

Water-Data Report 2013

15051010 SALMON CREEK NEAR JUNEAU, AK

Northern Southeast Alaska Basin
Lynn Canal Subbasin

LOCATION.--Lat 58°19'57", long 134°27'57" referenced to North American Datum of 1927, in NE ¼ SE ¼ NW ¼ sec.9, T.41 S., R.67 E., City & Borough of Juneau, AK, Hydrologic Unit 19010301, (Juneau B-2 SE quad), in Tongass National Forest, on left bank, about 0.3 mi upstream from mouth and 2.5 mi northwest of Juneau.

DRAINAGE AREA.--9.69 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1990 to current year. Daily discharge record previously collected 0.5 mi upstream at station number 15051008 "above canyon mouth" during water-years 1982-90. Drainage area, 9.50 mi².

REVISED RECORDS.--WDR AK 93-1: 1991 (m).

GAGE.--Water-stage recorder. Elevation of gage is 30 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges which are poor. Flow regulated by Salmon Creek Reservoir 2.5 mi upstream. Diversions upstream for off-stream hydropower plant; outflow from the plant goes into Gastineau Channel and is not included in the discharge records. Diversions upstream into Twin Lakes via a pipeline are also not included in the discharge records.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	50	12	e7.9	e10	e11	12	10	22	151	96	27	102
2	41	12	e7.8	15	e30	10	9.1	48	117	92	25	66
3	35	13	e7.8	9.6	49	9.2	7.9	55	80	95	25	41
4	32	19	e7.8	8.3	26	8.6	7.0	178	112	66	29	87
5	32	30	e7.7	7.8	19	7.9	6.5	152	130	45	31	87
6	31	26	e7.5	7.5	15	7.5	6.4	72	154	38	25	52
7	29	20	6.8	7.4	14	7.3	6.6	54	120	37	23	54
8	27	15	6.6	7.4	23	7.3	8.2	50	85	153	28	95
9	25	13	6.7	6.8	24	7.9	39	55	75	91	31	51
10	22	13	8.5	6.6	68	7.9	22	67	78	60	23	41
11	19	13	8.4	6.5	39	7.8	14	95	91	48	21	40
12	21	13	7.1	6.3	25	7.1	11	152	89	42	20	35
13	81	12	8.9	6.5	19	6.6	10	145	77	41	20	30
14	67	31	9.4	19	19	6.8	9.3	126	66	38	20	26
15	56	34	13	61	67	7.0	9.1	115	74	37	19	24
16	64	23	8.9	33	40	6.9	9.2	87	102	35	32	27
17	50	17	7.5	95	25	6.4	12	86	96	38	24	32
18	39	14	e6.6	35	22	e5.5	11	130	104	37	56	50
19	31	13	e6.3	21	18	e5.3	9.2	81	92	34	46	55
20	27	12	e6.0	16	19	e4.9	8.4	49	76	34	34	116
21	23	11	e5.9	29	18	e4.8	8.2	41	70	48	29	158
22	21	11	e5.9	22	16	e5.0	8.6	40	78	44	26	74
23	19	10	e5.9	21	13	e5.0	8.4	44	63	37	22	55
24	18	10	e5.8	21	12	e5.0	9.6	58	65	37	26	43
25	16	9.8	e5.7	17	11	8.4	24	70	76	36	28	37
26	15	9.5	e5.6	22	9.9	7.4	50	73	71	33	25	56
27	14	9.0	e5.5	16	9.7	6.2	31	87	65	29	22	65
28	13	8.7	e5.5	e13	11	5.8	27	103	51	29	20	54
29	12	e8.0	e5.7	e14	---	5.6	18	136	45	29	18	43
30	12	e7.9	e5.8	e13	---	7.1	14	106	48	30	20	37
31	13	---	e7.6	e12	---	6.8	---	101	---	28	34	---
Total	955	449.9	222.1	585.7	672.6	217.0	424.7	2,678	2,601	1,537	829	1,733
Mean	30.8	15.0	7.16	18.9	24.0	7.00	14.2	86.4	86.7	49.6	26.7	57.8
Max	81	34	13	95	68	12	50	178	154	153	56	158
Min	12	7.9	5.5	6.3	9.7	4.8	6.4	22	45	28	18	24
Ac-ft	1,890	892	441	1,160	1,330	430	842	5,310	5,160	3,050	1,640	3,440

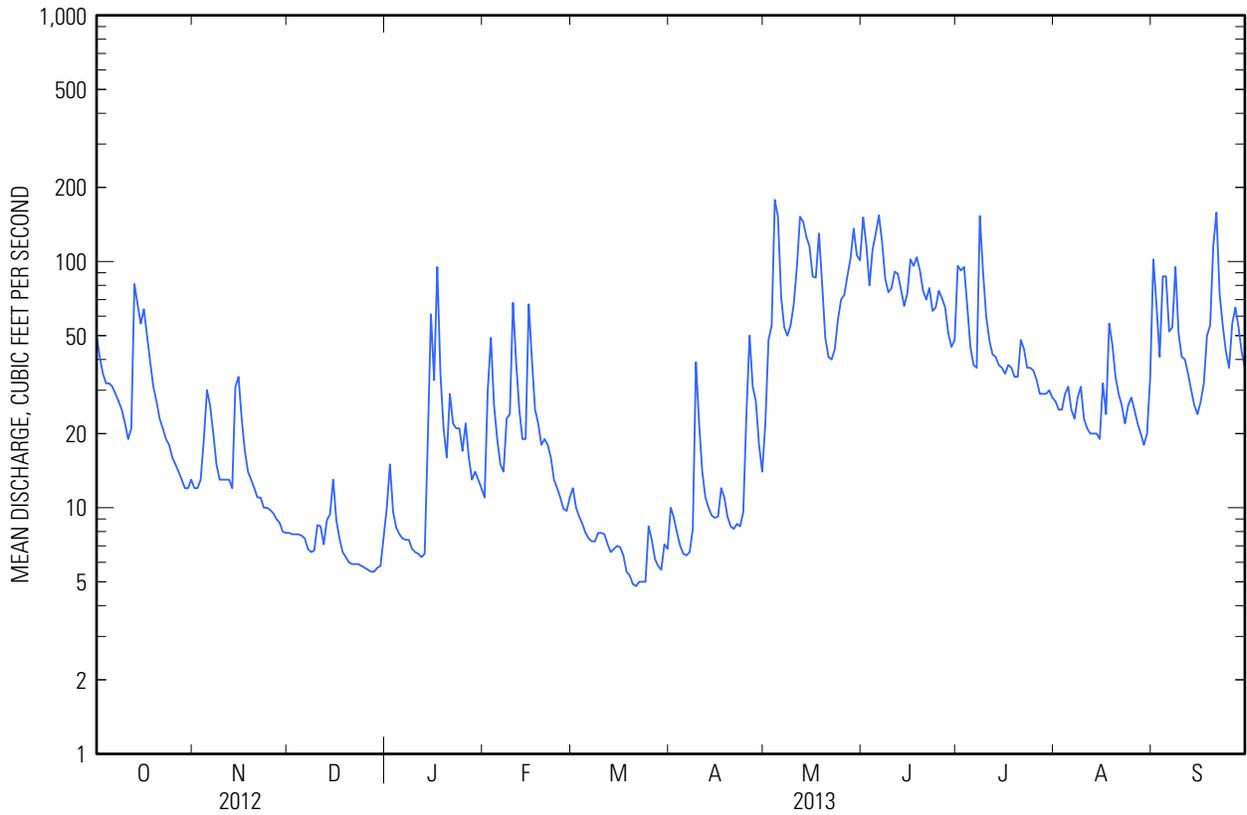
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	61.4	38.5	29.1	18.4	18.6	14.3	22.0	50.3	58.4	47.2	42.0	63.4
Max	131	242	133	33.5	45.0	39.0	38.6	86.4	109	73.9	98.8	108
(WY)	(1999)	(2006)	(2006)	(1992)	(1992)	(1992)	(1994)	(2013)	(2012)	(2008)	(2011)	(1991)
Min	30.8	13.0	7.16	9.65	9.16	5.51	9.52	29.0	31.7	21.9	15.1	27.3
(WY)	(2013)	(2007)	(2013)	(1997)	(1999)	(2006)	(2002)	(2003)	(2003)	(2003)	(2004)	(2010)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1991 - 2013	
Annual total	15,171.5		12,905.0			
Annual mean	41.5		35.4		38.7	
Highest annual mean					65.3	2006
Lowest annual mean					28.8	2010
Highest daily mean	211	Sep 9	178	May 4	1,100	Nov 22, 2005
Lowest daily mean	5.5	Dec 27	4.8	Mar 21	3.5	Mar 17, 2006
Annual seven-day minimum	5.7	Dec 24	5.1	Mar 18	3.5	Mar 15, 2006
Maximum peak flow			648	Jul 8	2,110	Nov 22, 2005
Maximum peak stage			3.15	Jul 8	4.65	Sep 25, 1996
Annual runoff (ac-ft)	30,090		25,600		28,040	
10 percent exceeds	92		87		76	
50 percent exceeds	31		23		28	
90 percent exceeds	7.8		6.8		9.2	



15051010 SALMON CREEK NEAR JUNEAU, AK—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--March to September 2013.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: March to September 2013.

INSTRUMENTATION.--Electronic water-temperature recorder since March 4, 2013, set for 15 min recording interval.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on April 23rd. No variation was found within the cross section. A variation of less than 0.2°C was found between mean stream temperature and sensor temperature.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 12.5°C, August 3, 12 - 15; minimum, 0.0°C, on many days during winter periods.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
 [ft, feet; ft³/s, cubic feet per second; °C, degrees Celsius]

Date	Sample start time	Stream width, ft (00004)	Location in	Gage height, ft (00065)	Discharge, instantaneous, ft ³ /s (00061)	Temperature, water, °C (00010)	Temperature, air, °C (00020)
			cross section, distance from left bank looking downstream, ft (00009)				
April 23, 2013	1011	14.3	8.00	1.53	8.1	1.6	2.5
April 23, 2013	1012	14.3	10.0	1.53	8.1	1.6	2.5
April 23, 2013	1013	14.3	12.0	1.53	8.1	1.6	2.5
April 23, 2013	1014	14.3	14.0	1.53	8.1	1.6	2.5
April 23, 2013	1015	14.3	16.0	1.53	8.1	1.6	2.5
April 23, 2013	1016	14.3	18.0	1.53	8.1	1.6	2.5
April 23, 2013	1017	14.3	20.0	1.53	8.1	1.6	2.5

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	---	---	---	2.0	1.5	1.5	2.0	1.5	1.5
2	---	---	---	---	---	---	2.5	1.0	1.5	2.5	2.0	2.0
3	---	---	---	---	---	---	2.5	1.0	1.5	3.0	2.0	2.5
4	---	---	---	---	---	---	1.5	0.5	1.0	3.0	2.0	2.5
5	---	---	---	0.5	0.0	0.5	1.0	0.0	0.5	3.0	2.0	2.5
6	---	---	---	1.0	0.0	0.0	1.5	0.0	1.0	3.5	2.5	2.5
7	---	---	---	0.5	0.0	0.0	2.5	1.0	1.5	4.0	2.0	3.0
8	---	---	---	1.5	0.5	1.0	2.5	1.5	2.0	4.5	2.0	3.5
9	---	---	---	1.5	1.0	1.5	2.0	1.0	1.5	5.0	2.5	3.5
10	---	---	---	2.0	1.0	1.5	2.0	1.0	1.0	5.0	2.5	3.5
11	---	---	---	1.5	1.0	1.5	1.5	0.5	1.0	4.0	3.0	3.5
12	---	---	---	1.5	0.5	1.0	2.0	1.0	1.5	4.0	2.5	3.5
13	---	---	---	0.5	0.0	0.0	2.0	0.5	1.0	3.5	3.0	3.0
14	---	---	---	0.0	0.0	0.0	2.5	0.5	1.5	3.5	3.0	3.5
15	---	---	---	0.0	0.0	0.0	2.5	0.5	1.5	4.0	3.0	3.5
16	---	---	---	0.0	0.0	0.0	2.5	1.0	1.5	4.5	3.0	3.5
17	---	---	---	0.0	0.0	0.0	3.0	1.5	2.0	4.0	3.5	3.5
18	---	---	---	0.0	0.0	0.0	3.0	1.5	2.0	3.5	2.5	3.5
19	---	---	---	0.0	0.0	0.0	2.5	1.0	2.0	3.5	2.5	3.0
20	---	---	---	0.0	0.0	0.0	2.5	0.5	1.5	4.5	2.0	3.0
21	---	---	---	0.0	0.0	0.0	3.0	0.5	1.5	5.0	2.5	3.5
22	---	---	---	0.0	0.0	0.0	2.5	1.5	2.0	5.5	3.5	4.5
23	---	---	---	0.0	0.0	0.0	3.0	1.5	2.0	6.0	3.5	4.5
24	---	---	---	1.0	0.0	0.5	2.5	2.0	2.5	5.0	4.0	4.5
25	---	---	---	1.0	0.0	0.5	2.5	2.0	2.0	5.5	3.5	4.5
26	---	---	---	1.5	0.5	1.0	2.0	1.0	1.5	6.5	3.5	5.0
27	---	---	---	1.5	0.5	1.0	2.0	1.0	1.5	6.5	4.0	5.0
28	---	---	---	1.5	0.5	1.0	2.5	0.5	1.5	7.0	4.0	5.0
29	---	---	---	2.0	0.5	1.0	2.0	0.5	1.0	6.5	4.0	5.0
30	---	---	---	2.0	1.0	1.5	2.0	1.0	1.5	5.5	4.0	4.5
31	---	---	---	2.5	1.0	1.5	---	---	---	4.5	4.0	4.5
Month	---	---	---	---	---	---	3.0	0.0	1.5	7.0	1.5	3.6

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	4.0	3.5	4.0	8.0	6.0	7.5	12.0	10.5	11.0	10.5	10.0	10.5
2	5.5	3.5	4.5	6.5	6.0	6.5	12.0	10.0	11.0	10.5	10.0	10.0
3	5.5	3.5	4.5	6.5	6.0	6.5	12.5	10.5	11.5	11.0	10.0	10.5
4	5.0	4.0	4.5	7.0	6.0	6.5	11.5	10.5	11.0	10.5	10.0	10.5
5	4.5	3.5	4.0	7.5	6.5	7.0	11.0	10.0	10.5	10.5	9.5	10.0
6	5.0	3.5	4.5	7.5	6.5	7.0	12.0	10.0	11.0	11.0	10.0	10.0
7	6.0	4.0	5.0	8.5	7.0	7.5	12.0	10.0	11.0	11.5	11.0	11.0
8	6.5	4.0	5.0	8.0	6.5	7.5	11.5	10.5	11.0	12.0	10.0	11.0
9	7.5	4.5	5.5	7.0	6.0	6.5	11.0	10.5	10.5	10.0	9.0	9.5
10	8.0	5.0	6.0	8.5	6.0	7.0	11.0	9.5	10.0	9.5	9.0	9.5
11	7.5	5.0	6.0	8.0	7.0	7.5	11.5	9.5	10.5	11.0	9.5	10.0
12	8.0	5.0	6.0	8.0	7.0	7.5	12.5	10.0	11.0	11.0	10.5	10.5
13	7.0	4.5	5.5	9.0	7.5	8.0	12.5	10.5	11.5	10.5	9.5	10.0
14	8.0	5.0	6.5	9.5	6.5	8.0	12.5	11.0	12.0	10.0	9.5	9.5
15	8.5	5.0	6.5	9.0	7.5	8.5	12.5	11.0	11.5	10.0	9.0	9.5
16	7.5	5.5	6.5	10.0	8.0	9.0	12.0	11.0	11.5	10.0	9.5	9.5
17	8.5	5.5	6.5	11.0	8.5	10.0	11.5	10.5	11.0	9.5	9.0	9.0
18	7.5	5.0	6.0	10.0	9.0	9.5	11.0	9.5	10.5	9.0	8.5	9.0
19	8.0	5.5	6.5	9.0	8.5	9.0	10.0	9.0	9.5	8.5	8.5	8.5
20	8.0	6.0	7.0	9.0	8.5	8.5	10.0	9.5	9.5	9.5	8.5	9.0
21	9.0	6.0	7.5	9.0	8.0	8.5	10.0	9.5	9.5	9.0	7.5	8.0
22	7.5	6.5	7.0	9.5	8.0	8.5	10.0	9.5	10.0	8.0	7.5	8.0
23	8.0	6.0	7.0	10.5	8.5	9.5	10.0	9.5	10.0	8.0	7.5	8.0
24	9.0	6.0	7.5	10.0	9.0	9.5	10.0	10.0	10.0	8.0	7.0	7.5
25	8.0	6.5	7.0	9.5	9.0	9.0	10.5	9.5	10.0	7.5	6.5	7.0
26	7.5	6.5	7.0	9.0	9.0	9.0	11.0	10.0	10.5	8.0	7.5	7.5
27	7.5	6.5	7.0	9.5	8.5	9.0	11.0	9.5	10.0	7.5	7.0	7.5
28	9.0	6.0	7.5	11.0	8.5	9.5	11.0	10.0	10.5	7.5	7.0	7.0
29	8.5	7.0	7.5	11.5	9.5	10.5	11.0	9.5	10.0	7.5	6.5	7.0
30	9.5	7.0	8.0	12.0	10.0	11.0	10.5	9.5	10.0	7.5	6.5	7.0
31	---	---	---	12.0	10.0	11.0	10.5	10.0	10.5	---	---	---
Month	9.5	3.5	6.1	12.0	6.0	8.4	12.5	9.0	10.6	12.0	6.5	9.1