



# Public Utility District No. 1

of Skamania County

---

Post Office Box 500 • Carson, WA 98610  
Phone (509) 427-5126 • Fax (509) 427-8416  
Toll Free (800) 922-5329

## Underwood Water Rate Hearing Index

---

February 11, 2015

### INDEX

<b><u>DESCRIPTION</u></b>	<b><u>PAGE NO.</u></b>
Underwood Water System Q & A	1
Debt Service Coverage Forecast	2-3
Rate Revenue Uses – 2014 & 2018	4-5
Rate Scenarios	6-7

## Underwood Water System Q & A

---

### **1. What are the drivers of the rate restructure adjustment?**

*The PUD's objective is to cover fixed costs with basic service charges. The appropriate balance between the basis charge and water volume charge helps to insulate the PUD from variation in revenue due to weather related swings in water consumption. The PUD recognizes that adjusting the rate structure at the same time rates are increased can have a detrimental impact to some customers based on their usage.*

### **2. Why are the planned major capital investments necessary?**

*In 2013 a WA State Department of Health (DOH) sanitary survey of the Underwood water system identified a number of concerns with the Shepherd pumping station. The station was constructed in the 1950's and is at the end of its useful life. DOH recommends the Shepherd pump station be replaced by 2017. Due to the overall condition and design of the station, refurbishing the existing equipment will not resolve existing concerns. Line replacements also remain a priority for the aging system to reduce water losses that exceed DOH water system efficiency standards.*

### **3. What has the PUD done to respond to increasing costs?**

- *Developed a strategic plan to align Board and management vision, prioritize PUD activities, avoid unproductive efforts and improve PUD effectiveness.*
- *Deferred organizational improvements identified in the strategic plan to avoid costs; this comes with a trade-off of increased risk.*
- *Remain active in our search for grants & low interest loans to fund capital improvements in our water systems.*
- *To minimize the rate impact of the newly adopted financial policy, the Board requested a multi-year ramp up to the target Debt Service Coverage (DSC) ratio of 1.75.*

### **4. What is industry and best business practice for setting rates?**

- *Develop financial policies to ensure long term viability of the utility.*
- *Levelize rate impacts to customers with multi-year rate strategies.*
- *Cover the fixed costs of providing water service with the monthly basic service charge.*

### **5. What are the drivers of the rate increases?**

*Increased revenue requirement due to debt service to address important large capital improvement needs and a general inflation of costs over time.*

## Debt Service Coverage Ratio Forecast

*DSC = Operating Revenues - Operating Expenses / Debt Service*

2015 Forecast	
	<b><u>Underwood</u></b>
Rate Revenue	\$ 310,365
Other Revenues	\$ 1,000
+ Use of General Fund	\$ -
+/- Transfers from RSF/(Allocations to RSF)	\$ -
Total Operating Revenue	<u>\$ 311,365</u>
Operating Expenses (incl taxes)	\$ 212,333
Debt Service	\$ 20,577
<b>Net Operating Income</b>	<b><u>\$ 78,456</u></b>
<b>Debt Service Coverage (incl Other Revenues)</b>	<b>4.81</b>
Debt Service Target	1.75
Margin/(Shortfall)	\$ 63,023
Rate Revenue Increase (%)	8.9%

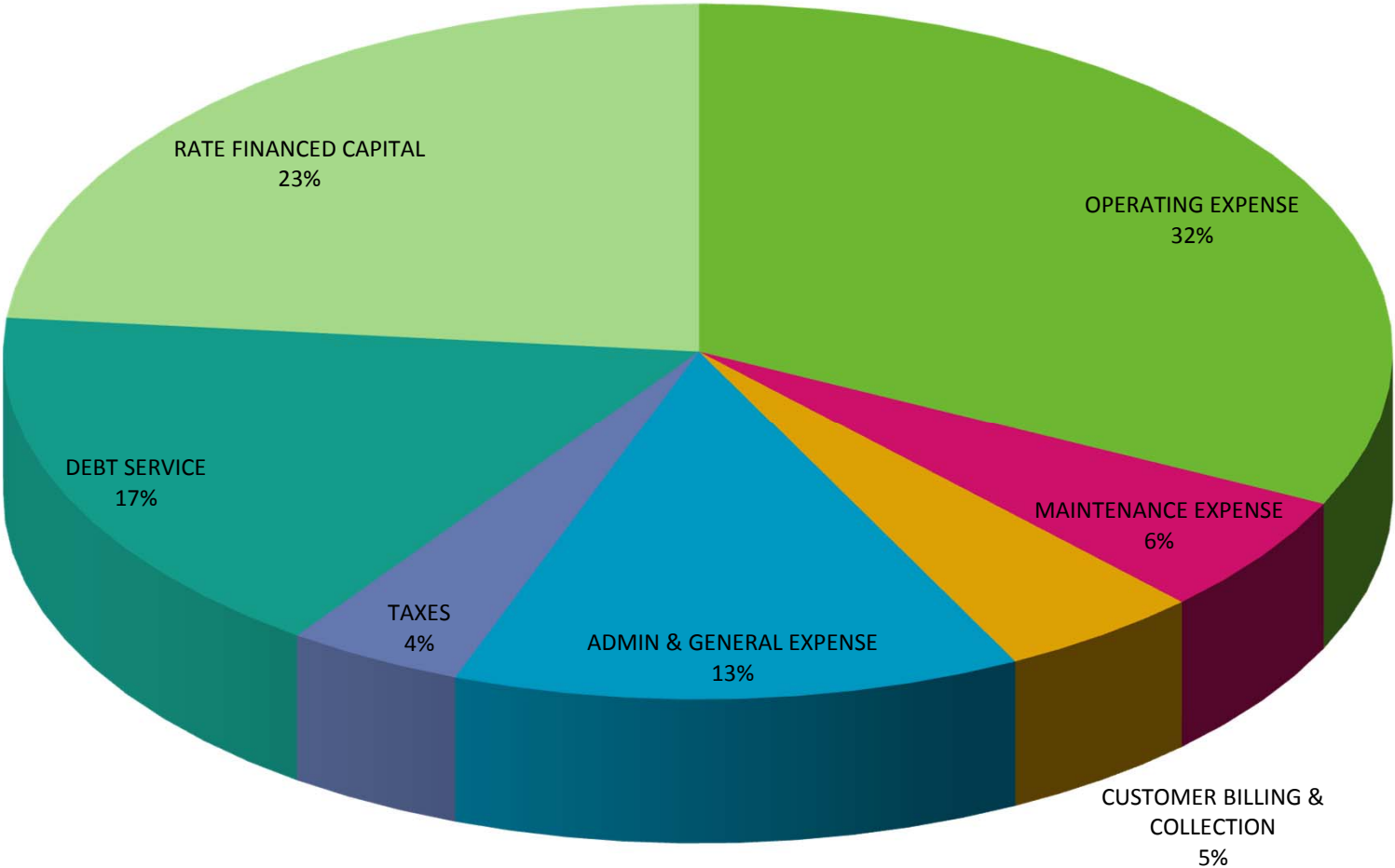
2016 Forecast	
<i>Assuming 1% annual water growth, 2015 Budget Expenses plus 2.5% annually, stated rate increase, and New Debt Issue</i>	
	<b><u>Underwood</u></b>
Rate Revenue	\$ 341,367
Interest on Past Due	\$ -
Other Revenues	\$ 1,000
+ Use of General Fund	\$ 25,365
+/- Transfers from RSF/(Allocations to RSF)	\$ -
Total Operating Revenue	<u>\$ 367,732</u>
Operating Expenses (incl taxes)	\$ 217,641
Debt Service	\$ 100,306
<b>Net Operating Income</b>	<b><u>\$ 49,785</u></b>
<b>Debt Service Coverage (incl Other Revenues)</b>	<b>1.50</b>
Debt Service Target	1.50
Margin/(Shortfall)	\$ (368)
Rate Revenue Increase (%)	8.9%

<b>2017 Forecast</b>	
<i>Assuming 1% annual water growth, 2015 Budget Expenses plus 2.5% annually, stated rate increase, and New Debt Issue</i>	
	<u><b>Underwood</b></u>
Rate Revenue	\$ 363,744
Interest on Past Due	\$ -
Other Revenues	\$ 1,000
+ Use of General Fund	\$ -
+/- Transfers from RSF/(Allocations to RSF)	\$ -
Total Operating Revenue	<u>\$ 364,744</u>
Operating Expenses (incl taxes)	\$ 223,082
Debt Service	<u>\$ 99,650</u>
<b>Net Operating Income</b>	<u><b>\$ 42,012</b></u>
<b>Debt Service Coverage (incl Other Revenues)</b>	<b>1.42</b>
Debt Service Target	1.50
Margin/(Shortfall)	\$ (7,813)
Rate Revenue Increase (%)	5.5%

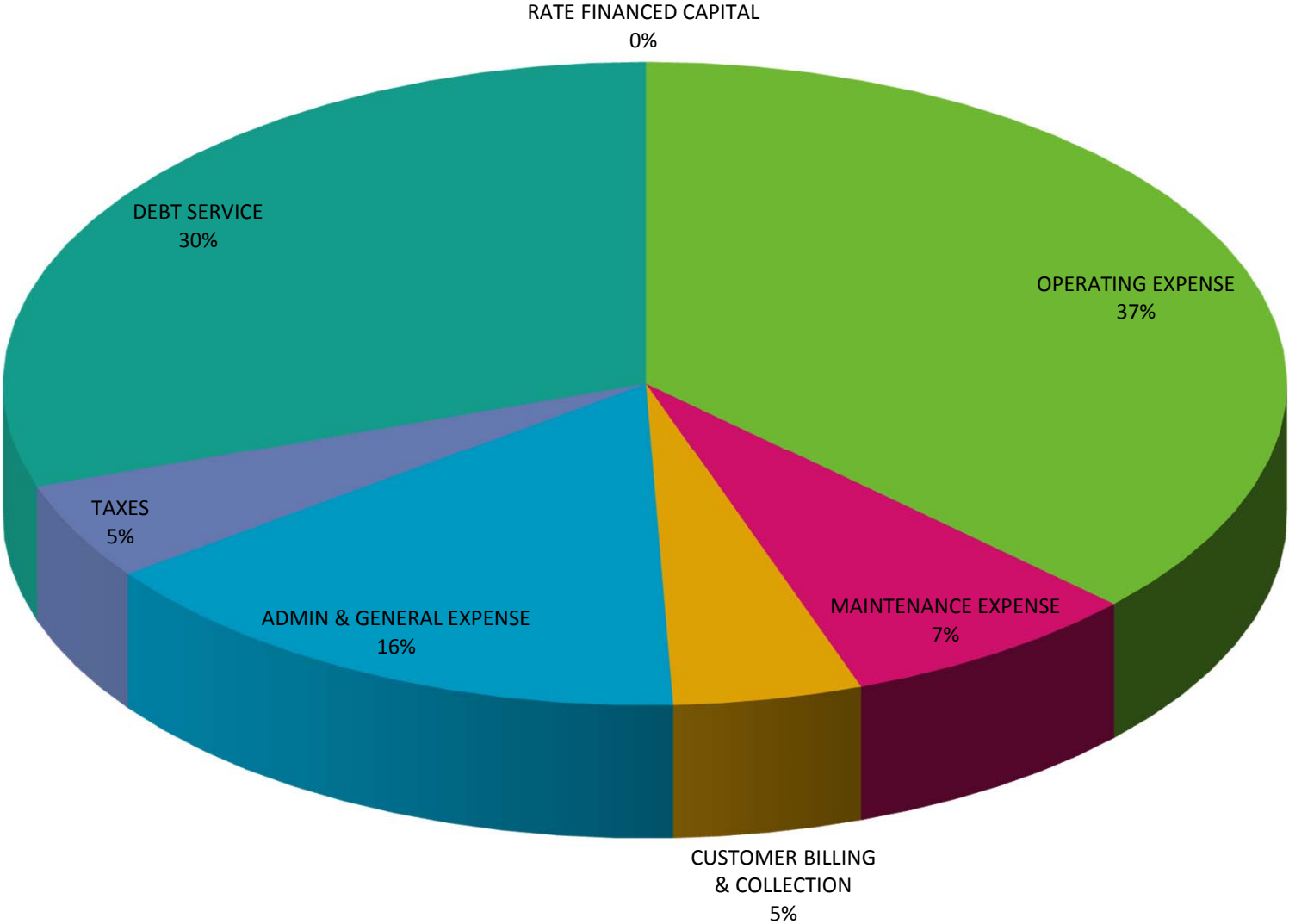
<b>2018 Forecast</b>	
<i>Assuming 1% annual water growth, 2015 Budget Expenses plus 2.5% annually, stated rate increase, and New Debt Issue</i>	
	<u><b>Underwood</b></u>
Rate Revenue	\$ 387,587
Interest on Past Due	\$ -
Other Revenues	\$ 3,000
+ Use of General Fund	\$ -
+/- Transfers from RSF/(Allocations to RSF)	\$ -
Total Operating Revenue	<u>\$ 390,587</u>
Operating Expenses (incl taxes)	\$ 228,659
Debt Service	<u>\$ 99,295</u>
<b>Net Operating Income</b>	<u><b>\$ 62,633</b></u>
<b>Debt Service Coverage (incl Other Revenues)</b>	<b>1.63</b>
Debt Service Target	1.625
Margin/(Shortfall)	\$ 574
Rate Revenue Increase (%)	5.5%

<b>Aggregate Rate Revenue Increase 2015-2018</b>	<b>28.8%</b>
--	--------------

### Underwood Rate Revenue Uses - Estimated 2014



# Underwood Rate Revenue Uses - Estimated 2018



**Underwood Water System  
Water Rates-Comparing Four Scenarios**

	Current Rate	Scenario 1	Scenario 2	Scenario 3	Scenario 4
<b>Minimum Charge Increase</b>		<b>10.0%</b>	<b>16.5%</b>	<b>13.0%</b>	<b>20.0%</b>
<b>Usage Charge Increase/Decrease</b>		<b>10.0%</b>	<b>0.0%</b>	<b>5.0%</b>	<b>-5.0%</b>
Minimum Rate: 200 cu ft/month	41.88	46.07	48.79	47.32	50.26
Next 800 cubic ft/month	0.0277	0.0305	0.0277	0.0291	0.0263
Next 5000 cubic ft/month	0.0317	0.0349	0.0317	0.0333	0.0301
All excess usage over 6000 cu ft/month	0.0396	0.0436	0.0396	0.0416	0.0376

**Customer Bill Calculations Under Four Scenarios-Bimonthly**

Usage 500	Bimonthly	Current Rate	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Minimum Rate: 200 cu ft/month	400	83.76	92.14	97.58	94.65	100.51
Next 800 cubic ft/month	100	2.77	3.05	2.77	2.91	2.63
<b>Total Bill</b>	<b>500</b>	<b>86.53</b>	<b>95.18</b>	<b>100.35</b>	<b>97.56</b>	<b>103.14</b>
<b>Increase Bimonthly Billing</b>			<b>\$ 8.65</b>	<b>\$ 13.82</b>	<b>\$ 11.03</b>	<b>\$ 16.61</b>

Usage 1,000	Bimonthly	Current Rate	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Minimum Rate: 200 cu ft/month	400	83.76	92.14	97.58	94.65	100.51
Next 800 cubic ft/month	600	16.62	18.28	16.62	17.45	15.79
<b>Total Bill</b>	<b>1,000</b>	<b>100.38</b>	<b>110.42</b>	<b>114.20</b>	<b>112.10</b>	<b>116.30</b>
<b>Increase Bimonthly Billing</b>			<b>\$ 10.04</b>	<b>\$ 13.82</b>	<b>\$ 11.72</b>	<b>\$ 15.92</b>

Usage 2,000	Bimonthly	Current Rate	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Minimum Rate: 200 cu ft/month	400	83.76	92.14	97.58	94.65	100.51
Next 800 cubic ft/month	1600	44.32	48.75	44.32	46.54	42.10
Next 5000 cubic ft/month	-	-	-	-	-	-
<b>Total Bill</b>	<b>2,000</b>	<b>128.08</b>	<b>140.89</b>	<b>141.90</b>	<b>141.18</b>	<b>142.62</b>
<b>Increase Bimonthly Billing</b>			<b>\$ 12.81</b>	<b>\$ 13.82</b>	<b>\$ 13.10</b>	<b>\$ 14.54</b>

	Usage 3,000	Bimonthly	Current Rate	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Minimum Rate: 200 cu ft/month		400	83.76	92.14	97.58	94.65	100.51
Next 800 cubic ft/month		1600	44.32	48.75	44.32	46.54	42.10
Next 5000 cubic ft/month		1000	31.70	34.87	31.70	33.29	30.12
<b>Total Bill</b>		<b>3,000</b>	<b>159.78</b>	<b>175.76</b>	<b>173.60</b>	<b>174.47</b>	<b>172.73</b>
<b>Increase Bimonthly Billing</b>				\$ 15.98	\$ 13.82	\$ 14.69	\$ 12.95

	Usage 5,000	Bimonthly	Current Rate	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Minimum Rate: 200 cu ft/month		400	83.76	92.14	97.58	94.65	100.51
Next 800 cubic ft/month		1600	44.32	48.75	44.32	46.54	42.10
Next 5000 cubic ft/month		3000	95.10	104.61	95.10	99.86	90.35
<b>Total Bill</b>		<b>5,000</b>	<b>223.18</b>	<b>245.50</b>	<b>237.00</b>	<b>241.04</b>	<b>232.96</b>
<b>Increase Bimonthly Billing</b>				\$ 22.32	\$ 13.82	\$ 17.86	\$ 9.78

	Usage 10,000	Bimonthly	Current Rate	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Minimum Rate: 200 cu ft/month		400	83.76	92.14	97.58	94.65	100.51
Next 800 cubic ft/month		1600	44.32	48.75	44.32	46.54	42.10
Next 5000 cubic ft/month		8000	253.60	278.96	253.60	266.28	240.92
All excess usage over 6000 cu ft/month		-	-	-	-	-	-
<b>Total Bill</b>		<b>10,000</b>	<b>381.68</b>	<b>419.85</b>	<b>395.50</b>	<b>407.46</b>	<b>383.54</b>
<b>Increase Bimonthly Billing</b>				\$ 38.17	\$ 13.82	\$ 25.78	\$ 1.86

	Usage 15,000	Bimonthly	Current Rate	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Minimum Rate: 200 cu ft/month		400	83.76	92.14	97.58	94.65	100.51
Next 800 cubic ft/month		1600	44.32	48.75	44.32	46.54	42.10
Next 5000 cubic ft/month		10000	317.00	348.70	317.00	332.85	301.15
All excess usage over 6000 cu ft/month		2,000	79.20	87.12	79.20	83.16	75.24
<b>Total Bill</b>		<b>14,000</b>	<b>524.28</b>	<b>576.71</b>	<b>538.10</b>	<b>557.19</b>	<b>519.01</b>
<b>Increase Bimonthly Billing</b>				\$ 52.43	\$ 13.82	\$ 32.91	\$ (5.27)