09379200 CHINLE CREEK NEAR MEXICAN WATER, AZ

LOCATION.--Lat 36°56'38", long 109°42'36" in sec. 19, T.41 N., R.25 E. (unsurveyed), Apache County, Hydrologic Unit 14080204, in Navajo Indian Reservation, on right bank 150 ft upstream from bridge on U.S. Highway 160, 3 mi upstream from Walker Creek, 4 mi southwest of Mexican Water, 5 mi downstream from confluence of Chinle Creek and Laguna Creek, and 6 mi upstream from Arizona-Utah State line.

DRAINAGE AREA.--3,650 mi^2.

PERIOD OF RECORD.--Oct. 1964 to current year (monthly discharge only for 1979). Prior to Oct. 1970 published as Chinle Wash near Mexican Water.

REVISED RECORDS.--WDR AZ–88–1: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 4,720 ft above sea level.

REMARKS.--Records poor. Some diversions upstream for irrigation, livestock tanks, and domestic use. Many Farms Reservoir, about 25 mi upstream, was built in 1939 with an original capacity of 25,000 acre-ft. The reservoir provides off-channel storage for irrigation of about 1,600 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft^3/s Aug. 24, 1982, gage height, 13.87 ft, from rating curve extended above 3,100 ft^3/s on basis of slope-area measurement at gage height 12.50 ft; no flow at times each year.

EXTREMES FOR CURRENT PERIOD.--Peak discharges greater than base discharge of 500 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 30.....	0900	935	5.52	Aug. 12	1815	*1,250	*5.90
Feb. 13	0900	1,040	5.71	Aug. 17	0345	630	4.84
Feb. 20	2015	821	5.28				

Minimum daily discharge, no flow for many days.

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	154	16	0.52	e27	e9.2	e9.0	7.1	e65	0.00	0.00	e3.4	0.00
2	38	9.1	0.77	e17	e4.9	e6.7	3.7	56	0.00	0.00	e42	0.00
3	11	1.7	0.53	e13	e4.0	6.0	2.1	30	0.00	0.00	e50	0.00
4	0.70	0.45	0.25	e9.3	e2.6	5.8	1.4	12	0.00	0.00	e24	0.00
5	0.06	0.29	0.77	e9.3	e3.6	5.8	1.1	e8.7	0.00	0.00	e6.5	18
6	0.00	0.36	0.81	e7.1	e6.8	6.8	0.82	e5.4	0.00	0.00	e7.5	8.3
7	0.00	0.35	0.86	e7.5	e11	6.0	0.86	e3.8	0.00	0.00	e58	7.1
8	0.00	2.5	1.0	e5.7	e12	7.5	0.69	e3.0	0.00	0.00	e28	2.5
9	6.2	94	0.85	e6.4	e15	5.7	0.72	e2.0	0.00	0.00	e6.6	29
10	0.01	e12	0.81	e9.4	e12	4.0	1.1	e1.2	0.00	0.00	60	51
11	1.7	e7.0	0.73	e12	e9.6	3.4	0.84	e1.0	1.3	0.00	e316	58
12	0.01	e1.4	5.7	e16	35	3.2	0.78	e0.60	0.13	0.00	347	0.72
13	0.00	e13	5.3	e18	613	2.9	0.84	e0.42	0.00	0.00	114	0.01
14	0.00	e6.8	6.6	e20	161	2.2	0.78	1.2	0.00	0.00	1.3	0.00
15	0.00	e3.7	6.8	17	20	1.5	0.77	1.2	0.00	0.00	0.19	0.00
16	0.00	e2.9	4.8	8.1	31	1.3	44	0.86	0.00	0.00	0.10	0.00
17	0.00	e1.9	2.4	e11	109	1.5	124	0.34	0.00	0.00	e136	0.00
18	0.00	e3.0	1.4	e9.9	16	1.5	124	0.47	0.00	0.00	e6.6	0.00
19	0.00	e1.7	0.90	e7.5	12	1.5	184	0.63	0.00	0.00	3.0	0.00
20	0.00	e1.9	0.67	7.0	484	2.0	220	0.53	0.00	0.00	0.70	0.00
21	0.00	e4.7	0.86	4.8	183	1.9	108	0.27	0.00	0.00	1.4	0.00
22	0.00	e35	0.37	6.3	1.8	1.9	68	0.29	0.00	0.00	0.96	0.00
23	0.00	e20	0.26	6.2	0.13	3.5	120	0.17	0.00	0.00	0.07	0.00
24	e4.6	e8.0	0.39	5.0	e7.7	2.8	94	0.04	0.00	0.00	0.00	0.00
25	e0.73	e5.8	0.37	5.4	21	2.7	151	0.00	0.00	23	0.00	0.00
26	e0.53	e5.7	0.39	5.4	e18	2.5	145	0.00	0.00	e100	0.00	0.00
27	0.48	e5.5	0.51	6.9	e15	3.2	91	0.01	0.00	e45	0.00	0.00
28	1.4	e5.1	0.80	16	e11	7.2	105	0.00	0.00	e12	0.00	0.00
29	43	e1.7	2.8	16	---	e3.3	81	0.00	0.00	e4.9	0.00	0.18
30	47	0.81	298	14	---	5.5	63	0.00	0.00	e3.4	0.00	0.00
31	29	---	65	10	---	11	---	0.00	---	e3.4	0.00	---
TOTAL	338.42	272.36	412.22	334.2	1829.33	129.8	1745.60	195.13	1.43	191.70	1213.32	174.81
MEAN	10.9	9.08	13.3	10.8	65.3	4.19	58.2	6.29	0.05	6.18	39.1	5.83
MAX	154	94	298	27	613	11	220	65	1.3	100	347	58
MIN	0.00	0.29	0.25	4.8	0.13	1.3	0.69	0.00	0.00	0.00	0.00	0.00
AC-FT	671	540	818	663	3630	257	3460	387	2.8	380	2410	347

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2005, BY WATER YEAR (WY)

MEAN	21.9	14.0	8.28	16.3	26.7	22.4	55.5	46.5	4.88	23.9	52.7	42.8
MAX	142	144	41.2	151	169	215	402	294	72.5	129	501	342
(WY)	1973	1988	1966	1993	1988	1983	1985	1980	1973	1975	1982	1982
MIN	0.18	0.41	1.09	1.60	1.58	0.67	0.53	0.08	0.00	0.00	0.00	0.00
(WY)	2002	1991	1978	1996	2003	1967	1996	2004	1975	1979	1974	1979

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1965 - 2005	
ANNUAL TOTAL	4317.95		6838.32			
ANNUAL MEAN	11.8		18.7		28.0	
HIGHEST ANNUAL MEAN					94.2	1982
LOWEST ANNUAL MEAN					4.47	1974
HIGHEST DAILY MEAN	880	Sep 30	613	Feb 13	6000	Aug 25 1982
LOWEST DAILY MEAN	0.00	May 1	0.00	Oct 6	0.00	Jul 4 1965
ANNUAL SEVEN-DAY MINIMUM	0.00	May 19	0.00	Oct 13	0.00	Jun 12 1966
ANNUAL RUNOFF (AC-FT)	8560		13560		20280	
10 PERCENT EXCEEDS	14		46		52	
50 PERCENT EXCEEDS	0.86		1.7		3.0	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated