

**MAYOR'S
CAUCUS
2009**

Water Conservation & Efficiency

An Update with Highlights of the Draft Plan

June 10 – 12, 2009

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Overview

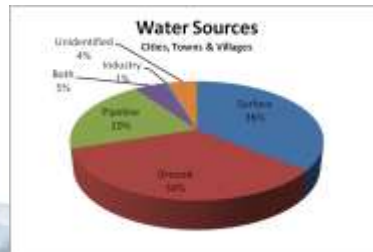
- Background
- AUMA Water CEP Plan
 - Short-Term Targets
 - Water Use Reporting
 - Leak Management
 - Conservation Planning
 - Low Flow Fixtures
 - Evaluating Progress
 - Recommendations
 - AUMA Actions and Supports
 - Microsite
 - Future Events
- Questions

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Background

- GOA Water for Life Strategy
- AUMA Strategic Objective
- Identified as a priority at 2008 Convention



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Background

- AUMA Draft Plan
 - Developed with input from experts, workshop attendees and AUMA committees
 - Reviewed by members and stakeholders in May
 - Most relevant to municipalities with water or wastewater treatment and/or distribution systems



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Short-Term Targets

- Confusion about wording of targets in Draft Plan: *“urban municipalities representing 80% of municipal water allocations”*
 - Allocations not representative of actual use
 - Confusing terminology
 - Doesn't promote participation from smaller municipalities
- Sustainability & Environment Committee and AUMA staff discussed alternatives and came up with...

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Short-Term Targets

- Water Use Reporting → everyone
 - Conservation Planning
 - Leak Management
 - Water Efficient Fixtures
- 100% with pop >10,000
75% with pop 2,500 to 10,000
50% with pop < 2,500



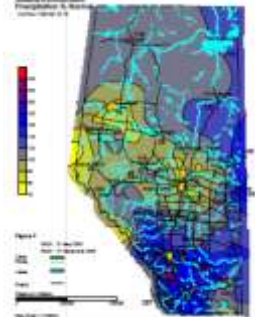
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Short-Term Target 1

- Water Use Reporting
 - All urban municipalities will report water use data through Alberta Environment's electronic Water Use Reporting (WUR) System by 2010



2005 Precipitation % Normals
<http://www.environment.alberta.ca/forecasting/WaterSupply/oct2005/precfig3.pdf>

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Short-Term Target 1

Water Use Reporting

- Current understanding of municipal water use is deficient
- Measuring and reporting water use will help us set long-term targets for water use and monitor the impact of CEP related actions in order to make improvements as necessary

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Short-Term Target 1

Water Use Reporting

- **Reporting:** As the WUR data is accessible to the public, AUMA will use this data to track and report on progress in regard to this target
- **Support:** AUMA will work with Alberta Environment to ensure that the WUR System accurately portrays municipal water use data and to follow-up with communities in order to encourage reporting



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Short-Term Target 2

- **CEP Planning**
 - Develop Conservation, Efficiency and Productivity Plans by December 31, 2011
 - 100% of urban municipalities with pop > 10,000
 - 75% of urban municipalities with pop 2500-10,000
 - 50% of urban municipalities with pop < 2500



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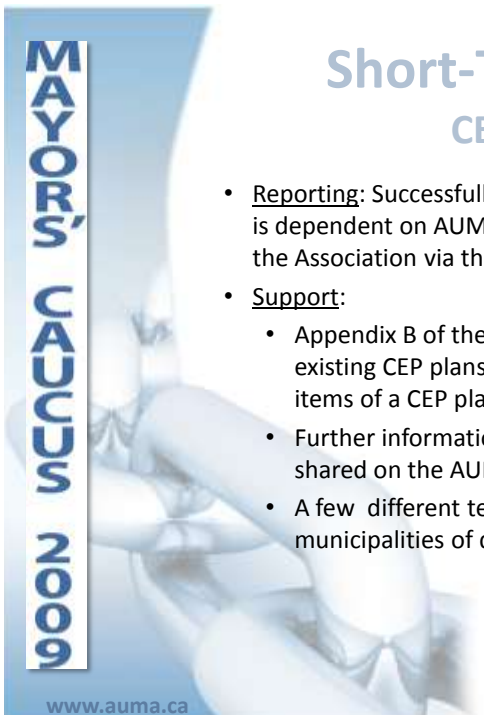
Short-Term Target 2

CEP Planning

- Background: A plan provides a framework for future water management decisions and programs
- A Plan might include:
 - Introduction - Context, rationale for developing a plan
 - Water Profile - Municipality, watershed, infrastructure and use
 - Water Demand Forecasting - What considerations and limitations?
 - Targets towards a sustainable water future
 - Measures and Tools – initiatives to address AUMA CEP Plan short-term target, others
 - Selecting Measures and Tools - Evaluating what works best in your municipality
 - Implementation

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Short-Term Target 2

CEP Planning

- Reporting: Successfully tracking progress towards this target is dependent on AUMA members sharing their plans with the Association via the AUMA Water microsite.
- Support:
 - Appendix B of the Draft CEP report includes a listing of existing CEP plans and a discussion on some of the main items of a CEP plan
 - Further information and planning templates will be shared on the AUMA Water microsite
 - A few different templates may be provided to assist municipalities of different size and circumstance

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Short-Term Target 2 CEP Planning

Table A1: List of Municipal Water CEP Plans

Municipality	Plan Name	Weblink
Calgary	Water Efficiency Plan, 30 in 30 by 2033	http://www.calgary.ca/directors/21/water_services/conservation/planning/water_efficiency_plan.pdf
Canmore	Water Demand Management Plan	http://www.canmore.ca/component/option/com_content/download/170-water-management-action-plan-.html
Cochrane	Water Conservation Strategy 2008-2009	http://www.cochrane.ca/municipal/cochrane/cochrane-website.nsf/41E9c73181E4046A5-TCB8725794803EAF6A7?file/Water%20Conservation%20Strategy%202008.pdf
Edmonton	Water Strategy (section 10 of the Environmental Strategic Plan)	http://webos.edmonton.ca/Environment/ESP/2106_ESP.pdf
Grande Prairie	Water Conservation: 2008 Water Conservation Measures for Implementation	not yet available on-line
Olds	Water Conservation Strategy: Policy Statement	http://www.olds.ca/policies/watcons.pdf
Okotoks	Water Management Plan	http://www.okotoks.ca/data/1/oc_docs/134_WMPlanApr1009.pdf
Red Deer	Water Conservation Strategy	http://www.reddeer.ca/96/rd/or/96/9871867-7699-4f90-8F96-4703E2C7DC6A/0/WaterConservationStrategyofthetwob.pdf

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Short-Term Target 2 CEP Planning



http://www.poliswaterproject.org/sites/default/files/Water_Conservation_Planning_Guide_v1.0.pdf

- AUMA looking at adapting Water Conservation Planning Guide developed for British Columbia Communities into a template for Alberta
 - Developed by POLIS Project for Ecological Governance at University Of Victoria
 - Considers watersheds
 - Takes an integrated approach
 - POLIS planning on a national guidebook

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Short-Term Target 3

- Infrastructure Leakage
 - Urban municipalities will estimate their Infrastructure Leakage Index (ILI) and identify ways to reduce leaks by December 31, 2011.
 - 100% of urban municipalities with pop > 10,000
 - 75% of urban municipalities with pop 2,500-10,000
 - 50% of urban municipalities with pop < 2,500



<http://www.afurialwater.com/services/images/Leak-0707-6.jpg>

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Short-Term Target 3

Infrastructure Leakage

- Background: This area received the most interest among members at the AUMA Municipal Water Conservation Workshop. This is likely for a number of reasons including:
 - by calculating an ILI, a municipality is able to identify to what degree there is a leakage problem and areas where leak detection can be improved
 - an estimate of ILI is relatively easy and inexpensive to obtain. The software is available for free from the American Water Works Association Website, www.awwa.org
 - detailed data is not essential for an initial estimate, and
 - by taking care of municipal infrastructure first, municipalities are able to lead by example and get better buy in from residential, commercial, industrial and institutional water users

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Short-Term Target 3 Infrastructure Leakage

- Reporting of interim numbers will begin December 2009 through the AUMA microsite
- Support: Appendix C of the Draft report includes some background information on ILI and AUMA's Water Microsite will link to the software available from the AWWA and feature examples from Alberta municipalities

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Short-Term Target 3 Infrastructure Leakage

- AWWA Website where the software can be downloaded:
<http://www.awwa.org/Resources/WaterLossControl.cfm?ItemNumber=48511&navItemNumber=48158>



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Short-Term Target 4



http://i.ehow.com/images/GlobalPhoto/Articles/2208907/energyshowerhead_Full.jpg

- Water Efficient Fixtures
- Urban municipalities will implement incentives and/or disincentives of their own choosing to increase the uptake of water efficient fixtures and technologies by December 2011
 - 100% of urban municipalities with pop > 10,000
 - 75% of urban municipalities with pop 2500-10,000
 - 50% of urban municipalities with pop < 2500

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Short-Term Target 4

Efficient Fixtures

- Background:
 - In the home, toilet flushing is typically the largest contributor to indoor water use
 - Rebates and bylaws can be used to encourage people to replace larger toilets with newer 6 litre and dual flush toilets
 - Other opportunities for reducing waste include:
 - reducing "once through cooling" in industrial applications
 - water efficient pre-rinse spray valves in commercial kitchens



<http://www.energytar.gov/ia/business/healthcare/images/water9.jpg>

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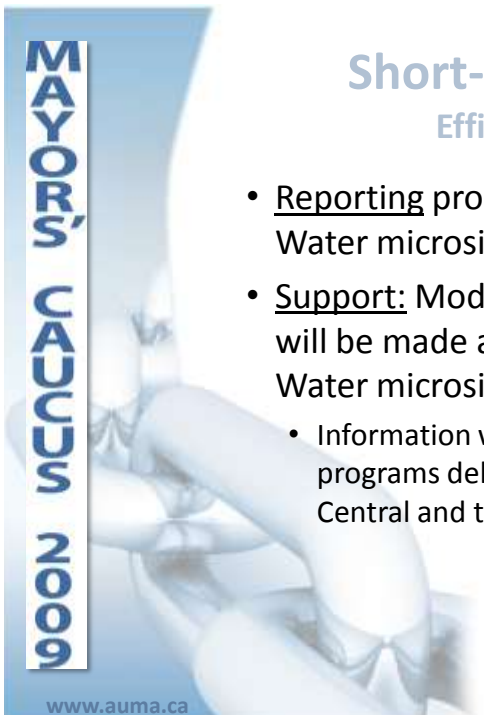
Short-Term Target 4

Efficient Fixtures

- A range of incentives and disincentives can be used by municipalities to increase the uptake of water efficient fixtures and technologies, including:
 - Amending existing bylaws or creating new bylaws,
 - Providing rebates for water efficient fixtures (this is a labour intensive activity and some municipalities have partnered with Climate Change Central to defer that impact)
 - Providing or installing water efficient fixtures,
 - Educational campaigns (alone or in support other initiatives),
 - Caveats registered on the property for new homes,
 - Building permit rebate where the developer needs to demonstrate best water practices are working in order to get money back.

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Short-Term Target 4

Efficient Fixtures

- Reporting progress through the AUMA Water microsite beginning in 2009.
- Support: Model bylaws and templates will be made available via the AUMA Water microsite.
 - Information will also be provided on programs delivered by Climate Change Central and the Government of Canada.

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Government of Canada
Home Renovation Tax
Credit →

Short-Term Target 4 Efficient Fixtures

Examples of HRTC Eligible and Ineligible Expenditures

Eligible

- Renovating a kitchen, bathroom, or basement
- New carpet or hardwood floors
- Building an addition, deck, fence or retaining wall
- A new furnace or water heater
- Painting the interior or exterior of a house
- Resurfacing a driveway
- Laying new sod

IMPORTANT NOTICE
August 13, 2008

Attention: Mayors, Councillors & CAO's

C3 Invites Municipalities to join in Promoting Energy and Water Savings

Climate Change Central (C3) is a public-private partnership promoting simple solutions to global climate change and its impacts. C3 is currently planning a number of new energy efficiency rebate programs for Alberta customers. The proposed programs include rebates for ENERGY STAR front-loading clothes washer and space heating systems in addition to an incentive for home energy assessments (from EcoEnergy Retrofit for Homes approved contractors).

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Evaluating Progress

- Report progress annually
 - AUMA Annual Report
 - AUMA Convention
 - Update to Alberta Water Council

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Recommendations for Municipalities


- Commit to the four water CEP targets
 - AUMA will provide a model motion that can be passed by council.
- Report progress on the four water CEP targets each April
- Work with AUMA and AENV to ensure WUR data is meaningful and accurately reflects municipal water usage
- Engage in dialogue about water CEP successes and challenges with colleagues across the province

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Recommendations for Government

- Alberta Environment
 - Continue to support AUMA/AENV Protocol of Cooperation
 - Coordinate with AUMA and member municipalities to ensure that water use reporting system data is meaningful and accurately reflects municipal water usage,
 - Supply municipal water use return data to AUMA every two years, commencing in 2011,
 - Continue to support to municipalities with drinking water operations by providing educational and technical resources.
- Alberta Transportation
 - Continue grant support for municipal water infrastructure,
 - Use provincial grants to incent CEP, as identified in the Alberta Water Council's Recommendations for Water Conservation, Efficiency and Productivity Sector Planning (2008).

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AUMA Actions and Supports

- Communications
 - Updates via Weekly Digest and Small Communities Newsletter
 - Use the weekly digest and AUMA events to get feedback from members on the support AUMA and Alberta Environment are providing . Make improvements as necessary and appropriate
 - Provide updates on targets to other orders of government and the Alberta Water Council


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AUMA Support: Microsite

- <http://water.auma.ca>
- Launches June 10, 2009
- Features
 - Highlights of the CEP Plan
 - Short-Term Targets
 - Tools and Resources
 - Forum
 - Discuss challenges, successes and ask questions of your peers



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AUMA Support: Events

- 2nd Water Workshop
 - Thursday, October 1, 2009
 - Calgary (hotel TBA)
 - Topics based on targets and how to achieve them
 - Similar format to 2008
 - Presentations and group discussions
 - Take aways

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Questions



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