

# INTERNATIONAL OSOYOOS LAKE BOARD OF CONTROL

## DECEMBER QUARTERLY CALL MINUTES

Monday, December 9, 2024

9:00-11:00 AM (PST)

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### BOARD MEMBERS

Dave Hutchinson	Chair, Canadian Section
Scott VanderKooi (Chair)	Chair, U.S. Section
Connie Chapman	Board Member, Canadian Section
Sue McKortoff	Board Member, Canadian Section
Brian Symonds	Board Member, Canadian Section
Anna Warwick Sears	Board Member, Canadian Section
John Arterburn (absent)	Board Member, U.S. Section
Col. Kathryn Sanborn	Board Member, U.S. Section
Kris Kauffman	Board Member, U.S. Section
Arnie Marchand	Board Member, U.S. Section

### BOARD STAFF and ASSISTANTS

Martin Suchy	Secretary, Canadian Section
Sarah Dunn	Secretary, U.S. Section
Sonja Michelsen	Technical Advisor to Colonel Kathryn Sanborn
Savannah Shirley	Canadian Section Assistant (Acting for Jamie Kolodinsky)

### IJC REPRESENTATIVES

Rob Caldwell	Engineering Advisor, Canadian Section
John Allis	Engineering Advisor, U.S. Section
Jeff Kart	IJC Communications, U.S.
Christina Chiasson	IJC Communications, Canada
David Hermann	Senior Policy Advisor, U.S. Section
Catherine Lee-Johnston	Environmental Advisor, Canadian Section

### ACRONYMS

ECCC	Environment and Climate Change Canada
Ecology	Washington State Department of Ecology
IJC	International Joint Commission
IOLBC	International Osoyoos Lake Board of Control
IWB	International Watershed Board
IWI	International Watershed Initiative
NHC	Northwest Hydraulic Consultants
OBWB	Okanagan Basin Water Board
SNOTEL	Snow Telemetry
U.S.	United States
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey

## **Welcome, Introductions & Approve Meeting Agenda**

Mr. Dave Hutchinson (Chair, Canadian Section) opened the meeting at 9am PST and reviewed the agenda. Ms. Savannah Shirley was welcomed as she will be acting for Jamie Kolodinsky as the support role on the Canadian side.

## **Approval of September and October Meeting Minutes**

### **September Quarterly Call**

Ms. Sonja Michelsen (Technical Advisor to Col. Kathryn Sanborn, Board Member, U.S. Section) had made several edits to the minutes, and the other board members had not yet had a chance to review these changes. The consensus was to postpone the approval of the September Quarterly meeting minutes until the next Board meeting in March.

### **2024 October Annual Board Meeting**

Mr. Hutchinson and Ms. Michelsen had both made edits to the minutes. Confirmation is required that Mr. Hutchinson's edits have been updated on the SharePoint document that Ms. Michelsen was working on. Additionally, the other board members had not yet had a chance to review these changes. The consensus was to postpone the approval of the October Annual Board meeting minutes until the next Board meeting in March.

### **2024 October Annual Public Meeting**

Mr. Martin Suchy (Secretary, Canadian Section) mentioned that there was a minor discrepancy in the number of attendees, he will confirm the number of attendees prior to posting the minutes.

A motion was made by Ms. Sue McKortoff (Board Member, Canadian Section) to adopt the October Public Board Meeting minutes. The motion was seconded by Ms. Connie Chapman (Board Member, Canadian Section) minutes were approved with the understanding that minor corrections will be made by Mr. Suchy.

## **Hydrological Conditions**

Mr. Suchy provided an update on hydrological conditions in the basin. On average, over the past 3 months, Kelowna was a bit drier than normal, while Osoyoos was wetter. Penticton, Kelowna and Vernon were all warmer than normal, with Vernon recording its warmest mean temperature on record.

Snowpacks in the Okanagan and Similkameen basins are currently slightly below and significantly below normal, respectively (Province of BC, 2024). In contrast, the U.S. Washington SNOTEL reports the current snowpack at 111% of normal, Mr. Suchy noted this may be due to the larger geographic area covered by this data.

Flow and level conditions were presented for the current time and reviewed for the fall months. The Similkameen River near Nighthawk water supply forecast for the April to July 2025 period, is forecasted to be below 1-million acre-feet (ac-ft), at about 890,000 ac-ft, which would again trigger Condition 8a, though it is still early in the water year. The current Similkameen River discharge is at the 24<sup>th</sup> historical percentile. Okanagan Lake at Kelowna had negative net inflows, which is atypical for this time of year, with lake levels at the 31<sup>st</sup> historical percentile. The three Okanagan River discharge stations all remain low, around the 25-30<sup>th</sup> percentiles. Osoyoos lake levels were reported to be 909.89 ft, below the mean, but significantly higher than last year.

The North American Drought Monitor is now being used as a standardized approach to monitor drought for the transboundary basin, the area is currently classified as D0 (abnormally dry) and D1 (moderate drought).

Mr. Suchy also reported on the El Niño/Southern Oscillation (ENSO) conditions, noting that the likelihood of La Niña conditions is diminishing, with only a weak La Niña expected. This reduces the likelihood of increased precipitation and cooler temperatures typical of a stronger La Niña. Probabilistic forecasts suggest there still may be some La Niña impacts expected, however these may diminish in the coming months.

Dr. Warwick Sears asked about how climate change impacts the ENSO forecasts. Mr. Suchy will attend an ECCC climate bulletin call this week and will seek an answer.

No other questions or comments were brought forward.

### **IWB Feasibility Study Update**

Mr. David Hermann (Senior Policy Advisor, IJC, U.S. Section) gave an update on the IWB feasibility study. The IJC is still working on finalizing the terms of reference which is expected to be done early in the new year, after which the IJC will still have to finalize the team for the study.

Colonel Kathryn Sanborn (Board Member, U.S. Section) and Mr. Hutchinson asked about what the next steps are for the Board once the feasibility study is completed. Mr. Hermann explained that this question has contributed to the delay in finalizing the terms of reference, as the study aims to identify basin gaps and needs to guide the Board's actions. Mr. Hutchinson followed up, asking if the study would define the Board's scope or suggest changes to its mandate. Ms. Catherine Lee-Johnston (Environmental Advisor, IJC, Canadian Section) confirmed that the study will provide background to help the IJC and governments decide on any mandate or directive changes, as this is a new situation where the current board does not function as a traditional watershed board.

Dr. Warwick Sears commented on the difficulty of setting up narrow terms of reference for a watershed with many unknowns and suggested more open-ended terms of reference. Mr. Hermann agreed and emphasized the need to establish a strong model that may be used for other watershed boards.

Ms. Michelsen asked about funding updates. Mr. Hermann acknowledged budgetary constraints affecting the study but confirmed that the IJC understands the Boards expectations in that regard, especially for Indigenous participation. This remains an issue the IJC is working on.

Dr. Warwick Sears invited further discussions on Indigenous participation, noting her collaboration with Mr. Arnie Marchand (Board Member, U.S. Section). Mr. Hermann replied the IJC will keep that in mind. Ms. Sue McKortoff (Board Member, Canadian section) highlighted that there was a collaborative leadership table that had a meeting in Penticton in November where municipalities, regional districts, First Nation and Tribes all signed a Memorandum of Agreement to protect the water in the Okanagan and Similkameen. A follow-up meeting is planned for March in Vernon. Mr. Hutchinson asked about board member participation at the March meeting. Ms. McKortoff noted that no opportunities are currently available but mentioned that Dr. Warwick Sears attended as an elected representative, and Mr. Marchand attended as a Colville Tribal elder. Dr. Warwick Sears added that the OBWB will assist in implementing collaborative efforts between the Indigenous and non-Indigenous governments. There is a lot of interest in how a future watershed board may be complimentary to this collaborative leadership table initiative. Mr. Marchand added that there is a strong interest expressed by all 7 Okanagan Band chiefs in involvement with any future studies or watershed boards.

### **Zosel Dam Gate Replacement Project Update**

Ms. Sarah Dunn (Secretary, U.S. Section) shared a letter from Ecology regarding the Zosel Dam gate replacement project. The initial bids were over budget, so Ecology is currently putting it back out to bid which breaks the maintenance down into base improvements (gate hoists and control systems) and optional additive components like gate replacement and a metalized coating system. She noted the delays wouldn't lead to any compliance concerns with lake levels but asked if there was any Board feedback to Ecology.

Mr. Hutchinson highlighted the importance of addressing impacts from aquatic invasive species and Dr. Warwick Sears asked if Ecology is planning to incorporate recommendations from the OBWB Vulnerability Assessment Guide for reducing impact of invasive species on in-water infrastructure. Ms. Dunn noted that Ecology acknowledged receipt of the guide but has not clarified how it will be prioritized. Mr. Rob Caldwell (IJC, Engineering Advisor, Canadian Section) pointed out that the metalized coating system in alternate #3 may be a protection against invasive zebra mussels.

Mr. Brian Symonds (Board Member, Canadian Section) stressed the need for coordination between the Zosel Dam operators and the Penticton dam operators for inflow modifications to Osoyoos Lake at critical times during their process.

Col. Sanborn pointed out that due to budget constraints it is possible that the only work done by Ecology in 2025 will be the base improvements.

The Board's secretaries will draft a response addressing these concerns while acknowledging budget limitations and email it to the Board co-chairs for review.

### **Ecology Preliminary Channel Survey Results**

Ms. Dunn shared another update from Ecology regarding the channel survey upstream of Zosel Dam, to ensure they are meeting the channel conveyance requirement. Conveyance calculations are not yet complete, but cross-section data was plotted and compared to previous dredging data. At this point there is not much to review regarding the order. A visual analysis shows some changes to the shape of the channel, but no huge changes in channel bed elevations.

Mr. Hutchinson noted that there looks to be sediment accumulation from Tonasket Creek. He asked about the historical threshold at which this accumulation typically begins to cause problems. Mr. Kris Kauffman (Board Member, U.S. Section) explained that historically Tonasket Creek Bar served as an outlet control, so therefore dredging was critically important. In the past the Board has emphasized dredging outside the island to limit the impact of the deposition on the outlet channel.

Mr. Hutchinson concluded that the Board would wait for the results of the hydraulic analysis to respond to Ecology. At this point the sediment accumulation has not yet caused an issue with compliance to the order, but the Board will continue to monitor.

### **Phase II Climate Model Integration Update**

Mr. Suchy provided an update on Phase II Climate Model Integration on behalf of NHC. They have completed analysis of Okanagan drought criteria (Condition 8bi and 8bii), with updated climate projections using SSP2-4.5 and SSP5-8.5 scenarios. The results showed that Condition 8bi is being met more frequently, while Condition 8bii is met less frequently, with a general trend of less frequent drought conditions compared to the historic period, except for the worst-case SSP5-8.5 scenario at the end of the century. These results are highly dependent on the

assumption that the regulation for the lake levels does not change. Next steps include a long-term simulation of Osoyoos Lake from December to January, with the report outline under internal review. The draft report will be ready for Board review by the end of January, and the final report will be completed by late February/early March. Board members will be sent a draft for review prior to the finalization in February.

Dr. Warwick Sears expressed support for the project's progress but raised concerns about the drought criteria's oversimplification and its effectiveness under changing conditions, such as drier summers and earlier freshets. She questioned whether the study considers enough scenarios and suggested that climate change impacts may not be fully addressed. She recommended holding a technical workshop for further study planning.

Mr. Suchy acknowledged the concerns and emphasized the need to plan for the review of the next order of approval, suggesting additional studies in the next five years. He proposed documenting questions for future action.

Mr. Hutchinson highlighted the challenge of drought criteria not accounting for basin-wide needs and suggested deeper analysis of the dataset produced by the Phase II model.

Dr. Warwick Sears added that new operating orders for the dam in Penticton, following the 2017 floods, could impact water storage and study results, underscoring the need for further scenario modeling with the IOLBC involved.

No further comments or discussions were raised.

#### **IWI Proposal Prioritization**

Mr. Suchy reviewed the prioritization matrix for the IWI proposals. All board members provided a ranking between 1-8 to each of the IWI proposals. The highest priority was the Zosel Dam fish passage improvement feasibility study, followed by the Osoyoos Lake Water Balance and the Zosel Dam Operational Model.

Mr. Hutchinson asked about coordinating efforts between the Canadian and U.S. side for the land use mapping regarding the Osoyoos Lake Water Balance project. Dr. Warwick Sears replied that the BC Ministry of Agriculture is planning to complete Canadian mapping in summer of 2025 or 2026. She said this would be a good time to start talking about coordination. Mr. Scott Vanderkooi (Chair, U.S. Section) asked about the U.S. counterpart to the BC Ministry of Agriculture. Dr. Warwick Sears recommended that the Board be the U.S. partner for logistical reasons, noting the U.S. study would likely be a separate but complementary study to the Canadian effort. Dr. Warwick Sears recommended ensuring the U.S. land use mapping matches the Canadian side for compatibility.

Ms. Dunn suggested new USGS products regarding water use could be useful, however, Dr. Warwick Sears replied that the USGS data lacks the level of detail that is required for the Osoyoos Lake Water Balance project; data from this Osoyoos project also has potential use in various modelling frameworks. Regarding IWI funding for these 3 projects, Mr. John Allis (Engineering Advisor, IJC, U.S. Section) clarified that U.S. focused projects could apply for funding from the IJC U.S. section, and Mr. Caldwell mentioned that Canadian funding won't be available until April.

Mr. Hutchinson proposed moving forward with all three top-ranked projects and opened the floor for feedback from board members.

Ms. Michelsen cautioned against submitting all three proposals at the same time as there is the Phase II Climate Change Model project still on the go. She suggested the Board not take on more than 2 projects at a time.

Mr. Suchy asked Ms. Michelsen about where the proposal stands for the operational model. Ms. Michelsen replied that it is close and if there is money available then USACE could get it started within a month.

Mr. Suchy commented that the fish passage proposal could be written in the next month, and the three proposals would be submitted at different times.

Mr. Suchy asked what the Board wants to do with the five other IWI's that ranked lower regarding adding them or taking them off the workplan going forward. Mr. Hutchinson suggested keeping them on the work plan but lower in priority.

Mr. Caldwell highlighted the urgency of Records Management and recommends this be submitted as a fourth proposal. The Board agreed to approach it with two components: reviewing saved records and digitizing with a third party. Ms. Michelsen emphasized the importance of document organization.

#### **Update 2025 IOLBC Work Plan**

Ms. Dunn shared the draft of the work plan. Core activities plan to remain unchanged. The two IWI projects in progress, the Ice Jams Study and the Phase II Climate Modelling, will remain on the workplan. The new initiatives will be added in order of the priorities just discussed.

Ms. Michelsen suggested splitting initiatives into "next year" and "future priorities" sections.

Mr. Caldwell noted the IJC's request for watershed boards to adopt a 3-year work plan cycle. Ms. Dunn and Mr. Suchy confirmed they would revise the plan accordingly and send it to the Board by mid-January.

#### **Round Table**

Mr. Hutchinson announced that there is an Enloe Dam Technical Advisory Committee that is looking at removing Enloe Dam. Despite this being outside the Boards purview, he wanted to let the Board know he was contacted by Global Affairs Canada to confirm here was no transboundary concerns over this. Their next meeting is on December 12<sup>th</sup>. Mr. Hutchinson let Global Affairs Canada that the Board does not have any involvement with Enloe Dam.

Mr. Symonds noted that it is a fairly big discussion regarding the dam removal and fish passage and the Board is likely not ready to get into that.

Dr. Warwick Sears announced that the Canadian Water Resource Association annual national meeting in Penticton this May is going to have a session on transboundary boards, if anyone wants to work on something for the Osoyoos Board then let her know.

#### **Adjourn**

Mr. Hutchinson adjourned the meeting at 10:55am PST.

#### **Action Items**

1. Board Members to review the September and October Board Meeting Minutes
2. Secretaries will finalize the September, October Board and Public meeting minutes.
3. Mr. Suchy to provide update to Dr. Warwick Sears regarding climate change impacts on ENSO forecasts
4. Secretaries to draft a response to Ecology's Zosel Dam Gate Replacement Project Update letter and send to Board co-chairs for review.

5. Board to discuss drought criteria oversimplification and scenario adequacy in Phase II Climate Change Model Integration study, potential for additional studies, and the impact of new Penticton dam operating orders on water storage and study results.
6. Ms. Michelsen finish the Operational Model IWI proposal
7. Ms. Dunn to start Records Management IWI proposal
8. Secretaries to revise workplan and send to Board by mid-January