



www.bmid.ca



December 2007

A newsletter from the Black Mountain Irrigation District No. 26

## ORGANIZATIONAL NEWS

**BMID** Our works yard at 1200 Belgo Road is beginning to fill up with steel pipe. The pipe will be used for the East Bench Trunk Main and the supply and drawdown for the Black Mountain Reservoir. The steel cost is \$0.30 per pound which is far below the industry cost. In total 8,500 metres of steel pipe has been purchased for a cost of \$2,300,000. The pipe also requires coatings inside and out to meet water industry standards. The steel pipe purchase is being paid for from our existing Capital Expenditure Charge Reserve Fund.



In November, BMID completed the 2007 **Capital Plan Update**. The plan can be viewed on the web at [www.bmid.ca](http://www.bmid.ca). Go to *Maps and Reports*, then go to *BMID Capital Plan*. Drawing figures/text are available in digital form for download.

BMID is leading a multiple agency initiative to develop a **Water Use Plan for Mission Creek**. The Ministry of Environment, the OBWB, SEKID, the City of Kelowna and the Regional District are all working with a consultant and contributing to this work. The study objective is to maximize benefits through improved operations of reservoirs and stream flow in the creek. The work is scheduled for 2008 with operations tested for one year after.

In 2007, BMID will be commissioning two new pump stations at Kirschner Mountain Estates and at Tower Ranch. These facilities are expected to be on-line before the end of the year.

Our agriculture metering program is now nearing completion. Remote read systems and reporting will be implemented for the growing season of 2008.

In the confrontation between the stream and the rock, the stream always wins—not through strength, but through persistence.  
- Anonymous

## WATER RATE INCREASES

For the last several years, BMID has increased water rates at a level between 2 and 3% per year to match the cost of inflation. BMID is obligated under our Operating Permit to meet the regulators (Interior Health Authority) requirements for water treatment. We also have the responsibility to plan ahead and ensure that there is a high quality, reliable and secure water source for our community. Our recent Capital Plan Update sets out a direction for water supply to meet both our long term quality and quantity requirements. There are only two sources of funding available to BMID, tax / toll rates, and development charges. To meet our longer term objectives and avoid a future higher rate increase, moderate rate increases are recommended for both existing users and new development.

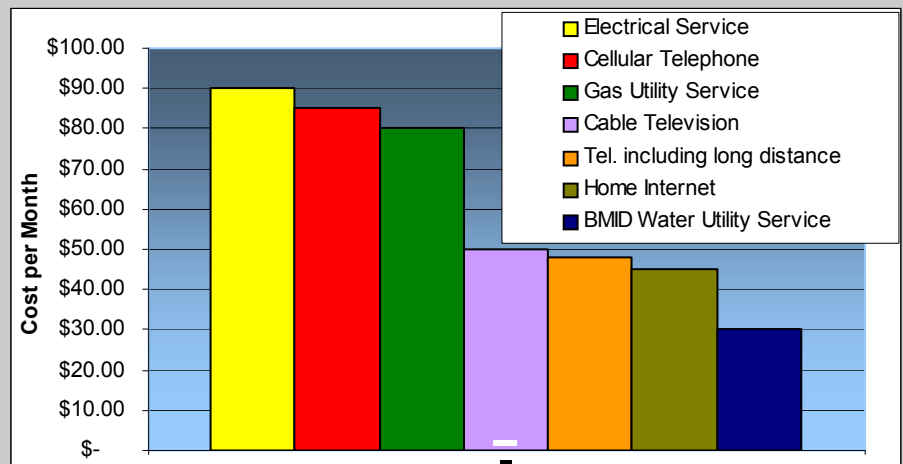
**Development Charge Rates:** *The Capital Plan lists 43 projects with an apportionment of costs between existing ratepayers and new development based on the premise of who benefits. Development Charge rate increases are recommended to increase from \$3,250 per new single family lot to \$4,500.*

**Existing Rate Payer Increase:** *The percentage rate increase for existing users is distributed evenly across all of the varying types of connections including agriculture. The increase for a single family connection will be inflation plus a \$3.00 / month Water Quality Improvement fee. The cost of water for a single family home will become \$1.00 / day.*

One of the first projects is to eliminate Scotty Creek as a drinking water source. This will reduce risks to our north end residents who have been subject to on-going Water Quality Advisories for the last two years. For our Mission Creek system, the plan is to construct the Black Mountain Reservoir which will allow BMID to control and optimize use of the highest quality water from Mission Creek. Although our clarification water treatment plant reduces the turbidity levels to below 1.0 NTU, it does not have filters and does not fully eliminate the risk of *Cryptosporidium*. The cost for full filtration for BMID is \$50,000,000.

Existing user revenue is targeted towards UV Disinfection, the Black Mountain Reservoir and a Water Quality Improvement Fund. UV disinfection is recommended to inactivate *Cryptosporidium* and *Giardia*. The WQ Fund will be required by our regulator if a utility is to defer the installation for full filtration and would be used to protect the raw water sources through watershed management, control of waste materials, and increased monitoring.

Development revenue is targeted towards projects that increase supply capacity including the Black Mountain Reservoir. The figure below compares the new BMID water rate with other typical services provided to a single family residence.



**Kelowna Joint Water Committee**

This fall, Golder Associates completed the Phase 2 - Groundwater Protection Planning work for the KJWC. The report is insightful and identifies groundwater movement and zones of capture for all utility drinking water wells within the City. The next step in our groundwater protection work is to determine how to mitigate risks to our community wells.

For 2008, the KJWC will be undertaking a review of the cross connection control program and is looking to implement common sprinkling regulations through the Central Okanagan Regional District area.

**Water Supply Association**

The WSABC was successful in meeting with the IHA and finding middle ground on the issues of water treatment and how to implement water quality improvements in the Okanagan. A discussion paper was jointly developed on the history, the issues and the direction for improvements. The paper is available for download on the WSABC website at [www.wsabc.com](http://www.wsabc.com).

The only point still to be resolved is the Turbidity Notification Program which has been in place for the last two years. With no changes in the approach by the IHA and under considerable technical arguments and political pressure, the Minister of Health has appointed an expert panel to review notification for the entire province. The WSABC is optimistic that workable recommendations and direction will be provided by the panel.

**BOTTLED WATER VS TAP WATER**



For the last 15 years the bottled water industry has taken advantage of public fear to make large profits. Waterborne disease outbreaks in places like Walkerton has made the public look for alternatives to their supposedly "dirty" tap water.

Kelowna experienced two such outbreaks. In 1988 BMID had an outbreak of *Giardiasis*. In 1996, the City of Kelowna water utility had an outbreak of *Cryptosporidiosis*. From these events the water utilities improved our disinfection practices, managed our wastes better, and implemented a City-wide cross connection control program. While we learned and improved, the bottled water industry capitalized in painting tap water as unsafe. Extreme marketing ads asked the public if they believed the water they flushed their toilets with was fit for drinking. The fact is that the water supplied to the home is potable.

Bottled water containers are now commonplace for the public. With the incredible volume of plastic that is created, the environmental impact is substantial. More information is now being brought forward about the safety of bottled water. One of the most thorough books on the topic is by Tony Clark called *Inside the Bottle, Exposing the Bottled Water Industry*. See [www.insidethebottle.org](http://www.insidethebottle.org).

A current urban myth is that Tim Horton wax paper coffee cups are the most frequent roadside waste along Canadian highways. One of the most responsible environmental initiatives is personal reusable containers that reduce or eliminate plastic packaging or paper beverage holders. Another initiative is minimizing your ecological footprint. Drinking tap water meets both of these objectives.

Because water utilities are public agencies, they are accountable to their regulator and to their public. They have more stringent reporting requirements than the beverage industry which is regulated federally as a food product and can have a shelf life of up to a two years. A question on tap water is "How can something that costs so little be safe?"

Water supply is a multiple use service. In-home uses include water for drinking, bathing, lawn irrigation, cleaning, etc. The use of water for these purposes improves the quality of life. The large volumes utilized by a community allow the economies of scale to substantially reduce the cost of supply. Water utilities are not allowed to make a profit. All funds must be reinvested in the utility.



COMPARITIVE COST OF FLUIDS	Price	Litres	\$ per m <sup>3</sup>	\$ per Litre
Tap Water ( filtration and disinfection)	\$ 0.50	1000	\$ 0.50	\$ 0.00050
Bottled Water (at suppliers site - 18 L bottles)	\$ 2.00	18	\$ 111.11	\$ 0.11
Bulk Bottled Water Service	\$ 6.00	18	\$ 333.33	\$ 0.33
Milk ( 4 Litre container )	\$ 3.60	4	\$ 900.00	\$ 0.90
Gasoline ( 1 litre )	\$ 1.09	1	\$ 1,090.00	\$ 1.09
Fruit Juice ( 1 litre )	\$ 1.57	1	\$ 1,570.00	\$ 1.57
<b>Bottled Water ( 600ml at store )</b>	<b>\$ 1.39</b>	<b>0.6</b>	<b>\$ 2,316.67</b>	<b>\$ 2.32</b>
Fruit Juice ( 473 mL container )	\$ 1.85	0.473	\$ 3,911.21	\$ 3.91
Beer \$ 2.00 / bottle	\$ 2.00	0.355	\$ 5,633.80	\$ 5.63
Wine \$ 15.00 bottle	\$ 15.00	0.75	\$ 20,000.00	\$ 20.00
Scotch @ \$40.00 / bottle	\$ 40.00	0.75	\$ 53,333.33	\$ 53.33
HP # 10 Inkjet Print Cartridge ( 69 mL )	\$ 50.00	0.069	\$ 724,637.68	\$ 724.64

**OBSERVE, RECORD & REPORT**  
questionable watershed activities to  
BMID at 765-5169

During the "CBC Morningside show in the 1980's Peter Gzowski sent Stuart McLean off to develop a top ten list for best value of what could still be purchased for ten cents. Municipal Tap Water was on the list.  
**For 10 cents, the public gets 200 litres of tap water from BMID to their property line or enough water for a single person to live on for 100 days.**