

REPORT TO MAGIC LAKE ESTATES WATER AND SEWER LOCAL SERVICES COMMITTEE MEETING OF TUESDAY 21 JUNE 2011

SUBJECT UPGRADE PROJECT UPDATE

<u>ISSUE</u>

Work is in progress on a major water system upgrade project initiated by the Magic Lake Estates Water and Sewer Local Services Committee (MLEWSC).

BACKGROUND

A major water system upgrade for Magic Lake Estates was initiated by a successful referendum of the electors to borrow funds to augment a federal-provincial grant. The project consists of two main subprojects:

- Construction of a new water treatment plant to replace the existing Buck Lake and Magic Lake plants, and related supply and distribution works
- Seismic evaluation of Buck Lake Dam and construction of a new spillway

Contracts were awarded for engineering services relating to each sub-project in 2010. Progress to date on these projects is as follows:

Water Supply, Treatment and Distribution Upgrades

The engineering consultant, AECOM, has submitted three deliverables:

- Draft comprehensive review of the Magic Lake Estates water system
- Pre-design report for the new water treatment plant
- Specification for the treatment process equipment package

The consultant is working on design of the water treatment plant. Preliminary information has been provided to the Vancouver Island Health Authority Public Health Engineer for comment. The following project milestones are expected to be achieved in the next few months:

- Issue call for tenders for supply of water treatment process equipment (July)
- Proceed with detail design of treatment plant (ongoing tender closing in October)

Buck Lake Dam Seismic Assessment and Spillway Design

The engineering consultant for this sub-project, Klohn Crippen Berger, has completed a seismic stability assessment of the east and west earthen dam structures, which are separated by a rock outcrop. The larger west dam was found to be satisfactory. The consultant has recommended further study of the smaller east dam due to the discovery of a layer of sand in the dam during exploratory drilling. Additional drilling may be necessary to verify that the east dam meets an acceptable standard of stability during a major earthquake.

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The design of a new spillway to replace the existing culvert at the east shoulder of the west dam is nearly complete, and has been submitted to the Ministry of Environment for approval.

Financial Status

Of the total \$8,012,500 budget for the upgrade project, \$234,469 was expended as of 2 June. Of this total, \$53,275 is grantable work by AECOM on treatment and distribution, \$38,995 is non-grantable staff time for administration of the treatment and distribution project, and the balance of \$142,199 is non-grantable consulting and staff services related to the Buck Lake dam work.

ALTERNATIVES

There are no alternatives.

FINANCIAL IMPLICATIONS

There are no implications.

SUMMARY

Work is progressing through the design stage for water supply, treatment and distribution upgrades to the Magic Lake Estates water system, and for a new spillway on the Buck Lake dam.

RECOMMENDATION

That the Magic Lake Estates Water and Sewer Local Services Committee receive this report for information.

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