

water matters

A newsletter from
the Black Mountain
Irrigation District

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Trustees give go-ahead to innovative water treatment project

Trustees have approved a \$2.5-million treatment project that will significantly improve drinking water quality, especially during spring run-off. Construction of the facility will begin this month and is expected to be up and running by the spring of 2000.

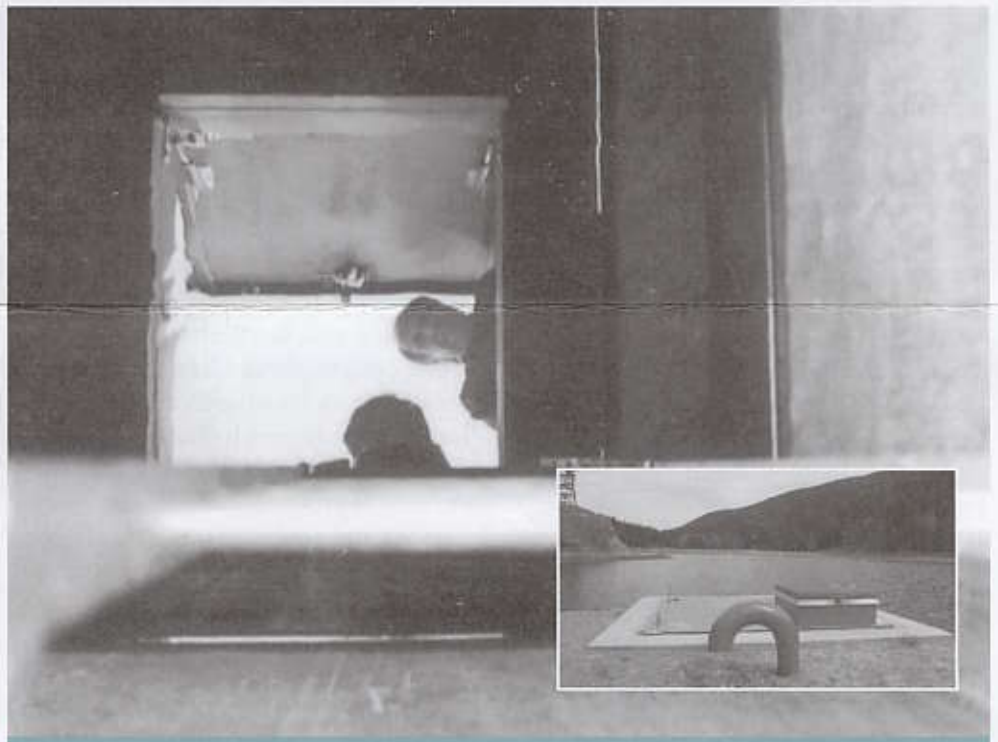
"The objective is to treat Mission Creek water during spring run-off and other times when water quality is lower than recommended in the *Canadian Drinking Water Quality Guidelines*," says engineer Bob Hrasko of Kelowna's Reid Crowther, the firm that designed the facility and will oversee construction.

You might recall that BMID undertook a pilot project in 1998 to test the effectiveness of a water quality treatment process using a chemical (alum being the most effective) to settle out silt particles and remove colour. Results of the study showed the coagulation/sedimentation process would effectively reduce turbidity, particle count (size and number of particles in the water), colour, and total organic carbon levels. It is expected the process will also reduce levels of waterborne cysts such as *Giardia* and *Cryptosporidium*, although not to the extent provided by full-scale filtration, which is not affordable for BMID customers. Pilot study results were presented to BMID customers at an open house December 8th. Response was positive, which prompted trustees to approve the project in January.

The chosen location is above Stevens Reservoir near BMID's intake on Mission Creek. The facility will include a new intake on Mission Creek; a rapid-mix

tank; two flocculators; two sedimentation clarifiers; and all necessary pipeworks, instrumentation, and chemical dosing systems.

Because no financial help is available from government sources, BMID customers can expect a monthly increase in users fees of about \$3 when the plant is operational. ■



One of Malcolm Tomlinson's duties as BMID operations supervisor involves checking water levels in the Stevens Reservoir outlet tower (see inset). Water is drained from the top two meters of eight in the reservoir through the outlet into a 36-inch main leading to the Hadden Reservoir, where further settling occurs.

TRUSTEES' ANNUAL REPORT

Meetings: In 1998, BMID's Board of Trustees held 37 regular and special meetings to conduct the district's business activities.

Election: Trustees Heinz Koetz and Lawrence Petch were re-elected by acclamation to three-year terms.

Water Treatment Facility:

Responding to poor water quality caused by excessive run-off in 1997, the district embarked on a pilot project to test the effectiveness and cost-efficiency of a treatment system involving coagulation and flocculation for clarification using a chemical (alum) to settle out silt particles and remove colour.

The pilot project proved successful and details were presented at an open house December 8th held at the district office. The response by the public has been positive and the trustees approved the next phase of the project — this being to proceed with pre-design to confirm actual construction costs. Construction will begin in 1999; the facility will be in operation by 2000.

Conduit Failure: As a result of the main conduit failure in December, the Board agreed that the need for a back-up emergency water supply is more important than ever. Refurbishing and upgrading of the Cornish Road well was approved, which includes a pump, electric-motor replacement, variable frequency drive, electrical wiring, etc. at a cost about \$75,000. Funds from the Equipment Replacement Reserve will be used for this project.

Trustees thank Rutland Waterworks for supplying emergency service while BMID's system was down during repairs.

Office Computer System: To be Year-2000 compliant, it was necessary to upgrade the office's entire financial and reporting systems. The new Vadim Computer Management system was installed and is now working well.

Boundary Extension: To properly align district boundaries and to assume responsibility for an area which had been serviced by the City of Kelowna with bulk water supplied by BMID, the Ministry of Municipal Affairs was petitioned requesting an extension of boundaries to include more than 100 lots. The district can easily supply the additional properties.

Capital Works Plan: A ten-year Capital Works Plan was approved along with a revised Capital Charge Bylaw which established capital charge rates which more accurately reflect the costs for capital works required to service new development in the district. Because of the anticipated water treatment project, construction of the Black Mountain Reservoir might be deferred until sufficient funds are available to minimize debt and, therefore, avoid financial risk.

Timber Harvesting Management: Management of the timber resource on BMID property continued in 1998. Extensive blow down in the Ideal Lake (Belgo Dam) area, prompted salvage logging; 51 loads were removed. Even with depressed timber prices, the district's net gain was nearly \$50,000. It is expected that additional logging will take place in 1999.

Gallagher Canyon Lands - Reserve Status: Negotiations continued with the Westbank First Nation (WFN) in an effort to resolve conflicts with Westbank's application to have lands adjacent to Mission Creek declared Reserve Lands. BMID's main concern is protection of existing water licenses and easements, and that water quality is not compromised by development along the creek.

A formal agreement among all parties has been drawn up which records and outlines respective rights and obligations for each agency. It is expected a final agreement will be reached sometime this year.

Subdivision and Development:

The growth rate in the BMID service area continued to be moderate. Ninety-one units were added to the system, which brought the total number of serviced units to 6519 by year's end — an increase of about 1.5 percent from '97.

Interconnection - BMID/Glenmore Ellison:

The City's recently-adopted subdivision, development, and servicing bylaw requires a minimum fire flow of 225 litres per second for industrial lands. This resulted in fire-flow deficiencies in the Sexsmith, Campion, and Adams Road areas. To meet the new fire-flow requirement, the two districts agreed to interconnect their systems in the Sexsmith Road area. A two-way pressure-regulating system was installed which allows the valve to open either way if a pressure loss occurs in either system. This interconnection has rectified the fire-flow deficiency in the area.

Personnel Changes:

Administrative assistant Garry Yaneszewski resigned from his position in December after five years with district. We wish Garry well in his new endeavors. His replacement is James Moller, who we feel will be a valuable addition to the BMID team.

Acknowledgment: On behalf of all BMID water users, we thank all district staff for a job well done, and for their dedication to the responsibilities assigned them.

Respectfully submitted,

Gord Ivans

Jim Kitaura, Chair

Alf Kempf

Heinz Koetz

Lawrence Petch