

## Meeting Minutes

### Annual Public Meeting, International Osoyoos Lake Board of Control (IOLBC)

Tuesday, October 8, 2020  
6:00 – 7:30 PM

#### Virtual Meeting: Go To Webinar

#### List of Acronyms

IJC	International Joint Commission
IOLBC	International Osoyoos Lake Board of Control
OBWB	Okanagan Basin Water Board
USGS	U.S. Geological Survey
USACE	US Army Corps of Engineers
WADOE	Washington State Department of Ecology
BCFLNRORD	BC Ministry of Forest, Lands, Natural Resource Operations and Rural Development
ECCC	Environment and Climate Change Canada

#### Membership

	<b>United States</b>	<b>Canada</b>
Co-Chairs	Cynthia Barton (host)	Dave Hutchinson
Members	John Arterburn Col. Xander Bullock Kris Kauffman Arnie Marchand	Ted White Sue McKortoff Brian Symonds Anna Warwick Sears
Secretaries	Andrew Gendaszek	Martin Suchy
IJC representatives	Jane Corwin, Robert Sisson, and Lance Yohe, (Commissioners, U.S. Section), Pierre Beland, Henry Lickers, and Merrell-Ann Phare, (Commissioners, Canadian Section), Wayne Jenkinson (Engineering Advisor, Canadian Section), Paul Allen (Communications, Canadian Section), Norman Barth (Senior Advisor, U.S. Section), Adam Greeley (AAAS Fellow, U.S. Section)	
Guests	Al Josephy (WADOE), Jay O'Brien (OTID), Anna Sharkova (GAC), Jenny Ferone (ECCC)	
Public Attendees	Bill Atwood, David Kuwka, Kell Petersen, Birgit Arnstein, Jacob d Raadt, Marianni Nogare	

#### **Welcome, Introductions, and Review of Agenda**

The meeting was opened at 6:00 p.m. by Cindi Barton (Board Chair, U.S. Section) with welcoming remarks and introductions of the board members and IJC Commissioners who were in attendance. She then reviewed the agenda for the Public Meeting.

#### **IJC Orders of Approval**

Cindi Barton presented an overview of the IJC, IOLBC, and the IJC Orders of Approval for Osoyoos Lake. She summarized the history of the IJC Orders and discussed allowable lake levels under the rule curve established under the 2013 Supplementary Orders of Approval. She described the activities of the IOLBC including ensuring compliance of the Applicant with the

Orders, monitoring drought criteria outlined within the Orders, meeting quarterly for Board conference calls, communicating hydrologic conditions and Zosel Dam operations to the IJC and the public, and developing special projects to develop technical understanding of the Okana(o)gan/Similkameen watersheds and communicate Board activities.

### **Hydrological Conditions and Lake Levels in 2020**

Canadian Board member, Ted White, provided a brief overview of the hydrology of Osoyoos Lake, the Okanagan/Okanogan River, and the Similkameen River during 2020. Although snowpack measured during the first part of the 2020 Water Year was at or below normal in both the Similkameen and Okanagan basins, as measured at the Blackwall Peak and Mission Creek snow pillows, respectively, increased snowfall beginning in January resulted in above normal snowpack for the remainder of the 2020 Water Year. In contrast, snowpack in both the Similkameen and Okanagan basins was below normal during the 2019 Water Year.

As a result of the above normal spring snowpack, the Similkameen River reached a peak instantaneous discharge of 20,700 cfs on June 1 during the spring freshet compared to 10,500 cfs on May 18, 2019. Elevated discharge of the Similkameen River contributed to reduced discharge of the Okanogan River at the outlet of Osoyoos Lake on several occasions during the spring freshet in May and early June 2020.

Drought criteria within the Similkameen River and Okanagan Lake outlined in the Orders of Approval for Osoyoos Lake were not met in 2020. Cumulative April – July flow volume for the Similkameen River was 1,733,411 acre-feet as measured at the USGS streamflow gaging station at Nighthawk, which was greater than the early April and early May forecasts; 1,005,000 and 1,189,000 acre-feet respectively. Cumulative net inflow to Okanagan Lake from April through July, and peak Okanagan Lake level in June and July were forecasted to exceed the criteria for declaring a drought in both early April and early May. Actual Okanagan Lake net inflow and peak level exceeded earlier forecasts and reached 704,000 acre-feet and 1,124.54 feet, respectively.

Osoyoos Lake levels were largely within the allowable range of the standard (Condition 7) rule curve in 2020 except for the period between May 14 and July 18 when lake level exceeded the upper bound of the rule curve (912.0 feet). This exceedance was allowable under the Orders because all Zosel Dam gates were fully opened on May 11 and Zosel Dam no longer controlled outflow from the Lake; instead, outflow was controlled by the stage of the Similkameen River during this period of the spring freshet. After Osoyoos Lake stage decreased below 912.0 feet on July 18, Zosel Dam resumed control of outflow from Osoyoos Lake for the rest of the year. Another increase in lake stage, which occurred entirely within the rule curve, occurred as a result of decreased capacity at the outlet of Osoyoos Lake due to an ice jam that formed during a period of cold weather in January. The Board monitored the development of ice jam and Osoyoos Lake stage during the ice-jam event until the jam thawed in late January and lake levels lowered.

Compliance of the discharge capacity of Zosel Dam with the IJC Orders was demonstrated from June 2 to June 7 when Okanagan River discharge exceeded 2,500 cfs and Osoyoos Lake level exceeded 913.0 feet.

Finally, the Board monitored the presence of wildfires within the Okanagan Basin in 2020, which included the Palmer Fire (18,000 acres), the Pearl Hill Fire (223,780 acres), and the Cold

Springs Fire (190,000 acres). None of these fires directly impacted Osoyoos Lake or the Okanagan River.

### **Special Projects Updates**

Andy Gendaszek (Board Secretary, U.S. Secretary) presented several Board projects that have been completed or are in process. A high-water monument was installed near the Memorial Fountain in Osoyoos in March 2019 and a similar monument will be installed in Oroville once COVID-19 travel restrictions are eased. The IOLBC in partnership with the OBWB (Okanagan Basin Water Board) is tentatively planning to host an Osoyoos Lake Water Science Forum in the fall of 2021, as a follow-up to the 2007, 2011 and 2015 events. A steering committee and sub-committees are being formed to develop the program and funding for the Forum.

### **Public Comments**

Question from Public: Can the Board provide a detailed study of what flood levels are on Osoyoos based on an analysis that includes the effect of a backwater curve of the Okanagan River through the lake. The Design Brief of 1992 indicated a flood level of 280.7 m at Zosel Dam, but this cannot be the same at Lakehead Campground (the north end of the lake).

Response: The OBWB (Okanagan Basin Water Board) recently built a hydrologic model of the Okanagan Basin and a hydraulic model of the Okanagan River. A contractor for the IOLBC is currently building a hydrologic model of the Similkameen River Basin that will provide analysis of current and future drought and flood conditions on Osoyoos Lake that affects the IJC Orders.

Question from Public: The RDOS (Regional District Okanagan and Similkameen) is currently updating the Official Community Plan Bylaw for Area "A" and this includes a section on flood protection, It would be very nice to have actual flood levels included as a tool for planning.

Response: The OBWB has a link on their website to the "Okanagan Flood Story", which provides useful information pertaining to flood protection.

**Meeting Adjourned at 7:30 PM**