

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 86-7345

Exam Date: 12/31/2008

1. Current Owner: IDAHO WATER RESOURCE BOARD
PO BOX 83720
BOISE ID 83720-0098
(208)287-4800

2. SOURCE

CLEARWATER RIVER

TRIBUTARY

SNAKE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point of diversion:

Beginning of Reach for 86-7345 has the same approximate location as the Ending of Reach for 86-7318

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

CLEARWATER RIVER L13 (NW¼SW¼) Sec. 7, Twp 36N, Rge 03W, B.M. NEZ PERCE County
(Beginning of Reach)

CLEARWATER RIVER L1 and L6 (SW¼NE¼) Sec. 32, Twp 36N, Rge 05W, B.M. NEZ PERCE County
(Ending of Reach)

Method of Determination: GIS, Satellite Imagery

2. N/A Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater. (Attachment A)
- X Aerial Photo Attached (required for irrigation of 10+ acres). (Attachment B)
- N/A Photo of Diversion and System Attached

3.

Well or DiversionID No.*Motor MakeHpMotor Serial No.Pump MakePump Serial No. or Discharge Size

N/A

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement EquipmentTypeMakeModel No.Serial No.SizeCalib. Date

N/A

2. Measurements:

Through September 12, 2008, USGS staff have completed 694 stream flow measurements for the Clearwater River at Spalding, ID stream gaging station. The gaging station is approximately 0.4 miles downstream from the confluence of the Clearwater River and Lapwai Creek. The period of record at this site is from August 1910 to October 1913, October 1924 to January 1925, and April 1925 to present. However, due to construction of Dworshak Dam, upstream control changed flow conditions in 1971. Water-Data Report 2007 (Attachment C) describes mean daily discharge data, maximum flows, minimum flows, and historical records. The period of record critical for review of this minimum stream flow permit is 1971 to present.

E. FLOW CALCULATIONS

_____Additional Computation Sheets Attached

Measured Method: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 =$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$$

2. Volume Calculations for Other Uses: Minimum Stream Flow, non-consumptive use
No annual volume limitation required

G. NARRATIVE/REMARKS/COMMENTS

Permit no. 86-7345 should be licensed as permitted based on the findings of fact, conclusions of law, and order set forth in the Final Order dated December 21, 2001.

USGS stream flow records show that the permitted flows for August through October, 4,498 cfs, are available at least 60 percent of the time and the permitted flows for November through July, 5,910 cfs, are available at least 84 percent of the time (Attachments D, E, and F) as described in Finding of Fact No. 9 in the Final Order.

The permitted beginning of reach point is described as Lot 13 (NW¼SW¼SW¼) Sec. 7, Twp 36N, Rge 03W, at the confluence of the Potlatch River and the Clearwater River. Based on available satellite imagery and public land survey system data, this confluence point is in fact located in Lot 13. However, Lot 13 is more accurately described as located in the NW¼SW¼ Sec. 7. The ending of reach point in Lot 13 should be described with reference to the 40-acre tract: Lot 13 (NW¼SW¼) Sec. 7, Twp 36N, Rge 03W, at the confluence of the Potlatch River and the Clearwater River.

The permitted ending of reach point is described as Lot 1 and Lot 6 (SW¼NE¼) Sec. 32, Twp 36N, Rge 05W, at the beginning of the backwater from the reservoir behind Lower Granite Dam. Based on available satellite imagery and public land survey system data, this location is situated on the river between Lot 1 and Lot 6. The ending of reach point is accurately described on the permit.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
MINIMUM STREAM FLOW	11/01 to 07/31	5,910 CFS	N/A
MINIMUM STREAM FLOW	08/01 to 10/31	4,498 CFS	N/A
<u>Totals:</u>		5,910 CFS	

2. Recommended Amendments

___Change P.D. as reflected above ___Add P.D. as reflected above ☒None

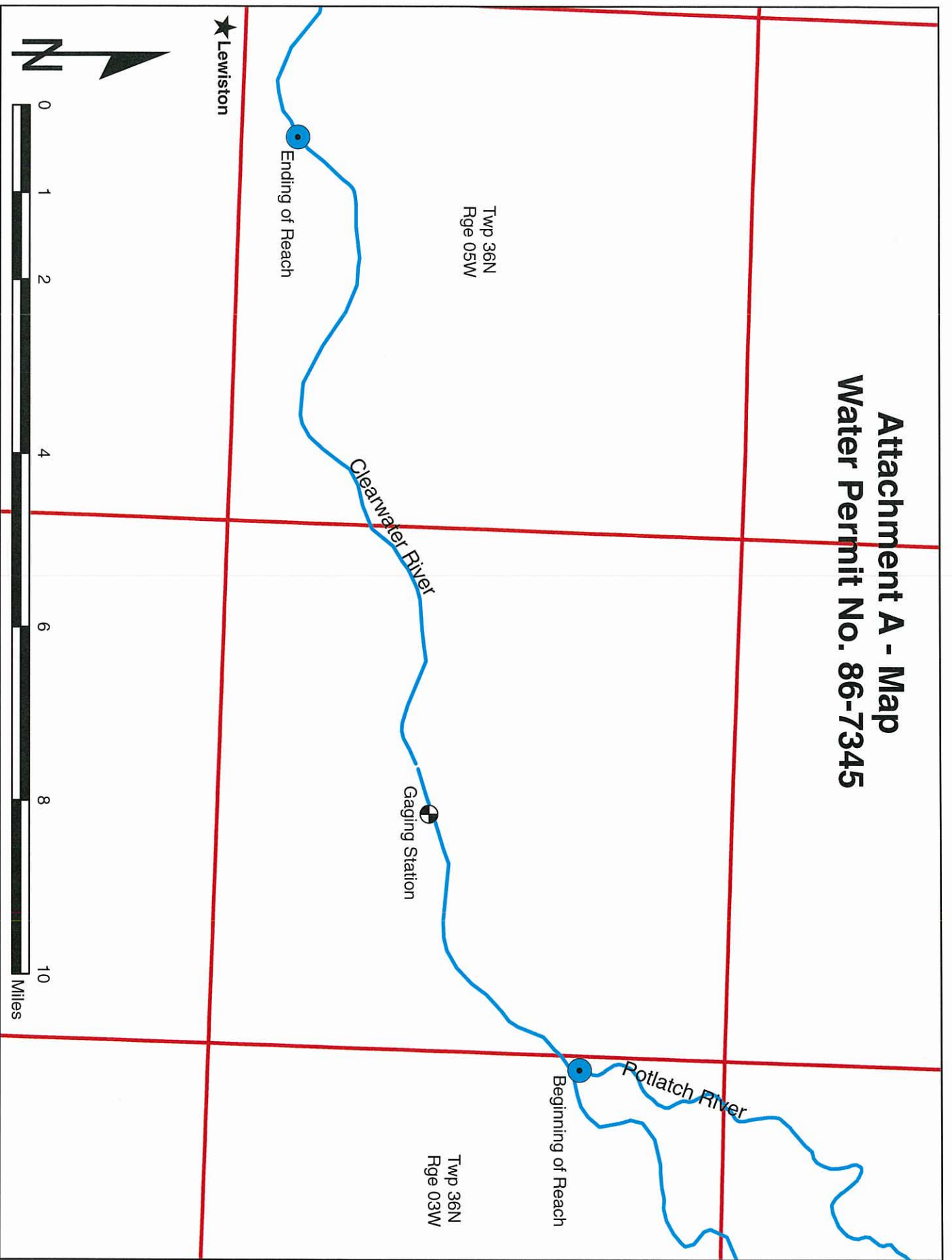
___Change P.U. as reflected above ___Add P.U. as reflected above ___Other

I. AUTHENTICATION

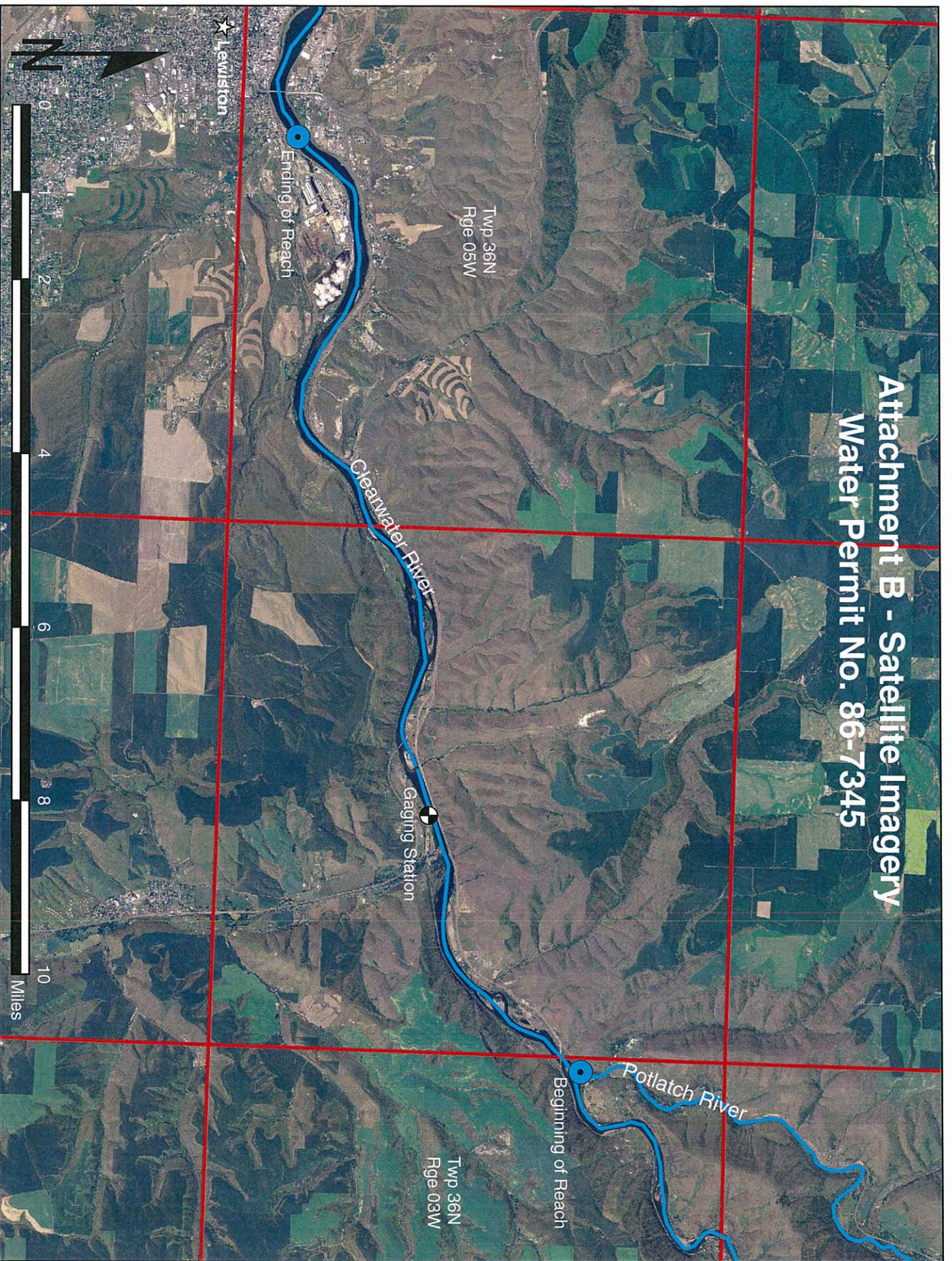
Field Examiner's Name AARON MARSHALL Date 12/31/2008

Reviewer _____ Date _____

Attachment A - Map Water Permit No. 86-7345



Attachment B - Satellite Imagery Water Permit No. 86-7345



Water-Data Report 2007

13342500 CLEARWATER RIVER AT SPALDING, IDClearwater Basin
Clearwater Subbasin

LOCATION.--Lat 46°26'55", long 116°49'35" referenced to North American Datum of 1927, in NW ¼ NE ¼ SW ¼ sec.22, T.36 N., R.4 W., Nez Perce County, ID, Hydrologic Unit 17060306, Lapwai quad., Nez Perce Indian Reservation, on left bank 0.4 mi downstream from Lapwai Creek, 0.6 mi west of Spalding Post Office, 0.9 mi upstream from U.S. Highway 95 bridge, and at mile 11.6.

DRAINAGE AREA.--9,570 mi². Mean elevation, 4,360 ft.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1910 to October 1913, October 1924 to January 1925, April 1925 to current year. Published as "near Lewiston", 1910-13, 1924-27. Records published for both sites March 1926 to September 1927.

REVISED RECORDS.--WSP 1737: 1927, 1935, 1943.

GAGE.--Water-stage recorder. Datum of gage is 770.49 ft above NGVD of 1929. See WDR for Idaho, 1966-68, for history of changes prior to Oct. 1, 1962.

REMARKS.--No estimated daily discharges. Records good. Station equipment includes satellite telemetry. Diversions above station for irrigation of about 1,630 acres (1966 determination). Regulation of the North Fork Clearwater River at Ahsahka began on Sept. 27, 1971, when diversion tunnel at Dworshak Dam was closed.

EXTREMES FOR PERIOD OF RECORD.--

UNREGULATED PERIOD (1911-71): Maximum discharge prior to regulation by Dworshak Reservoir, 177,000 ft³/s May 29, 1948, gage height, 23.76 ft; maximum gage height, 27.77 ft, Feb. 5, 1963, from floodmark (ice jam); minimum daily, 500 ft³/s Jan. 9, 1937, Dec. 1, 1952.

REGULATED PERIOD (1972 to current year): Maximum discharge since regulation began, 131,000 ft³/s June 16, 1974, gage height, 19.10 ft; minimum, 1,350 ft³/s Oct. 31, 1971, gage height, 2.47 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1894 reached a stage of 20.8 ft, site and datum in use 1924-26, discharge, 136,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46,000 ft³/s May 13, gage height, 11.35 ft; minimum daily, 2,450 ft³/s Nov. 3.

13342500 CLEARWATER RIVER AT SPALDING, ID—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,700	2,810	5,320	5,300	8,880	7,160	24,300	38,600	21,100	9,390	11,700	9,160
2	2,680	2,570	5,830	6,480	8,730	6,620	18,900	40,700	20,600	10,200	11,700	9,190
3	2,650	2,450	5,590	9,120	7,540	6,270	17,600	41,400	20,900	13,000	11,600	9,220
4	2,630	2,910	5,030	11,000	7,500	6,260	15,400	38,500	21,200	14,000	11,600	9,140
5	2,660	3,720	5,080	9,980	7,590	6,420	13,300	33,800	21,600	14,200	11,600	9,080
6	2,690	4,560	5,510	9,170	5,540	6,590	13,100	30,500	21,600	15,500	11,600	9,060
7	2,730	15,100	5,350	8,790	5,130	7,040	13,900	28,600	22,000	15,300	11,600	9,120
8	2,730	35,600	5,130	10,700	5,290	8,920	15,200	28,300	21,100	15,200	11,600	9,150
9	2,710	22,100	5,030	13,000	6,030	9,840	17,000	30,300	19,800	14,900	11,500	9,090
10	3,270	13,100	5,030	13,200	7,340	9,570	19,500	35,500	19,300	14,700	11,500	7,440
11	2,700	10,200	5,200	14,200	7,840	10,200	17,500	40,900	22,600	14,600	11,500	6,670
12	2,680	9,630	5,490	14,000	10,000	12,300	21,200	41,700	22,000	14,500	9,570	6,520
13	3,410	8,150	7,880	12,700	10,500	18,500	20,700	43,400	18,800	14,200	9,250	6,550
14	2,590	7,990	9,140	12,600	9,450	21,700	18,000	40,700	17,600	14,300	9,230	4,260
15	2,610	7,670	10,600	11,400	10,700	18,700	18,200	37,300	16,800	13,500	9,230	3,390
16	2,680	6,950	10,500	9,290	15,000	15,900	18,900	36,400	16,000	11,900	9,220	3,410
17	3,020	8,100	8,350	10,800	13,700	14,800	18,600	33,300	15,300	12,300	9,120	2,850
18	3,430	7,360	6,300	11,200	12,600	15,000	19,700	34,700	15,000	12,300	9,030	2,560
19	3,130	6,650	4,910	8,920	11,800	16,800	20,500	35,300	14,100	12,400	9,100	2,600
20	3,030	6,370	4,830	8,440	12,200	20,500	20,400	33,900	13,500	12,300	9,130	2,570
21	3,980	7,660	5,140	8,430	11,700	25,100	19,700	32,100	13,200	12,200	9,210	2,510
22	4,120	8,530	5,520	8,370	10,100	23,700	19,200	29,900	13,000	12,100	9,400	2,520
23	3,540	8,400	5,890	8,210	9,380	22,500	19,500	26,800	12,300	12,000	9,430	2,480
24	3,230	7,980	5,710	8,150	8,760	22,300	20,700	24,600	11,800	12,000	9,300	2,570
25	3,080	7,740	5,400	8,070	8,190	23,000	22,000	23,300	11,300	12,000	9,200	3,360
26	3,050	7,340	5,770	7,930	8,210	29,100	25,200	22,200	10,100	12,000	9,140	3,100
27	3,030	6,830	7,780	7,860	8,080	29,800	25,600	21,800	9,700	11,900	9,090	2,780
28	2,960	6,680	8,010	7,600	7,550	29,700	26,700	23,600	9,990	11,900	9,110	2,670
29	2,910	5,970	6,740	7,970	---	27,000	30,600	23,700	9,750	11,900	8,910	2,630
30	2,870	5,340	5,790	8,580	---	25,300	35,400	21,400	9,600	11,800	9,160	2,720
31	2,890	---	5,270	8,840	---	24,300	---	20,300	---	11,800	9,220	---
Total	92,390	256,460	193,120	300,300	255,330	520,890	606,500	993,500	491,640	400,290	311,550	158,370
Mean	2,980	8,549	6,230	9,687	9,119	16,800	20,220	32,050	16,390	12,910	10,050	5,279
Max	4,120	35,600	10,600	14,200	15,000	29,800	35,400	43,400	22,600	15,500	11,700	9,220
Min	2,590	2,450	4,830	5,300	5,130	6,260	13,100	20,300	9,600	9,390	8,910	2,480
Ac-ft	183,300	508,700	383,100	595,600	506,400	1,033,000	1,203,000	1,971,000	975,200	794,000	618,000	314,100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1971, BY WATER YEAR (WY) (UNREGULATED)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	4,416	6,790	8,078	7,715	9,362	13,290	30,670	50,570	37,270	10,180	3,616	3,174
Max	17,160	38,940	33,250	28,480	22,100	32,100	53,370	85,900	73,630	21,800	6,180	7,210
(WY)	(1960)	(1928)	(1934)	(1934)	(1971)	(1934)	(1943)	(1948)	(1964)	(1950)	(1950)	(1968)
Min	1,893	1,783	2,126	1,577	2,068	3,868	14,880	24,830	10,760	3,682	1,935	1,870
(WY)	(1953)	(1937)	(1953)	(1937)	(1937)	(1955)	(1941)	(1941)	(1934)	(1931)	(1931)	(1937)

13342500 CLEARWATER RIVER AT SPALDING, ID—Continued

SUMMARY STATISTICS

	Water Years 1911 - 1971	
Annual mean	^a 15,430	
Highest annual mean	24,250	
Lowest annual mean	8,556	
Highest daily mean	166,000	May 29
Lowest daily mean	500	Jan 9
Annual seven-day minimum	921	Nov 26
Annual runoff (ac-ft)	11,180,000	
10 percent exceeds	42,400	
50 percent exceeds	7,000	
90 percent exceeds	2,500	

^a Statistics 1911-1971 are prior to regulation by Dworshak Reservoir.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2007, BY WATER YEAR (WY)

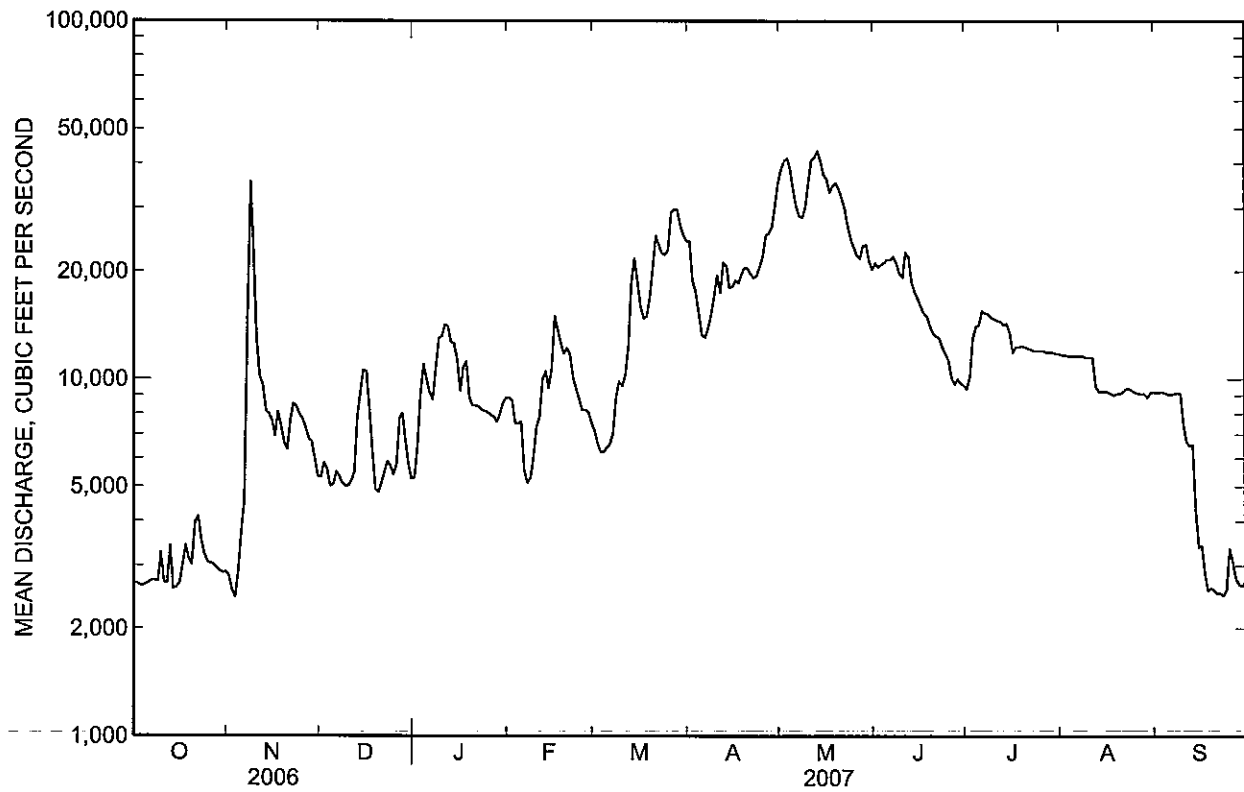
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	4,142	6,685	8,830	9,827	11,790	16,540	23,190	35,960	30,760	13,970	8,307	6,865
Max	8,260	21,010	27,180	27,320	38,940	35,770	41,190	63,180	73,570	27,750	19,000	11,520
(WY)	(1976)	(1996)	(1976)	(1974)	(1996)	(1986)	(1997)	(1972)	(1974)	(1997)	(1997)	(1986)
Min	1,711	2,209	2,479	3,301	3,350	4,879	7,761	19,200	8,766	4,861	2,914	2,513
(WY)	(1972)	(1972)	(1972)	(1987)	(1973)	(1977)	(1973)	(1977)	(1987)	(1987)	(1994)	(1994)

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1972 - 2007	
Annual total	5,342,970		^b 4,580,340			
Annual mean	14,640		12,550		14,740	
Highest annual mean					25,020	1996
Lowest annual mean					7,852	1973
Highest daily mean	62,700	May 20	43,400	May 13	124,000	Jun 16, 1974
Lowest daily mean	2,450	Nov 3	2,450	Nov 3	1,390	Oct 31, 1971
Annual seven-day minimum	2,680	Oct 1	2,540	Sep 18	1,470	Oct 8, 1971
Annual runoff (ac-ft)	10,600,000		9,085,000		10,680,000	
10 percent exceeds	34,600		24,400		33,800	
50 percent exceeds	10,500		9,630		10,200	
90 percent exceeds	3,030		3,030		3,390	

^b Regulated by Dworshak Reservoir.

13342500 CLEARWATER RIVER AT SPALDING, ID—Continued



13342500 CLEARWATER RIVER AT SPALDING, ID—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-60, 1968 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Water years 1959-70, 1972 to current year.

INSTRUMENTATION.--Temperature recorder since October 1959.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 28.0 °C Aug. 13, 1963; minimum, 0.0 °C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 17.5 °C June 26, 30, July 1; minimum, 0.5 °C Dec. 19.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	14.5	12.0	5.5	4.0	3.0	2.5	2.5	2.0	3.0	3.0	4.5	3.5
2	14.0	12.0	6.0	4.5	3.0	2.5	3.5	2.5	3.5	2.5	4.0	2.0
3	13.5	11.5	8.0	6.0	2.5	1.5	4.0	3.5	3.0	2.0	4.5	3.5
4	14.0	12.0	9.5	8.0	2.5	2.0	4.0	3.5	4.0	3.0	5.5	3.5
5	14.0	11.5	9.0	8.0	3.5	2.5	3.5	3.0	4.0	3.5	5.5	4.5
6	13.5	11.5	9.5	8.5	3.5	2.5	3.5	3.0	4.5	3.0	6.5	4.5
7	13.5	12.0	9.5	8.0	3.0	2.5	4.0	3.0	3.0	2.5	6.0	5.0
8	12.0	10.5	8.5	8.0	3.5	2.5	4.5	3.5	3.5	3.0	6.5	5.0
9	12.0	9.5	8.5	7.0	3.5	3.0	5.0	4.5	3.0	2.5	7.0	5.5
10	11.0	9.5	7.0	6.5	3.5	3.0	5.0	4.0	3.5	2.5	8.0	6.0
11	11.5	9.0	6.5	6.0	4.0	3.5	4.5	3.5	4.0	3.0	8.5	7.0
12	11.5	9.0	6.5	6.0	4.5	4.0	3.5	3.0	4.0	3.0	8.0	7.0
13	11.5	9.5	6.5	6.0	5.5	4.5	3.5	2.5	4.0	2.5	7.0	6.0
14	11.5	9.5	6.0	5.5	5.5	4.5	3.5	3.0	4.5	3.5	6.5	5.0
15	11.0	10.0	5.5	5.5	4.5	3.5	3.0	2.0	4.5	4.0	6.0	5.0
16	11.5	10.0	6.5	5.5	3.5	3.0	3.0	2.0	5.0	4.0	6.5	5.0
17	11.5	10.0	5.5	5.0	3.0	2.0	3.5	3.0	5.5	4.0	8.0	5.5
18	11.5	10.0	5.5	4.5	2.0	1.0	3.5	3.0	5.0	4.0	9.0	6.5
19	11.0	10.5	6.0	5.0	1.5	0.5	3.5	3.0	4.5	3.5	8.5	6.5
20	11.0	10.0	6.5	6.0	2.0	1.0	3.5	3.0	4.5	4.0	7.5	6.0
21	10.5	9.0	6.5	5.5	2.5	1.5	3.0	2.0	4.5	3.0	7.0	5.5
22	10.0	8.5	6.5	5.5	2.0	1.5	3.5	3.0	4.5	3.5	6.5	5.0
23	10.0	8.5	6.5	6.0	2.0	1.5	4.0	3.0	5.0	4.0	7.5	5.5
24	9.5	8.0	6.0	6.0	2.5	1.5	3.5	2.5	4.5	3.5	7.5	6.5
25	9.5	8.0	6.0	5.0	3.0	2.5	3.5	2.5	5.0	4.0	7.5	6.5
26	9.0	7.5	5.0	4.0	3.5	3.0	3.5	2.5	5.5	4.5	6.5	5.5
27	9.0	7.0	4.5	4.0	3.0	2.5	3.5	3.0	5.5	4.0	6.5	5.5
28	8.5	7.0	4.0	2.5	2.5	1.5	3.5	3.0	5.0	3.5	7.0	5.5
29	8.0	6.5	2.5	2.0	2.0	1.0	3.5	3.0	---	---	7.0	5.0
30	7.5	6.0	3.0	2.0	2.0	1.5	3.5	3.0	---	---	7.5	5.5
31	6.0	5.0	---	---	2.0	1.5	3.5	3.0	---	---	7.5	6.0
Month	14.5	5.0	9.5	2.0	5.5	0.5	5.0	2.0	5.5	2.0	9.0	2.0

Water-Data Report 2007

13342500 CLEARWATER RIVER AT SPALDING, ID—Continued

 TEMPERATURE, WATER, DEGREES CELSIUS
 WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

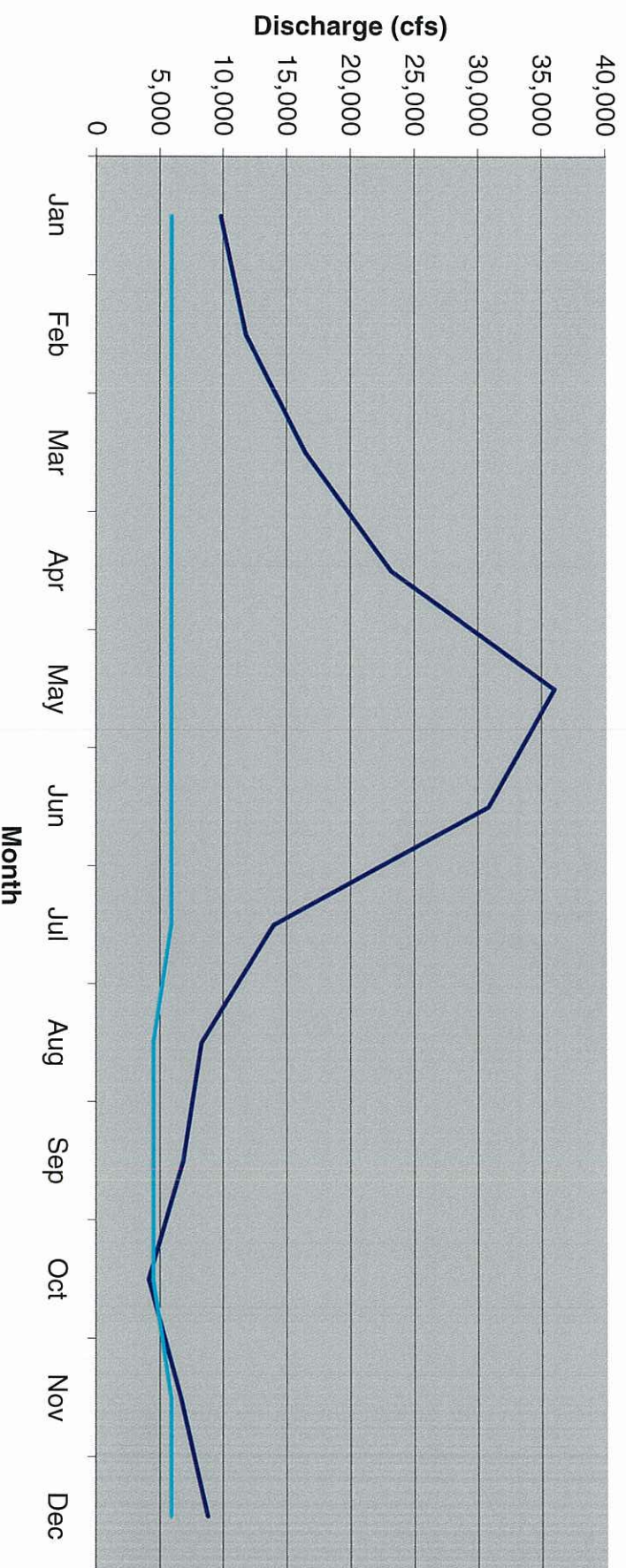
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	8.0	6.0	9.5	8.5	14.0	11.5	17.5	14.5	12.0	9.5	13.5	11.0
2	7.0	5.5	9.0	8.0	15.0	12.5	17.0	14.5	12.0	9.5	13.5	11.0
3	7.5	5.0	8.0	7.0	15.0	13.5	15.0	12.5	12.0	9.5	14.0	11.5
4	7.5	6.0	7.5	6.5	15.0	13.5	14.5	11.5	12.0	9.5	14.0	11.5
5	8.5	6.0	7.5	6.0	14.0	12.5	14.5	12.0	11.5	9.0	13.5	11.5
6	10.0	7.0	7.5	6.5	12.5	11.0	14.0	11.0	11.5	9.0	13.5	11.0
7	11.0	8.0	9.0	7.0	11.0	9.5	13.5	11.0	12.0	9.5	13.5	11.0
8	11.0	9.0	10.0	8.5	11.0	9.0	13.5	10.5	11.5	9.5	13.5	11.0
9	10.0	8.5	10.5	9.5	12.0	10.0	13.5	10.5	12.0	9.0	13.5	11.0
10	8.5	7.0	10.5	10.0	11.5	11.0	13.5	11.0	12.0	9.5	13.5	11.0
11	8.0	6.0	10.0	9.0	13.0	11.0	13.5	11.0	11.5	9.0	13.5	11.5
12	7.5	6.0	10.0	8.5	13.5	11.5	13.0	11.0	13.0	9.5	13.0	10.0
13	8.0	6.0	9.5	9.0	13.0	12.0	13.5	11.0	13.0	10.0	12.0	10.0
14	8.5	6.5	9.0	8.0	14.0	12.0	13.0	10.5	13.0	10.0	12.0	10.0
15	9.0	7.0	9.5	8.5	15.0	12.5	12.5	10.5	12.5	10.0	15.0	11.5
16	8.5	7.0	10.0	9.0	14.5	13.0	13.0	11.0	12.5	10.5	14.0	11.5
17	8.5	7.5	11.0	9.5	13.5	12.5	12.5	10.5	13.0	10.0	14.5	12.5
18	7.5	6.5	11.5	10.5	14.5	12.0	13.5	10.5	12.5	10.0	13.5	12.0
19	8.5	6.0	11.0	10.0	15.0	12.0	13.0	11.0	11.5	10.0	14.0	11.0
20	8.5	5.5	10.5	9.5	16.0	11.5	12.5	10.5	10.5	10.0	13.0	11.5
21	8.0	6.0	10.0	8.5	16.5	13.5	12.5	10.0	12.5	10.0	14.0	11.0
22	8.0	6.5	8.5	7.5	17.0	13.0	13.0	10.0	13.0	10.5	14.0	11.5
23	9.5	7.5	9.0	7.0	17.0	14.5	13.0	10.5	13.0	10.5	13.5	11.5
24	9.5	7.5	10.5	8.5	16.5	14.5	13.0	10.5	13.0	10.5	13.5	11.0
25	9.0	8.0	11.0	9.5	16.5	14.0	12.5	10.0	13.0	10.5	13.5	10.5
26	9.0	7.5	11.5	9.5	17.5	13.0	12.5	10.0	13.0	10.5	14.0	11.0
27	9.5	7.5	11.0	10.0	17.0	13.5	12.5	10.0	13.0	10.0	13.5	11.0
28	10.0	8.5	10.5	9.5	16.5	13.5	12.5	10.0	13.0	10.0	12.5	11.0
29	9.5	8.5	10.5	9.0	16.0	14.0	12.5	9.5	13.0	10.5	12.5	10.0
30	9.5	8.5	11.5	9.5	17.5	14.5	12.5	9.5	13.0	11.0	11.5	10.5
31	---	---	13.0	10.5	---	---	12.0	9.5	13.0	11.5	---	---
Month	11.0	5.0	13.0	6.0	17.5	9.0	17.5	9.5	13.0	9.0	15.0	10.0

ATTACHMENT D USGS 13342500 CLEARWATER RIVER AT SPALDING ID

Discharge, cubic feet per second (Calculation Period: 1971-10-01 -> 2007-09-30)												
	Mean Monthly Discharge for USGS 13342500 * and Water Right No. 86-7345 Minimum Stream Flow values											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Monthly Discharge	9,830	11,800	16,500	23,200	36,000	30,800	14,000	8,310	6,860	4,140	6,690	8,830
Minimum Stream Flow	5,910	5,910	5,910	5,910	5,910	5,910	5,910	4,498	4,498	4,498	5,910	5,910

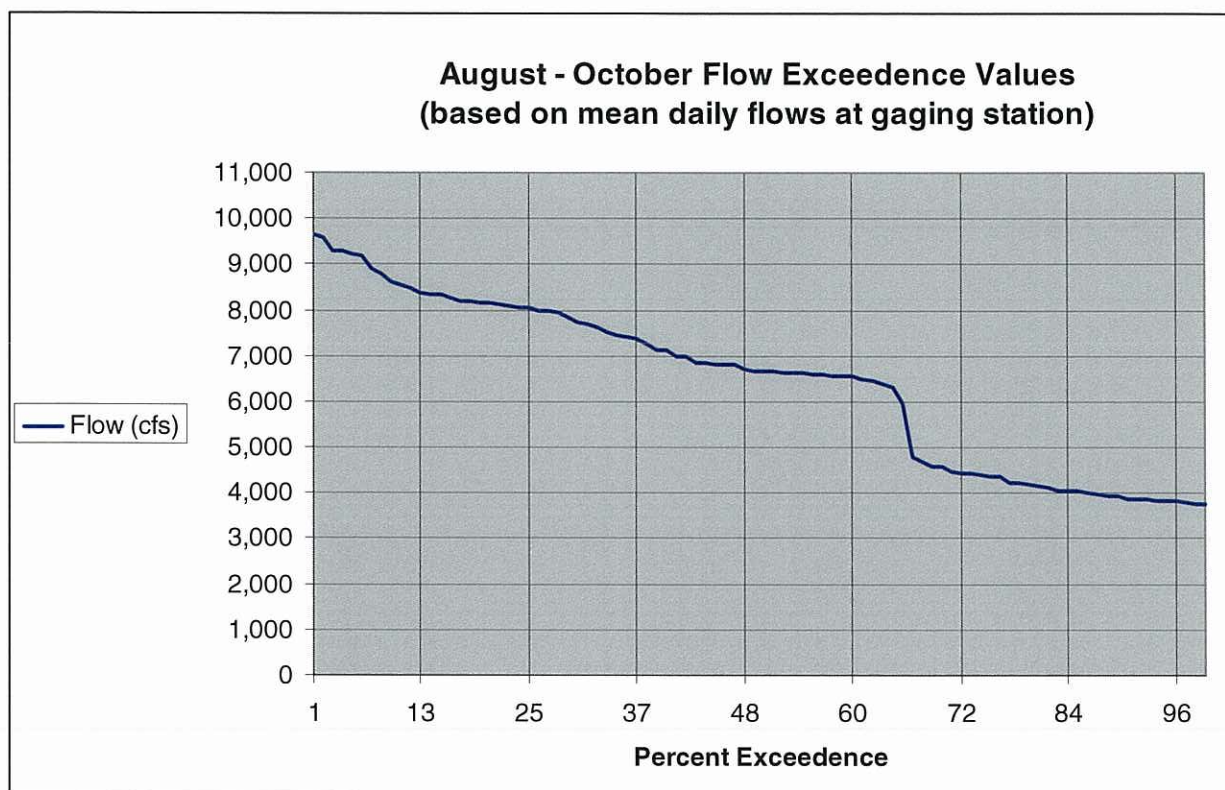
*Mean monthly data downloaded from USGS web site for entire available period of record at gaging station

Mean Monthly Discharge vs. Minimum Stream Flow



ATTACHMENT E - Flow Frequency (Aug. – Oct.)

USGS 13342500 CLEARWATER RIVER AT SPALDING ID

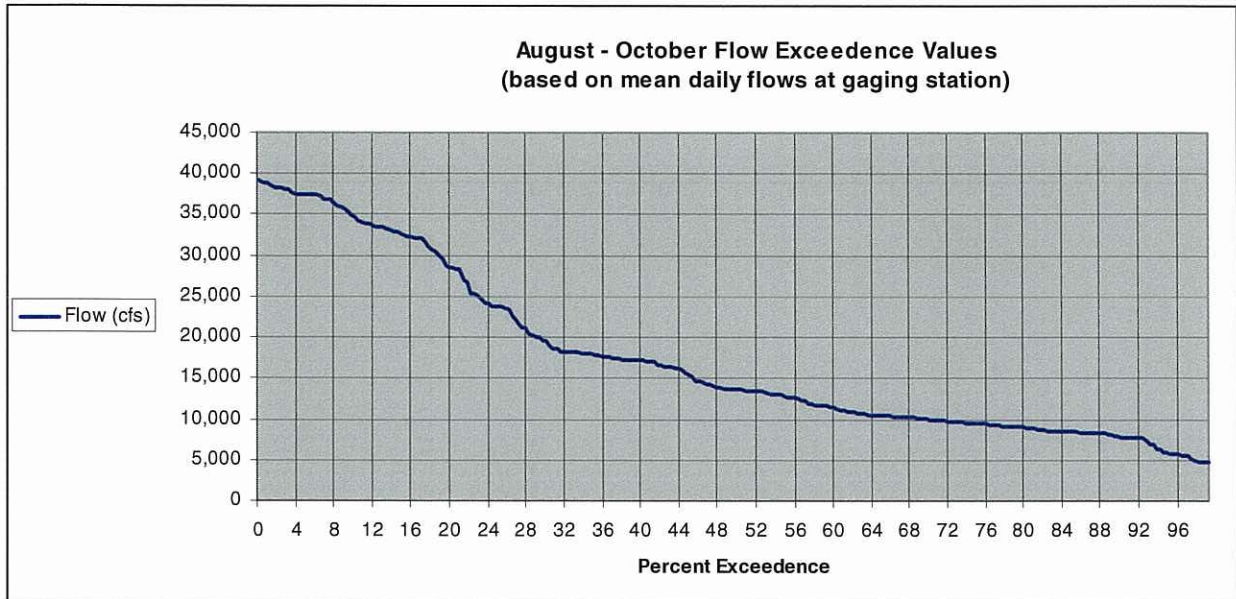


Aug. - Oct. Data	Rank	Tr	P	% Exceedence
9,640	1	93.00	0.01	1
9,590	2	46.50	0.02	2
9,310	3	31.00	0.03	3
9,300	4	23.25	0.04	4
9,220	5	18.60	0.05	5
9,200	6	15.50	0.06	6
8,920	7	13.29	0.08	8
8,810	8	11.63	0.09	9
8,610	9	10.33	0.10	10
8,540	10	9.30	0.11	11
8,490	11	8.45	0.12	12
8,370	12	7.75	0.13	13
8,340	13	7.15	0.14	14
8,340	14	6.64	0.15	15
8,280	15	6.20	0.16	16
8,180	16	5.81	0.17	17
8,180	17	5.47	0.18	18
8,160	18	5.17	0.19	19
8,150	19	4.89	0.20	20
8,130	20	4.65	0.22	22
8,090	21	4.43	0.23	23
8,060	22	4.23	0.24	24
8,040	23	4.04	0.25	25
7,980	24	3.88	0.26	26
7,980	25	3.72	0.27	27
7,960	26	3.58	0.28	28
7,830	27	3.44	0.29	29
7,720	28	3.32	0.30	30
7,710	29	3.21	0.31	31
7,630	30	3.10	0.32	32
7,520	31	3.00	0.33	33
7,460	32	2.91	0.34	34

7,400	33	2.82	0.35	35
7,390	34	2.74	0.37	37
7,290	35	2.66	0.38	38
7,150	36	2.58	0.39	39
7,130	37	2.51	0.40	40
7,000	38	2.45	0.41	41
6,980	39	2.38	0.42	42
6,860	40	2.33	0.43	43
6,840	41	2.27	0.44	44
6,830	42	2.21	0.45	45
6,820	43	2.16	0.46	46
6,810	44	2.11	0.47	47
6,690	45	2.07	0.48	48
6,680	46	2.02	0.49	49
6,680	47	1.98	0.51	51
6,680	48	1.94	0.52	52
6,650	49	1.90	0.53	53
6,640	50	1.86	0.54	54
6,640	51	1.82	0.55	55
6,600	52	1.79	0.56	56
6,590	53	1.75	0.57	57
6,580	54	1.72	0.58	58
6,580	55	1.69	0.59	59
6,560	56	1.66	0.60	60
6,490	57	1.63	0.61	61
6,470	58	1.60	0.62	62
6,390	59	1.58	0.63	63
6,320	60	1.55	0.65	65
5,970	61	1.52	0.66	66
4,780	62	1.50	0.67	67
4,680	63	1.48	0.68	68
4,590	64	1.45	0.69	69
4,580	65	1.43	0.70	70
4,480	66	1.41	0.71	71
4,440	67	1.39	0.72	72
4,440	68	1.37	0.73	73
4,410	69	1.35	0.74	74
4,380	70	1.33	0.75	75
4,360	71	1.31	0.76	76
4,230	72	1.29	0.77	77
4,210	73	1.27	0.78	78
4,200	74	1.26	0.80	80
4,140	75	1.24	0.81	81
4,110	76	1.22	0.82	82
4,050	77	1.21	0.83	83
4,040	78	1.19	0.84	84
4,030	79	1.18	0.85	85
4,020	80	1.16	0.86	86
3,960	81	1.15	0.87	87
3,950	82	1.13	0.88	88
3,940	83	1.12	0.89	89
3,870	84	1.11	0.90	90
3,860	85	1.09	0.91	91
3,860	86	1.08	0.92	92
3,840	87	1.07	0.94	94
3,840	88	1.06	0.95	95
3,830	89	1.04	0.96	96
3,790	90	1.03	0.97	97
3,770	91	1.02	0.98	98
3,750	92	1.01	0.99	99

ATTACHMENT F - Flow Frequency (Nov. – July)

USGS 13342500 CLEARWATER RIVER AT SPALDING ID



Nov. - July Data	Rank	Tr	P	% Exceedence
38,800	3	91.67	0.01	1
34,800	28	9.82	0.10	10
28,800	55	5.00	0.20	20
20,000	82	3.35	0.30	30
17,200	110	2.50	0.40	40
13,600	138	1.99	0.50	50
11,400	165	1.67	0.60	60
10,100	193	1.42	0.70	70
9,040	220	1.25	0.80	80
8,550	231	1.19	0.84	84
7,870	248	1.11	0.90	90
4,740	274	1.00	1.00	99