

**MINUTES**

**International Osoyoos Lake Board of Control  
Public Meeting**

**The Oroville Depot  
1210 Ironwood Street  
Oroville, Washington**

**Tuesday September 9, 2008  
7:30 PM**

**Attendance**

	<b>United States</b>	<b>Canada</b>
Chairs	Dr. Cynthia Barton	Kirk Johnstone
Members	Col. Anthony Wright Kris Kauffman	Glen Davidson Brian Symonds
Secretaries	Robert Kimbrough	Daniel Millar
Guests	Commissioners: Irene Brooks, Jack Blaney, Pierre Trépanier Tom McAuley (Canadian Section, IJC), Dr. Mark Colosimo (US Section IJC), Larry Merkle (USACE), Ray Newkirk (WA Dept of Ecology), Ken Slattery (WA Dept of Ecology), Ken Brettmann (USACE). Stu Wells (Osoyoos), Chad Ingram (Osoyoos), Gwen Monteith (Osoyoos Lake Water Quality Society), Sherry Linn (Osoyoos Oxbows Society), Ralph Keuler (Oroville), Margaret Keuler (Oroville), Ivo Tyl (Osoyoos), Web Hallauer (Oroville), David Buckmiller (Oroville), Tom Scott (Oroville Tonasket Irrigation District), Eike Scheffler (Osoyoos), Lee Chapman (Lake Osoyoos Association), Nelson Jatel (Okanagan Basin Water Board), Howard Zosel (Zosel Lumber, Oroville), Linda Colvin (Oroville School District), Raleigh Chinn (Lake Osoyoos Association), Mark Peterschmidt (Washington Department of Ecology), John Biele (Oroville), Mike Cantwell (Oroville), Anna Warwick Sears (Okanagan Basin Water Board).	

**Agenda**

1. Welcome and introductions Cynthia Barton  
Cynthia Barton welcomed guests and introduced the Board and Commissioners.
2. Review of the agenda Cynthia Barton  
Item #7, Public questions, concerns, and comments, was added to the agenda that was circulated at the meeting.
3. Overview of the IJC and the Osoyoos Lake Orders. Robert Kimbrough  
Mr. Kimbrough gave a short presentation describing the International Joint Commission, the Osoyoos Lake Board of Control, the Osoyoos Orders, and the frequency of drought declaration since the new Zosel Dam was constructed.

4. 2008 Hydrologic conditions Brian Symonds

Mr. Symonds reviewed the past year's hydrologic conditions in the Okanogan and Similkameen basins. Winter was generally drier than normal; however, cooler, wetter conditions in early spring improved the snowpack and delayed melt. The heat of late May caused a rapid melt, but a cool wet June slowed things down and resulted in a double freshet peak. Summer was hot and dry with periods of localized intense rainfall.

5. Washington Department of Ecology management of Osoyoos Lake levels in 2008 Ray Newkirk

Mr. Newkirk reported that Zosel Dam had been operated throughout the year as necessary to keep Osoyoos Lake level within the bounds set in the IJC Orders. During the winter, the water levels are kept low to help kill milfoil and to prevent ice damage to the retaining wall at the lake outlet. At one point during the year, a log broke free from the upstream debris boom and was subsequently replaced. In late May, lake levels rose above 911.5 feet due to high flow in the Similkameen and subsequent backwater in the Okanogan River. During such occasions, the dam gates are completely removed from the river to allow free flow. Mr. Newkirk reported the current lake level as 911.25 feet and the Okanogan River flow as 882 cubic feet per second.

6. Update on Orders renewal in 2013 Cynthia Barton

Dr. Barton reviewed the process for reissuing the Osoyoos Lake Order in 2013. The plan of studies that will inform the Commission was completed in 2006 and the studies are scheduled to commence in 2008/09. The Board has prepared statements of work for the first four scheduled studies and contracts will be issued soon. Funding for these studies was recently secured. The Board anticipates that all eight studies will be complete by 2011, leaving the Commission about a year-and-a-half to consider the results, hold public hearings, and prepare the new Order.

Dr. Barton also cast back to the Osoyoos Lake Water Science Forum of September 2007. She highlighted a few community initiatives that took inspiration from the forum including:

- Development of an Okanogan River Watershed Plan by the Okanogan Conservation District
- Osoyoos Lake Sediment Core project by UBC-O
- Rewatering of Quintal and Winters Oxbows by Osoyoos Oxbows Restoration Society
- Re-establishment of the Lake Osoyoos Association (of Oroville)

7. Public questions, concerns and comments

[Questions are paraphrased. For clarity, answers may be reported here with more detail than offered at the meeting.]

Howard Zosel: What data are collected with respect to the occasional managed flow surges that benefit fish migration? *A. One factor that is measured is the band width for safe fish passage between the high temperature surface waters and the low oxygen deep waters in the lake.*

Sherry Linn: Large changes in river flow may affect other in-stream work on the river, such as efforts to re-water the oxbows. It would be most helpful if appropriate workers were advised in advance of large changes in river flow. *A. Brian Symonds agreed to provide such advice to Ms. Linn or another identified contact.*

Sherry Linn: The spring flush of the river channel above the lake was somewhat unexpected.

It caused the movement of debris into the lake and affected fish riparian habitat work. A media announcement to advise the public in advance in future would be helpful. *A. The "spring flush" was a normal occurrence...perhaps unexpected as it hadn't occurred in a while. The absence of a spring flush may have allowed debris to build up. The movement of debris may have been influenced by the wind as well as the higher flows.*

Dave Buckmiller: The oxygen-temperature fish squeeze in Osoyoos Lake is intriguing. To what extent does wind affect the squeeze? *A. The lake's north basin has a wider band of passable water. In the central basin, the band of passable water can become very narrow or closed leading to fish kills. The wind is a good agent for mixing the stratified layers in the lake.*

Eike Scheffler: It is good that the Board is considering the affects of the Similkameen. We should consider controlling the flows of both the Similkameen and Inkanep Creek, as each brings silt to the lake, and the Similkameen can cause flooding. The benefits of dams in removing silt should be factored into cost-benefit studies of proposed dams. *A. The control of the Okanagan by dams is only limited. High flows can exceed our capacity to control the river. Also, high flows in the Similkameen are ten times that in the Okanagan above the lake. In proposing a dam on the Similkameen, one must find a suitable reservoir location in consideration of social, economic, and environmental factors.*

Howard Zosel: Were coliform measurements done in the top layer of the lake's south basin during the lake's temperature-oxygen squeeze? *A. Brian Symonds agreed to discuss the matter with Mr. Zosel after the meeting.*

Ralph Keuler: Is hydrometric information, such as fish flow releases, shared across the border? *A. To some extent. BC advises the Zosel Dam operator about upstream operational changes. Also, there is good information exchange about the fish-flow model used for the Okanagan River in Canada.*

Mike Cantwell: Could the lake level be brought lower than usual in the winter to kill off milfoil? *A. It is not clear how effective the practice is controlling milfoil. The problem with lowering the lake too far is the difficulty that may be faced in trying to refill to 911 feet in the spring during dry years. Recently, the State of Washington has been trying to fill the lake to the 911 level earlier in March than in the past.*

Ralph Keuler: How does the Board and dam operator decide on the time span during which the change from winter to summer operational levels occurs? A slower ramp-up rate might help prevent exceedences in spring due to high flows. *A. This is the topic of one of the proposed studies in the Board's plan of studies for the reissuance of the Orders. At present, State of Washington employee Ray Newkirk decides on the ramping rate within the bounds of the Order.*

Dave Buckmiller: Muddy water is occasionally observed flowing upstream from the Similkameen into the bottom end of Osoyoos Lake during the freshet, but it would take a 300-year flood to drive muddy water far up into the lake.

Dave Buckmiller: Residents would prefer if lake levels were kept below 913 feet to prevent property encroachment. At 913 feet, the beaches are gone. I am glad droughts are not declared every year.

Tom Scott: Lake levels cannot be held dead flat. Managing the dam and water levels is not an exact science.

Howard Zosel: The Board uses the National Geodetic Vertical Datum of 1929 (NGVD 29) to report lake levels. There is a newer datum, North American Vertical Datum of 1988 (NAVD 88). The two datums can differ by about 3 feet. Some surveyors, by using the newer datum, may be contributing to the problem of lake encroachment on properties. *A. This is an important factor to consider in the reissuance of the Orders.*

Anna Warwick Sears: Considering the State of Washington will be releasing the contracts for the Board's studies, will the contracts go to US firms only, or to contractors in both countries? *A. Both.*

Gwen Monteith: Has the work taken on by Glenfir Resources been completed yet? *A. Yes, it has been published as the Plan of Study for Renewal of the International Joint Commission's*

*Osoyoos Lake Orders.*

Ivo Tyl: It has been 100 years since the Boundary Waters Treaty was signed. It is due time that these studies are done. The fact that they weren't done when the present Orders were written in 1982 and 1985 was a violation of the treaty. In most cases, when dams are built, affected parties are compensated. But my property gets flooded without compensation. The new Order should refer to the lake as a reservoir. The dates for switching water levels (April 1 and November 1) are not scientifically correct. I am glad to see that something will be done.

Eike Scheffler: Recent in-stream studies conducted by the Osoyoos Oxbows Society had little support from the provincial Ministry of the Environment. Unanticipated Okanagan flow changes during these studies caused difficulty and frustration.

Sherry Linn: Some Ministry of Environment employees happened to be at the field site for the Oxbow study 24 hours before the river was to be drawn down. This was fortunate; otherwise, field pumps could have gone dry and ruined. In spite of some frustration, the Ministry offered much good advice. Study samples are now with UBC-O for analysis.

Mike Cantwell: With the help of Washington Department of Ecology, the re-invigorated Lake Osoyoos Association has started doing water quality sampling on the Oroville end of the lake.

Eike Scheffler: The Board is ignoring the siltation effect of Similkameen flows on the lake. Some of the upstream oxbows have serious water quality problems. How can Zosel Dam be operated to fix Osoyoos Lake water quality, particularly with respect to sediment from the Similkameen?

Ralph Keuler: When an unusual operation of the lake or river is anticipated (including backwater from the Similkameen), a press release should be issued to inform the public.

Sherry Linn: Noxious water lilies are choking the Okanagan River side channel just above the dam. Is sediment gathering in this reach the cause of noxious weed growth? Is this the location where the fish are spawning?

Dave Buckmiller: No, they spawn below the dam.

Dave Buckmiller: Tonasket Creek outlet has been dredged in the past. But it does refill. When recently dredged, fish were observed migrating up the creek.

Dave Buckmiller: While silting has been observed coming upstream from the Similkameen, it only occurs during extreme high water events.

Sherry Linn: Sediment in the north basin is from upstream inflow.

Sherry Linn: Thanks to the Board and Commission for bringing this opportunity for public input.

Eike Scheffler: It takes more than a bureaucratic annual meeting and a science forum to express and resolve the issues in Osoyoos Lake. *A. These meetings and the forum are designed to bring people together to express their views.*

Ray Newkirk: The dam itself is not a water quality problem. The input of pollutants causes water quality issues. The answer to water quality problems is source control.

Ralph Keuler: What were the historic water levels on the lake? *A. They apparently ranged from 905 to 921 feet.*

Ivo Tyl: IJC documents indicate that the original level was around 909 feet.

Dave Buckmiller: "Indian Rocks" visible in the lake during low water suggest that lake levels may have been much lower in the past.

Eike Scheffler: What is the term of the present Commission and Board? *A. There is no predefined term.*

8.

Adjourn

Dr. Barton thanked guests and adjourned the meeting.