

FIFTY-NINTH ANNUAL REPORT
to the
INTERNATIONAL JOINT COMMISSION



from the
INTERNATIONAL COLUMBIA RIVER BOARD OF CONTROL
For
CALENDAR YEAR 2000

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**Summary of the Fifty-Ninth Annual Report
to the International Joint Commission by the International
Columbia River Board of Control
for the Calendar Year 2000**

The flow of the Columbia River at Grand Coulee Dam for the 2000 calendar year totaled 96,880 cubic hectometers (78,540,000 acre-feet), about 0.8 percent below the average observed in the 87-year period of record.

The instantaneous maximum discharge of the Columbia River at the international boundary was 4,870 cubic meters per second (172,000 cubic feet per second) on June 15, about 36 percent below the mean annual flood for the 63-year period of record, and ranking forty-ninth for the same period.

Instantaneous extremes of stage on Franklin D. Roosevelt Lake varied between elevations 392.366 meters (1,287.29 feet) on October 29 and 376.093 meters (1,233.90 feet) on May 19. The stage was 386.407 meters (1,267.74 feet) at midnight on December 31, 2000. Backwater at the international boundary varied during the year between 0.000 meter (0.00 feet) and 0.174 meter (0.57 feet). Backwater on December 31, 2000, was 0.015 meter (0.05 feet). Flashboards at Grand Coulee Dam were in place for all of 2000 and should remain in place in the future under normal conditions.

FIFTY-NINTH ANNUAL REPORT (For the Calendar Year 2000)

To: The International Joint Commission

From: The International Columbia River Board of Control

(1) The Order of the International Joint Commission dated December 15, 1941, in the matter of the Application of the United States for Approval of the construction and operation of the Grand Coulee Dam and reservoir (Franklin D. Roosevelt Lake), provided for the creation of an engineering board to be known as the International Columbia River Board of Control, to which the undersigned have been duly appointed. The order provides that the Board shall conduct studies under the supervision of the Commission as to the effect of the operation of Grand Coulee Dam and Franklin D. Roosevelt Lake upon water levels at and above the international boundary, and shall submit a report to the Commission annually.

(2) During the calendar year 2000, the United States Geological Survey continued the collection of information concerning the stages and discharges of Franklin D. Roosevelt Lake, and in cooperation with the Water Survey of Canada, the stages and discharges of the Columbia River at the international boundary, upstream from the lake.

(3) The annual flow of the Columbia River at Grand Coulee Dam for calendar year 2000 totaled 96,880 cubic hectometers (78,540,000 acre-feet), about 0.8 percent below the average observed for the 87-year period of record. The instantaneous maximum discharge of the Columbia River at the international boundary during the snowmelt season was 4,870 cubic meters per second (172,000 cubic feet per second) on June 15, about 36 percent below the mean annual flood for the 63-year period of record, ranking forty-ninth for the same period. The ten lowest peaks in the 63-year period of record have occurred in the last 28 years, indicating, in part, the effects of storage behind Mica Dam (1973) and Libby Dam (1974). The discharge at the international boundary is shown on the accompanying hydrograph. Extremes of stage recorded at midnight on the lake varied between elevations 392.366 meters (1,287.29 feet) on October 29 and 376.093 meters (1,233.90 feet) on May 19. Elevations are above mean sea

level, Bureau of Reclamation datum, and adjustments of 1937. The stage at midnight on December 31, 2000, was 386.407 meters (1,267.74 feet).

(4) The analyses of data collected indicate that backwater at the international boundary varied during the year between 0.000 meter (0.00 feet) and 0.174 meter (0.57 feet). Backwater on December 31, 2000, was 0.015 meter (0.05 feet). Backwater that occurred at the international boundary during the period January 1, 1996, to December 31, 2000, as computed at 10-day intervals each month, is plotted on the accompanying graph. Backwater since the time of filling of Franklin D. Roosevelt Lake in June 1942 to December 31, 1995, is plotted on the charts submitted with previous annual reports.

(5) The Board has been informed by the United States Bureau of Reclamation that flashboards at Grand Coulee Dam were in place for all of 2000.

Respectfully submitted,

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APPENDIX I

