

DEEP BAY IMPROVEMENT DISTRICT
MINUTES OF THE REGULAR BOARD MEETING

December 17, 2014

Trustees: Tom Plensky, Chair
Candace Cowan
Claire Hilscher
Linda McKay
Dave Simpson
Bob Leggett

Regrets: Don Milburn

Staff: Leslie Carter, Administrator
Don Buchner, Operator

Call to Order: 7:00 pm

Introduction of late items: none

Motion: to approve agenda for current meeting

Bob Leggett Seconded: Linda McKay Vote: Carried

Petitions and Delegations:

Rick Guiton, M.Sc., P. Geo. Senior Hydrogeologist – Principle, Guiton Environmental Consulting – presentation of Third Party Review of GW Solutions Deep Bay Well Field Assessment

Rick Guiton presented an overview of the work Guiton Environmental Consulting (GEC) was requested to do and recommendations made:

- GEC previously reviewed report by Kala Geosciences (presented at September 18, 2013 board meeting) and made recommendations for further testing
- GW Solutions was hired by developer to carry out this testing and provided a report
- GEC did an initial review of this report and recommended further office analysis which was completed by GW Solutions and a revised report was provided
- GEC found the pumping work to be good and after reviewing the final report, which included discussions with the authors, has made the following recommendations to the board to assist dealing with requests for water:
 1. Estimated annual recharge is 16 l/s for current DBID well field (not entire aquifer) and recommendation is to commit no more than 50% of this amount. Current demand is 4.4 l/s, therefore a further 3.6 l/s may be allocated from the existing well field. It is considered prudent to maintain the other 50% against unknowns associated with current recharge calculations, reoccurring drought periods, future climate change impacts, and future growth and demand.
 2. Additional quantities beyond the 3.6 l/s should be obtained through an expanded well field, likely to the south-east of the current field, and outside of the current catchment area.

Q. If the well field is expanded to the south, is this the same aquifer?

A. An expansion of the current well field would be in the same aquifer. Aquifers do not have uniform capacity and indications are that south of the current wells will yield more productive zones.

Q. We have existing wells not producing to capacity, are these included in the calculations?

A. This report is not looking at well production; rather it is looking at recharge capacity of the well field.

Q. How far do you have to go to not affect current well yield?

A. Catchment area or "radius of influence" can be determined from current existing data and new well would be placed outside of that.

Q. Should the Natural Resources Canada Nanaimo Lowland hydrogeologic study indicate that bedrock plays a key role in providing water to the sand and gravel aquifer (at lower elevation), as observed in the Cassidy and Englishman River areas, would you take that into consideration and increase the recharge rate of the Deep Bay aquifer?

A. There is reason to discount flux recharge. Existing well logs have a marine clay layer under the aquifer that would limit the amount of water able to reach the wells. Records of recharge fluctuation indicate recharge during wet winter months, followed by decline during dry summer months. If recharge was coming from upgradient groundwater flow, the recharge would be uniform and steady throughout the year.

Q. Should potential new well be drilled to the south-east of the existing system and confirm that the aquifer is wider than presently estimated, would you consider increasing the recharge rate of the aquifer due to the resulting larger "foot print" where the aquifer is being recharged?

A. GEC agrees with the current recharge calculation for rainfall for the existing well field, as determined by GW Solutions. If a new well went in outside of the current well field, the available recharge would increase.

Q. How far down do you have to drill to get past the clay?

A. You don't actually want to go through the clay; outside of the aquifer is fractured rock which would not provide productive yield due to low hydraulic connectivity.

Q. Did the Kala report verify that recharge was from rainfall?

A. Kala report was not a focused discussion and did not use conservative estimates. Numbers used in the GW Solutions report are conservative. Pumping test was not used to estimate recharge.

Q. It was previously indicated that there are new regulations coming in regarding well drilling and that there is a first in first rights order.

A. At present there is legislation coming in that will see groundwater regulated much the same as surface water. Timing for this regulation is still not known. Regulations regarding drilling wells will be more onerous and stricter. Impact with regard to other wells will need to be considered (this is currently good practice but is not regulated). If a new well is required, putting one in sooner rather than later will mean less red tape.

Q. Previously the developer had mentioned drilling wells on their own property, will these be less productive?

A. Productivity would not be known until wells are drilled but historically the aquifer has not been as productive in that area. Land owners are entitled to investigate potential on their own property.

Rick Guiton was thanked for attending the meeting and left the meeting at this point.

Minutes of the Regular Board Meeting held on November 19, 2014

Motion: to approve the minutes of Regular Board Meeting of November 19, 2014

Linda McKay Seconded: Claire Hilscher Vote: Carried

Business arising from November 19, 2014 board meeting: none

Operator Monthly Report:

Operations & Maintenance Report for November 11 – December 12, 2014

Water Delivery: November 11 – December 12, 2014: 1,464,960 Imp. Gal.

Average daily use/connection (601 connections): 79 Imp. Gal. Previous Month – 91

Observation Well #310 Levels (meters): Dec. 12, 2014: 9.486 Previous Month – 9.727

Operations & Maintenance Committee: December 2, 2014 meeting

Review of December 2, 2014 report

Motion: to engage Maci Services for the replacement of the pump in Well #4

Linda McKay Seconded: Dave Simpson Vote: Carried

Motion: to receive Operator's Monthly report and Operations & Maintenance Committee report

Linda McKay Seconded: Bob Leggett Vote: Carried

Fire Chief's Report: presented by Leslie Carter

Call outs for November 2014: 3 (2 MVI, 0 First Responder, 0 Fire, 1 Misc.)

Motion: to accept Fire Chief's report as presented

Claire Hilscher Seconded: Linda McKay Vote: Carried

Fire Protection Committee: no meeting

Finance Committee: no meeting

Total payments issued for November 2014 Water: **\$27,560.03**

Total payments issued for November 2014 Fire: **\$27,054.84**

Motion: to authorize the Finance Committee trustees, Don Milburn, Claire Hilscher and Linda McKay and the Administrator, Leslie Carter, as signing authorities for the RBC Dominion Securities investment accounts

Claire Hilscher Seconded: Linda McKay Vote: Carried

Bylaw Committee: no meeting

Environment and Emergency Committee: no meeting

HR Committee: report to be presented in-camera

Planning Committee: no meeting

Correspondence In:

November 24, 2014 – Guiton Environmental Consulting, Third Party Review of GW Solutions
June 16, 2014 report.

November 26, 2014 – North Island Labs, comprehensive testing results for Reservoir

November 28, 2014 - North Island Labs, comprehensive testing results for Wells

Correspondence Out:

November 26, 2014 – Min. of Community, Sport & Cultural Development, Bylaw No. 222
“Comprehensive Capital Expenditure Charge (Water)” for registration

Motion: to deal with and file correspondence in and out

Bob Leggett

Seconded: Linda McKay

Vote: Carried

Old Business:

Motion: to appoint trustees Bob Leggett and Dave Simpson, Deep Bay Volunteer Fire Department members George Lenz and John MacMillan and public members, Christo Kuun, Shane Dalager, Jim Rowland and Larry Highcock as members of the Fire Hall Replacement Select Committee

Dave Simpson

Seconded: Candace Cowan

Vote: Carried

New Business:

Motion: to adopt the Terms of Reference for Fire Hall Replacement Select Committee as presented

Candace Cowan

Seconded: Linda McKay

Vote: Carried

January 2015 Pipeline reviewed. 2015 AGM set for Wednesday, April 8, 2015 to be held at the VIU Centre for Shellfish Research.

Resolution No. 119: that identified properties will be given 24 hour written notice that water will be shut off due to tolls or other charges owing for 90 days or longer.

Dave Simpson

Seconded: Claire Hilscher

Vote: Carried

Question Period: none

There being no further business the meeting was adjourned to move in-camera for an HR report at 8:23 pm

The above minutes were approved by the Board of Trustees on January 21, 2015.

By: _____
Chair of the Trustees

Officer