

## MINUTES

### International Osoyoos Lake Board of Control Annual Meeting

Best Western Sunrise Inn  
5506 Main Street  
Osoyoos, BC

Wednesday September 19, 2007  
10:00AM – 12:00PM

#### Attendance

	<b>United States</b>	<b>Canada</b>
Chairs	Dr. Cynthia Barton	Kirk Johnstone (absent)
Members	Col. Michael McCormick Kris Kauffman	Glen Davidson (host) Brian Symonds
Secretaries	Robert Kimbrough	Daniel Millar
Guests	Commissioners: Irene Brooks, Jack Blaney Tom McAuley (Canadian Section, IJC), Dr. Mark Colosimo (US Section IJC), Larry Merkle (USACE), Ed Zapel (USACE), Ray Newkirk (WA Dept of Ecology), Doug Johnson (WA Dept of Ecology).	

#### Agenda

1. Welcome and introductions Glen Davidson  
Mr. Davidson welcomed all and led introductions.
2. Review of the agenda Glen Davidson  
The Board adopted the draft agenda.
3. Business from previous meeting
- 3.1 Okanogan channel capacity verification survey in 2006-7 Robert Kimbrough,  
Ray Newkirk  
The Osoyoos Order specifies that the outlet channel of Osoyoos Lake must be able to pass 2,500 cfs at 913 feet lake level elevation. The Board notified the applicant in 1999 that this may be verified by actual flow observation or by surveying the channel. However, the channel must be surveyed at least once every 10 years. This survey was due in 2006.  
Mr. Newkirk advised that the channel was surveyed last October, but that the data had not yet been analyzed. He apologized for the delay and agreed to have a report to the Board by November 1, 2007.
- 3.2 Update on Okanagan Lake water level gauge correction factor Brian Symonds  
Mr. Symonds advised the Board, last year, that the geodetic reference bench mark for Okanagan Lake was moving, bringing into question the conversion factor to convert local gauge datum to geodetic elevation. This conversion is required as it reflects one of the Osoyoos Order drought criteria. Mr. Symonds offered that this drought criterion is intended to mark the point at which Okanagan Lake reaches

one foot below full pool during the freshet. When the Order was written, the correction factor was +340.297 metres. Recently, it was found, by survey, to be +340.236 metres.

It is within the Board's mandate to technically interpret the IJC Order. Mr. Symonds recommended that to best meet the intent of the Order, we should continue to use the correction factor of +340.297 in the interim, with the Commission considering this matter when it reviews the Order in 2013. The Board agreed to this suggestion.

4. New Business

4.1 Compliance with the IJC Orders in 2006-2007

Robert Kimbrough

To date during 2007, the Washington State Department of Ecology has operated Zosel Dam to manage the water level of Osoyoos Lake within the limits set by the International Joint Commission's Osoyoos Orders. As drought was not declared this year, water levels were maintained in the normal operating range of 911.0 to 911.5 feet during the summer, and 909.0 to 911.5 feet in the winter. Lake levels did not exceed 911.5 feet due to freshet conditions this year.

See attachment.

4.2 Status of works and maintenance at Zosel Dam

Ray Newkirk

Mr. Newkirk reported that no substantive work had been conducted on Zosel Dam this year. Outflows were occasionally adjusted to address a dewatered downstream side channel used by fish. The Department of Ecology intends, in the future, to bring the lake level up to 911.0 feet in mid March, rather than just prior to April 1<sup>st</sup>, in order to improve spawning conditions for steelhead downstream. Further, the Department will likely only drop water levels to 910.0 feet in winter, rather than 909.5 per past practice, again for fish considerations. These changes are within the limits set by the Order.

Mr. Newkirk was asked what the primary reason was for lowering lake levels below 911.0 feet in the winter. He responded that it was to keep ice from damaging various retaining walls around the lake and dam.

Mr. Newkirk was questioned by the Board about the rise and fall in water levels during mid winter over the last two years. He did not have an explanation at the moment. Note that in spite of this operation, water levels remained within limits set by the Order.

4.3 Status of funding for the Plan of Study and initiation of the studies

Tom McAuley

Mr. McAuley reported that the IJC, Canadian Section, has lined up resources of \$80K in its 2008 budget for studies identified under the Plan of Studies. However, the US Section did not receive the necessary funding in the President's 2008 budget. As a result, consideration should be given to using the Canadian Section's resources for early studies and the US Section's for studies in the latter years of the program.

Board Members inquired how the Plan of Study would be initiated and managed. While the Commission is looking to the Board to take on that role, Members indicated that

redirecting their time and resources from their home agency to managing contracts for this project would be near impossible. Instead, they agreed with a suggestion to investigate whether the projects could be undertaken within their home agencies, rather than by contractors, and funded by the IJC. For example, Mr. Symonds suggested that the BC Ministry of the Environment may be able to undertake study #1. The Board also agreed that it could update the plan of study if necessary.

**ACTION:** Board Members to survey their home agencies to determine if studies in the Plan of Study can be handled in house. Reconvene on the matter by teleconference in mid-November.

4.4 Review of the Osoyoos Lake Science Forum

Mark Colosimo

The IJC, the Osoyoos Board, the Town of Osoyoos, and several other groups organized an Osoyoos Lake Water Science Forum that was held over two days earlier this week. The Forum was instigated at last year's Board meeting in response to public pressure to address critical local water issues (i.e., water quality and quantity) much sooner than will be possible with the reissuance of the Osoyoos Order in 2013.

Of the approximately 190 registrants, about 55% were from the public, and 45% from government agencies. One-third of attendees were from the US, two-thirds from Canada. Presentations and other material from the Forum will be posted on the Okanagan Basin Water Board web site in mid-October. Some of the work presented will likely benefit the upcoming studies under the Plan of Study. A next steps document will be prepared by ESSA, the forum's facilitator. The Board will review these steps to determine if any are applicable to the Board or Commission. If possible, the Board may report to the Commission on the outcome of the Forum at the October semi-annual meeting.

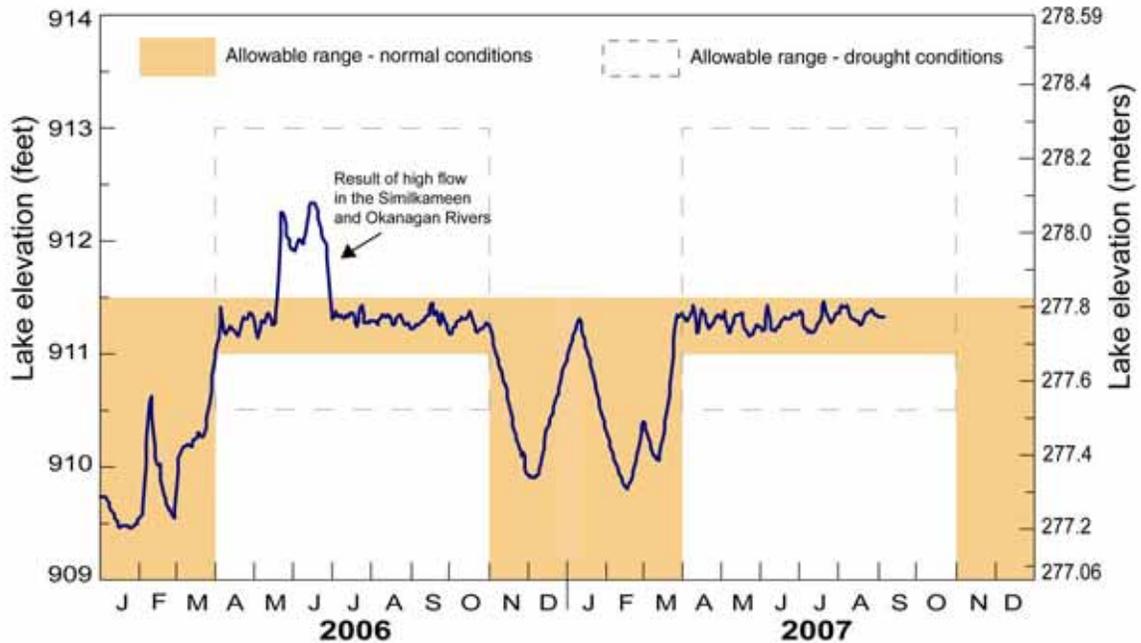
Commissioner's thanked the Board for sharing with other agencies in organizing the forum. They advised that, as a result of the Forum, they are considering the Osoyoos/Okanagan watershed as a location for a pilot watershed initiative for the Commission.

5. Adjourn

## Compliance with the IJC Orders in 2006-2007

2007 IOLBOC annual meeting

September 19, 2007



**Osoyoos Lake elevation and allowable ranges in elevation, 2006-07.**

### **Lake Elevation in 2006 and 2007**

#### **2006**

- A drought was not declared in 2006 so the allowable range in lake elevation for normal conditions was in effect all year.
- High flow in the Similkameen and Okanagan Rivers caused the level of Osoyoos Lake to rise above the 911.5 feet from May 19 to June 28, 2006.

#### **2007**

- A drought was not declared in 2007 so the allowable range in lake elevation for normal conditions is in effect all year.
- In 2007 to date, lake elevation has been kept within the allowable range for normal conditions.

### **Hydrologic Conditions in 2007 Compared to Drought Criteria**

Drought Criteria	Actual value (preliminary)	Drought criteria met?
Total flow in the Similkameen River during April-July is less than 1 million ac-ft	1,372,200 ac-ft	No
Net inflow to Okanagan Lake during April-July is less than 195,000 ac-ft	390,000 ac-ft	No
Level of Okanagan Lake in June or July is less than 1,122.8 ft	1,123.8 ft	No

## Summary of Drought Conditions

2007 IOLBOC annual meeting

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Year	Drought Criteria Condition			Drought	
	(a)	(b)	(c)	Declared?	Rescinded?
<b>CRITERIA</b>	1,000,000	195,000	1122.8		
1987	1,003,453	178,900	1123.11	Yes	Yes
1988	933,296	192,700	1122.32	Yes	
1989	1,060,974	296,700	1123.54		
1990	1,566,775	536,000	1124.90		
1991	2,299,868	479,100	1123.42		
1992	735,541	123,600	1121.87	Yes	
1993	938,989	458,300	1123.56	Yes	
1994	885,375	302,600	1123.39	Yes	
1995	1,305,004	368,400	1123.17		
1996	1,661,380	654,000	1124.07		
1997	1,946,984	863,100	1124.81		
1998	1,230,960	391,000	1123.47	Yes	Yes
1999	1,706,980	560,700	1123.39		
2000	1,070,039	431,200	1123.41		
2001	566,825	192,300	1122.72	Yes	
2002	1,546,158	417,900	1123.70		
2003	781,500	137,600	1122.46	Yes	
2004	1,143,082	269,000	1122.80	Yes	Yes
2005	622,400	328,900	1123.87	Yes	
2006	1,065,000	452,800	1123.90		
2007	1,372,200	390,000	1123.8		

### Since current Zosel Dam was completed in 1987

- Between 1987 - 2007, (21 years), drought declared 10 times, and thrice rescinded
- Condition (a) (Similkameen River) has been met 7 of 21 years (33%)
- Condition (b) (Okanagan Lake inflow) has been met 5 of 21 years (24%)
- Condition (c) (Okanagan Lake elevation) has been met 4 of 21 years (19%)

### For period of record for Similkameen River (79 years, 1929-2007)

- Similkameen criteria has been met 19 of 79 years (24%)