# OKANAGAN BASIN WATER BOARD

MINUTES OF AN INAUGURAL MEETING OF THE OKANAGAN BASIN WATER BOARD HELD IN THE REGIONAL DISTRICT OF NORTH OKANAGAN BOARD ROOM, 2903 - 35th AVENUE, VERNON, B. C., ON TUESDAY, FEBRUARY 28th, 1989 AT 2:40 P.M.

PRESENT:	Director E. Lamont Director S. Simpson Director N. Oystryk Director A. Hill Director E. Reich Director M. Friesen Director J. Kimberley Alt. Director Piazza Director R. Shewfelt	Central Okanagan Reg. Dist. Central Okanagan Reg. Dist. Central Okanagan Reg. DistAbsent North Okanagan Reg. Dist. North Okanagan Reg. Dist. North Okanagan Reg. Dist. Okanagan-Similkameen Reg. Dist. Okanagan-Similkameen Reg. Dist.
ALSO PRESENT:	Mr. M. Maxnuk Mr. B. Retzer Mr. M. Wallis	Ministry of Environment Ministry of Environment Aqua Reseach & Development Inc.
STAFF:	P. Mackiewich G. Armour	Administrator Field Supervisor

Director E. Lamont, Chairman of the 1988 Okanagan Basin Water Board, called the meeting to order and welcomed new Directors Simpson and Reich to the Board. He stated that the Okanagan Basin Water Board had a good year and received very little criticism appearing to satisfy the needs of the public insofar as aquatic milfoil control is concerned.

Director Lamont noted that this Board represents the whole Valley and must show its concern over any problems which may arise in the valley. Citizens are now striving to develop a clean environment and this activity shows by overtures from other groups to be represented on the Okanagan Basin Water Board. Director Lamont indicated that this is indicative of the clout the Board has, even though its powers are limited by the Supplementary Letters Patent.

Appointments for the 1989 term to the Okanagan Basin Water Board were made as follows:

# Regional District of Central Okanagan:

- Director E. Lamont;
- Director S. Simpson; Director N. Oystryk;
- Alternate Director W. Gray;
- Alternate Director J. Stuart.

Regional District of North Okanagan:

- Director A. Hill;
- Director M. Friesen;
- Director E. Reich; -
- Alternate Director E. Hornby;
- Alternate Director H. Norris.

Regional District of Okanagan-Similkameen:

- Director J. Kimberley;
- Director M. Radi;
- Director R. Shewfelt;
- Alternate Director J. I. Piazza.

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# ELECTION OF CHAIRMAN:

Director A. Hill was nominated for the position of Chairman of the Okanagan Basin Water Board for 1989 by Director M. Friesen.

Director E. Lamont was nominated as 1989 Chairman by Director S. Simpson.

There being no further nominations, nominations were closed and ballots were circulated by the Administrator for the election of Chairman. The Board agreed that Mr. M. Wallis act as a scrutineer. After the ballots were counted, the Administrator declared that Director A. Hill has been duly elected as Chairman of the Okanagan Basin Water Board for the year 1989.

Moved by Director Simpson, seconded by Director Kimberley:

"That the ballots be destroyed."

CARRIED.

Director Hill assumed the Chair and thanked Director Lamont for his service as Chairman of the Okanagan Basin Water Board since 1982.

#### **ELECTION OF VICE-CHAIRMAN:**

Director J. Kimberley was nominated as Vice-Chairman of the Okanagan Basin Water Board for the year 1989 by Director R. Shewfelt. There being no further nominations, Director Kimberley was declared Vice-Chairman of the Okanagan Basin Water Board for the year 1989.

#### MINUTES:

Moved by Director Shewfelt, seconded by Director Kimberley:

"That the minutes of a regular meeting of the Okanagan Basin Water Board held on September 15th, 1988 be adopted as circulated."

CARRIED.

#### **DELEGATIONS:**

MR. M. WALLIS: Mr. M. Wallis appeared before the Board and advised that he is employed by Aqua Research & Development Inc., a company that is contracting aquatic milfoil removal in British Columbia in a small way and, in a larger way, in Alberta and in Washington.

> The company has been able to sell the derooting concept they employ to Egypt and is developing new equipment which will come onstream in the next year or two.

Mr. Wallis then showed the Board a video of the computer controlled AD3 rototiller his firm has developed. After the video, Mr. Wallis advised that his purpose in attending the meeting is to let the Board know that there is a Vernon based company who is prepared to offer its services and to sell equipment for the control of aquatic weeds. The company is determined to do a good job, especially in its own backyard. Mr. Wallis stated that their rototiller machine costs \$110,000 and includes training. Its operating costs are \$22 per acre for parts and approximately \$50 per acre for operation. It is estimated that \$116 per acre would pay for the amortization of the equipment over a ten year period.

Mr. Armour pointed out that it is the policy of the Board that the Ministry of Environment test all new equipment and make recommendations to the Board.

Mr. Wallis replied that he feels that his company has gone beyond testing and now is prepared to enter into a contract to prove performance.

Mr. Armour reported that he observed the operation of the company's rototiller and the machine did clear the weeds in the area it was operating, however it seemed slower and less maneuverable than the Board's equipment, although this could have been as a result of the machine working in a confined area.

Mr. Wallis was thanked for his presentation.

#### **CORRESPONDENCE:**

MINISTER	Cancellation Notice of Agreement for Cost-shared Aquatic
RESPONSIBLE	Plant Management and Draft of Proposed New Five-year
FOR ENVIRONMENT:	Agreement:

A letter was received from the Honourable B. Strachan, Minister of State for Cariboo, Responsible for Environment, advising that in accordance with Clause 16 of the existing agreement between the Province and the Okanagan Basin Water Board, the letter provides notice of termination of the existing agreement effective March 31st, 1989.

Director Lamont suggested that this matter be pursued with the Minister of Environment. At the present time the Board has an agreement with the Ministry which is valid until 1991 and suggested that the government is wrong in forever trying to renegotiate the agreement.

The Administrator advised that the Ministry of Environment has forwarded a new agreement, which agreement reflects a servant/master relationship and does not recognize a partnership with the Okanagan Basin Water Board.

The Columbia Shuswap Regional District has been asked to sign a similar agreement, however are reluctant to do so until the agreement reflects a partnership.

Mr. Maxnuk noted that the Ministry advised the Board that the government would be reviewing the entire aquatic weed program in the province. The Ministry has been asked to develop a five year plan. The new plan recognized the existing 75/25% cost sharing arrangement between the Board and the Province and provides that all new equipment will be purchased with local dollars.

The Provincial Government saw the development of a five-year plan as an opportunity to renew the existing agreement with the Board for a further five years and increase the ceiling to 1.5 million dollars over the term.

Members of the Board expressed concern over the manner in which the proposed agreement was drafted and stated that it is completely unacceptable to the Board in its present form. The agreement as drafted does not reflect a partnership arrangement and although it appears to be a five-year agreement, it can be cancelled on 120 days notice without cause and does not provide any obligation for funding for more than a one-year term.

After some discussion, it was finally <u>moved</u> by Director Kimberley, seconded by Director Simpson:

"That the Minister of Environment be asked to withdraw his notice of termination of our existing agreement and to extend the termination period to June 30th, 1989 to allow the Board time to draft an acceptable agreement."

CARRIED.

# MINISTER OF Announcement of Environmental Partners Fund:

ENVIRONMENT CANADA:

Correspondence was received from the Minister of Environment Canada advising that the environmental partners fund will provide up to 50% support for local level environmental clean ups which will help to prevent environmental problems.

Moved by Director Kimberley, seconded by Director Friesen:

"That an application for funding be submitted under this program."

CARRIED.

Director Friesen left the meeting.

OKANAGAN<br/>TRIBAL COUNCIL:Proposed Establishment of Okanagan-Similkameen Watershed<br/>Advisory Committee:

Correspondence was received from the Okanagan Tribal Council recommending that an Okanagan-Similkameen Watershed Advisory Committee be established.

Mr. Armour advised that he attended a meeting convened by the the Tribal Council on December 7th, 1988 to discuss the matter. The Tribal Council has decided to take a lead role in the establishment of an Advisory Committee, however did not appear to know what direction they wish to take.

Much of the information the Council requested is already available. At this meeting the Tribal Council modified its original stand and has decided to be supportive of the government leading in environmental issues and the Council also lobbies strongly for funds.

Alt. Director Piazza noted that this may be a step in the right direction to obtain federal funding to clean up the Okanagan Valley waters.

Director Simpson observed that this may be an opportunity for the Water Board to involve the Tribal Council who would be good allies and recommended that the Council be invited to sit as observers on the Board.

Moved by Director Shewfelt, seconded by Director Simpson:

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"That a letter be written to the Okanagan Tribal Council thanking for them for the interest they have shown in the environment and the Okanagan Watershed and that they be provided with a brief outline of the mandate of the Okanagan Basin Water Board and, further, the Council be asked if they would like to become involved with the Okanagan Basin Water Board."

CARRIED.

# WATER MANAGEMENT Report on Infestation of Eurasian water milfoil in Swalwell BRANCH: (Beaver) Lake:

Mr. Brian Retzer of the Ministry of Environment outlined his report covering the initial assessment of Eurasian water milfoil in Swalwell (Beaver) Lake. He noted that Beaver Lake is the only upper lake that has become infested with milfoil. The Ministry treated the lake in 1988 and will return in 1989 to determine the effects of the program.

Mr. Retzer stated that Beaver Lake is a small enough water body to maintain a control effort. Mr. Retzer noted that in 1988 the Ministry carried out the program entirely on its own cost, but any future program will require cost sharing with the Board.

Moved by Director Kimberley, seconded by Director Reich:

"That the matter of controlling Beaver Lake be referred to the Aquatic Plant Management Committee for recommendations."

CARRIED.

#### WATER MANAGEMENT Copy of letter from Green Bay resident (Kelowna) regarding BRANCH: extensive Eurasian water milfoil growth:

A copy of a letter from the Green Bay Homeowners Association to F. King, M.P., complaining over the lack of proper control and maintenance in Green Bay was received.

Mr. Armour advised that this is one of thirteen form letters from the Green Bay Homeowners Association. He noted that Green Bay is a sheltered warm water bay and weeds are prolific in the area, however the waterfront only serves private residential properties and, as such, receives a lower priority than public use areas. Usually the weeds are harvested during the first or second week of July however during 1988 it was not harvested until July 19th. Vaseux Lake was more pressing and as a result the form letter was triggered.

Mr. Armour stated that with the priorities to treat public use areas first, it is impossible to make the Homeowners Association happy with the equipment and resources available to the Water Board.

Moved by Director Kimberley, seconded by Director Reich:

"That the letter from the Green Bay Homeowners Association be received and filed."

CARRIED.

R.D.O.D. Support for inclusion of Waste Management Studies in O.B.W.B. Funding:

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The Board was advised that the Regional Districts of Central Okanagan and North Okanagan have declined to authorize the Board to fund waste management studies, however Okanagan Similkameen has authorized funding of such studies. The Supplementary Letters Patent of the Regional District requires that before studies are funded they must be authorized by all three Regional Districts.

Director Reich left the meeting.

Alt. Director Piazza stated that if the Okanagan Basin Water Board provided study funds it would encourage the completion of waste management plans by those entities who have not undertaken such a plan.

Director Simpson stated that the Okanagan Basin Water Board should play a co-ordinating role in the completion of waste management plans.

# SEWAGE FACILITIES ASSISTANCE GRANTS:

Moved by Director Kimberley, seconded by Director Simpson:

"That the following sewage facilities assistance grants be approved:

	a) O.S.R.D. b) Town of Os	oyoos	June 3 June 3	-		14,883.59; 24,230.55;
с	;)	Gr	rants to Dece	mbe	er 31/88	
	Total Grant @ 24%		owed Grant		Paid to June 30/88	Balance to be Paid
\$	32,778.16 92,488.56		28,790.15 81,235.79	\$	17,031.31 33,265.63	\$ 11,758.84 47,970.16

33,607.46

64,749.71

636,741.63

Armstrong Coldstream Kelowna R.D.O.S. 0liver Osoyoos Penticton Vernon

30,431.43 26,422.98 24,230.55 57,670.05 50,653.53 58,219.47 120,314.10 105,675.89 47,456.42 306,258.96 268,997.46 196,547.85 72,449.61 \$ 1,446,434.46 \$ 1,270,451.62 \$ 751,000.68 \$ 519,450.94."

372,504.00

14,883.59

34,318.28

CARRIED.

264,237.63

18,723.87

#### NEW AND UNFINISHED BUSINESS:

DILEMMA:

City of Armstrong:

38,262.76

73,718.84

724,943.03

The Administrator advised that the City of Armstrong is in a dilemma insofar as implementation of its Waste Management Plan is concerned.

At the present time the City is discharging a low quality of sewage effluent into Deep Creek which discharges into Okanagan Lake. Its Waste Management Plan calls for a spray irrigation program, however the residents in Spallumcheen oppose a spray irrigation program and the City is unable to obtain sufficient land to implement its Waste Management Plan.

It can, however, upgrade the sewage system to a tertiary level and discharge a high quality effluent into Deep Creek, however this method of disposal is not acceptable to the Ministry of Environment.

Meetings have been held with representatives of the Ministry of Environment and the M.L.A.'s to try to resolve the dilemma.

#### APPOINTMENT: Signing Officers:

Moved by Director Piazza, seconded by Director Shewfelt:

"Whereas it is desirable for the Okanagan Basin Water Board (hereinafter called the 'corporation') to authorize certain of its officers to, inter alia, sign cheques, deposit promissory notes and cheques, receive paid cheques, obtain and deliver from the Corporation's bankers copies of all or any stocks and bonds;

Now therefore the Corporation hereby enacts as follows:

That all cheques of the Corporation drawn on its Current account be signed on its behalf by A. Hill, Chairman; J. Kimberley, Vice-Chairman; E. Shipmaker, N.O.R.D. Chairman, and P. Mackiewich, Secretary-Treasurer (any two to sign);

That P. Mackiewich, Secretary-Treasurer, of the Corporation be and is hereby authorized for and on behalf of the said Corporation to negotiate with, despoit with or transfer to the Bank of Montreal (but for the credit of the said Corporation only) all or any Bills of Exchange, Promissory Notes, Cheques and Orders for the payment of money and other negotiable paper, and for the said purpose to endorse the same or any of them on behalf of the said Corporation, either in writing or by rubber stamp, and further that all cheques under the sum of \$5,000.00 may be mechanically signed by any of the above officers;

That P. Mackiewich, Secretary-Treasurer, be and is hereby authorized for and on behalf of the said Corporation from time to time to arrange, settle, balance, and certify all books and accounts between the said Corporation and the Bank; to receive all paid cheques and vouchers, unpaid and unaccepted bills of exchange and other negotiable instruments;

That P. Mackiewich, Secretary-Treasurer, be and is hereby authorized for and on behalf of the said Corporation to obtain delivery from the said Bank of all or any stocks, bonds and other securities held by the said Bank in safekeeping or otherwise for the account of the said Corporation and to give valid and binding receipts therefore;

That this resolution be communicated to the said Bank and remain in force until written notice to the contrary shall have been given to the Manager for the time being the Branch of the Bank at which the account of the said Corporation is kept and receipt of such notice duly acknowledged in writing."

CARRIED.

#### APPOINTMENT: Aquatic Plant Management Committee:

Moved by Director Shewfelt, seconded by Director Kimberley:

"That the Aquatic Plant Management Committee consist of Directors Hill, Lamont, Kimberley and Mr. G. Armour, Field Supervisor." CARRIED.

#### AQUATIC PLANT <u>New Agreement:</u> MANAGEMENT:

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Moved by Alt. Director Piazza, seconded by Director Shewfelt:

"That the Aquatic Plant Management Committee be empowered to draft a new Aquatic Plant Management Agreement and be given the authority to negotiate with the Province of British Columbia in this regard."

CARRIED.

# SCHEDULE: Winter Derooting - 1988/89:

Mr. Armour circulated the 1988/89 Winter Derooting Schedule. He stated that the crew is way behind schedule because of the ice conditions. We are usually shut down for 4 - 5 weeks in the winter, but this winter we have already been shut down for 8 weeks.

Director Shewfelt noted that the Summerland area is open and suggested that derooting can commence there. Mr. Armour advised that there are probably a couple of areas that will not get derooted this year because of the lateness in getting started.

# KALAMALKA LAKE: Intensive Control Program for 1989:

Mr. Maxnuk advised that the Ministry does not have the written report ready for the proposed 1989 Intensive Control Program in Kalamalka Lake. The Ministry has, however, completed its survey and notes that several parts of Kalamalka Lake would benefit from an intensive control program which is scheduled to take place.

# ADMINISTRATION N.O.R.D.:

FEE:

# Moved by Director Shewfelt, seconded by Director Lamont:

"That the North Okanagan Regional District be permitted to increase its administration fee charged to the Okanagan Basin Water Board by 5% over 1988."

CARRIED.

#### STAFF SALARIES: 1989:

Moved by Director Shewfelt, seconded by Director Simpson:

"That the consideration of the 1989 staff salaries be referred to the Aquatic Plant Management Committee for review and a recommendation to the Board."

CARRIED.

# FEDERAL FUNDING: Moved by Alt. Director Piazza, seconded by Director Kimberley:

"That letters be written to the Valley Members of Parliament to encourage them to obtain extra funding for environmental methods to ensure that the water quality in the Okanagan is maintained."

CARRIED.

#### ADJOURNMENT:

There being no further business, the meeting adjourned on a motion of Director Shewfelt at 4:50 p.m..

CHAIRMAN

SECRETARY-TREASURER

# OKANAGAN BASIN WATER BOARD

MINUTES OF A MEETING OF THE AQUATIC PLANT MANAGEMENT COMMITTEE HELD IN THE OFFICES OF THE REGIONAL DISTRICT OF NORTH OKANAGAN, 2903 - 35TH AVENUE, VERNON, B. C. ON APRIL 18, 1989 AT 10:05 P.M.

PRESENT:	Chairman A. Hill Director E. Lamont Director J. Kimberley	N.O.R.D. C.O.R.D. O.S.R.D.
ALSO PRESENT:	M. Maxnuk B. Retzer	Ministry of Environment Ministry of Environment
STAFF:	P. Mackiewich G. Armour	Okanagan Basin Water Board Okanagan Basin Water Board

# PROVINCE OF B.C./O.B.W.B. AGREEMENT:

The Committee was advised that the draft agreement which is now being considered was administratively developed jointly with the Columbia Shuswap Regional District and reflects the concerns expressed earlier by members of the Water Board and administration relating to a partnership rather than a master/servant relationship document.

The agreement also recognizes that the Province is bound by the Financial Administration Act, but obligates the Minister to request Treasury Board for funds each year. The termination provisions without cause have been removed and the agreement may now only be terminated with cause. In addition, if the agreement is terminated by the Province for any reason, the Provincial Government must repay the Water Board's interest in equipment that it has acquired for the program.

After reviewing the document in detail, and making some minor changes, it was <u>moved</u> by Director Kimberley, seconded by Director Lamont:

"That the agreement now be forwarded to the Minister of Environment for execution."

CARRIED.

#### DISTRICT OF CHILLIWACK - Loan of 0.B.W.B. owned rototiller:

Correspondence was received from the District of Chilliwack requesting that the Okanagan Basin Water Board rent its rototiller to the District of Chilliwack during the month of July.

Mr. Armour advised the Committee that he has kept the Ministry's rototiller longer than he normally would have because of the ice conditions this year and, as a result, the machine was not available to the Chilliwack area.

The Okanagan Basin Water Board does not use any rototilling equipment after the end of June, but he expressed concern over whether or not Chilliwack has an operator which is experienced in the operation and maintenance of rototilling equipment.

Mr. Armour also expressed concern that the machine would be operating in sloughs, which conditions may be rugged. If the machine was made available, rental rates would need to be negotiated and transportation costs would need to be paid both ways by the District of Chilliwack. After some discussion it was <u>moved</u> by Director Kimberley, seconded by Director Lamont:

"That the field supervisor contact the District of Chilliwack to negotiate the terms and conditions of renting the Board's rototiller to the District."

CARRIED.

# YARD RENTAL:

Mr. Armour advised that the Okanagan Basin Water Board is renting a yard from A-1 machine for a fee of \$250.00 per month. The facility is open space with no water or power available and gets extremely muddy in the spring and the fall. To relieve the problem would result in a significant expenditure by the owner who has offered to construct a heated 40' x 60' building and rent it to the Water Board for approximately \$800 - \$1,000 per month.

After discussing the matter, the Committee **recommended** that other alternatives for rental of space be explored and that a recommendation be made to the Board.

# KALAMALKA LAKE - Intensive Control Program:

The Committee was advised that a \$52,000 combination dredge/ bottom barrier program will be carried out in Kalamalka Lake this year during the period June 15th to September 15th. The Board will hire four divers to carry out the program. Aqua Research & Development Inc. has offered to carry out the program on a contract basis.

Mr. Armour advised that the Board has the equipment and a complement of divers, together with a supervisor to carry out the program.

The Committee discussed the pros and cons of contracting out milfoil control work and noted that it is not the policy of the Board to contract out this service when the Board has its own staff and equipment available.

Mr. Maxnuk expressed concern that it is extremely difficult to monitor a diver/dredging program. One would not know for approximately one year whether or not the program was successful and, as a result, did not recommend that this work be contracted out.

Moved by Director Kimberley, seconded by Director Lamont:

"That the Kalamalka Lake Intensive Control Program be carried out by Okanagan Basin Water Board crews and Aqua Research & Development be advised that it is not the policy of the Okanagan Basin Water Board to contract work where it has its own equipment and manpower available."

CARRIED.

Mr. Retzer advised that it is the intent of the Ministry to resurvey and treat the areas missed in 1988 at Beaver Lake. It is important to keep this lake weedfree because it serves as a storage reservoir for the Winfield/Okanagan Centre Irrigation District, it has a significant fisheries interest with approximately 12,000 angler days per summer using the lake, and it is also a very important trout egg collection area.

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Mr. Retzer stated that last year's work will need to be followed up in September when the water levels are low. We will not be able to determine the success of last year's work until the survey is completed.

Mr. Armour advised that we have looked at the Environmental Partners Fund to assist with funding of the control at Beaver Lake, however we will not know whether or not monies have been approved until June. Mr. Armour also stated that funds are well spent as long as weeds are at a low level.

After some discussion, it was <u>moved</u> by Director Kimberley, seconded by Director Lamont:

"That we correspond with the Winfield/Okanagan Centre Irrigation District and the Fisheries Branch to determine whether or not these agencies will provide funding assistance to control milfoil in Beaver Lake."

CARRIED.

Mr. Retzer reported that in 1988 approximately \$12,000 was spent in controlling milfoil in this lake.

#### **GROWTH PRESSURES:**

Director Lamont expressed concern over the rapid growth occurring in the Kelowna area and the pressure this growth places on the community's sewage disposal facilities.

Director Kimberley noted that in Penticton the City sewage system is being upgraded and part of it will be a spray irrigation system. The Province originally removed the spray irrigation component from the City's Waste Management Plan, however has replaced part of it after public pressure.

The Committee **agreed** that an item for discussion at the next Board meeting would be to obtain an update on the sewage systems in Kelowna, Penticton, and Vernon and that Mr. R. Nickel, Ministry of Environment, be invited to the meeting.

The Committee also **suggested** that the recommendations contained in the Okanagan Basin Study be brought to the Board's attention for review.

# DATE OF NEXT MEETING:

The Committee agreed that the next meeting of the Okanagan Basin Water Board should be held during the last week of May if a reply is received from the Minister covering the Aquatic Plant Management Agreement.

#### ACQUISITION OF PORTABLE WEED CUTTER:

A brochure showing a portable hedge type weed cutter was circulated among the members of the Committee. The equipment is available from the United States for approximately \$300 and from the brochure appears that it should work.

The Committee, however, expressed concern that there is no way to contain the weeds after they have been cut.

The Committee **agreed** that more information be obtained on the equipment.

# 1989 STAFF SALARIES:

The attached recommendations covering 1989 staff salaries were considered by the Committee. The Committee was advised that over the last six years the field staff have received increases of approximately 2% per year. Mr. Armour did not recommend an increase in salary for a first year equipment operator, but recommended that other salaries be increased as shown. He noted that in the Regional District of Columbia Shuswap an equipment operator receives \$13.18 per hour; in the District of Coldstream \$13.94 to \$15.27 per hour. The staff has been with the Board for several years and is experienced with equipment, the geography and knows where most of the water intakes are. They are currently employed between six months for the most junior employee to eleven months for the most senior employee.

Moved by Director Lamont, seconded by Director Kimberley:

"That it be recommended that effective April 1, 1989, the staff salaries be approved as recommended by the Field Supervisor."

CARRIED.

Mr. Armour and Mr. Retzer were excused from the meeting and the Committee considered the Field Supervisor's salary.

The Administrator advised that the salary being proposed for Mr. Armour is identical to the Deputy Treasurer and the Chief Building Inspector of the North Okanagan Regional District and is \$5,450 per annum lower than Mr. Maxnuk's salary. Mr. Armour is a qualified and valuable employee to the Board and the Administator recommended that Mr. Armour's salary request be approved.

Moved by Director Kimberley, seconded by Director Lamont:

"That it be recommended that effective April 1, 1989 Mr. Greg Armour's salary be increased to \$40,800 per annum."

CARRIED.

#### ADJOURNMENT:

There being no further business, the meeting adjourned at 1:00 p.m.

CHAIRMAN SECRETARY-TREASURER

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# OKANAGAN BASIN WATER BOARD

# SALARIES 1989/90

1. <u>Supervisor</u>: Greg Armour

Bachelor of Science Degree in Marine Biology (U.B.C. 1974)

Member of Association of Professional Biologists

13 years experience in Aquatic Weed Control (1976 – Present)

Salary	1983	1988	Proposed April 1/89
Bi-Weekly	\$ 1,055	\$ 1,323	\$ 1,569
Annual	\$27,500	\$34,400	\$40,800

# Comparison: Ministry of Environment

	Biologist 2	<u>Biologist 3</u>	<u>Biologist 4</u>
Bi-Weekly	\$ 1,368	\$ 1,612	\$ 1,779
Annual	\$35,600	\$41,900	\$46,250

2. Field Staff: 7% increase in hourly rate for returning staff

	1988	Proposed April 1/89
Equipment Operator: 1st year 2nd year + up	\$10.63 \$12.46	\$10.63/hour \$13.33/hour
Truck Driver: (Class 1 License)	\$12.98	\$13.89/hour

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February 28th, 1989

# OKANAGAN BASIN WATER BOARD

MINUTES OF A REGULAR MEETING OF THE OKANAGAN BASIN WATER BOARD HELD IN THE REGIONAL DISTRICT OF CENTRAL OKANAGAN BOARD ROOM, 540 GROVES AVENUE, KELOWNA, B. C., ON THURSDAY, JULY 13th, 1989 AT 1:40 P.M.

PRESENT:	Chairman A. Hill Director M. Friesen Director E. Reich Director M. Radi Director R. Shewfelt Director E. Lamont	North Okanagan Regional District North Okanagan Regional District North Okanagan Regional District Okanagan-Similkameen Reg. District Okanagan-Similkameen Reg. District Central Okanagan Regional District
ALSO PRESENT:	M. Maxnuk	Ministry of Environment
STAFF:	P. Mackiewich G. Armour	Administrator Field Supervisor
ALSO PRESENT:	V. Sutton R. Nickel	Administrator, O.S.R.D. Okanagan Water Quality Control Project

## MINUTES:

Moved by Director Shewfelt, seconded by Director Radi:

"That the minutes of a regular meeting of the Okanagan Basin Water Board held on February 28th, 1989 be adopted as circulated."

CARRIED.

Further moved by Director Radi, seconded by Director Friesen:

"That the minutes of a meeting of the Aquatic Plant Management Committee held on April 18th, 1989 be adopted as circulated." and the recommendations contained therein be confirmed."

CARRIED.

#### **PETITIONS AND DELEGATIONS:**

# MR. R. NICKEL: Okanagan Water Quality Control Project:

Mr. R. Nickel, Manager, Okanagan Water Quality Control Project, appeared before the Board to update the Board on the status of the Okanagan Water Quality Control Project. He noted that originally this project was established for a three year term which has now been extended to five years.

The original \$20 million allocated for sewage treatment facility upgrading has been increased to \$26 million and the project has 18 months left to run. To date, \$9.6 million has been expended on the upgrading of area sewage treatment facilities. \$4.137 million have been expended on the upgrading of Vernon's sewage treatment facilities and this upgrading has now essentially been completed. The installation of the Westbank treatment system is near completion and should be operational by early fall. To date, \$2.9 million has been expended on this system.

The upgrading of the City of Penticton system was started in April and \$2 million has been expended to date, with a projected expenditure of \$1 million per month for the next twelve months for the Penticton system. The Ministry expects that the City of Penticton's upgraded sewage treatment facilities will be operational by the fall of 1990. The Penticton system is a U.B.C. derivation of Kelowna's plant.

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The Town of Osoyoos treatment facilities are next in line for upgrading; a new reservoir will be built for an estimated cost of \$1 million with the work to start very soon and to be completed within six months.

The Ministry is currently dealing with the City of Armstrong which is in a dilemma. The Spallumcheen residents are opposing spray irrigation of Armstrong's effluent and the Ministry opposes a discharge of effluent into Deep Creek. A new reservoir site is presently being sought and the City intends to extend its boundaries to include the site within City boundaries. The intent in Armstrong is to use spray irrigation with any overflow being discharged into Deep Creek.

The City of Kelowna is one-third of the way through its Waste Management Plan which should be completed within a period of six months to one year.

Mr. Nickel advised that the total cost of all of the approved capital works will be approximately \$38 million rather than the original \$30 million estimated.

The Quality Control Project Team has implemented Okanagan Basin-wide waste management planning and expects these plans to be completed by 1992. On-site septic tank disposal regulations have been developed and should be on-stream within the next six months.

The Ministry has also been fairly successful in dealing with the Ministry of Forests in development of logging guidelines.

Director Reich asked whether septic tank pollution is being addressed. Mr. Nickel replied that it was and that in developing waste management plans for various areas, sensitivity of soils, hydraulic capacities and the general development of rural areas are considered. Problem areas are identified and remedies will be recommended.

Mr. Nickel stated that the Ministry hopes to have a mosaic of the Waste Management Plan for the entire Okanagan Valley so that the Ministry can priorize where sewage facilities monies should go.

Director Lamont entered the meeting.

Mr. Nickel noted that the Ministry has completed a computer model for septic tank disposal and has come up with a broad brush soil zoning in the Okanagan Valley. Three types of soils are identified which include impervious, marginal and good insofar as septic tank disposal is concerned.

Director Friesen stated that problems with existing septic tank systems must be addressed in addition to increasing setbacks for new systems.

The Administrator advised that the North Okanagan Regional District had recommended to the Minstry of Health that it impose mandatory septic tank pumping in the Okanagan Valley. The Ministry replied that septic tanks really do not create much of a problem and did not feel that mandatory pumping requirements were needed.

Director Radi suggested that an inventory system for septic tanks should be developed and that some sort of control should be implemented.

Director Friesen noted that when septic tanks malfunction people do not phone the Health Unit and did not feel that the Health Unit is really aware of the magnitude of septic tank problems in the area.

The Chairman asked what plans are being made for sewage disposal in Summerland and Peachland. Mr. Nickel replied that a development of a Waste Management Plan for Summerland is near completion and that Peachland has not yet started its Waste Management Plan.

Director Lamont noted that if the Minstry could do an equally good job of regulating septic tanks there would be a vast improvement to the lake system and with the development of innovative septic tanks there could also possibly be alternatives to installing outfalls into the lake.

After some discussion, Mr. Nickel was thanked for his presentation.

MR. RICHARD Introduction of Hand Operated Aquatic Weed Harvesting Device: WEISBECK:

Mr. Richard Weisbeck appeared before the Board to introduce his invention called "swordfish" which is a hand operated battery powered aquatic weed cutter.

Mr. Weisbeck advised that his machine cuts weeds off at the bottom, is completely portable and totally submersible. Under load it operates for 2 hours with one battery charge and sells for \$1,195. The machine cuts in both directions and the weeds float to the top and are easily raked off.

Mr. Armour noted that our equipment is least effective in three of less feet of water. He stated that he would make people aware of Mr. Weisbeck's machine. Mr. Armour expressed concern, however, that there will be a potential for complaints because of the loss of weeds.

Mr. Maxnuk advised that the Ministry does not like to see weed cutting methods used which do not collect the weeds. He suggested that Mr. Weisbeck prepare operating instructions which would include a statement that the Ministry of Environment doesn't approve the release of weeds after they have been cut. Mr. Maxnuk noted that not all weeds in the water system are bad; many are beneficial for fish habitat. He also noted that the Federal Fisheries Ministry may seize the machine if fish habitat is being harvested.

Mr. Weisbeck advised that it is the intention of his machine to work in areas that the Okanagan Basin Water Board machines will not work.

Mr. Weisbeck was thanked for his presentation and left the meeting.

VERNON & DIST. WATER CONSERVA-TION COMMITTEE:

The Vernon & District Water Conservation Committee provided a video showing the many methods which may be used to conserve water. They also asked that the Okanagan Basin Water Board become involved in water conservation and provide funds for the types of advertisements shown in the video.

Director Radi stated that some municipalities have a problem with water supplies, then that particular municipality should be encouraged to implement water conservation methods, but it should not be the Okanagan Basin Water Board.

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Director Friesen stated that he likes the approach taken in the commercials shown in the video but agreed that the advertisements such as shown should be up to the communities and not the Water Board.

Director Lamont expressed the opinion that the Board's priority should be quality and not quantity.

Director Shewfelt suggested that we should complement the Vernon & District Water Conservation Committee on the job that they are doing, but agreed with the previous comments which had been made.

# FUTURE MEETINGS:

Director Radi recommended that due to the long intervals between meetings, the correspondence should be mailed to the Directors at periodic intervals

The Board was advised that this meeting was originally scheduled to be held at the end of May, however was moved ahead because we were hoping to have negotiations for a new aquatic plant management agreement completed for endorsation by the Board.

The Chairman asked whether or not the Board should meet more often than quarterly.

After some discussion it was <u>Moved</u> by Director Radi, seconded by Director Reich:

"That regular meetings of the Board be held on the first Thursday of every second month commencing in September."

CARRIED.

#### **CORRESPONDENCE:**

MINISTER OF Acknowledge Receipt of O.B.W.B. Draft Agreement for Weed Control:

Correspondence from the Minister of Environment acknowledging receipt of the O.B.W.B. draft agreement for weed control was received for information.

MINISTER OF<br/>ENVIRONMENT:Proposal to extend existing 0.B.W.B. - Province Weed<br/>Control Agreement to August 31st:

Correspondence from the Minister of Environment proposing to extend the existing O.B.W.B. - Provincial Weed Control Agreement to August 31st, 1989 was received for information.

MINISTRY OF No funds available for milfoil control in Swalwell (Beaver) ENVIRONMENT: Lake:

> A letter from Mr. Chris Bull, Fisheries Section Head, Ministry of Environment, advising that no funds are available for milfoil control in Swalwell (Beaver) Lake was received for information.

# DISTRICT OF Decline Use of O.B.W.B. Rototiller:

CHILLIWACK:

A letter from the Municipal Engineer, District of Chilliwack, declining use of the O.B.W.B. rototiller was received for information.

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**ENVIRONMENT:** 

CANADA:

# REGIONAL DIST. Federal funding of Sewage Treatment: OKAN. SIMILK.:

The letter from Regional District of Okanagan Similkameen referring the correspondence from Jack Whittaker, M.P., to South Okanagan Union Board of Health concerning possible Federal funding of sewage treatment was received for information.

#### L. MacWILLIAM M.P., OKANAGAN <u>SHUSWAP</u>: Federal Assistance for Aquatic Weed Control: Correspondence from L. MacWilliam, M.P., M

Correspondence from L. MacWilliam, M.P., replying to the Administrator's request for Federal Assistance for aquatic weed control was received for information.

L. MacWILLIAM, M.P., OKANAGAN SHUSWAP: A letter from L. MacWilliam, M.P., updating the

A letter from L. MacWilliam, M.P , updating the Water Board on its application for Federal funding for aquatic weed control was received for information.

# M. MAXNUK W.C.B. Requirements - Scuba Diving: MINISTRY OF

Correspondence from M. Maxnuk, Ministry of Environment, advising the Water Board of Workers' Compensation Board requirements concerning scuba diving was received for information.

# <u>REGIONAL DIST.</u> <u>Copies of letters concerning Westbank Wastewater</u> <u>OF CENT. OKAN.</u>: <u>Treatment Plant</u>:

Correspondence was received from the Regional District of Central Okanagan advising that the Westbank Wastewater treatment plant complies with the Board's tertiary treatment requirement for sewerage facilities assistance funding.

Moved by Director Friesen, seconded by Director Lamont:

"That the Westbank Wastewater Treatment Plant be approved for receipt of funding from the Sewerage Facilities Assistance Fund."

CARRIED.

# ENVIRONMENT Environmental Partners Fund:

A Press Release was received from Environment Canada outlining the details of a \$50 million partners fund which provides funding for projects such as cleanup of local parks, lakes or streams, community based water conservation projects, etc., to community groups, service clubs, environmental organizations, schools and youth groups.

Discussion arose over the types of projects which the Board may undertake under the program. It was pointed out that the Okanagan Basin Water Board as such may not be eligible for funding but that an application should be made in any event once a project has been agreed upon.

The Board **recommended** that this program be taken under advisement and the matter be brought back for the next meeting for further discussion.

# COLUMBIA SHUS. Request Use of Board's Rototiller: REGIONAL DIST.:

Moved by Director Radi, seconded by Director Reich:

"That as requested by the Columbia Shuswap Regional District, the Board's blue rototiller be made available to the Columbia Shuswap Regional District from September 18th to October 13th, 1989, provided the machine is not required by the Board during that period."

CARRIED.

# CITY OF KELOWNA: Moving of Concrete Marker Buoys by Derooting Equipment:

A letter was received from the City of Kelowna expressing concern that during recent weed harvesting in the Strathcona Beach area of Kelowna, several of the concrete anchors used for marker buoys were moved.

The Board **recommended** that letters be written to all of the member municipalities and regional districts advising them where weed harvesting will occur and request that they do not anchor buoys where weed harvesting will be carried out.

CITY OF KELOWNA: Biological Control of Aquatic Weeds in South Pacific:

A letter was received from the City of Kelowna attaching a newspaper clipping advising that a weevil called cyrtopagous saleiniae has been found which eats milfoil.

Mr. Maxnuk agreed to obtain more information on this weevil and forward the research to the Board for consideration.

Director Lamont left the meeting.

# SEWERAGE FACILITIES ASSISTANCE GRANTS:

Moved by Director Friesen, seconded by Director Shewfelt:

"That the Sewerage Facilities Assistance Grant application from the Town of Osoyoos, period Jan. 1 - June 30/89, in the amount of \$19,230.08 be approved for payment."

CARRIED.

# NEW AND UNFINISHED BUSINESS:

O.B.W.B.-PROVINCE: Agreement for Weed Control:

The Board reviewed a draft agreement received from the Ministry of Environment containing some significant differences from the draft agreement which was forwarded by the Board.

It was agreed that a meeting be requested with the Valley M.L.A.'s and the Minister of Environment as soon as possible in order to resolve the differences in the document.

AUDITED Moved by Director Friesen, seconded by Director Shewfelt:

 FINANCIAL

 STATEMENT:

 "That the 1988/89 Audited Financial Statement covering the Okanagan Basin Water Board be received."

CARRIED.

#### PROVISIONAL Fiscal Year 1990/91: BUDGET:

Moved by Director Reich, seconded by Director Friesen:

"That the Provisional Budget for the fiscal year 1990/91 showing total expenditures in the amount of \$257,900 be forwarded to the Minister of Environment for approval."

CARRIED.

The Board was advised that to date our 1989/90 fiscal year budget still has not received approval from the Ministry, however the invoices submitted to government are being paid.

#### WORK YARD: Equipment Storage Facilities:

Mr. Armour advised the Board that we are currently renting a yard for the storage of equipment at a rate of \$250 per The yard is very muddy during the spring, does not month. contain any buildings, and it is very difficult to service equipment in inclement weather and to store equipment which should not be stored outdoors.

Mr. Armour advised that he has been negotiating with an owner of property near the same site who owns a fenced yard on which a  $40' \times 60'$  shop is located. This yard is available for rent on a long term lease at a rate of \$800 per month plus utilities, plus 1/3 of any tax increases beyond the base vear.

Moved by Director Radi, seconded by Director Shewfelt:

"That the Administration be authorized to enter into a lease to rent the abovedescribed facilities known as Field's cardlock at a base rate of \$800 per month, plus utilities, plus 1/3 of any tax increases beyond the current year."

CARRIED.

HARVESTING 1989: SCHEDULE:

> The attached 1989 Harvesting Schedule was circulated for information.

#### **OTHER MATTERS:**

0.B.W.B.: Review Recommendations of Consultative Board and Role:

> It was agreed that a review of the recommendations of the Consultative Board covering the Okanagan Basin Water Board and a review of the role of the Okanagan Basin Water Board be deferred to the next meeting for consideration.

NEXT BOARD The Board agreed that the next regular meeting of the MEETING: Okanagan Basin Water Board be held on Thursday, September 7th, 1989 in Penticton.

#### ADJOURNMENT:

There being no further business, the meeting adjourned at 4:00 p.m..

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### ADJOURNMENT:

There being no further business, the meeting adjourned at 4:00 p.m..

SECRETARY-TREASURER

CHAIRMAN

PM/las

Attach.

# PROPOSED AQUATIC WEED HARVESTING SCHEDULE - 1989

The 1989 Harvesting Program will again give priority to public beaches, recreational areas, and resorts. Cutting will begin in Mid-June depending on plant growth rates as determined by lake levels and weather conditions and will end on September 1.

Winter derooting has been effective in reducing plant density in areas such as Kelowna foreshores, Okanagan Landing, Skaha Lake (Okanagan Falls), and Osoyoos Lake, and although some harvesting clean-up remains, it is likely that additional harvesting time will be available for other sites.

Four aquatic weed harvesters will be in service for the 1989 season and will be based as follows:

#### Note: Start dates are approximate.

1. <u>South</u> <u>Aquamarine Harvester #3</u> Okanagan:

Lake:

- - B

Osoyoos Lake: (based in Osoyoos all summer)

June 12 <u>Central and South Basins</u> - Resorts, Provincial Park, Solana Bay.

> <u>North Basin</u> - Motel Row, Civic Beach, Starlite Marina

Willow Beach Area - including areas on west shore as necessary.

Skaha Lake: Aquamarine Harvester #1

June 28 North End: Public Beach, Marina, and Boat Launch

July 4 Kaleden Area: Resorts, Public Beach, and Boat Launch

July 10 Okanagan Falls: Provincial Beach, Boat Launch, and Resort Area

July 19 <u>East Side</u>: Sunny Bay, Skaha Estates, Southeast Penticton

#### Vaseux Aquamarine Harvester #1

June 8 <u>South Shore</u> - motel and river channel if required to improve water flow

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June 22 Provincial Campground and Resort, East shore residential, if time permits.

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Okanagan Lake:

June 19 Kelowna Foreshore: Cook Road Boat Launch, Rotary Beach, Gyro Beach, and public access North to Bridge, Hot Sands Beach, Yacht Club.

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July 4 Westside - Regional Park, Marina, Boat Launch

July 10 Peachland Foreshore to Antler's Beach

July 17 Summerland - as necessary

July 24 Penticton - Marina at Penticton and Naramata

Wood Lake:

August 1 South End Motels, Marina and Resorts, West Side to 15 Resorts and View Areas

Repeat cutting at Kelowna as necessary

3. <u>North</u> Okanagan

Ellison Holiday Park Resort and Water Ski Site

Aquamarine Harvester #2

June 12 - 23

Okanagan Lake

June 26	Vernon Arm (Okanagan Landing)			
	Paddlewheel Park, Kin Beach, Marinas, Sandy Beach			
	East and West Shore Residential Areas as time permits			

August 1 Westside - as time permits

# OKANAGAN BASIN WATER BOARD

MINUTES OF A REGULAR MEETING OF THE OKANAGAN BASIN WATER BOARD HELD IN THE REGIONAL DISTRICT OF OKANAGAN-SIMILKAMEEN BOARD ROOM, 101 MARTIN STREET, PENTICTON, B. C., ON THURSDAY, SEPT. 7th, 1989 AT 1:30 P.M.

PRESENT:	Chairman A. Hill Director M. Friesen Director J. Kimberley Director R. Shewfelt Alt. Director J. Piazza Director N. Oystryk	North Okanagan Regional District North Okanagan Regional District Okanagan-Similkameen Reg. District Okanagan-Similkameen Reg. District Okanagan-Similkameen Reg. District Central Okanagan Regional District
ALSO PRESENT:	M. Maxnuk	Ministry of Environment
STAFF:	P. Mackiewich G. Armour	Administrator Field Supervisor
ALSO PRESENT:	Jean Whitney	Constituency Secretary to Jack Whittaker, M.P.

# MINUTES:

Moved by Director Friesn, seconded by Director Oystryk:

"That the minutes of a regular meeting of the Okanagan Basin Water Board held on July 13th, 1989 be adopted as circulated."

CARRIED.

#### CORRESPONDENCE:

# MINISTER OF Approval 1989/90 Funding Level: ENVIRONMENT:

Correspondence was received from the Minister Responsible for Environment advising that our budgetary request for the 1989/90 season for up to \$228,000, being 75% share of control of Eurasian water milfoil under our cost-sharing agreement, has been approved by the Provincial Government.

This funding includes a special Provincial allocation of up to \$40,000 for intensive milfoil control of Kalamalka Lake. The Minister further advised that it is anticipated that funding in the fiscal year 1990/91 would be reduced to \$188,000.

The Board was advised that our 1990/91 Provisional Budget requested a grant of \$193,425 from the Provincial Government. The Board expressed concern that the budgetary allocation has been cut by approximately \$5,000 over that requested by the Water Board and it was <u>Moved</u> by Director Kimberley, seconded by Director Shewfelt:

"That a letter be written to the Minister Responsible for Environment expressing concern over the reduction in the Board's request for the 1990/91 fiscal year from \$193,425 and encourage the Minister to expand the program and not to reduce it."

CARRIED.

	Milfoil – Osoyoos Lake:	
ECONOMIC DEVEL.		
CORPORATION:	Moved by Director Kimberley, seconded by Director Shewfelt:	

"That a copy of the correspondence from the Economic Development Corporation of Osoyoos & Area to Dr. P. R. Newroth and his reply related to the combatting of the milfoil problem in Osoyoos Lake be received and filed."

CARRIED.

Page Two

NEWSPAPER

ARTICLE:

John Hackman Dredge:

The Board reviewed a news article which appeared in the Vernon Daily News reviewing a dredge for the removal of milfoil.

Mr. Maxnuk advised that the Ministry of Environment evaluated the dredge developed by Mr. John Hackman and found that the dredge did remove the milfoil effectively, however the plants started growing back as predicted and which is consistent with other control methods.

The difficulty with dredging of milfoil is that the method requires treatment and disposal of spoils. Mr. Hackman does not have the only dredge available for such purposes; there are numerous companies which have dredging machines which can be used for milfoil control.

Moved by Director Shewfelt, seconded by Director Oystryk:

"That the information relating to the dredge machine developed by Mr. John Hackman be received and filed."

CARRIED.

#### COLUMBIA SHUS. Agreement for Cost share Control Agreement: REGIONAL DIST.:

Moved by Director Kimberley, seconded by Alt. Director Piazza:

"That the copy of a letter from the Columbia Shuswap Regonal District to the Ministry of Environment outlining their conditions for settling their agreement with the Provincial Government covering cost sharing control of Eurasian water milfoil in the Shuswap Lake system be received for information."

CARRIED.

# MR. M. MAXNUK: Management of salviniae molesta (weed eating moth):

Mr. Maxnuk provided information covering the management of salviniae molesta in the northern territories. He noted that salviniae molesta would not live in the northern environment, but that there are other herbiverous insects which eat milfoil. A paper on these insects has been provided to the Administrator.

These insects now occur naturally in the Okanagan environment, however to be effective large quantities are required to be reared however to date an efficient method of rearing the insects has not been found.

Moved by Director Shewfelt, seconded by Alt. Director Piazza:

"That the Summerland Research Station be requested to provide assistance to research and develop the milfoil eating insects and the Members of Parliament within the Okanagan also be asked for their assistance in this regard."

CARRIED.

# Milfoil - Vaseux Lake:

MR. AND MRS. T. WORTH & MINISTER

OF ENVIRONMENT:

A copy of a letter to the Minister of Environment from Mr. and Mrs. T. Worth requesting that the milfoil in Vaseux Lake be removed by means of dragging a chain with a rope attached and the Minister's reply that dredging for Eurasian water milfoil control was tested in Vernon in 1975 and was found to be only temporarily effective was received.

Mr. Armour advised the Board that dredging has never been carried out in Vaseux Lake because of the lack of available equipment and funds.

Mr. Maxnuk noted that Vaseux Lake is the biggest single weed lake in the Okanagan and technically it is very difficult to do anything with it.

A lot of money can be spent on the weed problem in Vaseux Lake and in about two years the weed problem would be right back where is it now.

Members of the Board suggested that perhaps dredging of Vaseux Lake would be effective and Mr. Maxnuk estimated that to dredge the lake would cost over \$2 million.

After some discussion, it was finally <u>Moved</u> by Alt. Director Piazza, seconded by Director Shewfelt:

"That an appeal be made to the Minister of Environment for extra project funds to eradicate the weeds from Vaseux Lake."

CARRIED.

MINISTER OF ENVIRONMENT:

#### Agreement on Cost-shared control of Eurasian water milfoil:

A letter was received from the Minister of Environment recommending that the Board meet with Dr. D. A. Kasianchuk, Director, Water Management Branch to prepare an agenda for the meeting of the Board with the Minister and Okanagan M.L.A.'s.

The Administrator advised that the Ministry is aware of the Board's concern over the contract and that the Honourable L. Hanson's office has agreed to make arrangements for the Board to meet with the Minister and the Okanagan Valley M.L.A.s at the upcoming U.B.C.M. Convention in Penticton.

The Administrator reported that he may not be attending the U.B.C.M. Convention, however and asked whether or not the Board wanted to meet the Minister without administration.

Moved by Director Shewfelt, seconded by Director Friesen:

"That the offer of the Honourable L. Hanson's office to arrange a meeting with the Minister and the Board at the U.B.C.M. Convention in Penticton be accepted in order that negotiations for the cost-shared agreement can be finalized."

CARRIED.

# SEWERAGE FACILITIES ASSISTANCE GRANTS:

Moved by Alt. Director Piazza, seconded by Director Oystryk:

"That the following Sewerage Facilities Assistance Grants be approved for payment:

 City of Kelowna
 \$ 308,082.95;

 City of Penticton
 \$ 55,793.28;

 City of Armstrong
 \$ 14,331.45."

CARRIED.

#### NEW AND UNFINISHED BUSINESS:

ENVIRONMENTAL Mr. Armour explained that the Board itself is not eligible for funding under the Environmental Partners Fund, however it can provide the lead.

The funds cannot be used for any projects which are presently being undertaken by the Board, but 50% funding can be obtained by non-profit organizations for the Board to undertake other projects which may qualify through a non-profit organization such as equipment design, biological control, super septic tank design and research, prevention of spread of milfoil to upper elevations and so on. We would still need to raise 50% of the funds.

Moved by Diretor Oystryk, seconded by Director Friesen:

"That information on the Environmental Partners Fund be filed for future reference."

CARRIED.

#### WINTER DEROOTING:

# 1988/89 Results:

Mr. Armour advised the Board that he has not yet prepared the 1989/90 Winter Derooting schedule and circulated the attached 1988/89 derooting results for the Board's information.

Discussion arose over the harvesting within the Solana Bay area. The Administrator recommended that the Board establish a policy for harvesting of private lakeshore property such as Solana Bay and Westside Cays. Solana Bay has been harvested at no charge to the residents, yet the residents of Westside Cays have been required to pay for their services.

Mr. Maxnuk explained that most of the area called Solana Bay is actually Goodmans Pond and is public domain, however Solana Bay is private.

Moved by Director Shewfelt, seconded by Director Oystryk:

"That the matter of harvesting private foreshore such as Westside Cays and Solana Bay be placed on the next meeting agenda for the establishment of a policy."

CARRIED.

### REVIEW: Terms of Reference of O.B.W.B. and Okanagan Basin Study Recommendations:

Discussion arose over whether or not the Board is really doing its job when one considers the Okanagan Basin Study recommendations and **agreed** that this matter be discussed very soon.

# LEASE CONDITIONS:

# Field Investment Ltd.:

The Board was advised that as authorized at its July 13th, 1989 meeting negotiations to lease a works yard and building have been completed with Field Investments Ltd. at a rate of \$800 per month over a three-year period with no escalation in rent fees plus any increase in taxes over the base year of 1989.

Field Investment Ltd. have agreed to enter into a three-year term without any escape clause or alternatively will provide an escape clause which would apply both to the landlord and tenant by giving notice for whatever term the Board may deem appropriate.

# DEROOTING SUMMARY - 1988/89

# Equipment Used:

- Rototiller No. 1 (owned by M.O.E.) Worked in South Okanagan for the period March 17th to May 29th, 1989
  - Total hours of operation 494,2

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- Rototiller No. 2 (O.B.W.B.) Worked in North Okanagan from November 8th, \_ 1988 to June 1st, 1989 with a shutdown due to cold weather and ice cover for the period Jan. 27th to March 8th, 1989.

  - Total hours of operation 626.5 (Also loaned to C.S.R.D. Oct. 12 31 Hours 108.3)
- Bombardier (O.B.W.B.) shallow water operation on Kelowna foreshore and --south shore of Wood Lake
  - Total hours of operation 69.4

Derooting Site	Start Date	Completion Date	Machine Used	Operating Hours
Summerland			Roto. #1	
- Lakeshore Tent & Trailer	March 7	March 13	Ц	32.0
- Yacht Club	March 13	March 13	" (extensive debris)	
<u>Kelowna</u> - Cedar Ave. to West Ave. - Kinsmen Park - Gyro Park	March 15	April 3	n -	141.6
Skaha Lake				
- Skaha Beach (east & west of Okanagan River)	April 4	April 13	" (excluding hous adjacent to Sudbury Beach)	
- Okanagan Falls Boat Launch Christie Park	April 14	April 26	"	65.7
Motel & Park - Recreation West Marina	April 27	May 3	н	46.0
			Skaha Subtotal	166.9

# Derooting - 1988/89, Con't.

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# Page Two

Derooting Site	Start Date	Completion Date	Machine Used	Operating Hours	
			Roto. #1		
Osoyoos Lake - Willow Beach - Motel Row	May 14 May 18	May 17 May 25		81.2 45.6	
Starlite Marin - South Basin Adjacent to Bridge Solana Bay Entrance	a May 26	May 29		26.9	
Entrance			Osoyoos Subtot	al 153.7	
			Roto #1 Subtot	a and the second second second	
			KULU #1 SUDLUL	al <u>494.2</u>	
<u>Shuswap Lake</u> (Cont - Sicamous	ract - 100% F Oct. 12/88		Roto #2	108.3	
Okanagan Lake					
Okanagan Landing	Nov. 8/88	Nov. 24/88	11	47.3	
Downtime	Nov. 25/88 Dec. 5/88	Dec. 3/88 Jan. 26/89	11		
- Yacht Club Seymour Marina	Dec. 11/88	Dec. 12/88	8	13.6	
Shutdown due to cold weather and ice on lakes - Jan. 27 - March 9/89					
			Vernon Subt	otal <u>201.1</u>	
Kelowna Foreshore - Watt Road Area - Cedar Avenue - Yacht Club - Cook Ave. Launch	March 9 April 9 April 9 April 28	April 8 April 27 April 18 April 30	81 13 33 88	$   \begin{array}{r}     148.4 \\     50.4 \\     35.5 \\     23.1   \end{array} $	
			Kelowna Subt	otal 257.4	

Kelowna Subtotal 257.4

# Derooting - 1988/89, Con't.

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# Page Three

Derooting Site	Start Date	Completion Date	Machine Used	Operating Hours
			Roto. #2	
Kalamalka Lake				
- Palfrey Crek	May 14	May 17	11	81.2
- Curwens - Oyama Canal	May 18	May 25	16	45.6
- Klub Kalamalka - Summertree	May 26	May 29	н	26.9
			Kalamalka Lake Subtotal	153.7
Wood Lake				
- Belvedere	May 11	May 13	14	21.0
Resort - Beasley Park	May 14	May 18	11	26.1
- Sam's Resort	May 19		11	67,4
to Lakeshore Resort				
			Wood Lake Subtota	1 114.5
		R	ombardier	
Okanagan Lake		b		
- Kelowna	April 13	April 15	n	12.5
Foreshore (Bridge-Strathcona)	)			
- Kinsmen Park to	/ April 17	April 25	п	32.9
Cedar Ave.				
- Cedar Ave. to	April 26	May 1	11 IL	15.3
Point Watt Rd.	May 2	May 5		8.3
			Rombandian Tot:	-1 60 A

Bombardier Total 69.4

An escape clause would enable the landlord to evict the tenant or alternately increase the rental by giving notice of termination of the lease.

Moved by Director Alt. Director Piazza, seconded by Director Friesen:

"That the lease with Field Investment Ltd. be entered into at a base rate of \$800.00 per month for a three year period with no escape clause but providing for adjustments for future tax increases as set out in the lease documents."

CARRIED.

# ADJOURNMENT:

There being no further business, the meeting adjourned at 4:00 p.m. on a motion of Alt. Director Piazza.

CHAIRMAN

PM/las

Attach.

# OKANAGAN BASIN WATER BOARD

MINUTES OF A MEETING OF THE OKANAGAN BASIN WATER BOARD HELD IN THE PENTICTON BEACH BOWL, PENTICTON, B. C., ON THURSDAY, SEPTEMBER 21st, 1989 AT 10:35 A.M.

PRESENT:	Chairman A. Hill Director M. Friesen Director M. Radi Director R. Shewfelt Director J. Kimberley Director N. Oystryk Director S. Simpson	North Okanagan Regional District North Okanagan Regional District Okanagan-Similkameen Reg. District Okanagan-Similkameen Reg. District Okanagan Similkameen Reg. District Central Okanagan Regional District Central Okanagan Regional District
STAFF:	P. Mackiewich	Administrator

#### PURPOSE OF THE MEETING:

The purpose of the meeting was to review the Board's strategy when meeting with the Minister of Environment, the Honourable Bruce Strachan, to discuss the cost sharing agreement for aquatic weed control.

The Administrator reviewed some of the sections of the agreement as drafted by the Ministry of Environment which are not deemed to be acceptable.

He noted that the proposed agreement does not recognize that aquatic weed control is a partnership with the Water Board and the document has been drafted as a master/servant relationship agreement.

It also places total liability on the Water Board when carrying out the program; it requires that the Board respond to all of the directions of the Minister whether or not the Board agrees with such directions and it does not provide for the replacement and/or addition of harvesting equipment.

We have been advised by the Ministry staff that it is not the policy of government to cost share in the acquisition of equipment and that this matter should be addressed when meeting with the Minister.

Members of the Board expressed serious concern over the apparent lack of commitment by the Provincial Government to have the aquatic weed program properly tackled and noted that the trivial amount of funds provided for the program are simply inadequate.

The Board also noted that alternatives to harvesting must also be explored, such as biological control, including weed eating carp which are currently being used in Alberta.

After some discussion, it was the **concensus** of the Board that two problems are apparent. One is that the Ministry of Environment has presented the Board with a cost sharing agreement it cannot agree with and, two, that insufficient funds are being provided for the program.

It was also the **concensus** of the Board that these points be made strongly to the Minister, including a pitch for the need to acquire replacement and/or additional equipment and, further that if agreement cannot be reached on these matters, the Board should consider accepting the Minister's letter terminating the existing agreement on October 31st, 1989.

The meeting recessed at 11:00 a.m. and joined the Minister, the Honourable Bruce Strachan, together with the Assistant Deputy Minister, Mr. Jon O'Reardon.

The Chairman asked the Minister whether or not he'd been briefed on the apparent impasse the Board has reached in trying to negotiate a new aquatic plant management agreement with the Provincial Government as a result of the Board's existing agreement being terminated by the Ministry on October 31st, 1989 and the Minister replied that he was not briefed, nor was he aware of the termination notice.

The Minister was advised that the Board cannot agree with the cost sharing agreement it has been presented with for the following reasons:

a. It does not recognize that the program is a partnership with the Provincial Government and the agreement presented is a master/servant relationship document.

The Minister agreed that the document should reflect a partnership.

- b. That the liability for the entire program is placed onto the shoulders of the Okanagan Basin Water Board.
- c. The agreement does not reflect a commitment of government to really attack the aquatic weed problem and doesn't provide sufficient funds nor provision for the addition or for the replacement of necessary equipment.

The Minister asked how much additional funds would be required to run the program.

He was advised that using the current equipment, the funds in the program are adequate, however at least one additional rototiller should be added to the fleet with the necessary funds to operate the equipment and the guestimate would be an additional \$100,000 per year would certainly be helpful.

The Minister was also advised that the lakes system of the Okanagan are the main drawing card and the tourism industry would drastically suffer if the weeds are not removed.

After some discussion, the Minister advised that he did not realize that the Board found the agreement it was presented with to be so offensive and agreed to address all of the concerns the Board has expressed, including biological control, and to try to have the problems resolved prior to the termination of the existing agreement on October 31st, 1989.

## ADJOURNMENT:

There being no further business, the meeting adjourned at 11:30 a.m.

Lill CHAIRMAN

SECRETARY-TREASURER

PM/las

# OKANAGAN BASIN WATER BOARD

MINUTES OF A MEETING OF THE OKANAGAN BASIN WATER BOARD HELD IN THE BOARD ROOM OF THE CENTRAL OKANAGAN REGIONAL DISTRICT OFFICES, 540 GROVES AVENUE, KELOWNA, B. C. ON THURSDAY, OCTOBER 12th, 1989 AT 1:30 P.M.

PRESENT:	Chairman A. Hill Director M. Friesen Director E. Reich Director R. Shewfelt Alt. Director J. Piazza Director S. Simpson Director E. Lamont	North Okanagan Regional District North Okanagan Regional District North Okanagan Regional District Okanagan-Similkameen Reg. District Okanagan-Similkameen Reg. District Central Okanagan Regional District Central Okanagan Regional District
ALSO PRESENT:	Mr. L. Chalmers Mr. C. Serwa Dr. D. Kasianchuk Dr. P. Newroth Mr. M. Maxnuk	M.L.A., Okanagan South M.L.A., Okanagan South Ministry of Environment Ministry of Environment Ministry of Environment
STAFF:	P. Mackiewich G. Armour	Administrator Field Supervisor

#### PURPOSE OF THE MEETING:

The purpose of the meeting was generally to review the proposed Aquatic Plant Management Agreement Program prepared by the Province.

Dr. Kasianchuk referred to the Board's letter dated September 27th, 1989 expressing displeasure over the agreement as drafted and apologized that the Board found the agreement offensive.

Dr. Kasianchuk stated that he wants to work with the Board towards the removal of the offensive clauses, to agree on the contents of the agreement and then to advise the solicitors accordingly. He stated there is absolutely no intent on the part of government to execute a master-servant relationship document.

He advised that the Province wants the Water Board to be the leader in the program because the Province is not interested in developing a super structure.

# Joint Liabilities and Equipment Acquisition:

The Provincial Government is now prepared to share in the joint liabilities, including the costs of acquiring the necessary insurance.

The acquisition of equipment is more difficult. It is the current policy of government not to participate in the acquisition of new equipment, which policy came about as a result of the proposal submitted by the Columbia Shuswap Regional District when the Treasury Board refused to share in the cost of new equipment.

Dr. Kasianchuk stated that he is prepared to take back any concerns that the Board has to the Minister in this regard. He further stated that the government is committed to the Aquatic Weed Program.

Dr. Kasianchuk was advised that the Board does not feel that the Government has much commitment to the Program when it provides such minimal funds and puts the Water Board in the position of begging for funds almost every year. Then when it is presented with a master-servant relationship type of agreement for signature, the Board wonders why it is in this program at all.

The funding arrangement does not provide for monies to acquire additional equipment, yet if a private contractor was operating the program the charges for the program would be sufficient to capitalize the cost of the equipment, therefore it is imperative that the government share in the cost of replacement and additional equipment.

Director Lamont noted that in 1986 the agreement for Aquatic Plant Management in the Okanagan Basin was renewed for a period of five years ending April, 1991. The Government has now given notice of termination of this agreement effective October 31st, 1989. He stated that it is difficult for the Board to function when it forever has to chase the government for money. He noted that the Water Board was first in the Province to control aquatic weeds, yet there is a feeling of great uncertainty over the program.

Dr. Kasianchuk replied that it was the intention to terminate the existing agreement once a new agreement was negotiated and executed and not before as was done.

Director Lamont stated that it is his feeling that it is the intent of the Government to pass on more and more of the costs for aquatic weed control onto the local taxpayer.

Alt. Director Piazza noted that the Okanagan is not only for the Okanagan people, but the tourism economy from the Okanagan benefits the entire province. He suggested that cost sharing be 90/10% rather than 75/25%.

Dr. Kasianchuk advised that the Treasury Board has increased the funds to the program Province wide and feels that his Ministry has wrestled as much monies from the Government as it's going to get.

Chairman Hill stated that \$188,000 for a program to provide control of all of the Okanagan Lakes is really a paltry sum. Dr. Kasianchuk agreed to undertake to prepare a Treasury Board submission to see if the Treasury Board's position on the acquisition of and replacement of equipment has changed. In terms of design the Ministry would like to test the design of the rototiller which will shortly be ordered by the Columbia Shuswap Regional District. A change in policy for acquisition of equipment in the Okanagan Basin will have implications with other authorities who have agreement.

Director Simpson noted that there does not seem to be an end to milfoil harvesting and asked whether there are any other alternative methods of aquatic weed control.

Dr. Newroth replied that when there was a million dollars in the program cultivating, rotovating and diver dredging control methods were developed for aquatic weed control. In addition, the Province was first to find an insect which appeared to be effective in controlling the milfoil. When the program funds were cut, something had to go so the research part of the program was deleted.

The Science Council in the University of Victoria is currently finding ways to rear the insects which appear to provide effective biological control. Fungi have been developed in the United Stated which appear to damage the weeds. The use of herbicides is very contraversial and there does not appear to be much hope that the use of herbicides will be permitted. Grass carp have been tested in Alberta and Washington and appear to be a practial control method in small ponds and irrigation ditches, but not practical for use in Okanagan Lakes. The price of each fish is between \$5 and \$10 and a large quantity of fish would be required.

In addition, the Federal Government is against the introduction of the grass carp into the local lakes. Grass carp will not necessarily eat the milfoil, but will also eat other weeds which are beneficial to the ecology. Vaseux Lake is a very large body of water for carp control and the stocking of this lake with carp would be very expensive.

Director Simpson noted that Vaseux Lake appears to be doomed anyway and it may be a good place to try the grass carp control method.

Dr. Newroth observed that the aquatic weed was only introduced into Vaseux Lake in 1975 and has spread like wildfire since then.

Mr. Armour noted that Dr. Newroth has identified two treatments, being biological control and rototilling, each method requiring more funds to be effective.

Director Friesen observed that Vaseux Lake is a blatant example of the program itself. He stated that we are not going to eradicate the weeds, but we certainly need more funds to provide realistic control.

Director Reich stated that at one point we had a \$2 million program which has now been reduced to less than \$200,000. This year we've had \$5,000 cut from our submission. He said that the public is expecting to have more happen than is happening. If we cannot receive a better commitment from government, then perhaps the Water Board should wash its hands of the program.

The waters are a provincial jurisdiction and not local, therefore the government must provide much more commitment to the program than it is currently doing.

Director Lamont observed that we have gone a full circle. He noted that the Federal Government has spent over \$1 million cleaning up the Great Lakes system and perhaps we should pursue the Federal Government for funds. He suggested that the Board look at its own authority as well because it represents the whole valley and is bigger than just a weed control Board. He also suggested that the whole concept should be readdressed and redrafted in by-law form so we don't have to continually plead with government for funds, otherwise the matter of the Board dissolving will keep coming up.

The Chairman stated he also senses a gradual emasculation of the board and felt that the Board did not live up to the Okanagan Basin Agreement.

Director Simpson stated that funding is a political decision and we are here shooting the messengers. In addition, we appear to be perpetuating a program which barely keeps up and may not be the way to go. She suggested that we should find some other way to present the program which will justify more funding.

Director Shewfelt stated that the Board seems to have gone away from its mandate. We require more funding and more equipment and to establish a goal for ourselves. He suggested that we contact Mr. A. Horning, M.P., and also our M.L.A.'s to advise Cabinet that the Board is completely frustrated and is going to quit if there is not more senior government commitment to the program.

Director Lamont felt that the Okanagan Basin Water Board should have the same authority as the Tenessee Valley Authority.

Mr. Chalmers, M.L.A., stated that we must find a long term solution but that we also need to address the immediate problem. He advised that the Honourable L. Hanson and the other valley M.L.A.'s have met and are certainly willing to support the Board's request for additional funding.

Mr. Chalmers indicated that there must be some local cost-sharing and noted that the 75/25% cost sharing formula seems to be reasonable. Mr. Chalmers observed that he shares the feeling of the Board that if the Board cannot get more commitment from the Government that the whole situation should be reassessed. He agreed that the whole problem must be revisited and that it is really a political decision when it comes down to funding.

Dr. Kasianchuk suggested that the Board outline its scope of the program it wishes to see undertaken in the years 1990 and 1991 and in the future, together with a budget which can be presented to the Cabinet. In addition, he will ask that the Minister revisit with Treasury Board the policy of acquiring new and replacement equipment.

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Director Reich agreed that not only should we come up with something saleable, but so should government.

Mr. Cliff Serwa, M.L.A., stated that he has attended a series of Okanagan Basin Water Board meetings and supports the position of the Board. When one recognizes that there are 250,000 people living in the Okanagan valley containing five major lakes it's a very small amount of funds which are being provided to aquatic weed control. He stated that hopefully the Board and the Province can arrive at a more suitable agreement.

He suggested that perhaps the acquisition of GO B.C. funds should be explored because there certainly is no question on the magnitude of the weed problem in the valley. He assured the Board that to the best of his ability he will represents the concerns to the Treasury Board. The timing is right for such a request.

The Chairman observed that the general public will demand a more agressive role by the Board.

Dr. Kasianchuk advised that he would do the following:

- 1. Propose to the Minister that a letter be written to the Okanagan Basin Water Board withdrawing the Notice of Termination of the existing Aquatic Plant Management Program Agreement and allowing it to run to its termination date of March 31st, 1991;
- 2. He will ask the Minister to make a Treasury Board submission to reconsider its policy of cost sharing in the acquisition of new and replacement equipment;
- He will ask Dr. Newroth and Mr. Maxnuk to contact the Board's adminis-3. tration to prepare a realistic program and budget for the years 1990 and 1991 and to look at the available equipment to meet this year's budgetting program.

The Chairman thanked the Provincial officials for attending the meeting and observed that they appear to have received the Board's message loud and clear.

# NEXT MEETING DATE:

The Board agreed that the next regular meeting of the Water Board be held on November 21st, 1989 at the Regional District of North Okanagan rather than on November 2nd, 1989 as previously agreed, as the Chairman and other members will be absent on November 2nd.

## ADJOURNMENT:

There being no further business, the meeting adjourned at 3:15 p.m. on a motion of Director Friesen.

CHAIRMAN

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TREASURER
## OKANAGAN BASIN WATER BOARD

MINUTES OF A MEETING OF THE OKANAGAN BASIN WATER BOARD HELD IN THE BOARD ROOM OF THE NORTH OKANAGAN REGIONAL DISTRICT OFFICES, 2903 - 35th AVENUE, VERNON, B. C. ON TUESDAY, NOVEMBER 21st, 1989 AT 1:30 P.M.

PRESENT:	Chairman A. Hill Director M. Friesen Director E. Reich Director M. Radi Director S. Simpson Director E. Lamont	North Okanagan Regional District North Okanagan Regional District North Okanagan Regional District Okanagan-Similkameen Reg. District Central Okanagan Regional District Central Okanagan Regional District
ALSO PRESENT:	Mr. M. Maxnuk Mr. B. Retzer	Ministry of Environment Ministry of Environment
STAFF:	P. Mackiewich G. Armour	Administrator Field Supervisor

## **MINUTES:**

Moved by Director Lamont, seconded by Director Simpson:

"That the minutes of a regular meeting of the Okanagan Basin Water Board held on September 7th, 1989, a special meeting held on September 21st, 1989, and a special meeting held on October 12th, 1989 be adopted as circulated."

CARRIED.

#### **DELEGATIONS:**

MR. J. MOORE: First Watercount Systems:

> Mr. J. Moore, representing Mr. Yves Bajard, President, First Watercount Systems, appeared before the Board to advise that First Watercount Systems are in the process of developing and marketing a count water system.

The system includes the establishment of an information base and deals with this in specific regions. Mr. Moore invited the Board to take part in the pilot project which would involve testing in a local watershed using the compteau technology. This technology is a local system which focuses on critical to medium size leachate defined as water related hot spots, such as watersheds or aquafirs.

The system consists of 7 inter-related components, being:

- 1. Host-institution;
- 2. Data gathering;
- 3. Physical model of area;
- 4. Scenario and alternative testing;
- Simulation and backtracking software; 5.
- 6. Information distribution and negotiation;
- 7. Monitoring and evaluation package.

The process will go over a period of 4 years. The whole idea is to get together a group of between 30 - 40 people who have a stake in the water resources of the area. Western Diversification has expressed a strong interest in funding provided local government makes some funds available. What is needed now is a commitment of one or more groups in the target area. One of the target areas is Mission Creek. Mr. Moore advised that the total cost of the project would be approximately \$1,000,000 and the local group would need to put up 10 - 15% of the total sum. Initially \$7,500 would be required for the workshops.

The final result is that the system is intended to become self-supporting. Mr. Moore asked that the Board consider funding the workshop.

 $\operatorname{Mr.}$  Moore was thanked for his presentation and left the meeting.

## **CORRESPONDENCE:**

# MINISTER OF <u>Withdrawal of Termination Notice</u>:

Correspondence from the Minister of Environment withdrawing his notice to terminate our existing Aquatic Plant Management Agreement so that the existing agreement will be effective until March 31st, 1991 was received for information.

The Board reviewed a proposal prepared by the Ministry and Board staff covering an enhanced aquatic weed control program for the fiscal year 1990/91, a copy of which is attached. The Board also noted that our valley M.L.A.'s have been very supportive of the Board in its request for additional funding.

Moved by Director Simpson, seconded by Director Radi:

"That a letter be written to the Okanagan Valley M.L.A.'s thanking them for their interest and assistance in the Board's endeavour to control aquatic weeds and its pursuit of additional funding; that they be advised of the Board's proposal for the next five years in both the number of hectares of weeds to be treated and the dollars required and they be requested for their ongoing supported."

CARRIED.

Mr. Maxnuk advised that part of the Treasury Board submission covering this program is the Water Board's request to expand the biological research.

Director Friesen expressed concern that \$350,000 is not really enough money to adequately deal with the aquatic weed problem and wouldn't even be sufficient to adequately deal with Vaseux Lake.

Director Lamont noted that the letter from the Federal Minister of Environment to Mr. A. Horning, N.P., advising that Environment Canada is continuing its research activity on aquatic weed control, but has neither the mandate nor the funds to extend its activity to the operational aspects of weed control which are provincial/local government responsibilities misses the point.

Director Lamont recommended that the Board keep pushing the Federal Government to intensify its research and to update its original Okanagan Basin Study. For example, the study should be expanded to include recommendations covering ways that septic tanks could be made to function more efficiently. Director Lamont noted that the Great Lakes area has received substantial funding from the Federal Government to rid the lakes of outfalls and the Okanagan should be entitled to the same level of funding.

Moved by Director Lamont, seconded by Director Reich:

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"That our N.P.'s be requested to open every door of the Federal Government to obtain money to truly address the concept of maintaining and enhancing the quality of all of our lakes in the Okanagn Valley."

CARRIED.

### <u>SEDIMENT</u> Okanagan Lake: TESTING:

Director Simpson advised that the City of Kelowna is asking the Ministry of Environment to test the sediment in Okanagan Lake near Kelowna. The City is concerned over the possible contaminants in the sediment and, as a result, would like it tested.

The Board agreed that the City's request for sediment testing be supported.

<u>BUDGET</u>: Director Radi noted that each year the Board agonizes over a budget and even an enhanced budget of \$350,000 is peanuts. This budget will provide for five machines and he asked whether fifteen machines might be better.

Director Simpson suggested that the Board look at other options. She stated that long-term harvesting is a band-aid approach and that government must make a commitment to other alternatives for weed control.

SEWAGE FACIL. Director Friesen suggested that the Board look at its philosophy of raising funds for sewage facilities and rather direct these monies towards weed control.

Director Lamont stated that out of fairness to the communities who have paid into the fund over the years and have not yet benefitted, it would not be right to dispense with the fund at this time.

Directors Reich, Hill and Simpson agreed that we have to look at all ways of preserving the quality of the lakes, including sewage discharges and noted that weeds are only a sympton of the problem.

Director Friesen stated that he does not agree with collecting funds to finance sewer systems.

Director Radi wondered whether or not \$1.5 million might be better spent in a form to actively pursue improving the water quality of the lakes.

Mr. Armour advised the Board that milfoil is not a result of nutrient loading. When the Okanagan Basin study was completed the milfoil wasn't even a factor. He noted that our enhanced budget is trying to get a policy changed which currently does not provide for the government to participate in the acquisition of equipment and also requests more operating funds.

Mr. Armour suggested that the Aquatic Weed Control should be considered separately from other water enhancement programs.

The Chairman suggested that the Board should hold a meeting with no other business but to review the terms of reference of the Board, including its goals and objectives.

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Moved by Director Lamont, seconded by Director Simpson:

"That the proposal for an enhanced aquatic weed control program as attached be approved and be submitted to the Minister for his approval, in addition the need for more biological control be acknowledged and the Minister be thanked for this initiative."

CARRIED.

Correspondence from Dr. Peter Newroth covering his projections on an enhanced Eurasian water milfoil control program, Mr. Cliff Serwa, M.L.A., urging the Minister of Environment to change his policy in cost sharing on capital expenditures and a letter from the Minister of Environment replying to our concerns covering management of Eurasian water milfoil in Vaseux Lake were received for information.

MINISTER OF Copy of Letter to J. Hackman - Innovative Industries Ltd. -ENVIRONMENT: Dredging - Eurasian water milfoil:

> A letter from the Minister of Environment to Hr. J. Hackman relating to his dredging machine for the removal of aquatic weeds was received.

> Mr. Armour advised the Board that it is the feeling of administration and ministry staff that the weed will re-establish itself after dredging as quickly as when other derooting methods are used. Mr. Hackman does not agree and feels that his machine will achieve years of control.

Mr. Maxnuk noted that when soil is removed by a dredge it seems to enhance the growth of milfoil. It was suggested that perhaps the only way to find out is to have Mr. Hackman complete a test and to pay him for the cost of this test.

The Board was reminded that its current policy is not to pay for any testing of equipment, but to have it initially evaluated by the Ministry of Environment staff and if it shows promise, then to provide the results to the Okanagan Basin Water Board.

Moved by Director Lamont, seconded by Director Reich:

"That Mr. Hackman of Innovative Industries Ltd. be invited to complete a test of his dredging machine at his own expense and that the test be monitored and evaluated by staff, with the results being reported to the Board."

CARRIED.

### SEWAGE FACILITIES ASSISTANCE GRANTS:

Moved by Director Reich, seconded by Director Simpson:

"That the following Sewage Facilities Assistance Grants be approved for payment:

Regional Dist. Okanagan Similkameen	\$ 12,462.09;
City of Vernon	\$ 164,566.37;
District of Coldstream	\$ 26,562.00."

CARRIED.

Discussion arose over the manner in which accounts are presented for payment and approved. Several members of the Board felt that an itemized list of all of the facilities which receive funding be provided by the recepients of the monies.

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The Administrator advised that the current policy of the Board is to provide funding, being 24% of the approved funding made by the Ministry of Municipal Affairs for sewage facilities under the 75/25% Provincial/Municipal cost-sharing formula.

Due to inadequate funds now being raised by the maximum equivalent of 1.5 mills, a new formula was established last year covering new facilities and a reduction of the 24% for the older facilities.

## NEW AND UNFINISHED BUSINESS:

#### DISCUSSION: Terms of Reference - Okanagan Basin Study recommendations:

The Board agreed that a special meeting be held on January 16th, 1990 in Kelowna at 1:00 p.m. to discuss the goals and objectives of the Board and to review the Okanagan Basin Study recommendations.

#### AQUATIC WEED 1989 Report: HARVESTING:

Mr. Armour presented the attached 1989 Aquatic Weed Harvesting Report for the Board's information.

Mr. Armour also showed the Board slides of the weed harvesting equipment and the areas harvested.

#### DEROOTING 1989/90: SCHEDULE:

The Board reviewed the attached 1989/90 Derooting Schedule. Discussion also arose over harvesting in that part of Solana Bay that is privately owned, as well as at Westside Cays which is privately owned lake property.

The Board agreed that harvesting of these areas be left to the discretion of the Administration for harvesting, time permitting, and that the landowners of this area be charged for the work.

FIRST WATER-The Board agreed that Mr. J. Moore, First Watercount Systems, be thanked for his proposal and that he be informed COUNT SYSTEMS: that the Board will keep his submission under advisement.

## ADJOURNMENT:

There being no further business, the meeting adjourned at 4:30 p.m.

CHAIRMAN

SECRETARY-TREASURER

PM/las

Attach. CHAIRMAN

SECRETARY-TREASURER

PM/las

Attach.

## OKANAGAN BASIN WATER BOARD AQUATIC WEED CONTROL PROGRAM

## Proposals for Enhanced Program

		<u>Current Budget</u> Fiscal Yr. 1990/91	Proposed Increase
Ha	rvesting Operations		
-	Currently employ 4 machines: mid June to end of August	\$ 74,000.00	
-	Add use of 5th M.O.E. machine in Vaseux Lake (1 month)		\$ 8,000.00
-	1989 time in June 9 - July 5 Vaseux Lake: Single/Double Shift 226 loads (Harv #1)		
*	Increase cutting may require new disposal and contract hauling	site	4,000.00
-	Preparation of Harvester #5		2,000.00
-	Increase Productivity of 5 Existing Harvesters in Transport and Moving by adding thrusters/propellors		(20,000.00) Cap. Incr.
-	Replacement of Existing Harvesters Current Price <u>+</u> \$100,000.00 U.S. Turn used Machine over to C.S.R.D.		
De	rooting		
-	Currently operate Roto #2 - Oct. 15 - Dec Feb June Roto #1 - Feb May		
-	<pre>Additional Rototilling - C.S.R.D. bids \$248,000 - \$460,000 - Roto #2 (1983) \$82,000 - Would probably incorporate new technolo into Roto #2 design, but in smaller siz lower cost machine.</pre>		(140,000.00) Cap. Incr.
	* Would need to start bid/construction pr soon to have machine next fall.	ocess	
	* Roto #1 needs updating - should we shar this cost or just dispense with its use Okanagan?		(50,000.00)
	Operating Costs of New Roto		
	6 months (Oct./Nov./Dec./Feb./Mar./Apr. If Roto #1 not used:	)>	50,000.00 (-32,000.00)

	Current Budget Fiscal Yr. 1990/91	Proposed Increase
Special Projects		
<ul> <li>Present fiscal year 1990/91 budget includes \$9,000.00 for spot bottom barrier applications in areas of intensive control i.e. Kalamalka and Beaver Lakes</li> </ul>	\$ 9,000 e	
<ul> <li>Beaver Lake will require a six week effor next year to achieve a sufficient level or control</li> </ul>		\$ 26,000.00
* Okanagan Basin Water Board must decide on and priority for aquatic weed control in elevation lakes.		
Administration		
Current 1990/91 level including - supervisors salary - yard rental - N.O.R.D. administration costs - payroll overhead	77,900.00	
- Additional payroll overhead costs for extra operations staff in enhanced program		\$_5,000.00
TOTAL BUDGET:	\$257,900.00	
Proposed Operations Increase:		\$95,000.00
Total Enhanced Operations Budget:		\$352,900.00
Capital Equipment Costs:		\$160,000.00

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## 1989 AQUATIC WEED HARVESTING PROGRAM

Aquatic weed harvesting commenced in the second week of June in Vaseux Lake and Duck Lake. Harvesting started June 13th in Osoyoos Lake and June 29th in Okanagan Lake at Kelowna. Work was completed by the start of the Labour Day long week-end on September 1st. The variation in start times was due to the different rates of maturation of the plants in the various lakes and the late start in Kelowna provided an extra operator to double shift the machine in Vaseux Lake in early June.

A total of 1,011 machine loads or 1,868 tonnes of aquatic weeds were removed from six mainstem valley lakes. This is approximately an eighteen (18) percent drop from 1988 production.

Seasonal fluctuations in weed growth were most pronounced in Skaha Lake and Okanagan Lake at Vernon, where declines in amounts of plant material harvested exceeded 35 percent. Increases in amount of material harvested occurred in Vaseux Lake and Wood Lake (27 percent and 39 percent respectively).

Winter de-rooting accounts for some of the decreased amount of harvested weeds shown over the past three years. Even though some clean-up of rototilled sites by harvesting is necessary to remove missed patches and re-infestation, the time spent is greatly reduced and the quality of work enhanced. More harvester time is then available for other sites.

A disturbing aspect of de-rooting is the proliferation of native species of weeds in certain areas following de-rooting. Many of these plants are well adapted to colonizing areas cleared of Eurasian watermilfoil, by means of reproductive turions or bulbs which are not removed by rototilling. The native plant species tend to become a nuisance later in the growing season, than Eurasian watermilfoil and occupy more shallow water zones. At Kelowna, this proved to be the

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case. This is attributable, in part, to the timing of our de-rooting work. In sites where native plant species are known to be prominent, a late spring de-rooting is advised so that the overwintering turions have germinated and can be removed. Due to extensive spring ice cover on Wood, Kalamalka and Skaha Lakes, our work at Kelowna was done much earlier in the spring than is the usual case, as it was one of the few sites with open water.

Equipment downtime, including weather and mechanical shutdowns, as well as time spent moving from site to site, averaged 25 percent for the four machines. While this is lower than the 27 percent figure for the previous season, an average of 20 percent would be more acceptable (weather related shutdowns were more prevelant this season, however). Summary of Expenditures is as Follows:

	1988	Actual	1989	Budget	1989 Actual
Machine Operators Wages Truck Drivers' Wages (machine moving & weed disposal)	\$	30,185 8,425	\$	25,000 9,000	\$ 26,779.79 10,563.52
Equipment Transport Vehicle Rental Vehicle Fuel & Maintenance Travel Expenses Crane Rental Fuel & Lubricants Maintenance & Repair Contract Weed Disposal	2	4,103 2,529 3,737 746 1,850 2,991 14,403		5,000 3,000 4,000 1,000 3,000 4,000 18,000 1,000	7,698.59 3,363.41 4,762.99 1,013.10 1,575.00 3,162.54 14,233.69
Water Intake Repairs	Ś	1,592 	ŝ	1,000	\$ 73,377.63

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## TABLE 1 HARVESTER PRODUCTION SUMMARY 1989

UNIT	LOADS	TONNES	EST. AREA
H65015 (Harv#1)	332	564.4	23.38 ha
H65028 (Harv <b>#</b> 2)	328	557.6	23.11 ha
H65035 (Harv <b>#</b> 3)	259	440.3	18.25 ha
H11-1100 (Altosar)	92.5	305.3	9.73 ha
Totals	1011.5	1867.6	74.47 ha

## TABLE 2 HARVESTING PRODUCTION BY LAKE 1989

LAKE	LOADS	TONNES	EST. AREA
Osoyoos	250	425.0	17.62 ha
Vaseux	226	384.2	15.92 ha
Skaha	50	85.0	3.52 ha
Okanagan*	383.5	800.0	30.23 ha
Wood	56	95.2	3.94 ha
Duck	46	78.2	3.24 ha
Totals	1011.5	1867.6	74.47 ha

\*figures represent two machines with different load capacity

## HARVESTING OPERATIONS RECORD 1989

	Harv#1	Harv#2	Harv#3	H11
Total hours	440.0	408	480	304
Operating hours	322.9	329.6	327.1	230.8
Downtime	117.1(26%)	78.4(19%)	152.9(31.8%)	73.2(24%)

H65015(harv#1)

Location

1.Vaseux Lake	Southend	June 9-12	15
	River channel	June 13-20	51
	Southend	June 20	13
	Prov.Park	June 21-22	58
	Southend	June 23-28	61
	Prov.Park	June 29-30	10
	Southend	July 4-5	18
2.Skaha Lake	O.K. Falls	July 6-10	15
	Sunny Bay	July 11-17	14
	Kaleden	July 18-19	6
	Eastside	July 20-24	13
	Northend	July 25-27	2
3.Wood Lake	Northend Southend	July 28-Aug 4 Aug 8-24	26 30 30

## H65028(harv#2)

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1.Duck Lake	Northend	June 12-21	46
2.0kanagan Lake	P/Wheel Park Kin Beach Phelps Corner Westside Head-o-Lake P/Wheel Park Kin Beach Phelps Corner	June 22-July17 """ July 18-31 Aug 1-8 Aug 9-28 """	10 59 63 15 5 40 40

## Harvesting operations page 2

## H65035(Harv#3)

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1.0kanagan Lake	Westside Cays	June 6-8	9
2.0soyoos Lake	Southend Motel Row Willow Beach Southend Motel Row Willow Beach	June 13-29 June 30-July 4 July 5-25 July25-Aug 8 Aug 9-16 Aug 17-Sept 1	54 5 97 39 13 42

## H11-1100(Altosar)

1.0kanagan Lake	Hotsands Beach	June 29	2
nonanogan zana	Cedar Ave.	June 30	2
	Water St.	July 4-5	4.5
	Cedar Ave.	July 6-7	4.5
	Green Bay	July 10-12	2.5
	Pritchard Dr.		5
	Westbank	01 34	2.5
	Peachland	July 13	1
	Prov.Park	July 14	1
	Summerland	July 14-17	1
	Trout Creek		2.5
	Naramata	July 18	
	Penticton	July 19-20	5
	Trout Creek	July 21	2
	Westbank	July 25-26	- 1
	Westside Cays		9
	Pritchard Dr.	90 D3	1
	Cooke Ave.	July 27	2
	Cedar Ave.	July 28-Aug 16	12
	Water St.	n n n	9.5
	Hotsands Beach	83 88	3
	Green Bay	Aug 16-18	7.5
	Pritchard Dr.	Aug 18-22	8
	Westside Cays	Aug 22	2
	Cooke Ave.	Aug 23	1
		nuy 20	1

## WINTER DEROOTING PROGRAM

## 1989/90 SCHEDULE

Derooting equipment available for work in the period October, 1989 to May, 1990 inlcudes:

Rototiller #2

Bombardier Muskeg Skidder

In addition, the Ministry of Environment (M.O.E.) rototiller (roto #1), currently in use in Shuswap Lake will be available in February.

The operating season is dependent upon weather and a shutdown of approximatley 4 weeks is anticipated during the coldest part of the winter. Ice cover on any of the lakes can alter scheduling.

Significant expansion of our derooting program is currently limited by the number of pieces of equipment available. In 1988/89, Kalamalka Beach and parts of Kelowna Foreshore were not derooted following several consecutive years of treatment, in order to determine if nuisance regrowth of Eurasian watermilfoil and/or other species would occur. Both sites showed moderate levels of infestation of various plants. It appears, then, that we are committed to derooting on an annual basis if we are to achieve effective control. The operating time is reduced, however, as the number of consecutive annual treatments increases, allowing for addition of a few new sites.

Timing of derooting work is critical, especially where native species of plants are known to be present. These species are out-competed by Eurasian watermilfoil but are adapted to occupying areas once this competition is removed. Some plants produce bulbs or turions which

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remain dormant on the lake bottom and are not removed by rototilling or cultivating. The most effective derooting period in these sites is late spring when the dormant overwintering structures have germinated. Sites dominated by Eurasian watermilfoil can be effectively treated earlier in the spring or in the preceding fall months.

Taking into account biological, weather, and equipment limitations, scheduling treatments at optimum times at all sites is virtually impossible and changes are inevitable.

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Derooting <u>Site</u>	Equipment Used	Optimum Treatment Time	Scheduled Treatment Time	Comments
OK Landing	Roto #2		Dec./89-Feb./90	
- Sandy Beach/ Kin Beach - Marinas, Yacht Club	Bombardier	Fall or Spring	April/90	Late Spring Clean-up of . inshore zone
	March 13	Late Spring	May/90	
Kalamalka Lake	Roto #2			
- Kalamalka Beach - Country Club - Blue Water Lodges		Spring Spring	Nov./89  	Area covered with bottom barrier in '89 - check for re-growth
Oyama Canal		Fall or Spring		11
Kalamalka Terrace		Early Spring	 Nov/Dec./89	
Cosens Bay				Bottom barrier in 1989
Wood Lake				
	Roto #2	Late Spring	April/May/90	
South Shore	Bombardier		May/90	Inshore weed removal
Kelowna Foreshore	Roto #2	Late Spring	March/April/9	0
<ul> <li>Bridge to Strathcona Ave.</li> <li>West Ave. to Cedar Ave.</li> <li>Watt Road</li> <li>Cooke Ave. Boat Launch</li> </ul>	Bombardier	Fall and Spring	Nov./89 May/90	Shallow water Second late spring pass to remove native weeds

Derooting Site	Equipment Used	Optimum Treatment Time	Scheduled Treatment Time	Comments
Osoyoos Lake	Roto #1	5.11	E.J. 100	
- Willow Beach		Fall or Spring	Feb./90	
- Central Basin - Solana Bay? - Motel Row	Bombardier	Late Spring	Mar./Apr./90	
Skaha Lake	Roto #1	Fall or		
- Okanagan Falls		Spring		
- Skaha Estates - Recreation West - Skaha Beach			April Nay April	