

**ANNUAL REPORT
to the
INTERNATIONAL JOINT COMMISSION
from the
INTERNATIONAL OSOYOOS LAKE BOARD OF CONTROL
for
CALENDAR YEAR 1996**

1. ACTIVITIES OF THE BOARD

The International Osoyoos Lake Board of Control was established on February 12, 1986, by the International Joint Commission to carry out the provisions of the Commission Order of Approval dated December 9, 1982, and the Supplementary Order of Approval dated October 17, 1985.

The Board met in Oroville, Washington, on September 25, 1996, and also held a public meeting that day.

2. OPERATION AND MAINTENANCE OF ZOSEL DAM

a. Osoyoos Lake Elevations

Levels of Osoyoos Lake were controlled by Zosel Dam throughout the year in accordance with criteria specified in the Order of Approval. The authorized range of normal operating elevations, 909.0 to 911.5 feet, is shown by the blue area in appendix I. The grey area on appendix I shows the authorized range of elevations, 910.5 to 913.0 feet, that may be used to provide additional storage from April 1 to October 31 if drought conditions are declared by the Board. Drought conditions did not occur and criteria for normal operation applied during the year.

The Order of Approval recognizes that backwater from high flows in the Similkameen River or excessive flows in the Okanogan River can cause Osoyoos Lake levels to rise above the authorized range. This happened in 1996 when high river flows for the Okanogan River at Oroville gaging station and/or backwater from the Similkameen River near Nighthawk caused the lake level to exceed 911.5 feet during the periods April 10-14 and May 17 to July 6.

Recorded lake elevations for water years 1994-96 are shown on appendix I.

Data on Osoyoos Lake levels and relevant river flows are summarized in appendices II and III.

b. Drought Operation

Drought conditions did not occur during the year.

c. Zosel Dam

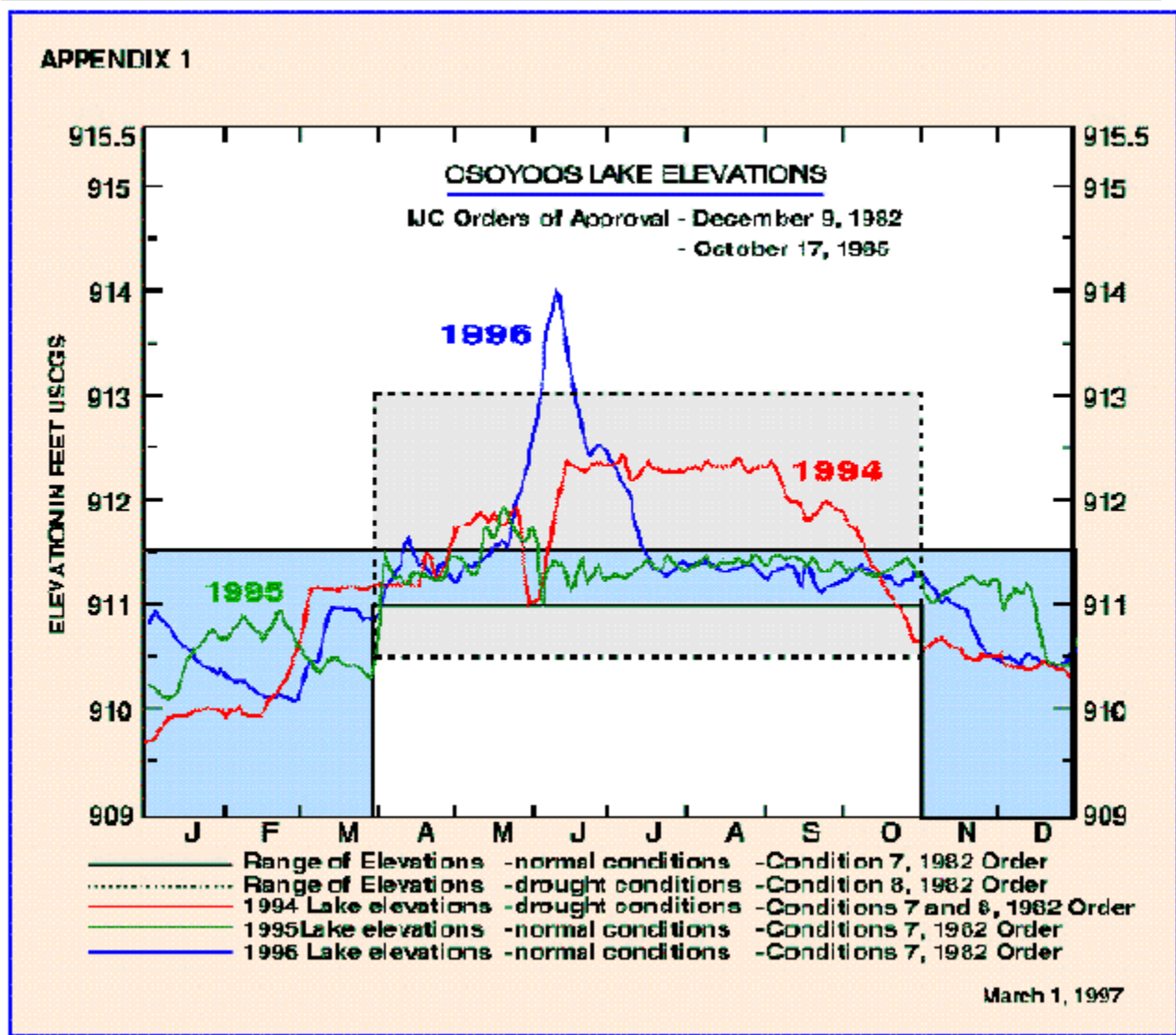
The Oroville-Tonasket Irrigation District operated Zosel Dam under the authority of the State of Washington, Department of Ecology. Levels on Osoyoos Lake were maintained for the year in accordance with the Commission's Orders of Approval.

3. IMPROVEMENTS TO THE OKANOGAN RIVER CHANNEL

The Board has obtained confirmation from the State regarding the capacities of the Okanogan River Channel. Water is able to be moved out of the lake, through the channel, and past the dam at a rate of 2,500 cubic feet per second with the lake at elevation 913.0 and no appreciable backwater effect from the Similkameen River.

The maximum instantaneous flow on the Okanogan River occurred on June 11 and 12 at Oroville and was 3,460 cubic feet per second. Osoyoos Lake mean daily elevations for these days were 913.88 feet and 913.70 feet, respectively; and the Okanogan River at Oroville was in backwater from the Similkameen River on these days.

The maximum elevation on Osoyoos Lake occurred on June 9 and 10 at 914.07 feet, and the mean daily discharge for these days was 2,790 and 3,140 cubic feet per second, respectively, at Okanogan River at Oroville.



APPENDIX II -- OSOYOOS LAKE LEVELS, INFLOWS, AND OUTFLOWS

A. International gaging stations in operation throughout the year:

(1) For Stage Records:

Osoyoos Lake near Oroville, Washington

Okanogan River at Oroville, Washington (auxiliary gage)

(2) For Discharge Records

Okanogan River near Oliver, British Columbia

Okanogan River near Oroville, Washington (base gage)

Similkameen River near Nighthawk, Washington

(3) Reports

Monthly summary reports of stage and discharge data were forwarded to the International Joint Commission and to the Board of Control members.

B. Compliance with the lake levels specified in the Orders of Approval is measured at the station "Osoyoos Lake near Oroville," where elevations are expressed in terms of USCGS datum.

C. Osoyoos Lake

Maximum daily mean elevation	278.529 meters (914.04 feet)	- June 9
Maximum instantaneous elevation	278.609 meters (914.07 feet)	- June 9 and 10
Minimum instantaneous elevation	277.402 meters (910.11 feet)	- February 27 and 28

D. Okanogan River at Oroville

Maximum instantaneous discharge	98.6cms (3,460 cfs)	- June 11 and 12
Maximum daily mean discharge	96.6 cms (3,410 cfs)	- June 12
Annual mean discharge	35.7 cms (1,262 cfs)	

The annual mean discharge was 187 percent of the 54-year average of 674 cfs.

E. Similkameen River near Nighthawk

Maximum instantaneous discharge	510 cms (18,000 cfs)	- June 8
Maximum daily mean discharge	496 cms (17,500 cfs)	- June 8

High river discharges and stages created backwater conditions for the Okanogan River at Oroville gaging station on May 17 to July 5.

APPENDIX III.--

