15276000 SHIP CREEK NEAR ANCHORAGE, AK

Knik Arm Basin
Anchorage Subbasin

LOCATION.--Lat 61°13′32″, long 149°38′06″ referenced to North American Datum of 1927, in SE ¼ SW ¼ SE ¼ sec.9, T.13 N., R.2 W., Municipality of Anchorage, AK, Hydrologic Unit 19020401, (Anchorage A-8 quad), in Fort Richardson Military Reservation, on left bank, 800 ft downstream from diversion dam, 3.3 mi upstream from North Fork Ship Creek, and 7.8 mi east of intersection Seward and Glenn Highways in Anchorage.

DRAINAGE AREA.--89.5 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 1936: Drainage area. WDR AK-2001-1: 1987-1997.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 490 ft above sea level, from topographic map. Prior to August 22, 1985, water-stage recorder at dam 800 ft upstream. See WSP 1936 for history of changes prior to October 1, 1954.

COOPERATION.--Gage inspected and records of diversion provided by Doyon Utilities, LLC., Fort Richardson Water Treatment Plant.

REMARKS.--Records good except for estimated daily discharges, which are poor. Discharge data represent the net flow after diversion for water supply to Joint Base Elmendorf-Richardson and Municipality of Anchorage. Average diversion for the 2010 water year was 3.56 ft^3/s. Diversion began in 1944. Magnitude of discharges downstream of dam may be affected by periodic spillway adjustment.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	94	e63	e57	e42	e30	e28	e25	62	657	345	265	130
2	92	e71	e57	e39	e30	e27	e24	61	633	345	250	136
3	95	e79	e56	e39	e28	e26	e24	61	639	333	239	126
4	95	e76	e55	e40	e27	e25	e24	75	591	324	241	124
5	104	e73	e55	e40	e26	e25	e23	80	532	326	264	134
6	99	e71	e55	e41	e25	e24	e23	86	496	333	251	129
7	115	e69	e55	e40	e25	e24	e23	94	501	317	236	158
8	118	e66	e55	e39	e25	e23	e23	104	486	339	227	162
9	128	e63	e55	e38	e25	e22	e23	119	456	352	221	178
10	142	e62	e55	e36	e25	e22	e23	132	442	341	209	167
11	155	e59	e54	e35	e26	e21	e23	130	430	325	210	158
12	155	e55	e54	e34	e27	e21	e23	128	399	294	197	153
13	151	e53	e54	e34	e28	e21	e23	130	388	301	190	145
14	146	e51	e53	e35	e28	e21	e23	125	384	292	199	142
15	138	e49	e53	e35	e28	e21	e23	132	437	272	189	137
16	131	e47	e53	e36	e28	e22	e24	136	423	262	188	133
17	126	e46	e53	e36	e29	e22	e24	133	412	252	193	123
18	120	e49	e53	e37	e29	e22	e24	143	378	263	182	126
19	115	e52	e53	e34	e29	e22	e24	161	369	269	171	123
20	112	e55	e53	e32	e30	e22	e24	189	371	257	162	119
21	110	e58	e54	e32	e30	e22	e25	225	378	284	155	117
22	107	e60	e55	e31	e30	e22	e25	252	394	270	149	115
23	108	e60	e56	e31	e30	e22	e25	277	397	257	147	112
24	105	e60	e56	e31	e28	e23	e26	292	391	244	139	109
25	102	e60	e55	e31	e26	e23	e29	334	398	252	135	108
26	100	e59	e55	e31	e24	e23	e35	387	401	330	130	106
27	97	e59	e55	e31	e23	e23	51	467	391	348	129	101
28	94	e59	e54	e32	e26	e24	62	534	383	315	138	99
29	e79	e58	e50	e31	---	e24	66	584	373	291	146	100
30	e71	e58	e48	e31	---	e24	63	657	360	269	138	98
31	e67	---	e45	e30	---	e25	---	676	---	284	135	---
Total	3,471	1,800	1,671	1,084	765	716	877	6,966	13,290	9,286	5,825	3,868
Mean	112	60.0	53.9	35.0	27.3	23.1	29.2	225	443	300	188	129
Max	155	79	57	42	30	28	66	676	657	352	265	178
Min	67	46	45	30	23	21	23	61	360	244	129	98
Ac-ft	6,880	3,570	3,310	2,150	1,520	1,420	1,740	13,820	26,360	18,420	11,550	7,670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2010, BY WATER YEAR (WY) #

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	155	80.5	50.8	33.9	24.3	18.6	27.3	182	447	297	204	207
Max	356	199	154	79.4	61.6	50.2	69.7	504	798	645	510	471
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(1990)	(2005)	(1977)	(1980)	(1981)	(1967)
Min	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	132	72.0	72.9	55.8
(WY)	(1969)	(1969)	(1969)	(1956)	(1983)	(1956)	(1954)	(1971)	(1996)	(1996)	(2004)	(1969)

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SUMMARY STATISTICS

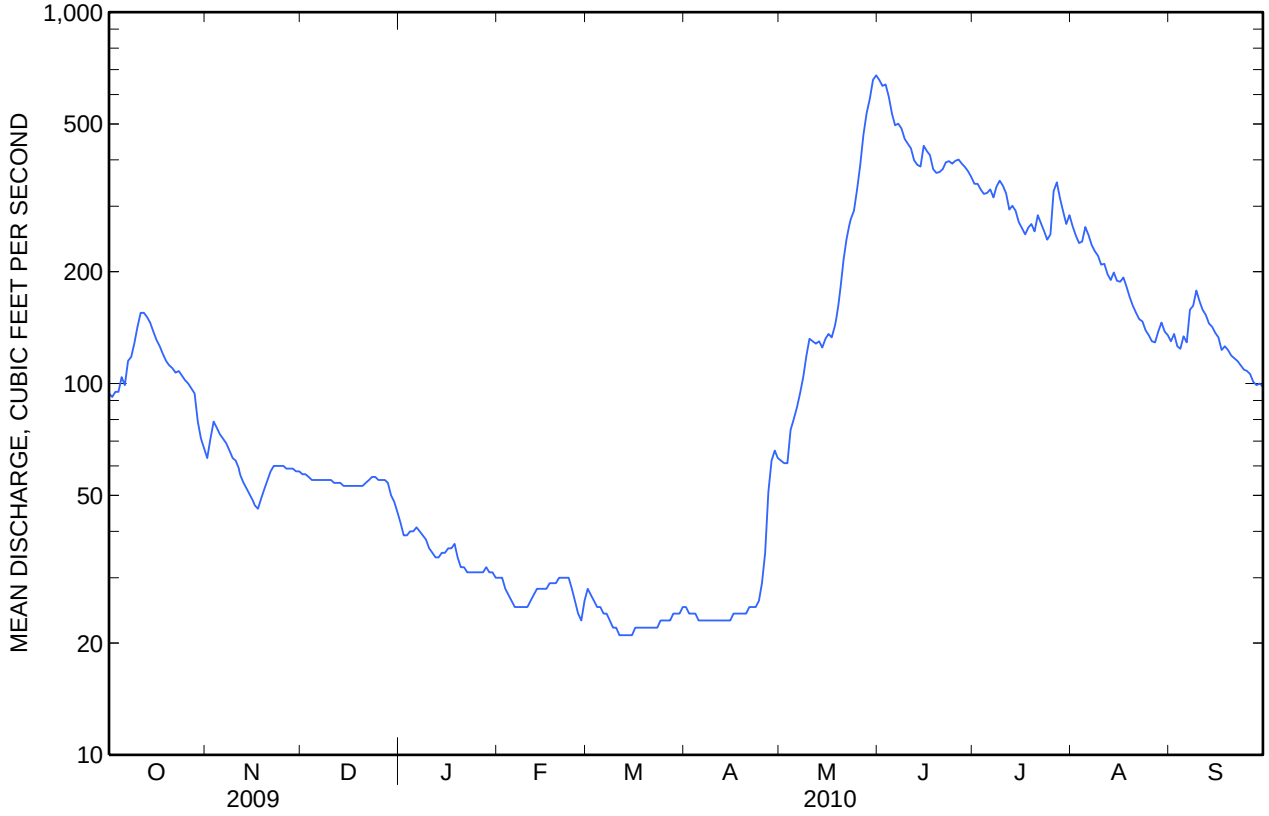
	Calendar Year 2009		Water Year 2010		Water Years 1947 - 2010#	
Annual total	45,384.8		49,619			
Annual mean	124		136		144	
Annual mean	*127		*139		*161	
Highest annual mean					223	1980
Lowest annual mean					67.3	1969
Highest daily mean	627	May 27	676	May 31	1,420	Aug 9, 1971
Lowest daily mean	16	Mar 15	21	Mar 11	0.00	Jan 2, 1956
Annual seven-day minimum	16	Mar 15	21	Mar 9	0.43	Jan 9, 1956
Maximum peak flow			733	May 30	1,860	Jun 21, 1949
Maximum peak stage			5.88	May 30	[a]3.44	Jun 21, 1949
Maximum peak stage					[b]6.52	Jun 21, 1949
Maximum peak stage					[c]10.91	Nov 21, 2009
Instantaneous low flow					0.00	Jan 2, 1956
Annual runoff (ac-ft)	90,020		98,420		104,600	
Annual runoff (ac-ft)	*92,726		*100,995		*116,600	
Annual runoff (cfsm)	*1.41		*1.53		*1.80	
Annual runoff (in)	*19.2		*20.9		*24.4	
10 percent exceeds	361		355		369	
50 percent exceeds	90		71		80	
90 percent exceeds	19		24		15	

See Remarks, values shown on this page are unadjusted for diversion, unless otherwise noted

* Adjusted to account for diversion, see Remarks

[a] Site and datum then in use

[b] Current site and datum

[c] Backwater from ice

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