



**MINUTES OF THE REGULAR MEETING OF THE  
ENGLISHMAN RIVER WATER SERVICE (ERWS) MANAGEMENT BOARD  
HELD ON WEDNESDAY, FEBRUARY 22, 2012, AT 6:00 PM  
IN THE PARKSVILLE FORUM**

**Present:**

Director J. Stanhope, Chair	Regional District of Nanaimo
Director G. Holme	Regional District of Nanaimo
Mayor Chris Burger	City of Parksville
Councilor Marc Lefebvre	City of Parksville

**Also in Attendance:**

C. Mason	Regional District of Nanaimo
John Finnie	Regional District of Nanaimo
Wayne Moorman	Regional District of Nanaimo
Mike Donnelly	Regional District of Nanaimo
Fred Manson	City of Parksville
Mike Squire	City of Parksville
Bob Harary	City of Parksville
Matt Henney	Associated Engineering (BC) Ltd.
Keith Kohut	Associated Engineering (BC) Ltd.
David Pyne	ASR Systems LLC
Dennis Lowen	Lowen Hydrogeology Consulting
Bev Farkas	Recording Secretary

**CALL TO ORDER**

Chair Stanhope called the meeting to order at 6:00 PM.

**DELEGATIONS**

**MINUTES**

MOVED Director Lefebvre, SECONDED Director Holme, that the minutes from the Inaugural meeting of the Englishman River Water Services Management Board held November 9, 2011, be adopted.

CARRIED

## **BUSINESS ARISING FROM THE MINUTES**

### **COMMUNICATIONS/CORRESPONDENCE**

MOVED, Director Holme, SECONDED Director Lefebvre, that the correspondence from S. Thomson, Minister of Forests, Lands and Natural Resource Operations, be received.

CARRIED

MOVED, Director Holme, SECONDED Director Lefebvre, that the correspondence from T. Wicks be received.

CARRIED

### **REPORTS**

#### **Englishman River Water Service Project Status Update and Change of Works Application (M. Squire and M. Henney)**

M. Squire gave a PowerPoint presentation on ERWS Project Status and Change of Works Application and the following points were discussed:

- In the next several weeks AWS / ERWS will be making a formal application to the Ministry of Environment (MoE) for a minor amendment to Conditional Water Licence 110050 to formally approve a Change of Works to define the location of the proposed new intake for the ultimate AWS/ERWS surface water supply component of the regional water system.
- The Water Licence Application Report completed by the MoE – Water Management Branch at the time of the granting of Water Licence in 1997 refers to the future plans of AWS to re-locate a larger intake further upstream above the urban development somewhere between the new Inland island Hwy (Hwy 19) and the confluence of the South Englishman River.
- Storage development for fish resources in the low flow period from July through September has already been addressed with the original Licence Application and the construction of the Arrowsmith Dam and reservoir in accordance with the current Englishman River Water Allocation Plan.
- The application also supports concerns from DFO, MoE, BCCF and MVIHES as they indicated through stakeholder meetings that their preferred intake location would be as far downstream as possible. Consequently, an intake location downstream of Allsbrook Canyon would be considered more favourable to agency staff and key stakeholders than an intake location above Allsbrook Canyon.
- In conjunction with the Conditional Water Licence, a Provisional Operation Rule was issued based on using the existing City of Parksville intake until such time the future intake works are relocated above the Englishman River Water Survey Canada (WSC) hydrometric gauge (08HB002).

- The AWS original water licence application was based on the premise of acquiring a water licence and constructing a dam to support storage for not only future potable water demand but fisheries enhancements based on the intake being just downstream of the confluence of the South Englishman River and the Englishman River.
- Extensive research and studies have been undertaken and resources spent before and after the construction of the Arrowsmith Dam for fisheries benefits. Considerable ecological and Fisheries enhancements resulting from the construction of the Arrowsmith Dam are very apparent. Coho, Pink and Chinook Salmon abundance appears to be much higher from 1999 onward due to:
  - Improved summer base flows from the Arrowsmith Dam that have allowed enhancement efforts to go forward such as
  - stocking, the release of eggs, fry and smolts and
  - the construction of two flow controlled side channels constructed to increase rearing habitat.

In order to meet future water supply demands and comply with the new water treatment conditions from VIHA, the AWS requires the appropriate permits to be in place prior to proceeding with the next preliminary design phase of this project. With the Change of Works application and our continued effort to develop sustainable solutions for future water supply, we hope to continue to promote a partnership committee with DFO, MoE and AWS / ERWS staff in an effort to determine appropriate reservoir releases on an annual basis to meet all conditions.

M. Henney, gave a PowerPoint presentation on Phase 2 Project Status – Water Treatment Pilot program. Regarding the preferred treatment option (membrane treatment), the following points were discussed:

- Aluminum chlorohydrate salt used as a coagulant to remove colour from water
- High level of automation, mostly remote monitoring
- Higher capital investment than conventional system but better life cycle costs
- Energy costs slightly higher than conventional system but lower residuals management costs
- Residuals can be reduced on site and used for agriculture, minimal liquid to wastewater stream
- Membranes provide a 99 percent efficient treatment system compared to conventional treatment systems that are 95 percent efficient
- Average life of membrane 12-15 years

#### **Aquifer Storage Recovery (D. Pyne and D. Lowen)**

D. Pyne and D. Lowen presented on Aquifer Storage Recovery. The following points were discussed:

- Access to stored water by others may be controlled through site selection of large parcel with effective setbacks, protective covenant or legislation
- Capturing rainwater for ASR wells would likely have challenges with regulatory framework
- Will be chlorine free residuals and no phosphates will be added in process

- Ideal conditions for ASR well in this area are: hydraulic characteristics producing useful quantity of water from single well, semi-confined or confined aquifer, appropriate radial distance, absence of reactions with minerals, suitable surrounding properties

MOVED Director Burger, SECONDED Director Holme that the verbal and visual reports be received.

CARRIED

#### **ADDENDUM**

B. Harary introduced the report on Amendment #1 to the professional services agreement with Associated Engineering (BC) Ltd. The amount of the additional full scale ASR investigation was confirmed to be \$228,943.

MOVED Director Burger, SECONDED Director Lefebvre, that the ERWS Management Board authorize Amendment #1 to the professional services agreement with Associated Engineering (BC) Ltd. to complete the additional full scale ASR investigation for an additional \$228,943.

CARRIED

MOVED Director Burger, SECONDED Director Lefebvre, that staff be directed to manage the additional capital work projects required to complete a full scale ASR investigation within the 2012-2016 Financial Plan allocated budgets.

CARRIED

#### **BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS**

MOVED Director Lefebvre, SECONDED Director Holme, that a letter be prepared under the Chairman's signature in reply to T. Wicks' letter.

CARRIED

#### **NEW BUSINESS**

##### **OTHER**

The Chair opened the floor to questions from the public.

##### **Charlie Stone – 624 Island Highway West, Parksville**

C. Stone asked if there has been consideration given to monitoring water and selectively treating the water that is better quality versus all water including spikes in turbidity.

M. Henney responded that it is hard to predict extent and frequency of turbidity, but there may be an opportunity to shutoff the refill for ASR for periods of time. He added that the intake design may have features that prevent high turbidity from coming into the plant.

##### **James Craig – 1040 Forgotten Drive, Parksville**

J. Craig supported ASR technology and strategy and added that it will lessen the impact of water withdrawals from Englishman River. He questioned which steps have been taken to provide the Department of Fisheries and Oceans (DFO) with information to evaluate potential impacts of intake relocation.

M. Squire indicated that there has been stakeholder consultation with DFO and MOE and that consultation will continue as the Change of Works application and new Operational Rule proceed.

J. Finnie stated that DFO has indicated they may be looking for a level of mitigation for the intake relocation. We recognize that relocating the intake will affect that river reach from the existing site to the new site and we need to discuss further with fisheries. Mitigation for the licenced extraction from the river was considered via the construction of the AWS dam and reservoir, and the Operational Rule which requires release of water to support Fisheries. In addition, if successful, the ASR initiative may serve as mitigation because of its contribution to river flows in low flow periods and the benefit to fisheries.

**Lance Pope – 585 Columbia Drive, Parksville**

L. Pope asked how much will be spent on the ASR project by the time a referendum is held in 2014 to go forward with funding for construction. B. Harary responded that approximately \$4-5 million will have been spent prior to the referendum.

Mr. Pope expressed his concern that the money spent prior to referendum could be allocated to alternative methods such as rainwater harvesting and/or greywater recycling. J. Finnie replied that while rainwater re-use is a significant component under the Drinking Water and Watershed Protection function and other municipal initiatives, it would not be able to support the total water needs of the area unless it was on a significant scale.

Director Burger added that investigation to find the most cost effective solution at this scale has been ongoing for several years and as appropriate new alternatives become available they will be considered. Director Burger noted that a Communications Plan is in place and stressed exercising caution when releasing information to the community as misinformation can easily be communicated.

Director Lefebvre closed by saying that Vancouver Island Health Authority has dictated a certain quality of water, and that the Board has looked at all other options to satisfy VIHA's requirements for the quality and quantity of water required.

**ADJOURNMENT**

The meeting was adjourned at 8:25 pm.

**NEXT MEETING** to be announced.

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CHAIRPERSON