



Making a difference...together

Agenda Item #7  
REPORT #RWSC 2011 - 13

**REPORT TO REGIONAL WATER SUPPLY COMMISSION  
MEETING OF WEDNESDAY, NOVEMBER 16, 2011**

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**SUBJECT      2012 CAPITAL AND OPERATING BUDGET**

**PURPOSE**

The purpose of the report is to provide a synopsis of the 2012 budget highlighting the proposed significant changes and additions. The report generally follows the sequence of information provided in the draft budget document.

**Rate Base**

The rate base for 2012 has decreased by \$4,873,980 primarily due to overstating the forecast of additions to year end particularly for the Supply Main #2 contract and write down of decommissioned infrastructure related to the Sooke Water Supply and treatment facilities. Capital additions to the rate base include the final phase of Supply Main No. 2 replacement and the final phase of the new Sooke supply main (Pages 5 and 6).

**Revenue Requirement**

The revenue requirement for 2012 has increased by \$28,551 comprised of an increase in operational expense of \$108,421, offset by decrease in depreciation of \$62,970 mainly resulting from assets having been fully depreciated, disposals and prior years forecast overstatement of capital additions as noted above (Pages 7 and 8).

**Operations Budget**

The 2012 Board budget (Page 33) reflects an increase in non-discretionary expenses such as negotiated wage/salary increases, and increased corporate allocations. The net increase in the board budget from previous year (Column 2 less Column 7) is \$108,421.

The only single supplementary item charged to the Regional Water Supply Commission budget is the American Bullfrog eradication grant (\$20,000), conditional on matching funding by CRD Parks. Other single supplementary items that will be cost shared across all the services within Integrated Water Services include a data entry clerk (\$33,000), and a financial Analyst (\$65,000). A standardized fuel procurement system (\$64,000) is proposed cost shared across all services within the CRD. The continuous supplementary item includes the ongoing maintenance and administration of the fuel procurement system. Details are provided on Pages 9 - 13 of the budget document.

**Capital Budget**

The projected capital expenditures for the period 2012 - 2016 total \$16.116 million, plus \$1.889 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), completion of the new McTavish Reservoir (\$4.6 million), Sooke Intake Tower valve replacement (\$1.8 million) and possible upgrade to the method of chlorine disinfection System (\$1.0 million).

**Agricultural Subsidy**

The 2012 Agricultural water rate has been maintained at the 2011 rate of \$0.2126.

**Staffing**

No permanent additions to staff are included in the budget.

Water Demand

Total Water demand in the service area continues to decline. In 2011 the water rate was calculated using 48,945,000 cubic metres. The actual demand is projected to be 45,952,000 cubic metres reflecting the unusually cool spring and shorter summer. The 2012 water rate has been calculated using 47,721,000 cubic metres which is 2.5% lower than last years budgeted volume.

Proposed 2012 Wholesale Water 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 2012 wholesale rate is \$0.5699 per cubic metre. The increase in annual cost for the average household using 235 cubic metres would be \$3.50 (Page 15).

5-Year Water Rate Projection

The 5-year water rate projection is attached (Attachment 1). 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 2011 Accomplishments

- Completed replacement of the No. 2 water main.
- Completed the 2011 Strategic Plan for Water Management (to be presented to the Commission in February).

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 2) summarizes CRD Integrated Water Services 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 2012 Operating Budget;
3. Approve the 2012 wholesale water rate of \$0.5699 per cubic metre; and
4. Approve the agricultural water rate at the 2010 rate of \$0.2105 per cubic metre.

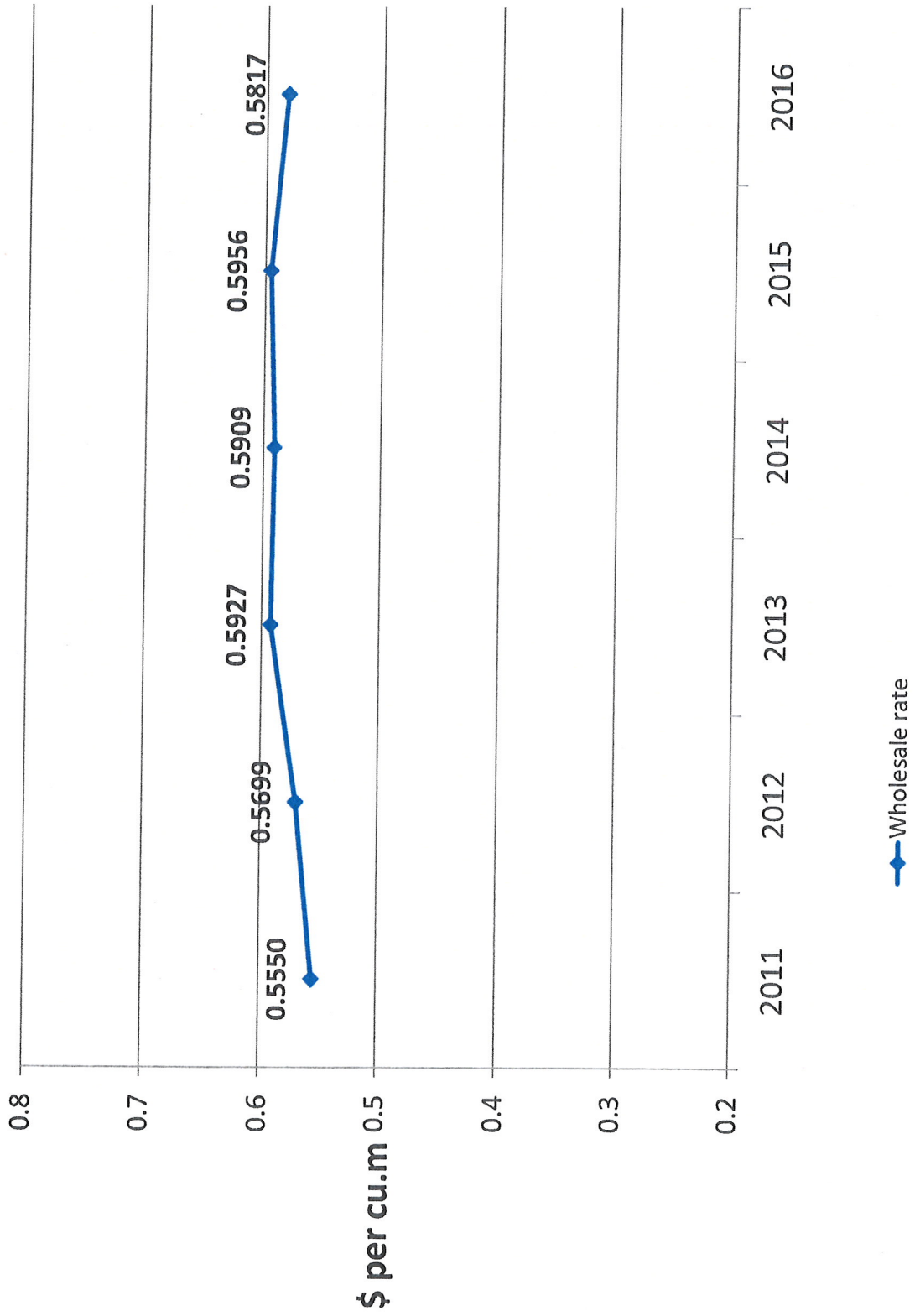
**RECOMMENDATION**

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

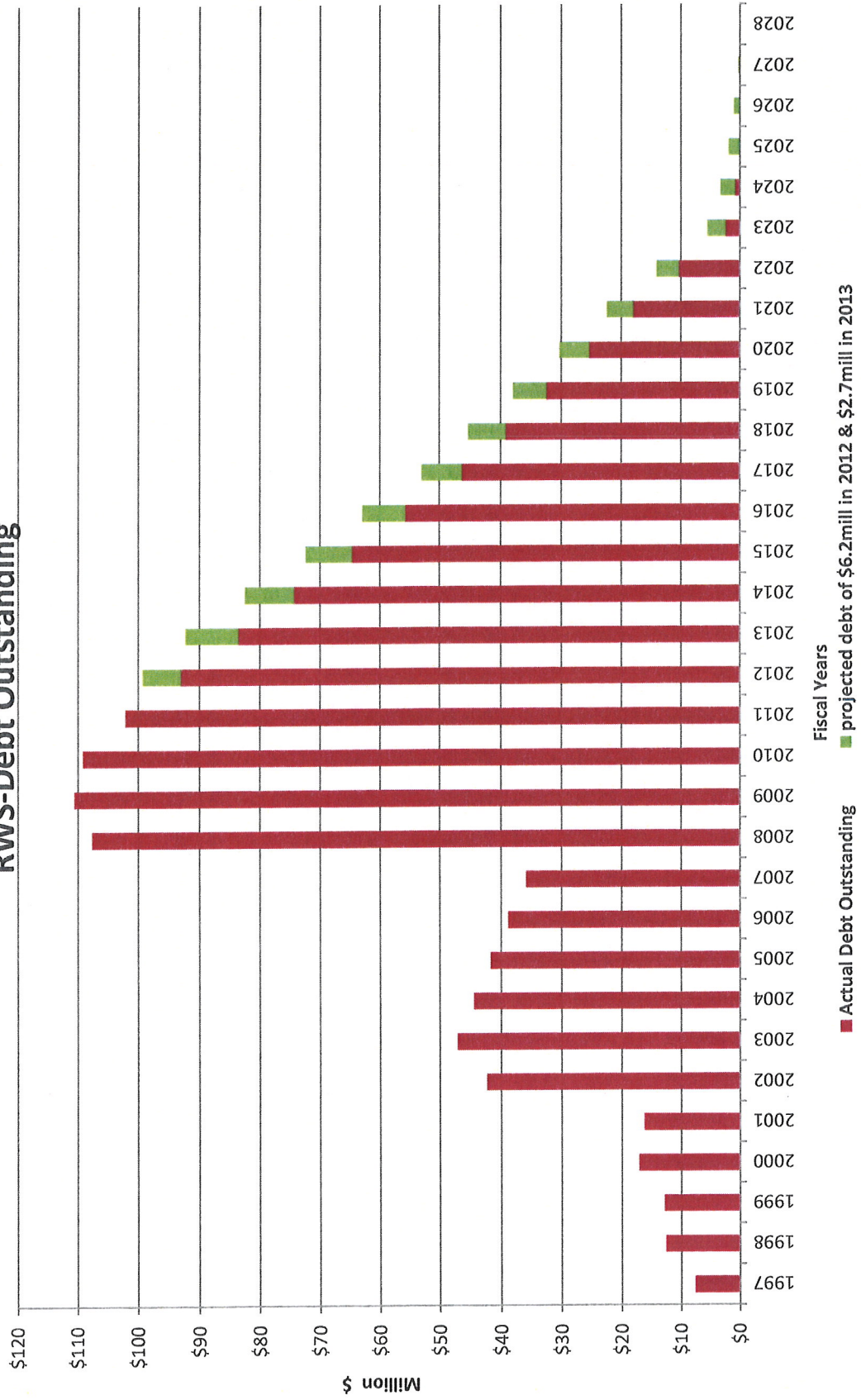
1. Approve the five year Capital Budget;
2. Approve the 2012 Operating Budget;
3. Approve the 2012 wholesale water rate of \$0.5699 per cubic metre;
4. Approve the agricultural water rate of \$0.2105 per cubic metre; and
5. Amend the *Water Supply Local Service Area Fee and Charge Bylaw No. 1, 1997* accordingly.

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

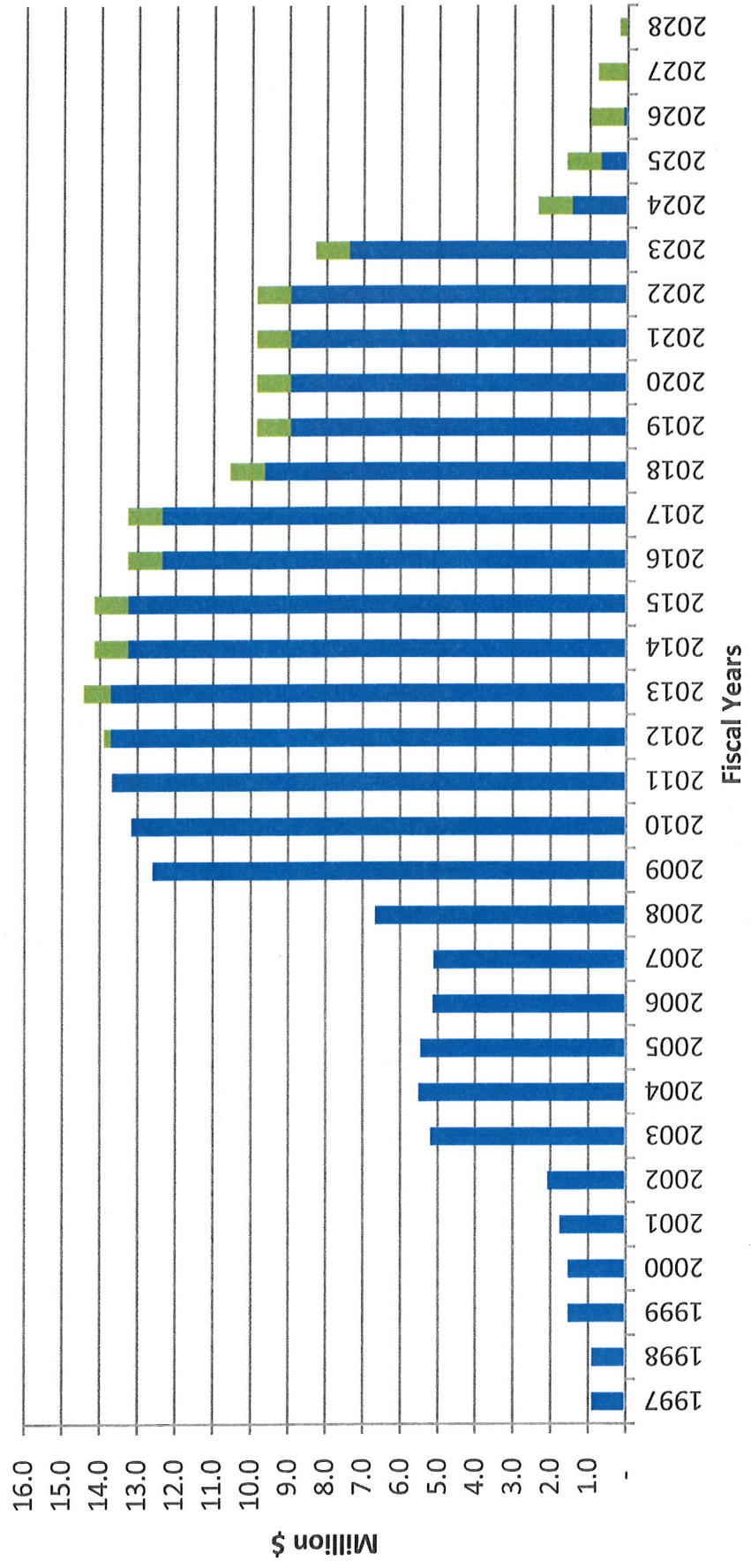
# CRD Water Wholesale Rate Projections



# RWS-Debt Outstanding



# Debt Payments (Principal & Interest) on Outstanding Debt



■ Debt payments(P&I)      ■ Debt payments(P&I) on projected 2012-13 debt of \$8.9mill

## BACKGROUND

The National Water and Wastewater Benchmarking Initiative (NWWBI) provide an opportunity for Canadian utilities to compare themselves to other similar utilities. CRD Integrated Water Services (IWS) has participated in the Transmission and Distribution initiatives every year since 2000. In 2009, there were a total of 35 participants, 13 participants in the Distribution initiative, 18 participants in the Integrated Transmission and 4 participants in the Transmission initiative.

The benchmarking initiative reports on 6 utility management goals. They are:

- Reliability of service
- Ensure adequate capacity
- Maintain sustainable cost
- Protect the environment
- Have satisfied customers
- Provide a safe and productive workplace
- Protect public health

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

	AVERAGE	MAXIMUM	MINIMUM	CRD TRANSMISSION
System Length (km)	1,152	4,693	91	121
Population ('000)	526	2,255	25	344
Number of Wholesale Customers	3	20	1	5
Area (km <sup>2</sup> )	343	2308	34	494
Average Daily Demand (ML/day)	259	1,633	14	150
Average Age of Pipes (Years)	33	59	22	40

The comparisons to the NWWBI results are based on a selection of participants based on the above criteria. The group consists of all the Transmission and Integrated systems.

## OUTCOMES

The measurement of achieving a management goal is based on the average results of a group of performance measures. These measures are evaluated against set targets or in cases where there are no targets the maximum measurement for the period 2007 to 2009.

The IWS results for 4 of the utility management goals for the 2009 data year are:

- Ensure system reliability, 4 performance measurements – 81% attainment of the goal.
- Provide a safe and productive work environment, 3 performance measurements – 70% attainment of the goal.
- Have satisfied customers, 1 performance measurement - 95% attainment of the goal.
- Protect public health, 4 performance measurements – 92% attainment of the goal

From the above results it can be seen that the provision of a safe and productive work environment has the lowest attainment percentage.

## GRADING OF THE PERFORMANCE MEASURES

### 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 Integrated and Transmission participants

ENSURE RELIABILITY				
NWWBI Performance Measure		Comments	NWWBI Grade	Dept. Grade
1	# of water main breaks / 100 km length	The CRD is in the process of replacing the # 2 main. The CRD was lower than the NWWBI average	A	A
2	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.	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

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 higher than the 2007 levels. The CRD was higher than the average for this metric.	C	A
3	Average Value for THMs (mg/L)	The CRD achieved its goal of staying below the 0,08 Canadian guideline. The CRD is below the average for this metric (the lower the value, the higher the rating).	A	A+

## ANALYSIS OF SAFE AND PRODUCTIVE WORK ENVIRONMENT GOAL RESULTS

This goal uses the following three performance measures to measure the attainment of the goal. They are:-

1. Number of field accidents with lost time per 1,000 field labour hours,
2. Number of lost hours due to field accidents per 1,000 field hours, and
3. Number of sick days taken per field employee.

Factors that were taken into account when doing the comparison was that there is a joint workforce for both the Regional Water Supply and Juan de Fuca System. The data for these three measures were combined as one and compared to all the other system. The data related to capital work was excluded in order to do the comparison of the combined Regional Water Supply and Juan de Fuca data with the other participants.

The goal for each of the performance measures is to be below the maximum value for the group over the three year period. The percentage attainment is calculate using the range of 0 to the maximum value reported where a value of 0 equals 100% attainment.

The results for each of the three performance measures are as follows:-

- Number of field accidents with lost time per 1,000 field labour hours

For the period 2007 to 2009 the IWS benchmarking result varied from 0.09 to 0.14. The median for the group was 0.04 and the maximum was 0.53. The CRD average percentage attainment for the period was 80%.

- Number of lost hours due to field accidents per 1,000 field hours

For the period 2007 to 2009 the IWS benchmarking result varied from 33 to 19. The median for the group was 3 and the maximum was 85. The average percentage attainment for the period was 73%.

- Number of sick days taken per field employee

For the period 2007 to 2009 the benchmarking result varied from 11 to 13. The median for the group was 10 and the maximum was 22. The IWS average percentage attainment for the period was 46%.

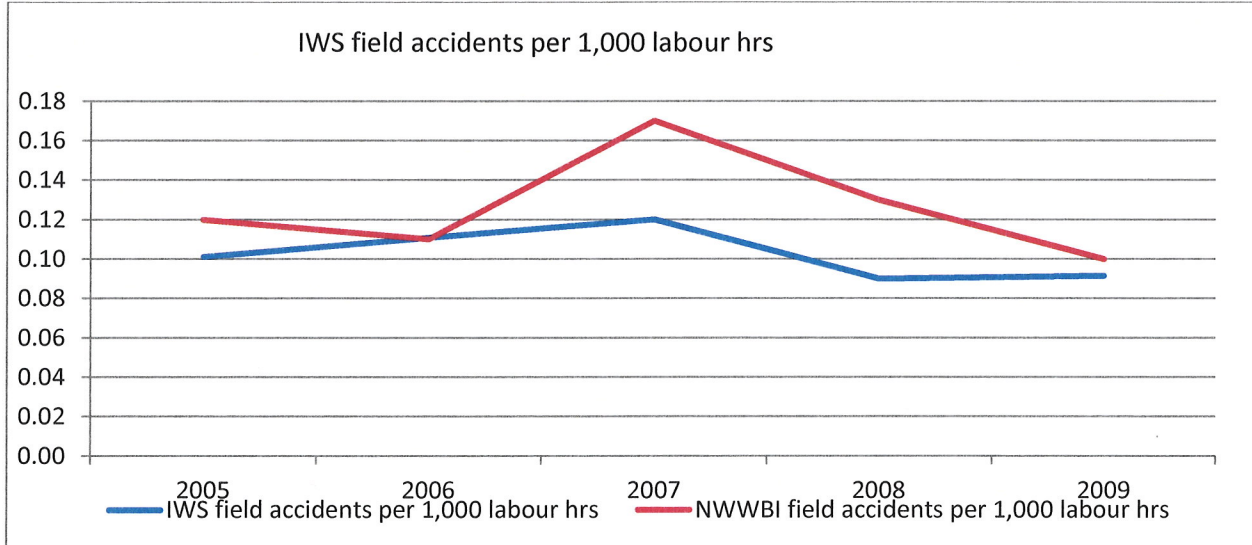
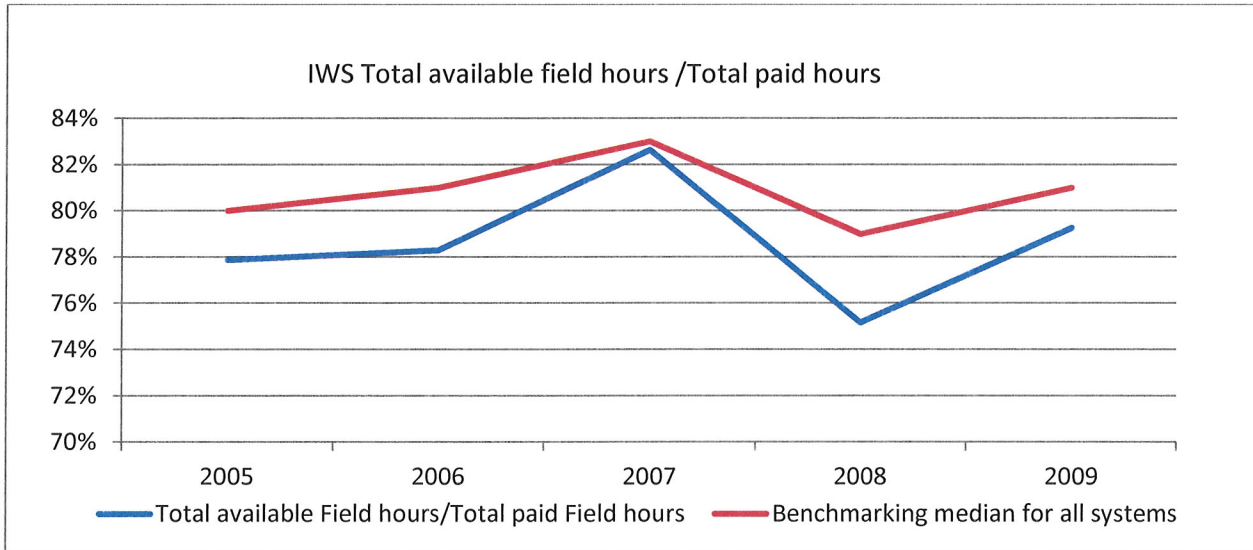
From the above it can be seen that of the three measures the number of sick days taken per field employee has the lowest attainment value.

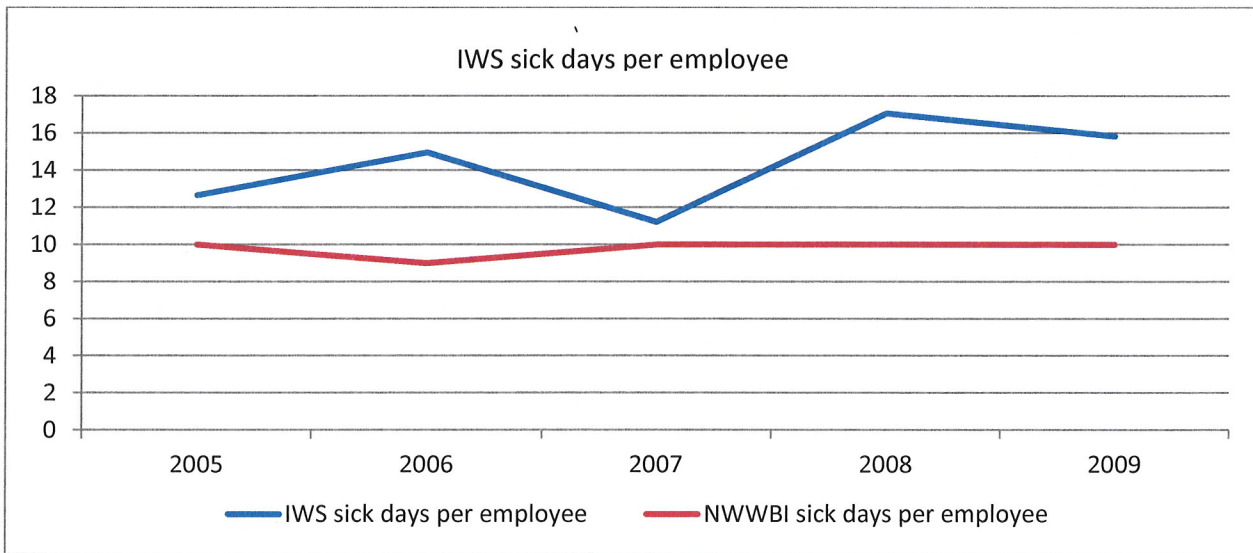
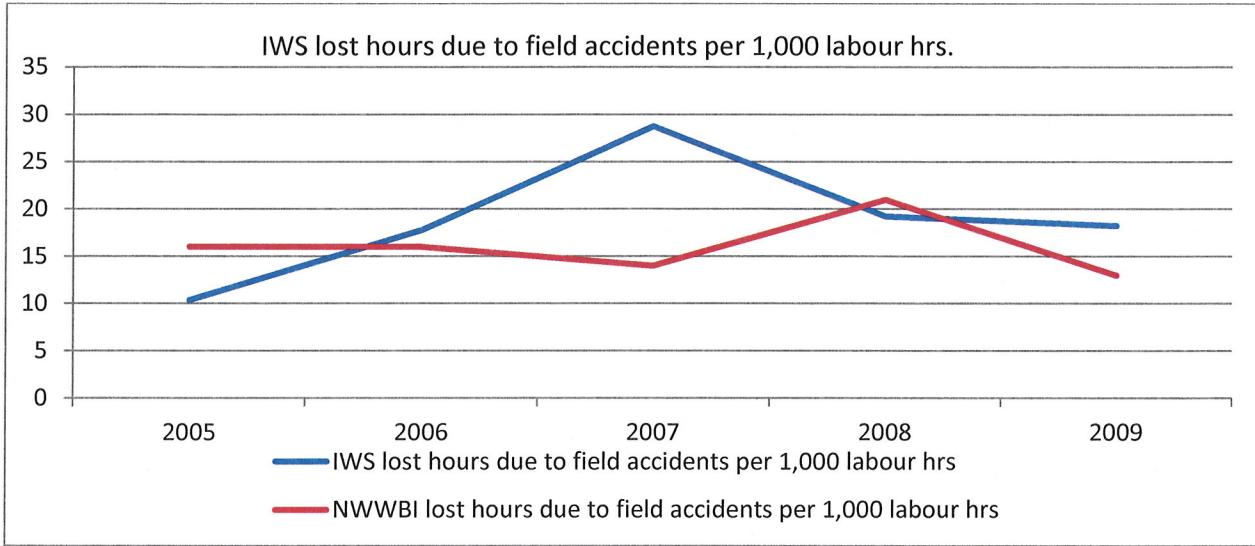
One of the standard performance indicators used in the NWWBI is the ratio of available time to paid time. This indicator includes performance measures such as time lost due to sick time taken, vacation and statiotary holidays and workplace injuries. The vacation and statiotary holidays are defined within the 1978 collective agreement. An improvement to the sick time and workplace injury performance indicators would result in more field time being available.



The following 4 graphs show the 5 year trend for IWS compared to the average NWWBI values. The graphs shown are the following:-

- Available field hours as a percentage of paid hours
- Number of field accidents per 1,000 field labour hours
- Number of lost hours due to field accidents per 1,000 field labour hours
- Number of sick days per employee





## 2012 BENCHMARKING OBJECTIVES

The 2012 benchmarking objectives will be to improve the performance measures related to providing a safe and productive work environment and to expand the report to include the management goals of adequate capacity and sustainable cost.