

**OKANAGAN BASIN WATER BOARD**

**MINUTES OF A MEETING OF THE OKANAGAN BASIN WATER BOARD HELD ON FEBRUARY 19TH, 1991, IN THE BOARD ROOM, REGIONAL DISTRICT OF CENTRAL OKANAGAN, 540 GROVES AVENUE, KELOWNA B.C., AT 10:00 A.M.**

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<b><u>PRESENT:</u></b>	Director S. Simpson	C.O.R.D.
	Director G. Paynter	C.O.R.D.
	Director R. Hobson	C.O.R.D.
	Alternate Director W. McGrath	N.O.R.D.
	Director J. Yardley	N.O.R.D.
	Alternate Director G. Rieger	N.O.R.D.
	Director R. Shewfelt	O.S.R.D.
	Alternate Director T. Shields	O.S.R.D.
	Director T. Takacs	O.S.R.D.

<b><u>ALSO PRESENT:</u></b>	M. Maxnuk	Ministry of Environment
	B. Hayward	L. MacWilliam's Office

<b><u>STAFF:</u></b>	P. Mackiewich	Administrator
	G. Armour	Field Supervisor

**ELECTION OF CHAIRMAN:**

The Administrator called the meeting to order and introduced the appointed members of the Okanagan Basin Water Board, the staff, and others present.

He then called for nominations for the position of Chairman for the 1991 - 1992 term.

Director Shewfelt nominated Director Simpson for the position and this was seconded by Alternate Director Shields.

There being no other nominations, Director Simpson was declared re-elected Chairman of the Okanagan Basin Water Board.

**ELECTION OF VICE- CHAIRMAN:**

The Chairman called for nominations for the position of Vice - Chairman of the Water Board.

Director Hill, although absent from the meeting, was nominated by Alternate Director Rieger, seconded by Director Shewfelt, for the position of Vice - Chairman.

There being no further nominations, Director Hill was declared elected Vice-Chairman of the Okanagan Basin Water Board.

**MINUTES:**

Moved by Director Shewfelt, seconded by Director Paynter :

"That the minutes of a regular meeting of the Okanagan Basin Water Board held on October 16th, 1990 , be adopted as circulated."

CARRIED.

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**AQUATIC PLANT MANAGEMENT BUSINESS:**

**Introduction to the Okanagan Basin Water Board:**

The Chairman stated that she wished, because of the number of new members, to give the Board a sketch of the history of the Water Board, as well as its accomplishments in the past year. She then proposed that goals be established for the Board to work towards in the current year.

The Administrator outlined the history of the Water Board beginning with its creation by Letters Patent in 1970. The mandate as given in that document was read.

The Administrator also advised that the Board has taxing authority through the Regional Districts, for funds for tertiary sewage treatment facilities.

The Field Supervisor gave a slide presentation detailing the aquatic weed control aspect of the Water Board. The methods of control currently in use include:

-Harvesting: Four (4) machines are operated in the summer months to cosmetically mow plant growth.

-Derooting: Two floating rototillers, a track vehicle drawn cultivator, and some contract work are used to remove the root system of the plant, providing a longer term of control. In addition, this method can be used in the "off season" to expand the amount of work done and minimize interference with tourism.

-Bottom Barriers: Rolls of synthetic material are placed over weed beds by SCUBA divers. This method is used to control small populations of plants and thus prevent expansion of the problem. Sites where bottom barrier application is currently used include Kalamalka Lake and Swalwell (Beaver) Lake.

Mr. Maxnuk, of the Provincial Water Management Branch gave a short description of past and current role of the Ministry of Environment in aquatic weed control.

The Province has been involved in the Okanagan since 1972, initially in researching alternatives for control of Eurasian water milfoil growth. These efforts included mechanical methods, chemical control, and means to prevent the spread of the plant. Once the research phase was complete, administration of the control program was turned over to the Water Board. The Ministry maintains four staff to monitor the effectiveness of the program, and to supervise other cost share agreements for weed control with Columbia Shuswap Regional District, Kootenay Boundary Regional District, Cultus Lake Parks Board, and the City of Nanaimo.

The role of the Water Management Branch in aquatic plant control can be summarized as follows:

- To test and evaluate new control methods
- To monitor the Okanagan control program where possible
- To train groups to initiate aquatic plant management programs
- To maintain an inventory of shared equipment
- To maintain a public information program and surveillance program aimed at preventing the spread of nuisance aquatic weeds and to identify problems at an early stage when control is possible.

The Chairman described the past year's activities indicating that for many years the primary function of the Water Board was weed control. In the past year the Board tried to branch out into such areas as examination of new methods of control; greater public involvement through information to let people know the job that is being done; construction of an improved rototiller on a cost shared basis with the Province.

Weed control is not the only responsibility of the Board, however, and in the past year we have endeavoured to collect information on a variety of water quality and quantity matters. We have reviewed the recommendations of the Okanagan Basin Study and the Implementation Board and returned to the Federal and Provincial governments to ask that recommendations not yet dealt with be implemented. These recommendations were reviewed extensively with the help of the Okanagan Water Quality Control Project staff and it will be up to the new Board to determine how much information is required.

The Administrator commented that the current Minister of Environment is perhaps more informed on this local issue than his predecessors, and more available to the Board. He stated that we should make use of this opportunity.

Director Shewfelt stated that the mandate of the Board is to pursue the sources of expertise and funding to preserve our water resources and we should get on with the job.

The Chairman advised that she will arrange to meet with the Minister of Environment and pointed out that with the imminent end of the Okanagan Water Quality Control Project, the question of how this work will be continued must be addressed.

Alternate Director McGrath commented that the original Okanagan Basin Study provided an enormous volume of information, and that our concerns should be fine tuned.

Director Hobson suggested that the Board should look at the impact of land use on water as directed by the original study. He felt that this has not been done.

The Chairman indicated that other issues not yet addressed include the question of Indian Lands which impact significantly on the lakes.

The Administrator indicated that water quantity is a problem which is having immediate consequences on development in many areas of the Valley.

The Chairman reiterated the need to focus on the issues the Board wishes to deal with in this next year.

Director Hobson informed the Board that the Okanagan Basin Study dealt extensively with the effects of urbanization on the Valley, while the 1982 Review did not. He felt this is a major question facing us. How can the impact of urbanization on water quality be minimized and the necessary quantities of water supplied?

The Chairman asked the Board if members would like to view weed control equipment in operation. She suggested a meeting with the Minister of Environment that might coincide with an official launching of the new rototiller.

**Moved** by Alternate Director Rieger and seconded by Director Takacs:

"That the Minister of Environment be invited to the official launching of the new rototiller"

CARRIED.

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The Chairman agreed that the Board should continue to lobby for a review of the Okanagan Basin Study recommendations with specific emphasis on the impact of urbanization, the issue of foreshore planning, and the question of Indian Lands.

Alternate Director McGrath questioned whether there was any real possibility of Federal involvement in a review of the study recommendations

The Chairman referred to a letter in the correspondence section of the agenda from Robert de Cotret, Federal Minister of Environment, in which the senior government stated that they would be approaching the subject with the Province.

Director Takacs referred to the International status of Osoyoos Lake as a possible means to involve the Federal Government. He also asked for specifics of what is done to enhance the quality of water in our lakes.

The Chairman replied that the Board had addressed the establishment of tertiary sewage treatment in major population centres in the Valley last year.

The Administrator added that the Okanagan Water Quality Control Project had addressed diffuse sources from forestry, agriculture, and septic tanks as part of their mandate. He proposed that Mr. Dick Nickel, Project Manager be invited to update the Board at our next meeting. It was also suggested that the maps of the sensitive zones proposed under the new septic tank regulations be reviewed for the Board.

Director Shewfelt enquired as to the comments requested from Mr. Phil Epp of the O.K. Water Quality Control Project on the Peat Wastewater Disposal System and was informed by the Field Supervisor that a reply had not yet been received.

Discussion arose regarding the role of the Water Board in funding of sewage treatment systems.

The Administrator informed the Board that our mandate is to fund any system approved as tertiary treatment by the Ministry of Environment.

Director Shewfelt added that all wastewater management plans incorporate engineering and a technical basis which is reviewed by the Ministry of Environment prior to any funding by the Water Board.

The Chairman pointed out that it is not the mandate of the Board to say what is environmentally acceptable and what is not. This is the responsibility of the Ministry of Environment.

Alternate Director Shields agreed that the Board mandate concerns water quality and quantity.

Director Takacs asked whether the focus of the Board should be on removal of all septic tanks in favour of sewage collection and treatment.

Director Shewfelt commented that properly functioning septic systems are acceptable and, indeed, the only alternative in many areas.

Chairman Simpson stated that sewage treatment systems, spray irrigation, and septic tank disposal systems all have a place in the overall waste management scheme.

The Board recessed for lunch at 12:00 p.m.

Meeting reconvened at 1:15 p.m. in the absence of Mr. Hayward.

**Aquatic Plant Management Matters: (Cont'd)**

**Province - OBWB Agreement for Aquatic Weed Control:**

The Administrator indicated that the new five year cost sharing agreement for aquatic weed control between the Provincial Ministry of Environment and the Water Board had been signed by all Regional Districts and forwarded to Victoria for final signature.

Mr. Maxnuk confirmed that the Agreement is now with Treasury Board and that final approval is imminent. He also pointed out that the new agreement represents a five year "cap" on the amount of funding which can be committed to aquatic plant control. This amount covers both operational and capital expenses.

The Administrator advised that there is still no commitment on the part of the Ministry for more than one year; only that the Minister will ask the legislature for the funds requested by the Water Board. Approval may not be necessarily given in which case the budget reverts to the base level of 1989-90.

Mr. Maxnuk replied that he is optimistic that the intent is to scale up the base budget each year of the agreement. With respect to the 1991-92 budget submitted by the Board last fall, the only word as yet is that the Water Board should continue operations into the new fiscal year.

Mr. Maxnuk informed the Board that the Sustainable Environment Fund (SEF) used to provide funding for the new rototiller, the guidance package, and the improvements to existing equipment may allow carry over of allocations to the next fiscal year. He suggested that it is unlikely a usable guidance system for the new rototiller will be available before the end of March and therefore desirable that these funds be carried over into 1991-92.

**Moved** by Director Hobson, seconded by Alternate Director Shields:

"That the Minister of Environment be requested to carry forward the SEF monies not spent in the current fiscal year so that these funds can be spent when proven technology is available."

CARRIED.

**New Rototiller Construction and Equipment Improvements:**

The Field Supervisor outlined progress on the new tiller and the improvements made to existing equipment in the slide presentation.

**1989-90 Derooting and 1990 Harvesting Results:**

Mr. Armour summarized the reports presented to the Board pertaining to derooting work done in the fall of 1989 and spring of 1990 and also the results of 1990 summer harvesting. He cautioned that the figures for area harvested are based on the number of loads cut, and therefore are not true measurements for the worksites. This makes the cost per hectare figures quoted useful for year to year comparison purposes only.

**Osoyoos Lake Water Quality Meeting:**

A memorandum summarizing results of a study done on Osoyoos Lake water quality by a Ministry of Environment summer student was reviewed by the Field Supervisor. He indicated that information regarding the ability of Eurasian water milfoil to take up sediment bound phosphorus and release it into the water column was significant in that the amount of nutrient represented a larger quantity than that contributed by septic tanks into the lake.

Director Hobson wondered about the amount of phosphorus released by derooting methods.

Mr. Maxnuk replied that the re-suspended phosphorus was not in a form usable for plant growth, while that introduced by milfoil uptake was in a converted form.

The Chairman directed Mr. Armour to obtain additional information on this subject for the next Board meeting.

Directors Takacs and Shields both voiced objections to the conclusion of the study which stated that the water quality of Osoyoos lake had not deteriorated appreciably over the past twenty years.

**Progress of Derooting Contract at Kalamalka Lake:**

Mr. Armour reported that as per Board instructions from the October 16th meeting, proposals were received from two private contractors for derooting work at the north end of Kalamalka Lake. The low bid of \$10,800.00 from Aqua Research and Development was accepted and work began on the 11 hectare site on November 13th, 1990.

The contract called for completion of the job by December 15th but due to some adverse weather conditions and slower than expected progress, the contractor asked for an extension. This was granted but by December 17th, ice formation and extreme cold forced shutdown.

At this point some 6.2 hectares have been completed in a total of 209 operating hours. Aqua Research has been paid for the work done with a 25% holdback until completion of the remainder of the contract. This is expected to occur as soon as ice melts.

The Administrator informed the Board that the rate of progress was slow in comparison to that achieved by Aquatic Plant Control Ltd. in a contract operation on Kelowna Foreshore last spring. The Field Supervisor requested direction from the Board on how to proceed with the second phase of 1991 contracting at Kelowna.

**Moved** by Alternate Director Shields, seconded by Director Shewfelt:

"That proposals for contract derooting of Kelowna Foreshore be solicited from firms employing root removal technology similar to that provided by Aquatic Plant Control Ltd. because the treatment area measures 45 hectares and requires a rapid operation rate."

CARRIED.

DIRECTOR HOBSON OPPOSED.

**Aquatic Plant Control Funding Under the Green Plan:**

The Field Supervisor reviewed the Framework Green Plan and indicated that the best possibilities for funding aquatic weed control were in the areas of research into biological control methods and implementation of the recommendations of earlier joint Federal-Provincial studies.

Mr Armour summarized the correspondence between the Water Board and the Federal Government to date:

: March 23rd, 1990 - Reply from Dr. P. Harris, Head of Biological Control for Agriculture Canada stating that Eurasian water milfoil is not currently on the list of species targeted for research into biological control agents.

: May 2nd, 1990 - Letter to Minister of Environment requesting that consideration be give to scheduling of a meeting of the Standing Committee on the Environment in the Okanagan. The reply received August 17th stated that the Committee does its own scheduling and perhaps the local M.P. could put forward our request.

: June 26th, 1990 - Reply to Water Board letter to Minister of Agriculture stating that consideration will be given to targeting Eurasian water Milfoil for biocontrol research.

: November 9th, 1990 - Reply from Minister of Environment indicating that the Federal Government will be approaching the Provincial Ministry of Environment regarding a review of the status of the Okanagan Basin Study recommendations.

**Moved** by Director Takacs and seconded by Director Hobson:

"That every effort be made to pursue funding under the Green Plan for aquatic weed control and water quality improvement in the Okanagan."

CARRIED.

**CORRESPONDENCE:**

**Dr. J.E. Bryan, Ministry of Environment - Report on Water Quality Trends in Okanagan Valley Lakes:**

A copy of a report on the water quality trends in Okanagan Valley lakes was received and the Chairman asked the Field Supervisor to obtain additional copies for distribution to the Board members.

**Honourable R. de Cotret, Federal Minister of Environment - Okanagan Basin Water Management Review:**

A letter from the Minister of Environment was received indicating that communication will be established with the Provincial Ministry regarding implementation of recommendations from the Okanagan Basin Study.

**Honourable C. Serwa, Minister of Environment - Review of Implementation Board Recommendations:**

A letter from the Minister acknowledging receipt of the Water Board's letter reviewing the recommendations of the Implementation Board was received for information.

**Columbia Shuswap Regional District - Use of CSRD equipment Trailer:**

Correspondence from CSRD agreeing to shared use of a trailer purchased for moving of the new rototilling equipment was received.

**IEC Environmental Services - Offer of Services:**

Literature was received concerning research services offered by IEC Environmental Services.

**Minister of Environment - Purple Loosestrife:**

Correspondence acknowledging the Water Board's concern over the presence of the noxious wetland plant, Purple loosestrife, in the Okanagan Valley was received.

**Moved** by Director Hobson, seconded by Director Shewfelt:

"That a letter be sent to the Wildlife Branch of the Ministry of Environment reiterating the concern of the Board about Purple Loosestrife and requesting an update on action taken."

CARRIED.

**Minister of Environment - Budget Information:**

Correspondence from the former Minister encouraging the Board to proceed with acquisition of new rototilling equipment was received for information.

**Regional District of Okanagan-Similkameen - Preparation of Waste Management Plans:**

Notification of preparation of Waste Management Plans for Naramata and the West Bench was received by the Board.

**Ministry of Environment, Engineering Section - Public Notification of Changes in Flow in the Okanagan River Channel:**

A response from Mr. B. Symonds, Head of Engineering Section, to Water Board concerns about lack of public notification regarding increased River Channel flows last spring was received for information. The Chairman noted that public information on this subject has improved this year.

**L. MacWilliam, M.P. Okanagan-Shuswap - Support for review of Okanagan Basin Study:**

A letter supporting the Water Board's request for a review of the recommendations of the Okanagan Basin Implementation Study was received for information. Mr. MacWilliam requested that he be kept apprised of correspondence from the Minister.

**Minister of Environment - Summerland Waste Management Plan Funding:**

A reply from the Minister of Environment provided information on the amount of grant funding available to the District of Summerland for implementation of their Waste Management Plan.



**Columbia Shuswap Regional District - Design Drawings for New Rototiller:**

A letter consenting to allow the Water Board to use engineered plans for the construction of the new rototiller was received for information. It was the consensus of the Board to invite representatives from CSRD to the launch of our machine.

**R. Smith, Manager, Public Health Protection Branch - New Septic Tank Regulations:**

Correspondence in reply to an OBWB request on the status of the new septic tank regulations was received. The Board was informed that the mapping process for Environmental Control Zones was being done under contract and is not yet complete.

**District of Coldstream - Wastewater Management Plan:**

The Board received a letter advising that a contract had been awarded for development of a Wastewater Management Plan for the District of Coldstream. A separate letter advised that the Council of the District of Coldstream supported, in principle, the extension of sewage services to preserve the quality of our lakes.

**Regional District of North Okanagan - Airshed and Watershed Management:**

Correspondence from the Regional District of North Okanagan endorsed the concept of airshed management in the Okanagan Valley, and urged the continuation of the role of the Water Board in coordinating watershed management. The letter was received and filed.

**SEWAGE FACILITIES ASSISTANCE GRANTS:****Revision of Previously Approved Amounts:**

The Administrator explained that the amounts of two grants approved in 1990 were in error and it was necessary to ask the board to correct these:

District of Coldstream: \$3,267.03 was due and paid over the amount approved by the Board.

City of Penticton: Board approval was given to pay \$55,793.28. The correct amount subsequently paid was \$46,494.40.

**Moved** by Director Shewfelt, seconded by Director Takacs:

"That the Board give approval for the appropriate changes to be made in the grant payments as detailed by the Administrator."

CARRIED.

**Grant Applications:**

- City of Armstrong	\$ 23,160.51
- District of Coldstream	39,202.16
- City of Kelowna	290,941.39
- Village of Oliver	52,562.42
- City of Penticton	174,598.46
- Regional District of Central Okanagan	65,782.93
- Town of Osoyoos	23,378.67
- City of Vernon	338,732.30
- Regional District of Okanagan-Similkameen	27,330.68

Moved by Director Shewfelt and seconded by Director Paynter:

"That the grant applications described above be approved for payment."

CARRIED.

The Administrator advised the Board that grants are currently paid out at about 17% of the Provincial allocation, with the exception of Westbank which receives the full 24% for the first five years. The 1991 assessments have increased by approximately 37% and as a result, if the levy remains at the maximum .21 per \$1000, it will be possible to pay out 22% of the provincial contribution if the levy is not reduced by the Board.

Moved by Director Shewfelt, seconded by Director Takacs:

"That the maximum .21 per \$1000 be levied in 1991 to provide additional revenue which will result in payment of approximately 22% on existing sewage grants."

**Detailed Information on Grants Approved:**

Information from the District of Coldstream was received detailing works funded by the Water Board.

**NEW AND UNFINISHED BUSINESS:**

**Appointment of Signing Officers:**

It was agreed that signing officers for the Okanagan Basin Water will be as follows:

Vice Chairman Alan Hill  
NORD Chairman Earl Shipmaker  
Chairman Sharron Simpson  
Administrator Peter Mackiewich

**Appointment of Aquatic Plant Management Committee:**

The Administrator asked the Board whether they felt technical matters should be dealt with by committee which would then report back to the Board in order to reduce the length of meetings.

The Chairman suggested that the new Board would perhaps like to hear all the information unless this system proves unworkable.

Moved by Director Shewfelt and seconded by Alternate Director Shields :

"That the Board as a whole be appointed as the Aquatic Plant Management Committee."

CARRIED.

**Provisional Schedule for 1991 Board Meetings:**

The Board reviewed the provisional schedule (attached) and noted that additional meetings may be held as necessary.

**Audited Financial Statement for Year Ended March 31, 1990:**

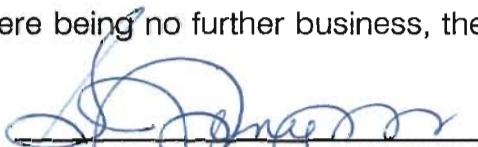
**Moved** by Director Hobson, seconded by Alternate Director Shields:

That the Audited Financial Statement be received and filed."

CARRIED.

**ADJOURNMENT:**

There being no further business, the meeting adjourned at 3:00 p.m.

  
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CHAIRMAN

  
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SECRETARY-TREASURER

PM/gda

OKANAGAN BASIN WATER BOARD

MINUTES OF A MEETING OF THE OKANAGAN BASIN WATER BOARD  
HELD IN THE REGIONAL DISTRICT OF NORTH OKANAGAN BOARD  
ROOM, 9848 ABERDEEN ROAD, VERNON, B.C., ON TUESDAY,  
OCTOBER 16TH, 1990, AT 1:30 P.M..

PRESENT:

Chairman S. Simpson	Cent. Okan. Reg. Dist.
Director E. Reich	North Okan. Reg. Dist.
Director A. Hill	North Okan. Reg. Dist.
Director M. Friesen	North Okan. Reg. Dist.
Director J. Piazza	Okan. Similk. Reg. Dist.
Director R. Shewfelt	Okan. Similk. Reg. Dist.

ALSO PRESENT: Mr. M. Maxnuk                      Water Management Branch  
                         Mr. B Hayward                      Executive Assistant to  
   L. MacWilliam (MP)

STAFF:

P. Macklewich	Administrator
G. Armour	Field Supervisor

The Meeting was preceeded with a visit to Salmon Arm to view the  
MPV SHUSWAP in operation.

MINUTES:

Moved by Director Piazza, seconded by Director Hill:

"That the minutes of a regular meeting of the Okanagan Basin Water Board held on September 11th, 1990, be adopted as circulated."

CARRIED.

AQUATIC PLANT MANAGEMENT BUSINESS:

Draft Agreement for Aquatic Weed Control:

The Administrator advised the Board that Draft #8 of the Province-OBWB addressed the concerns he had with the previous draft agreements.

Moved by Director Shewfelt and seconded by Director Piazza:

"That officials of the Provincial Ministry of Environment be advised that the Okanagan Basin Water Board will recommend to its parent Regional Districts that the new agreement be signed upon receipt of the necessary documents."

CARRIED.

Work Plan for 1990-91 and 1991-92:

The Field Supervisor circulated a proposed schedule for 1990-91 winter derooting and a summary of budget expenditures to October 1st, 1990. (attached) He explained that the schedule covers the period to May of 1991 and that more general plans for the remainder of the Fiscal Year will be forthcoming.

Mr. Armour noted that sufficient funds remain in the current F. Y. to operate Rototiller #2 (OBWB owned), Rototiller #1 (Shared use), borrow the new machine acquired by Columbia Shuswap Regional District for 4 to 6 weeks in the spring, and perform the contract work approved by the Board at the last meeting.

Mr. Armour also advised the Board that the budget figures did not include the "overexpenditure" of some \$20,300 from F.Y. 1989-90 which the Province had refused to cost share on. He asked the Board to advise on whether to carry this amount as a deficit until funds can be requisitioned from the Regional Districts.

The Chairman commented that, although our efforts have been unsuccessful to date, she agreed to continue to pursue this matter at the political level as the money was spent directly on aquatic weed control work.

Moved by Director Shewfelt and seconded by Director Reich:

"That the shortfall in Water Board funds from Fiscal Year 1989-90 be carried as a deficit and that the Board continue to petition the Ministry of Environment to cost share on this work."

CARRIED.

The Field Supervisor informed the Board that he and Mr. Maxnuk had discussed the sites where the program could benefit from contract derooting. These were the north end of Kalamalka Lake and the Kelowna Foreshore. Work at the first site was proposed for November-December, 1990 while Kelowna would be done in the spring.

Director Shewfelt expressed the opinion that the expenditure of special equipment improvement funds on our derooting machines represented a disadvantage to potential contractors, as this was never included in our operating costs.

Mr. Armour pointed out that we were utilizing contractors to augment our own work due to lack of equipment but agreed that our costs are not always comparable to those of contractors.

Mr. Maxnuk felt that sealed tenders should be called for from those contractors who had met the Boards' requirements in an unpaid test.

Director Shewfelt indicated that he felt that contractors who presented equipment identical to that used currently by the Water Board should not be subject to this testing procedure.

The Administrator felt that we had already established a policy of testing all new equipment, and that it would be difficult to depart from this. New contractors could be given the opportunity to qualify but they might not do so in time for certain work.

Mr. Hayward described a system used in testing of contract equipment by the Federal Environment Ministry, Fisheries and Oceans, where a "Test Month" is set aside during which, anyone wishing to qualify for contract work may demonstrate equipment.

The Board felt this was an excellent idea and instructed the Field Supervisor to develop a list of guidelines for contractors and coordinate a test period of convenience to ourselves and the staff of the Water Management Branch.

Moved by Director Shewfelt, seconded by Director Reich:

"That the Water Board call for proposals for the contract work at Kalamalaka Lake and Kelowna Foreshore from Aqua Research and Developments Inc., and Aquatic Plant Control Ltd."

CARRIED.

Moved by Director Reich and seconded by Director Shewfelt:

"That a set of criteria and guidelines for contractors and new equipment to meet in order to be considered by the Board for contract work be developed."

CARRIED.

The Chairman reminded the Field Supervisor that the Board had supported a public information program to involve advertising of projects on-going in various areas of the valley. / . . . 3

Mr. Armour indicated to the Board that funds requested in our provisional budget for F.Y. 1991-92 are not guaranteed and that we must again reinforce our request for enhanced levels of funding. Specifically, we need the increase in derooting operations budget in order to operate new equipment, funds to continue control work a Swalwell Lake, and capital amounts for equipment improvement and purchase of a new harvester. The final item requested for next year is for support of research for a biological control alternative.

Should the Province not agree to our proposed 1991-92 budget, funding levels would revert to the 1989-90 level.

Acquisition of New Equipment:

The Board members discussed the viewing of the *MRV SHUSWAP* earlier in the day.

Director Piazza expressed some concern over transport of a vessel of that size, from lake to lake in the Okanagan.

The Field Supervisor replied that he was not as worried about this as previously since the vessel is road permittable and a special trailer for its transport was being acquired. Most boat launches in the Okanagan would be able to accommodate it, with the possible exceptions of Vaseux and Wood Lakes.

The Chairman advised that we might risk losing the funding if the money is not spent this fiscal year, and although this is still a prototype, some testing has been done by the Ministry of Environment which indicates that it is a better machine than those we now have.

Mr. Maxnuk reported that testing is not complete but a single pass test had shown good results and a more rapid operating capability is indicated.

Director Shewfelt and Mr. Maxnuk debated the relative merits of the rototiller and cultivator.

Director Reich pointed out that these are two different machines both applicable in certain areas of the Okanagan.

Director Hill stated that he was impressed with the machine both in its construction and sophistication, and he suggested that the Board move as quickly as possible to acquire one.

Moved by Director Hill and seconded by Director Reich:

"That the Administrator and Field Supervisor be authorized to proceed with the acquisition of new rototilling equipment, similar to the *MRV SHUSWAP*, from A-1 Machine and Welding 1986, Ltd., provided the end price is within the funding limits approved by the Ministry of Environment"

CARRIED.

The Administrator indicated that we would proceed to define the changes we wished to make from the Shuswap design, obtain the plans from Columbia Shuswap Regional District, and then negotiate the contact for construction with the low bidder on the previous machine. (A-1)

The Chairman suggested that the Board FAX a thank-you letter to C.S.R.D. for allowing the tour of the machine and request the plans and assistance of their staff in designing the new machine.

Director Friesen re-entered the meeting.

Acres International Ltd.:

A letter from Acres International Ltd., who acted as design engineers on the CSRD machine, offering their service to the Water Board was discussed.

Mr. Maxnuk pointed out that the expertise was valuable on the first machine but that the design work was largely completed now. Unless substantial changes are contemplated, further engineering is probably not needed.

Moved by Director Friesen, seconded by Director Shewfelt:

"That the letter be received and Acres International thanked for their offer and told that we will call on their expertise when needed."

CARRIED.

Director Hill left the meeting at 3:10 p.m.

Purple Loosestrife:

The information on the invasion of the Okanagan by this aquatic wetland plant was reviewed by the Board.

The Chairman suggested that a public education program was in order.

Mr. Maxnuk informed the Board that the plant is still sold at local nurseries as a garden plant and described briefly, the habitat and potential impact of Purple Loosestrife in the Okanagan.

Moved by Director Shewfelt, seconded by Director Reich:

"That a letter be sent to the Ministry of Environment expressing the strong concern of the Water Board over the lack of action on Purple Loosestrife and asking that steps be taken to restrict its sale as a garden plant."

CARRIED.

DELEGATIONS:

Mr. Phil Epp: Re: Implementation Study:

Mr. Epp represented the Ministry of Environment at the request of the Board to complete discussion of the recommendations of the Implementation Study begun at the September 10th meeting.

**Item 15- Agricultural practices-** Mr. Epp informed the Board that one of the objectives of the Water Quality Control Project was to improve the agricultural practices in the Okanagan and reduce the nutrient loading from waste run-off. This is the main component of agricultural nutrient loading, with fertilizer over-use being a minor consideration.

All major animal operations in the valley were identified and a helicopter overview was made during run-off to document problems. The Ministry is currently taking more of an enforcement role and can lay charges under the Waste Management or Fisheries Acts.

The Ministry of Agriculture has instituted a "Best Agricultural Waste Management Plan" to attempt to satisfy the concerns and be sympathetic to the agricultural operator.

The Chairman raised the Question of how this documentation work will be continued when the O.K. Water Quality Control Project ends.

Mr. Epp replied that he will still be employed by the Waste Management Branch and expects to continue his efforts. Agricultural operations formerly were exempt under the Waste Management Act and now will not be as new regulations have been written.

Director Shewfelt recommended that the Board urge the Ministry of Environment to continue their involvement in areas addressed by the Water Quality Control Project following its termination.

**Item 16: Forestry Practices:** The O.K.W.Q.C.P. had originally cooperated with the Ministry of Forests and the forest industry to draft guidelines for better forestry practices. Mr Epp Explained that the Ministry of Environment currently has a consultant looking at thirty selected logging cut blocks to see if the industry has improved practices.

Director Friesen pointed out that these regulations apply on Crown Lands only and not on private lands where practices are often atrocious.

The Chairman questioned whether the issues posed in the Implementation Study are being addressed by the new guidelines.

Mr. Epp replied that they are if all the guidelines are being followed, however, the Ministry of Forests is not checking all licensees.

Director Shewfelt inquired about the ability of the Environment or Forest Ministry to prosecute in the event of a violation.

Mr. Epp stated that the companies have agreed to certain regulations and the Fisheries Act could be used to enforce them. It is unlikely that other acts such as the Environmental Management Act would be used.

**Item 17- Pesticide Control:** Mr. Epp reported that Stuart Craig of the Pesticide Control Branch had informed him that this recommendation is covered by the mandate of his Branch.

Director Hill re-entered the meeting at 4:15 p.m. and Director Shewfelt left.

Mr. Epp indicated that the new septic tank regulations have not yet been adopted. He also provided a report (attached) on **Items 18-22.**

The Chairman thanked Mr. Epp for his assistance in reviewing the recommendations of the Implementation Board Study and said that the Water Board will communicate the results of our discussions to the Ministry of Environment.

#### SEWAGE FACILITIES GRANTS:

Information was received from Central Okanagan Regional District, City of Armstrong, District of Coldstream, and the Town of Osoyoos regarding sewage facilities for which grants have been received.

Director Hill commented that Coldstream's reply was not sufficiently detailed and asked that a letter requesting additional information be sent.



Moved by Director Friesen and seconded by Director Reich:

"That the grant applications received from the District of Coldstream in the amount of \$24,968.88, and from the Town of Osoyoos in the amount of \$15,587.58 be approved for payment."

CARRIED.

NEW AND UNFINISHED BUSINESS:

Peat On-Site Wastewater Disposal Systems:

Information provided by Director Shewfelt on an enhanced form of septic treatment was reviewed by the Board.

The Chairman suggested that a copy of the information be sent to Mr. Phil Epp for comment.

NEXT MEETING:

It was agreed to leave the next meeting to the call of the Chair.

ADJOURNMENT:

There being no further business, the meeting adjourned at 4:45 p.m.



CHAIRMAN



SECRETARY - TREASURER

GA/gda

TO: W. S. KASTLEEN  
FILE: 10,30,00  
SUBJECT: OKANAGAN BASIN STUDY

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You requested that Section Heads inform you of the status of the Okanagan Basin Study. I have enclosed a copy of the Recommendations outlined in the Summary Report and the following comments explain the current status.

18 (ii) We have marginally increased special types of fishing and seasonal use (eg artificial flies only and ice fishing bans). We do not anticipate much expansion of special types of fishing because regulations become very complicated, enforcement requirements are greatly increased, and non-compliance becomes a problem.

We feel we have made major advances in carefully managing lakes and recording information. Our Small Lakes Index Management (SILIM) program carefully monitors angler use, fishing success, fish growth and angler satisfaction. We have also made good progress in lake aeration and spawning stream enhancement using Habitat Conservation Fund money. For example, we now run aerators on Yellow, Gardom, Bunnell, Kilpoola, and Martins Lakes.

With the world shortage of rotenone and the increased public concern with poisoning program, we have generally ceased the practice of chemical rehabilitation of lake.

18 (iii) We have built and we operate through contract the Skaha Hatchery which adds 600,000 hatchery kokanee to Okanagan Lake annually. We have constructed a spawning channel on Mission Creek and we have enhanced habitat in Peachland Creek, Vernon Creek, Hill Creek, and Eneas Creek. Enhancement of Penticton Creek is anticipated soon.

We have not publicized the use of cod and whiterfish even though this may be a worthwhile thing to do. No funding or manpower has been provided for this task and we have a full workload. More resources would be required to complete this aspect of Recommendation 18 (ii).

19. We feel confident that our Headwater stocking program is second to none. We maintain a rates consistent with individual lake plans for fish growth and angler satisfaction. We use eggs from wild stock rather than brood fish thus maintaining superior genetic quality and fish health standards.

20. We have contracted a study to address the water supply issue. As mentioned earlier, we have constructed a spawning channel on Mission Creek and we have enhanced habitat in Peachland Creek, Vernon Creek, Hill Creek, and Eneas Creek. We also expect that enhancement of Penticton Creek will be conducted shortly.

21. This recommendation asks us to continue to operate Skaha Hatchery. We would like to do this, however, it operates under a contract issued by our Fish Culture Section in Victoria and they failed to budget it in this fiscal. The hatchery will continue

to operate only if a Cabinet Submission is granted. I am extremely upset over this turn of events.

This recommendation also asks us to continue operating the Kelowna Pond which annually produced 25,000 rainbow for Okanagan Lake. This project was successful in increasing the catch of rainbow but each rainbow could eat 250 kokanee annually and so we have postponed the rainbow stocking program until we are satisfied that the kokanee population can handle the additional predation pressure. In the meantime, our Fish Culture Section is attempting to purchase the Kelowna Pond.

21. (i) Our Ministry has made every effort to minimize lake drawdowns. However this procedure affects a lot of other downstream users and so a Committee has been formed to address the issue. We are satisfied that the results are the best possible for general good of the resource.

22. (ii) We have secured a map reserve for the areas where kokanee spawn. However we suspect that there could be considerable improvement in the amount of awareness of this reserve. We have seldom, if ever, had Lands staff refer to the reserve and make special efforts to advise us of activities which would affect shore spawners.

We trust this supplies the information you were seeking.

C. J. BULL

1990-1991 WINTER DEROOTING  
PROPOSED WORK PLAN

FUNDS REMAINING: ( Fiscal Year 90/91 ending March 31st, 1991)

Expenditures to October 1st, 1990 (Includes \$23,000 contract derooting) (excludes \$20,333 F.Y. 89/90 over-run)	\$68,000
Allocation: Original 90/91 budget	\$93,000
Enhanced budget funds	\$50,000
	<u>\$143,000</u>
Funds Remaining (Operations)	\$75,000

DEROOTING EQUIPMENT AVAILABLE:

Rototiller #1 (Red Machine) - Available Jan. to May/91  
Average 400-500 Hours OBWB use each season

Rototiller #2 (Blue Machine) - Nov/90 to June/91  
Average 700-800 Hours OBWB use

Bombardier/Cultivator- Replaced by contractor in 89/90  
as equipment was not serviceable. (Engine  
replacement required)

Contract Derooting- Water Board has allocated \$24,000  
for contract derooting in F.Y. 90/91.

M.R.V. SHUSWAP- May be able to arrange use during CSRD  
shutdown period Jan. to April 1991.

New OBWB Machine- Likely would not be ready for more  
than test usage in this F.Y.

PROPOSED WORK SCHEDULE:

- "New" sites listed cannot all be derooted with the remaining \$75,000.

- Sites containing dense *E. water milfoil* can be effectively treated in either the spring or fall, while those containing significant populations of *Pondweed* respond better to late spring derooting.

<u>LAKE/SITE</u>	<u>PREVIOUS TREATMENT</u>	<u>1990/91 TREATMENT (Proposed)</u>	<u>MACHINE</u>	<u>COMMENTS</u>
<u>Osoyoos L.</u>				
Motel Row	Mar/Apr/90	Apr/91	Roto#1	
Solana Bay	April/90	Apr/91	"	
				/ . . . 2

<u>LAKE/SITE</u>	<u>PREVIOUS TREATMENT</u>	<u>1990/91 TREATMENT (Proposed)</u>	<u>MACHINE</u>	<u>COMMENTS</u>
<u>Osoyoos Lake</u> Willow Beach	Apr/May/90	Mar/Apr/91	Roto#1	Expand area treated to reduce reinfestation
Haynes Point	NEW	Apr/91	Roto#1	Survey site first
Willow Beach (N.W. Corner)	NEW	See Willow Beach		
Safari Beach	NEW	Insuff. Time		
<u>Skaha Lake</u> Skaha Beach	Feb/Mar/90	Jan/Feb/91	Roto#1	Add residential area adj. Sudbury Beach
Okanagan Falls	March/90	Feb/ Mar/91	Roto#1	Conc.on res. area adjacent to Sudbury Beach
Christie Mem. Park	March/90	?		Requested by Parks; Very rocky
Sunny Bay	NEW	Feb/91		
Skaha Estates	NEW	Feb/91		
Kaledan	NEW	Not planned		Extensive water lines
East Side (Penticton)	NEW	Not planned		Large, shallow weed beds
<u>Vaseux Lake</u> Prov. Campground	NEW	Mar/91		MRV Shuswap
South Shore River Channel Entrance	NEW	Not planned		
Resort	NEW	" "		

<u>LAKE/SITE</u>	<u>PREVIOUS TREATMENT</u>	<u>1990/91 TREATMENT (Proposed)</u>	<u>MACHINE</u>	<u>COMMENTS</u>
<u>Okanagan Lake</u>				
<u>Penticton</u>				
Marina	NEW	Not planned		Dredged in 1990
<u>Summerland</u>				
Marina	NEW	Not planned		
Lakeshore Tent and Trailer	NEW	Mar/91	Contract? or Roto#2	
Trout Creek Sites	NEW	Mar/91	"	
<u>Kelowna Westside</u> NEW				
Westbank Yacht Club		Mar/Apr/91	Roto#2	
Pritchard Drive		Mar/Apr/91	Roto#2	
Green Bay		Not Planned		
<u>Kelowna Foreshore</u>				
Bridge-Gyro Beach	Apr-June/90	Apr/May/91	Contract	
Cook Ave.	NEW	Apr/May/91	Roto#2 or contract	
Rotary Beach	NEW	Apr/May/91	"	
Okan. Mission	NEW	Not planned		
Hot Sands Beach	NEW	Apr/May/91	Roto#2 or contract	
Yacht Club	Apr/89	Not planned		Done once previously when wharves removed

<u>LAKE/SITE</u>	<u>PREVIOUS TREATMENT</u>	<u>1990/91 TREATMENT (Proposed)</u>	<u>MACHINE</u>	<u>COMMENTS</u>
<u>Vernon Arm</u>				
Kin Beach and Sandy Beach	Feb/Mar/90	Dec/90	Roto#2	
Seymour Marina	March/90	Dec/90	Roto#2	
Yacht Club	March/90	Not planned		Obstacles
N.E. Side (Philp's Corner) NEW		Not planned		Residential
<u>Westside</u>	NEW	Not planned		
Alexis Beach Newport Beach Head of the Lake				
<u>Duck Lake:</u>	NEW			
North Shore Hol. Park Waters Edge		Apr/May/91	Roto#2	
<u>Wood Lake:</u>	Apr/May/90	Oct/Nov/90	Roto#2	May require spring derooting by cultivator inshore
South Shore Lakeshore Resort Kokanee Rescrt Sam's Resort Beasley Park Belvedere Resort Spot Resort				
N.E. Corner (Park)	NEW	Not planned		
<u>Kalamalka Lake:</u>				
North Shore Coldstr. Cr to Vernon Cr.	Dec/89-Jan/90	Nov/90		Contract
Palfrey Cr.	Dec/89	Nov/90		Contract

SUMMARY OF EXPENDITURES  
FISCAL YEAR 1990-1991

OPERATIONS BUDGET:

<u>CATEGORY</u>	<u>\$ TO DATE</u>	<u>\$ ALLOCATED</u>	<u>\$ REMAINING</u>
Harvesting	72,500	92,000	19,500 (extra Vaseux Lake work not performed)
Derooting	68,000	143,000	75,000
Spec. Projects	33,000	35,000	2,000 (includes Swalwell L. and Kal.Lake)
Administration	51,000	79,333	28,333
<hr/>			
Total	224,000	349,333	125,333

CAPITAL ACQUISITIONS:

<u>Budgeted</u>	<u>\$ Spent to Date</u>	<u>Description</u>
\$250,000	nil	New derooting equipment
\$36,000	nil	Guidance System
\$50,000	\$23,000	Improved propulsion system on Roto#2.
	\$10,000	Boat motors for MOE work boat.
<hr/>		
\$336,000	\$33,000	



## OKANAGAN BASIN WATER BOARD

**MINUTES OF A MEETING OF THE OKANAGAN BASIN WATER BOARD HELD ON APRIL 16TH, 1991, IN THE BOARD ROOM, REGIONAL DISTRICT OF OKANAGAN-SIMILKAMEEN, 101 MARTIN ST., PENTICTON, B.C. AT 10:30 A.M.**

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<b><u>PRESENT:</u></b>	Chairman S. Simpson	C.O.R.D.
	Director G. Paynter	C.O.R.D.
	Director R. Hobson	C.O.R.D.
	Director A. Hill	N.O.R.D.
	Director J. Yardley	N.O.R.D.
	Director E. Hornby	N.O.R.D.
	Alternate Director T. Shields	O.S.R.D.
	Director J. Kimberley	O.S.R.D.
	Director T. Takacs	O.S.R.D.

<b><u>ALSO PRESENT:</u></b>	M. Maxnuk	Ministry of Environment
	P. Newroth	Ministry of Environment

<b><u>STAFF:</u></b>	P. Mackiewich	Administrator
	G. Armour	Field Supervisor

### **MINUTES:**

Moved by Director Hobson, seconded by Alternate Director Shields :

"That the minutes of a regular meeting of the Okanagan Basin Water Board held on February 16th, 1991 , be adopted as circulated."

CARRIED.

Director Hornby asked for clarification of information of the material in the minutes dealing with the introduction of sediment bound phosphorus into Osoyoos Lake by Eurasian water milfoil.

The Field Supervisor stated that rooted plant growth could "recycle" otherwise unavailable nutrient into the water column. It is not clear how significant these amounts are, but the data presented at the Osoyoos Lake water quality meeting indicated that it could involve the introduction of more phosphorus than the septic tank component in that area.

### **AQUATIC PLANT MANAGEMENT BUSINESS:**

#### **Provisional Budget for Fiscal Year 1991-92:**

Dr. Newroth informed the Board that the Treasury Board review of the new five year cost-sharing agreement was not complete due to the change in Ministers. He hoped that this would be done soon.

He also indicated that the Water Board request for enhanced budget funds for F.Y. 91-91 did not leave the Ministry, and it seemed unlikely that we would receive this money. He felt that the base budget for operations would be approved and he had recommended to his superiors that funding should not be reduced to programs already underway.

The Chairman instructed that a letter be written to the new Minister, the Honourable Dave Mercier, congratulating him on his appointment and highlighting the current needs of our joint program.

The Field Supervisor reviewed the Provisional budget submitted to the Province last July. He indicated that the Board had requested increases in operating funds for derooting as the new equipment came onstream. This amount was approximately \$30,000.00. In addition, capital funds had been requested totalling \$266,000.00. This was made up of \$150,000.00 for replacement of a weed harvester with new equipment; \$50,000.00 for improvements to existing equipment; and \$66,000.00 for a biological control research program.

Mr. Maxnuk pointed out an error in the version of the budget handed out, in that the amount for special projects should total \$281,000.00 not \$381,000.00.

The Field Supervisor agreed that this was a typographical error.

Mr. Armour also informed the Board that it was imperative that confirmation of extra funds be received early in the year so that scheduled projects could commence, and be completed in the budget year. He referred specifically to the extra harvesting proposed for Vaseux Lake for which preparations would have to begin immediately.

Dr. Newroth indicated that it appeared this amount was in the base budget and, thus would be covered.

The Chairman asked Dr. Newroth about the status of the Biocontrol Research Program.

Dr. Newroth summarized the work done to date on insect species feeding on Eurasian water milfoil and indicated that a technician is currently working on contract for the Ministry. The work is not yet at a stage where biological control is a useful control tool. He also stated that we must compare the cost of rearing and introducing insect biocontrol agents with the cost of methods currently in use.

The Chairman requested information of the use of grass carp in weed control and progress in the State of Washington using this method.

Dr. Newroth replied that the work in Washington is being done in small lakes and is not specific to milfoil control. He stated that he could not foresee much use for this method in the large lakes of the Okanagan due to the high stocking rates required and the preference of the fish for food species other than Eurasian water milfoil.

Alternate Director Shields asked what the stocking rate would be in Vaseux Lake as an example.

Dr. Newroth indicated that it would be in the tens of thousands.

Moved by Director Hobson, seconded by Director Paynter:

"That the Provisional Budget be received."

CARRIED.

### **Derooting Schedule:**

Mr. Armour reviewed the revised derooting schedule for the remainder of the 1991 season. He explained that the winter shutdown had extended from mid-December to February and that some new sites proposed for treatment this season could not be done.

Work to be completed includes Osoyoos Lake, some Kelowna sites, and possible rototilling in Duck Lake if time permits.

**Derooting Schedule: (Continued)**

Mr. Armour informed the Board that contract work done by Aqua Research and Developments Ltd. at Kalamalka Lake had recently been completed and assessed, but that results were not yet available. Preliminary indications were that some touch-up work would be needed from the contractor for the job to be satisfactory.

The Administrator advised the Board that he felt the contractor should not be paid for substandard work.

Moved by Alternate Director Shields and seconded by Director Takacs:

"That the Aqua Research and Developments be paid for the work at Kalamalka Lake when the job is completed to the satisfaction of our staff and the Water Management experts."

CARRIED.

Mr. Armour indicated that the other contract at Kelowna foreshore being carried out by Aquatic Plant Control Ltd. was proceeding well.

The Chairman asked the Field Supervisor about efforts to publicize the work of our weed control program so the public might be better informed.

Mr. Armour replied that he had contacted newspapers as the equipment was moved from site to site but perhaps a routine schedule would be best published as a paid advertisement.

Moved by Director Hobson and seconded by Director Kimberley:

"That paid advertisements of the Water Board equipment schedule be authorized in the affected areas."

CARRIED.

**Proposed 1991-92 Harvesting Schedule:**

Mr. Armour presented the Board with a provisional schedule for summer harvesting (attached) and requested that Board members contact him with revisions, if necessary.

**Progress of the new Rototiller (MRV Okanagan):**

The Field Supervisor informed the Board that the new rototiller had been completed and launched at Vernon on March 14th. The machine has undergone about 200 hours of operational testing and general de-bugging and results appear highly satisfactory.

Mr. Armour indicated that a official "unveiling" ceremony had been scheduled with the previous Minister to attend but obviously, this had to be postponed.

Dr. Newroth suggested that he was sure the new Minister would wish to participate in the ceremony and after discussion it was decided to contact the Minister's office regarding a tentative date of Wednesday, May 1st.

**DELEGATIONS:****Okanagan Water Quality Control Project:**

Mr. R.A. Nickel, Mr. T. Forty, and Mr. P. Epp representing the Okanagan Water Quality Control Project appeared at the request of the Board to update the new members on the status of their program and inform the Board of what might happen with the termination the Project in a years time.

Mr. Nickel gave a overview of the program and some predictions for the future of wastewater management in the Valley. (information attached) He stated that since 1984, the Project had tried to implement uniform water quality standards throughout the Valley. It is recognized that the Okanagan system is unique and our lakes are subject to a slow flushing rate of 60 to 80 years combined with the pressures of a rapidly expanding population. Development must proceed carefully if the quality of of water resource is to be preserved.

Under the terms of the project, the Province declared the Okanagan an Environmentally Sensitive Zone, and committed \$20 million to the upgrading of wastewater management. The O.K. Water Quality Control Project was also instructed to look at nutrient input from septic tanks, agricultural, and forestry practices.

A total of \$40 million has been spent on municipal sewage systems which has given the Okanagan one of the most sophisticated wastewater management systems in the world. A 95% reduction in phosphorus loading has been accomplished but it is estimated that it would require \$120 million to reduce this component to near zero. It was decided to use funds to concentrate on the diffuse nutrient sources instead.

Computerized soil maps have been developed to show the capability of soil types in various areas to accept septic effluent. These will be used with the new septic tank regulations, and could form the basis of rural waste management plans. Mr. Nickel stressed that he believes the Water Board should be involved in prioritizing areas where these plans should be implemented.

Mr. Nickel observed that there is a lack of forethought in some cases, towards resolving environmental concerns rather than responding to development in the waste management planning process. He asked for the support of the Board and consideration in sharing in the cost of developing a overall waste management strategy for the Okanagan Valley. He estimated that it would cost \$50,000 to \$100,000 to produce such a plan and stressed that it was essential to encourage orderly development which addresses both environmental and development concerns. If this process is not undertaken we will end up with 15 separate wastewater management plans but no means to prioritize where works are most needed.

Mr. Epp updated that status of the wastewater management plan map.

The Chairman inquired as to any progress with the Indian Bands in getting them to be part of the planning procedure.

Mr. Nickel replied that he had asked but received no positive reply as yet.

Director Hornby referred to a map previously presented by Mr. Epp, showing sensitive areas in individual Management Plans and interpreted this as meaning that areas requiring attention in the short term have been identified.

Director Paynter questioned the meaning of the large cost spikes on the Point Source projection.

Mr. Forty answered that they represent large capital expenditures for treatment plant updates in major centres as population increases.

The meeting recessed for lunch at 12:30 p.m. and reconvened at 1:45 p.m.

Mr. Nickel summarized his request by saying that he would like the O.B.W.B. to be part of the overall waste management planning process. He suggested working with a smaller group if this would suit the Board, and asked the Board to consider contributing funds to works that are needed from an environmental standpoint for nutrient control.

Director Hobson wished to confirm that the maximum initial cost to the Water Board would be \$25,000 and then asked how we could raise the funds.

The Administrator informed the Board that funds can be raised with the approval of the Regional Districts, but that the money is not in the allocation for the 1991-92 budget. He stated that Sewage facilities Assistance grant funds could also be used with the authorization of the Regional Districts.

Director Hobson emphasized that he felt that this is an appropriate role for the Water Board and we should participate following receipt of more exact cost information.

The Chairman said that cost implications should be established, presented to the Board, and then taken back to the individual Regional Districts.

Director Takacs asked for information on the cost of supplying sewerage to all Valley areas and wondered how we would determine a starting point if that were our objective. He specifically questioned the effect of this planning process on the priority of sewerage areas in Osoyoos now served by septic tanks.

Mr. Nickel indicated that the Osoyoos area is currently considered a high priority and would likely be so under a Valley wide plan.

Director Kimberley indicated that he supports in principle, the development of a master plan but would like to see something in writing for the Board's consideration which could then be taken back to the Regional Districts.

The Chairman pointed out that this would be a unique venture for this Board and members would have to set aside regional considerations for Valley-wide concerns. She observed that partial funding may be available in the current budget.

The Administrator advised that we would need the permission of the Inspector of Municipalities to divert Sewage Facilities funds. He stated that he likes the idea of a development cost charge to pay for these services.

Director Hill questioned the role of the Provincial Government in the long term management of wastewater since the costs are out of reach for the Water Board.

Mr. Forty indicated that this is also a concern of the Okanagan Water Quality Control Project and that it would be advisable to approach the funding issue with a coordinated effort rather than as individual areas.

Director Takacs asked how long the study would take to complete.

Mr. Epp replied that it would take at least 12 months.

The Chairman stated that leadership must come from the political level to encourage participation where some local priorities may be initially lowered. The problem is that funding of sewage works proceed in areas where development money is available but does not go ahead in areas of environmental priority.

Alternate Director Shields indicated that he would like to see the Valley wide scope looked at, and local concerns put on hold if necessary.

The Chairman pointed out that it may not be necessary to put local concerns on hold during the planning process.

Moved by Director Kimberley, seconded by Director Hobson:

"That Water Board staff work with the Ministry of Environment to draft terms of reference and financial implications of a Valley wastewater plan for presentation to the Board at the next meeting.

Moved by Director Hornby and seconded by Director Paynter:

"That the motion be amended to include three Water Board members in the working group."

CARRIED.

The Chairman invited Directors Hill and Kimberley to join her in dealing with this issue, and the proposal was accepted.

Director Hobson noted that the Water Quality Project ends next March and wondered what mechanisms are in place to carry on the work.

Mr. Nickel informed the Board that he had presented alternatives to his superiors, including carrying on the Project and performing the work through the existing structure of the Waste Management Branch.

Director Hobson urged the Board to ensure that staff and resources of the Water Quality Project are not lost.

Moved by Director Hobson, seconded by Director Paynter:

"That the Water Board communicate at the political level to ensure that staff and resources of the Okanagan Water Quality Project are maintained."

CARRIED.

Director Paynter asked for a breakdown of the location of the remaining locations of point source nutrient input.

Mr. Forty presented information explaining this and pointed out that point source loading of phosphorus has dropped from 58,000 kgs in 1970 to 5,000 kgs in 1990.

Mr. Nickel asked for Board support for the concept of a 25% "topping off" fund for wastewater management in environmentally sensitive areas. He suggested this would be a new use for the Ministry's Sustainable Environment Fund.

Moved by Director Hobson, seconded by Director Hornby:

"That the Water Board lobby the Ministry of Environment to use Sustainable Environment Funds to top up grants to environmentally sensitive areas to the 75% level."

CARRIED.

The Chairman asked the delegation about the status of the new septic tank regulations.

Mr. Epp reported that they have still not been enacted and it is his understanding that it is only legal wording that remains to be resolved.

The Chairman thanked the delegation from the Okanagan Water Quality Control Project for their attendance and efforts in keeping the Board informed.

### **CORRESPONDENCE:**

#### **Minister of Environment - F.Y. 89-90 Reimbursement:**

A letter was received from the Environment Minister indicating that the Water Board would be reimbursed for work done in F.Y. 1989-90 for which the Board had previously paid 100%. The Administrator noted that the funds have not been received to date and that we will correspond with the new Minister as to their whereabouts.

#### **M.P. J. Whittaker - Information on the Environmental effects of the Persian Gulf War:**

This information was received and filed by the Board.

#### **Dr. D.A. Kasianchuk, Water Management Division:**

A request from Water Management Division asking that in the absence of Treasury Board signing of the new agreement for aquatic weed control, the program be continued under the terms of the existing agreement was received.

Moved by Director Takacs, seconded by Alternate Director Shields:

"That the aquatic weed control program be continued under the terms of the existing agreement pending signing by Treasury Board of the new five year agreement."

CARRIED.

#### **City of Penticton - Community Environmental Strategy:**

Information from the City of Penticton was received asking for Water Board cooperation in preparation of a Community Environmental Strategy.

Director Kimberley informed the Board that the City was the first in British Columbia to apply for, and receive, Provincial funding for such a study. He indicated that the Board would be contacted for their input.

Chairman Simpson asked the Board members to provide the Administrator with their comments.

Director Hobson inquired as to the amount of funds received and was informed that \$30,000 was received through the Ministry of Municipal Affairs.

**B.C. Telephone Company - Installation of Submarine Cable:**

Notification of the installation of a submarine telephone cable in the Kelowna area was received by the Board.

The Field Supervisor noted that while the telephone company had an easement for all of their submarine structures he was not sure about such obstacles as cablevision facilities and would check this out. He also asked for input from Board members regarding installation of any submarine structures that they might become aware of in their areas.

**Regional District of Central Okanagan - Complaint about weed debris on Rotary Beach Following Rototilling:**

A request from the Regional District of Central Okanagan to clean up weed debris resulting from rototilling operations at Rotary Beach was received.

The Field Supervisor informed the Board that treatment of new sites results in greater than normal accumulations of weed fragments on shore as the plant densities have not yet been reduced by prior work. This is normally only a problem in the first year. He also commented that he had examined the site and that a large portion of the material was mud, made up of decomposing algae, leaves, and other organic material. This deposit was likely more extensive this season because the low lake levels were allowing wave washing of deeper areas.

Moved by Alternate Director Shields and seconded by Director Kimberley:

"That the Water Board concentrate its resources on removal of aquatic weed growth in the lakes and not take on the responsibility for cleaning of beaches. The Board would appreciate the assistance of municipalities and residents in cleaning up beach areas and putting up with any inconvenience."

CARRIED.

**Minister of Environment - Reply to Letter Requesting Review of Implementation Study Recommendations:**

A letter from the Minister indicated that senior levels of government had corresponded on this issue and the Provincial Ministry had undertaken to obtain funding for this review. The Board was asked to arrange to meet with Dr. Kasianchuk and Mr. Kastelen, the Regional Manager, to review our proposal.

Chairman Simpson noted that we would need a clear proposal of what we wish to accomplish in resurrecting these recommendations especially in view of the rapidly changing demographics in the Valley.

Director Hobson stated that we should not delay in setting up a meeting and suggested calling a special sitting or empowering a smaller group to deal with the matter. He also felt that the Federal Government reply suggesting that the Province take the lead role and that the problems to be addressed lie mainly in the tributary systems was inadequate since the tributaries flow into the mainstem lakes and across the international border. This was the reason for the Federal involvement in the original study.

The Board directed that a letter be sent to the Federal Ministry of Environment asking for clarification on their commitment of funding.



Director Kimberley suggested that the Chairman prepare and circulate a draft of the Water Board proposal and that the Board meet immediately prior to speaking with Dr. Kasianchuk and Mr. Kastelen.

**Geoff Smith - Letter Concerning Weed Growth in Manhattan Point Area of Kelowna:**

The letter was received by the Board for information.

**OTHER MATTERS:**

**Staff Salaries for 1991-92:**

The Administrator explained that the past practice of the Board has been to follow the wage increases approved for the Regional District of North Okanagan. This year a 5.5% increase was granted to N.O.R.D.

Moved by Alternate Director Shields and seconded by Director Hobson:

"That the Water Board carry on with the practice of following salary increases awarded to N.O.R.D. and a 5.5% increase be approved for 1991-92, effective April 1, 1991."

CARRIED.

**Water Management Branch - Vernon Office Lease:**

Moved by Director Takacs, seconded by Director Hobson:

"That the Water Board sign the lease for the Water Management Branch office in Vernon subject to reimbursement for 100% of the costs by the Province."

CARRIED.

**City of Penticton - Sewage Treatment Facility:**

Director Kimberley informed the Board that the new sewage treatment facility in the City of Penticton is now onstream and the grand opening will be at the end of May. He hoped that the Board members would be able to attend.

**Use of Low Phosphate Detergents:**

The Board agreed that a letter should be sent to the Ministry of Environment re-affirming its recommendation that the use of low phosphate laundry and dishwashing detergents be made mandatory.

**ADJOURNMENT:**

There being no further business, the meeting adjourned at 3:40 p.m.

be made mandatory.

**ADJOURNMENT:**

There being no further business, the meeting adjourned at 3:40 p.m.



CHAIRMAN



SECRETARY-TREASURER

OKANAGAN BASIN WATER BOARD

Administration and Aquatic Weed Control

PROVISIONAL BUDGET (April 1/91 to March 31/92)

	<u>1990/91</u> <u>ANNUAL</u> <u>BUDGET</u>	<u>1991/92</u> <u>PROVISIONAL</u> <u>BUDGET</u>
<b><u>REVENUE:</u></b>		
Province of B. C. (75% Grant)	\$514,000	\$ 484,500
R.D.C.O. Requisition	59,189	111,371
R.D.O.S. Requisition	29,595	47,980
R.D.N.O. Requisition	25,041	38,995
Transfer from Equip. Reserve	71,500	
Previous Year's Surplus (Deficit)	<u>nil</u>	<u>(16,846)</u>
<b>TOTAL REVENUE:</b>	<b><u>\$699,325</u></b>	<b><u>\$ 666,000</u></b>
 <b><u>EXPENDITURES:</u></b>		
<b>Harvesting Operations</b>		
Harvester Operator Wages	\$ 36,000	\$ 37,500
Driver's Wages	10,500	11,000
Equipment Transport	3,000	3,000
Pickup Truck Rentals	4,500	5,000
Pickup Operation and Maintenance	5,500	6,000
Travel Expenses	1,000	1,000
Crane Rental	2,000	2,000
Fuel and Lubricants (Harvesters)	4,500	4,500
Maintenance, Repairs, Supplies	19,000	19,000
Contract Weed Disposal	5,000	5,000
Water Intake Repairs	<u>1,000</u>	<u>1,000</u>
<b>Harvesting Subtotal:</b>	<b><u>92,000</u></b>	<b><u>95,000</u></b>
 <b>Winter Derooting</b>		
Operator Wages and Contract Work	66,000	78,000
Driver's Wages	7,933	10,500
Equipment Transport	6,000	7,000
Pickup Truck Rental	5,000	6,000
Pickup Operations and Maintenance	6,000	8,500
Travel Expenses	1,000	1,000
Crane Rental	3,000	3,000
Fuel and Lubricants	9,000	12,000
Maintenance, Repairs, Supplies	<u>35,000</u>	<u>44,000</u>
<b>Derooting Subtotal:</b>	<b><u>138,933</u></b>	<b><u>170,000</u></b>

**OKANAGAN BASIN WATER BOARD**

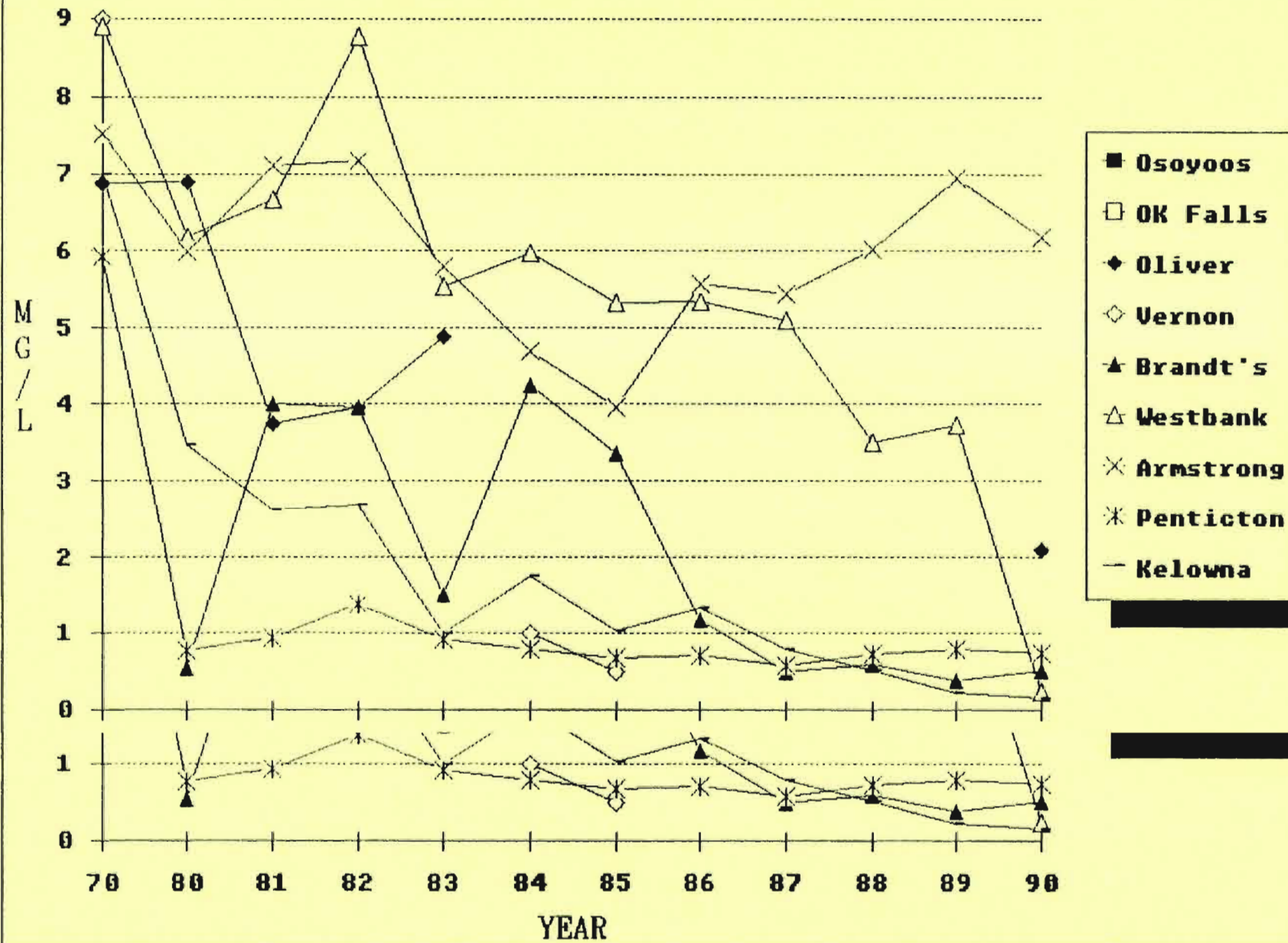
**Administration and Aquatic Weed Control**

**PROVISIONAL BUDGET (April 1/91 to March 31/92)**

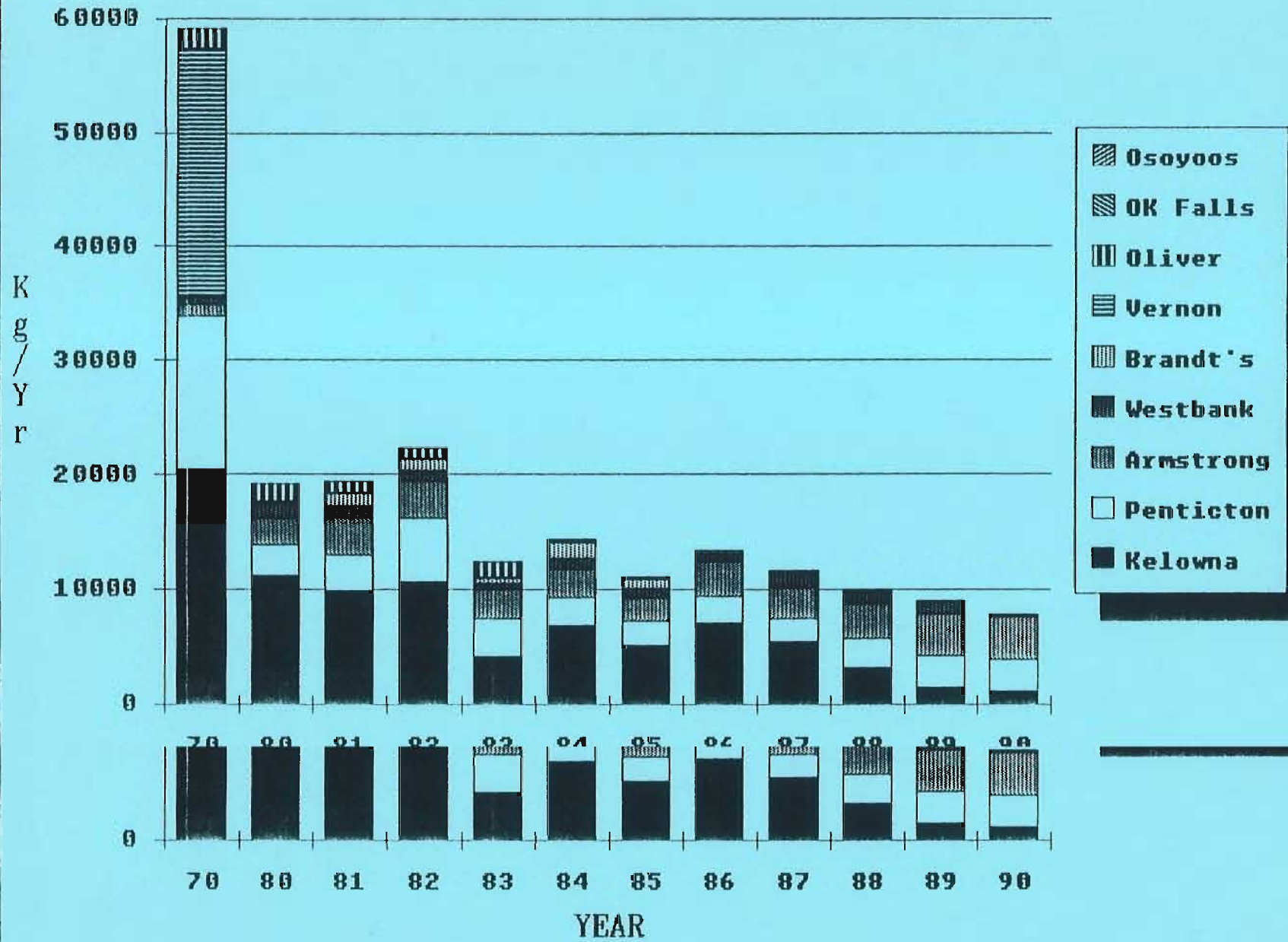
	<b>1990/91 ANNUAL BUDGET</b>	<b>1991/92 PROVISIONAL BUDGET</b>
<b>EXPENDITURES (Continued)</b>		
<b>Special Projects</b>		
Wages	\$ 14,000	\$ 6,000
Dive Pay	10,000	3,000
Pickup Rental and Operation	2,000	1,000
Fuel and Lubricants	2,000	1,000
Materials and Supplies	7,000	4,000
Equipment Improvements	50,000	50,000
Proposed New Equipment	286,000	150,000
Biological Control Program		66,000
<b>Special Projects Subtotal</b>	<b><u>371,000</u></b>	<b><u>381,000</u></b>
<b>Administration</b>		
Field Supervisor's Salary	\$ 40,800	\$ 42,840
Payroll Benefits (All Staff)	18,200	25,000
Insurance	500	1,000
Yard Rental and Utilities	10,000	13,760
Office Costs	3,500	4,000
Accounting and Payroll	8,400	10,400
Interest Charges	<u>2,000</u>	<u>3,000</u>
<b>Administration Subtotal</b>	<b><u>83,400</u></b>	<b><u>100,000</u></b>
<b>Total Operating Costs</b>	<b><u>\$685,333</u></b>	<b><u>\$646,000</u></b>
<b>Administration (Non-Shareable)</b>	<b>18,100</b>	<b>20,000</b>
<b>TOTAL EXPENDITURES</b>	<b><u>\$703,433</u></b>	<b><u>\$666,000</u></b>



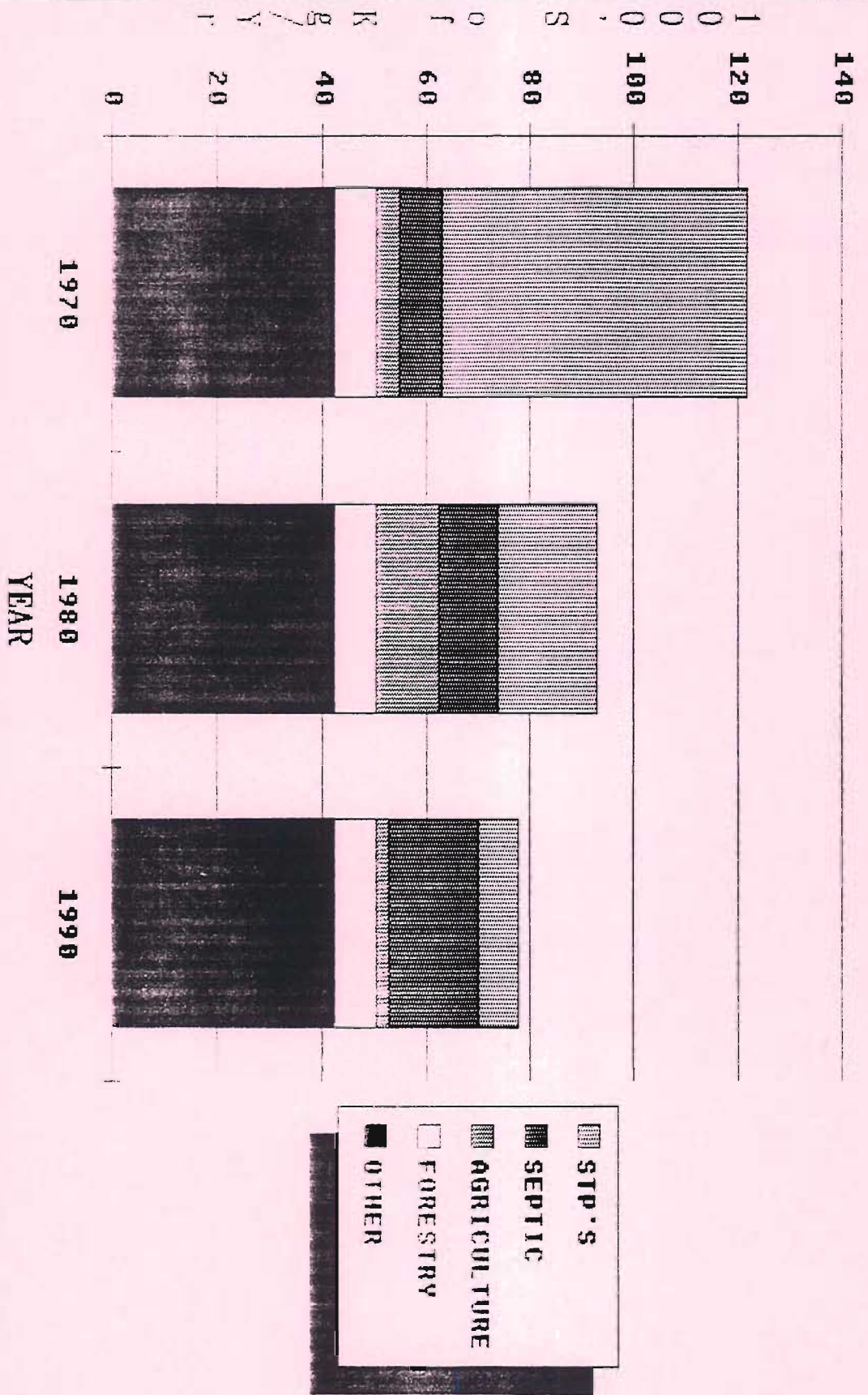
# STP EFFLUENT PHOSPHORUS



# MUNICIPAL PHOSPHORUS LOAD



# OKANAGAN PHOSPHORUS SOURCES



DEROOTING SCHEDULE - 1990-91  
REVISED WORK PLAN

Since the submission of the Derooting Work Plan to the Board at the October 16th, 1990 meeting, a number of changes have taken place. These are summarized as follows:

- Winter shutdown due to cold conditions and ice on lakes occurred from mid-December to early February.
- Operations began on sites which were ice free. These did not correspond to the original schedule.
- Rototiller #1 was "de-commissioned" on March 22nd to allow for a complete re-fit of the machine.
- The new rototiller MRV OKANAGAN was put into operation March 14th, although the initial phase involves mostly setting up and testing.

A summary of sites treated to date follows, along with a description of areas we hope to deroot by the end of the spring season. (End of May)

LAKE	SITE	PREVIOUS TREATMENT	1990-91 TREATMENT	MACHINE USED	COMMENTS
OKANAGAN LAKE	KELOWNA COOK AVE.	NEW	FEB/91	ROTO#2	COMPLETE
	ROTARY BEACH	NEW	FEB/MARCH	#2	COMPLETE
	GYRO BEACH	NEW	MARCH	#2	COMPLETE
	FORESHORE	APRIL/JUNE/90	MARCH/MAY/91	CONTRACT	BLOCK#1 COMPLETE
	KELOWNA NORTH HOT SANDS SUTHERLAND BAY	NEW	APRIL/MAY/91	MRV OKANAGAN	
	WESTBANK	NEW	FEB/MARCH	ROTO#1	COMPLETE
	SUMMERLAND -LAKESHORE TENT & TRAILER	1989	MARCH	ROTO#1	COMPLETE
	-SUNOKA BEACH	NEW	MARCH	ROTO#1	COMPLETE
	-POWELL BEACH	NEW	MARCH	ROTO#1	COMPLETE
	-MARINA	?			COMPLETE
OKANAGAN LAKE	VERNON ARM	FEB/MARCH/90	MARCH/APRIL/91	MRV OKANAGAN	
SKAHA LAKE	SKAHA BEACH (incl. Sudbury Beach Res.)	FEB/MARCH/90	MARCH/91	ROTO#1	COMPLETE
	OKANAGAN FALLS	MARCH/90	MARCH/APRIL/91	ROTO#2	
	SKAHA ESTATES	NEW	APRIL/91	ROTO#2	



LAKE	SITE	PREVIOUS TREATMENT	1990/91 TREATMENT	MACHINE	COMMENTS
OSOYOOS LAKE	WILLOW BEACH	APRIL/MAY/90	APRIL/MAY/91	ROTO#1 OR #2	
	HAYNES POINT	NEW	MAY/91	ROTO#1	
	SOLANA BAY	APRIL 90	MAY/91	ROTO#1	
WOOD LAKE	SOUTH SHORE	APRIL/MAY/90	OCT/NOV/90	ROTO#2	COMPLETE
KALAMALKA LAKE	NORTH END	DEC/89 TO JAN/90	DEC/90 TO FEB/91	CONTRACT	COMPLETE
DUCK LAKE	NORTH SHORE	NEW	MAY/91	ROTO#2	

## 1991 AQUATIC WEED HARVESTING PROVISIONAL SCHEDULE

Four Aquatic Weed Harvesters are scheduled for use in the 1991 season in Osoyoos, Vaseux, Skaha, Okanagan, Duck, and Wood Lakes. A fifth machine is available from the Ministry of Environment should our request for funds to permit additional work in Vaseux Lake be approved.

The normal harvesting season begins in mid-June and runs through to Labour Day. In 1990, extremely high water levels delayed the start of work until late June or early July resulting in a short work period. In addition, as lake levels dropped, nuisance weed growth was at the lake surface in almost all locations at once, rather than a progression from shallow lakes which tend to warm earlier encouraging plant growth sooner in the season.

Public beaches, recreational areas, and resorts will again be given priority for harvesting in 1991, with foreshore in front of private residential areas done as time permits. Some exceptions occur as we try to cut sites in an orderly manner to eliminate excessive transport of equipment.

Start dates for harvesting are determined by weather conditions and lake levels and are approximate.

### 1. SOUTH OKANAGAN:

#### **Osoyoos Lake: Harvester #3**

- |         |  |
|---------|--|
| June 10 | Central and South Basins - Provincial Park (Haynes Point)<br>- Resorts<br>- Solana Bay and other Residential               |
| June 24 | North Basin - Motel Row, Starlite Marina, Civic Beach<br>- Inkameep Campground   |
| July 8  | Willow Beach Area - including west shore residential areas<br><br>Harvester will repeat cutting cycle until end of season. |

#### **Vaseux Lake: Harvester #1**

- |              |   |
|--------------|---|
| June 3 or 10 | South Shore incl. River Channel to improve flow       |
| June 17      | Prov. Campground, Resorts, and East shore Residential |

**Skaha Lake: Harvester #1**

June 28 North End - Public Beach, Marina, and Boat Launch  
July 8 Kaleden - Public Beach and Boat Launch  
July 15 Okanagan Falls - Boat Launch, Prov. Campground, and Resorts  
July 22 East Side - Skaha Estates, Sunny Bay, Southeast Penticton

**2. CENTRAL OKANAGAN**

**Okanagan Lake: Altosar Harvester**

June 10 or 17 Kelowna Foreshore - Yacht Club, Sailing Club and touch up to winter derooting sites  
July 2 Westside - Regional Park, Boat Launch, and Marina  
July 8 Peachland Foreshore to Antler's Beach  
July 15 Summerland - Touch up to derooting sites  
- Trout Creek and Prov. Day Parks  
July 22 Penticton - Marina  
Naramata - Marina

**Wood Lake: Altosar Harvester or Harvester #2**

July 29 Touch up to South Shore derooting  
August 5 West Shore - Resort and Highway View Areas  
August 9 North Shore incl. Park

**3. NORTH OKANAGAN**

**Duck Lake: Harvester #2**

June 10 Holiday Park and Water's Edge Resorts

**Okanagan Lake: Harvester #2**

June 24 Vernon Arm - Touch up to Derooting Sites  
- Marinas  
- Residential Areas as time permits  
August 12 Westside Areas - as time permits

## OKANAGAN BASIN WATER BOARD

MINUTES OF A MEETING OF THE OKANAGAN BASIN WATER BOARD HELD ON JUNE 4TH, 1991, IN THE BOARD ROOM, REGIONAL DISTRICT OF NORTH OKANAGAN, 9848 ABERDEEN ROAD, VERNON, B.C., AT 10:30 A.M.

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<b><u>PRESENT:</u></b>	Chairman S. Simpson	C.O.R.D.
	Director G. Paynter	C.O.R.D.
	Director R. Hobson	C.O.R.D.
	Director A. Hill	N.O.R.D.
	Director J. Yardley	N.O.R.D.
	Director E. Hornby	N.O.R.D.
	Alternate Director T. Shields	O.S.R.D.
	Director R. Shewfelt	O.S.R.D.
	Director T. Takacs	O.S.R.D.

**ALSO PRESENT:** M. Maxnuk Ministry of Environment

**STAFF:** P. Mackiewich Administrator  
G. Armour Field Supervisor

### **MINUTES:**

Moved by Director Hobson, seconded by Alternate Director Shields:

"That the minutes of a regular meeting of the Okanagan Basin Water Board held on April 16th, 1991, be adopted as circulated."

CARRIED.

### **AQUATIC PLANT MANAGEMENT BUSINESS:**

#### **Treasury Board Directive for Independent Review of Milfoil Impact:**

The Chairman asked Mr. Maxnuk to outline this directive and its implications.

Mr. Maxnuk stated that in the Treasury Board review process, prior to signing of the five year agreement for aquatic weed control, an analysis of the socio-economic benefits of the weed program had been requested. The Agreement would be signed for the current year but approval for subsequent years would be conditional on the outcome of the review.

A Request for Proposals to complete the study had been prepared and circulated to one Okanagan and several Lower Mainland consulting firms, with a deadline for submission of proposals of June 7th, 1991. The R.F.P. document is attached.

The Chairman informed the Board that she had sent the draft of the Request for Proposals to two additional local consultants who had expressed concern that insufficient time was allocated to complete the program review.

Director Shewfelt asked where the money to perform the study would come from.

Mr. Maxnuk replied that the Treasury Board instructions were to take the funds (estimated to be \$20,000.00) directly from the Ministry of Environment allocation for the weed control work. The Province would thus be paying for the study but reducing the amount of money available for actual weed control in the current fiscal year.

The Chairman asked who would be evaluating the proposals.

Mr. Maxnuk indicated that a committee composed of himself, Dr. P. Newroth, and two Ministry of Environment economists would perform the evaluation.

Chairman Simpson stated that this did not seem to represent an independent evaluation since the review would be conducted by the M.O.E. alone. She indicated that the Water Board has a vested interest in the outcome of the study and should be on the review committee.

Moved by Alternate Director Shields and seconded by Director Shewfelt:

"That the Ministry of Environment be asked that a member of the Okanagan Basin Water Board participate in the decision making process by sitting on the committee to review proposals received for an independent review of the aquatic weed control program."

CARRIED.

The Chairman offered to participate and this was accepted by the Board. She also obtained permission to appoint Director Hobson as an alternate should she be unable to fulfil the obligation.

Alternate Director Shields pointed out that un-checked aquatic weed growth adversely affects almost all facets of life and economics in the south end of the Valley.

Chairman Simpson agreed that the value of the program is self evident to most of us in the Valley and it seems questionable to have to prove its worth to someone in Victoria. She urged the Board members to let their communities know that the program could be in jeopardy.

Alternate Director Shields wondered if the review might open possibilities for increased levels of Provincial funding.

Director Hobson expressed his annoyance that the funds for the study were to be taken directly from our program, but indicated that as a former Treasury Board analyst he recognized that this review procedure was not an unusual practice when a program had increased in size.

He also noted that the successful consultant will have a limited amount of money to work with and it would be imperative that they have a good knowledge of the economic facts.

Director Hornby wished to know if this was the first such review of our cost shared program.

Mr. Maxnuk and the Field Supervisor informed the Board that it was, since the current cost-sharing program began in 1981.

Director Hill indicated that perhaps a review can do the program some good.

Director Hobson observed that most of the research will have to be of secondary information and that little original data can be generated with the proposed budget. It would be the latter type of information that would be needed to generate additional funding for our program. He also said that it is customary for Treasury Board to indicate the level of analysis required.

Alternate Director Shields wondered if Chambers of Commerce should be involved in providing information.

Director Hobson said that the consultants should indicate the proposed sources of their information in their proposals.

Director Takacs asked if any firms had indicated that they would submit proposals.

Mr. Maxnuk answered that several had. He also asked if the Water Board might consider increasing the value of the contract with their funds.

Director Hobson pointed out that other items of potential local interest could have been surveyed if the Water Board had been involved earlier.

#### **Complaints About Weed Debris on Shoreline:**

Mr. Armour informed the Board that he had communicated the policy that the Water Board should not pay for shoreline clean-up at the expense of our efforts to control weeds in the lakes. The City of Kelowna and a private developer on Watt Road in Kelowna had both cooperated.

#### **Testing of the MRV Okanagan:**

Mr. Maxnuk reported that his staff had completed evaluation of a test block treated by the new rototiller. (report attached)

He indicated that the site at Naswhito Creek on the Westside of Okanagan Lake was previously untreated and contained very dense weed growth. SCUBA diver monitoring of a test strip showed removal in excess of 98% following two passes by the machine. The remainder of the test plot showed over 99% reduction in plant growth.

Alternate Director Shields stated that in view of these excellent results, perhaps we should be considering additional equipment.

Mr. Maxnuk reported that the Ministry had not approved the Water Board request for money from the Sustainable Environment Fund and this meant that there would be no funds this fiscal year for purchase of additional equipment, equipment improvements, or for research into biological control. He indicated that the Ministry would try to keep the research program going with their own funds.

He also indicated to the Field Supervisor that the operating budget must be adjusted to reflect the lower allocation of Provincial funds as a result of the Treasury Board review.

#### **Contract Work at Kalamalka Lake and Kelowna Foreshore:**

The Field Supervisor reported that contract derooting work had been completed and assessed at Kelowna Foreshore and at Kalamalka Lake. The contractors Aquatic Plant Control Ltd. and Aqua Research and Developments Inc., respectively, had both been paid for satisfactory work. Sampling done to assess the treatments showed posttreatment results to be within Board standards at Kalamalka Lake and excellent at Kelowna.

The meeting adjourned for lunch at 12:00 P.M.

**CORRESPONDENCE:****Integrated Management Branch - Information on Purple Loosestrife:**

Information on the status of the noxious wetland plant was received.

**Mr. T. G. Stewart - Complaint About Weeds at Skaha Lake:**

The Field Supervisor informed the Board that Mr. Stewart had vacationed at Skaha Estates last summer and found the weed situation to be intolerable. He explained in his letter, that in previous years, the harvester had done an adequate clean-up job, but that last year the harvest was done far too late. If he could not be assured of improved conditions this year, he would be forced to holiday elsewhere.

Mr. Armour told the Board that harvesting in 1990 was extremely late due to the late start forced by high water conditions and the necessity to treat Vaseux Lake first for flood control purposes. This season, some rototilling has already been done in the area of Skaha Estates, and our harvest is expected to be closer to normal scheduling.

The Board observed that Mr. Stewart's letter is exactly the type of information the Treasury Board review should have and Alternate Director Shields suggested that the Chambers of Commerce may have additional correspondence.

**Ministry of Environment - Fisheries Information and Questionnaire:**

The Administrator explained that a copy of information and a questionnaire concerning sportfishing in the Okanagan had been sent to the Board for comment. He briefly outlined the contents.

The Field Supervisor noted some points of interest contained in the information:

- there has been a 75% decrease in stocks of stream spawning kokanee in the Okanagan since 1970
- Increased angling pressure and damage to spawning beds are thought to be the causes.
- Okanagan Lake sportfishing industry is worth over \$2 million annually
- The introduction of a small shrimp into the lake system in the 1960's for kokanee food proved to be a major error, as the shrimp are of little food value to the fish but compete for the same food sources.

Director Hill stated that his own observations indicated a dramatic decrease in shore spawning kokanee in recent years.

Director Paynter stated that drawdown of the lake level may have caused desiccation of the eggs.

Director Hill offered to fill out the questionnaire and comment on the information provided.

**M. Ruscheinsky - Concern Regarding Lack of Weed Control and Head of the Lake:**

A letter and petition from eight residents at the Head of the Lake was received indicating that the dense, untreated weed growth there posed a problem for recreation and a hazard to anyone attempting to swim in the area. The Field Supervisor confirmed that this area is not currently scheduled for weed control by the Water Board. It is located at the extreme North end of Okanagan Lake and consists of a mobile home park with about eight units. Weed growth is very dense and would require four to five days of harvesting plus transport time.

The Administrator stated that there are other areas, mainly of summer cabins on the Westside which receive no weed control service.

Chairman Simpson felt that we should reply in some positive way rather than offer no assistance.

Director Hill suggested that if no Water Board weed control equipment could be made available due to scheduling constraints, a list of private contractors be provided to the residents. The Board concurred with this suggestion.

**K. Maley - Subsidy for Private Aquatic Weed Control Work:**

Mr. Maley wishes to establish a private weed control business using a combination of hand removal by SCUBA and texel bottom barrier. His letter asks about the availability of subsidy to the property owner using his services.

Mr. Armour informed the Board that we had at one time discounted the price of burlap bottom barrier to encourage the public to treat small weed problems themselves to provide an alternative where Water Board equipment was not scheduled to operate.

The Board felt that funds were not available at this time to subsidize this effort.

Moved by Alternate Director Shields, seconded by Director Shewfelt:

"That correspondence be received and filed."

CARRIED.

**SEWAGE FACILITIES ASSISTANCE GRANTS:**

No new grant applications were received at this time but Director Takacs asked for clarification on the history and uses of these grants.

Mr. Mackiewich provided a brief outline of the information requested.

Director Takacs asked where funds for a study for wastewater management planning in the rural areas around Osoyoos might be obtained.

The Administrator stated that the Provincial Government will provide fifty percent of the funding for such studies but the remainder must be obtained locally. A previous request to the Water Board for these funds was turned down as approval from only one of the parent Regional Districts was received.

**NEW AND UNFINISHED BUSINESS:**

**Review of Implementation Study Recommendations:**

Chairman Simpson reminded the Board that we are attempting to establish a framework that will bring about review, updating, and implementation of some of the original study recommendations. She indicated that two approaches could be taken:

- a review was supposed to occur every five years after completion of the Implementation Report in 1982. This is long overdue.
- A re-assessment of the impact of urbanization and changing land uses on the availability of water should be carried out.



The Chairman advised that she felt many water quality matters had been dealt with by the Okanagan Water Quality Control Project and the focus of the review should be on water quantity. She suggested that a letter be sent to the Minister of Environment indicating that this was the focal point in our asking for resurrection of the recommendations.

Director Yardley inquired as to whether the figures in the Summary Report are current and the Chairman replied that they are now ten years old.

#### **Integrated Okanagan Wastewater Management Plan:**

A draft of terms of reference for development of a master wastewater management plan was received from the Okanagan Water Quality Control Project. Board members did not have the opportunity to review this prior to the meeting.

The Chairman suggested that we set up a meeting with Water Quality Control project staff and the three Water Board members delegated to deal with this issue. A final draft would be prepared and presented to the Board at the next meeting .

The Administrator noted that after final approval is given by the Water Board, the proposal must be submitted to the Regional Districts for approval to spend the money.

#### **OTHER MATTERS:**

##### **Septic Tank Regulations:**

Chairman Simpson advised the Board that the septic tank regulations for environmentally sensitive zones have still not been enacted. She suggested a strongly worded letter be sent to the Ministers of Environment and Health expressing the Board's displeasure with this situation. In addition, she noted that the new regulations deal with health matters but not environmental issues.

Moved by Director Takacs, seconded by Alternate Director Shields:

"That a letter be sent to the Ministers of Environment and Health strongly urging immediate adoption of the new septic tank regulations."

CARRIED.

##### **Soil Profile Maps For Environmentally Sensitive Zones:**

The Chairman noted that mapping being done by the Okanagan Water Quality Control Project on soil profiles in environmentally sensitive zones is complete but not yet available to communities for use in rezoning and development applications.

Moved by Director Shewfelt, seconded by Director Hill:

"That a letter be sent to the Okanagan Water Quality Control Project requesting that completed soil profile maps for environmentally sensitive zones be released so that immediate use can be made of this information."

CARRIED.

**Foreshore Planning:**

Chairman Simpson reminded the Board that to date, only Summerland and Peachland have adopted foreshore plans. As the population of the Valley increases and with it, foreshore development, the issue becomes more urgent and should perhaps have a higher priority with many communities.

Director Hill wondered where consistency in planning would come from as each community prepares its own plan.

The Administrator replied that the Ministry of Environment would presumably apply the same rules to all plans even though they might be developed individually.

Director Hobson noted that the expertise may not be available at the local level to evaluate the impact of some planning decisions on the foreshore. He stated that perhaps the Water Board should consider staff in the future to do this type of work which requires special expertise in understanding the processes on-going in the lakes.

The Chairman asked if the Water Board wished to address the issue of foreshore planning as one of the original mandates given it under the Okanagan Basin Study. She stated that it is imperative to have land use planning in place prior to development occurring.

Director Hill observed that it may be impossible to exercise control over planning in the various jurisdictions, but perhaps we could act as an information source on options available.

Directors Hobson and Shewfelt accepted the request of the Board to do some review on the potential role of the Board in the foreshore planning process. This review would be available for the next Board meeting in August.

**Indian Lands:**

Chairman Simpson noted that we must establish communication and coordination with the Indian Bands so that we work toward the same purpose in preserving the water resources that we both share.

Director Takacs suggested that we approach the Tribal Council with the idea of holding a Board meeting at their office. The Chairman agreed to write to the Tribal Council and Director Takacs said he would approach Chief Clarence Louie of the Osoyoos Indian Band with the idea.

**Public Profile of the Water Board:**

The Chairman urged Board Members to raise the profile of the work of the Board in their areas and to communicate the potential threat posed to the weed program by communicating with MLA's and local councils.


**ADJOURNMENT:**

There being no further business, the meeting adjourned at 2:00 p.m.


The Chairman urged Board Members to raise the profile of the work of the Board in their areas and to communicate the potential threat posed to the weed program by communicating with MLA's and local councils.

**ADJOURNMENT:**

There being no further business, the meeting adjourned at 3:00 p.m.



\_\_\_\_\_  
CHAIRMAN



\_\_\_\_\_  
SECRETARY-TREASURER

## OKANAGAN BASIN WATER BOARD

**MINUTES OF A MEETING OF THE OKANAGAN BASIN WATER BOARD HELD ON  
AUGUST 6TH, 1991, IN THE COUNCIL CHAMBERS, TOWN OF OSOYOOS,  
OSOYOOS B.C., AT 1:30 P.M.**

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<b><u>PRESENT:</u></b>	Chairman S. Simpson	C.O.R.D.
	Director G. Paynter	C.O.R.D.
	Director A. Hill	N.O.R.D.
	Director J. Yardley	N.O.R.D.
	Director E. Hornby	N.O.R.D.
	Alternate Director T. Shields	O.S.R.D.
	Director R. Shewfelt	O.S.R.D.
	Director T. Takacs	O.S.R.D.

**ALSO PRESENT:** M. Maxnuk Ministry of Environment

**STAFF:** G. Armour Field Supervisor

The meeting was preceded by a boat tour of some problem aquatic weed areas in Osoyoos Lake. Director Takacs was unable to attend.

### **MINUTES:**

Moved by Director Shewfelt, seconded by Alternate Director Shields:

"That the minutes of a regular meeting of the Okanagan Basin Water Board held on June 4th, 1991, be adopted as circulated."

CARRIED.

### **AQUATIC PLANT MANAGEMENT BUSINESS:**

#### **Treasury Board Directive for Independent Review of Milfoil Impact:**

Mr. Maxnuk informed the Board that two proposals had been received in response to the Province's request for a consultants review the benefits of the aquatic weed control program. A contract has now been signed with a Vancouver firm, Ference Weicker & Company, to perform the evaluation.

Mr. Maxnuk circulated copies of an evaluation framework prepared by Ference Weicker, to the Board and outlined details of what the consultant proposed to do:

- 1) Interview program representatives, including Water Board members and Ministry of Environment staff to discuss the rationale behind the program and the potential effects of terminating it.
- 2) Examine letters of complaint and support pertaining to the program which are on file at the Water Board offices. The Field Supervisor was asked to begin to pull together letters on file for this purpose.
- 3) Telephone owners of 60 tourist facilities and 50 lakeshore property owners for input on the impact of aquatic weed growth.
- 4) Survey out of Province tourists by means of a questionnaire for guests in tourist facilities.
- 5) Conduct personal interviews with 75 beach users.

- 6) Contact representatives in other jurisdictions conducting weed control programs, such as the State of Washington.
- 7) Solicit input from real estate office regarding the impact of aquatic weeds on property values.
- 8) Gather information from authorities on the impact of weeds in drainage and water flow.
- 9) Contact the private contractor doing aquatic weed control.

The Chairman expressed concern over the low number of samples being taken and pointed out that these numbers would hardly be statistically significant.

Mr. Maxnuk also stated that he had asked Ference Weicker to include a more representative sampling of Okanagan beach users, particularly in the south end of the Valley.

Alternate Director Shields pointed out that this study, especially as related to tourist input, must begin immediately if the final report is due in December.

Director Shewfelt noted that the Native population which owns large areas of lake foreshore was not represented in this study.

Mr. Maxnuk indicated that he would speak to the consultant in this regard.

The Chairman noted that contact with the Indian Band in the South end of the Valley had been established and their representative was at the meeting. She asked the Field Supervisor to send a copy of the agenda for our next meeting and a covering letter to the other two Okanagan Bands.

The Chairman also suggested that all Valley communities and Regional Districts prepare letters to the Consultant in support of the program.

Alternate Director Shields asked that the final report to Treasury board be made available to the Water Board so that local use could be made of the information.

Mr. Maxnuk indicated that he would attempt to ensure that this happened.

The Chairman asked, and the Board agreed that a letter be sent to the Minister of Environment, requesting a copy of the final report.

#### **Progress of the 1991 Harvesting Season:**

The Field Supervisor outlined the progress to date with 1991 aquatic weed harvesting. He stated that the season had begun with five machines in operation, commencing between June 11th and 24th in the various areas. Initially, two harvesters were used in Vaseux Lake to improve the cosmetic appearance of the lake.

Observations so far show denser weed growth in Skaha lake than has been the case in the past two seasons. Conditions in Okanagan Lake at Vernon and Kelowna appear good with derooted sites containing only sparse weed growth.

Some discussion ensued over the amount of harvesting resources that should be allocated to Vaseux Lake for cosmetic improvement. Mr. Armour noted that the second machine had cut over one hundred loads of weed but that this represents only a small fraction of the total weed cover at the north end of the lake.

The Chairman commented that the general condition of the lake appeared good when driving by, and the most noticeable plant growth were some lily pads at the north end.

Several Directors questioned whether rototilling would be a better approach and Mr. Armour replied that he felt this would achieve only cosmetic benefit due to the potential for reinfestation from the adjacent, untreated weed populations.

Mr. Maxnuk asked the Field Supervisor whether it would be possible to divert some money from the harvesting budget to derooting by completing the summer schedule before the end of August.

Mr. Armour replied that this had been done last year when a machine was shut down by mid August, but that he was not in a position now to say what the situation would be this year. It seems likely, however, that some savings will occur.

#### **Fiscal Year 1992-93 Provisional Budget:**

The Field Supervisor circulated a draft of the Provisional Budget (attached) for aquatic weed control for 1992-93, which is required at this early date so that the Ministry of Environment may incorporate it into their estimates.

Mr. Armour pointed out that inflation only was reflected by the slightly increased amounts. The amounts for Equipment Improvement, Equipment Acquisition, and Biological Control asked for in the 1991-92 request were turned down, and he questioned whether the Board might want to re-submit these items in the new budget.

The Chairman emphasized that the Water Board has a continuing interest in upgrading the amount and quality of weed control and all three items are of importance. She suggested that the same amounts be included in the request to the Ministry for 1992-93 funding.

Moved by Director Paynter, seconded by Director Shewfelt:

"That the Provisional Budget be amended to include \$50,000 for Equipment Improvement, \$150,000 for Capital acquisition, and \$66,000 for research into Biological Control."

CARRIED.

Director Hill questioned the \$83,346 listed under transfer to equipment reserve in the 1991-92 budget,

The Field Supervisor explained that the requisition of the 25% share from the Regional Districts had included the funds to cover equipment improvements, capital, and research. At the time these requisitions were made, it was not known that the requests would be turned down by the Province. The surplus of local funds is then held for application against the local contribution to the 1992-93 program.

#### **1991-92 Derooting:**

Mr Armour indicated that he had not prepared a schedule for the coming season of derooting as yet but had a number of questions which needed direction from the Board.

He stated that the amount of derooting work done should increase substantially this winter with a full season from the new machine. This increased work could be used to replace work done under contract the past two years or could free equipment for expansion of derooting to new areas.

Director Hornby inquired as to whether equipment availability or budget would be the limiting factor in the amount of derooting work done.

Mr. Armour indicated that in the past, equipment had always been the problem but that this year with the increase in our complement of machines plus the successful contract work performed by Aquatic Plant Control Ltd., we would be in a position of being limited by dollars.

Director Hornby also wished a comparison of the cost of derooting a site versus harvesting twice in the summer to achieve cosmetic control.

Mr. Armour replied that the cost might be close to equal due to the two summer cuts required to achieve control. He noted that most derooted sites need some summer touch up with the harvester.

Moved by Director Shewfelt, seconded by Alternate Director Shields:

"That the priority of the program continue to shift from summer harvesting to derooting."

CARRIED.

Mr. Maxnuk reported on a conversation he had with Aquatic Plant Control Ltd. representatives in which they indicated that at current rates they were not making a profit. He said the contractor expressed interest in selling or leasing the machine to the Board.

Chairman Simpson instructed the Field Supervisor to determine the financial and legal implications of this option and report to the Board at the next meeting.

Based on observations made in the morning tour of Osoyoos Lake, the Field Supervisor was instructed to add the water ski beach north of Inkameep Campground to the derooting schedule.

#### **Other Aquatic Weed Business:**

The Chairman asked Alternate Director Shields to report on discussions he had on obtaining funding from the Federal Government.

Alternate Director Shields informed the Board that he had met with M.P.'s Whittaker and Horning and received positive response toward federal funding for purchase of several new pieces of derooting equipment. He indicated that he favours this approach for Osoyoos Lake for control of aquatic weeds and for reduction of phosphorus by removing the recycling effect of the plants. He informed the Board that the Town of Osoyoos has commissioned a study of the sources of phosphorus entering Osoyoos Lake.

Chairman Simpson asked where the operating funds for additional equipment would come from.

Alternate Director Shields indicated that he had met with M.L.A.'s Messmer and Serwa but had received no commitment as yet for operating funds.

Chairman Simpson observed that Treasury Board is questioning the current amount of dollars spent so the battle to obtain additional funds could be difficult. She also cautioned that the funding requested for other projects within the mandate of the Water Board might be jeopardized by asking for too much in the weed control area. She asked for the opinion of the Board on their role in this initiative, since in some ways duplicates our efforts.

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August 6, 1991

Director Hill recalled that all previous effort to obtain Federal monies had been futile. He wondered if our focus should be on increasing cosmetic weed control at the expense of dealing with the causes of degradation of the water supply in the Valley. He pointed out that funding for Sewage Facilities Assistance Grants is declining and this remains a critical item.

Director Paynter supported the idea of approaching the issue on the basis of obtaining one new piece of equipment so that funding for other facets of our mandate is not jeopardized.

Director Hornby stated that he would not want the focus of the Board to be solely one of weed control.

The Chairman summarized the discussion by indicating the priority of the Water Board is not just to obtain three or four new weed machines and that Alternate Director Shields initiative would best come directly from him.

Alternate Director Shields stated emphatically that he felt the citizens of Osoyoos expected an improvement in the quality of their lakes and his approach addressed that end.

Mr. Maxnuk commented that we should be cautious from a technical standpoint with regard to the effects of massive amounts of rototilling on the levels of phosphorus suspended in the lake from the machine operation. He suggested that results of studies on the sources of phosphorus in the lake be known prior to trying to obtain new machines.

Alternate Director Shields agreed that all technical information should be assembled.

#### **CORRESPONDENCE:**

##### **Minister of Environment - Approval of F.Y. 91-92 Budget:**

Approval was received from the Minister for operating funds for Aquatic Weed Control in F.Y. 1991-92. (The letter did not state the exact amount) Funds for Equipment acquisition and improvement and biological control were not approved. The Field Supervisor explained that we had written for clarification of the exact amount committed.

##### **Dr. D. A. Kasianchuk - Signed Five Year Agreement For Aquatic Weed Control:**

Dr. Kasianchuk forwarded the signed agreement for weed control along with a letter clarifying our F.Y. 91-92 budget. The letter states that the Ministry is committing \$285,000 with the provision that \$20,000 will be used to conduct the Treasury Board review.

Moved by Director Shewfelt and seconded by Director Takacs:

"That the above two letters be received and filed."

CARRIED.

##### **Holiday Park Resort - Non Power Boating Status for Duck Lake:**

Correspondence was received from Holiday Park Resort at Duck Lake asking support of the Water Board in making application for non power boating status for Duck Lake. The President of the resort, Mr. S. Sigal, listed extensive reasons pertaining to his request for this status.

The Board noted that it was not within their mandate or expertise to judge the situation and the application should proceed through appropriate channels.

Moved by Director Hill, seconded by Director Hornby:

"That correspondence be received and filed."

CARRIED.

Director Takacs was opposed.

**Mr. W. Kastelen - Reply Regarding Termination of Okanagan Water Quality Control Project:**

A letter from the Regional Manager for the Ministry of Environment, Mr. W. Kastelen informed the Board that the Ministry will attempt to maintain the expertise and staff of the necessary to continue the wastewater management work in the Okanagan Valley.

The letter was received and filed.

**Minister of Environment (Federal) - Implementation Agreement Recommendations:**

The Federal Minister indicated that water management in the basin is primarily a Provincial responsibility with Federal interests in fisheries, navigation, transboundary flows, and water quality. The Minister states that discussions with Provincial authorities are taking place.

The Chairman noted that the issue of water quality is of prime concern to the Board and hoped that this was a positive indication for Federal involvement.

Moved by Director Shewfelt and seconded by Director Takacs:

"That the letter be received and filed."

CARRIED.

**City of Penticton - Community Environmental Strategy Discussion Paper:**

Information was received from the City of Penticton on progress with their Community Environmental Strategy. A discussion paper was received and will be circulated to the Board and Mayor Kimberley will be asked to update on the status of the Plan at the next Board meeting.

**Minister of Environment - Phosphate Free Detergents:**

A reply to a Water Board letter pursuing the issue of mandatory use of phosphate free detergents in environmentally sensitive zones was received.

The Field Supervisor explained that the contents of the letter explained the history of phosphate reduction in detergents to a level of five percent but that the point of addressing this remaining amount had not been answered.



Moved by Director Paynter, seconded by Director Shewfelt:

"That the letter requesting consideration of legislation to make the use of phosphate free laundry and dishwasher detergents be re-submitted with the appropriate explanation."

CARRIED.

**Minister of Environment - Use of Sustainable Environment Funds for Wastewater Treatment Facilities:**

A response was received to a Water Board letter asking the Minister to consider the use of SEF dollars to increase the grant available for installation of tertiary wastewater treatment facilities from 50% to 75%.

The Field Supervisor explained that the Minister indicated the funds were fully committed for the coming year and that grants will be targeted to small communities in sensitive areas with excessively high costs of sewage treatment.

Moved by Director Paynter and seconded by Alternate Director Shields:

"That the Board write the Minister of Environment to clarify their position on the use of SEF funds to further wastewater management and to explain that we wish to see a topping up of grants to the 75% level."

CARRIED.

**Skaha Estates Improvement District - Request for Information on Aquatic Weed Control:**

Mr. Armour indicated that the area in question is mainly residential and that dense weed growth is present, often in shallow water. Some rototilling had been done this past spring as a trial and it appeared to have been effective. A large investment of time would be required to rototill to entire site but perhaps we can expand the treated area this season.

Mr. Maxnuk noted that this type of letter will be of interest to the consultant doing the Treasury Board review.

Moved by Director Hornby, seconded by Director Takacs:

"That the letter be received and filed."

CARRIED.

**L. MacWilliam - Inclusion of Kalamalka Lake Under Pollution Regulations:**

A copy of correspondence with the Provincial Minister of Environment was received from the M.P. for Okanagan - Shuswap. The letter endorsed the request from the District of Coldstream for inclusion of Kalamalka Lake under new Federal Pleasure Craft Pollution Regulations.

Moved by Director Takacs and seconded by Director Shewfelt:

"That the request for inclusion of Kalamalka Lake under the Federal Pleasure Craft Pollution regulations, by the District of Coldstream, be supported by the Water Board with a letter to the Minister and a copy to Mr. MacWilliam."

CARRIED.

**Minister of Health - Septic Tank Regulations:**

A reply was received from the Minister of Health concerning the Water Board request for immediate enactment of the new septic tank regulations.

The Field Supervisor explained that the letter indicated the regulations would be discussed with the Minister of Environment and presented to cabinet for consideration. Upon contacting Phil Epp of the Regional M.O.E. office, Mr. Armour was informed that Cabinet had some questions about the draft regulations, and had selected the Ministers of Environment and Health, along with the three Okanagan Cabinet Ministers (L. Chalmers, L. Hanson, and I. Messmer) to meet with Mr. Epp and Mr. Nickel to answer these questions. This meeting has not occurred.

Moved by Director Shewfelt and seconded by Alternate Director Shields:

"That a letter be sent to Cabinet Ministers Mercier, Strachan, Messmer, Chalmers, and Hanson urging that they meet as soon as possible to clarify any questions concerning the enactment of the new septic tank regulations."

CARRIED.

**Dr. Gerry Neilsen - Request for Support for Green Plan Funding:**

A letter was received from Dr. G. Neilsen of Agriculture Canada, requesting Water Board support for an application for Federal Green Plan funding to conduct a soil and irrigation water management project for the orchard industry.

Mr. Armour explained the objective of the project would appear to be the effective management of orchard irrigation by improving the ability of soils to retain nutrients and determining optimum levels of irrigation with effluent waters. The result should be reduced nutrient run-off into the lakes.

Moved by Director Paynter and seconded by Director Hill:

"That a letter of support for Green Plan funding for Dr. Neilsen's project be sent to the Federal Minister."

CARRIED.

**SEWAGE FACILITIES ASSISTANCE GRANTS:****Grant Applications:**

Town of Osoyoos	\$ 20,095.00
City of Kelowna	337,635.38
City of Penticton	196,609.27

Moved by Director Shewfelt and seconded by Director Hornby:

"That the Grant Applications listed be approved for payment."

CARRIED.

**NEW AND UNFINISHED BUSINESS:****Review of Implementation Study Recommendations:**

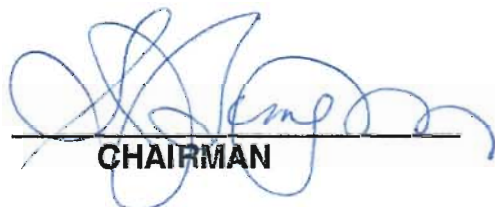
Chairman Simpson informed the Board of a meeting which took place on July 25th in Kelowna with herself, Directors Hill and Kimberley, and officials of the Ministry of Environment. A summary of the meeting is attached.

The Chairman suggested that a letter be sent thanking the M.O.E. staff for their attendance.

Chairman Simpson also suggested that a meeting be arranged with the Minister of Environment at the U.B.C.M. to follow up on the results of the meeting with Ministry staff.

**ADJOURNMENT:**

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

  
\_\_\_\_\_  
CHAIRMAN  
\_\_\_\_\_  
SECRETARY-TREASURER

**OKANAGAN BASIN WATER BOARD**

**Administration and Aquatic Weed Control**

**PROVISIONAL BUDGET (April 1/92 to March 31/93)**

	<b>1991/92 ANNUAL BUDGET</b>	<b>1992/93 PROVISIONAL BUDGET</b>
<b>REVENUE:</b>		
Province of B. C. (75% Grant)	\$285,000	\$507,532
R.D.C.O. Requisition	111,371	
R.D.O.S. Requisition	47,980	
R.D.N.O. Requisition	38,995	
Transfer from Equip. Reserve		
Previous Year's Surplus (Deficit)		
<b>TOTAL REVENUE:</b>	<b><u>\$483,346</u></b>	<b><u>\$696,710</u></b>
<b>EXPENDITURES:</b>		
<b>Harvesting Operations</b>		
Harvester Operator Wages	\$ 37,500	40,000
Driver's Wages	11,000	12,500
Equipment Transport	3,000	4,000
Pickup Truck Rentals	5,000	5,000
Pickup Operation and Maintenance	6,000	6,000
Travel expenses	1,000	1,500
Crane Rental	2,000	3,000
Fuel and Lubricants (Harvesters)	4,500	5,000
Maintenance, Repairs, Supplies	19,000	19,000
Contract Weed Disposal	5,000	2,000
Water Intake Repairs	<u>1,000</u>	<u>1,000</u>
<b>Harvesting Subtotal:</b>	<b><u>95,000</u></b>	<b><u>99,000</u></b>
<b>Winter Derooting</b>		
Operator Wages and Contract Work	78,000	90,000
Driver's Wages	10,500	12,500
Equipment Transport	7,000	9,000
Pickup Truck Rental	6,000	6,000
Pickup Operations and Maintenance	8,500	8,500
Travel Expenses	1,000	1,000
Crane Rental	3,000	4,000
Fuel and Lubricants	12,000	14,000
Maintenance, Repairs, Supplies	<u>44,000</u>	<u>44,000</u>
<b>Derooting Subtotal:</b>	<b><u>170,000</u></b>	<b><u>189,000</u></b>

## OKANAGAN BASIN WATER BOARD

**MINUTES OF A MEETING OF THE OKANAGAN BASIN WATER BOARD HELD ON  
OCTOBER 1ST, 1991, IN THE BOARD ROOM, REGIONAL DISTRICT OF CENTRAL  
OKANAGAN, 540 GROVES AVENUE, KELOWNA, B.C., AT 10:00 A.M.**

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<b><u>PRESENT:</u></b>	Chairman S. Simpson	C.O.R.D.
	Director G. Paynter	C.O.R.D.
	Director Robert Hobson	C.O.R.D.
	Director A. Hill	N.O.R.D.
	Director J. Yardley	N.O.R.D.
	Director E. Hornby	N.O.R.D.
	Alternate Director T. Shields	O.S.R.D.
	Director T. Takacs	O.S.R.D.

<b><u>ALSO PRESENT:</u></b>	M. Maxnuk	Ministry of Environment
	R. A. Nickel	Ministry of Environment
	P. Epp	Ministry of Environment

<b><u>STAFF:</u></b>	P. Mackiewich	Administrator
	G. Armour	Field Supervisor

The Chairman asked that the discussion of the Master Wastewater Management Plan for the Valley take place while Mr. Nickel and Mr. Epp were in attendance and the Board agreed to move this item to the top of the agenda.

### **Okanagan Valley Master Wastewater Management Plan:**

Mr. Nickel outlined the development of individual wastewater management plans under the Okanagan Valley Water Quality Control Project. He stated that we now have fourteen plans which should be linked together in a master plan.

The Ministry of Environment estimates the cost of developing a master plan at approximately \$100,000.00, which would be eligible for 75/25% cost sharing with local government.

The plan would be developed by a consultant with input from a local technical steering group.

In reviewing the objectives of the plan, Mr. Nickel indicated that the future infrastructure cost for wastewater disposal will be very expensive with about \$200 million required to fully service current populations.

Director Hobson commented that there is a need to fit the wastewater management plan into a growth management strategy for the valley.

Chairman Simpson observed that other Regional Districts in the Valley may benefit from the problems experienced with the current rapid growth in the Central Okanagan.

Mr. Epp stated that increased development cost charges would go a long way toward offsetting the infrastructure costs.

Director Paynter pointed out that this affects only new development but does not deal retroactively with existing lots.

Mr. Epp agreed and added that in areas with no wastewater disposal system in place, there is no cost to new lots. This is the case in Summerland and Winfield.

Director Yardley observed that an environmental tax on existing properties might help to offset costs.

Mr. Epp indicated that the Water Board levy for Sewage Facilities Grants may accomplish this.

Director Hobson commented that a subsidy of new development takes place from general taxes as developers pay only for roads, sewers, etc. in the developed area and connections and extensions to existing systems are provided by local government.

Mr. Nickel reviewed the Scope of Work from the Terms of Reference, stating that the first six items deal with summarizing information from the individual wastewater management plans.

Chairman Simpson stressed that there is a need to understand at the local level how priorities for funding will be set. It was her understanding that the Ministry of Municipal Affairs has suspended funding of projects until the Master Plan has been completed.

Director Hobson said that we should try to encourage more efficient use of existing works to reduce the need for expensive new structures.

Mr. Epp commented that water conservation promotes this type of efficiency. He also stated that there is a difficulty in determining the ultimate carrying capacity of wastewater treatment in the Okanagan.

Under Item 11 it was agreed that Stage 1 of the plan would include definition of the criteria to be used in prioritizing works.

The Chairman asked that feedback be provided to the local elected officials at the Water Board and Regional District level as well as to technical staff. She also indicated that she saw an urgent need to have a protocol in place to deal with applications in progress while the master plan is being developed.

Chairman Simpson and Mr. Nickel agreed to try to meet with officials of the Ministry of Municipal Affairs to work out an interim funding strategy to cover the period during which the master plan is developed.

The Chairman thanked Mr. Nickel and Mr. Epp for their assistance.

**MINUTES:**

Moved by Alternate Director Shields, seconded by Director Paynter:

"That the minutes of a regular meeting of the Okanagan Basin Water Board held on August 6th, 1991, be adopted as circulated."

CARRIED.

**AQUATIC PLANT MANAGEMENT BUSINESS:**

**Summary of the 1991 Harvesting Season:**

The Field Supervisor circulated a summary of work done in the 1991 harvesting season (attached) and compared the recently completed season with 1990 and with a peak year for weed growth in 1981.

He stated that the current season showed the reduction in quantity of weeds cut in the areas derooted during the winter program. Funds spent to date were well within budget but with repairs to be done, it is unlikely that substantial savings will be realized.

LAKE	1991 LOADS CUT	1990 LOADS CUT	1981 LOADS CUT
OSOYOOS	168	210	540
VASEUX	239	133	276
SKAHA	128	93	162
OKANAGAN	104	174	865
WOOD	123	41	63
DUCK	30	72	0
TOTAL	792	723	1906

Mr. Maxnuk questioned whether, in light of the low amount of weeds cut by the Kelowna based machine, it might be possible to shut down one or more of the harvesters next season. He stated that while the public expects good quality of aquatic weed control from the program, it is not possible to achieve completely weed free conditions in our lakes.

The Board directed Mr Armour to draft provisional schedules for 1992 harvesting incorporating these reductions, for discussion purposes.

#### **1991-92 Derooting:**

Mr. Armour circulated a summary of derooting work completed in 1990-91.

He explained that the effectiveness of this work was apparent from the reduction in harvested weeds in the summer, however, a problem was occurring in sites which had been derooted for several years in succession. These sites exhibited a marked reduction in the amount of Eurasian watermilfoil present but were showing an increased growth of native species of pondweeds. These plants posed a slightly different problem in that they produce a overwintering bulb or turion, which is not removed by derooting. The most effective way to treat this problem is by derooting the site late in the spring after germination of the turions. This compresses the time available for effective derooting of these sites. Early season derooting will be done in areas where Eurasian watermilfoil is dominant and areas containing mixed species infestations will be treated later in the spring.

Mr. Armour informed the Board that discussions had been held with the owner of the "Duck" derooting machinery which was contracted and performed successfully the past two seasons. The owner indicated that he wished to get out of the weed control business and was prepared to sell the machine to the Water Board for \$32,000. Mr. Armour indicated that this was a very low price, and that the equipment was well suited to rapid derooting of areas of moderate weed growth.

The Board instructed Mr. Armour to verify the present condition of the machine and to discuss means of acquiring it without departing from the cost sharing agreement we have with the Ministry of Environment.

Moved by Director Takacs and seconded by Director Paynter:

"That a letter be sent to the Ministry of Environment giving details on the availability of the "Duck" equipment and proposing that means be worked out to take advantage of this offer."

CARRIED.

**Conversion of Equipment to Vegetable Base Hydraulic Oil:**

Mr. Armour reported that all aquatic weed control equipment has been or will be converted to a non-toxic, biodegradable hydraulic oil. The cost is approximately twice that of petroleum base oils but lubricating properties appear superior and the environmental concern is foremost.

The Chairman commented that the total cost of conversion was minimal and that it was an obvious step to make aquatic weed control machinery more environmentally safe.

**CORRESPONDENCE:**

**Minister of Environment - Approval of F.Y. 91-92 Budget:**

Approval was received from the Minister for operating funds for Aquatic Weed Control in F.Y. 1991-92 allocating \$285,000 including the \$20,000 for the Treasury Board review.

Mr. Maxnuk indicated that Provincial funding available for F.Y. 92-93 would likely be \$300,000. This would be a slight increase from the \$285,000 allocated this year but would not include capital and research funds requested by the Water Board.

Mr. Armour asked if the funds were approved pending completion of the Treasury Board review.

Mr. Maxnuk confirmed this.

Chairman Simpson asked Mr. Maxnuk if a draft of the final report would be made available to the Board, and Mr. Maxnuk indicated that this would not be the case.

The Board asked that a letter be sent to Dr. Kasianchuk requesting a draft of the report.

**Minister of Environment (Federal):**

Correspondence acknowledging receipt of the letter from the Water Board supporting Dr. G. Neilsen's request for Green Plan funding for an agriculture irrigation study was received.

**North Okanagan Union Board of Health:**

A copy of a letter from the North Okanagan Union Board of Health to the Federal minister of Environment was received. The letter expressed concern that the Pleasure Craft Sewage Prevention Regulations now in effect for a number of lakes in B.C. might lead some to interpret that discharge of blackwater into lakes not specifically named is permissible.

**North Okanagan Union Board of Health:**

A copy of a letter to the Ministers of Environment and Health, urging that all B.C. systems be brought up to Canadian Drinking Water Standards was received.

**Dr. D.A. Kasianchuk, Executive Director, Water Management Division:**

A discussion paper entitled "Sustaining the Water Resource" was received. It was noted that a request for comments was attached and the Board asked that a letter be sent to Dr. Kasianchuk indicating that comments would be forthcoming, but that it was not likely that we would meet the deadline of October 15th.



**Minister of Health:**

The Minister informed the Board that he had received the letter urging enactment of the On-Site Sewage Disposal Regulations for environmentally sensitive areas and he would endeavour to meet with staff of the Okanagan Water Quality Control Project as soon as possible to answer remaining questions.

**Minister of Environment:**

The Minister indicated to the Board that he will consider Kalamalka Lake for inclusion in the Pleasure Craft Sewage Prevention Regulations.

Moved by Director Hobson and seconded by Director Takacs:

"That items of correspondence listed above be received and filed."

CARRIED.

**SEWAGE FACILITIES ASSISTANCE GRANTS:**

**Grant Applications:**

Regional District of Okanagan Similkameen: \$14,503.46

Moved by Director Hobson and seconded by Director Hornby:

"That the Grant Application be approved for payment."

CARRIED.

**NEW AND UNFINISHED BUSINESS:**

**Meeting with Minister Of Environment at UBCM:**

As most of the Board members were present at the meeting, the Chairman did not deal with the results of the meeting with the Honourable D. Mercier.

**Okanagan Valley Master Wastewater Management Plan:**

The Chairman indicated that the discussion with Mr. Nickel and Mr. Epp left the question of the 25% local contribution to formulation of the plan to be addressed.

The Administrator informed the Board that we must ask the Regional Districts for funds to contribute to studies of this nature. Under the Water Board Letters Patent, it is not possible to make such an allocation of funds directly.

Moved by Director Paynter, seconded by Director Hobson:

"That a letter be sent to the three Regional Districts comprising the Water Board asking for approval to fund the study to establish the Master Valley Wastewater Management Plan. The letter should contain the amended terms of reference and be sent following establishment of funding procedures for the interim period while the plan is being prepared."

CARRIED.

**Storm Sewer Discharge into Lakes:**

Chairman Simpson reported on discussions held at a meeting of the Central Okanagan Regional District concerning Ministry of Environment policy that storm sewer waters be directed into the mainstem lakes.

Director Paynter detailed some specific concerns on the Westside in Kelowna.

Director Hobson pointed out that storm waters are a major source of nutrients and efforts should be made to have retention ponds to allow the settling out of particulate matter or retention of storm water on site.

Moved by Director Hobson, seconded by Director Yardley:

"That a letter be sent to the Minister of Environment urging that direct storm sewer discharge into the lakes not be permitted and that efforts be made to retain water on site or allow for retention ponds to improve the quality of storm water before it enters the lake."

CARRIED.

**Brenda Mines Committee:**

The Chairman asked that a Board member take her place on the committee reviewing the de-commissioning of Brenda Mines.

Director Paynter was appointed.

**ADJOURNMENT:**

There being no further business, the meeting adjourned at 12:30 p.m.

  
\_\_\_\_\_  
CHAIRMAN

  
\_\_\_\_\_  
SECRETARY-TREASURER

### 1990/91 DEROOTING SUMMARY

LAKE	MACHINE	DATES	OPERATING HOURS	DOWNTIME %
<b>Wood Lake</b>				
South Shore	Roto #2	Oct 28 - Dec 18 1990	328	18
South Shore	Contract	June/ 1991		
<b>Kalamalka Lake</b>				
Kal Beach	Contract	Nov - Dec 1990 Mar - May 1991		
<b>Okanagan Lake</b>				
Vernon Arm	MRV	Mar 14 - Apr 17	207	
Kelowna Foreshore Cook Ave. Rotary	Roto #2	Feb 11th - Mar 21 1991	243	23
Foreshore	Contract	Mar - June/1991		
Hot Sands	MRV	May 5 - 10	49	
Block 2-b	MRV	May 11 - 31	117	
Naswhito Creek	MRV	April 17 - May 3	115	13
Westbank	Roto #1	Feb 18 - Mar 3	79	
Summerland	Roto #1	Mar 3 - 10	67	
<b>Okanagan Total</b>			670	
<b>Skaha Lake</b>				
Skaha Beach	Roto #1	Mar 11 - 22	58	22
Skaha Beach	Roto #2	Mar 23 - 25	21	
Okanagan Falls	Roto #2	Mar 25 - Apr 10	111	
Skaha Estates	Roto #2	Apr 11 - 17	41	
<b>Skaha Lake Total</b>			231	
<b>Osoyoos Lake</b>				
		April 18 - June 5		
Willow Beach	Roto #2		150	
Solana Bay	"			
Haynes Pt. S.	"		76	
Motel Row	"		76	
Inkameep	"		32	
<b>Osoyoos Lake Total</b>			334	18

**1991 AQUATIC WEED HARVESTING PROGRAM**

	<u>Budget 1991</u>	<u>Spent 1991</u>	<u>Spent 1990</u>
Operators' Wages	\$37,500	\$38,772	\$ 34,220
Transport Op. Wages	11,000	11,369	10,194
Equipment Transport	3,000	3,140	7,696
Pickup Truck Rentals	5,000	4,016	4,036
P/U Operation and Maint.	6,000	3,316	4,709
Travel Expense	1,000	1,829	784
Crane Rental	2,000	2,246	2,120
Fuel and Lubricants	4,500	1,840	3,057
Repairs and Maintenance	19,000	10,097	10,980
Spoils Disposal	5,000	nil	75-
Water Intake Repairs	1,000	nil	1,266
TOTAL	<u>\$95,000</u>	<u>\$82,656</u>	<u>\$78,989</u>

**TABLE 1  
HARVESTING PRODUCTION SUMMARY 1991**

UNIT #	LOADS CUT	TONNES	ESTIMATED AREA
H65015 HARV#1	232	394.4	16.33 ha
H65028 HARV#2	202	343.4	14.23
H65035 HARV#3	225	382.5	15.84
H65055 HARV#5	78	132.6	5.49
H11-1100 ALTOSAR	55	181.5	6.25
TOTALS	792	1434.4	58.14

**TABLE 2  
HARVESTING PRODUCTION BY LAKE 1991**

LAKE	LOADS CUT	TONNES	ESTIMATED AREA
OSOYOOS LAKE	168	285.6	11.83 ha
VASEUX LAKE	239	406.3	16.83
SKAHA LAKE	128	217.6	9.01
OKANAGAN LAKE	104	264.8	9.70
WOOD LAKE	123	209.1	8.66
DUCK LAKE	30	51.0	2.11
TOTALS	792	1434.4	58.14