

INTERNATIONAL OSOYOOS LAKE BOARD OF CONTROL
Conference Call
Tuesday March 9, 2021 at 9:00 PM – 11:00 AM PST

BOARD MEMBERS

Dave Hutchinson	Chair, Canadian Section
Cindi Barton (meeting Chair)	Chair, 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
John Arterburn	Board Member, U.S. Section
Col. Xander Bullock (absent)	Board Member, U.S. Section
Kris Kauffman (absent)	Board Member, U.S. Section
Arnie Marchand	Board Member, U.S. Section

BOARD STAFF and BOARD MEMBER ASSISTANTS

Andy Gendaszek	Secretary, U.S. Section
Martin Suchy	Secretary, Canadian Section
Lt. Col. Mark DeSantis	Representative for Colonel Xander Bullock
Kevin Shaffer	Technical Assistant to Colonel Xander Bullock

IJC REPRESENTATIVES and GUESTS

Wayne Jenkinson	Engineering Advisor, Canadian Section
Mark Colosimo (absent)	Engineering Advisor, U.S. Section
Paul Allen	Communications, Canadian Section
Norman Barth	Senior Advisor, U.S. Section
Adam Greely	Senior Advisor, U.S. Section

1. Review and Approval of the Agenda

The conference call was started at 9:10 AM and led by Cindi Barton (U.S. Co-Chair). Prior to starting, Wayne Jenkinson (IJC Canadian Section Engineering Advisor) announced that he taking an interchange assignment with Environment and Climate Change Canada, and would be stepping away from his IJC role at the end of March, 2021, and that a replacement Engineering Advisor would be named shortly.

The agenda was reviewed and accepted with the deferral of Agenda 2 (WADOE update on Zosel Dam access), to the June 2021, call.

2. Zosel Dam Access Update from WADOE

Removed from March 2021 Agenda.

3. Approval of December Conference Call Minutes

The Board reviewed and approved the December conference call minutes. Anna Warwick Sears moved to approve the minutes, which was seconded by Sue McKortoff.

4. Approval of Annual Board Meeting Minutes

The Board reviewed and approved the 2020 IOLBC Annual Board meeting minutes, with no changes. Anna Warwick Sears moved to approve the minutes, which was seconded by Dave Hutchinson.

5. Approval of Annual Public Meeting Minutes

The Board reviewed and approved the 2020 IOLBC Annual Public meeting minutes, with no changes. Sue McKortoff moved to approve the minutes, which was seconded by John Arterburn.

6. Approve 2021/2022 Workplan Changes

The Board reviewed and approved the 2021/2022 Work Plan with the following changes:

- On the title page, Col. Mark Gerald was replaced by Col. Alexander Bullock and Arnie Marchand was added.
- Under “Ongoing Core Activities”, item 6) text was changed to ensure Board news is communicated to the public more regularly through news releases, while item 16) text was added to ensure this also included relevant presentations from other Boards with similar issues.
- Under the “2021 Priorities”, item 3) Kevin Shaffer (technical advisor to Col. Alexander Bullock) to reach out to stakeholders about obtaining manual staff gauge readings for both above and below Zosel Dam. Item 4) change text to specifically address water demand model need for US part of basin; OBWB has a water demand model for the Canadian part of the basin.

Cindi Barton moved to approve the updated Work Plan, which was seconded by Kris Kauffman.

7. Hydrologic Conditions and Climate

Snowpack

The March 1st BC Snow Water Indices for the Similkameen and Okanagan basins are 124% and 120% greater than normal, respectively, and the percentages above normal have increased since February 1. Individual snow pillow station results for low, mid, and high elevations in the two basins were presented, with all stations reporting SWE near the 75th historical percentile, although accumulation has decreased in recent weeks.

Hydrology and Operations

Similkameen River discharge has remained at or near historical mean daily discharge since early January, except for a decrease in mid-February due to an ice jam. In the near term, Similkameen discharge is forecast to remain at similar flows with the potential to slightly decreasing. The Northwest River forecast Center (NWRFC) Similkameen Water Supply Forecast for April-Jul is currently 1,349 acre-ft, which exceeds the drought declaration threshold of 1 million acre-feet.

Similarly, Okanagan Lake levels continue to decrease, and remain near historical mean levels, currently at 1,120.73 ft (341.6 m). Shaun Reimer (Ministry of Forests, Lands, Natural Resource Operations, & Rural Development), currently estimates Okanagan Lake levels to peak near 1,122.97 ft in June or July, above the 1,122.6 ft drought declaration threshold. The Okanagan Lake net inflows for the period April to July is currently forecast at 441 k acre-feet, well above the 195 k acre-feet drought threshold.

Discharge of the Okanagan River at Penticton and Oliver both remain above historical mean levels, currently 740 cfs (20.9 cms) and 802 cfs (22.7 cms), respectively.

Osoyoos Lake level is currently at 909.67 feet, within the normal conditions rule curve, and has yet to begin rising due to spring freshet. Lake levels did peak slightly in mid-February due to an ice jam at the lake outlet but remained within allowable levels defined by the rule curve and returned to pre-jam conditions within two weeks. During the ice jam, discharge of the Okanogan River at Oroville declined briefly but remain above historical mean daily levels, currently 905.1 cfs.

Climate Outlook

The short-term weather forecast for Penticton indicated generally below freezing temperatures, with minimal precipitation in the coming 10 days. A La Nina advisory continues to be issued by U.S. and Canadian authorities, with a near 60% probability persisting through March-April-May, but decreasing below 50% for April-May-June. As a result, probabilistic forecasts for March-April-May in the region are near normal for both temperature and precipitation.

8. 2020 Annual Report update

The Secretaries provided an update on the development of the 2020 Annual Report, indicating it would be ready for distribution to the Board for review with a few weeks. Comments will be requested back by the end of March, then sent to the IJC prior to the Spring Semi-Annual Appearances.

9. Similkameen Hydrologic Model DRAFT report

The Secretaries provided a summary of the Phase I - Similkameen Hydrologic Model Draft Report, which was developed by NHC under IWI project funding.

The model used the Raven hydrologic framework and evaluated hydrologic changes up to 2100. The process determined no obvious bias in snow data calibration, good hydrograph calibration and validation and overall a strong confidence to carry out the project objectives. Model results indicate that total precipitation is expected to increase in all months except July to September (which are expected to stay the same), but an overall decrease in winter snowfall accumulation, but more winter rain, with mid elevations most affected. Under the worst-case climate warming RCP 8.5 scenario, basin temperatures are expected to rise by 3-4 °C, resulting in changes to basin hydrology. Snowpack capacity to lose solar heat at night will decrease, prompting accelerated snowmelt. The shift from winter snowfall to winter rainfall will decrease spring freshet, but the annual flow yield is expected to increase. The magnitude of peak flows is not expected to change; however, the timing will shift from extreme peaks in May to early fall, potentially as early as 2050's. Overall, the shape of the hydrograph is expected to change to a mixed regime more typical of the Coast Mountains. Furthermore, the median year freshet volume for the period April – July is expected to be < 1 million acre-feet, resulting in 52% of years predicted to be below the Osoyoos Order of Approval Condition 8ai drought declaration threshold. Additionally, these changes will decrease the ability to predict summer flows based on freshet volumes, and other techniques may be required.

Board members were asked to provide comments, which the secretaries will summarize and return to the contractor for inclusion in the final report, expected for delivery on March 31. Key comments from Board members included: the inclusion of duration frequency plots, adding plots for water demand changes over the model time period, examining the duration of flows > 10,000 cfs since we expect to see shorter duration events on the Similkameen River with similar intensity.

10. Phase II Similkameen / Okanagan hydrologic model integration update

Secretaries provided an update on the Phase II contract with NHC, which aims to integrate the Similkameen and Okanagan models. The IJC must make some changes to the statement of work to address some sole source requirements, but it is hopeful the project will commence in the coming months.

11. Fall 2021 Osoyoos Lake Water Science Forum

Canadian Section Board member Anna Warwick Sears, who is the forum co-chair along with Al Josephy, along with both secretaries provided an update on the preparations for the Osoyoos Lake Water Science Forum (OLWSF). The Steering Committee held its kick-off meeting on December 17th, at which a modified forum format was proposed, which would see shorter 5-6 mins technical talks followed by discussion panels with indigenous facilitators, similar to the Ecological Flow Needs conference held in Kelowna in 2018. The Okanagan nation Alliance (ONA) appears to be in full support of the conference. The forum is planned with an initial reception at the Cultural Center, followed by the Town of Osoyoos Sonora Center (with ~150 people capacity) venue, and will be a combination of in-person and virtual participation. Plans include a half-day field trip and is hoped to have strong school participation. Forum finances are progressing, including a recent funding submission to the real Estate Foundation, while a list of potential sponsors is also being developed. The total budget is expected to be approximately \$90 k, with \$40 k of in-kind and cash being confirmed. Steering, Program and Finance Committee meeting will be planned monthly for now but will likely increase.

12. Action Items

In Progress.

1. Develop workplan to engage Tribes and First Nations within the Okanagan/Okanogan and Similkameen Basins;
2. Investigate the extension of inundation maps south of border into Washington State and post on Board website;
3. IJC guidelines for outside participation (Agencies such as the U.S. Department of State (DOS), Global Affairs Canada (GAC), Tribal and First Nations) in quarterly conference calls and Board meetings. Board Secretaries waiting for official guidance document for IJC. Continue with interim guidance;
4. Board Secretaries to add Osoyoos Lake inundation maps to IOLBC webpage. Canadian inundation maps have been created, but extend only to US/Canada border;
5. Board Secretaries to add update on Board website to indicate installation of new High-Water Monuments. Waiting for the US Veterans Memorial Park monument to be completed in order to update the website. Town of Oroville is ready to do whatever they need to do to assist with this;

6. Improve knowledge of the Osoyoos lake water balance (both US and Canadian side); and
7. Track USGS Enloe Dam sediment quality project.
8. Invite Trevor Hutton (the new technical representative of the Applicant), to introduce himself to the Board at the Board's March conference call.

Completed Items

1. Secretaries to watch for the schedule release of the BC Snow and Water Supply Bulletin in 2021 before proposing IOLBC quarterly conference call dates for 2021.
2. Update 2020-2021 Work Plan document;
3. Update Board website with September 2020 conference call minutes;

New Items