



Water-Data Report 2008

15225990 SOLOMON LAKE NEAR VALDEZ, AK

Prince William Sound Basin
Eastern Prince William Sound Subbasin

LOCATION.--Lat 61°04'25", long 146°18'08" referenced to North American Datum of 1927, in NE ¼ NE ¼ SW ¼ sec.21, T.9 S., R.6 W., Valdez-Cordova Division, AK, Hydrologic Unit 19020201, (Valdez A-7 SE quad), within Valdez Corporate boundary, at outlet of Solomon Lake, 0.7 mi upstream from mouth of Solomon Gulch, and 4.6 mi southeast of Valdez.

DRAINAGE AREA.--19.2 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1991 to current year. Additional unpublished records prior to period of record available from Copper Valley Electric Association and in station files of Geological Survey.

COOPERATION.--Reservoir contents furnished by Copper Valley Electric Association.

REMARKS.--Reservoir is formed by a rockfill dam at outlet of Solomon Lake. Reservoir is used for power; power-plant operation began January 6, 1982. Usable capacity is 31,500 acre-feet below spillway crest at 685 ft. Discharge released to the penstocks is accounted for at Solomon Gulch Tailrace (station 15225996). Releases through the dam to maintain minimum flows, spillway releases, and incremental flow are accounted for at the Solomon Gulch at top of falls gage (station 15225997).

EXTREMES FOR PERIOD OF RECORD.--Maximum contents 32,500 acre-ft, September 21, 1993 and October 10, 2006, from crest-stage gage and rating extended above 31,500 acre-ft; minimum contents, 2,167 acre-ft, May 1, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 31,900 acre-ft September 16, elevation, 685.74 ft, from crest-stage gage and rating extended above 31,500 acre-ft; minimum contents, 3,500 acre-ft, May 8, elevation, 623.00 ft.

**MONTH END RESERVOIR ELEVATION, IN FEET, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

| Date | Elevation | Contents | Change in contents |
|---------------|-----------|---------------------------|--------------------|
| Sep 30 | 682.4 | 29,300 | ---- |
| Oct 31 | 681.4 | 28,600 | -700 |
| Nov 30 | 679.0 | 27,000 | -1,600 |
| Dec 31 | 673.7 | 24,000 | -3,000 |
| Jan 31 | 665.4 | 19,700 | -4,300 |
| Feb 28 | 655.4 | 14,800 | -4,900 |
| Mar 31 | 642.2 | 9,500 | -5,300 |
| Apr 30 | 625.5 | 4,120 | -5,380 |
| May 31 | 637.5 | 7,830 | +3,710 |
| Jun 30 | 657.5 | 15,700 | +7,870 |
| Jul 31 | 679.3 | 27,200 | +11,500 |
| Aug 31 | 680.0 | 27,700 | +500 |
| Sep 30 | 683.8 | 30,500 | +2,800 |
| | | Calendar Year 2007 | +4,300 |
| | | Water Year 2008 | +1,200 |