

REGIONAL DISTRICT OF NANAIMO

MINUTES FROM THE REGULAR MEETING OF THE DRINKING WATER WATERSHED PROTECTION ADVISORY COMMITTEE

HELD ON WEDNESDAY, JUNE 22, 2011 AT 12:30 PM
IN THE RDN BOARDROOM

Present:	Director J. Stanhope	Chairperson
	Joe Burnett	Director Electoral Area A
	Gisele Rudischer	Director Electoral Area B
	Deb Ferens	Islands Trust Representative
	Gilles Wendling	General Public Representative (South)
	Gordon Buckingham	General Public Representative (North)
	Pat Lapcevic	Ministry of Forests, Lands and Natural Resource Operations
	Faye Smith	Environment Community Representative
	Alan Gilchrist	Academic Community Representative (VIU)
	Ken Epps	Forest Industry Representative
	Morgan Kennah	Forest Industry Representative
	Shelley Bayne	Hydrogeology Representative
	Domenico Iannidinaro	Forest Industry Representative
	Bob Wylie	Ministry of Transportation and Infrastructure
	John Deniseger	Registered Professional Biologist
	Lynne Magee	Vancouver Island Health Authority
	John Finnie	General Manager Regional and Community Utilities, RDN
	Mike Donnelly	Manager of Water Services, RDN
	Christina Metherall	Drinking Water/Watershed Protection Coordinator, RDN
	Sophie Waterman	Special Projects Assistant, RDN
	Julie Pisani	Special Projects Assistant, RDN
	Cavan Gates	Special Projects Assistant / Recording Secretary, RDN
Regrets:	Oliver Brandes	Academic Community Representative
	Dave Bartram	Director Electoral Area H
	Bonaventure Thorburn	Water Purveyors' Representative

CALL TO ORDER

The Chair called the meeting to order at 12:35.

MINUTES

MOVED J. Burnett, SECONDED G. Rudischer, that the minutes of the Drinking Water Watershed Protection Advisory Committee meeting of March 31, 2011 be adopted. CARRIED

REPORTS (verbal)

Presentation on the Englishman River – Groundwater – Surface Water Interactions and Climate Change (A. Lil - Living Rivers, F.Smith)

F. Smith spoke about the surface water-groundwater interactions project. There has been lots of popular support for the project. There is an opportunity to tie together some projects dealing with the Englishman River.

A. Lil provided an overview of Living Rivers' involvement and interest with the Englishman River. The main goal is clean drinking water for an increasing population while preserving ecological benefits in the face of climate change. In past partnerships, Living Rivers has provided one third of the funding with other parties providing the remainder. Living Rivers currently has BC Regional Adaptation Collaborative funding to further develop the water management planning on the Englishman River. The seven goals in the RDN Snapshot Report are supported by the Living Rivers initiative. Another Living Rivers project is to augment the storage capacity above the Englishman River, in particular, a new dam on Shelton Lake. Scope of involvement with the RDN is to advance knowledge of watershed conditions and collaborate on potential future adaptation strategies. The following points were noted:

- ? The Arrowsmith Dam helps maintain an adequate summer flow already.
- ? Drought frequency in the Cowichan Valley is on the rise which may indicate the need for further management in the RDN.
- ? There has been no low flow below historical levels since the installation of the dam (for records to 2005).
- ? The AWS water license requires a greater flow than historical levels to maintain water extraction and fish stocks.
- ? The proposed dam on Shelton Lake would be a low head dam of 2.5 metres.
- ? Construction and operational costs would be shared by the AWS and Living Rivers but AWS would hold the water license.
- ? TimberWest owns the land around Shelton Lake.
- ? AWS staff have been directed to prepare a report on the Shelton Lake dam but it has not been completed, pending resolution of matters associated with AWS governance, etc.
- ? Fish stocks are increasing in the Englishman River.
- ? Impacts on the flood-drought cycle include both climate change and urban development.
- ? The present synergy between Living Rivers and Natural Resources Canada would make this a timely partnership with the RDN.
- ? RDN resources are largely already allocated so more information is required on what role the RDN would play in a partnership.
- ? There are potential funding resources so it would be wise to identify synergies and work together.

Discussion of the draft Terms of Reference for the Water Budget Project (C. Metherall)

C. Metherall addressed questions raised in previous discussions of the Water Budget Project by providing context on how the project will relate to the overall goal of knowing how much water is available for human and environmental use now and in the future in order to guide development policy. This project will result in identifying which watersheds are stressed and begin identifying potential future watershed capacity. Stressed watersheds will receive first priority when developing more in-depth water budgets. It was noted that although there has been some work done on areas of the Englishman River Watershed, the scope was smaller than the current project.

Discussion of the Water Extraction and Level Database (C. Metherall)

C. Metherall outlined the database options which consist of the VIU database, an RDN created database and porting the Okanagan Basin's SWURT database to the RDN. The advantage of SWURT is that it will likely be linked to the Ministry of Environment database when the new Water Act is enacted. It also provides a dashboard which tells users how they compare to others in the region. The following points were noted:

- ? The Okanagan Basin Water Board currently operates SWURT.
- ? SWURT would be used for large water users but not on the individual well scale; the database developed by VIU could be used for individual wells.
- ? Private well users will not be required to report their usage under the new Water Act. This could be changed in some "hotspot" areas but it is not realistic to monitor private well usage province wide.
- ? EPCOR is willing to report their usage.

Water Sustainability Indicators (C. Metherall)

C. Metherall explained that three indicators have been chosen for the Regional Growth Strategy Indicators and the Watershed Report Cards based on the availability and timing of data collection. They are groundwater elevation, surface water quality and water consumption.

Discussion of Composting Toilets (L. Magee)

L. Magee asked if there were any specific topics committee members would like covered. The following points were noted:

- ? From VIHA's perspective, composting toilets may be used as the primary toilet in a house as long as there is a way to dispose of grey water from other sources.
- ? Water from kitchen sinks requires more treatment than many grey water recycling systems provide.
- ? UBC has a building that is not connected to the city sewer and reuses or disposes of all their black water and grey water on site.
- ? L. Magee committed to providing a formal response to the Committee if further information was requested.

Program Updates:

Phase 2 Observation Well program (C. Metherall)

C. Metherall presented the potential locations of future observation wells. The following points were noted:

- ? Phase 1 wells were installed by Red Williams and Drillwell, and also included existing wells that were converted to monitoring wells.
- ? The rock coring done in Cedar was for the Geological Survey of Canada who contributed funding for it.

- ? There is no monitoring well on Gabriola Island yet, but a potential well has been identified.

Community Water Quality Monitoring (C. Metherall)

C. Metherall noted that seven sets of monitoring equipment have been ordered. Volunteer stewardship groups will perform the monitoring. The following points were noted:

- ? Nanaimo River is not currently being monitored. NALT has indicated that they have some interest but are too busy right now.
- ? This model of community monitoring has the potential to expand across Vancouver Island. Its effectiveness lies in the ability to simultaneously sample many locations which allows for direct comparison.

Cassidy and South Wellington Groundwater Quality Survey (C. Gates)

C. Gates stated that sampling was performed by Rachelle Ormond of Ministry of Forests, Lands, and Natural Resource Operations (MFLNRO) and Cavan Gates (RDN) in April for Phase One and in June for Phase Two. Thirty-four sites were included in Phase One and fourteen in Phase Two. The distribution of sample points in Phase One was even across the sample areas and Phase Two is more targeted. Notable results include Total Coliforms, *E. coli*, Arsenic, Fluoride, Sodium, Iron, Manganese, Hardness, pH, Aluminum, Total Dissolved Solids and Chloride. All dissolved elements were from wells in South Wellington and most Total Coliforms were from wells in Cassidy. The following points were noted:

- ? Well owners are receiving a copy of their results as well as customized recommendations for well head protection.
- ? No notable ammonia levels were found.
- ? Ammonia is known to naturally occur in other areas of the Regional District.
- ? Ammonia levels would be interesting to analyze even if they do not exceed the Maximum Allowable Concentration (MAC).
- ? Two instances of Fluoride exceeded the Guidelines for Canadian Drinking Water Standards.
- ? In some cases, Total Coliform levels exceeded the MAC, but the water samples were taken prior to any treatment on the systems, so this is not necessarily a test of drinking water.
- ? Rachelle Ormond is reviewing the results.
- ? Potential sources of contamination will be investigated.

Update on Private Well Monitoring Program (C. Metherall)

C. Metherall noted that for monitoring private wells, there is a tradeoff between cost and accuracy. A decision will be made whether to lower the desired accuracy of the measuring equipment or monitor fewer sites with more expensive equipment. Staff time commitment to data collection should be minimized.

Update on the Toilet Rebate Program to date (J. Pisani)

J. Pisani summarized the toilet rebate program to date. \$16,750 worth of toilet rebates have been processed since January 2011. 153 of 176 applications were backlogged from last year. RDN is partnering with Home Depot for a special instant rebate event in August.

Irrigation Review Program (S. Waterman)

S. Waterman reviewed the Irrigation Review program statistics to date. Close to seventy have been completed so far this year and another thirty are scheduled. Unlike last year, the highest proportion have been in Town of Qualicum Beach; it was noted that the Town of Qualicum Beach does contribute to the Team WaterSmart program.

Highly Vulnerable Aquifer Outreach Program (J. Pisani)

J. Pisani outlined the status of the program which is in the planning stages. The goal is to change people's behaviours by using Community Based Social Marketing. Outreach options under consideration include signs about aquifer vulnerability on the highway, information at fueling stations, and an initiative to promote proper disposal of household hazardous waste. There is a potential to partner with the airport, which has an interest in demonstrating environmental stewardship. It was noted that outreach regarding septic system maintenance and operation may be valuable.

Nanaimo River Flow Monitoring (C. Metherall)

C. Metherall provided more information on the Nanaimo River Flow Monitoring project. It is more expensive than first thought with \$25,000 in construction costs and \$8-12,000 per year for maintenance. Consequently, it has been reduced in priority and the RDN is looking for partners.

It was noted that a Department of Fisheries and Oceans representative on the DWWPAC would be beneficial and recommended that "The Drinking Water and Watershed Protection Advisory Committee Terms of Reference be amended to include a representative from Fisheries and Oceans Canada."

OTHER

Arrowsmith Water Service (J. Finnie)

J. Finnie summarized the Arrowsmith Water Service (AWS). It is a joint venture between the City of Parksville, the Regional District of Nanaimo and the Town of Qualicum Beach. It has built a dam and reservoir on Arrowsmith Lake and holds a water license on the Englishman River. The RDN interest is for the Nanoose Peninsula Bulk Water Supply. The current Parksville intake will be relocated and a treatment plant will be built. The new capacity will be required by 2016 for Parksville and RDN but not for another fifteen to thirty years for Qualicum Beach. Aquifer Storage and Recovery (ASR) is being explored in the area. The following points were noted:

- ? ASR may be the best way to meet summer demand in the area.
- ? Fairwinds Corporation and other new development in the Nanoose Bay Peninsula Bulk Water Service Area contribute to future water capacity infrastructure through Development Cost Charges and taxes.

ADJOURNMENT

Chair Stanhope thanked the committee for their contributions noting that clean water is becoming increasingly topical and important.

Chairperson