

# MINUTES

## International Osoyoos Lake Board of Control Public Meeting

### Oroville-Osoyoos Port of Entry Oroville, Washington

Tuesday October 26, 2004  
7:30 to 9:30 PM

#### Attendance

	<b>United States</b>	<b>Canada</b>
Chairs	Dr. Cynthia Barton (host)	Kirk Johnstone
Members	Col. Debra Lewis Kris Kauffman	Glen Davidson Brian Symonds
Secretaries		Daniel Millar
Guests	Commissioners: Irene Brooks, Jack Blaney Tom McAuley (Canadian Section, IJC), James Chandler (US Section, IJC), Larry Merkle (USACOE), Ray Newkirk (WA Dept of Ecology) Gwen Monteith, Osoyoos; Web Hallauer, Oroville; Lionel Dallas, Osoyoos; Eike Scheffler, Osoyoos; John Smith, Oroville; Lorrie Smith, Oroville; Gail Davidson, Vancouver; Mike Kammers, Oroville; John Moran, Oroville; Louie Wilson, Oroville; Monica Hoover, Oliver; Sherry Linn, Osoyoos.	

#### Agenda

1. Welcome and introductions Cynthia Barton  
Members and guests introduced themselves.
2. Review of the agenda Cynthia Barton  
The agenda was adopted as presented.
3. IJC and the Osoyoos Lake Orders - context Daniel Millar  
Daniel Millar gave a PowerPoint presentation to provide guests with the context of the Osoyoos Orders, the Commission, the Board, and the Board's work.
4. 2003 – 2004 Hydrologic Conditions Brian Symonds  
Brian Symonds described the hydrologic conditions in the Okanagan Basin during the past year. See Appendix 1.
5. 2004 drought conditions and rescindment Cynthia Barton  
Dr. Barton reviewed the facts concerning the 2004 drought declaration and rescindment.
6. Washington Department of Ecology management of Osoyoos Lake levels in 2003 – 2004 Ray Newkirk  
Ray Newkirk reported on the operation of Zosel Dam from the Applicant's perspective. He advised that following drought declaration, the State and the Province came to agreement to hold the maximum level of Osoyoos Lake at 912.5 feet during the drought period in exchange for storage of the equivalent of a half foot of Osoyoos water on Okanagan Lake. Mr. Newkirk reported maximum and minimums for 2004: 1280 and 103 cubic feet per second; and 912.3 and 909.5 feet. In response to a question, he responded that the low winter levels prevent ice damage along the retaining walls. He reported the current conditions for lake level (911.17 feet) and outflow (410 cubic feet per second).

7. Update on Orders renewal in 2013 Kirk Johnstone

Kirk Johnstone reported that the Board had made slow but steady progress toward the reissuance of the Osoyoos Lake Orders in 2013 over the past year. He noted that the Governor of Washington had indicated that the State does intend to reapply to the Commission, and that the Board had prepared a “charge” to the Plan of Study team that addresses makeup of the team and key issues.

Extensive discussion followed and is reported under item 8 herein.

8. Questions and comments from the public Cynthia Barton

This discussion reported below is paraphrased.

Dallas: Has Governor Locke actually stated in his letter that water quality should not be considered in the reissuance of the Order?

Johnstone: While the letter did present this position, it should not dissuade today’s guests from advising the Commissioners otherwise.

Barton: Apparently the Governor feels that the BC/Washington Environmental Cooperation Council is a better avenue for dealing with water quality issues.

Scheffler: The Osoyoos Order has an indemnity clause to protect people from impacts of the dam. The dam is the problem, acting as a plug in the lake. The lake is dying (with respect to water quality) because of this plug. That is the real issue for Order renewal.

Lewis: By comparison, there are lakes in Washington that have greatly improved water quality under appropriate engineering management. Such examples can guide the Order renewal.

Monteith: We are all impacted by deteriorating water quality.

Scheffler: There are only two venues available to Okanagan residents to address water quality issues. That is the Okanagan Basin Water Board, and this Board of Control.

Dallas: The conditions causing Osoyoos Lake water quality problems are growth and development on the Canadian side. Similar development is anticipated on the US side.

Monteith: [Reference to a Statistics Canada report...] There has been a 137% increase in population in this area of poor water quality. Consider the sewage discharge with increased population. This issue requires political involvement.

Linn: The criteria related to drought conditions have to be made more realistic.

Kauffman: The suitability of the drought conditions have been identified as an issue for study in the Order renewal process. But note that the drought criteria in the Order are consistent with the USGS’s general drought criteria.

Symonds: The questions are the frequency of drought, and the allowable water levels during drought. Are they both appropriate? This can be studied in the renewal process.

Scheffler: This Board needs biologists in its membership to be effective. A recent US report about pesticides in the lake suggests that there is enough to make the fish inedible.

Blaney: As it stands, the Osoyoos Board of Control is only empowered to deal with water levels. The Commission could empower the Board to deal with both levels and quality, but this will not happen without the support of the Province and the State.

Kauffman: Agreement between the State and Province to rebuild the dam in the 1980s would not have been reached if water quality had been included in the deliberations.

Johnstone: What are the tangible signs of water quality trouble in the lake?

Dallas: The Osoyoos Water Quality Society has a library of 93 reports describing the problem.

Scheffler: There are no kokanee...the beaches are turning to mud...all due to the plug (Zosel Dam).

Dallas: The State of Washington has reported arsenic problems in the Similkameen.

Newkirk: What can be done, with respect to the operation of Zosel Dam, to improve water

quality in the lake?

Johnstone: The Commission's view may not be so narrow as simply the relation of the dam to water quality. They also have a role in the anticipation and advice to government's on potential issues along the international boundary.

Newkirk: Even if Zosel Dam was removed, it wouldn't substantially improve water quality in the lake.

Dallas: Agree.

Moran: The lake is too low in the winter. But the idea of flushing the lake may be worth pursuing.

Linn: This Board is not looking at water quality in spite of a Commissioner stating last year that it should. What will be the duration of the new Orders? Will they be written to be able to respond to the changing nature of the lake? I am very disappointed that I have not learned anything new from the Board this year over last year. The Board should let the public know if there is anything that the public can do to help. That is why we left you with our names last year.

Davidson: There is concern that much reliance is being placed on the IJC when the water quality problems are regional and domestic.

Kauffman: The Board of Control has two tasks at hand: the usual monitoring of the management of the lake under the Orders, and now the renewal of the Order. This second role has only come to life with the letter of intent from the Governor.

Scheffler: Senator Fitzpatrick says that Commissioner Blaney can represent Canada in fixing the lake's water quality problems and renewing the Okanagan River oxbows.

Symonds: These issues are in the purview of the Regional District of Okanagan Similkameen.

Dallas: The IJC needs to be concerned with development. If more people come to the basin, more water is used.

Brooks: While levels and flows are the tradition of the IJC, perhaps it is due time that water quality be included. But remember that much work is needed locally. The Commission will consider sending letters to governments on both sides of the border concerning the Osoyoos Lake water quality issue.

Barton: The Board would be interested in any names that today's guests may wish to put forward for nomination to the renewal Plan of Study team.

9. Adjourn

Dr. Barton thanked participants and adjourned the meeting.

## Appendix 1.

# Review of 2003/2004 Hydrologic Conditions in the Okanagan and Similkameen Watersheds

A Report to the International Osoyoos Lake Board of Control  
by  
Brian Symonds, P. Eng.  
Ministry of Water, Land & Air Protection  
October 26, 2004

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In the southern interior of British Columbia the 12 month period ending September 30, 2003 was unusually dry. Between October 2002 and September 2003 Okanagan Lake inflow were only 24% of normal. Similar trends were observed throughout the region and by October 2003 water levels were typically at or near historic lows for that time of year.

In 2003 fall snow accumulation in the Okanagan and Similkameen watersheds were delayed due to warmer than normal temperatures during the month of October. By contrast November was cooler and wetter than normal, resulting in above normal accumulations for the month. Although December was some what drier than normal, January 1 snowpack indices for both the Okanagan and Similkameen were near normal. Throughout the last quarter of 2003 stream flows in the region remained low. Despite releases from Okanagan Lake being kept to near the minimums specified in the operating plan during 2003, the level of the lake was approximately 0.45 metres below target at year end.

Temperatures and precipitation during January were near normal. February was quite dry with precipitation in both the Okanagan and Similkameen approximately one third of normal. March temperatures were well above normal and precipitation somewhat below normal resulting in lower accumulations. This resulted in April 1 snow water indices for the Okanagan and Similkameen basins which were 89% and 81 % of normal respectively. Throughout the first quarter of 2004 Okanagan Lake levels were the lowest recorded for this period since records began in 1921.

On April 1 the level of Osoyoos Lake was 910.79 feet.

Given the lower than normal snowpacks, dry antecedent conditions in the watershed and low lake level Okanagan Lake was not forecast to reach its full pool level of 1123.8 feet in 2004.

Condition 8 of the International Joint Commission "Order of Approval", dated 9 December 1982, provides the criteria for determining whether or not a drought should be declared for Osoyoos Lake for the operational period April 1 to October 31. Criterion 8 (a) is based on the volume of flow in Similkameen River at Nighthawk and Criteria 8 (b) & (c) are based on the inflow volume and maximum level of Okanagan Lake.

The drought criteria, 2004 April 1 forecasts and 2004 observed values are presented in Table 1.

Table 1:

IJC Drought Criteria	Drought Threshold	Forecast (April 2004)	Observed (2004)
April – July Volume of Similkameen River (million acre-feet)	1.00	0.97	1.14
April – July Inflow to Okanagan Lake (1000 acre-feet)	195	259	269
Maximum Level of Okanagan Lake (feet GSC datum)	< 1122.8	1122.6	1122.8 *

\* Level reached June 27 as calculated using datum correction factor of 340.224 metres, GSC. (With historic correction factor of 340.297 metres the maximum elevation would have been 1123.0 metres.)

Based on Criteria 8 (a) and (c) a Drought was declared for the operation of Osoyoos Lake, which allowed the lake to be raised to a maximum of 913.0 feet. The level of the lake was subsequently raised above 911.5 feet into the range of 912.5 to 912.8 feet.

On July 2 the drought declaration was rescinded based on a revised Similkameen volume forecast and the observed Okanagan Lake level. Following the rescindment the Osoyoos Lake lake was drawn down and returned to its normal operating range (< 911.5 feet) prior to July 23 as provided for in the notice of rescindment. Lake levels were maintained within the normal operating range for the remainder of the summer.

Summer flows in both the Okanagan and Similkameen Rivers were typically lower than normal but higher than flows during summer 2003.

In late August and the first part of September the region received greater than normal amounts of precipitation. This additional precipitation allowed Okanagan Lake to return to its target seasonal operating range for the first time since early 2003. Stream flows throughout the region also returned to seasonal norms.