INTERNATIONAL OSOYOOS LAKE BOARD OF CONTROL Conference Call

Tuesday June 18 2019, 9:30 – 11:30 AM PDT

BOARD MEMBERS

Cindi Barton Chair, U.S. Section

Bruno Tassone Chair, Canadian Section

John Arterburn

Col. Mark Geraldi (absent)

Kris Kauffman

Board Member, U.S. Section

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 (absent) Engineering Advisor, Canadian Section

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

1. APPROVAL OF THE AGENDA

The meeting started at 9:30 and was led by Bruno Tassone (Canadian Co-Chair). The meeting agenda was modified by moving agenda Item 6 (Ford Waterstrat resignation) ahead of Item 3 (review of current conditions), and Item 8 (Okanagan Basin Model updates) was moved up following the Similkameen Model IWI Proposal update.

2. APPROVAL MARCH BOARD MINUTES

The Board reviewed the minutes of the March 2019 Board Conference Call. A modification was made to Bruno Tassone's current contract expiration, otherwise the minutes were approved.

3. FORD WATERSTRAT RESIGNATION

Cindi Barton (U.S. Section Chair) received a letter from Ford Waterstrat (Board Member U.S. Section) on June 9th. Mr. Waterstrat resigned his Board Membership effective immediately as he was moving away from the region. The letter provided the names of potential nominees for the Board vacancy who have been active in the Osoyoos Lake community. The Board will gage their interest in joining the Board and provide recommendations and biographies to the IJC.

4. REVIEW OF HYDROLOGIC CONDITIONS AND CLIMATE FORECASTS

Weather Review

The Okanagan Basin experienced a milder than normal winter due to weak El Nino conditions. Temperatures were warmer than normal in December and January but reached near record cold temperatures in February due to Arctic outflows. March and April temperatures were near normal, while May was warmer than normal in southern BC (typically 1-3°C above normal). Interior BC generally experienced very dry conditions throughout this spring (March-April-May), some rainfall in April, while March and May were very dry (areas experiencing approximately 30-65% of normal rainfall amounts in May). In early June, cooler weather and some precipitation developed in southern BC before hot and dry conditions returned.

Spring Snowpack and Streamflow

Snowpack indices for June 1st have continued to drop as a result of warm temperatures and rapid snowmelt and were 1% and 4% for the Similkameen and Okanagan Basins, respectively. Low early June snowpack resulted from early snowmelt that occurred 1-3 weeks ahead of normal. June 1st snowpack was similar to 2015 and 2016 conditions when early snowmelt also occurred. As a result of the early snowmelt, discharge of rivers within the Okanagan and Similkameen Basins is receding from the spring freshet and more closely reflects early-to-mid July conditions, rather than early June conditions.

Outlook

The short-term BC forecast (mid-June to mid-July) calls for high pressure building into the second week of June, with temperatures expecting to rebound to seasonally hot conditions. Seasonal forecasts from Environment and Climate Change Canada favor an increased likelihood of above normal summer temperatures (June-July-August). There is a high probability (60-90%) of above normal temperatures for each of the individual summer months and collectively.

Osoyoos Lake Levels, Drought Criteria, and Order Compliance

Osoyoos Lake levels have remained within the rule curve for the 2019 calendar year through June 2019. Levels surpassed 912.0 ft on June 11 following granting of the Condition 10 variance allowing adaptation of the drought rule curve through September 30th, and lake levels expected to continue to rise to store additional water.

Drought criteria for Osoyoos Lake have been partially met. Similkameen discharge peaked on May 18 at 10,400 cfs (294.5 cms), and are currently at 2,200 cfs (62.9 cms). The current cumulative flow is 686,539 ac-ft, while the Water Supply Forecast for cumulative flow is 714,000 ac-ft (April through July), which is below the 1,000,000 ac-ft threshold, and triggers Condition 8a for declaring drought. The Okanagan Lake Cumulative Net Inflow is currently at 190,990 act-ft, and appears to be stable or decreasing, which suggests that the Condition 8b (i) numerical criteria may be met for drought declaration, but has not to date. The daily mean Okanagan Lake level reached the Condition 8b (ii) threshold of 1,122.6 ft on June 10, which means this criteria has not been satisfied for drought declaration. The current mean daily Okanagan Lake level (June 16) has dropped to 1,122.55 ft (342.164 m), and appears to be decreasing.

The BC River Forecast Centre will be requested to run the Okanagan Lake net inflow forecast model again to determine the final July 31st Okanagan Lake net inflow. Should the final net inflow remain below 195,000 act-ft, it is recommended that the Board declare a drought because Condition 8a and 8b (i) numerical criteria are met.

5. PLANNED OSOYOOS LAKE LEVELS AND 2019 CONDITION 10 VARIANCE

Due to below normal snowpacks and concerns for late summer and early fall in-stream flow needs and irrigation demands, the Applicant officially made a Condition 10 variance request on May 30th, to bring Osoyoos Lake levels up to 912.5 ac-ft. The request was discussed by the Board during a Special Conference Call on June 1st, and recommended to the IJC for on June 2nd. The IJC approved the request on June 7th, after which the Board sent a letter to Mary Verner (WADOE) "the Applicant" on June 8th. The variance is active to the end of the current water-year (September 30). The Board agreed that the Applicant should bring lake levels as close to 912.5 ft as possible, and keep them there within reason. It was indicated that return ramping rates are not specified in the Order, other than returning to a lake level to 911.5 by November 1st.

Because of uncertainty about whether Okanagan Lake net inflow (April through July) will be greater than or less than 195,000 ac-ft, BC River Forecast Centre will be asked about running additional Okanagan Lake net inflow models to confirm whether Condition 8 drought criteria are met. If new Okanagan Lake net inflow forecasts do not exceed 195,000 ac-ft by July 31,

Board secretaries will draft a Condition 8 Drought Declaration recommendation letter to the IJC for review and approval. A Condition 8 drought declaration would not change dam operations for the Applicant due to the Condition 10 variance and will be formally communicated to the Applicant if Condition 8 is approved.

Paul Allen (IJC – Canadian Section) requested that a press release be prepared for the Condition 10 Variance. IOLBC Secretaries to complete, and that a second press should be released should the Board recommend a Drought Declaration.

6. IWI PROPOSAL UPDATE

The IOLBC IWI Similkameen Hydrologic Model proposal was well received by the IJC, but that additional justification will need to be provided for the \$75,000 USD budget. A lower cost was deemed possible under a competitive bid process. The Board discussed options for the most cost effective and experienced contractor. Questions arose as to how the model will be stewarded in the future. The IOLBC IWI Model sub-group was to handle the additional justifications requirements.

7. OBWB MODEL UPDATES

Okanagan Basin Water Board has contracted with a consultant to develop hydrologic and hydraulic models of the Okanagan River and Okanagan Basin. The hydrologic model will incorporate current climate and future project climate as well as dam operations and the hydraulic model will use output from the hydrologic model to estimate flood levels within the Okanagan River. The project is underway although with some delays with the bathymetry study due to spawning beds. ECCC hydrometric stations had to get re-surveyed, which will then allow for model calibration. Project forecasted to be completed in March 2020.

8. ZOSEL DAM WEBCAM AND LAKE MONUMENT UPDATE

The Zosel Dam webcam has been published on the USGS webpage and will be linked from the IOLBC webpage. The camera shows an image of the day during daylight hours and is updated hourly.

High Water Monuments were installed in Canada near the Osoyoos Lake Memorial Fountain (east side of Hwy 3 Bridge over Osoyoos Lake) in March, however monument marks were

installed using incorrect datum. They will require adjustment once lake levels are lowered in summer. Monuments for the U.S. side will be installed in Fall 2019.

9. ANNUAL BOARD MEETING PREPARATION

Martin Suchy (Canadian Section Secretary), provided an update to the Board on planning for the Annual Board and Public meetings, along with the Field Trip Tour. IJC advisors had indicated that at least one IJC Commissioners from each section are likely to attend. 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 Osoyoos Community Centre. The field trip tour will likely include both Okanagan Lake Dam and Zosel Dam to provide context to new IJC Commissioners. Representatives from Global Affairs Canada and U.S. Department of State will likely attend Board and Public meetings as observers.

10. ROUND TABLE

- Ford Waterstrat contributions to the Board were acknowledged.
- Next call planned for September 10, agenda to focus on Annual Board and Public meeting planning.

STATUS OF ACTION ITEMS

New Action Items

- 1. IOLBC Secretaries to prepare press release for Condition 10 Variance approval.
- 2. Board Secretaries to add update on Board website to indicate installation of new High-Water Monuments.
- 3. 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.
- 4. Board Secretaries to draft Drought Declaration recommendation letter to the IJC for review and approval, should new model results confirm the findings.

In Progress

- 5. Board Secretaries will continue to look into availability of additional bathymetric data for Lake Osoyoos.
- 6. 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.
- 11. Board Secretaries to update Reports and Meeting Minutes on webpage

Completed (since last quarterly call)

- 12. IOLBC Secretaries to follow up with the Applicant regarding spring water level plans.
- 13. Canadian and U.S. Secretaries to work with Board Members Anna Warwick Sears and John Arterburn to develop a draft plan for vertical climate change pilot. Draft will be presented to the Board for review, then submitted to the IJC in Early May.
- 14. IOLBC Secretaries to track snow pack stations and drought potential, and follow up with the Applicant regarding spring water level plans. If needed, Secretaries will recommend a special April/May conference call to the Board to discuss drought considerations.