



WATER RATE DISCUSSIONS

Our base water rates have not been adjusted in 10 years.

Our current water rates were set in 2002 when the RO went on line. We currently pay:

- \$150 per year water Maintenance Fees
- \$0.018 per gallon if we use less than 18,000 gallons in 3 months¹
- \$0.05 per gallon for use above 18,000 gallons in 3 months¹
- \$10.00 per quarter minimum charge
- \$1,500 for a hook-up

FINANCIAL CONSIDERATIONS:

Since 2002 we have:

- Added a fulltime water manager to the staff at an increase cost of \$31,266², or \$0.009 per gallon.³
- Begun chlorinating the product of our fresh water wells costing \$980 per year.
- Begun chlorinating the product of our RO plant at \$420 per year .
- Begun injecting Ferric chloride FeCl₃ to our fresh water well product to remove Arsenic at \$621 annually.
- Total New Chemicals \$2,021 per year or \$0.0005 per gallon.³
- Cost additions per gallon since 2002 = \$0.0095 per gallon which when added to the current rate of \$0.018 would equal \$0.0275/gallon.

Our base rate should then be \$0.028 per gallon and this increase ignores 10 years of general cost increases. This would represent a 5% increase per year over 10 years which is a bit steep. The CPI has increased an average of 3% per year. If we applied an increase of just 3% per year it would set our proposed base rate at \$0.023.

WATER EFFICIENCY RULE CONSIDERATIONS:

We must abide by the recently implemented state Water Use Efficiency Rules. WUE requirements can be found in the [Third Edition of the Guidebook](#). To summarize, water suppliers must:

- Publicly establish water savings goals for their customers. *We need to do this.*
 - Evaluate or implement specific water saving measures to achieve customer-based goals. *Rate structure changes would be a part of this. Other actions should be placed in the Development Guide such as requirements for low flow shower heads, roof gutter collection systems, car washing and lawn watering rules.*
 - Develop a WUE planning program to support the established goals. *We need to do this.*
 - Install meters on all customer connections by January 22, 2017. *Already done.*
 - Achieve a standard of no more than 10% water loss. *We're at around 15% (down considerably).*
- Report annually on progress towards achieving these goals. *By 1 July annually.*

GROWTH CONSIDERATIONS:

We have 462 total authorized water connections. When they are gone we will need to expend huge amounts to gain additional authorizations, if it is even feasible and if we even want to. Therefore our remaining 189 hook-ups are very valuable. We should consider them as a resource to be sold. The water connection fee is not a payment for the labor of installing the meter, but rather the purchase price of one of our remaining, irreplaceable and valuable assets. If we wish to limit growth we can influence that by increasing the cost of a connection from \$2,500 to \$5,000. \$5,000 is not an unusual amount, there are small systems in the San Juan Islands with ROs that charge \$15,000+ to have a connection.

RECOMMENDED WATER RATE STRUCTURE:

Installation: \$5,000

Annual Maintenance: \$150 or no change

Metered Use:

0-8000 \$0.023/gallon

8,000 or 18,000 \$0.035/gallon

18,000 and above \$0.05/gallon

Minimum Quarterly charge: \$10.00 or no change

IMPACT:

Income: If these rates were applied to our actual measured consumption from last year we would see the following additional income:

1 st Quarter	\$ 1,900	Estimate, normally very similar to 4 th Qtr
2 nd Quarter	\$ 2,890	Estimate, normally 1/2 of 3 rd Qtr
3 rd Quarter	\$ 5,795	Actual
4 th quarter	\$ <u>1,956</u>	Actual
Total	\$12,541	

Top 40: (See Table 1) The impact on the top 40 users during the 3rd Qtr of 2010 is shown below. (data removed for public viewing)

Those people who fall into the 0-8,000 range see a 31% increase in their rate (3% per year over ten years as expected give the 3% per year increase in rates)

Those who fall in the 8,001 or 18,000 range see an 18-50% increase because of the portion of their usage that falls into the higher bracket. These people are our target for conservation and our goal is to get quarterly usage per household below 10,000 gallons per household.

Those who fall into the 18,001 and above category see varying impacts, but the bottom line is that this is and should be a punitive level of consumption

Part-time / Full-time: The 4th Quarter use patterns for typical full time owners vs. part time owners is shown below. Notice that some weekenders can use far more water than fulltime residents with the same number of people in the household. There is a tremendous range shown here and it is obvious that a family of two people living here full time can have bills well under \$100 per quarter or it is a matter of choice.

COMPARISON TO OTHER ISLAND SYSTEMS:

The table below shows four water systems in the San Juan Islands, one larger than ours, three smaller; two with RO and two without. The data is current from 2009, all four are metered systems.⁴

The first thing that strikes you is that RO is very expensive. Under the proposed scale a Hat Island owner who consumed 12,000 in a quarter would pay \$285. In both systems shown below with RO

plants the metered cost is lower, however the annual fees are significantly higher than ours.

<u>System</u>	<u>\$/12,000 gal</u>	<u>Tiers</u>	<u>Use Goal (2 person Household)</u>
Eastsound (Orcas Island)	\$84	3	130GPD
Friday Harbor (San Juan Island)	\$111	4	100GPD
Cattle Point (San Juan Island)	\$360	1	
Potlatch (Guemes Island)	\$168	1	None

Monthly/Annual Fees:

EWUA	\$33.00/month - \$396/year + use
Friday Harbor	\$88.71/month - \$1,064.52/year + use
Cattle Point	
Potlatch	\$62.58/month - \$750.96/year + use

New Hook Up fees:

EWUA	\$11,200 SFR, \$5,600 for a guest House plus the actual labor to install
Friday Harbor	\$9,650 plus \$6/ft for install of line
Cattle Point	not available
Potlatch	\$7,200 plus \$1,360 installation

Table C - Charges in Several Water Systems (Surface and RO)

Water System	Eastsound	Frid. Har.	Cattle Pt	Potlatch
Island	Orcas	San Juan	San Juan	Guemes
Type of Units*	SFR	SFR	SFR	SFR
Source of Water	Surface	Surface	RO	RO
Timeframe	Yr 2000	Yr 2000	Yr 2002	Yr 2002
Annual Total-Million Gal.	35.57	40.17	0.96	0.62
Peak Month-MG	4.74	5.36	0.13	0.06
Average Month-Gal/Conn	5,156	4,133	2,424	1,845
Nominal Connections	575	810	33	28
Peak Month-gpd/Conn	266	213	125	69
Ave.Month-gpd/Conn	172	136	81	62
Metered?	Yes	Yes	Yes	Yes
Charges Based on Meters?	Yes	Yes	Yes	Yes
Monthly Ch-@Ave Use	\$31	\$44	\$81	\$75
Monthly Ch-@4,000 gal	\$28	\$37	\$120	\$130

*SFR=Single Family Res.

Footnotes:

¹ 18,000 gallons in 90 days is 200 gallons per day which is the peak planning figure for a Single Family Residence (SFR) or a Equivalent Residential Unit (ERU). This is the most common break point for penalty payments across most private water providers in WA. But it must be considered an upper limit of consumption. Average consumption goals should be much lower.

² Roughly 30% of Skip's \$85,000 wages, benefits and taxes or \$28,000 were allocated to water; Wayne's total cost is \$59,266, thus an increase of \$31,266.

³ We produce an average of 3.4 million gallons of water each year. This is a 5 year average.