

www.bmid.ca



A newsletter from the Black Mountain Irrigation District No. 27

VALLEY WATER NEWS

BMID News

The BMID Annual General Meeting has been set for 7:00 pm on April 9, 2008 at the BMID office on Gray Road.

One of the five trustees positions is up for election. Mr. Allan Kirschner is seeking re-election for the three year term.



BMID Reservoir and Project

Our works yard at 1200 Belgo Road is filling up with steel pipe. We have 8,500 metres of the 9,100m of steel pipe on-site. Delivery will be completed by the end of March. A Cover-All building is being constructed where the steel pipe will be coated. Most of the project preparation work will be done at our yards which will result in less loading, hauling and fabricating costs and less impact on the City Roads.

Other Projects The Mission Creek Water Use Plan is underway to develop best strategies for management of water in Mission Creek for habitat, agriculture and domestic uses.

Scotty Creek separation works are underway to convert domestic customers off of the Scotty Creek source water in the summer months. BMID is installing watermain to convert 130 connections off of this system to our main water system in 2008.

Improved raw water quality monitoring will occur through our SCADA system improvements, the installation of a new water turbidimeter and a dissolved organics meter at the head gates on Mission Creek.

Our metering projects are on-going (see the back page for details).

"We think of our land and water and human resources not as static and sterile possessions but as life giving assets to be directed by wise provisions for future days." Franklin D. Roosevelt

WATER RATE INCREASE

You will notice on this water bill that rates have increased. The rate increase is an equal percentage increase for all water users groups including agriculture. The increase was proposed by the Board in accordance with the 2007 Capital Works and Financial Plan and was ratified as bylaw by the Ministry of Community Services. The primary reasons for the rate increase are:

- 1. To improve water supply security and;
- 2. To provide sufficient funds to implement water quality improvements to meet our regulators requirements.

In 1973, a washout (see adjacent photo) occurred on BMID's main supply conduit into Kelowna from Mission Creek. The time required to reinstall the conduit was two months.



Although BMID monitors and maintains the drainage routes that cross this conduit, low level storage will help to minimize the impacts of a major failure in the supply of water. The 3.0 kilometer conduit failed again in December of 1998 when a section cracked and had to be replaced. During that

December of 1998 when a section cracked and had to be replaced. During that event temporary water was provided through emergency interconnections from Rutland Waterworks District and water supply was restored within 3 weeks.

The Black Mountain Reservoir site (see photo inset below) located immediately below Black Knight Mountain has been proposed at this location since 1949. BMID has all of the land secured for the project and land use approvals from the Agricultural Land Commission. The BC Environmental assessment for the project is underway and we are carrying out the engineering of the works.



The project is being funded 50% by existing users and 50% by new development. The rationale is that it benefits both user groups. The project will allow diversion of the highest quality water from Mission Creek to be stored in a 4,600,000 cubic metre open surface reservoir. Water leaving the reservoir will be disinfected by Ultra-violet light and chlorination to deal with all known contaminants. Space is being set aside for enhanced treatment if it should be required in the future. The water quality will meet the Guidelines for Canadian Drinking Water Quality year round and should also meet the current requirements of our regulator. The Interior Health Authority requires that the water is to remain below 1.0 turbidity units at all times. BMID currently can provide water quality from Mission Creek in the range of 0.3-1.2 turbidity units, depending on the raw quality from Mission Creek. The reservoir should allow BMID to consistently provide water in the 0.30-0.40 turbidity unit range without chemical treatment. The plan is to provide safe water that addresses all known risks, and avoid an expenditure of \$40,000,000 for a water filtration plant.

The rate increase monies collected by BMID are to go to water quality improvements, protecting our source water, enhanced disinfection technology, and towards reserve fund levels for system renewal. BMID has only 3 sources of revenue available for capital projects, developers contributions, existing user tolls and taxes and federal grant monies.

VALLEY WATER NEWS (CONTINUED)

Kelowna Joint Water Committee

The KJWC is working on the following items in 2008:

- Further development of the Groundwater protection plan for drinking water aquifers in the Kelowna region;
- □ Toilet rebate charge development for all water utilities in Kelowna;
- □ Setting of common sprinkling regulations for the Central Okanagan region:
- Developing a data collection process for groundwater boreholes, water wells and geothermal boreholes within the Kelowna City limits;
- ☐ Further developing the Cross Connection Control program to assess risks for moderate hazard conditions within the City and develop appropriate actions for protection

Water Supply Association

The WSABC has been working on the following issues:

- Continued opposition to sale of leased lots on the drinking water reservoirs in the Okanagan;
- Sponsorship of Operator training session held on Feb. 18-19 at the Kelowna UBCO campus;
- Submission of a review paper to the Province related to the National Turbidity Guidelines for water supply;
- Review paper submitted to Interior Health Authority on their proposed Filtration Deferral Policy paper.

EVENTS

□ World Water Day, March 27, 2008

WATER LINKS TO CHECK OUT

Global Footprint test www.myfootprint.org
Biodiversity Impact Quiz

http://investigate.conservation.org/xp/IB/

SHIRLEY RETIRES Shirley Larmand has been the friendly face that has pleasantly greeted BMID customers at our main office since 1991. Shirley is retiring after 17 years of very professional, courteous and reliable service. She is one of

the key reasons why BMID has a good relationship with our customers. She is well respected by her co-workers and will be missed. We wish her a very happy and healthy retirement.



DEVELOPING A RESILIENT WATER SUPPLY

BMID is in the process of developing a more resilient water supply for our customers. There has been a barrage of media coverage on the issues of Global Warming, sustainability, the negative impacts of new housing development, and the question of whether there is enough water to maintain a high quality of life in the Okanagan Valley.



BMID staff are involved at the basin-wide level in providing input on how to address these issues. A key factor is that the weather patterns are changing and the variability in extreme weather events is increasing. More frequent and more extreme flood and drought events are occurring. Adaptation is the key to dealing with these extreme events. Development of a more "resilient" water supply is required. This means that water suppliers must have the tools and infrastructure in place to be able to adapt to the variations of nature. It also means that the public must be educated and willing to change their habits during extreme events.



Projects within the BMID 2007 Capital Plan Update related to securing water supply were analyzed on a cost/benefit basis. A cost was determined for each megalitre (1 ML = 1,000,000 litres) of water saved on an annual basis. A partial listing of projects and costs is presented in the table below. The lower the cost per megalitre, the more effective the project is in securing reliable source water.

		ı		
PROJECT	ML/Year		Project Cost	\$ / ML
Groundwater Development **	1200	\$	275,000	\$ 229
Scotty Creek System Separation	1730	\$	424,155	\$ 245
Agricultural Meters	1256	\$	423,140	\$ 337
Mission Lake Reservoir	2280	\$	1,179,454	\$ 517
Cornish / Morrison Road Separation	750	\$	404,484	\$ 539
SCADA	400	\$	227,700	\$ 569
Loch Long Reservoir	1850	\$	1,502,820	\$ 812
Fish Hawk Reservoir - Raising	4680	\$	4,245,467	\$ 907
Loch Oiche	1110	\$	1,135,000	\$ 1,023
Murray Meadows Reservoir	2880	\$	4,325,000	\$ 1,502
Site 3 Reservoir	2712	\$	5,660,000	\$ 2,087
Domestic Metering	750	\$	1,618,925	\$ 2,159

Any project with a cost less than \$1,000/ML is considered to be cost effective.



Metering Initiatives BMID has completed the Irrigation Metering Program and will be receiving a \$200,000 grant from the Federal Government. Remote read technology is being utilized. BMID will be reporting the water use of the meters to the agricultural community this summer on a monthly basis. The preliminary results from 2007 readings have already shown more efficient water usage throughout the District, even without pricing controls. There is no immediate plan to charge by a metered rate until several years of education and reporting are provided to the growers. The intent is that a flat rate will allow each grower a sufficient volume of water annually and eventually, an overage charge would apply to those who continue to use more than their fair allotment.

Existing meter upgrades are underway for all of our Institutional, Commercial and Industrial customers. This work will be completed this summer by Corix Utilities who have been upgrading all meter reading equipment to be compatible throughout BMID to the current technology standard.

Since January 2005, all new single family dwellings are required to install water meters with the same remote-read technology. BMID is purchasing a truck mounted reading system. BMID will start recording and reporting water use to our agricultural customers in 2008.

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

"Man - despite his artistic pretensions, his sophistication, and his many accomplishments - owes his existence to a six inch layer of topsoil and the fact that it rains." Unknown Author