INTERNATIONAL OSOYOOS LAKE BOARD OF CONTROL Conference Call

Tuesday September 10 2019, 9:30 – 11:30 AM PDT

BOARD MEMBERS

Cindi Barton Chair, U.S. Section **Bruno Tassone** Chair, Canadian Section Board Member, U.S. Section John Arterburn Col. Mark Geraldi (absent) Board Member, U.S. Section Kris Kauffman Board Member, U.S. Section Board Member, U.S. Section Vacant Ted White Board Member, Canadian Section Sue McKortoff Board Member, Canadian Section **Brian Symonds** Board Member, Canadian Section Anna Warwick Sears Board Member, Canadian Section

BOARD STAFF and BOARD MEMBER ASSISTANTS

Andy Gendaszek Secretary, U.S. Section

Martin Suchy Secretary, Canadian Section

Kevin Shaffer Technical Assistant to Colonel Mark Geraldi

IJC REPRESENTATIVES and GUESTS

Wayne Jenkinson Engineering Advisor, Canadian Section
Mark Colosimo Engineering Advisor, U.S. Section
Paul Allen Communications, Canadian Section
Dave Hutchinson National Hydrological Services - ECCC

1. APPROVAL OF THE AGENDA

The meeting started at 9:30 and was led by Cindi Barton (US Co-Chair). The meeting agenda was accepted with no changes required.

2. APPROVAL JUNE BOARD MINUTES

The Board reviewed the minutes of the June 2019 Board Conference Call, the minutes were approved with the following changes: Add request to Section 5. Planned Osoyoos Lake Levels and 2019 Condition 10 Variance": "...the Applicant made a Condition 10 variance *request* on May 30th...". Section 7. OBWB Model Updates: Correct spelling of *Okanogan*.

3. UPDATE - BOARD VACANCY US SECTION

In June, Ford Waterstrat resigned from the Board creating a vacancy in the U.S. Section. The U.S. cochair will follow up with several individuals who Ford recommended as potentially interested in joining the Board. The Board will then put together a nomination package for the Commissioners to appoint a person to the U.S. Section vacancy. Each section has taken the lead on recommending nominees for Board vacancies, but the recommendation is by both sections and the Commission as a whole appoints Board members.

4. REVIEW OF HYDROLOGIC CONDITIONS AND CLIMATE FORECASTS

Hydrology and Weather

Hydrologic review for the period from mid-June to early September. The volume of flow in the Similkameen River, for the period of April 1 to July 31, did not attain 1.0 million acre-feet, therefore Criteria 8a was met. Total volume was 831,285 ac-ft. Similkameen mean daily discharge was generally half of the historical daily mean throughout the summer.

In anticipation of reduced Okanagan Lake inflows due to a lower snowpack, Okanagan Lake was held higher through the spring to ensure sufficient storage was achieved in summer. There was considerable uncertainty until well into freshet whether or not the drought criteria would be met in 2019. Even on June 26th, after the BC River Forecast Centre re-ran the Okanagan Lake net inflow model, the Board was preparing to issue a Drought Declaration based on forecasted Okanagan Lake inflow. It was only the precipitation in late June and early July which pushed the net inflow to Okanagan Lake above the drought threshold. On July 31st, the Net Cumulative Inflow to Okanagan Lake was 206,591 ac-ft, which surpassed the Drought Criteria of 195,000 ac-ft, so Drought Criteria 8bi was not met. Okanagan Lake level reached a maximum of 1122.6 ft on June 13, therefore Drought Criteria 8bii was also not met.

June is typically the wettest month of the year in the Okanagan, but June was dryer than normal in 2019 and the rain shifted into July. Summer rainfall is fairly normal, but the last few Julys have had dryer conditions.

The peak Osoyoos Lake level was 912.59 ft (278.157 m) on August 11, 2019, and remained near or slightly above the Condition 8 (Drought) rule curve for much of the summer until late August. Order compliance to be discussed in section 5.

Outlook

Seasonal forecasts from Environment and Climate Change Canada favor an increased likelihood of above normal fall temperatures (Sept-Oct-Nov). There is a high probability (60-90%) of above normal temperatures for each of the individual months and collectively. The forecast indicated a near-normal probability for precipitation for the same period. The early August CPC probabilistic ENSO forecast

suggests a 60-65% neutral forecast probability in late summer, decreasing to \sim 55% by late fall. El Nino forecast probability remains near 30% throughout the period and into the winter.

5. ORDER COMPLIANCE AND PLANNED FALL RAMPING RATES DISCUSSION

Order Compliance

Due to concerns for late summer and early fall in-stream flow needs and irrigation demands, on May 30 the Applicant requested a Condition 10 Variance to operate following the Drought Rule Curve of the 2013 Supplementary Order of Approval. IJC Commissioners granted the variance on June 7, and on June 11, Osoyoos Lake level rose above 912.0 ft. A press release was issued in July informing the public about the Condition 10 Variance, which allowed for a broader range of water levels on Osoyoos Lake in the summer (expanded range of allowable lake levels between 910.5 and 912.5 feet) to help limit the impacts of dry conditions in the basin.

As per the original request, the variance was active only to the end of the current water-year (September 30), and not November 1, when both Rule Curves re-join. As a result, the Applicant has requested an extension of the variance to address this 1 month discrepancy, to afford them flexibility in managing the lake levels. The Board indicated the Applicant must make an official request for extention, which has yet to occur.

Osoyoos Lake levels exceeded the Drought Conditions Rule Curve of the 2013 Supplementary Order of Approval on several occasions between July 6 and August 28, resulting in non-compliance by the Applicant. The exceedances were typically less than 0.05 ft, however, the maximum exceedance was 0.09 ft. The Board agreed that the Applicant should bring lake levels as close to 912.5 ft as possible and keep it there within reason to maximize storage capacity, however storm runoff resulted in inflow to Osoyoos Lake and caused most of the exceedances. The Board decided to give the Applicant an opportunity to discuss the exceedances at the upcoming Annual Board meeting, prior to sending an official letter of non-compliance and notifying the IJC Commissioners.

Flushing Proposal

The Applicant, with assistance from John Arterburn (U.S. Section Board Member and a Fisheries Biologist) submitted a plan to use the excess stored water in Osoyoos Lake to benefit river ecology and spawning salmon by providing a flushing flow. The extra water stored this year provides a rare opportunity to provide flows that are not backwatered below Zosel Dam to mobilize the substrate and rejuvenate important spawning habitats for summer Chinook and Summer Steelhead. Mobilizing the substrate will require a discharge above 1,000 cfs in the reach below Zosel Dam for a 24 hour period. To avoid impacts on river users and reduce the potential for stranding fish, it is suggested to increase flows from a base of 275 cfs to 550 cfs for 24 hours then jumping to 1,100 cfs for 24 hours before returning to 550 cfs for 24 hours finally returning to 275 cfs or whatever flow is needed to stabilize the lake elevation. The proposed flushing is to begin on September 21. The Board decided to discuss the proposal further at the upcoming Annual Board Meeting, to hear from the Applicant directly.

6. SPECIAL PROJECTS UPDATE

The Board gave approval to post the "A River Film" themed vignettes to the Board website. The high water monument was installed in Canada near the Osoyoos Lake Memorial Fountain in March 2019. Monuments on the U.S. side to be installed in Fall 2019, must coordinate with Town of Oroville council on placement in Veteran's Memorial Park. The Zosel Dam webcam has been published on the USGS webpage and will be eventually be linked to the IOLBC webpage.

7. IWI PROPOSAL UPDATE

As indicated in the June call, the Similkameen Hydrologic Model proposal was well received by the IJC, but additional justifications were requested. Since then, a sub-committee comprising of the Board Members Anna Warwick Sears and John Arterburn, and the two Board Secretaries have drafted a Scope of Work (SOW) for the project, which will ultimately be submitted to the Canadian IJC Section for funding and contractor proposal bidding. Anna Warwick Sears through the OBWB will administer the project to take advantage of a GST rebate. The Regional District of Okanagan-Similkameen is very interested in the project moving forward.

8. OBWB MODEL UPDATES

Anna Warwick Sears (Canadian Board Member and OBWB Executive Director), provided an update on the hydrologic and hydraulic models project for the Okanagan River and Okanagan Basin. Flood mapping component between Okanagan Lake and Osoyoos Lake currently being developed using Lidar dataset. Bathymetric survey of Okanagan main stem completed. Working on hydraulic model for two major reaches, including culverts, dykes and freeboard determination. Regression analysis of Similkameen River backwater at the confluence of the Okanogan River being undertaken. Link for Okanagan Basin historical climate dataset will be available in coming weeks on OBWB website. Project completion date continues to be March 2020.

9. ANNUAL BOARD/PUBLIC MEETING UPDATES AND AGENDA REVIEW

The IOLBC's Annual Board and Public Meetings are scheduled for September 17-18, 2019 in Osoyoos, BC and will be hosted by the Canadian Chair. The Board reviewed and approved of the draft agenda for the Board and Public Meetings. Board meeting will be held at Oroville/Osoyoos Border Facility where it was held in 2018, whereas the Public meeting will likely be held at Sonora Community Centre. IJC advisors had indicated that at least one IJC Commissioners from each section are likely to attend. The field trip tour will include both Okanagan Lake Dam and Zosel Dam to provide Basin context for new IJC

Commissioners. Representatives from Global Affairs Canada and U.S. Department of State will likely attend the meetings as observers.

10. ROUND TABLE

Nothing additional items discussed, Action Items not discussed due to lack of time, however new items added as part of above discussions.

STATUS OF ACTION ITEMS

New Action Items

- 1. Continue preparation for upcoming Osoyoos Board and Public Meetings.
- Canadian and U.S. Secretaries to work with Board Members Anna Warwick Sears and John Arterburn to complete SOW for Similkameen Basin Hydrologic Model contract.
- 3. Update June Conference Call minutes and post on Board website.

In Progress

- 4. Board Secretaries to add update on Board website to indicate installation of new High-Water Monuments.
- 5. Board Secretaries will continue to look into availability of additional bathymetric data for Lake Osoyoos.
- Guidelines for U.S. Department of State (DOS) and Global Affairs Canada (GAC) participation as
 observers for quarterly conference calls and meetings. Board Secretaries waiting for official
 guidance document for IJC, which is being delayed due to lack of Commissionaires. Interim
 guidance.
- 7. Board Secretaries will update IOLBC website with documentary film trailer, vignettes.
- 8. Board Secretaries will prepare a bibliography to initiate the Organization step of the Preparedness Process proposed by CAWG.
- 9. Board Secretaries will investigate the possibility of funding short excerpts of "A River Film" about focused themes through the spring, IWI request for proposals.
- 10. Board Secretaries will add Osoyoos Lake inundation maps to IOLBC webpage.

Completed (since last quarterly call)

- 11. Update webpage with Annual Report and minutes;
- 12. Prepare press release for Condition 10 Variance approval.
- 13. Have BC River Forecast Centre for re-run Okanagan Lake Net Inflow model to see if in fact Drought Criteria will be met, and an official drought declaration can be made.
- 14. Board Secretaries to draft Drought Declaration recommendation letter to the IJC for review and approval, should new model results confirm the findings.