



SURE WATER Dawson Creek

Ensuring our future water supply

**Important
survey
inside!**

Let's continue the conversation about the future of our water supply!

May 2014

Join us as we continue the conversation about the future of our water supply! As outlined in this newsletter, the campaign runs from now until the end of May and will:

- Recap and revisit last year's Phase 1 information and outcomes
- Present updated information about population projections and the Bearhole Lake control weir
- Outline funding scenarios and taxpayer impacts for the pipeline option
- Identify public support for the pipeline option.

LOOKING BACK...

Last spring the City of Dawson Creek launched Phase 1 of the SURE WATER campaign to inform and engage the public in discussion about water security in general, and four water supply options in particular. Options and their estimated capital costs included:

- Upgrading the existing water system (\$16M)
- Building a new raw-water reservoir (\$22M)
- Tapping into groundwater aquifers (cost unknown)
- Building a pipeline to the Peace or Murray River (\$57M).

Through extensive consultation it became clear that more than two-thirds of residents preferred the pipeline option. Residents also showed their support for increased public education about water conservation, and their opposition to the use of fresh water for industrial purposes such as natural gas fracking. In response, the City:

- Revised its water conservation bylaw to prohibit the use of water for fracking during periods of drought
- Introduced a policy that directs future industrial uses, such as fracking, to use reclaimed water from the Dawson Creek Reclamation Facility, and that also prohibits private truck fill stations from connecting to the City's water system if they aren't already licensed to do so.

Council also directed staff to prepare a *Water Pipeline Funding Analysis* that explored \$55M, \$75M, and \$100M funding scenarios and related taxpayer impacts for a pipeline.

Read on for details, and then complete and return the enclosed survey (or the online version at www.dawsoncreek.ca/water) before May 30th.

COMMUNITY WATER SECURITY FORUM

Join us as we continue the conversation about the future of our water supply!

Thursday, May 8th

Encana Events Centre
#1-300 Hwy 2, Dawson Creek

Open House at 5pm
(View displays and talk to councillors and staff)

Presentation at 7pm
(Followed by a Q&A)

FOR MORE INFORMATION CONTACT:

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LOOK INSIDE...

- New info about growth and drought resiliency
- Pipeline funding scenarios and potential taxpayer impacts
- Info about how you can share your thoughts

Recent monitoring on Bearhole Lake shows that the control weir (dam) has greater water storage and/or refill/recharge capacity than previously thought. The existing system, therefore, could meet our water supply needs for longer than anticipated.

LOOKING DEEPER...

What follows is a summary of questions and answers outlined in the *Water Pipeline Funding Analysis*. Please note that the dollar figures are based on the best information available today, and do not reflect future variables such as inflation and interest rates. For more detailed information, see the complete analysis and/or the SURE WATER Phase 2 Frequently Asked Questions on the Dawson Creek website at www.dawsoncreek.ca/water.

The \$55M scenario is used throughout the text in this newsletter as it is closest to the pipeline design and construction cost proposed by supporters during Phase 1. Information about funding impacts for the \$75M and \$100M options is presented in the charts.

DOES THE CITY HAVE THE MONEY NOW?

The City does not have the money now to fund the design and construction of a new pipeline, whatever the cost. The City's current capital budget of \$21.4M is being used to pay for upgrades to buildings, equipment, and infrastructure that support City-provided services.

CAN THE CITY SAVE THE MONEY?

Yes, the City would first determine how much money it needs for a pipeline and then save annually to meet those needs. The amount required would depend on how much money could be raised from other sources (e.g., senior government funding and/or public-private partnerships), and when Council might proceed with the project.

There are four ways the City could save money for a pipeline: by cutting services, introducing a special tax, increasing water charges, and/or taxing growth.

CUTTING SERVICES: As shown in Figure 1, if the City cut its operating budget by 5 percent, \$1.7M could be saved annually and put into a reserve. Using this approach would take about 32 years to save \$55M, and would require extensive and potentially difficult discussions regarding what services and/or programs would be cut.

INTRODUCING A SPECIAL TAX: As shown in Figure 2, Council could hold services at present levels and, instead, save money by

introducing a special annual tax. Again, the City would have to determine how much to save each year. Given the current tax model, an annual tax levy per household of \$1.04/\$1,000 of assessed value (i.e., \$312/year for a \$300,000 home), combined with a commercial levy of \$3.46, would be needed over 20 years to raise \$55M.

Saving Money Annually by Cutting Services in the Operating Budget	
\$55M	5% = \$1.7M = 32 years 10% = \$3.5M = 16 years 20% = \$7M = 8 years
\$75M	5% = \$1.7M = 44 years 10% = \$3.5M = 21 years 20% = \$7M = 11 years
\$100M	5% = \$1.7M = 59 years 10% = \$3.5M = 29 years 20% = \$7M = 14 years

Figure 1: Save by Cutting Services

INCREASING WATER CHARGES: The City provides water to about 5,000 connections. Users pay a 'variable water charge' based on how much they use, which helps cover system operating costs. Currently, this charge is \$1.68/cubic metre for potable (drinking) water and \$1.25/cubic metre for non-potable water.

Each connection also pays a 'water infrastructure charge' based on connection type and meter size. This revenue is used to cover water-

Saving Money Annually Introducing a Special Tax Levy	
\$55M	10 years @ \$5.5M/year <i>Residential tax levy: \$2.07/year/\$1,000 assessed value</i> <i>Commercial tax levy: \$6.92/year/\$1,000 assessed value</i> 20 years @ \$2.75M/year <i>Residential tax levy: \$1.04/year/\$1,000 assessed value</i> <i>Commercial tax levy: \$3.46/year/\$1,000 assessed value</i>
\$75M	10 years @ \$7.5M/year <i>Residential tax levy: \$2.82/year/\$1,000 assessed value</i> <i>Commercial tax levy: \$9.44/year/\$1,000 assessed value</i> 20 years @ \$3.75M/year <i>Residential tax levy: \$1.41/year/\$1,000 assessed value</i> <i>Commercial tax levy: \$4.72/year/\$1,000 assessed value</i>
\$100M	\$100M 10 years @ \$10M/year <i>Residential tax levy: \$3.77/year/\$1,000 assessed value</i> <i>Commercial tax levy: \$12.59/year/\$1,000 assessed value</i> 20 years @\$5M/year <i>Residential tax levy: \$1.88/year/\$1,000 assessed value</i> <i>Commercial tax levy: \$6.29/year/\$1,000 assessed value</i>

Figure 2: Save by Introducing a Special Tax

related capital upgrade and/or borrowing costs. In 2013, for example, the average homeowner paid a flat fee of \$222 to help maintain the water system. The resulting \$1.5M raised is being used to pay for existing water-related commitments.

As shown in Figure 3, water charges would have to be increased substantially to support the pipeline option. To save \$55M over 20 years, for example, the annual infrastructure charge for a typical household connection would increase from \$222 to \$393, not including water-use charges.

Saving Money Annually by Increasing Water Infrastructure Charges (Based on a typical 5/8" residential connection)	
\$55M	10 years @ \$5.5M/year <i>From \$222/year today to \$786/year</i> 20 years @ \$2.75M/year <i>From \$222/year today to \$393/year</i>
\$75M	10 years @ \$7.5M/year <i>From \$222/year today to \$1,072/year</i> 20 years @ \$3.75M/year <i>From \$222/year today to \$536/year</i>
\$100M	10 years @ \$10M/year <i>From \$222/year today to \$1,439/year</i> 20 years @\$5M/year <i>From \$222/year today to \$715/year</i>

Figure 3: Save by Increasing Water Infrastructure Charges

TAXING GROWTH: Some residents believe that a pipeline is needed to accommodate growth (e.g., the increased number of taxable properties, homes, and businesses), so exploring how much growth

is needed to raise funds without affecting the current budget model provides useful information.

The average annual growth in residential assessment values from 1999 to 2013 was 10.38 percent. The average annual growth in commercial assessment values during the same period was 13.76 percent. As shown in Figure 4, these percentages, and the resulting revenues, are significantly lower than those needed to pay for costly upgrades. It is estimated that a growth rate of 20-36 percent over 20 years would be needed to cover the cost of a pipeline through growth alone.

Saving Money Annually by Taxing Growth	
\$55M	10 years @ \$5.5M/year 40% increase in current residential and commercial assessments needed
	20 years @ \$2.75M/year 20% increase in current residential and commercial assessments needed
\$75M	10 years @ \$7.5M/year 55% increase in current residential and commercial assessments needed
	20 years @ \$3.75M/year 27% increase in current residential and commercial assessments needed
\$100M	10 years @ \$10M/year 73% increase in current residential and commercial assessments needed
	20 years @ \$5M/year 36% increase in current residential and commercial assessments needed

Figure 4: Save by Taxing Growth

WHAT ABOUT THE CITY'S WATER FUND?

Local governments typically use three separate funds: one for general use, the others for sewer and water. Each fund has an operating budget and a capital budget for infrastructure upgrades.

The capital portion of the City's water fund is supported by water infrastructure charges paid by all residential, commercial, and industrial customers. While residential and commercial contributions will likely remain stable or grow, new fracking regulations and technologies make it unlikely that future industrial contributions will be secure.

The 2013 water fund budget was \$5.5M, including \$1.9M for annual capital and reserves (a very small portion of the total needed to build a pipeline), \$2.5M for operations, and \$1.1M for annual debt payments.

The outstanding water fund debt is \$8M, with annual payments of \$1.1M. The current debt will be retired in 2027. Council could choose to defer any borrowing for new infrastructure until the debt from previous upgrades is paid off.

Council would also have to consider the increased costs associated with operating a pipeline. Annual water pumping costs, for example, could increase from the \$125,000/year paid today, to a projected cost of between \$1.1M and \$1.7M annually.

CAN THE CITY BORROW THE MONEY?

Potentially yes, but it is a less flexible and more binding option than saving. Undertaken when savings or other funding sources are not available, or in combination with other sources, borrowing is also the

most costly option due to associated interest rates.

In 2013, the City owed \$29M in outstanding debt, including general fund debt of \$19M (65.5 percent of the total), sewer fund debt of \$475,000 (6.1 percent), and water fund debt of \$8.2M (28.4 percent). The annual principal and interest payments on this debt are about \$4M.

In 2013, Council committed to borrowing another \$11.29M for road upgrades, the Loran Reservoir, and the sewer trunk line. This

Borrowing the Money	
Current General Fund Debt = \$19M Current Water Fund Debt = \$8.2M Annual General Debt Payment: \$2.7M Annual Water Debt Payment: \$1.1M	
\$55M	Debt payment over 20 years \$4.6M/year with \$37M in interest charges
\$75M	Debt payment over 20 years \$6.6M/year with \$50M in interest
\$100M	Debt payment over 20 years \$8.4M/year with \$67M in interest

Figure 5: Borrowing the Money

brings total debt to \$40M, with annual principal and interest payments of \$5.2M.

As shown in Figure 5, these existing debts prohibit the City from borrowing all the money needed for a pipeline. For more information review the SURE WATER FAQs at www.dawsoncreek.ca/water.

WHAT ABOUT OTHER SOURCES OF FUNDING?

Cost-sharing with other levels of government and public-private partnerships are potential sources of funding.

SENIOR GOVERNMENT FUNDING: Other levels of government often support local government projects. The City has successfully shared costs with senior government for the Multiplex, the Calvin Kruk Arts Centre, and other water projects. Due to the slower economy, however, federal and provincial governments are giving less money to fewer projects. For this reason, staff didn't include a cost analysis for senior government funding in its report. However, if Council chooses to proceed with water supply upgrades, sources of senior government funding would be investigated at that time.

PUBLIC-PRIVATE PARTNERSHIPS: While these types of arrangements are often complex to administer and can cause asset ownership and/or management challenges, the City's partnership with Shell Canada for the design and construction of the Water Reclamation Facility is unfolding well. The City owns and operates the facility. In exchange for \$18.3M in funding, Shell receives about 75 percent of the 4,500 cu/m produced daily, which it uses for natural gas fracking.

A similar arrangement for the pipeline would require an arrangement agreeable to both the City and a private-sector partner.

WHAT ABOUT OTHER FUNDING MODELS?

If the community and Council decide to proceed with the pipeline, other funding models will be explored. But whatever model is chosen, the probable impacts include increased consumption and infrastructure charges, increased taxes, reduced capital and operating budgets for other services, increased municipal and community risk, and possibly reduced growth.

WHAT ELSE HAVE WE LEARNED SINCE THE PHASE-1 CAMPAIGN?

New information has also come to light about population projections and the water storage capacity provided by the existing Bearhole Lake control weir.

POPULATION PROJECTIONS:

Together, Dawson Creek and Pouce Coupe have about 13,000 residents. Population projections for last year's SURE WATER campaign were based on annual growth of two percent. Using that as a guide, it was estimated that the current water supply system would be sufficient until the population reaches 16,000—or until about 2024. Since then, BC Stats has conducted a more detailed survey of the region and is predicting an annual growth rate of one percent. At that rate, the current system would be suitable until 2034.

WATER STORAGE CAPACITY OF EXISTING SYSTEM:

Recent monitoring shows that the Bearhole Lake control weir has greater water storage and refill/recharge capacity and, therefore, more drought resiliency than previously thought. Storage could boost the City's water supply for about ten months, which is up from the previous estimate of six months.

Combined, these factors indicate that the existing system could meet our water supply needs for longer than anticipated.

LOOKING FORWARD...

This new information shows how significant the impacts could be if the City were to cut services, introduce a special tax, increase water charges, tax growth, and/or borrow money to fund a pipeline.

The *Water Pipeline Funding Analysis* notes that, "It wasn't that long ago (2011) that the first water infrastructure charge and increased water rates were applied. This created much conflict and anger"... "especially from low and fixed-income residents."

The report goes on to state that, "Funding a new pipeline using these sources would undoubtedly create further conflict and anger, but more importantly it could create an environment of enormous financial stress for many businesses and residents." And because "people have limited amounts of disposable income to pay their bills," they "could move to an area they believe is affordable."

During Phase 1 of the SURE WATER campaign, the majority of residents who participated in the process supported the construction of a new pipeline. But given the new information, and its short- and long-term financial implications for current and future taxpayers, Council believes the public will want to reconsider the pipeline option.

To that end, Council encourages you to review the updated information and then share your thoughts via the enclosed printed survey or the online version of the same survey at www.dawsoncreek.ca/water.

"...given the new information, Council believes the public will want to reconsider the pipeline."

NEXT STEPS...

SURE WATER input will be compiled and reported to Council later this year.

- If residents prefer to revisit the water supply issue in either 5-10 or 10-15 years, the City will plan accordingly.
- If residents prefer to move ahead with the pipeline now, the City may proceed with detailed design and costing. Given the significant cost of this option, a public approval process would be required to gauge public support for any borrowing that might be needed.

HERE'S HOW YOU CAN HELP CONTINUE THE CONVERSATION!

- Join us at the **Community Water Security Forum** May 8th at the Encana Events Centre (see front for details). This year's forum will be held during Drinking Water Awareness Week and in conjunction with *Water Works: Exploring the Value of Water at Home & Abroad*—a youth-led conference open to all.
- Complete and return the paper feedback form in your newsletter OR complete the on-line version of the survey during the month of May at www.dawsoncreek.ca/water.
- Host a SURE WATER TALK with your family, friends, colleagues, and/or neighbours (for more details, visit www.dawsoncreek.ca/water).
- Email us at water@dawsoncreek.ca to sign up for SURE WATER campaign updates.



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