EPCOR WATER SERVICES INC. 
(2007-2011) PERFORMANCE BASED REGULATION 
2010 PROGRESS REPORT
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Performance Based Regulation
Progress Report
2010 Highlights

EPCOR Water Services Inc. (EWSI) protects public health by providing a reliable supply of high quality water to over 240,000 residential, commercial and industrial customer accounts within Edmonton. EWSI is a subsidiary of EPCOR Utilities Inc. (EPCOR).

This report provides an annual update to The City of Edmonton (the City) regarding the operational and financial results of EWSI under the 2007 – 2011 Performance Based Regulation (PBR) Bylaw. In addition to 2010 highlights, it outlines expected future plans and challenges. This report pertains to EWSI’s drinking water treatment and distribution operations within Edmonton.

For customers in the Edmonton Region, PBR delivers many benefits including:

1. Assuring customers that their utility must meet performance standards
2. Ensuring customers receive stable and predictable rates over the five year period
3. Protecting customers from unexpected rate increases, as EWSI bears the risk of greater than expected cost increases
4. Encouraging EWSI to keep costs low and to find more innovative and efficient ways to improve the operations of its system

For the year ended December 31, 2010, the following highlights EWSI’s operating and financial performance under the PBR:

- EWSI exceeded the operating performance standards, achieving 102.8 points compared to the PBR standard of 100 points. Bonus points were available for surpassing target measures.
- 2010 actual net income of $21.8 million was below the PBR forecast of $25.3 million.

Note: In this report, linkages between PBR and the City of Edmonton Strategic Plan (2009-2018) “The Way Ahead” have been identified by a coloured triangle: ▲ represents an indicator of Edmonton’s environmental sustainability and ▲ represents a contribution towards Edmonton’s financial stability.
**Operating Performance**

In 2010, EWSI once again exceeded its overall operating performance standards by achieving a total 102.8 points compared to the target of 100 points. This is the fourth consecutive year it has exceeded the performance standard under the 2007-2011 PBR Bylaw.

**Table 1 - Operating Performance Measures**

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Weighting</th>
<th>Points Earned</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Reliability Index</td>
<td>25.0</td>
<td>27.5</td>
<td>✓</td>
</tr>
<tr>
<td>Water Quality Index</td>
<td>25.0</td>
<td>25.0</td>
<td>✓</td>
</tr>
<tr>
<td>Customer Service Index</td>
<td>20.0</td>
<td>21.3</td>
<td>✓</td>
</tr>
<tr>
<td>Environmental Index</td>
<td>15.0</td>
<td>14.8</td>
<td>✓</td>
</tr>
<tr>
<td>Safety Index</td>
<td>15.0</td>
<td>14.2</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Aggregate Points Earned (sum of all indices)** 100.00 102.8  ✓

- ✓ Met/Exceeded Target
- ✱ Below Target

For more details refer to Appendix A - 2010 Water Utility Performance Measures.

**Table 2 - Performance under the 2007-2011 PBR Bylaw**

<table>
<thead>
<tr>
<th>Year</th>
<th>Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>102.6</td>
</tr>
<tr>
<td>2008</td>
<td>103.3</td>
</tr>
<tr>
<td>2009</td>
<td>100.3</td>
</tr>
<tr>
<td>2010</td>
<td>102.8</td>
</tr>
</tbody>
</table>
System Reliability Index

The system reliability index includes the following components:

- **Water main break factor** compares the number of actual breaks in a year to a 10 year historical average.
- **Water main break duration factor** measures the percentage of water main breaks repaired within 24 hours from the time the water is shut off.
- **Planned interruption factor** measures the effectiveness of planned interruptions to minimize disruption of water service to customers. This factor measures the percentage of customers provided with 48 hours advance notice and whether the interruption exceeded the length of time indicated on the notice provided to customers.
- **Water pressure factor** measures the number of incidents per year where the water pressure is below 20 pounds per square inch (psi) for two or more consecutive 15-minute periods.
- **Water loss factor** measures the percentage of treated water that is unaccounted for within the waterworks system.

Overall, EWSI **surpassed its target for System Reliability** for the fourth consecutive year, achieving the maximum available 27.5 points compared to the target of 25 points. The most significant improvements in performance were reflected in the water main break and the water main break duration factors. See Appendix A for further details.

In 2010, distribution maintenance staff repaired 332 water main breaks - 89% of those breaks occurred on cast iron mains. In 2009, there were 669 water main breaks.

The number of water main breaks occurring in any given year is dependent on several uncontrollable factors including rapid changes in weather, temperature and soil moisture conditions. The significant reduction in main breaks during 2010 reflects the impact of a milder winter and the effectiveness of EWSI’s ongoing cast iron water main renewal program.

In 2010, EWSI initiated a formal review of the circumstances affecting every occurrence when the 24 hour repair time for a water main break was not achieved. Common trends were recorded which led to implementation of process improvements.
Specific changes were also made to processes to improve the water main break duration factor. Revised maintenance shift schedules were introduced to provide improved coverage and weekend supervision was added to support crews seven days a week.

As a result of those initiatives, EWSI only experienced nine breaks that exceeded 24 hours to repair during 2010 for a 96.8% performance rating, compared to the target of 93.6%.

**Initiatives to Improve the System Reliability Index**

It will be challenging to meet the water main break and water main break duration factors due to the impact of harsh winter conditions in early 2011. In particular, additional time was required to repair main breaks because of the combination of deeper frost, heavy snowfall, the City’s snow clearing priorities and water valves covered by windrows. EWSI has reviewed performance during the 2011 winter season and has presented an analysis of the impacts to the City’s Transportation Department as part of its Snow Removal Peer Review process.
Water Quality Index

This index is a summary of the percentage of Edmonton water quality tests that meet EWSI’s internal standards and regulatory measures. EWSI continues to meet these standards, earning the full 25.0 points available for this index.

During 2010, EWSI performed over 105,000 water quality tests, checking for 354 different substances to meet provincial standards and national guidelines. Of the 105,000 tests, 45,000 were specifically required to be performed to meet EWSI’s Water Quality Index.

99.7% of the tests met or surpassed the requirements, compared to the Water Quality Index standard of 99.6%.

Water quality is affected by on-going maintenance on the water distribution system. However these challenges were offset by the mildest spring run-off conditions in 2010 over the last five years. There was less turbidity, color, and odour in the river water than in previous years.

Monthly and annual water quality data for 2010 is available on EPCOR’s website (http://www.epcor.ca/en-ca/Customers/water-customers/water-quality-reports/Pages/default.aspx).
Customer Service Index

This index reflects the following components:

1. **Post service audit factor** measures customer satisfaction levels of those who rated their service experience with Water Dispatch personnel and/or field crews as “very satisfied” or “completely satisfied”.

2. **Response time factor** measures the time that elapses from when EWSI receives a customer call to when the field crew physically confirms a main break has occurred.

3. **Home sniffing factor** measures the percentage of volunteer community members who favorably assess the taste and odour of the drinking water during the spring run-off season.

In 2010, EWSI surpassed the target in all measures, with 21.3 points compared to the target of 20.0 points for the Customer Service Index. This is an improvement on 2009 performance (19.1 points), particularly on the water main break confirmation response time and home sniffing factors.

EWSI performed better than target for response time, despite changes to the safety policy requiring field crew staff to pull over before responding to a phone call, which adds an average of 2 to 3 minutes to the response time. The improved response times in 2010 were due to the reduced overall numbers of main breaks and fewer number of days with multiple main breaks. New shift schedules for Water Trouble staff were also implemented in 2009 to improve the coverage seven days per week, 24 hours per day.

During 2010, all cases where the response time exceeded 22 minutes were investigated to identify potential improvements in response. The learnings from this have been shared across all crews.

The home sniffing factor measures the effectiveness of the water treatment process in removing compounds in the raw water that cause musty and earthy odours, particularly during the spring run off season. The addition of carbon is used primarily to eliminate odours. In 2010, the satisfaction rating was the highest rating in the last five years and one of the highest in the last 10 years. One factor impacting the results is a change in the volunteer selection process for the home sniffing panel. An external firm was engaged to ensure a more representative demographic of city residents, moving from volunteers to a professionally selected panel. In addition, the mild spring run-off season likely had some impact on the improved rating.
Environmental Index

The Environment Index consists of:

1. **Emergency response training** measures the number of practice exercises undertaken in a year.
2. **Environmental Reporting** reflects the completeness and timeliness of incident reporting.
3. **Water conservation factor** reflects the average monthly water consumption per residential household.
4. **Vehicle fuel efficiency** measures the effectiveness of EWSI’s fuel usage based on the number of litres/100 kilometres used by the total vehicle fleet.

**EWSI was marginally below the Environment Index target for 2010**, earning 14.8 points of the available 15.0 points. All measures, with the exception of environment incident reporting, either met or surpassed the standards in 2010. See Appendix A for further details.

![The PBR Environmental Index contributes to the City of Edmonton’s measure of progress towards its 10-year strategic goal to “Preserve and Sustain Edmonton’s Environment”.

Initiatives to Improve the Environmental Index

1. The environment incident reporting measure fell below the standard due to one incident, which occurred because a sample was not taken following the wash down of the clarifier at the Rossdale Treatment Plant. As this incident was required to be reported to Alberta Environment under the Approval to Operate, it was considered significant under EPCOR’s severity categorization. Operating procedures have since been amended to ensure samples are taken on future wash downs of clarifiers.

2. A new Incident Management System was implemented across EPCOR in January 2010 which enables all incidents to be reported and tracked in one software application. Investigation into the root causes of incidents and identification of trends has improved with the introduction of this system.

3. EWSI has developed a targeted water conservation strategy. Information regarding this conservation strategy is attached as information to this report and is also available at www.epcor.ca.
Safety Index

EWSI did not meet its target for the Safety Index in 2010, achieving 14.2 points compared to the standard of 15.0 points.

The Safety Index measures performance of both Activities Based and Outcomes Based indicators:

- Activities Based or Leading indicators include the number of training and monitoring activities in four areas:
  - i) safety meetings
  - ii) completion of formal safe work plans
  - iii) first aid and emergency response training
  - iv) work site inspections and observations

- Outcomes Based or Lagging indicators include incident statistics in three areas:
  - i) lost time frequency rate
  - ii) injury frequency rate
  - iii) injury severity rate

As outlined in Appendix A, EWSI met or surpassed its targets for all of the four Activities Based safety indicators. The most significant improvement was the completion of formal safe work plans. During 2010, a review of the process for reporting safe work plans identified that when work was performed at a single physical location over multiple days individual daily safe work plans were not being properly documented and filed. As a result, the process for collating details of completed work plans was changed.

In 2010 EWSI surpassed its target for lost time frequency rate, but fell below its target for the injury frequency rate and for injury severity rate. The improvement in lost time frequency is reflected in performance around the operating units. EWSI's treatment plants reached five years without a lost time incident, before one occurred in October.

The injury frequency and severity indicators are calculated based upon the number of injuries that require medical aid and the number of days lost as a result of injury. These indicators vary from year to year depending on the number and nature of occurrences/incidents. EPCOR aims to reduce these indicators by promoting safe behaviours in order to minimize the risk of occurrence of severe incidents.
Initiatives to Improve the Safety Index

1. EPCOR introduced a new computer-based Incident Management System to assist in tracking health and safety incidents and to analyze occurrence patterns. We also introduced a new management process for review of all incidents for root cause analysis and identification of equipment, training and process changes required to reduce the risk of recurrence of injuries.

2. In 2010, EPCOR began implementation of a Health, Safety and Environmental Management System that will meet the standard of ISO 14001 and OSHAS 18001. The move to a new system will provide greater focus on ensuring procedures are regularly reviewed and that any changes to procedures are communicated to all employees. It is also anticipated that it will help to ensure that health and safety training is performed consistently across all areas, including regular retraining where procedures and business practices have changed.

3. In 2010, EPCOR formed a President’s Safety and Environment Council which involves monthly safety and environmental performance reviews by EPCOR senior leadership. This includes discussion of significant incidents and near misses, with employees sharing their experiences and suggestions for improvement. The purpose of the review is to learn from past events, provide recognition of safety accomplishments and to further promote a strong safety culture.

4. In 2011, EPCOR identified 10 Life-Saving Rules, which focus on a certain group of procedures associated with higher hazard activities. The aim is to encourage consistent behaviours in order to prevent incidents that could result in a serious injury or fatality.

EPCOR places the highest priority on supporting a safe work environment and culture. EPCOR is committed to achieving a zero injury culture and encourages staff awareness and engagement through communication and changes to safe work practices. EPCOR continues to link incentive pay to safety results as well as to monitor and assess all of the safety indicators to identify areas to improve training and communication. EWSI is reviewing its leading indicators to ensure the most effective indicators in affecting behaviour are used and will continue to implement new safety initiatives and tools to support zero injury workplace culture and ensure the well being of its employees.
Financial Results
Economic Overview

During 2010, Edmonton saw signs of a reversal of the economic slowdown experience during 2008 and 2009. In just 18 months, the economy grew by 3.2% in Gross Domestic Product, the labour force grew by 1% in 2010 and employment rose 2.3%. In spite of the economic growth, Edmonton’s inflation rate was 1% at the end of the year, below the national average of 2.5%

The impact of the economic recession and the increase in the labour force during 2010 has provided greater availability of labour and contractor resources, and the lower than forecast inflation has reduced some of the cost pressures in managing EWSI’s capital program and operations.

Edmonton’s population grew by 1.7% in 2010, and this was reflected in a modest increase in the number of water customers.

However, weather can cause significant variation in yearly residential water consumption which was down due to cooler summer weather and increased precipitation in 2010.

Weather can have a significant impact on EWSI’s operations and financial results. Melting snow, freeze/thaw cycles and seasonal precipitation events in the upstream watershed affect the quality of water entering our water treatment plants and the resulting costs of treatment.

The increased use of water efficient appliances and the adoption of conservation practices by consumers in recent years have contributed to an ongoing trend of declining water consumption per customer. A declining consumption per customer places upward pressure on water rates, as a significant portion of the costs to provide water services are fixed and generally rising due to inflation and other cost pressures.
Annual Water Consumption

In 2010, actual water consumption within the City was 89,550 million litres (ML) compared to the forecast of 94,182 ML. Total consumption in 2010 fell by 6% compared to 2009 and down 5% compared to the 2010 PBR Forecast, reflecting greater precipitation and the impact of cooler weather.

The graph below shows consumption by customer segment. Residential single family use continues to be about 50% of total annual demand.

Graph 1 - 2010 Annual Water Consumption by Customer Segment

In 2010, Edmonton reported one of its lowest water usage rates for single family residential customers with an average of 209 litres per capita per day (l/c/d) compared to the average of 266 l/c/d for Canadian residential customers living in large metered communities.

Edmonton has historically used less water than the Canadian average, partly due to the shorter summer, as well as our established metering program, rate setting methods and public education programs. Many Edmontonians are receptive to conservation initiatives such as EPCOR’s annual rain barrel sale, during which nearly 2,000 locally made rain barrels were sold at cost for a limited time.
Net Income

The 2010 actual net income was $21.8 million compared to the 2010 PBR forecast of $25.3 million, a decrease of $3.5 million. The decrease is primarily due to an increase in operating costs, partially offset by lower depreciation and interest expense and higher than forecast revenue.

Table 3 - Net Income

<table>
<thead>
<tr>
<th>($ millions)</th>
<th>2010 PBR Forecast</th>
<th>2010 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$134.7</td>
<td>$138.0</td>
</tr>
<tr>
<td>Less: Operating Costs</td>
<td>(57.8)</td>
<td>(69.8)</td>
</tr>
<tr>
<td>Less: Franchise Fees</td>
<td>(10.0)</td>
<td>(10.6)</td>
</tr>
<tr>
<td>Less: Depreciation</td>
<td>(17.5)</td>
<td>(15.5)</td>
</tr>
<tr>
<td>Less: Interest Expense</td>
<td>(24.1)</td>
<td>(20.3)</td>
</tr>
<tr>
<td>Net Income</td>
<td>$ 25.3</td>
<td>$ 21.8</td>
</tr>
</tbody>
</table>

In 2010, revenue of $138.0 million represents an increase of $3.3 million compared to the 2010 PBR forecast. The increase in revenue is attributable mainly to higher actual than forecasted inflation rates on annual water rate increases and higher than forecast revenue from services such as temporary water services, water permits and late payment penalties. Offsetting these increases is lower water sales revenue resulting from reduced customer water consumption.

Actual operating costs were $69.8 million compared to the PBR forecast of $57.8 million, an increase of $12.0 million. Although the general inflation rate in 2010 was below the PBR forecast, the impact of higher inflation rates in earlier periods of the current PBR term compared to the PBR forecast, combined with continued higher than forecast wage inflation rates, contributed in part to the cost increases. The impact of increased staffing levels in prior years to support succession planning and to support growth in the waterworks system has also resulted in increased labour costs.

Favourable spring run off conditions resulted in lower chemical costs compared to forecast, which slightly offset the impact of higher labour costs. Fewer water main breaks in 2010 also led to savings in excavation, paving and site restoration expenses.
In recent years, utilities such as EWSI have experienced increasingly rigorous financial controls, financial reporting, and corporate governance controls. These trends have resulted in increased costs associated with governance and transactional services provided by EPCOR’s central shared services group. The sale of EPCOR’s power generation assets and related operations to Capital Power Corporation in 2009 resulted in a smaller business base for EPCOR and a reduction in economies of scale related to EPCOR’s shared services costs allocated to EWSI in 2010.

To manage cost impacts, there has been a focus on streamlining corporately shared processes, updating systems and identifying opportunities for increased efficiencies and cost management. As EPCOR adds to its asset base through the acquisition of new businesses, there is the potential to benefit from economies of scale, which may lead to a future reduction in allocation of shared services costs to EWSI.

Actual depreciation and interest expense were lower than forecast by $2.0 million and $3.8 million, respectively, primarily due to lower than forecast depreciation on general plant assets and the impact of lower than forecast cost of debt (actual 6.12% vs. forecast 6.97%).

**Return on Equity**

The rate of return on equity (ROE) approved for the five-year term in the PBR plan (2007-2011) is 11.25%. Actual returns in any particular year can be higher or lower, depending on the actual operating and capital costs reported that year.

In 2010, the ROE was 8.94%, a decrease of 1.75% compared to 2009, as a result of lower net income compared to 2009. The decline in net income from 2009 reflects the reduction in revenue as a result of the lower consumption due mainly to the impact of cool, wet weather compared to 2009 and continuing conservation trends.

Over the first four years of the PBR from 2007 to 2010, the average ROE was 11.80%. However, it is expected the average ROE achieved over the five-year PBR term will be close to the approved rate of return of 11.25%.
Capital Spending

In 2010 EWSI invested $55.5 million in capital additions compared to the 2010 PBR forecast of $44.0 million primarily due to increased water main infrastructure investments.

EWSI’s capital program for 2010 included: upgrades and replacement of the waterworks infrastructure, as well as projects to support customer growth driven expansion of the distribution system and changes in regulatory requirements.

Major capital projects in 2010 include:

- **Water Main Renewals ($16.9 million)** – This is an annual program to replace an average of 10 kilometres of pipe per year. Cumulatively, EWSI has replaced 42% of its cast iron pipe over the past 25 years.

- **Private Development Transmission Mains ($5.8 million)** – This project extends and enhances the water mains network to meet the needs for water supply and fire protection in new development areas. In 2010, three major projects included the Chappelle subdivision extension along 28 Avenue SW, the Remand Centre extension under 127 Street and north of 167 Avenue as well as the Big Lake extension to connect the Big Lake residential development to the existing main under 184 Street.

- **Rossdale Dechlorination ($5.8 million)** – This is a multi-year project to meet future environmental regulation requirements to enhance the aquatic environment of the North Saskatchewan River by removing certain residual substances (solids and chlorine) at the water treatment plant prior to discharging them back into the river. Completion of this $12 million project is expected in 2011.

- **Private Development Construction Coordination Program ($1.4 million)** – This project provides a wide range of engineering services to effectively interface between the land development industry, the City and other utility agencies. This helps ensure the efficient expansion of the water supply system in Edmonton.

- **Tertiary Pressure Zone Transportation Utility Corridor (TUC) Crossing ($1.3 million)** – This is a multi-year project to provide improved fire flows, peak hour handling and system reliability through the construction of a transmission main crossing the TUC near 50 Street and linking two pressure zones. Construction will be completed in 2011.

- **Northwest Light Rail Transit (LRT) ($1.2 million)** – This is a project to construct and relocate water infrastructure which is in conflict with the Northwest LRT extension. The City is extending the LRT system to connect downtown Edmonton to the Northern Alberta Institute of Technology (NAIT). Additional costs are anticipated each year as LRT construction progresses throughout the City. $9.7 million has been spent on LRT relocations during this PBR period.
Rates Comparison with Surrounding Communities

Rates comparisons with other communities are difficult because the extent of potential cross subsidization is unknown. The 2010 comparative water rate information is based on surveys of Calgary, Vancouver, Winnipeg and as well as local communities within the Alberta Capital Region. The rate comparisons are based on the total cost to the customer and include fixed charges, consumption charges, plus any surcharges.

**Edmonton residential and commercial customers enjoy lower water rates compared to Calgary customers.**

The residential household water comparison graph below is based upon the average Edmonton residential household consumption of 17 cubic metres per month (m³/month). Edmonton has historically used less water than the Canadian average. In 2010, the Canadian average municipal residential household consumption was 19 m³/month.

Comparisons are not provided for the multi-residential customer class as many jurisdictions do not have a similar rate class.

**Graph 2 - Residential Water Monthly Bill Comparison**

EPCOR residential water customers’ rates are comparable with surrounding communities and other regions. It is important to note that Edmonton has a challenging water source compared to some other cities and must conduct additional treatment.
Vancouver reflects lower rates as it only needs to disinfect water with chlorine which results in lower water treatment costs. St. Albert also has a lower water bill due to the absence of a franchise fee such as the one EWSI pays to the City.

Overall, in the commercial water segment, EWSI’s charges are competitive compared to the other surveyed utilities as demonstrated in the graph below.

Comparisons are provided for four types of commercial customers:
- Extra small commercial business such as a store
- Small commercial business such as a car wash
- Medium commercial business such as a hotel, hospital or large shopping centre
- Large commercial customer such as a brewery or food processing plant

Table 4 - Commercial Water Bill Comparison

<table>
<thead>
<tr>
<th>Commercial Business</th>
<th>Extra Small</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Store</td>
<td>Car wash</td>
<td>Hotel / Shopping Centre</td>
<td>Brewery / Processing Plant</td>
</tr>
<tr>
<td>Average Monthly Consumption (m³)</td>
<td>125</td>
<td>325</td>
<td>6,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Vancouver</td>
<td>$97</td>
<td>$239</td>
<td>$4,274</td>
<td>$14,268</td>
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<tr>
<td>Edmonton (EPCOR)</td>
<td>$146</td>
<td>$355</td>
<td>$5,060</td>
<td>$14,558</td>
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<tr>
<td>Calgary</td>
<td>$175</td>
<td>$437</td>
<td>$5,926</td>
<td>$15,252</td>
</tr>
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<td>Winnipeg</td>
<td>$166</td>
<td>$415</td>
<td>$6,216</td>
<td>$19,578</td>
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<td>St. Albert</td>
<td>$152</td>
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<tr>
<td>Sturgeon County</td>
<td>$211</td>
<td>$579</td>
<td>$9,521</td>
<td>$31,081</td>
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<td>Sherwood Park</td>
<td>$222</td>
<td>$568</td>
<td>$10,192</td>
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<tr>
<td>Spruce Grove</td>
<td>$217</td>
<td>$556</td>
<td>$10,210</td>
<td>$34,458</td>
</tr>
</tbody>
</table>
Future Plans and Challenges

Investment in water infrastructure

EWSI plans to prudently invest an increased amount of capital into its water treatment and distribution infrastructure for the following reasons:

- modest increase in customer growth in 2011;
- increased housing starts;
- requirement to replace corroded cast iron mains in conjunction with the City’s neighbourhood rehabilitation initiative;
- impact of the weather on the maintenance required to repair breaks in older water mains; and
- EWSI’s proactive approach to improving environmental performance and to consistently produce water quality in excess of environmental standards.

The continuation of the accelerated water main renewal program in conjunction with the City’s Transportation department will increase capital infrastructure investment by $20 million in 2011. Recovery of the additional capital spending was approved as a Non-Routine Adjustment to the 2011 water rates. Future capital spending for 2012 and beyond for this program will be reflected in the 2012 - 2016 PBR renewal application.

Continue leadership in environmental initiatives

EWSI will continue its proactive approach to ensuring it surpasses current and proposed environmental standards, as well as meeting the needs of its stakeholders. EWSI is a founding member of the North Saskatchewan Watershed Alliance and is participating in a multi-stakeholder Integrated Management Plan for the North Saskatchewan River Basin.
EWSI has been recognized as a leader in the Alberta EnviroVista program for the sixth consecutive year. On June 9, 2011, EWSI was awarded EnviroVista Champion status. In conjunction with this increased status, EWSI is working to improve our environmental management system to earn ISO 14001 accreditation.

In 2011 EWSI is initiating the Rossdale hypochlorite capital project to reduce the risks associated with the transportation, handling and storage of chlorine. EWSI is continuing to work with Alberta Environment to develop plans to minimize the impact of treatment plant residuals on the environment.

EWSI is also responsive to efficiency initiatives that will shape future operations. The Province of Alberta, through the Alberta Water Council and its Water for Life strategy, is advocating conservation planning for all water-use sectors, including municipalities.

EWSI will continue its water wise public education initiatives. As part of this, EWSI has launched the Blue Bucket Crew micro website designed to promote water efficiency through water saving tips and “how-to” videos. Visit www.bluebucketcrew.ca

Declining water consumption

While the number of customers in the EWSI area is expected to increase as the city grows, average consumption per customer is declining at a greater rate than forecast due to the increased availability of water efficient appliances and conservation initiatives. A reduced consumption per customer has already been observed during 2011. Although this is beneficial from a social and environmental perspective, it exposes EWSI to greater risk in recovering its operational costs through its consumption based rates.

Achieve operational efficiencies and contain costs

The variability in weather conditions affecting spring run-off conditions and storm events impact raw water quality which leads to volatility in chemical costs. Under PBR, this volatility risk is wholly borne by EWSI. EWSI is continuing to focus on process improvements to enable us to manage operational costs.
EWSI actively monitors and analyzes the prices of natural gas and power, given the significance of these costs in the water treatment and distribution processes (11% of the annual operating forecast for 2010). EWSI is reviewing each pump station operation to identify ways of reducing energy costs as well as incorporating energy efficient solutions into capital projects that involve pump stations. A long term seven-year fixed price power contract was secured at the end of 2010, which provides greater cost stability.

Anticipated 2011 price increases for water treatment chemicals will be mitigated through strategies such as chemical use optimization. This includes using direct filtration, with minimal addition of chemicals, in the water treatment process during the winter months. Also, there will be continued efforts towards implementation of general cost reduction strategies.

**PBR renewal (2012 – 2016)**

The current term of EWSI’s PBR plan expires on March 31, 2012. EWSI has submitted its PBR renewal application and will be working with the City’s Administration, Utility Committee, and Council during 2011 to establish water rates and performance measures for another five-year term from April 1, 2012 to March 31, 2017. EWSI is proposing wastewater treatment operations be included in the PBR renewal.

For the PBR renewal, EWSI is proposing to replace the vehicle efficiency measure as a performance measure as this initiative will be formally transitioned into regular operations. Since implementing the program in 2007, EWSI has included fuel efficiency considerations in the selection of all new vehicles and field equipment, changes have been made to tools to reduce requirements to be fueled by vehicle idling, driver fuel sense training has been completed by all staff with EWSI driving permits and the training is now part of the standard training for new employees that operate fleet equipment. As a result of the implementation of the initiative in 2007, fuel usage has dropped to 29.39/100km from the original benchmark of 32.34 L/100km. EWSI’s fleet travels over 1.1 million km per year.

EWSI is recommending that the vehicle fuel efficiency measure be replaced with a watershed management activity measure.

⚠️ The PBR has offered stable and predictable rates which contribute to the City of Edmonton’s 10-year strategic goal of “Ensuring Edmonton’s Financial Stability”.


Conclusion

Overall, EWSI continues to demonstrate excellence in both its operating and financial performance for 2010, the fourth year of its five-year PBR term. EWSI expects continued strong performance in 2011 due to its commitment to ensure water quality and reliability standards are maintained or surpassed. In addition to its strong company focus on environment, safety will be an important area where the company will strive to meet or exceed its performance objectives.

Additional information relating to EWSI’s 2010 operating performance is provided in the “2010 Edmonton Water & Wastewater Performance Report” attached as information to this report. EPCOR’s Corporate Accountability Report also provides information on the company’s economic, environmental and social impacts within the community. See http://car.epcor.ca/Pages/default.aspx

Forward-looking Information

Certain information in this report is based on certain assumptions and analyses made by EPCOR in light of its experience and perception of historical trends, current conditions and expected future developments and other factors it believes are appropriate. The material factors and assumptions underlying this forward-looking information include, but are not limited to: (i) operation of EPCOR’s facilities; (ii) EPCOR’s assessment of the market and regulatory environment in which it operates; (iii) weather; (iv) availability and cost of labour and management resources; (v) performance of contractors and suppliers; (vi) availability and cost of financing; and (vii) the currently applicable tax laws will not change.

Whether actual results, performance or achievements will conform to EPCOR’s expectations and predictions is subject to a number of known and unknown risks and uncertainties which could cause actual results and experience to differ materially from EPCOR's expectations. The primary risks and uncertainties relate to, but are not limited to: (i) operation of EPCOR’s facilities; (ii) unanticipated maintenance and other expenditures; (iii) regulatory and government decisions including changes to environmental, financial reporting and tax legislation; (iv) weather and economic conditions; (v) competitive pressures; (vi) construction; (vii) availability and cost of financing; (viii) availability of labour and management resources; and (ix) performance of partners, contractors and suppliers in fulfilling their obligation.

Readers are cautioned not to place undue reliance on forward-looking statements as actual results could differ materially from the plans, expectations, estimates or intentions expressed in the forward-looking statements. Except as required by law, EPCOR disclaims any intention and assumes no obligation to update any forward-looking statement even if new information becomes available, as a result of future events or for any other reason.
## Appendix A - 2010 Water Utility Performance Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Benchmark Details</th>
<th>Weighting</th>
<th>Points Earned</th>
<th>Target 2010</th>
<th>Actual 2010</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System Reliability Index</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Main Break</td>
<td># breaks</td>
<td>5.0</td>
<td>7.4</td>
<td>630</td>
<td>332</td>
<td></td>
</tr>
<tr>
<td>Water Main Break Duration Factor</td>
<td>% fixed within 24 hours from time water shut off</td>
<td>5.0</td>
<td>5.2</td>
<td>93.6%</td>
<td>96.8%</td>
<td></td>
</tr>
<tr>
<td>Planned Interruption Factor</td>
<td>% compliance</td>
<td>5.0</td>
<td>5.3</td>
<td>95.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Water Pressure Factor</td>
<td># times below 20 PSI</td>
<td>5.0</td>
<td>5.6</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Water Loss Factor</td>
<td>%</td>
<td>5.0</td>
<td>6.7</td>
<td>4.9%</td>
<td>3.3%</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td><strong>Water Quality Index</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td>Customer Service Index</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Service Audit Factor</td>
<td>% satisfied</td>
<td>6.66</td>
<td>7.1</td>
<td>72.6%</td>
<td>78.1%</td>
<td></td>
</tr>
<tr>
<td>Response Time Factor</td>
<td>minutes to confirm breaks</td>
<td>6.67</td>
<td>7.3</td>
<td>22</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Home Sniffing Factor</td>
<td>% satisfaction</td>
<td>6.67</td>
<td>6.9</td>
<td>93.4%</td>
<td>96.5%</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20.0</td>
<td></td>
</tr>
<tr>
<td>Environmental Index</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Response Training</td>
<td># of exercises</td>
<td>3.75</td>
<td>4.5</td>
<td>3</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Completeness of Reporting</td>
<td>% target achieved</td>
<td>1.88</td>
<td>1.9</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Timeliness of Reporting</td>
<td>% target achieved</td>
<td>1.88</td>
<td>1.9</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Environment Incident Reporting</td>
<td># incidents</td>
<td>3.75</td>
<td>2.8</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Water Conservation</td>
<td>% target achieved</td>
<td>1.5</td>
<td>1.5</td>
<td>20.0%</td>
<td>19.20</td>
<td></td>
</tr>
<tr>
<td>Vehicle Fuel Efficiency</td>
<td>litres/100 km</td>
<td>2.25</td>
<td>2.2</td>
<td>29.43</td>
<td>29.39</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20.0</td>
<td></td>
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<tr>
<td>Safety Index</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety Meetings</td>
<td># meetings</td>
<td>1.50</td>
<td>1.5</td>
<td>40</td>
<td>40</td>
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<tr>
<td>Formal Safe Work Plans</td>
<td># completed</td>
<td>3.75</td>
<td>3.8</td>
<td>3,486</td>
<td>4,433</td>
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</tr>
<tr>
<td>First Aid Training</td>
<td>% of staff trained</td>
<td>3.00</td>
<td>3.0</td>
<td>33.0%</td>
<td>47.5%</td>
<td></td>
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<tr>
<td>Work Site Inspection/Observations</td>
<td># conducted</td>
<td>3.00</td>
<td>3.0</td>
<td>800</td>
<td>896</td>
<td></td>
</tr>
<tr>
<td>Lost Time Frequency Rate</td>
<td>frequency rate</td>
<td>0.75</td>
<td>0.9</td>
<td>0.59</td>
<td>0.51</td>
<td></td>
</tr>
<tr>
<td>Injury Frequency Rate</td>
<td>frequency rate</td>
<td>1.50</td>
<td>1.4</td>
<td>2.4</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>Injury Severity Rate</td>
<td>frequency rate</td>
<td>1.50</td>
<td>0.6</td>
<td>8.92</td>
<td>21.42</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15.0</td>
<td></td>
</tr>
<tr>
<td>Aggregate Points Earned (sum of all indices)</td>
<td></td>
<td></td>
<td></td>
<td>102.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:
- 1 Water Loss Factor target and actual performance reported above does not reflect a revised measurement methodology utilized for other reporting purposes. The methodology used to determine the standard performance measure in Waterworks Bylaw No. 12585, as amended, has been retained in calculating the actual performance to allow for comparability to the performance standard.
- 2 In accordance with Schedule 3 Section 3.0 Water System Service Quality of Waterworks Bylaw No. 12585, there is no water system quality penalty to be assessed as the points earned are above 100.
- 3 In accordance with Schedule 3.1 Section 3.0 Water System Service Quality of Waterworks Bylaw No. 12585, each index can collect up to 10% additional bonus points for performance above the standard. An additional 2.5 bonus points are available as the System Reliability Index has a maximum value of 25 base points.
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