

Reclaimed Water for Industrial, Commercial, Agricultural and Oil and Gas Applications

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Dawson Creek

Where are we now?

- Current Population - 11,700 (2006 Census)
 - Includes Pouce Coupe
 - 2.2% growth rate (2006 Census)
- Bulk water sales (Industrial and Commercial)
 - Increase of 459% over the last 5 years



Dawson Creek

Where are we headed?

- If Oil & Gas exploration increases as expected
 - Potential volume of water expected to increase 150% between 2010 and 2020
 - Investment required for water infrastructure
 - Reservoirs - \$25.5 Million
 - WTP upgrades - \$10 Million
 - New water source - \$60 Million
 - O&M Costs - \$1.2 Million
 - City taxes are likely to be affected to ensure finances are available to fund required infrastructure



Dawson Creek

Where the City has decided they want to be

- Alternative water source for Industrial, Commercial, Agricultural and Oil and Gas needs.
 - Results in protection of City's ONLY water source
 - Sustainability
 - Aligns with City's long term goals
 - Aligns with Provincial *Living Water Smart* Campaign
 - Decrease in immediate capital infrastructure costs due to decrease in demand on the water system



Reclaimed Water – What is it?

- Current treatment facility regulated by MoE.
- Additional treatment processes will be added to the existing facility to create high quality Reclaimed water
- Reclaimed water and the processes will also be regulated by MoE.

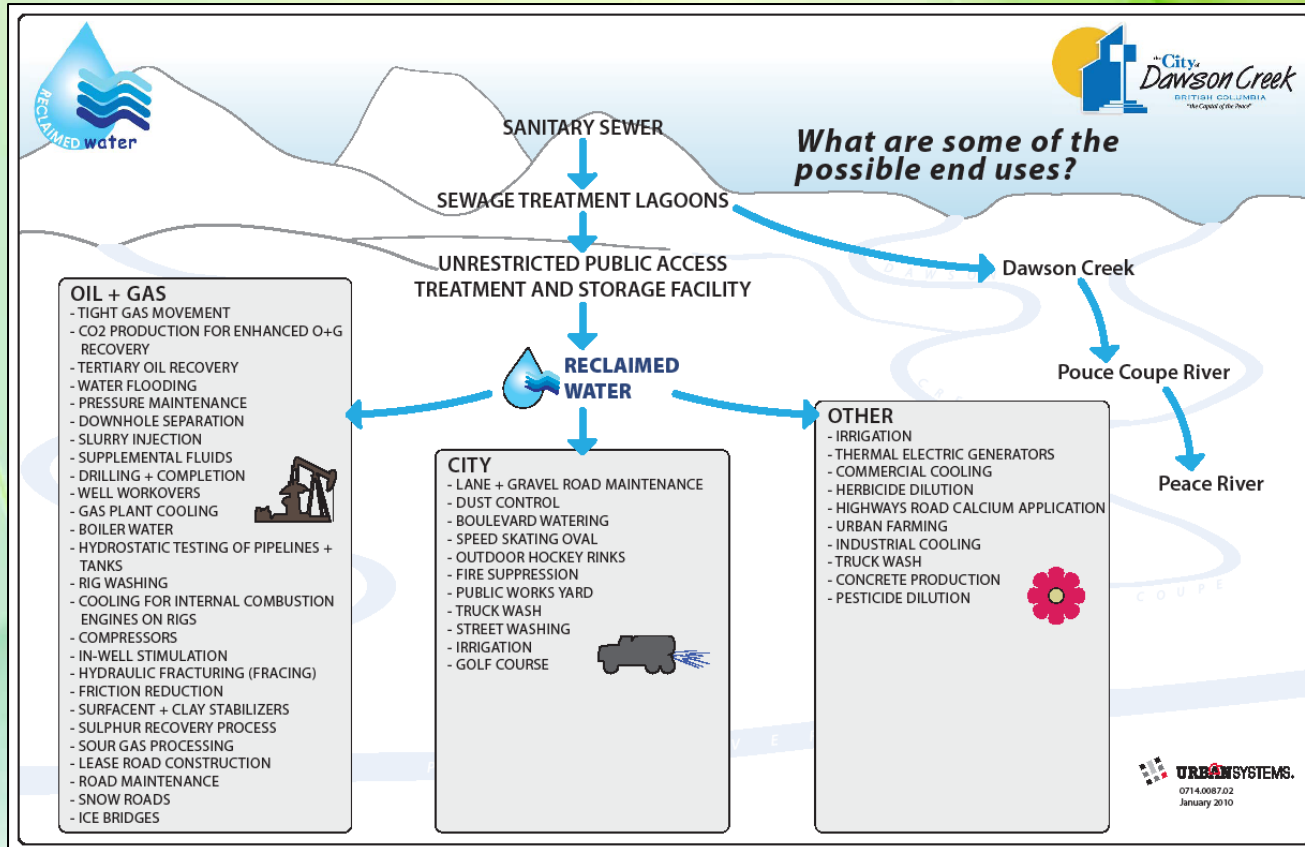


Reclaimed Water – Details

- Proposed Location of Treatment Facility
 - Adjacent to the existing Wastewater Treatment Facility
- Anticipated Water Quality – As set out by MoE
 - Unrestricted Public Access
 - Safe for human handling, however not safe for human consumption (ie: safe for public to access the land irrigated with it, and for food crops, however not suitable to drink)
 - Highest level of treatment available for reclaimed water
- City anticipates using this water for municipal uses including dust control and irrigation in the future
- Once online, bulk potable water will be unavailable for industrial applications
- Anticipate reclaimed water to be most cost effective alternative for industrial applications compared to potable water



Possible Uses of Reclaimed Water near Dawson Creek



Anticipated Project Cost

- Capital costs –\$8 Million to \$11 Million
- Annual Operation and Maintenance costs
 - Approximately \$150,000/year
- City looking for investment from private sector to fund the majority of the capital cost of this project



Project Background

- **Feasibility Study – 2008 - Effluent Re-Use in Oil and Gas Industry**
 - Studied the project feasibility in the Dawson Creek area and identified the potential uses and future volumes
- **Feasibility Study – 2009 -Effluent Water Re-Use Process Feasibility and Selection**
 - Studied different levels of water quality and identified possible treatment options and associated capital costs
- **Lawlist Triggers – Ongoing**
 - Identification and consultation with stakeholders regarding various environmental aspects of this project (including Northern Health Authority, MoE, Federal Government, etc.)
- **Industry Consultation – 2009**
 - Consultation with Oil and Gas companies in the Dawson Creek area to determine industry interest, anticipated future water volume requirements and required water quality for industrial processes
- **Industrial Information Session – January 2010**
 - Information Session that outlined project status and next steps as well as provided opportunity for feedback and questions



Schedule & Timelines

- February/March 2010 – Request for Proposals from Industry and the private sector
- March 2010 – City Council awards project to successful proponent
- Spring Summer 2010 - Detailed design and permit approvals
- 2011 – Anticipated Construction Completion



Next Steps

- Request for Proposals
 - Will identify the interested parties - confidential
 - Required prior to moving to detailed design
 - Will outline the following:
 - Available flow, flow quality, anticipated project cost, schedule and timeline
 - Will require the following from interested parties:
 - Required volume of flow, anticipated uses, financial contribution for requested volume, cash flow schedule and innovative partnering ideas



How you can help!

- The City of Dawson Creek is encouraging your feedback on this project
 - Team members will be available after presentations to address any questions you may have
- Please ask questions to ensure you are informed.



Thank you for your time

**Any
Questions??**

**Presentation will be available on the City's website:
www.dawsoncreek.ca**

