Water-Data Report 2011

15200280 GULKANA RIVER AT SOURDOUGH, AK

Copper River Basin
Middle Copper River Subbasin

LOCATION.--Lat 62°31′15″, long 145°31′51″ referenced to North American Datum of 1927, in NE ¼ SE ¼ NE ¼ sec.35, T.9 N., R.2 W., Valdez-Cordova Division, AK, Hydrologic Unit 19020102, (Gulkana C-4 quad), at Alyeska Pipeline Service Company bridge 70 ft streamward on downstream edge, 0.3 mi downstream from Sourdough Creek and 0.8 mi southwest of Sourdough.

DRAINAGE AREA.--1,770 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1972 to September 1978, May to September 1982, October 1988 to September 1993, May 1997 to September 2004, and May 2007 to current year.

REVISED RECORDS.--WRD AK-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,845.96 ft above sea level (levels of Alyeska Engineering).

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 15200280, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/15200280.2011.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,000	e575	e440	e280	e220	e200	e230	e1,600	2,760	1,140	1,250	1,320
2	1,050	e555	e440	e270	e220	e200	e220	e1,900	2,540	1,260	1,590	1,290
3	1,080	e555	e430	e270	e220	e200	e220	e2,300	2,320	1,450	1,540	1,270
4	1,050	e540	e430	e270	e220	e200	e225	e2,600	2,180	1,490	1,370	1,260
5	1,020	e540	e430	e270	e220	e200	e230	e2,900	2,030	1,390	1,250	1,220
6	1,010	e520	e420	e270	e220	e200	e230	e3,200	1,870	1,350	1,190	1,210
7	1,010	e520	e420	e260	e220	e200	e240	e3,500	1,740	1,390	1,180	1,160
8	997	e500	e420	e260	e220	e200	e250	e3,700	1,640	1,420	1,180	1,110
9	960	e500	e410	e260	e210	e200	e250	e3,900	1,590	1,540	1,180	1,070
10	948	e490	e410	e260	e210	e200	e260	3,690	1,540	1,440	1,320	1,050
11	e890	e490	e410	e260	e210	e200	e260	e4,000	1,490	1,280	1,400	1,040
12	e770	e480	e405	e250	e210	e200	e270	3,710	1,470	1,170	1,320	1,020
13	e840	e480	e405	e250	e210	e200	e270	3,460	1,430	1,110	1,220	1,010
14	e840	e470	e400	e250	e210	e200	e280	3,230	1,380	1,090	1,260	1,010
15	e925	e460	e390	e250	e210	e200	e280	3,050	1,330	1,060	1,620	1,000
16	e850	e450	e390	e250	e210	e200	e290	3,270	1,330	1,030	1,920	994
17	e850	e440	e380	e240	e210	e210	e300	3,530	1,390	1,070	1,780	978
18	e790	e440	e370	e240	e210	e210	e300	3,870	1,400	1,170	1,720	961
19	e790	e430	e360	e240	e210	e210	e310	4,520	1,370	1,530	1,780	937
20	e740	e430	e350	e240	e210	e220	e330	4,410	1,330	1,890	2,060	934
21	e740	e440	e340	e240	e210	e220	e360	4,310	1,650	1,710	2,470	916
22	e705	e450	e330	e230	e210	e230	e370	4,520	1,950	1,490	2,380	911
23	e705	e460	e320	e230	e210	e240	e380	4,780	1,800	1,320	2,200	929
24	e665	e470	e310	e230	e210	e250	e400	4,630	1,660	1,220	2,150	933
25	e665	e480	e310	e230	e210	e260	e450	4,430	1,490	1,170	2,020	925
26	e635	e490	e300	e230	e210	e260	e600	4,250	1,360	1,130	1,840	928
27	e635	e500	e300	e220	e210	e250	e800	3,880	1,250	1,110	1,700	913
28	e610	e490	e300	e220	e210	e250	e1,000	3,530	1,180	1,090	1,590	895
29	e610	e460	e290	e220	---	e240	e1,200	3,360	1,120	1,060	1,500	877
30	e590	e440	e280	e220	---	e240	e1,400	3,160	1,090	1,060	1,420	861
31	e575	---	e280	e220	---	e230	---	2,940	---	1,080	1,360	---
Total	25,545	14,545	11,470	7,630	5,960	6,720	12,205	110,130	48,680	39,710	49,760	30,932
Mean	824	485	370	246	213	217	407	3,553	1,623	1,281	1,605	1,031
Max	1,080	575	440	280	220	260	1,400	4,780	2,760	1,890	2,470	1,320
Min	575	430	280	220	210	200	220	1,600	1,090	1,030	1,180	861
Ac-ft	50,670	28,850	22,750	15,130	11,820	13,330	24,210	218,400	96,560	78,760	98,700	61,350
Cfsm	0.47	0.27	0.21	0.14	0.12	0.12	0.23	2.01	0.92	0.72	0.91	0.58
In.	0.54	0.31	0.24	0.16	0.13	0.14	0.26	2.31	1.02	0.83	1.05	0.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2011, BY WATER YEAR (WY) #

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,029	588	437	359	318	310	467	3,176	2,496	1,475	1,323	1,368
Max	2,369	1,362	1,005	801	670	563	1,344	5,630	4,969	2,696	2,821	4,253
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(1993)	(1989)	(1977)	(1992)	(1992)	(1990)
Min	437	287	208	200	200	200	227	836	1,150	575	423	505
(WY)	(1975)	(1976)	(1974)	(1974)	(1974)	(1974)	(2000)	(2002)	(1998)	(2004)	(2004)	(1974)

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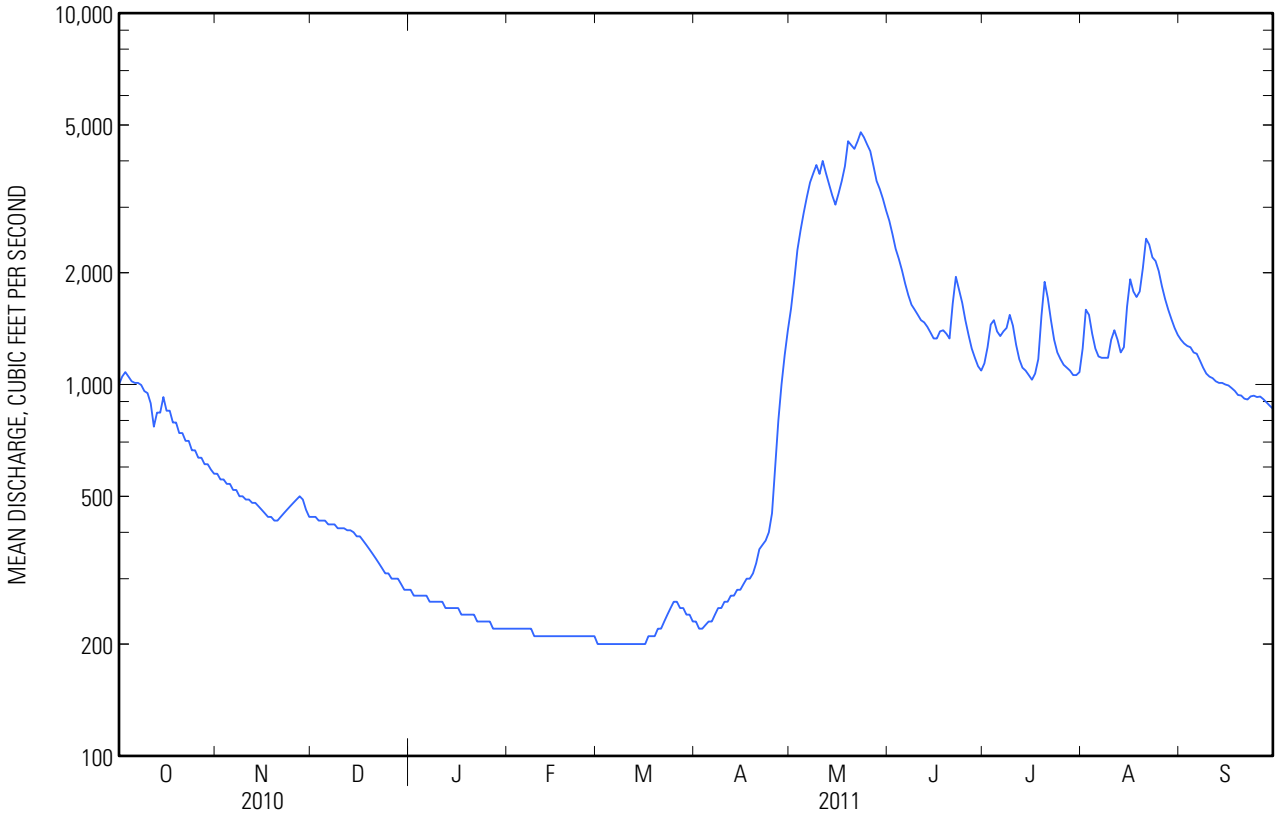
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1973 - 2011#	
Annual total	335,914		363,287			
Annual mean	920		995		1,118	
Highest annual mean					1,564	1992
Lowest annual mean					658	1998
Highest daily mean	4,340	Jul 25	4,780	May 23	12,100	Sep 12, 1990
Lowest daily mean	280	Dec 30	200	Mar 1	200	Dec 6, 1973
Annual seven-day minimum	294	Dec 25	200	Mar 1	200	Dec 6, 1973
Maximum peak flow			4,920	May 23	e15,300	Oct 10, 2006
Maximum peak stage			8.63	May 23	12.00	Oct 10, 2006
Maximum peak stage					a16.03	May 7, 1976
Annual runoff (ac-ft)	666,300		720,600		809,700	
Annual runoff (cfsm)	0.520		0.562		0.631	
Annual runoff (inches)	7.06		7.64		8.58	
10 percent exceeds	1,860		2,160		2,600	
50 percent exceeds	635		635		630	
90 percent exceeds	320		210		250	

See Period of Record; partial years used in monthly statistics
e Estimated
a Backwater from ice