## **OKANAGAN BASIN WATER BOARD**

MINUTES OF A MEETING OF THE OKANAGAN BASIN WATER BOARD HELD ON FEBRUARY 5, 2002, AT THE BOARD ROOM, REGIONAL DISTRICT OF NORTH OKANAGAN, 9848 ABERBEEN ROAD, VERNON, B.C. AT 10:00 A.M.

PRESENT:	Alternate Director Colin Day	C.O.R.D.
	Director R. Hein	C.O.R.D
	Director L. Novakowski	C.O.R.D.
	Director J. Cardoso	O.S.R.D.
	Director J. Coady	O.S.R.D.
	Alternate Director Ruth Ann Gullen	O.S.R.D.
	Director A. Klim	N.O.R.D.
	Director D. Hackman	N.O.R.D.
	Director W. Hansma	N.O.R.D

**STAFF:** G. Armour Field Supervisor

## **ELECTION OF CHAIR:**

Mr. Armour called the meeting to order. He advised the Board that there was a request to delay the election of a chair until the next meeting. If the Board agreed to this, a Chair for the current meeting would have to be appointed.

Director Hein explained that he was aware that Director Hansma had expressed an interest in running for the position of Chair and that Robert Hobson had asked that his name stand as well. He said that he felt both parties wanting the position should be able to present their thoughts to the Board.

## Moved by Director Hein and seconded by Director Coady:

"That the Board defer the election of Chair and Vice Chair until the March meeting."

CARRIED.

Moved by Director Hein and seconded by Director Coady:

"That Director Hansma be appointed to Chair the February 5, 2002 meeting."

CARRIED.

Director Hansma assumed the Chair.

#### **MINUTES:**

**Moved by Director Novakowski and seconded by Director Coady:** 

"That the minutes of a regular meeting of the Okanagan Basin Water Board held on January  $8^{th}$ , 2002 be adopted as circulated."

CARRIED.

Mr. Armour advised that Vic Jensen of the Ministry of Water Land and Air Protection had noted an omission from the minutes of the November meeting at which he made a presentation on Water Quality in Kalamalka Lake. He wished it noted that the negative changes seen in water quality in the north end of the lake are likely land use related, consisting mainly of an agricultural run-off component as well as some urban run-off and a septic tank component. He felt it was important to note this in choosing what area of nutrient pollution should be addressed in the future.

The Board agreed to amend the minutes.

## **DELEGATIONS**

Dr. Stewart Cohen - Adaptation & Impacts Research Group (AIRG), Environment Canada at UBC

Dr. Denise Neilsen – Agriculture Canada, Summerland Research Station Mr. Brian Symonds – Ministry of Water Land and Air Protection

Mr. Armour informed the Board that Dr. Cohen had, last year, outlined a one year project on the impact of climate change on the water resources of the Okanagan. He said that Dr. Cohen was here to review the results of that project and to inform the Board of funding from the Climate Change Action Fund to continue and expand this work over the next 2 years.

Dr. Cohen reviewed some of the data on the nature of climate change and its potential impacts on a regional scale in the Valley. He explained that there was a documented rise in temperatures over the last 100 years along with an increase in precipitation. This will result in a longer and hotter growing season with an increased demand for irrigation and for energy for summer cooling.

Dr. Cohen advised that only six Okanagan creeks had been monitored last year ranging from lower to higher elevations in the watershed. He said it is important to understand how the change hydrographs of these streams under climate change conditions will affect stakeholders. In general, lower elevation streams will have reduced volume and earlier peak flows. Those at higher elevations with more snowpack, will have consistent flows but also earlier peak flows.

Director Hein wondered if these changes were part of any international water agreement discussions.

Dr. Cohen said that while a conference of senior water managers from the U.S. and Canada had met last summer, climate change was not officially being incorporated into internationally discussions.

Director Hein asked about the effect of warming on water loss through evaporation.

Dr. Cohen said that they had not included this component in the study.

Director Klim asked how we could be sure that climate change was responsible for the observed variance and not just a longer term climatic cycle.

Dr. Cohen explained that studies have been unable to account for the changes over the past forty years based on natural climatic variation alone. There has to be a human component and this fits with the increase in greenhouse gas concentrations.

Alternate Director Day wondered how much technology would mitigate the effects of the climate change trends.

Dr. Cohen answered that identifying the vulnerability of the Okanagan to the projected changes is an important part of the study.

Director Hansma asked about the length of the study period and the role of population growth in the observed and future changes.

Dr. Cohen reported that growth scenarios vary widely among climate models.

Director Hein stated that a politician is dependent on good information and evidence in making decisions on spending taxpayers money.

Dr. Cohen noted that new climate change models were based on good science concerning impacts that will be felt in our lifetime. There may be longer cycles at work as well of which we are not yet aware.

Director Hackman asked if global warming through emission of greenhouse gases could be fixed.

Dr. Cohen said that he is optimistic that we will be able to level off the degree of climate change through the actions we are taking.

Denise Neilsen of Agriculture Canada explained to the Board how she hoped to relate climate change to the water requirement for crops. She indicated that mapping of changes in water demand under climate change scenarios predicted a 28 percent increase in crop water use by the middle of the century. The longer growing season, combined with warmer temperatures would be responsible for this.

Director Hackman asked if crop water use was based on measured use or on the amount of water applied.

Dr. Neilsen said that the usage was measured directly at the research station.

Director Hein asked if usage was based on the crops grown today or potential changes in crops due to warmer longer growing season.

Dr. Neilsen said part of what they hope to do in the next study is to determine what crops will be grown under climate change scenarios.

Director Hein emphasized that with two new chairs in watershed management being endowed at Okanagan University College, this research should have strong coordination with that group.

Dr. Neilsen replied that she and Dr, Cohen planned to meet with the two chairs today.

Director Klim asked if effluent irrigation would be considered a wasteful use of water, that if processed to a higher level could be used to irrigate crops or if it was all just water that returned to the system.

Mr. Symonds responded that the use of reclaimed wastewater reduces the use of other higher quality supplies. He noted that water lost through evaporation does not necessarily return to the same watershed system.

Alternate Director Day commented that the City of Kelowna had moved away from effluent irrigation because of the liabilities involved in crop irrigation. He wondered if soil types were incorporated in the crop irrigation work.

Dr. Neilsen said they were not, in this model.

Director Cardoso commented on the desert situation in areas like Palm Springs where water is expensive and brought in from the Colorado River. He noted that these areas have exact models of how much water is used and where it goes.

Dr. Neilsen said that the climatological data is much more extensive there.

Dr. Cohen reviewed the specifics of the new work to be done advising that it will involve 2 years of study and include the entire watershed and not just the six creeks looked at previously. They intend to hire a hydrologist and to incorporate economic and institutional considerations into the work.

Director Hein emphasized the importance of linking with the two new chairs at OUC, both of whom have extensive hydrology backgrounds.

Dr. Cohen noted that the local involvement is building as the project continues.

Director Cardoso asked who the work will end up with and what will be done with the results.

Mr. Symonds said, that as a water manager himself, this information is needed to incorporate into future decision making. It may be that the rules of the future for managing water supplies will have to be changed.

Director Novakowski noted that the Water Board is part of the decision making process and needs to stay current.

Alternate Director Gullen said that she is concerned that some of the research information is not exact and that water districts require accurate scientific information and trained technical staff to implement it.

Director Hein said that the OBWB is not unified in what its mandate is. He stated local government must become part of the management of water.

Director Klim commented on the degree of collective effort and cooperation needed to consolidate water management and delivery using NOWA as an example.

Chair Hansma thanked the delegation for their presentation.

#### **NEW AND UNFINISHED BUSINESS:**

#### **Workshop on Small Sewage Systems:**

Mr. Armour referred to information he had attached to the agenda concerning the small sewage system workshop. He advised that he had consulted with the OMMA convention organizer about the possibility of holding the session Weds. May 1st just prior to official start of OMMA at Silver Star. He reported that we could use one of the OMMA venues until about 4:00 p.m. The OMMA Program will be mailed out Feb. 11 if we wanted to include a registration for the session to get an idea of how many would attend. He wondered about conflicts with people travelling Wednesday to the OMMA session.

The Board felt that it would be reasonable for people to arrive in time for the session if it commenced mid morning on Wednesday.

# Moved by Director Coady and seconded by Director Klim:

"That the Small Treatment System Workshop be scheduled on May 1, 2002 as a preliminary event to the OMMA Convention at Silver Star."

CARRIED.

Mr. Armour referred to information in the agenda authored by Sebastian Moffatt, a consultant with the

SheltAir Group. Mr. Moffatt gave the opening presentation at the October conference on new technology for water wastewater and storm water treatment, and has worked with a number of major cities on sustainable infrastructure plans. Mr. Armour explained that he thought the session would benefit from someone with this background and expertise, who might be able to lead the workshop into looking at alternatives to conventional means of providing infrastructure. He advised that Mr. Moffatt would want \$1000 plus his expenses to prepare for an conduct the one day session.

The Board discussed the budget for the conference and agreed that knowledgeable leadership was worthwhile.

## Moved by Director Coady and seconded by Director Cardoso:

"That the Small Treatment System Workshop be allocated a budget not to exceed \$5000, including a fee of \$1000 plus expenses to retain Mr. S. Moffatt of the SheltAir Group."

CARRIED.

Mr. Armour said that he had proposed three other speakers: from Health and from WLAP, to talk about legislation, what tools local government has, and present information on specific treatment systems and their usefulness; and from VanCity Insurance to talk about the small systems assurance program they are offering. He felt this might occupy about 1.5 hours followed by a roundtable discussion in which each community could outline their current status and needs as far as sewage infrastructure goes. This would be led by Mr. Moffatt.

The Board felt that more time should be devoted to structured presentations but suggested that Mr. Moffatt indicate how he thought the session should best proceed.

There was some discussion about whether information on decentralized treatment options would encourage sprawl or whether this technology was appropriate for dealing with existing problems.

Director Hein noted that zoning authority rests with local government and the water quality interest is primary with the Water Board. Our interest is in using technology to clean up existing problems.

Director Klim asked that presenters have handout information and perhaps information booths at the venue.

### **CORRESPONDENCE**:

## **Ecosystem Conference May 2002 in Spokane, WA**

The Board received the Ecosystem Conference Announcement for Spokane Washington April 27 – May 1 dealing with Columbia River but including a special session on the Okanagan.

## **Moved by Director Hein and seconded by Director Coady:**

"That the notice of the BC Groundwater Association Annual General Meeting scheduled for Feb. 28 – March 2 in Kelowna be received."

CARRIED.

Okanagan Basin Technical Working Group - Invitation to partner in Ecosystem Conference

Moved by Director Hein and seconded by Director Hackman:

"That correspondence from the Okanagan Basin Technical Working Group be received and filed."

CARRIED.

# **Sewerage Facilities Grants:**

# **Municipal Financial Services – Letter to City of Penticton**

The Board received confirmation that Penticton Industrial Area sewer projects would have been eligible for Provincial funding consideration. The Board had previously agreed to approve an OBWB grant for these projects subject to receipt of the letter from Province. It was noted that the Board, subsequent to this, had resolved that no more retroactive grants would be considered.

# Moved by Director Klim and seconded by Director Cardoso:

"That the Grant application from the City of Penticton for the Industrial Area sewer project be approved for payment."

CARRIED.

### **OTHER BUSINESS:**

Mr. Armour reported on a request that he participate in a Lake Weed Control Symposium in Burns Lake March 8 & 9. He noted that the organizing group had a limited budget.

Director Hein advised that he had no objection to covering the Field Supervisor's time, but that the symposium organizers should be responsible for expenses.

#### **Next Meeting**

The next regular meeting will be held March 5<sup>th</sup> in Penticton.

#### **ADJOURNMENT:**

The Oken	agan Dagir	Water Board	maating ad	iauwaad at	12.55 0 00
THE UKAH	ayan basii	i watei boaiu	meeting au	iouilleu at	12.33 p.III.

CHAIRMAN	SECRETARY