

**INTERNATIONAL JOINT COMMISSION  
IN THE MATTER OF THE APPLICATION OF THE STATE OF WASHINGTON FOR  
APPROVAL TO CONSTRUCT A CONTROL STRUCTURE NEAR THE OUTLET OF  
OSOYOOS LAKE**

**SUPPLEMENTARY ORDER OF APPROVAL**

**January 29, 2013**

WHEREAS:

The Commission on 12 September 1946, in response to an application by the State of Washington, issued an Order of Approval for Zosel Dam subject to several conditions which included alterations that would provide a flow capacity of 2,500 cubic feet per second, when Zosel Dam forebay elevation is 911.0 USCGS;

The Commission on 28 April 1982 issued an Order of Approval, revised on 9 December 1982, approving the construction, maintenance and operation of a control structure and related works on the Okanogan River downstream from the outlet of Osoyoos Lake to replace Zosel Dam;

The Commission on 17 October 1985 issued a Supplementary Order of Approval which amended Conditions 1, 2, 4 and 5 of the 9 December 1982 Order of Approval;

The USCGS datum is equivalent to the National Geodetic Vertical Datum of 1929 (NGVD 1929);

The 9 December 1982 Order of Approval included a drought criteria 8(c) that referred to the failure or forecasted failure of Okanogan Lake to reach an elevation of 1122.8 feet Canadian GSD that has been recorded at Water Survey of Canada Station 08NM083 – Okanogan Lake at Kelowna, and subsequent general resurveying of the geodetic benchmarks and datum in the region has resulted in a change in the conversion factor of those recordings so that 1122.8 feet is equivalent to 1122.6 feet with the conversion factor in use in 2012;

The Applicant has completed the actions required by Conditions 3, 6 and 12 of the 9 December 1982 Order of Approval, and completed Condition 5 of the 9 December 1982 Order of Approval as amended by Condition 4 of the 17 October 1985 Order of Approval;

The 9 December 1982 Order contains a provision that the Commission's approval will terminate twenty-five years after completion of construction, unless renewed and the 17 October 1985 Supplementary Order contains a provision that the Commission's approval will terminate

twenty-five years after the Board of Control has informed the Commission that construction has been completed, unless renewed;

The Commission's International Osoyoos Lake Board of Control appointed under Condition 14 of the 1982 Order notified the Commission by letter dated 20 April 1988 that the final phase of project construction as approved by the 1982 and 1985 Orders, was completed on 22 February 1988 thus defining 22 February 2013 as the date that approval under the 9 December 1982 Order of Approval will terminate, unless renewed, and defining 20 April 2013 as the date that approval under the 17 October 1985 Supplementary Order of Approval will terminate, unless renewed;

The Commission's review process began in October of 2000 with the development of a workplan by the International Osoyoos Lake Board of Control identifying issues for consideration during the review of the 9 December 1982 Order, as amended. A Plan of Study was finalized in 2006 and eight studies completed in 2011. Public consultation on the study outcomes was received at International Osoyoos Lake Board of Control meetings and at two Osoyoos Lake Water Science Forums held in 2007 and 2011;

The International Osoyoos Lake Board of Control submitted to the Commission a report on Recommendations for Renewal of the IJC Osoyoos Lake Order on 21 June 2012 documenting the outcomes of the environmental and operational studies pertinent to Order renewal and providing recommendations for Conditions and considerations to be recognized in the Order renewal process;

Pursuant to published notices public hearings were held at Oroville, Washington on 24 July 2012 and Osoyoos, British Columbia on 25 July 2012 on the Board's report recommendations for the Osoyoos Lake Order, at which all persons attending and interested were afforded a convenient opportunity to be heard and present evidence to the Commission. The Commission also received written comments from the public through 31 August 2012. Copies of the transcript of the public hearings and written comments received are on file and available for examination at the offices of the Commission in Washington and Ottawa;

The Commission also sought comments on the Board's report at a Commission meeting with First Nations' representatives held on 25 July 2012 on the Osoyoos Indian Band reserve;

The representative from the State of Washington, Department of Ecology provided comments to the Commission on behalf of the Applicant and the Province of British Columbia provided information to support the Board's recommendations for Order renewal;

It is the understanding of the Commission that the Applicant and the Province of British Columbia continue to work together to update the "British Columbia Washington State

Cooperation Plan for Osoyoos Lake Levels and Trans-Border Flows", dated October 1980, that was prepared by the Department of Ecology of the State of Washington and the Ministry of Environment of the Government of British Columbia;

At the public hearings held 24-25 July 2012 and through written comments received by the Commission several issues were raised, including: that a sustained maximum lake level of 912.5 feet would be too high because of concerns about flooding, erosion, riparian habitat, endangered species and navigation; and that seasonal transitions over a specified period were preferred to abrupt lake level changes on fixed dates;

Hydrological analyses indicate that the level of Osoyoos Lake has, and probably will again, exceed elevation 913.0 NGVD 1929 at least every other year and for a duration varying from two days to two months, that the probable recurrence interval of the lake level exceeding elevation 915.0 is 10 years and that in 1972 Osoyoos Lake level peaked at elevation 917.1 NGVD 1929;

During the Osoyoos Lake Water Science Forums of 2007 and 2011, and the hearings held 24-25 July 2012 public interest was expressed toward the formation of an International Watersheds Initiative (IWI) Board that could assist in improving the ecological health of the Okanogan watershed and in preventing and solving cross-border problems;

The Commission has heard that the waters of Osoyoos Lake and the Okanagan River are valued by both countries and they help to sustain important migratory runs of salmon which are highly valued by all, particularly the Okanagan Nation and the Colville Tribes, therefore care shall be taken to consider ecosystem values in management of these waters;

The Commission has heard from local citizens a need for forecasts of Osoyoos lake levels for the benefit of all interests and recommends that further science and methods be explored to enhance information sharing and communication with stakeholders;

**NOW THEREFORE THIS COMMISSION ORDERS AND DIRECTS** that the Order of Approval of 9 December 1982, as amended by the Supplementary Order dated 17 October 1985, for the construction, maintenance and operation, by the Applicant, or the successor or assign of the Applicant, of a control structure and related works, herein called the works, on the Okanogan River located downstream from the outlet of Osoyoos Lake is hereby renewed and further amended as follows:

Condition 5 of the 9 December 1982 Order of Approval as amended by the 17 October 1985 Supplementary Order is amended by adding the following:

5. The Applicant shall maintain the works as constructed under the 9 December 1982 and 17 October 1985 Orders. The Applicant, in consultation with the Board of Control appointed under Condition 14, shall apply to the Commission for any substantive changes to the works.

Condition 7 of the 9 December 1982 Order of Approval is deleted and the following substituted therefor:

7. The Applicant shall operate the works, except under drought conditions in the Okanogan Valley (in Canada Okanogan Valley) as defined in Condition 8, so as to the extent possible the elevation of Osoyoos Lake does not exceed NGVD 1929 elevation 911.5 on 1 January; 911.5 on 1 March; 912 on 1 May; 912 on 15 September; 911.5 on 1 November and 911.5 on 31 December; and to the extent possible the elevation of Osoyoos Lake does not fall below the NGVD 1929 elevation of 909.0 on 1 January; 909.0 on 31 March; 910.0 on 1 April; 911 on 1 June; 911 on 15 September; 910.0 on 31 October; and 909.0 on 1 November and 909.0 on 31 December. Elevation limits are to be linearly interpolated between dates (See Figure 1).

Condition 8 of the 9 December 1982 Order of Approval is deleted and the following substituted therefor:

8. During a year of drought as determined by the Board of Control in accordance with the criteria (a) and either (b i) or (b ii) set forth below, the Applicant may operate the works to raise the elevation of Osoyoos Lake, in a manner considering fisheries interests, up to 912.5 NGVD 1929 during the period 1 April to 15 September, after which the lake level shall be decreased to reach elevation 911.5 NGVD 1929 by 1 November; and the Applicant shall operate the works so that to the extent possible the elevation of Osoyoos Lake does not fall below the NGVD 1929 elevation of 909.0 on 1 January; 909.0 on 31 March; 910.0 on 1 April; 910.5 on 1 June; 910.5 on 15 September; 910.0 on 31 October; and 909.0 on 1 November and 909.0 on 31 December. Elevation limits are to be linearly interpolated between dates (See Figure 1).

The criteria are:

a) the volume of flow in the Similkameen River at Nighthawk, Washington for the period April through July as calculated or forecasted by United States authorities is less than 1.0 million acre-feet and

b)

i) the net inflow to Okanogan Lake for the period April through July as calculated or forecasted by Canadian authorities is less than 195,000 acre-feet or

ii) the level of Okanogan Lake fails to or is forecasted by Canadian authorities to fail to reach during June or July elevation 1122.6 feet Canadian Geodetic Survey Datum.

Drought year operations shall be terminated when in the opinion of the Board of Control

the conditions no longer meet the criteria defining a drought year. The elevation of Osoyoos Lake shall then be returned to and maintained in accordance with Condition 7 in the shortest practicable time while respecting ramping rates that may be specified by the Board of Control from time to time.

Condition 9 of the 9 December 1982 Order of Approval is deleted and the following substituted therefor:

9. During appreciable backwater conditions caused by flow in the Similkameen River, particularly during the freshet period, and during abnormal excessive inflows to Osoyoos Lake, the Applicant shall operate the works so as to maintain the level of Osoyoos Lake below or as near as possible to the elevations described in Conditions 7 and 8 herein. In the event that lakes elevations deviate from the Conditions 7 and 8, the Applicant in consultation with the Board of Control shall make every effort to return Osoyoos Lake levels to the required levels in the shortest practicable time while respecting ramping rates that may be specified by the Board of Control from time to time.

Condition 10 of the 9 December 1982 Order of Approval is deleted and replaced by:

10. In the event of circumstances requiring temporary variation from the levels prescribed in this Order, the Commission upon written advice and recommendation from the Board of Control may allow a temporary deviation from the levels prescribed in Conditions 7 and 8.

Condition 13 of the 9 December 1982 Order of Approval is deleted and the following substituted therefor:

13. All levels of Osoyoos Lake shall be defined as those measured at the International Gauging Station known as "Osoyoos Lake near Oroville, USGS Station Number 12439000" and shall be expressed in terms of NGVD 1929 datum.

Condition 14 of the 9 December 1982 Order of Approval is deleted and the following substituted therefor:

14. The Commission shall appoint a Board of Control to be known as the International Osoyoos Lake Board of Control with an equal number of members from each country to ensure compliance with the provisions of this Order. The duties of the Board shall be to execute the instructions of the Commission as issued from time to time with respect to this Supplementary Order. The Commission shall issue a directive to the Board to include reporting requirements, and may include adaptive management functions and, should authorization be given by the Governments of the United States and Canada, possible expansion to an IWI Board. The Board shall keep the Commission currently informed of all matters relating to this Order and report promptly any violation of this Order to the Commission and compliance by the Applicant with

any instructions of the Commission as may be issued from time to time with respect to this Order. The Board shall submit reports to the Commission at such times as the Commission may determine. These reports shall include all hydrological, operational, maintenance information and diversions from Osoyoos Lake as may be required. In the event of a disagreement amongst the members of said Board of Control which they are unable to resolve, the matter shall be referred by them to the Commission for decision.

Condition 15 of the 9 December 1982 Order of Approval is deleted and the following substituted therefor:

15. The Applicant shall maintain the works to State of Washington safety standards and in a manner satisfactory to the Board of Control.

Condition 16 of the 9 December 1982 Order of Approval is deleted and the following substituted therefor:

16. The Applicant shall require that all water rights issued subsequent to the date of the 9 December 1982 Order for the diversion of water upstream from the control structure contain the condition that the diversion be terminated when the elevation of Osoyoos Lake drops below elevation 910.5 NGVD 1929.

A new Condition 18 is added to the 9 December 1982 Order of Approval by the addition of the following:

18. The Applicant shall timely publish and update on its website the current status of dam operations and planned operations.

This Supplementary Order shall be subject to review no later than 25 years following the date of its adoption, or as otherwise determined by the Commission. The review shall, at a minimum, consider monitoring information collected by natural resource management agencies and others during the interim that may indicate the effect of the changes contained in this Supplementary Order.

And it is further ordered that the Commission retains jurisdiction over the subject matter of this Supplementary Order, and may, after giving such notice and opportunity to all interested parties to make representations as the Commission deems appropriate, make such further Order or Orders relating thereto as may be necessary in the judgment of the Commission.

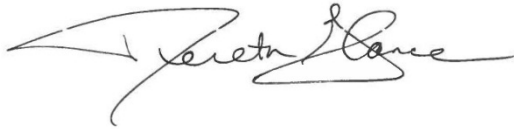
Signed this 29th day of January, 2013.



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Figure 1

