

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 83-11962

Exam Date: 07/18/2008

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

2. SOURCE TRIBUTARY
NORTH FORK CLEARWATER RIVER CLEARWATER 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: Ending of Reach points for 83-11952 and 83-11956 have the same location as the Beginning of Reach point for 83-11962

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

NORTH FORK CLEARWATER RIVER SW¼SW¼ Sec. 18, Twp 39N, Rge 10E, B.M. CLEARWATER County
(Beginning of Reach)

NORTH FORK CLEARWATER RIVER L7 (SE¼NE¼) Sec. 6, Twp 40N, Rge 07E, B.M. CLEARWATER 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.

<u>Well or Diversion</u> <u>ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge</u> <u>Size</u>
N/A					

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

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
N/A						

2. Measurements:

Through May 20, 2008, USGS staff have completed 282 stream flow measurements at North Fork Clearwater River near Canyon Ranger Station stream gaging station. The gaging station is $\frac{1}{10}$ -mile upstream from the confluence of Beaver Creek and the North Fork Clearwater River. The period of record at this site is May 1, 1967 to present. The published (corrected) record currently extends from May 1, 1967 to September 30, 2007. See Attachment C, USGS Water Data Report 2007.

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. 83-11962 should be licensed as permitted based on the findings of fact, conclusions of law, and order set forth in the Amended Preliminary Order dated January 13, 2006.

The permitted ending of reach point is described as Lot 7 (NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$) Sec. 6, Twp 40N, Rge 07E, at the confluence of Beaver Creek and North Fork Clearwater River. Based on available satellite imagery, this confluence point actually appears to be located in Lot 7 (NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$) Sec. 6, Twp 40N, Rge 07E. However, the North Fork Clearwater River straddles the 10-acre tract line. Due to this discrepancy, the ending of reach point should only be described to the 40-acre tract: Lot 7 (SE $\frac{1}{4}$ NE $\frac{1}{4}$) Sec. 6, Twp 40N, Rge 07E, at the confluence of Beaver Creek and North Fork Clearwater River.

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	01/01 to 01/31	1,349 CFS	N/A
MINIMUM STREAM FLOW	02/01 to 02/28	1,838 CFS	N/A
MINIMUM STREAM FLOW	03/01 to 03/31	2,885 CFS	N/A
MINIMUM STREAM FLOW	04/01 to 04/30	5,863 CFS	N/A
MINIMUM STREAM FLOW	05/01 to 05/31	10,396 CFS	N/A
MINIMUM STREAM FLOW	06/01 to 06/30	8,470 CFS	N/A
MINIMUM STREAM FLOW	07/01 to 07/31	2,331 CFS	N/A
MINIMUM STREAM FLOW	08/01 to 08/31	1,128 CFS	N/A
MINIMUM STREAM FLOW	09/01 to 09/30	873 CFS	N/A
MINIMUM STREAM FLOW	10/01 to 10/31	828 CFS	N/A
MINIMUM STREAM FLOW	11/01 to 11/30	1,239 CFS	N/A
MINIMUM STREAM FLOW	12/01 to 12/31	1,237 CFS	N/A

Totals: 10,396 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

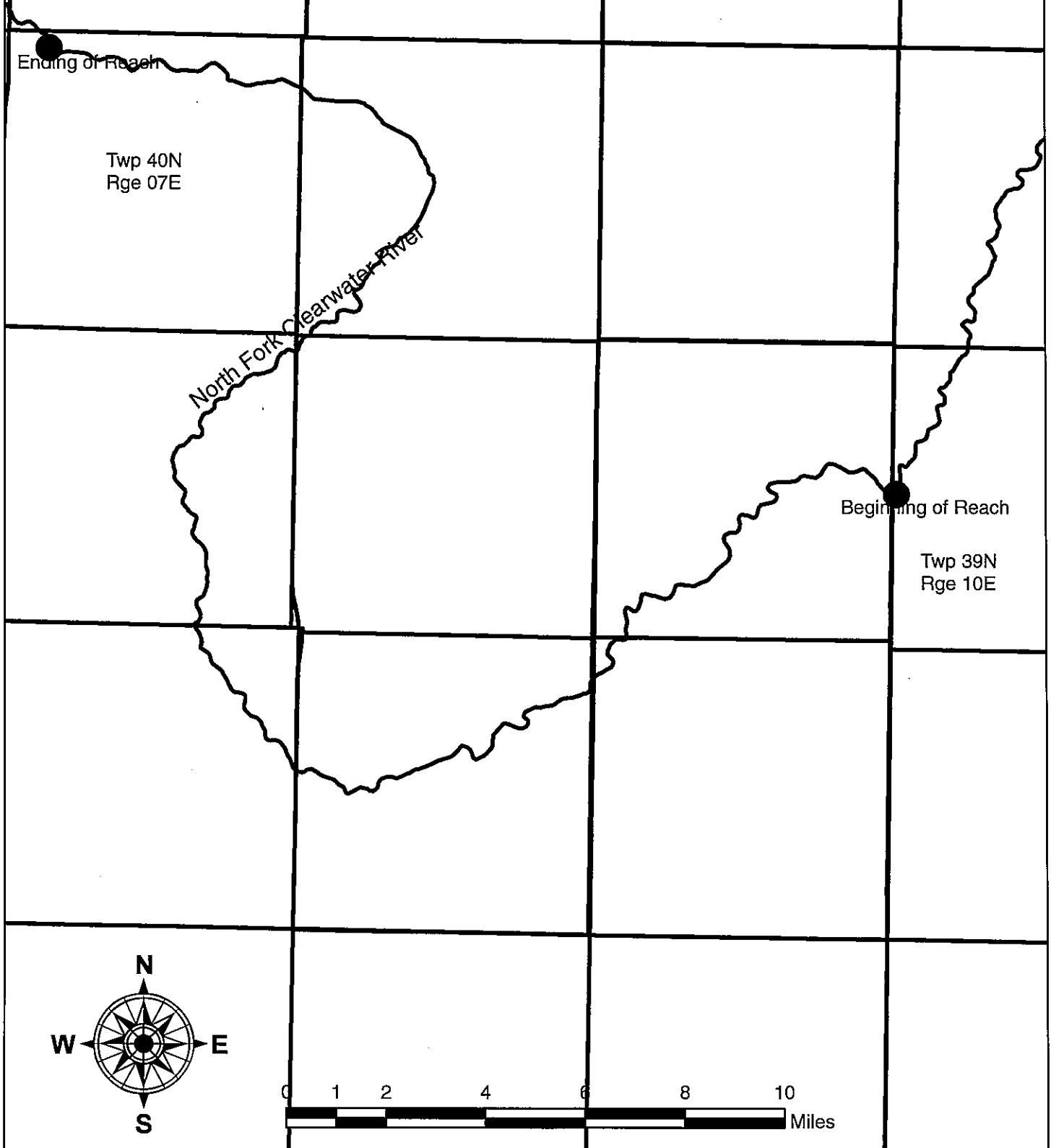
I. AUTHENTICATION

Field Examiner's Name Aaron Marshall Date 08/05/08

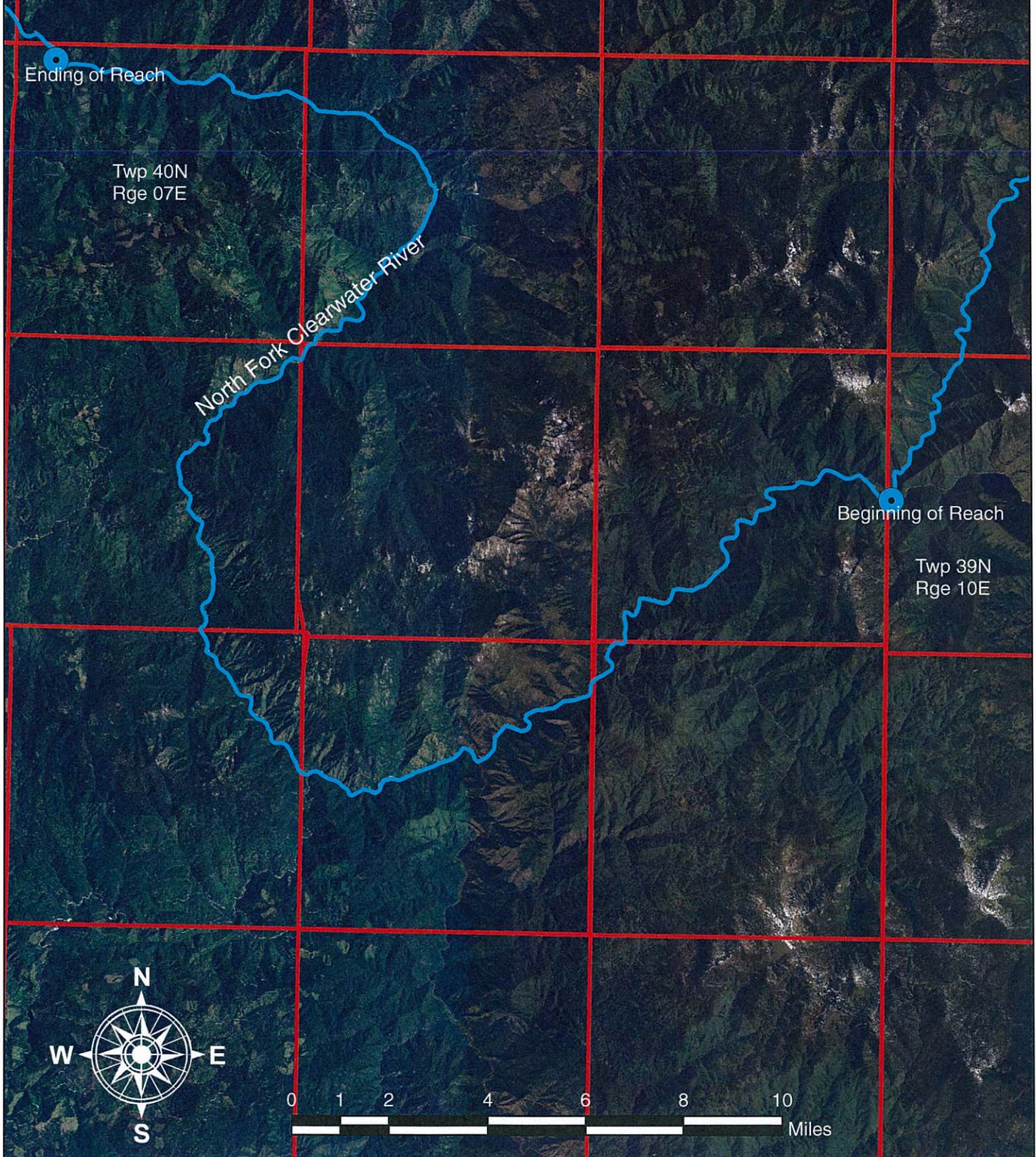
Reviewer _____ Date _____

Attachment A - Map

Water Permit No. 83-11962



Attachment B - Satellite Imagery Water Permit No. 83-11962



Water-Data Report 2007

13340600 NORTH FORK CLEARWATER RIVER NEAR CANYON RANGER STATION, IDClearwater Basin
Upper North Fork Clearwater Subbasin

LOCATION.--Lat 46°50'26", long 115°37'16" referenced to North American Datum of 1983, in SE ¼ SE ¼ NE ¼ sec.6, T.40 N., R.7 E., Clearwater County, ID, Hydrologic Unit 17060307, Sheep Mountain quad., Clearwater National Forest, on left bank immediately upstream from forest road bridge, 0.1 mi upstream from Beaver Creek, 1.7 mi downstream from Canyon Ranger Station, and at mile 58.0.

DRAINAGE AREA.--1,360 mi², approximately.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,660.00 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Station equipment includes satellite telemetry. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,500 ft³/s Nov. 30, 1995, gage height, 17.58 ft, from rating curve extended above 29,500 ft³/s; minimum, 200 ft³/s Dec. 5, 1972, gage height, 5.00 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 7	1930	*16,600	*12.99
No other peak greater than base discharge			

Minimum discharge, 318 ft³/s Nov. 1, gage height 4.88 ft.

13340600 NORTH FORK CLEARWATER RIVER NEAR CANYON RANGER STATION, ID—Continued

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

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	654	389	2,040	1,610	1,200	1,720	5,580	9,780	5,990	2,180	936	743
2	644	445	1,930	1,700	1,170	1,550	5,220	10,600	6,240	2,080	920	756
3	643	1,070	1,750	1,930	1,090	1,540	4,800	10,600	6,370	2,000	902	689
4	644	1,380	1,660	2,020	1,130	1,650	4,580	9,230	6,420	1,920	885	661
5	654	2,170	1,830	1,790	1,290	1,680	4,530	8,100	6,600	1,850	878	645
6	648	4,850	1,830	1,670	1,350	1,740	4,830	7,290	6,380	1,780	883	643
7	647	13,300	1,690	1,630	1,330	1,950	5,300	7,020	6,150	1,720	875	639
8	646	10,400	1,650	1,770	1,350	2,360	5,850	7,450	5,260	1,660	856	626
9	641	4,830	1,630	1,780	1,440	2,420	6,460	8,580	4,880	1,600	847	616
10	630	3,580	1,650	1,770	1,520	2,450	6,510	9,760	5,400	1,570	843	613
11	629	3,390	1,680	1,480	1,550	2,760	5,840	10,300	5,560	1,520	836	609
12	631	3,070	1,780	e800	1,850	4,800	5,480	10,800	4,970	1,470	813	602
13	629	2,840	2,210	e500	1,830	9,860	5,170	11,300	4,600	1,430	790	592
14	625	2,780	2,710	e550	1,770	7,760	5,200	10,100	4,380	1,390	774	584
15	660	2,400	3,290	e700	1,850	6,160	5,640	9,540	4,120	1,350	756	583
16	1,040	3,100	2,930	e900	2,710	5,340	5,330	9,530	3,920	1,340	747	581
17	1,100	2,840	2,260	e1,200	2,610	5,010	5,700	10,100	3,860	1,310	754	589
18	795	2,420	1,730	e1,500	2,590	5,480	5,620	10,700	3,800	1,420	743	637
19	837	2,220	1,570	e1,600	2,530	6,090	5,300	10,400	3,500	1,310	739	662
20	1,280	3,160	1,740	e1,700	2,620	6,840	4,940	9,500	3,320	1,240	943	651
21	1,020	3,860	1,840	1,590	2,560	6,560	4,760	8,850	3,200	1,200	1,080	648
22	820	3,600	1,960	1,460	2,370	5,840	4,750	7,760	3,070	1,170	1,000	644
23	745	3,300	1,950	1,400	2,250	5,480	5,150	7,190	2,920	1,140	847	690
24	713	3,120	1,770	1,380	2,060	5,380	5,660	6,630	2,790	1,120	792	957
25	711	2,920	1,770	1,330	1,980	7,010	6,130	6,480	2,770	1,100	764	763
26	706	2,580	1,970	1,260	1,960	8,390	6,230	6,130	2,680	1,070	740	667
27	682	2,520	2,270	1,180	1,830	7,520	6,400	6,200	2,500	1,050	723	637
28	671	2,300	2,070	1,130	1,780	6,620	7,330	6,640	2,400	1,030	714	626
29	665	2,020	1,720	1,140	---	5,980	8,510	5,890	2,340	998	704	672
30	686	1,870	1,510	1,250	---	5,670	9,320	5,680	2,310	978	688	700
31	598	---	1,500	1,250	---	5,490	---	5,750	---	961	680	---
Total	22,694	98,724	59,890	42,970	51,570	149,100	172,120	263,880	128,700	43,957	25,452	19,725
Mean	732	3,291	1,932	1,386	1,842	4,810	5,737	8,512	4,290	1,418	821	658
Max	1,280	13,300	3,290	2,020	2,710	9,860	9,320	11,300	6,600	2,180	1,080	957
Min	598	389	1,500	500	1,090	1,540	4,530	5,680	2,310	961	680	581
Ac-ft	45,010	195,800	118,800	85,230	102,300	295,700	341,400	523,400	255,300	87,190	50,480	39,120
Cfs/m	0.54	2.42	1.42	1.02	1.35	3.54	4.22	6.26	3.15	1.04	0.60	0.48
In.	0.62	2.70	1.64	1.18	1.41	4.08	4.71	7.22	3.52	1.20	0.70	0.54

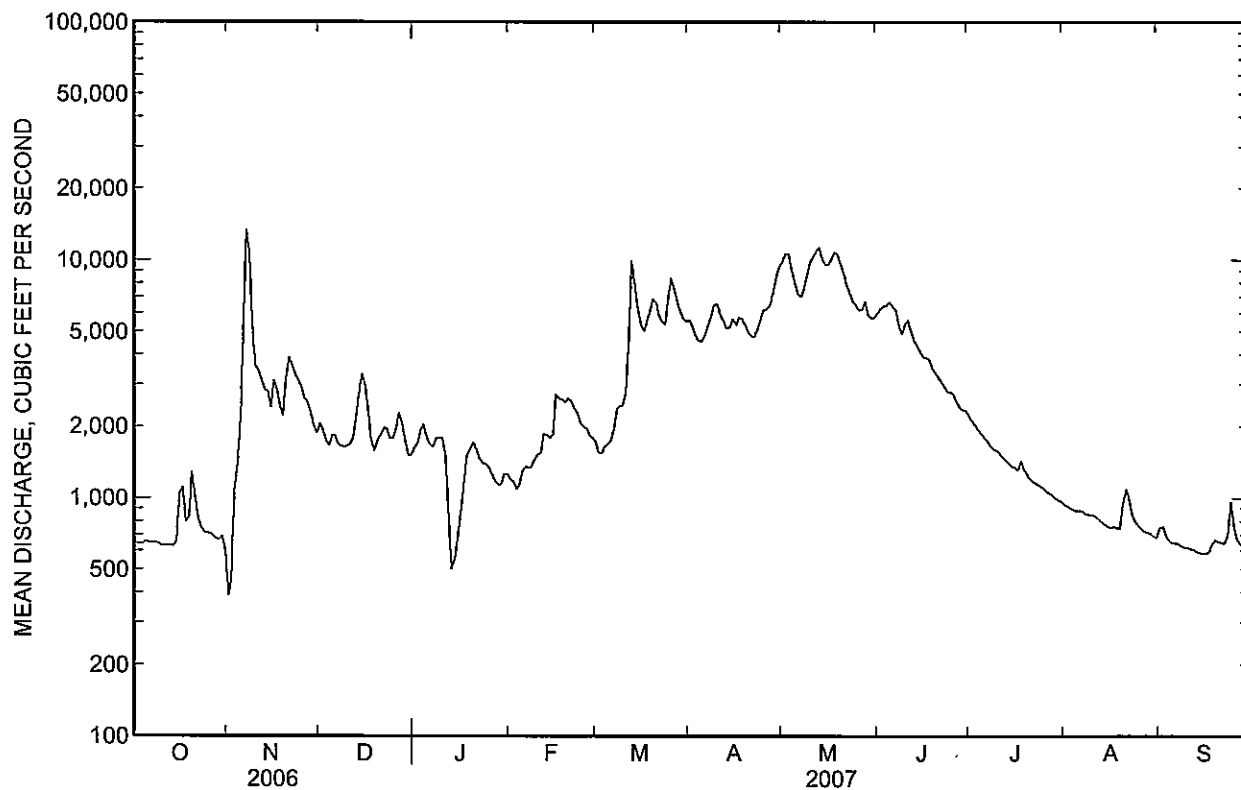
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,024	1,617	1,799	1,797	2,265	3,189	6,220	10,650	8,033	2,531	1,121	922
Max	2,346	6,581	8,582	5,106	8,133	7,429	9,931	20,670	20,630	4,934	1,713	1,675
(WY)	(1969)	(1996)	(1996)	(1974)	(1996)	(1986)	(1990)	(1997)	(1974)	(1975)	(1975)	(1968)
Min	551	609	708	665	722	1,247	2,710	5,955	2,367	1,151	698	551
(WY)	(1988)	(1988)	(1979)	(1979)	(1985)	(1977)	(1975)	(1973)	(1992)	(1977)	(1973)	(2001)

13340600 NORTH FORK CLEARWATER RIVER NEAR CANYON RANGER STATION, ID—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1967 - 2007	
Annual total	1,283,179		1,078,782			
Annual mean	3,516		2,956		3,420	
Highest annual mean					5,657	
Lowest annual mean					1,830	
Highest daily mean	19,400	May 19	13,300	Nov 7	34,200	Nov 30, 1995
Lowest daily mean	389	Nov 1	389	Nov 1	253	Dec 5, 1972
Annual seven-day minimum	591	Oct 27	591	Oct 27	420	Oct 30, 2002
Annual runoff (ac-ft)	2,545,000		2,140,000		2,478,000	
Annual runoff (cfsm)	2.58		2.17		2.51	
Annual runoff (inches)	35.10		29.51		34.17	
10 percent exceeds	9,260		6,620		8,860	
50 percent exceeds	1,970		1,780		1,710	
90 percent exceeds	703		653		760	



13340600 NORTH FORK CLEARWATER RIVER NEAR CANYON RANGER STATION, ID—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1970-83, October 1986 to current year.

PERIOD OF DAILY RECORD.—

WATER TEMPERATURE: February 1970 to September 1983, October 1986 to current year.

INSTRUMENTATION.—Water temperature recording data logger.

EXTREMES FOR PERIOD OF RECORD.—

WATER TEMPERATURE: Maximum, 24.0 °C Aug. 8, 1983, July 24, 2007; minimum, 0.0 °C many days during winter months.

EXTREMES FOR CURRENT YEAR.—

WATER TEMPERATURE: Maximum, 24.0 °C July 24; minimum, 0.0 °C many days during winter months.

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	11.5	10.5	1.0	1.0	0.5	0.5	0.5	0.0	0.5	0.0	2.0	1.5
2	11.0	10.0	1.5	0.5	1.0	0.5	0.5	0.5	0.5	0.0	1.5	1.0
3	10.5	10.0	2.0	1.5	0.5	0.5	0.5	0.5	0.5	0.0	1.5	1.0
4	10.5	10.0	3.5	2.0	0.5	0.5	0.5	0.5	0.5	0.0	3.0	1.5
5	11.0	10.0	4.5	3.0	1.0	0.5	0.5	0.5	1.0	0.5	4.0	2.5
6	11.5	10.5	7.0	4.5	1.0	0.5	0.5	0.0	1.0	0.5	4.0	3.0
7	11.5	10.5	8.5	7.0	1.0	1.0	0.5	0.0	1.0	0.5	4.0	3.0
8	11.0	10.0	8.5	6.5	1.0	1.0	1.0	0.5	1.0	0.5	4.0	3.0
9	10.0	8.5	6.5	5.0	1.0	1.0	1.0	0.5	1.0	0.5	4.0	3.5
10	8.5	7.5	5.0	4.5	1.5	1.0	1.0	0.5	1.0	1.0	4.5	3.5
11	7.5	6.5	4.5	4.0	2.0	1.5	0.5	0.0	1.0	1.0	4.5	4.0
12	7.0	6.5	4.0	3.5	2.0	2.0	0.0	0.0	1.0	1.0	4.0	3.5
13	7.0	6.5	4.0	3.5	2.5	2.0	0.0	0.0	1.5	1.0	4.0	2.5
14	7.0	6.5	3.5	3.5	2.5	2.0	0.0	0.0	1.5	1.0	4.0	3.5
15	7.0	6.5	3.5	3.0	2.5	2.5	0.0	0.0	1.5	1.0	4.0	3.5
16	8.0	7.0	4.0	3.5	2.5	1.0	0.0	0.0	1.5	1.0	4.5	4.0
17	8.0	7.0	3.5	3.0	1.0	0.5	0.0	0.0	2.5	1.5	5.0	4.5
18	8.0	7.5	3.0	2.5	0.5	0.5	0.0	0.0	2.5	2.0	5.5	4.5
19	8.0	7.5	3.0	2.5	0.5	0.5	0.0	0.0	2.5	2.0	5.0	4.5
20	8.0	7.5	4.0	3.0	0.5	0.5	0.0	0.0	2.5	2.5	5.0	4.5
21	8.0	7.5	4.5	4.0	0.5	0.0	0.0	0.0	2.5	2.0	4.5	4.0
22	8.0	6.5	4.5	4.0	0.5	0.0	0.0	0.0	3.0	2.0	4.0	3.5
23	7.0	5.5	4.0	3.5	0.5	0.0	0.0	0.0	3.0	2.5	5.0	4.0
24	5.5	5.0	3.5	2.5	0.5	0.0	0.5	0.0	2.5	2.5	5.5	5.0
25	6.0	5.0	2.5	2.0	0.5	0.5	0.5	0.5	3.0	2.0	5.5	4.5
26	5.5	5.0	2.0	1.5	0.5	0.5	0.5	0.5	3.0	2.5	5.0	4.0
27	5.0	4.5	1.5	1.0	0.5	0.5	0.5	0.0	2.5	2.0	5.0	4.5
28	5.0	4.0	1.0	0.5	0.5	0.5	0.0	0.0	2.5	2.0	5.0	4.5
29	4.5	3.5	1.0	0.5	0.5	0.0	0.5	0.0	---	---	5.5	5.0
30	3.5	2.5	0.5	0.5	0.5	0.0	0.5	0.0	---	---	5.5	4.5
31	2.5	1.0	---	---	0.5	0.0	0.5	0.0	---	---	5.0	5.0
Month	11.5	1.0	8.5	0.5	2.5	0.0	1.0	0.0	3.0	0.0	5.5	1.0

13340600 NORTH FORK CLEARWATER RIVER NEAR CANYON RANGER STATION, 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	5.5	5.0	8.5	7.5	12.5	11.5	18.0	16.5	22.0	20.5	18.5	17.0
2	5.5	4.0	8.5	7.0	12.5	12.0	18.5	17.0	21.5	20.5	19.0	18.0
3	4.5	3.5	7.5	6.0	12.5	12.0	19.0	17.0	21.5	21.0	19.0	18.0
4	5.0	4.5	6.0	5.0	12.0	12.0	19.5	17.5	21.0	20.5	19.0	18.0
5	6.5	5.0	6.5	5.5	12.0	10.5	20.5	18.0	20.5	19.5	18.5	18.0
6	7.0	6.0	7.5	6.0	10.5	8.0	21.0	19.0	20.0	19.5	18.0	17.0
7	6.5	6.0	8.5	7.5	8.0	7.5	21.5	19.5	19.5	19.0	17.5	16.0
8	6.5	6.0	9.0	8.5	10.5	7.5	21.0	19.5	19.5	19.0	16.0	15.0
9	6.0	5.5	9.5	9.0	11.5	10.5	21.0	19.0	20.0	19.0	15.5	14.0
10	5.5	4.5	9.5	8.0	11.5	11.0	21.5	19.0	20.0	19.0	14.5	14.0
11	5.5	4.0	9.0	8.0	11.5	10.0	22.0	19.5	19.5	18.5	14.5	13.5
12	5.5	4.5	9.0	8.0	12.5	11.5	22.0	20.0	19.0	18.5	14.5	13.5
13	6.0	5.0	9.5	7.0	12.0	11.0	22.5	20.5	19.5	18.5	14.5	13.5
14	7.0	6.0	8.5	6.5	12.0	10.5	23.0	21.0	19.5	18.5	14.5	13.5
15	7.0	6.0	9.0	8.0	12.5	11.5	23.0	22.0	20.0	19.0	14.5	13.5
16	6.5	5.5	9.5	8.5	13.0	12.0	23.0	22.0	19.5	19.0	14.5	13.5
17	7.0	6.0	10.0	9.0	13.0	11.5	23.0	21.5	19.5	18.5	14.5	13.5
18	6.0	5.5	10.5	9.0	12.0	10.5	23.5	22.0	19.0	18.5	14.0	13.5
19	5.5	5.0	10.0	8.0	13.0	11.5	23.0	21.5	18.5	17.5	13.5	12.5
20	5.5	4.5	8.5	7.5	15.0	13.0	23.0	21.5	17.5	17.0	12.5	11.5
21	6.0	5.5	7.5	6.5	16.5	15.0	22.5	21.5	17.0	16.0	12.0	11.5
22	7.5	6.0	7.5	6.0	17.0	15.5	23.0	21.5	17.5	16.0	12.5	11.5
23	8.5	7.0	9.0	7.5	16.5	16.0	23.5	22.0	17.5	16.5	12.5	11.5
24	8.0	7.5	9.0	8.5	16.5	15.5	24.0	23.0	17.5	17.0	11.5	11.0
25	8.0	6.5	9.5	8.5	15.5	14.0	23.5	22.5	17.5	17.0	11.5	10.5
26	7.5	6.0	10.0	9.5	14.5	13.0	23.5	22.0	17.5	16.5	11.5	10.5
27	8.0	7.0	10.0	8.5	15.5	13.5	23.0	22.0	17.5	16.5	11.5	10.5
28	8.5	8.0	8.5	7.5	17.0	15.0	23.0	22.5	17.0	16.0	11.5	10.5
29	8.5	7.5	9.5	7.0	17.5	16.5	23.0	22.0	17.0	16.0	10.5	9.5
30	8.0	7.5	10.5	9.5	18.0	16.5	23.0	22.0	17.0	16.0	10.0	9.0
31	---	---	11.5	10.5	---	---	22.5	21.5	17.5	16.5	---	---
Month	8.5	3.5	11.5	5.0	18.0	7.5	24.0	16.5	22.0	16.0	19.0	9.0