



# M E M O R A N D U M

EUGENE WATER & ELECTRIC BOARD



TO: Commissioners Carlson, Mital, Helgeson, Schlossberg and Brown  
FROM: Sue Fahey, Assistant General Manager/CFO; Deborah Hart, Financial Services Manager; Adam Rue, Fiscal Services Supervisor and Nate Schultz, Senior Financial Analyst  
DATE: June 26, 2019  
SUBJECT: Long-Term Financial Plan (LTFP) Update and 2020 Budget Assumptions  
OBJECTIVE: Direction on 2020 Budget Assumptions

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## Issue

Board Policy SD6 and Oregon Statutes require that staff annually prepare balanced Electric and Water Utilities budgets for Board approval by the end of the calendar year. Each summer the Board provides direction to staff on the assumptions used to develop the following year's budget.

## Background

In recent years both the Water and Electric Utilities have taken actions that have improved their financial resiliency. Those efforts include strategically reducing costs, joining the state and local government rate pool, reducing debt service obligations, strategic sales of assets, and prudently using reserves to strengthen financial metrics. Coupled with strong water sales, these actions have greatly improved the financial stability of the Water Utility. In addition to the aforementioned measures, the Electric Utility has also reduced anticipated borrowing for the Carmen-Smith relicensing capital project which has resulted in significant improvement to the debt service coverage ratio (DSC); historically, the Electric Utility's biggest financial challenge.

## Discussion

EWEB continues to focus on fostering customer confidence through many avenues, including aligning sustainable spending levels to what our customer-owners expect. Two years ago EWEB developed an affordability target (percentage of utility cost to median household income) of 3.2%. Using the most recently available median income information from 2017, on average, EWEB customers spend 3.71% of their median household income on water and electric bills. In the last two years, this metric has improved more than 9% and is an overall reduction of .35%. EWEB's combined electric and water bill is the sixth lowest out of seventeen northwest comparators, which is the same position as last year. While maintaining its commitment to stewardship of customer-owners' financial resources, Management is proposing an increase to capital investments to facilitate the continued delivery of safe and reliable water and electricity. Details of the capital investments proposed are included in the capital plan and will be presented by Electric and Water Operations staff at the July 9<sup>th</sup> meeting. Management believes the assumptions used to develop the LTFP balance EWEB's core values.

### **Overarching Forecast Assumptions**

The assumptions used in creating forecasts and budgets greatly influence the results. The following major assumptions have been used in developing the current forecasts and Management is proposing to use them in creating the 2020 budget. Utility specific assumptions are noted on Attachments 1 and 3.

#### **Both Utilities**

- 2.0% non-labor increase based on review of EWEB purchasing contracts, State of Oregon Economic Forecast, and recent Bureau of Labor Statistics Consumer Price Indices
- Education grant funding for public K-12 agencies only
- Labor/benefit increases:
  - 3.1% wage escalation based on the most recent historical table for the CPI index used in the union contracts
  - PERS – 3 percentage points lower than 2019 budget due to PERS transition liability payoff, increase of 4 percentage points in 2021 and 5 percentage points in subsequent odd-numbered years
    - No changes resulting from a potential Employer Incentive Fund deposit or the impact of recent PERS legislation. These will be incorporated when the PERS Board determines impacts and finalizes rules.
  - Health insurance increase – 11% for 2020 and 8% thereafter
- Capital improvement plans as presented at the July 9, 2019 Board meeting

### **Long-term Financial Plan Revenue Requirement Assumptions and Outcomes**

#### **Electric**

Even with the strategic capital investments, the Electric Utility LTFP indicates no overall average revenue requirement change is needed through 2021. If achieved, for six out of the seven most recent years, the Electric Utility would have no overall increase in the residential revenue requirement. The resulting cumulative LTFP price increase is 15% which is down over 4.5 percentage points from last October. Of the cumulative price increase, two thirds is attributed to the BPA pass-through assumptions. This year net BPA rates are not expected to increase and therefore no BPA pass-through is included for the 2020 budget assumptions. Through debt reduction and restructuring, as well as cost-saving initiatives, the Electric Utility achieves its debt service coverage target, which has been a challenge in the past. The Electric LTFP outcome is included in Attachment 1.

Attachment 2 provides Electric LTFP results under two different scenarios. Scenario A assumes taking advantage of the PERS Employer Incentive Fund 25% match by depositing Electric's \$17 million share into a side account in 2020. This deposit corresponds with a reduction of approximately four percentage points in PERS rates. Scenario B assumes a 20% reduction in wholesale prices, which results in days cash not meeting target starting in 2025. Both Scenario A and B challenge days cash reserve target with Scenario A very close to target in two of the years in the plan and Scenario B below target in the last five years of the plan.

#### **Water**

Similar to the Electric Utility, the Water Utility is able to fund strategic capital investments without any change in the overall average revenue requirement through 2023. This is the fourth consecutive year the Water Utility has had no residential rate increase. The plan includes a \$55 million bond issuance in 2024 to fund Type 2 capital and construction costs for a second filtration plant. The plan

also includes an additional \$24 million debt issuance in 2027 to fund Type 2 capital through 2029. The 10-year compounded price change is approximately 25%. The Water LTFP outcome is included in Attachment 3.

Attachment 4 provides Water LTFP results under two different scenarios. Like the Electric Utility, Scenario A assumes taking advantage of the PERS Employer Incentive Fund match by depositing Water's \$5 million share into a side account. The resulting PERS savings from a side account deposit, reduces the 10-year compounded price increase by 2.3%. Scenario B is similar to the Electric Utility's forecast and assumes expected conditions in the last five years of the forecast. In this scenario, the 10-year compounded price change is 3% lower than in the base case.

### **Recommendation**

Management recommends that the Board direct staff to prepare the 2020 budgets using the assumptions set forth in this document which include no change in overall revenue requirement for the Electric and Water Utilities.

### **Requested Board Action**

Management is not requesting Board action at the July 9<sup>th</sup> meeting; however, Management is requesting that the Board provide clear direction on the assumptions to be used in developing the 2020 budget.

Attachment 1 - Summary of Electric LTFP Revenue Requirement Assumptions and Outcomes

Attachment 2 - Electric LTFP Scenario A and B

Attachment 3 - Summary of Water LTFP Revenue Requirement Assumptions and Outcomes

Attachment 4 - Water LTFP Scenario A and B

Attachment 5 - Average Bill Comparison

Attachment 6 - Median Household Income (MHI) %

## Summary of Electric LTFP Revenue Requirement Assumptions and Outcomes (000's omitted)

	<u>Target</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
Reserves and Cash	\$85,720	\$126,700	\$106,700	\$110,900	\$111,500	\$109,100	\$109,300	\$115,500	\$119,300	\$123,000	\$122,400
Debt Service Coverage Ratio	1.75	2.21	2.76	2.11	2.17	2.18	2.21	2.44	2.36	2.25	2.02
Days Cash	>150 Days	212	181	181	178	168	163	172	178	178	174
Average Rev Requirement Change		0.00%	0.00%	3.75%	3.00%	2.50%	0.00%	2.50%	0.0%	2.50%	0.00%
<b>Revenue Requirement Assumptions</b>											
Price Schedule	10 Yr Total	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
General Rate Increase	3.00%				3.00%						
Carmen/Smith Debt	1.25%			1.25%							
BPA Increase	10.38%			2.50%		2.50%		2.50%		2.50%	
Avg Rev Requirement Change	15.08%	0.00%	0.00	3.75%	3.00%	2.50%	0.00%	2.50%	0.00%	2.50%	0.00%

Key Assumptions

- Retail load approximately the same as 2019 budget – 2.4 million MWh
- Contribution margin risk tolerance of \$5.5 million which represents 90% generation, 5.2% load reduction or 89% wholesale price reduction
- Similar contribution margin risk tolerance through 2024, expected conditions 2025-2029
- No BPA rate increase for energy in 2020 and 6% BPA rate increase assumed in October of 2021, 2023, 2025, and 2027, which translates to 2.5% for EWEB customer-owners.
- \$32 melded mid-market price curve increasing to \$46 in 2029
- Assumes 2019 sale of Foote Creek and defeasance of associated debt
- Full year Leaburg generation outage in 2020
- Partial year Carmen-Smith generation outage in 2023
- Bond issuance: \$40 million in 2021 funding Carmen-Smith capital work
- \$1.0 million per year contribution to meter replacement reserve starting 2021 based on 12 year estimated life.

## Scenario A – Electric LTFP with \$17M PERS Deposit in 2020 (000's omitted)

	<u>Target</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
Reserves and Cash	\$85,720	\$110,400	\$92,300	\$98,000	\$100,100	\$99,300	\$101,100	\$109,000	\$114,500	\$120,000	\$121,200
Debt Service Coverage Ratio	1.75	2.25	2.87	2.20	2.25	2.28	2.31	2.55	2.47	2.36	2.14
Days Cash	>150 Days	186	158	161	161	154	152	163	173	175	173
Average Rev Requirement Change		0.00%	0.00%	3.75%	3.00%	2.50%	0.00%	2.50%	0.0%	2.50%	0.00%
Revenue Requirement Assumptions	Compounded										
Price Schedule	10 Yr Total	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
General Rate Increase	3.00%				3.00%						
Carmen/Smith Debt	1.25%			1.25%							
BPA Increase	10.38%			2.50%		2.50%		2.50%		2.50%	
Avg Rev Requirement Change	15.08%	0.00%	0.00	3.75%	3.00%	2.50%	0.00%	2.50%	0.00%	2.50%	0.00%

## Scenario B - Electric LTFP with 20% Wholesale Price Reduction (000's omitted)

20% Price Reduction	<u>Target</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
Reserves and Cash	\$85,720	\$126,600	\$104,800	\$107,100	\$104,800	\$99,200	\$95,100	\$97,300	\$97,700	\$98,100	\$94,300
Debt Service Coverage Ratio	1.75	2.20	2.62	2.00	2.00	1.98	1.95	2.18	2.14	2.04	1.82
Days Cash	>150 Days	217	182	179	171	156	145	147	149	145	137
Average Rev Requirement Change		0.00%	0.00%	3.75%	3.00%	2.50%	0.00%	2.50%	0.0%	2.50%	0.00%
Revenue Requirement Assumptions	Compounded										
Price Schedule	10 Yr Total	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
General Rate Increase	3.00%				3.00%						
Carmen/Smith Debt	1.25%			1.25%							
BPA Increase	10.38%			2.50%		2.50%		2.50%		2.50%	
Avg Rev Requirement Change	15.08%	0.00%	0.00	3.75%	3.00%	2.50%	0.00%	2.50%	0.00%	2.50%	0.00%

Summary of Water LTFP Revenue Requirement Assumptions and Outcomes (000's omitted)

Key Metrics	Current Target	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Reserves & Cash	\$12,680	\$29,700	\$27,200	\$24,300	\$20,100	\$24,900	\$30,500	\$33,500	\$15,900	\$15,700	\$14,600
AWS Reserve Balance		\$5,700	\$5,300	\$4,900	\$4,500	\$4,100	\$0	\$0	\$0	\$0	\$0
AMI Reserve		\$0	\$0	\$0	\$300	\$800	\$1,400	\$2,000	\$2,600	\$3,100	\$3,700
Total Cash Reserves	\$12,680	\$35,400	\$32,500	\$29,200	\$24,900	\$29,800	\$31,900	\$35,500	\$18,500	\$18,800	\$18,300
Bond Funding						\$55M			\$24M		
DSC	2.00-2.50	3.68	3.65	3.55	3.96	2.93	2.49	2.48	2.42	2.15	2.05
Days Cash	> 150 days	631	571	501	401	451	475	500	256	246	227
	<u>Compounded</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
Average impact resulting from change in revenue requirement	25.18%	0.00%	0.00%	0.00%	0.00%	6.50%	5.50%	3.00%	5.00%	2.00%	1.00%

Key Assumptions

- Consumption approximately the same as 2019 budget - 7.8 million KGAL
- Contribution margin risk tolerance of \$750,000 which represents 95% of the 5 year consumption average
- Contributions of \$500,000 to AMI reserve starting 2023 based on 20 year estimated life
- Bond issuance: \$55 million in 2024 for Type 2 capital and a second filtration plant, \$24 million in 2027 for Type 2 capital
- \$4 million System Development Charge reserve draw for debt service payments in 2020 and 2021

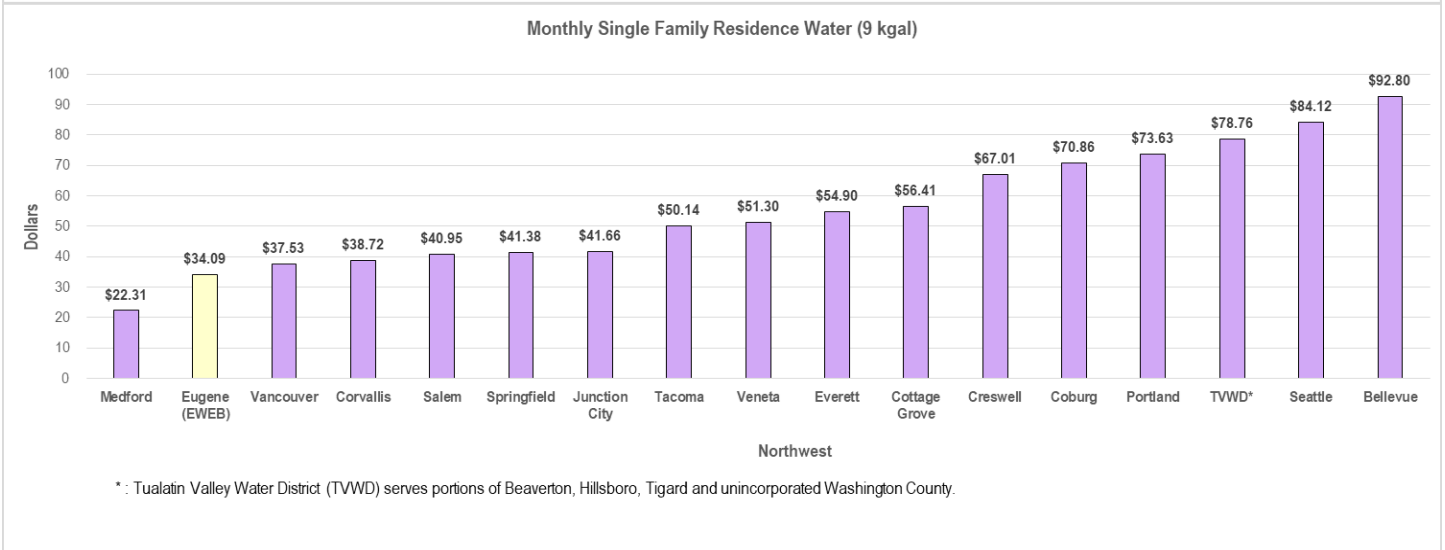
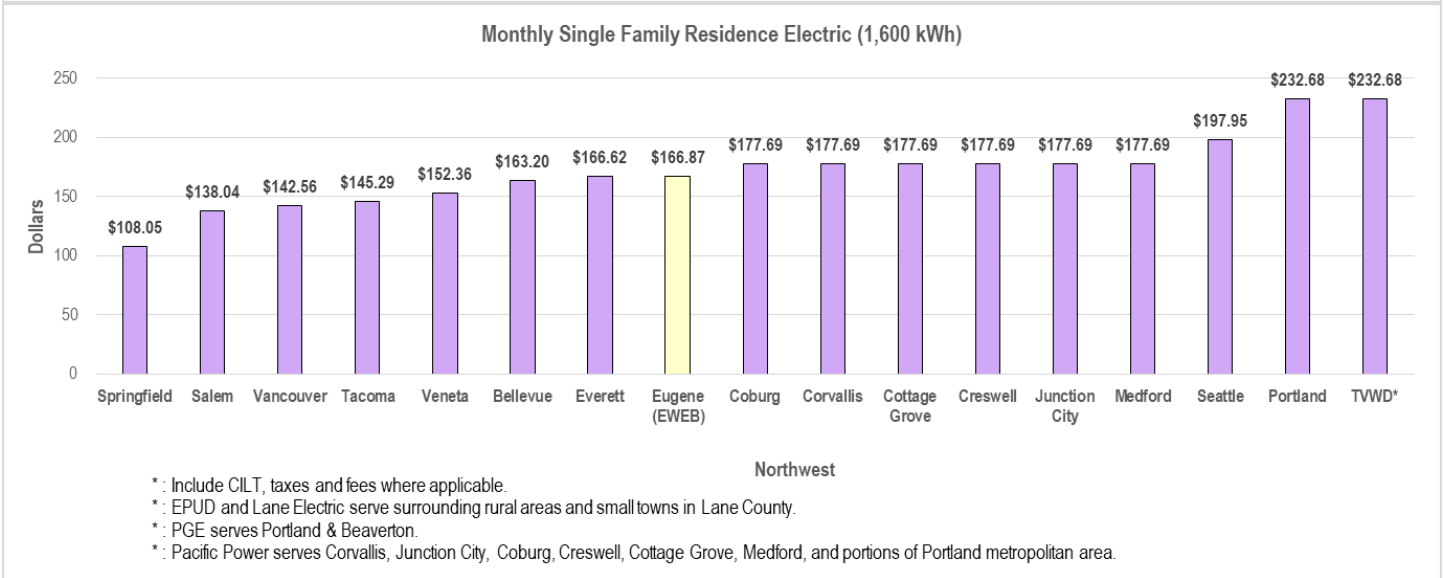
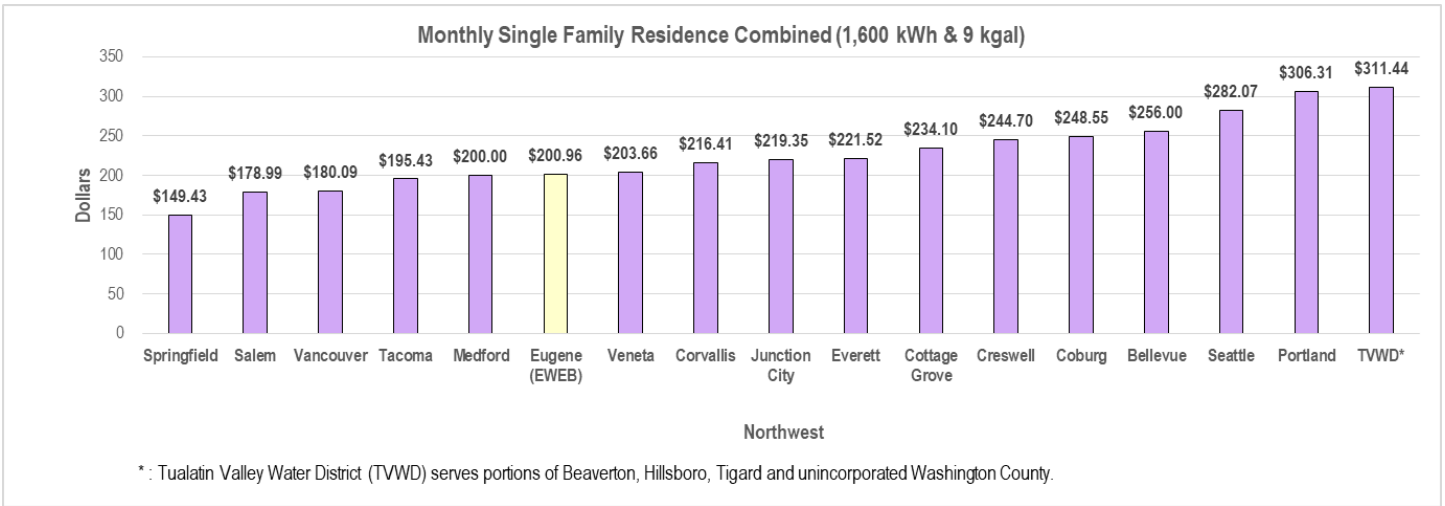
## Scenario A – Water LTFP with \$5M PERS Deposit in 2020 (000's omitted)

<u>Key Metrics</u>	<u>Current Target</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
Reserves & Cash	\$12,680	\$24,800	\$22,600	\$20,000	\$17,500	\$24,200	\$31,900	\$37,000	\$20,400	\$20,400	\$18,900
AWS Reserve Balance		\$5,700	\$5,300	\$4,900	\$4,500	\$4,100	\$0	\$0	\$0	\$0	\$0
AMI Reserve		\$0	\$0	\$0	\$300	\$800	\$1,400	\$2,000	\$2,600	\$3,100	\$3,700
Total Cash Reserves	\$12,680	\$30,500	\$27,900	\$24,900	\$22,300	\$29,100	\$33,300	\$39,000	\$23,000	\$23,500	\$22,600
Bond Funding						\$55M			\$24M		
DSC	2.00-2.50	3.71	3.72	3.63	4.37	3.25	2.75	2.75	2.54	2.16	2.01
Days Cash	> 150 days	549	500	435	365	448	503	558	322	310	283
	<u>Compounded</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
Average impact resulting from change in revenue requirement	22.76%	0.00%	0.00%	0.00%	4.00%	6.50%	5.50%	3.00%	2.00%	0.00%	0.00%

## Scenario B – Water LTFP with 95% expected consumption through 2024 and expected consumption in 2025-2029 (000's omitted)

<u>Key Metrics</u>	<u>Current Target</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
Reserves & Cash	\$12,680	\$29,700	\$27,200	\$24,300	\$20,100	\$24,900	\$31,200	\$35,100	\$17,400	\$17,300	\$15,900
AWS Reserve Balance		\$5,700	\$5,300	\$4,900	\$4,500	\$4,100	\$0	\$0	\$0	\$0	\$0
AMI Reserve		\$0	\$0	\$0	\$300	\$800	\$1,400	\$2,000	\$2,600	\$3,100	\$3,700
Total Cash Reserves	\$12,680	\$35,400	\$32,500	\$29,200	\$24,900	\$29,800	\$32,600	\$37,100	\$20,000	\$20,400	\$19,600
Bond Funding						\$55M			\$24M		
DSC	2.00-2.50	3.68	3.65	3.55	3.96	2.93	2.58	2.58	2.42	2.16	2.02
Days Cash	> 150 days	631	571	501	401	451	486	521	276	266	243
	<u>Compounded</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
Average impact resulting from change in revenue requirement	22.18%	0.00%	0.00%	0.00%	0.00%	6.50%	5.50%	3.00%	3.00%	2.50%	0.00%

Average Bill Comparison – Current Rates





## Median Household Income (MHI) %

### Background

To prepare the affordability information, *Assessment of Affordability of Residential Rates* (Glenn Barnes and Shadi Eskaf; Environmental Finance Center at the University of North Carolina, Chapel Hill; 2016) was used.

The approach differs from the Average Bill Comparison which is based on a single family home. This affordability measure uses the local community's median household income (MHI) and is based on the following data:

1. Monthly water and electric bill at average residential consumption per month.
2. Annual bills at same level of use.
3. Median Household Income in 2017

Currently, there is no national standard for what affordable percent (%) of MHI value is or is not. When using this assessment, consideration must be given to financial sustainability of the utility as a whole in addition to affordability of price.

To address the limited income customer-owner bill impact, EWEB has maintained a customer care program for many years that provides assistance for bill payment and weatherization programs.

Included below are the combined average water and electric bill for residential customers (water is 7 kgal and electric is 1050 kWh) in Eugene, Portland, Medford, Vancouver, Tacoma, Seattle, and Everett. This average is annualized and compared as a percentage of MHI.

<u>Eugene, Oregon</u>	<u>Current Prices</u>
Monthly water & electric bills at overall average residential consumption (Overall average residential : water consumption 7 kgal; electric consumption 1050 kWh)	\$146.83
Annual bill at same level of use	\$1,762
Median Household Income (MHI) in 2017 for Eugene, Oregon	\$47,489
<b>Water &amp; Electric % MHI</b>	<b>3.71%</b>

<u>Portland, Oregon</u>	<u>Current Prices</u>
Monthly water & electric bills at overall average residential consumption (Overall average residential : water consumption 7 kgal; electric consumption 1050 kWh)	\$213.31
Annual bill at same level of use	\$2,560
Median Household Income (MHI) in 2017 for Portland, Oregon	\$61,532
<b>Water &amp; Electric % MHI</b>	<b>4.16%</b>

<b><u>Medford, Oregon</u></b>	<b><u>Current Prices</u></b>
Monthly water & electric bills at overall average residential consumption (Overall average residential : water consumption 7 kgal; electric consumption 1050 kWh)	\$129.06
Annual bill at same level of use	\$1,549
Median Household Income (MHI) in 2017 for Medford, Oregon	\$45,361
<b>Water &amp; Electric % MHI</b>	<b>3.41%</b>

<b><u>Vancouver, Washington</u></b>	<b><u>Current Prices</u></b>
Monthly water & electric bills at overall average residential consumption (Overall average residential : water consumption 7 kgal; electric consumption 1050 kWh)	\$128.76
Annual bill at same level of use	\$1,545
Median Household Income (MHI) in 2017 for Vancouver, Washington	\$55,593
<b>Water &amp; Electric % MHI</b>	<b>2.78%</b>

<b><u>Tacoma, Washington</u></b>	<b><u>Current Prices</u></b>
Monthly water & electric bills at overall average residential consumption (Overall average residential : water consumption 7 kgal; electric consumption 1050 kWh)	\$145.46
Annual bill at same level of use	\$1,746
Median Household Income (MHI) in 2017 for Tacoma, Washington	\$55,506
<b>Water &amp; Electric % MHI</b>	<b>3.14%</b>

<b><u>Seattle, Washington</u></b>	<b><u>Current Prices</u></b>
Monthly water & electric bills at overall average residential consumption (Overall average residential : water consumption 7 kgal; electric consumption 1050 kWh)	\$194.88
Annual bill at same level of use	\$2,339
Median Household Income (MHI) in 2017 for Seattle, Washington	\$79,565
<b>Water &amp; Electric % MHI</b>	<b>2.94%</b>

<b><u>Everett, Washington</u></b>	<b><u>Current Prices</u></b>
Monthly water & electric bills at overall average residential consumption (Overall average residential : water consumption 7 kgal; electric consumption 1050 kWh)	\$152.05
Annual bill at same level of use	\$1,825
Median Household Income (MHI) in 2017 for Everett, Washington	\$54,562
<b>Water &amp; Electric % MHI</b>	<b>3.34%</b>

References: Assessment of Affordability of Residential Rates (Glenn Barnes and Shadi Eskaf; Environmental Finance Center at the University of North Carolina, Chapel Hill; 2016)