



Agenda No: 7.1
Meeting Date: Mar 26, 2012

Environmental Services

1450 K.L.O. Road
Kelowna, B.C. V1W 3Z4

Telephone: (250) 469-6241
Fax: (250) 762-7011
www.regionaldistrict.com

ENVIRONMENTAL SERVICES DEPARTMENT REPORT

TO: Regional Board
FROM: Jim Roe, Public Works Manager
DATE: March 13, 2012
SUBJECT: Proposed 2012 Water Utility Rates for:

- Sunset Ranch
- Star Place
- Westshore Estates
- Killiney Beach
- Falcon Ridge
- Upper Fintry / Shalal Road / Valley of the Sun (UF / SR / VOS)

RECOMMENDATION:

THAT the Regional Board endorse Option Two, of the following three options, in regard to a new 2012 RDCO Water Utility Rate Structure:

Option 1: A 2012 rate structure that is based on **100%** of the system's financial need (the Average Annual Lifecycle Cost Investment or "AALCI") over the next 20 years, as summarized following:

	2012 Flat User Fee	2012 Flat Asset Renewal Fee
Sunset Ranch	\$360	\$196
Dietrich (Star Place)	\$1300	\$332
Westshore Estates	\$400	\$382
Killiney Beach	\$400	\$382
Falcon Ridge	\$470	\$384
UF / SR / VOS (new)	\$400	\$200

Option 2: A 2012 rate structure that is based on **50%** of the system's financial need (the AALCI) over the next 20 years, as summarized following:

	2012 Flat User Fee	2012 Flat Asset Renewal Fee
Sunset Ranch	\$360	\$96
Dietrich (Star Place)	\$1300	\$232
Westshore Estates	\$400	\$232
Killiney Beach	\$400	\$282
Falcon Ridge	\$470	\$334
UF / SR / VOS (new)	\$400	\$200

Option 3: A 2012 rate structure that is based on **30%** of the system's financial need (the AALCI) over the next 20 years, as summarized following:

	2012 Flat User Fee	2012 Flat Asset Renewal Fee
Sunset Ranch	\$360	\$46
Dietrich (Star Place)	\$1300	\$182
Westshore Estates	\$400	\$232
Killiney Beach	\$400	\$232
Falcon Ridge	\$470	\$284
UF / SR / VOS (new)	\$400	\$200

AND FURTHER THAT: The Board endorse the creation of a "Consumption Based Billing" system wherein any customer who utilizes more than 235 cubic meters of water (235,000 litres), within a billing quarter, will be levied a surcharge of \$0.35 per cubic meter of water use, for all consumption that is over and above the baseline value of 235 cubic meters per billing quarter. Actual consumption will be determined by quarterly meter readings for each customer.

BACKGROUND:

Over the past year, the Environmental Services Department has been working closely with Urban Systems Ltd (USL) to determine if the RDCO's five existing water systems have a rate structure, and / or long term capital reserves, that would help to ensure the long term financial viability of each of the existing water systems. At the conclusion of the process, USL determined that the five existing systems do not currently have a rate structure, nor enough financial reserves, to allow for long term capital replacement of the existing works. In February 2012, USL presented a report to the Regional Board that identified the level of financial shortfall (the funding gap) for each of the five existing water systems.

At the direction of the Board, USL and the Environmental Services Department has created some 2012 rate options for each of the five existing water systems (and also for the sixth, the UF / SR / VOS system which is scheduled to be operational within the next few weeks). Each of the three options will help to close the funding gap with the '100%' and the '50%' option closing the gap more quickly and the '30%' option closing the gap more slowly. Options 2 and 3 would require some future funding from senior levels of government to ensure that capital replacement works are completed as the various components of the infrastructure come to the end of their useful life.

Further to all of the above, and to provide a comparison and context to the proposed 2012 RDCO water system user rate options, following is a summary of the yearly user rates of other local water purveyors, both from 2007 and from 2012 as well as a summary of the yearly user rates for the five existing RDCO water systems over the same timeframe. **

	2007 Average User Rate*	2012 Average User Rate*	Percent increase
Kelowna	\$331.12	\$478.06*	144%
Penticton	\$264.00	\$348.00	132%
Sunnyside	\$260.00	\$513.20*	197%
Peachland	\$277.00	\$504.00	182%
BMID	\$318.00	\$399.00	125%
GEID	\$240.00	\$528.00	220%
SEKID	\$252.00	\$456.00	181%
Lake Country	\$348.00	\$652.20*	187%
NORD	\$819.16	\$1274.40	156%
RDCO Systems:			
Sunset Ranch	\$230.64	\$360.00	156%
Star Place	\$1025.00	\$1300.00	127%
Westshore Est.	\$210.12	\$400.00	190%
Killiney Beach	\$210.12	\$400.00	190%
Falcon Ridge	\$410.20	\$470.00	115%

* For comparison, all consumption based rates are assumed to be 235m³ / quarter

** Asset Renewal fees are not included in any of the above noted values

It must be noted that the water purveyors that have a larger customer base than the RDCO have a 'critical mass' that may allow them to operate their water utility at a lower 'cost per cubic meter' than would ever be achievable for the RDCO systems, which range in size between 8 and 300 customers per water utility. So, although the proposed RDCO rates may be higher, they should be looked at in terms of their remote locations and small size, when comparisons are made with other purveyor's water utility rates. It must also be noted that the RDCO's current rates for the new UF / SR / VOS are anticipated to be financially viable, in the long term, and that there is no projected funding gap for at least the next twenty years, and quite possibly much longer (it has a financially sustainable rate structure).

With respect to the consumption based billing baseline of 235 m3 per quarter, this value was chosen based on a full year of meter readings. For the majority of the RDCO's water customers, this value will allow for outdoor water use that is consistent with the RDCO's standard irrigation restrictions that are put in place each summer.

Moving forward beyond 2012, the RDCO rates will need to be increased over the next five years to ensure that the funding gap continues to be closed. The following two documents, which were prepared by Urban Systems Ltd., illustrate the proposed increases for each utility and for each of the three options noted in the "Recommendation" section of this report. The future proposed rate increases (2013 – 2016), that are summarized in the following documents, do not come with a recommendation for acceptance at this time but are provided herein to give better context to this report:

Based on the decision by the Board regarding the appropriate 2012 rate option, the Environmental Services Department is prepared to submit a revised Water Bylaw to the Board at the March 30th, 2012 Board meeting to ensure that the new 2012 rates and consumption based billing can begin in the second quarter, which starts on April 1st, 2012.

Respectfully submitted,



Jim Roe, ASCT
Manager of Public Works

Proposed Water Rates

The following are the proposed combined water rates (user/asset renewal) for the next 5 years based on the sustainable funding level for each system¹. In all cases, a 66% grant was assumed for all regulatory (treatment) capital projects and a 33% grant was assumed for all studies. The following three (3) scenarios present rates based upon 100%, 50% and 30% annual contributions to renewal reserves.

100% Contribution to Renewal Reserve

	Current	2012	2013	2014	2015	2016	
Falcon Ridge	\$ 654	\$ 854	\$ 954	\$ 1,004	\$ 1,054	\$ 1,104	Additional increases in 2029
Sunset Ranch (<0.25 ha) ²	\$ 256	\$ 556	\$ 556	\$ 556	\$ 556	\$ 556	Additional increases in 2022 and 2027
Westshore	\$ 432	\$ 782	\$ 1,032	\$ 1,132	\$ 1,182	\$ 1,207	Additional increases in 2022 and 2028
Star Place/Trepanier	\$ 1,132	\$ 1,632	\$ 2,032	\$ 2,232	\$ 2,282	\$ 2,332	Additional increase in 2026
Killiney Beach	\$ 432	\$ 782	\$ 982	\$ 1,132	\$ 1,232	\$ 1,282	Additional increase in 2027
Upper Fintry/Shalal ³	–	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	

50% Contribution to Renewal Reserve

	Current	2012	2013	2014	2015	2016	
Falcon Ridge	\$ 654	\$ 804	\$ 879	\$ 929	\$ 929	\$ 929	Phased increase over 3 years
Sunset Ranch (<0.25 ha)	\$ 256	\$ 456	\$ 456	\$ 456	\$ 456	\$ 456	Additional increase in 2027
Westshore	\$ 432	\$ 632	\$ 832	\$ 932	\$ 957	\$ 982	Additional increases in 2022 and 2030
Star Place/Trepanier	\$ 1,132	\$ 1,532	\$ 1,832	\$ 1,982	\$ 2,032	\$ 2,057	Additional increase in 2026
Killiney Beach	\$ 432	\$ 682	\$ 882	\$ 982	\$ 1,032	\$ 1,057	Additional increases in 2020, 2027 and 2030
Upper Fintry/Shalal	–	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	

30% Contribution to Renewal Reserve

	Current	2012	2013	2014	2015	2016	
Falcon Ridge	\$ 654	\$ 754	\$ 829	\$ 879	\$ 879	\$ 879	Phased increase over 3 years
Sunset Ranch (<0.25 ha)	\$ 256	\$ 406	\$ 406	\$ 406	\$ 406	\$ 406	Additional increase in 2026
Westshore	\$ 432	\$ 632	\$ 782	\$ 882	\$ 932	\$ 957	Additional increase in 2028
Star Place/Trepanier	\$ 1,132	\$ 1,482	\$ 1,682	\$ 1,782	\$ 1,832	\$ 1,857	Additional increase in 2026
Killiney Beach	\$ 432	\$ 632	\$ 782	\$ 882	\$ 932	\$ 957	Additional increases in 2020, 2024 and 2027
Upper Fintry/Shalal	–	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	

¹ The rates proposed are to achieve sufficient revenue within the 20 year period; additional rate increases are likely necessary beyond the 20 year study period to ensure systems remain sustainable. The recommendations are intended to help the RDCO phase rates in over time.

² Based on the number of parcels rather than connections as only a maintenance fee is charged per parcel.

³ Excludes current parcel tax, Rates should be reviewed once ongoing operational costs stabilize.

³ Excludes current parcel tax, Rates should be reviewed once ongoing operational costs stabilize.

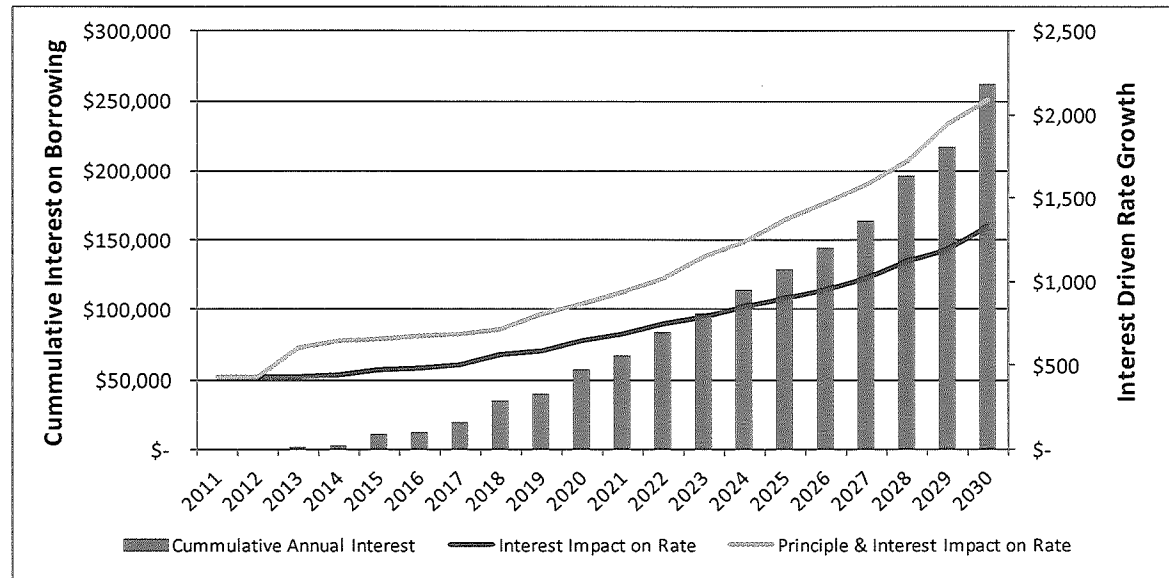
Importance of Renewal Reserves

The renewal reserve used in calculating each rate scenario was based upon the *Average Annual Lifecycle Cost Investment (AALCI)*. The AALCI is the annual depreciation of the replacement value of each of the Regional District's water systems. Saving the AALCI is the same as saving to purchase your home, what you haven't saved, you need to borrow and make debt payments. Whatever amount of the AALCI that is not budgeted each year will have to be made up in future years or the Regional District will need to borrow the funds to renew expired water system assets.

Even current low borrowing rates, over a 30 year term, will virtually double the renewal costs required. Whereas budgeting for renewal (AALCI) and building up reserves eliminates debt servicing costs, and reserves earn interest which can reduce future capital renewal costs. Using an AALCI and reserve approach to managing the Regional District's water systems will increase rates and/or fees in the short term however it will minimize rates and fees to a greater extent over the longer term.

In the Westshore water system example to the right, without a renewal reserve the Regional District will need to borrow for their capital

renewal needs. Over the next 20 years renewal interest on borrowing (5% over 30 years) will add an incremental burden on the rate moving it from \$432 to \$2090.



Demand Management Charge

The demand management charge will be \$0.35/m³ and will be applied to all consumption above the 235m³ allotment on a quarterly basis for all residential customers. The charge will be in effect starting 2013. Revenues collected from the rate will contribute to the costs of water conservation and management initiatives.