

MINUTES
International Osoyoos Lake Board of Control
Annual Meeting

The Oroville Depot
1210 Ironwood Street,
Oroville, Washington

Monday September 24, 2012
2:30 PM

Attendance

| | United States | Canada |
|-------------|---|--------------------------------|
| Chairs | Dr. Cynthia Barton (host) | Kirk Johnstone |
| Members | Col. Bruce Estok Kris Kauffman | Glen Davidson Brian Symonds |
| Secretaries | Larry Merkle - acting for Sue Kahle | Gwyn Graham |
| Guests | Commissioner Rich Moy (IJC), Dr. Mark Colosimo (US Section, IJC), Ted Yuzyk (Canadian Section, IJC), Al Josephy (WA Dept of Ecology), Bruno Tassone (Environment Canada). | |

Minutes

1. Introductions

Dr. Barton welcomed and led introductions of the Board members and guests.

2. Review of the Agenda. Following items were added:

IJC's 21 September 2012 Draft Directive to the Board will be covered with discussion of "States Application."

"Annual Meeting Scheduling to Avoid Conflict with Meeting of BC Government Officials" will be added at the end of "New Business" as paragraph 4.6.

3. Business from Previous Meeting

2011 Minutes approved with general agreement to remove personal information from reasons for absence from Board meetings, or similar.

3.1 Study 2&3 Corrections

No response has been received from the author of Studies 2 and 3 (Jim Mattison w/ Urban Systems) regarding corrections to these studies. Note: The author alluded to potential need for "minor correction"

during presentation at Osoyoos Lake Science Forum, Sept.24, 2011). Kirk Johnstone will attempt further follow-up with Jim Mattison. Note: Option to flag issue next to report on IJC website.

3.2 Detection of Flow Reversal

No flow reversal was observed using USGS Acoustic Doppler Current Profiler (ADCP) gages located at Zosel Dam in 2011; that is, no specific change in flow direction was observed. It was suggested that dam operator consider digital photos of debris movement to help confirm flow reversal. Pattern of discoloration of water can be another indicator. Al Josephy indicated that while backwater effect from the Similkameen River (damming effect by high Similkameen river stage) is almost an annual event, actual flow reversal is rare.

3.3 Question Related to Compensation for Stipulations in Revised Order

Regarding questions related to compensation for stipulations in revised Osoyoos Lake Order, IJC advisors indicated that if there is no significant change in the flow regime from the old Orders, and the applicant is in compliance, compensation would not be required. A change to the rule curve wouldn't change the flow regime. If damage occurs when the applicant is not in compliance with the Order, then there would be a possible compensation requirement. It was noted that this should be explicit in renewed Order because there have been previous claims for compensation arising from objections to conditions in the earlier Orders.

3.4 Discussion of Proposed Revised Order with First Nations and Tribes

IJC advisors indicated that Commissioners and staff met with some members of the Osoyoos Band (First Nation) on July 25, 2012. No specific issues were raised with regard to the draft Order on behalf of the Osoyoos Band. Colville Tribe representatives were at the July 24 hearings representing fish biology and ecosystem interests and made several points with respect to the draft Order. IJC Advisors indicated that the IJC hearings and deliberations have to be open to everybody as opposed to targeting specific groups.

3.5 Zosel Dam Operating Procedures

The Oroville-Tonasket Irrigation District (OTID) continues to operate Zosel Dam under contract to the State of Washington, Department of Ecology. Tom Scott, the manager of OTID, is the OTID contact. A new operations manual is being developed as part of a renewal of the operations agreement with OTID. This will include procedures for monitoring discharge capacity in the channel upstream of the dam.

Al Josephy provided an overview of a cross-channel improvement project undertaken by the Colville Tribes, which resulted in the construction of a boulder-weir on a cross channel between the Okanogan River and Similkameen River in 2010. The weir has been operating for 2 years and appears to be effective in keeping salmon and steelhead reds in Okanogan River submerged during low flow periods, with the added advantage of minimizing the discharge required at Zosel Dam for this in-stream flow need. Al identified the key problem for returning fish as a lack of sufficiently cold water. Each spring, there is a meeting between BC and WA on water management issues for fish in the Okanogan/Okanogan system.

4. New Business

4.1 & 4.2 Public Comments on Order Renewal and WA State Application.

The Board discussed renewal of the IJC Order for Osoyoos Lake and reviewed the various steps that have been undertaken to date, including: Plan of Study, conduct of studies, presentations on the studies (Osoyoos Lake Science Forum – September, 2011), the IJC hearings (July, 2012) and public comment period (August, 2012). Transcripts of the hearings and compilation of comments received have been recently circulated to Board members. On September 17, 2012, IJC provided the Board with a Supplemental Order which is a revision to the draft Order which Board submitted to IJC on June 22,

2012. In the absence of an application by the State of Washington, the IJC may consider acceptance of a revised Order to constitute the application. Al Josephy indicated that Washington Department of Ecology (WADOE) will need more time to consider the September 17 draft Supplemental Order and the State may forward comments to the IJC. The renewal application for Zosel Dam from the State is still being working on. There is increasing effort on consultation with stakeholders and other interests. The State of Washington Attorney General is conducting a legal review in consultation with the Governor's attorney. Mr. Josephy acknowledged the urgency of Order Renewal but mentioned several issues that are of concern to the State including: liability and indemnification; water rights; channel sedimentation, and the cost of dredging. Mr. Colosimo stated that IJC plans to follow the same practice for Order renewal as in past cases.

Al Josephy asked what happened to the 912.5 ft. lake level upper bound particularly as an upper operating bound during dry seasons. IJC advisors replied that the target had been lowered to 912 ft. as compromise due to high water concerns by residents. Mr. Josephy indicated under the previous drought criteria which allowed storage up to 913 ft., that a "hand-shake" agreement with BC resulted in a lower water level than the allowable maximum, to minimize high water impacts. Mr. Josephy indicated that the tentative plan of operation under the new Order would be to operate near the top of the allowable range, for example, elevation 912.3 in most years. Board Members expressed concern with a plan that anticipates being near the 912.5 limit in most years as that would conflict with sentiments expressed by the public at the hearings and suggested that the draft Order should be revised to assure operation more in accord with the public need. There was agreement that in most non-drought years, the 911 to 911.5 target has worked well. Comments from Board members pointed to the lack of an application from the State as creating uncertainty with regard to Zosel Dam operations, adaptive management approaches, and resulting lake level effects.

The Board agreed to meet via conference call to discuss the provisions of the IJC draft Supplemental Order following a question from Commissioner Moy about the possible need for further hearings and an expression of interest from the IJC advisors in receiving feedback from the Board. The Board also plans to discuss the 19 September 2012 IJC Board Directive at the next conference call. The date of the conference call was tentatively set for October 11, 2012.

4.3 & 4.4 Hydrologic Conditions and compliance with Orders.

No drought was declared as conditions didn't trigger drought criteria.

Snow melt was fairly rapid through mid-elevations (~1500m) by early summer which resulted in an initial decline in Okanagan lake discharge. This resulted in a preliminary peak in lake levels above 911.5 ft. from late April through May (~912 ft in mid-May). A backwater effect from the Similkameen River also occurred during this period. Subsequent high rainfall, particularly in northern reaches of the Okanagan watershed, resulted in very high discharge rates with above channel design spill in portions of the Okanagan River during this second peak period. Osoyoos lake levels exceeded 911.5 ft. in early June through to beginning of August, finally receding below elevation 911.5 after the first week in August. There has been a record return run of sockeye salmon this year. The reported fish kill in Osoyoos Lake resulted from a high water temperature and low oxygen squeeze in the last week of August. Gates at Zosel Dam were fully open during the high water periods. Aside from the high rainfall conditions that caused the high water exceedances during the summer, lake levels were maintained in compliance with the Order over the period since the last annual Board meeting.

4.5 Zosel Dam Maintenance and Statement of Works

WADOE announced that Jerald (Jerry) Lavassar is the new Engineer of Record for Zosel Dam.

Chinook Salmon and Steelhead reds in the channel downstream of Zosel Dam can now be maintained submerged with ~150 cfs discharge instead of >250 cfs flows during low-flow period due to Colville Tribes construction of boulder weir at the downstream location..

The old forebay log boom was replaced with a new plastic design, arranged to deflect floating debris towards the East shore. It also saved a father and daughter who were caught drifting towards the dam after engine-failure on their jet-ski.

Annual inspection of the dam revealed a need to correct loss of anti-corrosion coating on side-wall metal sheet-piling. Patchwork is also required to address localized concrete spalling. Painting will be required to address localized corrosion in some areas of gate structure.

The past two years Zosel dam discharge has exceeded 2650 cfs at lake elevations less than 913.0, thus confirming the channel capacity requirement in the Order. A channel capacity survey may be conducted next spring.

4.6 Annual Meeting Scheduling to Avoid Conflict with Meeting of BC Government Officials

Scheduling of the 2012 annual Board public meeting has conflicted with the annual meeting of the Union of BC Municipalities with the result that no elected officials (esp. municipal and regional) can attend the Board meetings. The Canadian Board secretary has received several complaints and will strive to obtain early information on the UBCM meeting schedule in advance of scheduling future Board of Control meetings.

5. Review of the Agenda for the Public Meeting

Board members reviewed and approved the agenda for the evening's meeting with the public.

Adjourn

Dr. Barton adjourned the meeting.