Minutes

of the

Annual Board Meeting of the International Osoyoos Lake Board of Control Oroville, Washington

October 28, 2014

List of Acronyms

FLNRO Forests, Lands and Natural Resource Operations

IJC International Joint Commission

IOLBC International Osoyoos Lake Board of Control

OBWB Okanagan Basin Water Board

USGS U.S. Geological Survey

WADOE Washington State Department of Ecology

Meeting Participants

Board Members and Secretaries

IOLBC, U.S. Section: Cynthia Barton (chair), Kris Kauffman, Col. John Buck IOLBC, Canadian Section: Bruno Tassone (chair), Brian Symonds, Glen Davidson Secretaries: Gwyn Graham (Canadian Section), Marijke van Heeswijk (U.S. Section)

Guests

Gordon Walker (Chair, IJC, Canadian Section), Rich Moy (Commissioner, IJC, U.S. Section), David Fay (Engineering Advisor, IJC, Canadian Section), Mark Colosimo (Engineering Advisor, IJC, U.S. Section), Mark Gabriel (Engineering Advisor, IJC, U.S. Section), Amy Reese (U.S. Army Corps of Engineers), Al Josephy (WADOE), Sean Reimer (British Columbia Ministry of FLNRO)

Cindi Barton, IOLBC U.S. Section chair, opened the meeting at 2:00 PM with introductions and a review of the meeting agenda.

Review of Action Items from 2013 Board meeting

Action Item 1 - Board Secretaries to follow up with Kirk Johnstone on status of report corrections and contact Jim Mattison (Urban Systems), if necessary.

Status: Completed. Secretary of Canadian Section contacted Kirk Johnstone and received clarification that no correction was needed.

Action Item 2 - Board Secretaries will create a website outline for review by the Board. Once the Board agrees with the outline, the Secretaries will work with the IJC to implement website changes.

Status: Completed. Website outline is ready for Board review.

Action Item 3 - Board Secretaries: Add emergency contact information for dam operations to the Board website. This information is currently available on WADOE's Zosel Dam webpage – Al Josephy is the emergency contact.

Status: Completed.

Action Item 4: Board Secretaries will add a draft communication plan to the work plan and define how required Board decisions are made and communicated with the public, e.g., whether or not droughts are declared. The communication plan will include such details as where to publish information, how to communicate with the Zosel Dam operator, etc.

Status: A draft communication plan has been prepared. Developing a communication plan and implementing aspects of the plan were identified as Board priorities through 2015 in the Board 2014-2015 Work Plan.

Action Item 5: Board Members will submit comments on the draft work plan to the Secretaries

Status: Completed.

Action Item 6: Board Secretaries will revise the draft work plan and send a revised work plan to the Board for review.

Status: Completed.

Action Item 7: WA State Dept. of Ecology (Zosel Dam Operator) will develop guidance regarding ramping rates that can be posted on-line.

Status: Al Josephy (WADOE) updated the Board during the meeting.

Action Item 8: Board Members will submit suggestions to Secretaries on approaches for communicating ramping rates to stakeholders.

Status: Remains to be done.

Action Item 9: Board Secretaries will incorporate suggestions from Action Item 8 into the communications plan.

Status: Remains to be done.

Action Item 10: Board Secretaries will investigate mechanisms for automatically notifying the public of press releases and other significant announcements.

Status: In progress. A link has been added to the USGS Osoyoos Lake data webpage for easy subscription to USGS WaterAlert, a service that sends an e-mail or SMS when lake levels are outside a user-specified range.

Action Item 11: Kris Kauffman will send a draft document re. monitoring requirements to the Board for review. The Board suggests adding this item to the work plan (added to Action Item 6) because it is specified in the 2013 Supplementary Order (long-range work plan item).

Status: In progress.

Action Item 12: Board co-chairs will arrange a future Board conference call to discuss the issue of expanded Board membership.

Status: Conference call took place. The Board is looking at different models for achieving additional public and First Nation/Tribal Participation. The IJC is considering expanding membership of the Board by adding local Canadian and U.S. representatives.

Action Item 13: Board will organize conference call for further discussion of IJC Strategic Initiative ideas, submit those ideas to the Secretaries for prioritization, and then decide which ones to send to the IJC.

Status: A proposal was submitted for an educational documentary and received conditional approval. A revised proposal was submitted in December.

<u>Presentation by Al Josephy, WADOE, regarding ramping rate targets proposed by WADOE, the Applicant:</u>

- During times of the year when it can control Osoyoos Lake levels, WADOE will try to keep Osoyoos Lake levels no lower than 0.3 ft above the bottom of the rule curve and no higher than 0.3 ft below the top of the rule curve.
- In the fall, WADOE tries to keep the lake levels close to 911.5 ft but may stay closer to 912 ft in late September to leave more water in the lake to assist the Okanogan-Tonasket Irrigation District.
- Proposed ramping rate targets also consider discharges downstream from Zosel
 Dam, to be protective of fisheries. For example, if downstream flows would be
 too low, redds would be out of the water along the river banks and fish would
 build redds near the center of the river. This would put the redds at greater risk of
 being washed out during the spring freshet. WADOE communicates with fisheries
 experts on both sides of the border, as well as British Columbia watermanagement officials, when ramping lake levels up or down.

New Action Item 1: Al Josephy will submit draft guidance to the IOLBC regarding WADOE's proposed ramping rate targets by January 30, 2015. The IOLBC will review the draft and request modifications, as needed. Once the IOLBC approves the guidance, the document will be posted to the IOLBC website.

Even though including minimum downstream flows in the guidance for ramping rate targets may be helpful, the IJC Order of Approval only specifies water levels and not transboundary flows.

<u>Implementation of 2013 Supplementary Order of Approval</u>

Presentation by Marijke van Heeswijk, Secretary U.S. Section IOLBC, regarding compliance monitoring in 2014

Three deviations from the rule curve occurred:

- April 6-8, 2014: Minor deviation due to changing inflows to Osoyoos Lake.
 Maximum deviation was 0.045 ft (14 mm). The Applicant notified the IOLBC as soon as the deviation was noticed and made corrections.
- May 16-June 5, 2014: Large deviation due to spring freshet. Maximum deviation 1.1 ft (0.34 m).
- June 9-10, 2014: Minor deviation due to rapidly changing flows into Osoyoos Lake. Maximum deviation 0.03 ft (9 mm).

There was a record return of about 600,000 sockeye salmon from mid- to late summer. Excellent cooperation between the Applicant and Canadian system operators and input from fisheries experts on both sides of the border allowed the needs of the fish to be met while operating within the rule curve.

Decision regarding documentation of deviations from the rule curve: The IJC suggests that the IOLBC documents deviations from the rule curve in its annual report. Annual reports are posted on the IOLBC website.

<u>Presentation by Brian Symonds, Canadian Section IOLBC, regarding hydrologic</u> conditions in the basin in 2014

- The most important control on Osoyoos Lake levels and flows in the Okanagan/Okanogan River system is regulation of Okanagan Lake, which is upstream of Osoyoos Lake and controls about 75% of flow through the watershed.
- Snowpack was above average at Mission Creek Snow pillow (an important indicator for spring hydrologic conditions in the upper Okanagan River basin). Snow had melted by late June.
- Snowpack was mostly close to average at Blackwall Peak snow pillow (an indicator for spring hydrologic conditions in the Similkameen River). Snow had melted by late June.
- Water in British Columbia is managed for variety of purposes, including water supply, flood control, recreation, etc.
- Once flows in the Similkameen River at Nighthawk reach ~10,000 cubic feet per second (cfs), backwater conditions develop in the Okanogan River. Similkameen River flows exceeded 10,000 cfs during the latter half of May and during two brief periods in June.
- Drought conditions were not declared in 2014 (as per drought criteria specified in Condition 8 of the IJC Supplementary Order of Approval for Osoyoos Lake, dated January 29, 2013).

- The gates at Zosel Dam were fully open starting May 7, 2014.
- There were three brief periods during which Osoyoos Lake levels deviated from the rule curve: April 6-8 (minor deviation due to changing conditions), May 16-June 5 (large deviation due to spring freshet), and June 9-10 (minor deviation due to rapidly changing inflows into Osoyoos Lake).

WADOE has done an excellent job notifying IOLBC Secretaries about anticipated and actual significant changes in Osoyoos Lake levels. In addition, the Secretary of the Canadian Section of the IOLBC compares actual Osoyoos Lake levels with the rule curve twice per week. The USGS developed a program that e-mails WADOE and the IOLBC Secretaries when the daily mean Osoyoos Lake level is outside the range of the rule curve and when it returns inside the range.

In Washington State, the Upper Okanogan River Basin is closed to new water rights and the Similkameen River Basin has interruptable water rights.

Review of correspondence

On January 22, 2014, the IOLBC received e-mail correspondence from Lee McFadyen asking during what years backwater conditions existed in the Okanogan River due to high flows in the Similkameen River. Brian Symonds of the IOLBC responded to the letter on the same day.

On February 6, 2014, the IOLBC received e-mail confirmation from the IJC that the Commission approved the Consolidated Orders on December 10, 2013. The approved Consolidated Orders have been posted on the IOLBC website.

On May 7, 2014, IOLBC Canadian Section chair, Bruno Tassone, received e-mail notification from the British Columbia Ministry of Agriculture, regarding a site visit to the Osoyoos lakeside property of Mr. Roger Borges and discussion of irrigation system intake from the lake. This site visit was prompted by earlier communication from Mr. Borges to IOLBC Canadian Section member, Brian Symonds, regarding a problem of insufficient water level over the irrigation intake due to low levels of Osoyoos Lake in early April 2014. Mr. Borges was concerned that Osoyoos lake level management was impacting his ability to draw water to irrigate his farm. According to British Columbia Ministry of FLNRO records, Mr. Borges was issued a replacement license in 2003 with a clause identifying that he was to prepare for lake levels different (generally lower) than what his intake was initially designed for (specifically, the works shall be shall be constructed to operate with a lake elevation of 908.5 to 919 feet). As a mitigating measure, the IOLBC worked with the Zosel Dam operator to raise the water levels a bit early which allowed the irrigation system to operate. Mr. Borges expressed his appreciation and also an understanding of the effects of the new IJC Rule Curve for Osoyoos Lake (effective January 29, 2013). Mr. Borges has also committed to follow up on his own accord to either extend his irrigation intake to greater depth and/or work out a possible connection to the Osoyoos Irrigation District.

On June 9, 2014, the IOLBC received a letter from the Applicant who requested authorization to work outside the rule curve for several days to best accommodate current and anticipated flows into Osoyoos Lake. The IOLBC did not write an official response to the letter but remained in close communication with the Applicant about the issue. During this period, the lake levels briefly exceeded the upper limit of the rule curve (912.0 ft) from 11:15 PDT on June 9, 2014, through 12:45 PDT on June 10, 2014. The maximum deviation from the rule curve was 0.03 ft (9 mm) from 21:15 PDT on June 9, 2014, through 02:45 PDT on June 10, 2014. This deviation from the rule curve was one of three deviations from the rule curve reported to the IJC by the IOLBC.

In late July 2014, multiple phone and e-mail communications took place among the Applicant and IOLBC Secretaries regarding operational decisions related to unusually large returns of sockeye salmon. The issues of concern were that larger than usual releases at Zosel Dam were needed to accommodate the unusually large fish returns, both in terms of flows and water quality (timing of temperature-migration signal at the confluence of the Okanogan and Columbia Rivers). Larger-than-usual releases could potentially have resulted in Osoyoos Lake levels that deviated below the rule curve. This condition was avoided, however, by close collaboration between the Applicant and Canadian system operators, who temporarily increased flows into Osoyoos Lake to compensate for increased releases from Zosel Dam.

On October 6, 2014, the IOLBC received e-mail correspondence from Anna Warwick-Sears, Executive Director of the OBWB, that was a copy of correspondence sent to the IJC regarding the issue of preventing the spread of invasive species (Zebra and Quagga mussels) into the Okanagan River system. David Fay, Engineering Advisor of the Canadian Section IJC, is in communication with Anna Warwick-Sears about the letter.

On October 7, 2014, the IOLBC received e-mail notification from the IJC notifying it that 1) its proposal for an educational documentary was conditionally approved and 2) the IJC liaisons would be following up with the IOLBC Secretaries to discuss the conditions of approval and the next steps.

Discussion Regarding Composition of the IOLBC

The IOLBC is looking at different models for achieving additional public and First Nation/Tribal participation and the IJC is considering expanding membership of the IOLBC by adding local Canadian and U.S. representatives.

New Action Item 2: The IOLBC will invite selected IJC Boards whose membership has recently been expanded to share their experiences during a conference call with the IOLBC.

Implementation and Review of 2014-15 Work Plan

The IOLBC reviewed its 2014-15 workplan and decided no changes were needed.

New Action Item 3: The Secretaries will post the 2014-15 workplan to the IOLBC website.

Update on IOLBC website

New Action Item 4: The Secretaries will suggest a list of criteria for a possible public photo contest for photos for the IOLBC website.

New Action Item 5: The Secretaries will work with the IJC on revising names of webpage labels. The Secretaries will also add links to local and regional organizations that are focused on issues related to Osoyoos Lake and Zosel Dam.

New Action Item 6: The Secretaries will investigate the possibility of adding a webcam at the Zosel Dam site.

IJC Strategic Initiatives

The IJC liked the proposal for an educational documentary that the IOLBC submitted to the IJC. The proposal received conditional IJC approval and the IOLBC submitted a revised version in December. The documentary project will be led by WADOE with input from stakeholders in the basin.

New Action Item 7: The IOLBC will hold a conference call to discuss whether to apply for IWI funding to develop a Zosel Dam operations modeling tool. Considerations: Douglas County Public Utility District (a U.S. entity) developed a fish/water-management modeling tool for the British Columbia Ministry of FLNRO. This model does not include Zosel Dam (the downstream boundary of the model is Osoyoos Lake). The model is used to make water-management operations decisions in British Columbia in consultation with local stakeholders.

The Board meeting concluded with a presentation by Kris Kauffman, U.S. Section IOLBC, about the history of Zosel Dam and transboundary collaboration.

The meeting adjourned at 4:30 PM.