



**REPORT TO REGIONAL WATER SUPPLY COMMISSION
MEETING OF WEDNESDAY, 17 NOVEMBER 2010**

SUBJECT 2011 CAPITAL AND OPERATING BUDGET

ISSUE

The purpose of the report is to provide a synopsis of the 2011 budget, highlighting the proposed significant changes and additions. The report generally follows the sequence of information provided in the draft budget document and is based on the recommendations of the budget subcommittee.

Rate Base

The rate base for 2011 has increased by \$7,030,565. Capital projects include the No. 2 transmission main replacement, Weeks Lake land purchase and the Millstream transmission main upgrade. (Pages 5 and 6).

Revenue Requirement

The revenue requirement for 2011 has decreased by \$866,007, primarily as a result of a decrease in operating expenses and a decrease resulting from not needing to make provision for a deficit carry forward to 2011 as was the case for the 2009 deficit in the 2010 budget (Pages 7 and 8).

Operations Budget

The 2011 Board budget reflects a decrease in expenditures as a result of the service review and a change in the charge-out rate methodology. As of January 1, 2010, the department now known as Integrated Water Services (IWS) assumed responsibility for new services, including core area trunk sewers, sewage treatment on the Saanich Peninsula, water and sewage treatment systems on the Gulf Islands, and associated infrastructure engineering. Prior to 2010, the fixed overheads of both Regional Water Supply and Juan de Fuca distribution systems were shared proportionately between the respective operating budgets. Employee charge-out rates included only salary and benefit costs. Given the multiple services for which IWS is now responsible, this approach is no longer appropriate, as the Regional Water Supply Commission (RWSC) and Juan de Fuca Water Distribution Commission (JWDC) budgets would be responsible for a disproportionate share of the overhead costs. Therefore, the 2011 budget fixed overheads are now included in the employees' charge-out rates. As a result of this change, the RWSC operating budget has been reduced and the overhead costs are now appropriately allocated to each of the department's service areas.

The 2011 board budget has dropped \$727,000 from 2010, mainly resulting from the following:

- 1) The charge-out rate for staff working on capital projects now includes the overhead component, resulting in approximately \$260,000 now charged to capital projects.
- 2) Approximately \$195,000 in overhead component is now allocated to the Environmental Sustainability department (Demand Management, Water Quality, Cross Connection Control) and to local services (Port Renfrew, Gulf Islands).
- 3) Corporate Fleet's budget shows an increased recovery of \$180,000. With the department responsible for a much larger fleet due to the additional service responsibilities, the Corporate Fleet administrative overhead allocated over a larger fleet results in a reduction of \$133,000 in RWSC budget.

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As in 2010, it is proposed to further reduce the demand management budget by eliminating rebate programs for the Industrial/Commercial/Institutional (ICI) sector. As a sound business case can be made for replacing once through cooling systems without the incentive of a rebate, the rebate program has been eliminated.

The single supplementary item is for the American bullfrog eradication grant, conditional on matching funding by Capital Regional District (CRD) Parks. The continuous supplementary item is to convert the administrative support for Corporate Fleet Services into a regular, full-time position. Last year's budget included a single supplementary term position pending completion of a review of administrative services in the IWS and Environmental Sustainability departments. No redundant positions were identified.

Capital Budget

The projected capital expenditures for the period 2011 through 2015 total \$17.083 million, plus \$1.371 million cost-shared with the Juan de Fuca water distribution system. The major expenditures over the five year period include restoration of the Leech water supply area (\$2.455 million), McTavish Reservoir replacement (\$4.6 million), Sooke Intake Tower valve replacement (\$1.5 million) and fleet replacements (\$1.47 million) (Pages 15 – 30).

Capital Debt

Attachment 1 summarizes the capital debt position of the Regional Water Supply Service including anticipated borrowing. The significance of the purchase of the Leech Lands on the level of debt is clearly illustrated on the graph. The CRD generally borrows for capital infrastructure on a 15 year term. It is projected that all debt will be retired by 2027. **Attachment 2** summarizes the annual debt payments (principal and interest). Currently debt obligations account for 50.5% of annual expenditures.

Agricultural Subsidy

In the 2010 budget, the RWSC increased the agricultural subsidy to \$0.2105 per cubic metre, a 2% increase. The RWSC may wish to again consider a modest annual increase of 1% in the agricultural rate. The 2011 agricultural rate would increase to \$0.2126 per cubic metre. A summary of agricultural water use across the region is attached (**Attachment 3**).

Staffing

The budget includes a continuous supplementary staffing increase by 1.0 full-time employee for administrative support for corporate fleet management. This position was included in the 2010 budget as a single supplementary pending a review of administrative services. The cost of this position would be fully recovered through charge-out rates for the fleet.

Water Demand

Total water demand in the service area continues to decline with below 5-year-average demand each month to date in 2010. In 2010, the water rate was calculated using 51,500,000 cubic metres. The actual demand is projected to be just under 49,000,000 cubic metres. The 2011 rate has been calculated using 48,945,000 cubic metres.

2011 Wholesale Rate

The recommended wholesale rate has taken into consideration the revenue required to meet debt obligations, as well as the trend to declining water use. The proposed 2011 wholesale rate is \$0.5550 per cubic metre, an increase of \$0.0107 per cubic metre. The increase in annual cost for the average household using 235 cubic metres would be \$2.52 (Page 13).

At the last RSWC meeting, CRD staff suggested restructuring the water rate to a volumetric charge plus a fixed charge to recover the debt associated with the Leech water supply lands purchase. **Attachment 4** illustrates calculation of the charges under this approach. As there has been no consultation with

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member municipalities, it is recommended that, if the RWSC wishes to change to this rate structure, the member municipalities be consulted with a view to changing the structure for the 2012 budget.

5-Year Water Rate Projection

The 5-year water rate projection is attached (**Attachment 5**). As in previous projections, it is assumed that demand remains constant. It should also be noted that capital expenditures are not fully reflected in the water rate until after the asset is in service (i.e., 'used and useful').

Selected 2010 Accomplishments

- Successful implementation of the service review recommendations establishing IWS with expanded responsibilities, including infrastructure engineering, core area trunk sewers, Saanich Peninsula sewage treatment, and local services on the Gulf Islands.
- Posting bacteriological data weekly on the CRD website for the Greater Victoria drinking water system.
- Participating in the project to change from MAXIMO to SAP work management, which will integrate the maintenance management system with the corporate accounting system.
- Replaced 2,200 m of Main No. 2 from Tyee to Burlieith.
- Completed Main No. 9 from Treanor to Hordon.
- Constructed temporary water supply to Charters Creek from Sooke Main for fisheries purposes.
- Replaced supply pipe from Japan Gulch Dam to Screening Tower.
- Completed 4 field based contracts with T'Sou-ke nation, will expand this fall.
- Planted 35,000 seedlings in the Leech Water Supply Area.
- Completed geology mapping for the Leech Water Supply area.

Performance Indicators

For the past several years, the CRD has participated in the National Water Benchmarking Initiative, one of 32 utilities to do so. Benchmarking allows participants to highlight strengths and identify areas for improvement. The attached report for the supply system (**Attachment 6**) summarizes IWS performance in comparison to the participating municipal services providers.

Recommendations from the Budget Subcommittee

The budget subcommittee recommends that the Regional Water Supply Commission:

1. Approve the five year Capital Budget;
2. Approve the 2011 Operating Budget;
3. Approve the 2011 wholesale water rate of \$0.5550 per cubic metre; and
4. Approve a 1% increase in the agricultural water rate to \$0.2126; and initiate a consultative process with the farming community on how to set the rate based on a percentage of the wholesale rate.

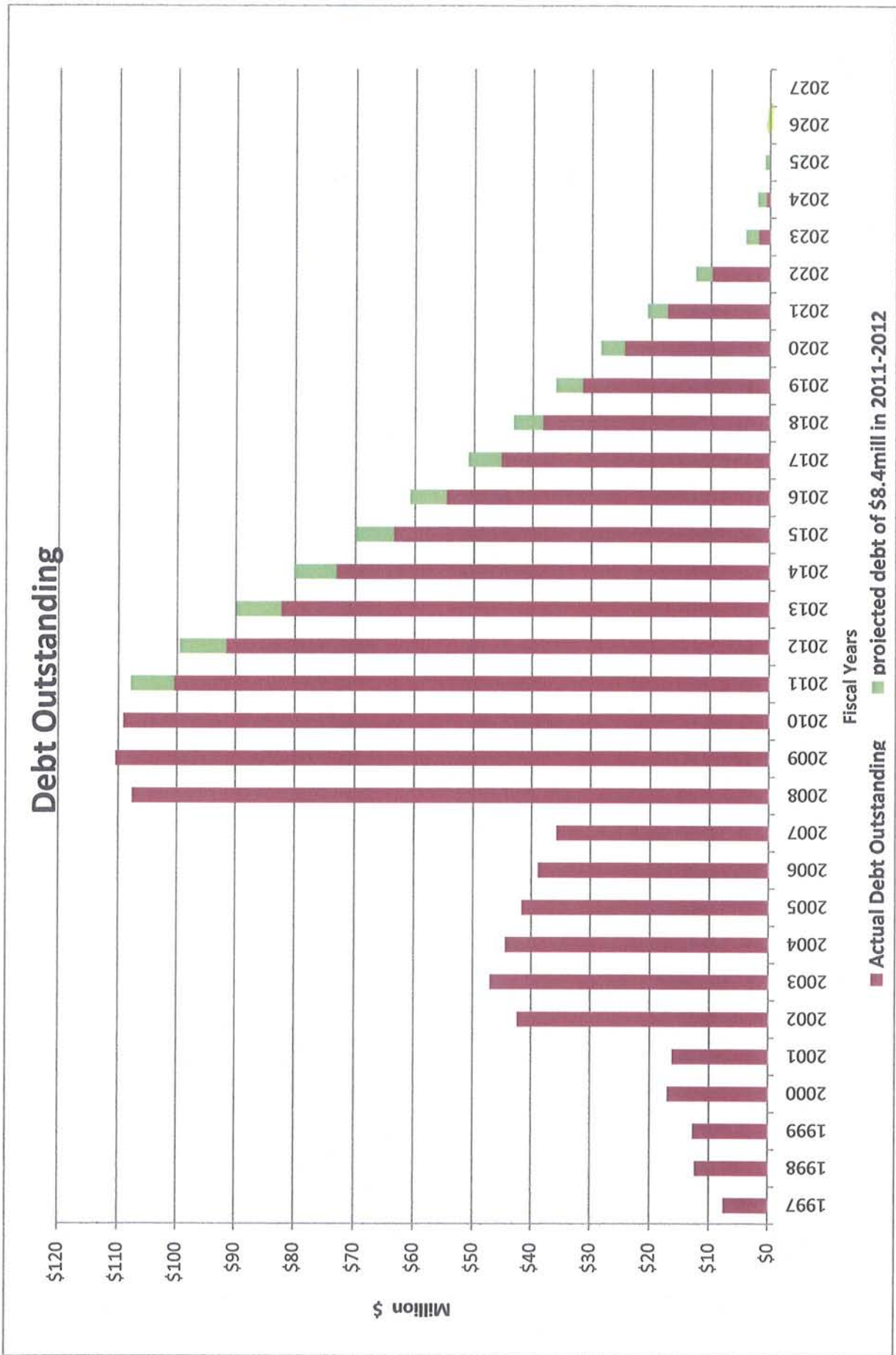
RECOMMENDATION

That the Regional Water Supply Commission recommend that the CRD Board:

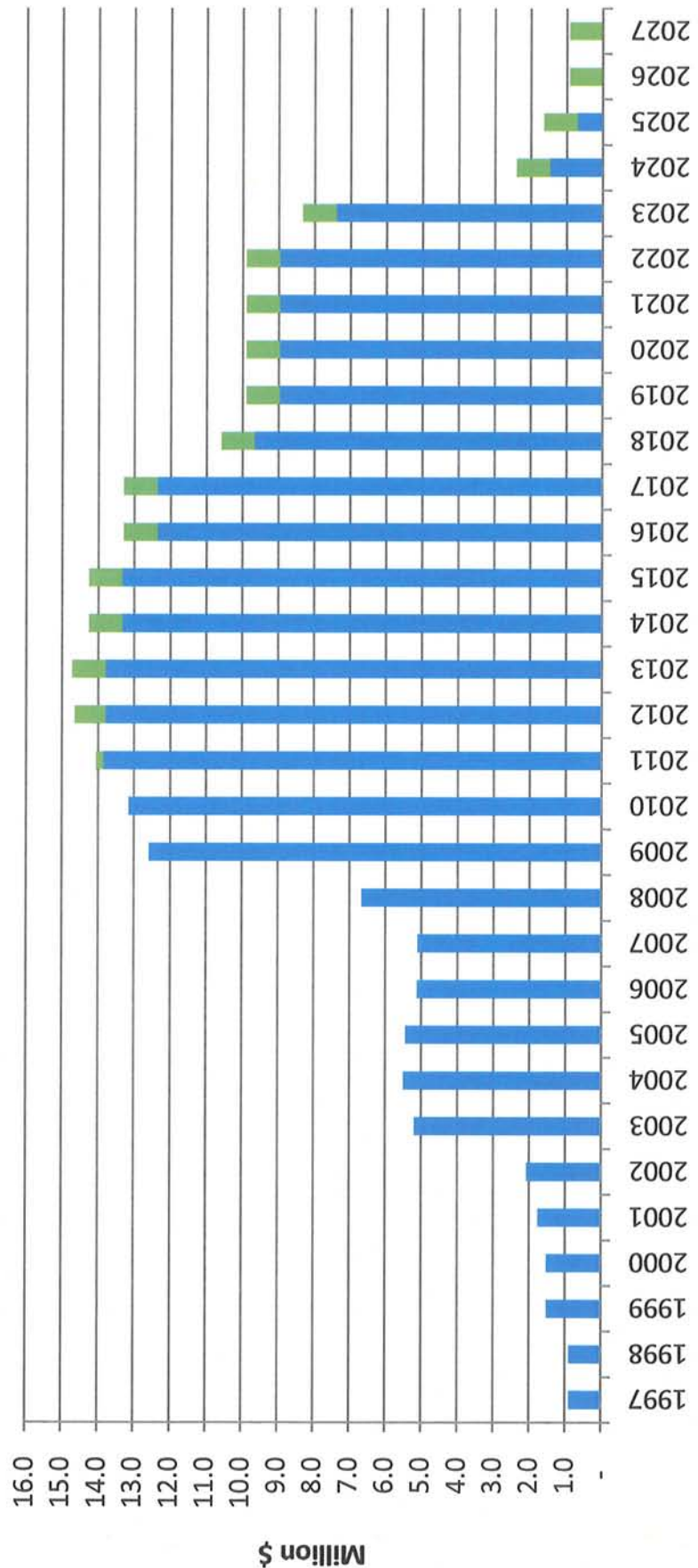
1. Approve the five year Capital Budget;
2. Approve the 2011 Operating Budget;
3. Approve the 2011 wholesale water rate of \$0.5550 per cubic metre;
4. Approve the agricultural water rate of \$0.2126 per cubic metre; and
5. Amend the *Water Supply Local Service Area Fee and Charge Bylaw No. 1, 1997* accordingly.

J.A. (Jack) Hull, MBA, P.Eng.
General Manager, Integrated Water Services

Attachments: 6



Debt Payments (Principal & Interest) on Outstanding Debt



■ Debt payments(P&I) ■ Debt payments(P&I) on projected 2011-12 debt of \$8.4mill

**REGIONAL WATER SUPPLY COMMISSION
Agriculture Subsidy provided in Fiscal Year 2009**

	No. of Accounts (2009 #s)	Agricultural Volume m3	Avg Agri Volume m3	Agri Rate Costs \$	Agri Fixed Costs \$	Total Agriculture Subsidy	Avg Agri Cost \$	% change
Western Communities & Sooke Jan to Dec 2009	92	42,355	460	35,219.03	0.00	35,219.03	382.82	-20.20%
Central Saanich Jan to Dec 2009	291	568,101	1,952	475,398.50	9,154.00	484,552.50	1,665.13	52.92%
North Saanich Jan to Dec 2009	63	142,634	2,264	125,984.41	0.00	125,984.41	1,999.75	36.03%
Saanich Jan to Dec 2009	127	275,459	2,169	164,506.72	8,714.20	173,220.92	1,363.94	27.23%
Totals	573	1,028,549	1,795	801,108.66	17,868.20	818,976.86	1,429.28	95.98%

Rate Summary

	Retail rate m3	Agri rate per Bylaw m3	Rate Difference m3
Western Communities	1.3682	0.2060	1.1622
Central Saanich	1.1358	0.2060	0.8368
North Saanich	1.1000	0.2060	0.8940
Saanich	0.9470	0.2060	0.7410

The 2011 budget has remained unchanged from the 2010 budget of \$925,000. The 2010 budget was significantly increased from previous years to align to projected expenditures and a change in the agricultural subsidy rate from .2060 to .2105.

Summary of Wholesale Water Rates-Base 2(e) adjtd to back out Leech Debt

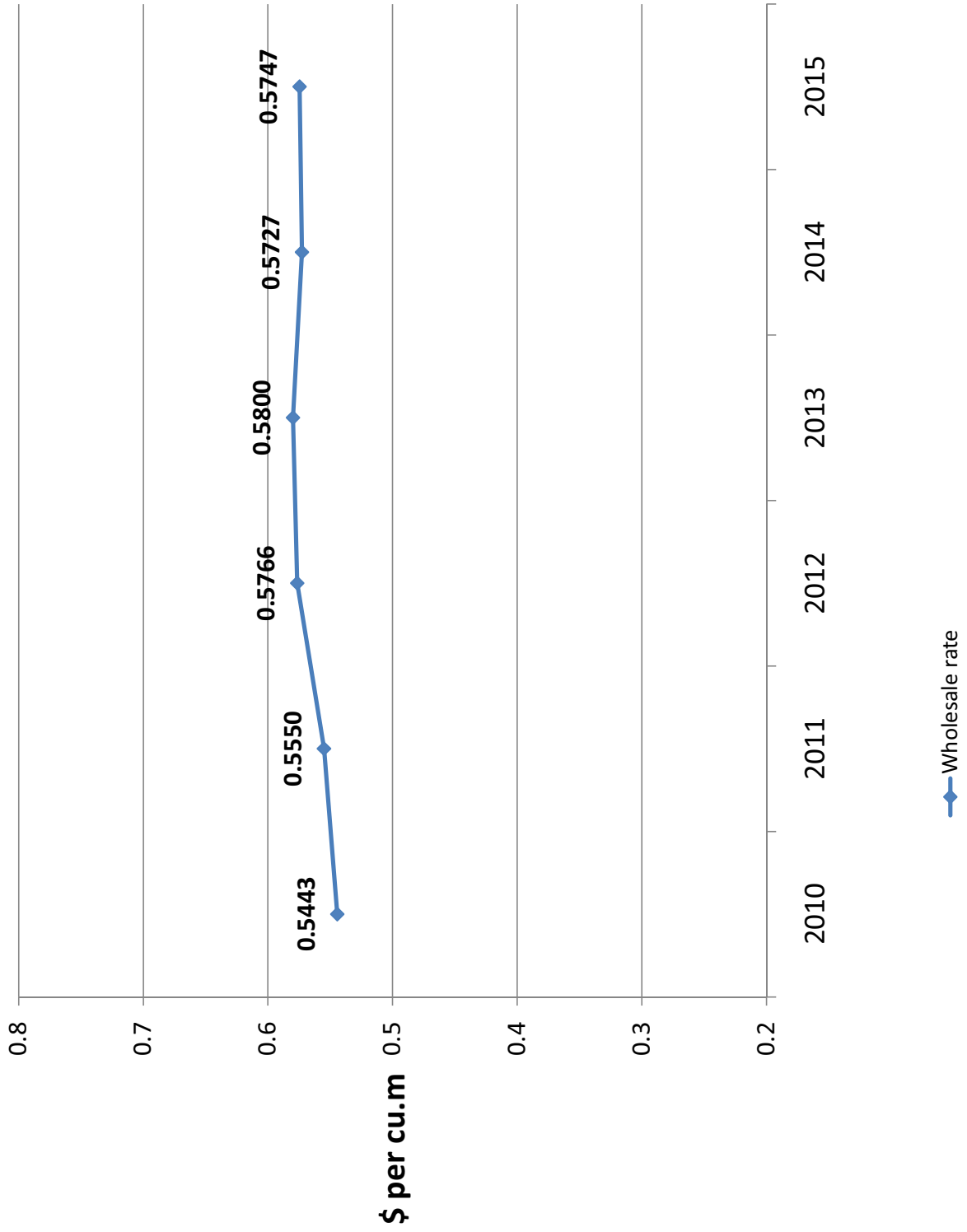
	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Change</u>	<u>Change %</u>
Wholesale water rate					
Unit cost per cu.m.	\$0.4463	\$0.5443	\$0.4297	-\$0.1146	-21.05%

**Wholesale Water Rate Increase
Impact on Residential Water Bill**

Charge for Twelve Months Consumption	Average Annual Consumption:		Fixed Charge		Total		Annual	
	2010 Year	2011	Annual Charge	Leech*	Annual \$	Annual \$	Change \$	Change \$
Average Consumption	2010 Year	2011	\$ 127.91	\$ -	\$ 127.91	\$ 127.91	\$ 130.45	\$ 2.54
Half Average Consumption	2010 Year	2011	\$ 63.96	\$ -	\$ 63.96	\$ 63.96	\$ 65.23	\$ 1.27
Twice Average Consumption	2010 Year	2011	\$ 255.82	\$ -	\$ 255.82	\$ 255.82	\$ 260.90	\$ 5.08

*Annual projected debt servicing cost for Leech is \$6,138,270. The average consumption fixed charge has been derived by dividing the debt servicing costs into the projected wholesale volume for 2011 times the average annual consumption. Note: 2010 water rates included the Leech debt servicing costs. 2011 reflects Leech debt as a fixed charge, vs. part of the water rate.

CRD Water Wholesale Rate Projections



NATIONAL WATER BENCHMARKING INITIATIVE – ANNUAL REPORT

SUMMARY

In the 2008 iteration of the National Water and Wastewater Benchmarking Initiative (NWWBI), the Water Transmission system ranked very high among participants. The Transmission system achieved its departmental goals in all metrics, and achieved or exceeded the NWWBI in all but four metrics.

The below average results for the 5 year running average capital reinvestment / replacement value is due to the transition period between the completion of the #1 main replacement project and the start of the #2 main replacement project. The 2008 number of field FTE's/100km length is higher than the average but lower than the 2007 number. The availability of Field FTE's is lower than 2007 and the average due to an increase in sick and vacation hours taken. The average turbidity is higher than average for this metric but below the standard for an unfiltered system.

Some of the Transmission systems greatest successes are the low ratio of the number of unplanned maintenance hours to total maintenance hours and the total O&M cost per km length. This is significant in an environment of rising costs and aging infrastructure.

BACKGROUND

The National Water and Wastewater Benchmarking Initiative (NWWBI) provide an opportunity for Canadian utilities to compare themselves to other similar utilities. CRD Water Services participates in Transmission and Distribution initiatives every year as part of our ongoing commitment to high quality service and creating a high performance work environment. In 2008, there were 10 participants in the Distribution initiative, 17 participants in the Integrated Transmission and Distribution initiative and 6 participants in the Transmission initiative.

Though it is not possible to fully account for the wide range of differences between participating utilities, the NWWBI have adapted methods such as normalized performance metrics to account for them. This report card should be taken as a high-level summary of results.

As with all in-depth comprehensive analyses, many of the metrics in the NWWBI have a conflicting metric, for example it will not be possible to be the leader in both 'cost/km' and 'service level/km' metrics. Even though the benchmarking process involves a series of quality checks, utilities vary in their ability to provide reliable data. The CRD maintains one of the best computerized maintenance management systems in Canada, which ensures accuracy of both planned maintenance and data for benchmarking.

To aid in interpreting the performance measures, the following table describes how the CRD Transmission system compares to a selected group of other participating utilities.

	AVERAGE	MAXIMUM	MINIMUM	CRD TRANSMISSION
System Length (km)	437	721	87	109
Population	394,792	2,255,340	44,285	344,000
Number of Wholesale Customers	2	20	1	5
Area (km ²)	388	2308	30	494
Average Daily Demand (ML/day)	190	1,091	25	141
Average Age of Pipes (Years)	33	45	25	37

The comparisons to the NWWBI results are based on a selection of participants based on the above criteria. Using these criteria, three (3) Transmission systems and eight (8) Integrated systems were selected.

GRADING SYSTEM

NWWBI Comparison Grading Scheme	Department Goal Grading Scheme
A+ = Highest achiever in category A = Better than average B = Average C = Worse than average or median	A+ = Higher than expected achievement A = Set goal achieved B = Goal partially achieved C = Goal not achieved

RESULTS – comparison to the selected participants

RELIABILITY				
NWWBI Performance Measure		Comments	NWWBI Grade	Dept. Grade
1	5 Year Running Average Capital Reinvestment / Replacement Value	The CRD value for this metric is lower than the average. The CRD has consistently met its goal to reinvest in such a way as to avoid an infrastructure deficit.	C	A

COST				
NWWBI Performance Measure		Comments	NWWBI Grade	Dept. Grade
1	# of Field FTEs / 100 km Length	The CRD achieved its goal of maintaining superior service levels. The CRD is higher than the average for this metric.	C	A
2	Total O&M Cost ('000) / km Length	The CRD achieved its goal of keeping the O&M cost for the water transmission system below the average. The CRD's average cost per km is below the average for this metric.	A	A
3	Unplanned Maintenance Hours / Total Maintenance Hours	The CRD achieved its goal of maintaining a very low level of unplanned maintenance. The CRD transmission system has the lowest ratio for this metric.	A+	A

WORKPLACE				
NWWBI Performance Measure		Comments	NWWBI Grade	Dept. Grade
1	# of Field Accidents with Lost Time / 1,000 Field Labour Hours	In 2008 the CRD had no injuries with lost time related to the maintenance and operations of the Transmission system.	A	A
2	Total Available Field Hours / Total Paid Field Hours	The CRD partially met its goal due to increase availability and to decrease vacation carry-over hrs. The both the number of vacation and sick hrs. taken increased in 2008. The CRD value is in line with the average for this metric.	C	B

PUBLIC HEALTH				
NWWBI Performance Measure		Comments	NWWBI Grade	Dept. Grade
1	Average Value for Turbidity (NTU)	The CRD achieved its goals as an unfiltered system and is within the standards set for this metric The CRD is higher than the average for this metric (the lower the value, the higher the rating).	C	A
2	# of Total Coliform Occurrences	This measure was less than the 2007 levels. The CRD was lower than the average for this metric.	A	A
3	Average Value for THMs (mg/L)	The CRD achieved its goal of staying below the 0,08 Canadian guideline. The CRD had the 2 nd lowest value and is below the average for this metric (the lower the value, the higher the rating).	A	A+

MOVING FORWARD

Metric	Description	Resolution
Workplace		
W-2	The rise in the number of sick days taken per year.	The level of awareness will be increased by providing supervisors with regular reports that show trends.