptick in Capital Spending as new projects begin execution. (Matt Barton)
General Plant - Buildings & Land Management	**$252,200**	**$36,397**	**$50,000**	🟢	ROC Comm Tower expected to be complete early Q3 - (Kris Moe)
General Plant - Electric& Water Fleet Capital	**$885,000**	**$148,700**	**$568,000**	🟢	Electric: $438,500 - all to be completed in budget year 2019. Water: $129,500 - all to be completed in budget year 2019. (Gary Lentsh)

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	2019 - Q1 Budget	YTD Actual	Year-End Projection	Project Total: Initial Plan	Project Total: To-Date Actual	Project Total: Project-End Projection	Schedule: Start	Schedule: Initial Planned Completion	Schedule: Projected Completion	Status	Status/Comments
AMI Information Technology & Integration (new AMI intergration/upgrade work)	**$ 16,200**	**$8,924**	**$3,000,000**	$6,475,700	**$5,455,595**	**$9,500,000**	May-2015	Dec-2017	May-2018	🟡	**Additional AMI spend is for the Meter Infrastructure Upgrade Support (Barton) In addition, the Communication infrastructure is needing expansion with approximately 4-5 new antennas and towers spread around EWEB's territory to accommodate opt out deployment needs (Nice)**
Wide Area Network	**$1,000,000**	**$0**	**$1,000,000**	$3,000,000	**$0**	**$3,000,000**	Q4	Dec-2022	Dec-2022	🟢	**WAN Project On Track (Barton)**
Oracle	**$1,661,000**	**$0**	**$1,661,000**	$0	**$694,092**	**$1,661,000**	Q1	Dec-2019	Dec-2019	🟢	**Oracle Enterprise Upgrade Project On Track (Barton)**
ROC Consolidation	**$ 1,000,000**	$ 817,374	**$1,600,000**	$2,000,000	**$2,022,502**	**$2,500,000**	Mar-2018	Dec-2020	Dec-2020	🟡	**Staff and department moves are currently planned into September with construction work underway. Project overspend is due to emergent requirements for moving Call Center and construction of a GM space. Call center requires additional strucural and HVAC elements. Noted yellow due to unfavorable variance.**
Total Shared Services Capital (This Report)	**$5,347,400**	**$1,020,699**	**$8,412,000**	**157.31%**							

APPENDIX D

Q1 2019, Quarterly Contracts Awarded Report

Contract Execution	Contractor	City, State	Description	Contract Amount	Contract Term	Contract Process	Executive Team Manager
12/19/2018	Boneville Power Administration	Vancouver, WA	Services to add EWEB's 115kv and 230kv Systems into BPA SCADA	$ 145,000	6/1/2019	Intergovernmental Agreement	Rod Price
1/9/2019	Burns McDonnell	Vancouver, WA	Water System Communications Master Plan	$ 47,416	one-time purchase	Direct Negotiation-Personal Services Agreement	Rod Price
1/11/2019	Technical Writer Consulting Servces LLC	Washington, DC	Technical Writing Services	$ 50,000	1/10/2024	Request for Proposals	Rod Price
1/16/2019	GSI Water Solutions, Inc.	Portland, OR	Wellfield Feasibility for Eugene Science Center Emergency Water Stations	$ 42,292	5/15/2019	Direct Negotiation-Personal Services Agreement	Rod Price
1/24/2019	Holt Services	Vancouver, WA	Drilling construction at Carmen Smith	$ 78,260	one-time purchase	Request for Quotes	Susan Ackerman
1/29/2019	Energy and Environmental Economics (E3)	San Francisco, CA	Integrated Resource Planning Strategic Advisory Services	$ 45,000	3/31/2020	Direct Negotiation-Personal Services Agreement	Susan Ackerman
2/19/2019	Lane Council of Government	Eugene, OR	2019 Master Services Agreement, task work to incude maintenance and development of several database systems including Pure Water Partners,Illegal Camping, and Watershed Emergency Response Systems	$ 101,500	2/18/2020	Direct Negotiation-Intergovernmental Agreement	Rod Price
2/21/2019	The Automation Group	Eugene, OR	Stone Creek Programmable Logic Controller (PLC) Upgrade	$ 87,327	One-time	Request for Quotes	Susan Ackerman
2/26/2019	Yates Line Construction Company	Garibaldi, OR	Emergency Electric Crews	$	3/15/2019	Emergency Contract	Rod Price
2/28/2019	K&D Services of Oregon, Inc.	Clackamas, OR	Emergency Flagging Services	$	2/27/2024	Emergency Contract	Rod Price
3/6/2019	WRK Engineers	Vancouver, WA	Transformer Anchorage	$ 98,150	2/28/2021	Direct Negotiation-QBS*	Rod Price
3/12/2019	Sapere Consulting, Inc.	Walla Walla, WA	Energy Division Organizational Transformation Assessment	$ 47,700	6/30/2019	Direct Negotiation-Personal Services Agreement	Susan Ackerman
3/19/2019	HDR	Omaha, NE	Underground Cable Asset Investment Planning	$ 77,000	one-time purchase	Direct Negotiation-QBS*	Rod Price
3/20/2019	Northstar Chemical Inc	Sherwood, OR	Water Treatment Chemicals (Coagulant)	$ 46,872	3/19/2024	Exemption for Water Treatment Chemicals	Rod Price
3/20/2019	Eaton Corportation	Portland, OR	HQ & ROC Data Center Uninterruptible Power Supply (UPS) Service and Maintenance Agreement	$ 103,575	1/31/2022	Direct Negotiation-Sole Source	Rod Price

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.

**These two contracts were awarded during the February 2019 storm. They were awarded under the exemption for Emergency Procurements (EWEB rules 3-0280)

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

APPENDIX E

Community Investment for Q1 2019

Sponsorships, Donations, Grants

AGENCY	EVENT/DESCRIPTION	PAYMENT DATE	EVENT DATE	AMOUNT	INVESTMENT AREA	CATEGORY	NOTES
Lane County Fair	Co-Sponsorship of Comfort Station Water Booth	03/21/19	07/24-07/28	$810	ENVIRONMENTAL: Water Quality/Reliability	Discretionary	Booth Fee / Use of EWEB drinking water fountain w/chiller.
Eugene 4J School District	22nd Annual EWEB Solar Challenge	03/12/19	06/01/19	$19,550	ENVIRONMENTAL: Greenpower	Customer Voluntary	
Friends of Trees	2018 Greenpower grant winner - $28,000 awarded	02/21/19	N/A	$7,000	ENVIRONMENTAL: Greenpower	Customer Voluntary	West Eugene Living Roadways Project - Third and final installment payment. Total $28,000 awarded.
The Eugene Science Center	2018 Greenpower grant winner - will receive up to $50,000	02/21/19	N/A	$4,865	ENVIRONMENTAL: Greenpower	Customer Voluntary	Installation of 32.5-kilowatt photovoltaic array project - Second installment payment. Total year-to-date = $29,865. Subsequent installments will be made as project progresses.
Friends of Trees	2018 Greenpower grant winner - will receive up to $28,000	01/24/19	N/A	$7,000	ENVIRONMENTAL: Greenpower	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. First installment payment of $14,000 was made in Q4 2018. Second of three installment payments.
Oregon Environmental Council	World Water Day 2019	01/17/19	03/22/19	$500	ENVIRONMENTAL: Water Quality/Reliability	Discretionary	
Bethel School District	Jan-June 2019 Education Grant	01/17/19	N/A	$38,500	ECONOMIC: Education	Board Directed	
McKenzie School District	Jan-June 2019 Education Grant	01/17/19	N/A	$10,500	ECONOMIC: Education	Board Directed	
Springfield School District	Jan-June 2019 Education Grant	01/17/19	N/A	$23,500	ECONOMIC: Education	Board Directed	
Eugene 4J School District	Jan-June 2019 Education Grant	01/17/19	N/A	$123,500	ECONOMIC: Education	Board Directed	
The Pearl Buck Center	2018 Greenpower grant winner - will receive up to $50,000	01/10/19	N/A	$25,000	ENVIRONMENTAL: Greenpower	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. Subsequent installments will be made as project progresses.
The Eugene Science Center	2018 Greenpower grant winner - will receive up to $50,000	01/10/19	N/A	$25,000	ENVIRONMENTAL: Greenpower	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. Subsequent installments will be made as project progresses.
			Q1 SUBTOTAL	**$285,725**			

Upcoming and/or committed

Sponsorships, Donations, Grants

AGENCY	EVENT/DESCRIPTION	PAYMENT DATE	EVENT DATE	AMOUNT	INVESTMENT AREA	CATEGORY	NOTES
St. Vincent de Paul	Dusk-to-Dawn Site on Hwy 99	N/A	N/A	Up to $20,000	PEOPLE: Safety Net	Discretionary	General Manager Grant - 50% of electrical/water installation costs - up to $20k - Funds approved but not yet appropriated - pending required design/construction documentation from St. Vincent de Paul.
			TOTAL	**Up to $20,000**			

Water Truck Deployment

AGENCY	EVENT/DESCRIPTION	PAYMENT DATE	EVENT DATE	AMOUNT	INVESTMENT AREA	CATEGORY	NOTES
None for this quarter							

Volunteer Efforts and Events (Unpaid)

AGENCY	EVENT/DESCRIPTION	PAYMENT DATE	EVENT DATE	AMOUNT	INVESTMENT AREA	CATEGORY	NOTES
Webelos Boy Scout Group	Presentation: Emergency Preparedness & EWEB Information	N/A	01/30/19	N/A	PEOPLE: Emergency Preparedness	N/A	1 staff = 1.5 hrs. preparation and presentation
Bloodworks Northwest	Onsite Blood Drive	N/A	01/28/19	N/A	PEOPLE: Safety Net	N/A	
Friends of Trees	Beltline South Greenspace Planting	N/A	01/12/19	N/A	ENVIRONMENTAL: Energy Efficiency/Renewable	N/A	3 volunteers = 9 hrs.
Food for Lane County	FFLC Volunteer Night	N/A	Ongoing	N/A	PEOPLE: Safety Net	N/A	7 volunteer hrs. ytd (2 of 3 events cancelled/snow storm & FFLC staffing shortage)

EWEB employees, friends and families have volunteered 17.5 hours in Q1

EWEB Ambassador Efforts and Events (Paid)*

	AGENCY	EVENT/DESCRIPTION	PAYMENT DATE	EVENT DATE	AMOUNT	INVESTMENT AREA	CATEGORY	NOTES
Upcoming	Lane County Fair	Co-Sponsorship of Comfort Station Water Booth	N/A	07/24-07/28	N/A	ENVIRONMENTAL: Water Quality/Reliability	N/A	Co-host Comfort Station - distribute water to fair-goers. Staff/hrs. = TBA
	City of Eugene	Public Safety Forum in Spanish	N/A	05/21/19	N/A	PEOPLE: Emergency Preparedness	N/A	EWEB will provide emergency preparedness and safety material in Spanish and bilingual staff to engage with the guests. Staff/hrs. = TBA
	The Pearl Buck Center Vocational Academy	HQ (05/15/19) and ROC Facility Tours	N/A	05/15/19	N/A	PEOPLE: Diversity	N/A	2 staff = TBD
	Bethel School District	KidWind Challenge	N/A	04/24/19	N/A	ENVIRONMENTAL: Energy Efficiency/Renewable	N/A	Staff/hrs. = TBA promoting Clean Energy Education
	Climate Town Hall Planning Team - Various Agencies	2nd Climate Town Hall	N/A	04/11/19	N/A	ENVIRONMENTAL: Energy Efficiency/Renewable	N/A	1 staff = 2.5 hrs. discussing Passenger Vehicle Electrification
	South Hills Neighborhood Association	Meeting	N/A	04/07/19	N/A	PEOPLE: Emergency Preparedness	N/A	1 staff = 1 hr. promoting Pledge to Prepare
	Newcomers Club	Meeting	N/A	04/04/19	N/A	PEOPLE: Emergency Preparedness	N/A	1 staff = 1 hr. promoting Pledge to Prepare
	American Red Cross Cascades Region & Community Partners	Prepare Out Loud @ South Eugene HS	N/A	04/04/19	N/A	PEOPLE: Emergency Preparedness	N/A	2 staff = 3 hrs. promoting Emergency Management/Resiliency Efforts
Q1	350 Eugene	Home Energy Solutions	N/A	03/21/19	N/A	ENVIRONMENTAL: Energy Efficiency/Renewable	N/A	1 staff = 2.5 hrs. promoting Efficiency Programs
	P.E.O Oregon	Chapter Meeting	N/A	02/11/19	N/A	PEOPLE: Emergency Preparedness	N/A	1 staff = 1 hr. promoting Pledge to Prepare
	GreenLane Sustainable Business Network	Luncheon	N/A	02/06/19	N/A	PEOPLE: Emergency Preparedness	N/A	1 staff = 1 hr. promoting Pledge to Prepare
		Good Earth Home, Garden and Living Show	N/A	01/18-01/20	N/A	ENVIRONMENTAL: Energy Efficiency/Renewable	N/A	12 EWEB Ambassadors will promote EWEB Efficiency Programs = 24 hrs.

EWEB Ambassadors have provided 28.5 hours of educational and other services to the Community in Q1