



Background

The City of Penticton provides safe drinking water to nearly 35 000 residents and hundreds of thousands more visitors during the hot summer months. The water conservation program aims to reduce Peak Day as well as summer consumption with the target 2009 Peak Day of 43.00 ML and July/August Total Monthly Demands of 1050 ML each. The actual flow was 41.17ML Peak and 1072 ML/980ML/mth respectively representing the lowest Peak and Total July/Aug demand on record.

This year, an application for the OBWB grant was driven by a change in City of Penticton budgeting process. In 2009,

The goal of the Water Audit Ambassador Program is to pin point above average water consumption in commercial facilities, perform audits and encourage water conservation by providing cost effective solutions

budget for the water conservation student positions was eliminated despite the ongoing need to be water wise in the Okanagan Water Basin and Mayor Ashton's previous OBWB involvement.

Out of necessity comes innovation and the concept of a commercial audits pilot project was born. The goal of the Water Audit Ambassador program is to pin point above average water consumption in commercial facilities, perform audits and encourage water conservation by providing cost effective solutions. This mandate was driven by identifying that water conservation in the residential sector is nearing saturation and of nominal benefit over reaching out to large water users.

Goals and Objectives

A target of 50 water audits were to be performed based on an analysis of 2008 commercial water demand. Within these 50 facilities the following goals and objectives were identified:

- Reduce commercial consumption by 5% in the coming 12 month period.
- Increase the awareness and focus on consequences of silent leaks
- Promote consequences of direct and indirect excessive water uses and behaviours
- Identify and educate employees about their responsibility to be water wise

Action Plan

Fifty audits were to be performed between June 1 and Aug 28, 2009.

Though water consumption goal of 5%

reduction has also been benchmarked, meter readings occur but twice a year, Sept/Oct and May/June.

Therefore, the goal of this pilot project was to develop an action plan with modest water reduction.

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Upon completing the onsite audit, a report outlining solutions to reducing water waste including ROI based on an average annual rate increase of 13% was created. A total of 42 water audits were performed, not quite meeting the targeted 50. By the end of the project, most audits identified a silent leak in the previous twelve months. An equal number of audits unearthed existing leaks with faucets and 18L toilets being the most obvious culprits.

Information on the availability of the water audits was communicated live on GIANT FM as well as the WaterTalk newsletter. As this was a pilot project, the scope and scale were limited to a select few.

Follow up will occur in the coming months, to determine barriers to implementation and obtain feedback.

And finally, printed materials targeting employees are being explored for effectiveness. Such materials include stickers near sink faucets stating the importance of turning off the tap on our water basin.

Internal and External Barriers

A few barriers to completing the pilot project according to the action plan include lacking historical meter readings to identify trends. The lack of access to this information is due to the City upgrading its database. An additional barrier includes contacting facility owners.

As this project is in its infancy, the limited buy-in proved to impact the total targeted audits. In subsequent years, an introduction letter earlier in the season certainly increases efficiency. However,

despite these two shortcomings, it is obvious that historical water

readings will be readily available with the launch of our new software. It is also expected that

collaboration with the Meter Readers, will allow the ambassador access to a remote meter reader for accurate tracking of behaviour changes and equipment upgrades as associated with the audits.

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Internal and External Barriers *(continued)*

As for external barriers, the downturn in the economy impacted the interest in the program. Furthermore, it remains to be seen whether or not implementation will occur. A second barrier involves the official notification of grant success. This is critical, as in this case student selection occurred at a later period of the year.

The lessons learned from this pilot project include bridging the gap between the facility owner and the employees' water use. In one case the owner of a restaurant pleaded with the Water Ambassador and Program Coordinator to discuss water waste with her relative. She indicated that he would probably listen to a voice of authority.

As a deliverable, a final report has been created by Phil Harbeck, Water Audit Ambassador and is available for perusal.

And finally, this pilot project is deemed a success as new partnerships may be forged for 2010. The public/private partnership gears to collaborate by offering a wider gamut of audits. All three are expected to be housed under one roof, with the three parties sharing resources and costs. Though this is premature, thru the OBWB and HRSDC grants, the dialogue regarding Energy Audit Ambassadors is shaping up!

Conclusion

In 2009, budget for the water conservation student positions was eliminated spurring a need for 100% grant funding.

The goals of the Water Audit Ambassador Pilot Project were met in that all audited facilities benefited from education aimed to link the cause and effect of water waste particularly water leaks. By increasing awareness and providing solutions to both the owner and employees, it is expected a modest 5% water reduction to occur with follow up next spring. Furthermore, due to the grant funding an action plan was developed to increase success rate and share with other municipalities who may be interested in following City of Penticton's lead. This deliverable provides methodology, templates and more.

Next year, efficiencies will be had in that the learning curve will be much shorter as well as feedback from facility owners on their motivation for implementation will allow for more targeted audits and reports.