

SOUTH-CENTRAL ALASKA

15276320 SHIP CREEK BELOW FISH HATCHERY NEAR ANCHORAGE

LOCATION.--Lat 61°14'36", long 149°43'19", in SW¹/₄ NE¹/₄ SE¹/₄ sec. 1, T. 13 N., R. 3 W. (Anchorage A-8NE quad), Municipality of Anchorage, Hydrologic Unit 19020401, in Fort Richardson Military Reservation, on left bank, 0.5 mi downstream from fish hatchery, 0.8 mi upstream of the Fort Richardson Elmendorf border, 3.3 mi downstream from diversion dam, and 6.0 mi east of intersection of Seward and Glenn Highways in Anchorage.

DRAINAGE AREA.--104.6 mi².

PERIOD OF RECORD.--October 2002 to September 30, 2005 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 250 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Discharge data represent the net flow remaining after diversion for water supply to Fort Richardson, Elmendorf Air Force Base, and Municipality of Anchorage. Average diversion for water year 2005 was 5.52 ft³/s. Diversion began in 1944. Magnitude of discharges downstream of dam may be affected by periodic spillway adjustment.

COOPERATION.--Gage inspected and records of diversion provided by Office of Post Engineers, Fort Richardson.

REVISIONS.--Revised figures of discharge for water year 2004 are given given below. These figures supercede those published in reports for 2004.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	e100	76	50	41	33	26	128	411	233	90	113
2	111	104	71	47	40	33	30	153	392	218	86	113
3	288	100	65	52	39	33	30	157	377	206	84	110
4	400	94	78	53	38	33	30	172	386	190	79	106
5	305	96	80	53	38	31	30	204	409	183	83	99
6	302	98	70	52	38	22	32	253	418	172	82	94
7	278	102	71	50	37	27	37	310	463	164	80	91
8	256	111	76	49	38	33	39	357	517	156	78	88
9	252	111	76	52	37	25	36	347	474	144	78	86
10	223	e106	74	52	38	33	37	336	426	139	78	84
11	e200	e105	74	51	40	34	37	346	391	133	75	81
12	e190	e105	71	49	35	33	37	356	360	124	75	79
13	e180	e100	68	47	39	31	38	392	348	119	75	90
14	e165	e85	68	47	38	31	40	418	343	117	73	80
15	e160	e60	67	45	34	31	44	423	360	120	74	76
16	e150	e48	65	44	25	30	49	414	351	117	73	73
17	e140	e42	63	44	28	27	49	396	393	114	63	70
18	e140	e32	63	44	32	29	50	411	422	113	64	69
19	e130	31	58	44	37	21	52	431	418	106	71	69
20	e130	49	63	46	40	26	55	456	411	101	77	76
21	e120	81	63	47	39	29	58	489	393	105	74	97
22	e120	83	63	47	38	33	65	514	357	104	72	91
23	e110	73	60	45	36	33	71	629	345	102	70	103
24	111	78	55	41	35	32	73	620	330	99	68	91
25	123	75	46	39	34	30	75	529	314	96	66	94
26	121	56	43	43	33	28	82	499	305	95	86	220
27	e113	49	43	43	34	28	89	449	299	96	182	223
28	e110	63	51	41	33	27	92	450	284	104	198	191
29	e110	74	60	40	33	28	108	413	268	100	159	212
30	e100	77	64	36	---	26	117	405	244	97	135	558
31	e100	---	63	39	---	21	---	421	---	93	120	---
TOTAL	5347	2388	2008	1432	1047	911	1608	11878	11209	4060	2768	3627
MEAN	172	79.6	64.8	46.2	36.1	29.4	53.6	383	374	131	89.3	121
MAX	400	111	80	53	41	34	117	629	517	233	198	558
MIN	100	31	43	36	25	21	26	128	244	93	63	69
AC-FT	10610	4740	3980	2840	2080	1810	3190	23560	22230	8050	5490	7190
CFSM	1.65	0.76	0.62	0.44	0.35	0.28	0.51	3.66	3.57	1.25	0.85	1.16
IN.	1.90	0.85	0.71	0.51	0.37	0.32	0.57	4.22	3.99	1.44	0.98	1.29

ADJUSTED TO INCLUDE DIVERSION

MEAN	178	84.8	69.8	51.5	41.7	35.4	58.8	389	379	141	96.2	126
CFSM	1.70	0.81	0.67	0.49	0.40	0.34	0.56	3.72	3.63	1.34	0.92	1.20
IN	1.89	0.90	0.77	0.57	0.43	0.39	0.63	4.28	4.04	1.55	1.06	1.38
AC-FT	10920	5040	4290	3170	2400	2170	3500	23900	22600	8650	5920	7480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)#

MEAN	255	134	106	60.3	46.2	39.0	50.5	274	356	164	121	117
MAX	337	188	148	74.4	56.6	48.7	53.6	383	374	196	153	121
(WY)	2003	2003	2003	2003	2003	2003	2004	2004	2004	2003	2003	2004
MIN	172	79.6	64.8	46.2	36.1	29.4	47.5	165	339	131	89.3	113
(WY)	2004	2004	2004	2004	2004	2004	2003	2003	2003	2004	2004	2003

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

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SOUTH-CENTRAL ALASKA

15276320 SHIP CREEK BELOW FISH HATCHERY NEAR ANCHORAGE—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004#	
ANNUAL TOTAL	46051		48283			
ANNUAL MEAN	126		132		144	
ANNUAL MEAN	*132		*138		*150	
HIGHEST ANNUAL MEAN					156 2003	
LOWEST ANNUAL MEAN					132 2004	
HIGHEST DAILY MEAN	517	Jun 14	629	May 23	680	Dec 28 2002
LOWEST DAILY MEAN	31	Nov 19	a21	Mar 19	a21	Mar 19 2004
ANNUAL SEVEN-DAY MINIMUM	35	Apr 9	26	Mar 26	26	Mar 26 2004
MAXIMUM PEAK FLOW			878	Sep 30	878	Sep 30 2004
MAXIMUM PEAK STAGE			5.34	Sep 30	5.34	Sep 30 2004
ANNUAL RUNOFF (AC-FT)	91340		95770		104300	
ANNUAL RUNOFF (AC-FT)	*95760		*100000		*108700	
ANNUAL RUNOFF (CFSM)	*1.26		*1.31		*1.43	
ANNUAL RUNOFF (INCHES)	*17.08		*17.89		*19.47	
10 PERCENT EXCEEDS	269		380		345	
50 PERCENT EXCEEDS	100		78		100	
90 PERCENT EXCEEDS	46		33		38	

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 * Adjusted to account for diversion, see Remarks.
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SOUTH-CENTRAL ALASKA

15276320 SHIP CREEK BELOW FISH HATCHERY NEAR ANCHORAGE—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	644	116	96	e34	e34	26	31	322	483	363	308	205
2	493	81	98	e35	e31	23	30	308	453	354	286	195
3	481	e76	84	e39	e27	30	31	302	438	352	266	189
4	490	e72	29	e43	e28	29	28	300	419	330	251	193
5	407	69	e18	e49	e29	29	28	284	446	318	231	195
6	345	e75	e34	e57	e30	30	29	278	476	315	222	254
7	327	e85	e50	64	28	31	28	293	482	307	208	309
8	293	e92	61	60	23	34	27	316	476	303	202	291
9	277	112	43	64	26	33	28	352	476	307	193	316
10	259	131	40	49	e30	37	28	377	480	286	186	591
11	229	129	44	50	e29	40	30	405	486	287	182	549
12	207	125	61	e40	e28	41	31	482	519	270	175	520
13	205	121	73	28	e29	50	33	572	497	266	169	483
14	211	114	66	39	28	47	30	650	505	245	165	417
15	199	111	65	56	29	42	36	621	528	234	160	373
16	181	111	73	63	29	41	38	568	565	233	153	356
17	171	107	77	54	28	38	37	501	600	226	151	341
18	159	105	81	59	28	37	35	483	661	206	149	324
19	166	103	78	e50	28	37	37	523	652	233	178	307
20	157	100	69	42	28	38	58	559	551	219	152	300
21	160	98	51	48	28	35	74	641	471	205	180	281
22	152	97	70	55	27	37	99	648	428	196	193	288
23	154	95	85	54	26	41	119	590	392	188	268	340
24	151	94	51	49	26	36	129	599	358	177	311	588
25	142	92	17	47	25	38	127	566	346	173	290	525
26	147	90	21	42	25	39	141	544	342	178	259	483
27	152	94	55	32	25	40	159	573	332	173	238	435
28	145	106	55	27	24	37	186	563	332	171	215	400
29	143	94	33	31	---	33	247	556	332	167	221	366
30	134	91	28	37	---	31	299	536	334	164	201	354
31	122	---	e33	39	---	33	---	503	---	353	203	---
TOTAL	7503	2986	1739	1436	776	1113	2233	14815	13860	7799	6566	10768
MEAN	242	99.5	56.1	46.3	27.7	35.9	74.4	478	462	252	212	359
MAX	644	131	98	64	34	50	299	650	661	363	311	591
MIN	122	69	17	27	23	23	27	278	332	164	149	189
AC-FT	14880	5920	3450	2850	1540	2210	4430	29390	27490	15470	13020	21360
CFSM	2.31	0.95	0.54	0.44	0.26	0.34	0.71	4.57	4.42	2.41	2.02	3.43
IN.	2.67	1.06	0.62	0.51	0.28	0.40	0.79	5.27	4.93	2.77	2.34	3.83

ADJUSTED TO INCLUDE DIVERSION

MEAN	250	104	61.3	51.4	33.0	40.9	79.3	483	469	259	217	363
CFSM	2.39	1.00	0.59	0.49	0.32	0.39	0.76	4.61	4.48	2.48	2.07	3.47
IN	2.66	1.11	0.67	0.57	0.34	0.45	0.84	5.31	4.99	2.85	2.39	4.00
AC-FT	15400	6220	3769	3160	1830	2510	4720	29700	27900	16000	13300	21600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2005, BY WATER YEAR (WY)#

MEAN	251	122	89.5	55.6	40.1	38.0	58.5	342	392	193	151	197
MAX	337	188	148	74.4	56.6	48.7	74.4	478	462	252	212	359
(WY)	2003	2003	2003	2003	2003	2003	2005	2005	2005	2005	2005	2005
MIN	172	79.6	56.1	46.2	27.7	29.4	47.5	165	339	131	89.3	113
(WY)	2004	2004	2005	2004	2005	2004	2003	2003	2003	2004	2004	2003

SUMMARY STATISTICS

	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 2003 - 2005#
ANNUAL TOTAL	50768	71594	
ANNUAL MEAN	139	196	161
ANNUAL MEAN	*144	*201	*167
HIGHEST ANNUAL MEAN			196
LOWEST ANNUAL MEAN			132
HIGHEST DAILY MEAN	644	661	680
LOWEST DAILY MEAN	17	17	17
ANNUAL SEVEN-DAY MINIMUM	26	25	25
MAXIMUM PEAK FLOW		a784	878
MAXIMUM PEAK STAGE		a5.21	5.34
ANNUAL RUNOFF (AC-FT)	100700	142000	116900
ANNUAL RUNOFF (AC-FT)	*105100	*146000	*121000
ANNUAL RUNOFF (CFSM)	*1.38	*1.92	*1.60
ANNUAL RUNOFF (INCHES)	*18.72	*26.19	*21.68
10 PERCENT EXCEEDS	392	484	391
50 PERCENT EXCEEDS	84	147	104
90 PERCENT EXCEEDS	33	29	34

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a Maximum discharge, 805 ft³/s, Oct. 1, peak discharge of 878 ft³/s occurred Sep. 30, 2004; maximum peak discharge for water year, 784 ft³/s, Jun. 18, 19 and Sep. 24, gage height, 5.21 ft.