

CRAB CREEK BASIN

12465000 CRAB CREEK AT IRBY, WA

LOCATION.--Lat 47°21'38", long 118°50'56", in NW 1/4 NW 1/4 sec.31, T.22 N., R.32 E., Lincoln County, Hydrologic Unit 17020013, on right bank 8 ft upstream from highway bridge at Irby, 5.4 mi downstream from Lake Creek, 7.5 mi west of Odessa, and at mile 111.5.

DRAINAGE AREA.--1,042 mi².

PERIOD OF RECORD.--September 1942 to current year.

REVISED RECORDS.--WSP 1446: 1949-51, WSP 1933: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,386.30 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Pumpage from ground-water wells for irrigation has been on the increase upstream from station since 1964. U.S. Geological Survey satellite telemeter at station. Some diversions for irrigation upstream from station. No regulation.

AVERAGE DISCHARGE.--60 years (water years 1943-2002), 66.3 ft³/s, 48,020 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,370 ft³/s Feb. 27, 1957, gage height, 11.94 ft; no flow several days during 1969, 1977, 1978, 1979, 1980, 1989, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 09	0315	*252	*3.20

Minimum discharge, 1.4 ft³/s Sept. 22-25, gage height, 1.77 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	4.2	4.8	11	53	84	78	60	28	e11	6.3	2.7
2	2.8	4.0	4.0	12	53	85	79	59	27	11	6.6	3.1
3	2.3	4.3	4.0	14	53	83	79	54	27	11	6.3	3.0
4	2.3	4.5	3.7	15	54	82	77	50	26	11	5.8	2.7
5	2.5	4.4	3.9	16	55	82	77	48	24	11	5.7	2.7
6	2.5	4.0	3.9	18	55	85	77	47	22	10	5.6	2.7
7	2.3	4.3	3.7	19	57	84	77	49	22	10	5.0	2.6
8	2.5	4.8	3.6	21	60	83	78	52	22	11	4.5	2.6
9	2.8	4.7	3.6	23	138	83	81	52	23	11	4.3	2.8
10	3.0	4.6	3.8	28	87	81	80	50	23	10	4.5	2.7
11	2.8	4.5	3.8	32	79	77	79	49	22	9.4	4.5	2.7
12	2.8	4.5	3.7	34	78	75	82	48	21	9.1	4.3	2.6
13	2.4	4.5	4.1	34	75	77	83	47	19	8.8	4.5	2.3
14	2.5	4.7	3.7	37	73	79	83	44	18	9.1	4.2	2.3
15	2.6	4.5	3.7	39	72	79	82	42	16	9.0	3.8	2.3
16	2.6	4.7	3.7	40	72	77	83	39	16	9.0	4.5	2.7
17	2.3	5.1	3.6	43	73	79	83	38	15	8.7	4.7	2.7
18	2.3	3.8	4.0	44	70	78	83	37	15	8.6	4.9	2.6
19	2.3	3.6	3.9	44	68	77	80	37	15	7.8	4.8	2.3
20	2.5	3.6	4.0	43	65	79	73	38	13	e8.0	4.4	2.0
21	2.8	3.7	4.0	43	68	80	74	37	12	e8.0	3.7	1.9
22	2.9	4.1	4.0	44	71	79	73	36	12	e7.0	3.3	1.5
23	2.7	3.8	4.3	43	77	79	71	35	12	e7.0	3.7	1.5
24	3.0	3.7	4.5	48	83	78	73	35	12	6.7	3.6	1.4
25	3.1	3.7	6.4	46	84	78	72	35	e11	6.9	3.1	1.5
26	3.3	3.7	7.4	47	85	79	66	36	e11	7.0	3.3	2.0
27	3.8	3.4	7.1	48	86	78	67	35	e11	6.5	3.6	2.0
28	4.0	4.5	6.9	49	86	78	68	34	e11	6.4	3.3	1.7
29	4.2	4.1	7.2	49	---	77	66	32	e11	6.3	3.0	2.0
30	4.8	4.3	7.9	52	---	78	62	30	e11	6.1	2.6	2.1
31	4.4	---	8.9	54	---	78	---	29	---	6.2	2.7	---
TOTAL	90.1	126.3	145.8	1090	2030	2471	2286	1314	528	268.6	135.1	69.7
MEAN	2.91	4.21	4.70	35.2	72.5	79.7	76.2	42.4	17.6	8.66	4.36	2.32
MAX	4.8	5.1	8.9	54	138	85	83	60	28	11	6.6	3.1
MIN	2.3	3.4	3.6	11	53	75	62	29	11	6.1	2.6	1.4
AC-FT	179	251	289	2160	4030	4900	4530	2610	1050	533	268	138

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2002, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)
MEAN	7.72	8.03	18.6	109	227	205	104	49.9	35.7	20.2	12.8	8.92
MAX	34.7	47.8	295	1163	744	1141	441	189	451	109	61.2	41.9
(WY)	1949	1998	1956	1956	1949	1956	1969	1997	1948	1948	1948	1948
MIN	0.33	0.58	0.27	0.26	0.63	4.26	8.61	5.46	3.06	1.49	0.54	0.27
(WY)	1993	1993	1993	1993	1992	1992	1992	1990	1992	1990	1992	1992

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1942 - 2002

ANNUAL TOTAL	6687.9	10554.6	
ANNUAL MEAN	18.3	28.9	66.3
HIGHEST ANNUAL MEAN			299
LOWEST ANNUAL MEAN			2.73
HIGHEST DAILY MEAN	55	Apr 4	138
LOWEST DAILY MEAN	2.3	Oct 3	1.4
ANNUAL SEVEN-DAY MINIMUM	2.4	Oct 13	1.7
ANNUAL RUNOFF (AC-FT)	13270	20940	48020
10 PERCENT EXCEEDS	45	79	147
50 PERCENT EXCEEDS	11	11	17
90 PERCENT EXCEEDS	3.3	2.7	2.7

e Estimated