

MAGIC LAKE ESTATES WATER AND SEWER LOCAL SERVICES COMMITTEE REPORT ON OPERATIONS TUESDAY 21 JUNE 2011

Drinking Water Supply and Demand

Buck Lake levels are shown in **Figure 1**, compared to the 15-year average (pre-2008) and 2008-2010 levels. Buck and Magic Lakes were both at full pool at the end of May.

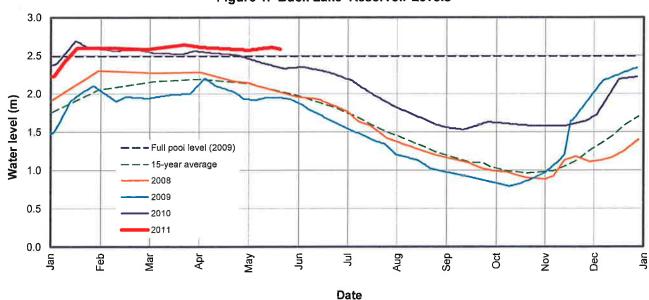


Figure 1. Buck Lake Reservoir Levels

The total water production by the Buck Lake and Magic Lake water treatment plants in the first four months of 2011 was 48,601 cubic metres (m³). This production is 8% lower than the same period in 2010, and 26% lower than the same period in 2008. Production by month is shown in **Figure 2**.

Drinking Water Quality

Typical Magic Lake Estates water quality characteristics include:

- Treated water is bacteriologically safe to drink
- Treated water turbidity (cloudiness) is frequently greater than the *Guidelines for Canadian Drinking Water Quality* (GCDWQ) limit of 1 NTU (**Figure 3**)
- Total organic carbon is moderate to high (typically 6-8 milligrams per litre (mg/L)). This can cause the disinfection by-products such as THMs to be high
- Total trihalomethanes (THMs) occasionally exceed the GCDWQ limit of 100 mg/L
- Metals are typically below limits
- The raw source water is guite coloured but once chlorinated falls within the limit of 15 TCU.
- The water sources are subject to algal blooms which can affect taste and odour and clog home filters

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A comprehensive 2010 annual report on Magic Lake Estates water quality will be completed in advance of the August Annual General Meeting, and frequent updates will be posted on the CRD website beginning in the next few months.

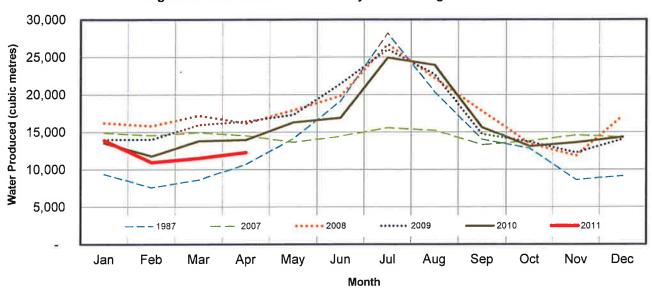
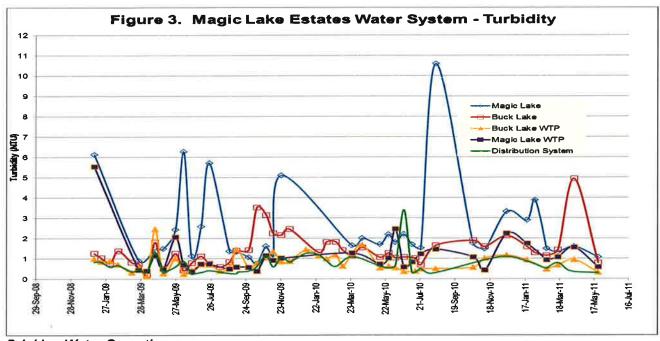


Figure 2. Total Water Production by Month - Magic Lake Estates



Drinking Water Operations

A summary of significant operational events in March to May 2011 follows:

March

- Investigated tree complaint 2705 Privateers. Trees removed and topped May 11.
- Paving work completed at Schooner way
- Water service turned on at 3712 Bosun Way
- Idlers installed on some unused service connections.
- Valve exercising on Cutlass court resulted in a color complaint. Resolved by

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flushing at a nearby standpipe.

April

- Flushed watermains and exercised valves.
- Found 4605 Mate road (leak on customer property) turned on and still leaking.
 Shut off service and issued warning to owner of Water Regulation Bylaw contravention.
- First aid training for staff.
- Inquiry from 3705 Starboard re/ dirty water filter. Flushed main.
- Buck lake WTP pump drive malfunctioning. Technician dispatched from Greater Victoria to troubleshoot and restore to service.

May

- Assisted owner and plumbing contractor in repair of 4605 Mate Road service line, and restored service.
- Low water pressure complaint at 37167 Schooner Way. Tested at 45 psi (acceptable).

Metering Project

The project is essentially complete but will remain open in 2011 for the purpose of correcting deficiencies as they arise. A financial summary of the metering project follows:

Revenue	
Transfer from reserve (2008)	\$ 83,189
Capital on hand (2008)	\$
Transfer from revenue (2008)	\$ 332,000
Transfer from revenue (2009)	\$
Gas Tax (approved transfer to project January 2009)	\$
Gas Tax (approved transfer to project January 2010)	\$ 48,731
Transfer from reserve (approved January 2010)	\$ 51,269
TOTAL REVENUE	\$ 1,189,837
Expense	
Travel and Accommodation	\$ 86,470
Materials and Services	
Meters	\$ 94,950
Radio Read Transcievers	\$ 157,290
Setters	\$ 84,200
Boxes	\$ 20,313
Soil and Rock	\$ 65,099
Repairs and Maintenance	\$ 9,078
Flagging	\$ 8,675
Other	\$ 138,985
Labour	
Field labour - CRD crew	\$ 359,145
Engineering and Administration	\$ 146,082
Subtotal - Expense to 31 May 2011	\$ 1,170,287
Allowance for deficiencies	\$ 19,550
TOTAL EXPENSE	\$ 1,189,837

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Wastewater Operations

A summary of significant operational events in March to May 2011 follows:

March

Schooner WWTP - #2 sludge (RAS) pump tripping out intermittently.

April

- Schooner WWTP #2 sludge pump tripping and rag entrapment problems.
- Plugged sewer at 4711 Buccaneers road. Pumped out sewage from downstairs bathtub and transported to WWTP. Located cleanout at property line - Problem was insufficient sewer grade on customer property.
- Schooner WWTP spare #2 sludge pump rebuilt with new cutters and installed, performing very well.

May

- Flushed sewers around Buck Lake. Some issues were reported in residences during flushing. Future flushing will be scheduled well in advance, notices will be posted, and cleanout caps will be removed at known problem locations in accordance with a new Standard Operating Procedure (SOP).
- Schooner WWTP operation was affected by sewer flushing, but remained within permit.

Sewer System Engineering Study

A contract was awarded in May to Stantec Inc. for this assignment, and work is in progress. The study will result in a high-level plan and budgetary cost estimates for immediate and future capital works needed to sustain the system and accommodate growth in the community. The anticipated completion date is August 31, 2011.

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Concurrence

CS/TT:ls