Surface Water Supply of the United States 1961–65

Part 9. Colorado River Basin

Volume 1. Colorado River Basin Above Green River

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1924

Prepared in cooperation with the States of Colorado and Utah and with other agencies

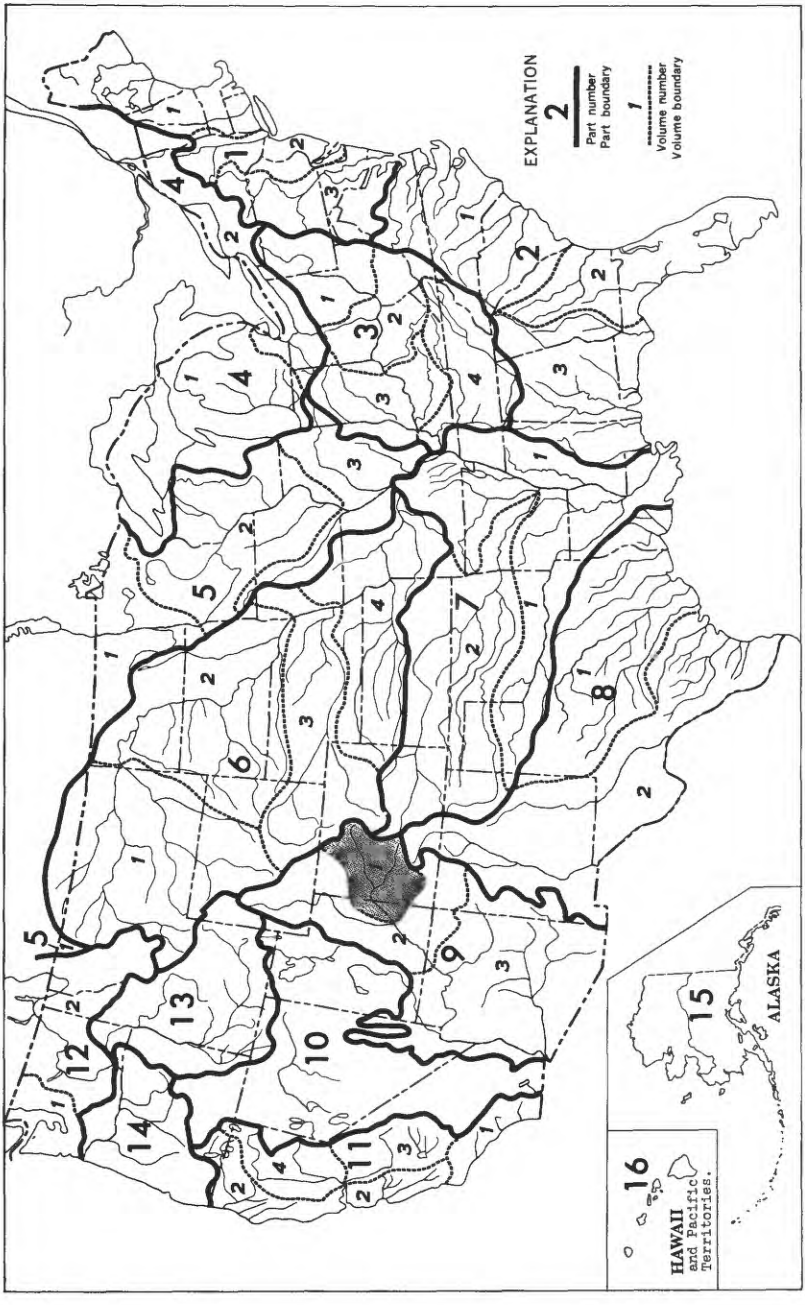

Figure 1.--Map of the United States showing area covered by the volumes in the series on surface-water supply. The area covered by this report is shaded.

This report marks the beginning of a new series of water-supply papers to be published on a 5-year basis. This series covers the 5-year period October 1, 1960, to September 30, 1965. To meet interim requirements, streamflow and related data have been released by the Geological Survey in annual reports, beginning with the 1961 water year, by State. These reports are entitled, "Water Resources Data for (state), Part 1. Surface Water Records." Distribution of these reports is limited and primarily for local needs. Any revision or corrections found necessary to the records published in these annual State reports have been made and published herein without reference.

This series of 5-year water supply papers consists of 37 volumes. The boundaries of the various parts and volumes within the parts are indicated in the following list and on the map in figure 1.

Part 1. North Atlantic slope basins, in three volumes:
- Volume 1: Basins from Maine to Connecticut
- Volume 2: Basins from New York to Delaware
- Volume 3: Basins from Maryland to York River

Part 2. South Atlantic slope and eastern Gulf of Mexico basins, in three volumes:
- Volume 1: Basins from James River to Savannah River
- Volume 2: Basins from Ogeechee River to Carrabelle River
- Volume 3: Basins from Apalachicola River to Pearl River

Part 3. Ohio River basin, in four volumes:
- Volume 1: Ohio River basin above Kanawha River
- Volume 2: Ohio River basin from Kanawha River to Louisville, Kentucky
- Volume 3: Ohio River basin from Louisville, Kentucky, to Wabash River
- Volume 4: Ohio River basin below Wabash River

Part 4. St. Lawrence River basin, in two volumes:
- Volume 1: Basins of streams tributary to Lakes Superior, Michigan, and Huron
- Volume 2: St. Lawrence River basin below Lake Huron

Part 5. Hudson Bay and Upper Mississippi River basins, in three volumes:
- Volume 1: Hudson Bay Basin
- Volume 2: Upper Mississippi River basin above Keokuk, Iowa
- Volume 3: Upper Mississippi River Basin below Keokuk, Iowa

Part 6. Missouri River basin, in four volumes:
- Volume 1: Missouri River basin above Williston, North Dakota
- Volume 2: Missouri River basin from Williston, North Dakota, to Sioux City, Iowa
- Volume 3: Missouri River basin from Sioux City, Iowa, to Nebraska City, Nebraska
- Volume 4: Missouri River basin below Nebraska City, Nebraska

Part 7. Lower Mississippi River basin, in two volumes:
- Volume 1: Lower Mississippi River basin except Arkansas River basin
- Volume 2: Arkansas River basin

Part 8. Western Gulf of Mexico basins, in two volumes:
- Volume 1: Basins from Mermentau River to Colorado River
- Volume 2: Basins from Lavaca River to Rio Grande

Part 9. Colorado River basin, in three volumes:
- Volume 1: Colorado River basin above Green River
- Volume 2: Colorado River basin from Green River to Compact Point
- Volume 3: Lower Colorado River basin

Part 10. The Great Basin

Part 11. Pacific Slope Basins in California, in four volumes:
- Volume 1: Basins from Tia Juana River to Santa Maria River
- Volume 2: Basins from Arroyo Grande to Oregon State line except Central Valley
- Volume 3: Southern Central Valley basins
- Volume 4: Northern Central Valley basins

Part 12. Pacific Slope basins in Washington, in two volumes:
- Volume 1: Pacific Slope basins in Washington except Columbia River basin
- Volume 2: Upper Columbia River basin

Part 13. Snake River basin

Part 14. Pacific Slope basins in Oregon and Lower Columbia River basin

Part 15. Alaska

Part 16. Hawaii and other Pacific areas

Water-supply papers and other publications of the Geological Survey containing data on the water resources of the United States may be purchased or consulted as follows:

1. Copies may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402, who will, on application, furnish lists giving prices. A list of Geological Survey publications may also be obtained by applying to the Director, Geological Survey, Washington, D. C. 20242.

2. Sets of the reports may be consulted in the libraries of the principal cities in the United States.

9-1855. Hatch Wash near La Sal, Utah

Location.--Lat 38°14'35", long 109°26'25", in SW¼ sec.30, T.29 S., R.23 E., on right bank 10 miles southwest of La Sal.

Drainage area.--378 sq mi.

Records available.--July 1950 to September 1965.

Gage.--Water-stage recorder and concrete control. Altitude of gage is 5,500 ft (from topographic map).

Average discharge.--15 years, 1.46 cfs (1,060 acre-ft per year).

Extremes.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (80 cfs), water years 1961-65

Date	Time	Discharge	Gage height	Date	Time	Discharge	Gage height	Date	Time	Discharge	Gage height
Mar. 15, 1961	1300	* 139	2.28	July 14, 1964	1430	175	3.06	July 12, 1965	2300	* 160	3.03
Sept. 9, 1961	0515	90	2.13	July 16, 1964	2230	349	3.36				
				July 23, 1964	2015	136	2.98				
Oct. 9, 1961	0630	* 215	2.40	Aug. 3, 1964	0200	298	3.28				
				Aug. 5, 1964	0015	160	3.03				
Aug. 21, 1963	-	* 961	3.61	Sept.14, 1964	1800	* 1,160	4.37				

No flow for many days in each year.

1950-65: Maximum discharge, 3,210 cfs Aug. 4, 1959 (gage height, 6.43 ft, from high watermark), from rating curve extended above 280 cfs on basis of velocity-area studies at gage heights 2.76 and 2.93 ft and slope-area measurement of peak flow; no flow for many days in each year.

Remarks.--Records fair except those for periods of no gage-height record, which are poor.

Revisions.--WSP 1713: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1960 TO SEPTEMBER 1961

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	0	0	0	0	0	0	0	0	0	0	0	9.7
2	0	0	0	0	0	0	0	0	0	0	0	2.9
3	0	0	0	0	0	.10	0	0	0	0	0	0
4	0	0	0	0	0	0	0	.10	0	0	0	.60
5	0	0	0	0	0	0	0	1.9	0	0	0	0
6	0	0	0	0	0	0	0	.10	0	0	0	0
7	0	0	0	0	0	0	1.4	.50	0	0	0	0
8	0	0	0	0	0	0	.10	.10	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	8.0
10	0	0	0	0	0	0	.10	0	0	0	0	25
11	0	0	0	0	0	0	0	0	0	0	0	2.9
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	1.1	0	0	0	0
14	0	0	0	0	0	3.2	0	.10	0	0	0	0
15	0	0	0	0	0	73	0	0	0	0	0	0
16	0	0	0	0	0	35	0	0	0	0	0	0
17	0	0	0	0	0	15	0	0	0	0	0	0
18	0	0	0	0	0	7.8	0	0	0	0	0	12
19	0	0	0	0	0	2.2	0	0	0	0	0	3.6
20	0	0	0	0	0	.10	0	0	0	0	.50	.70
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	1.2	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	------	.10	0	0	0	0	0	0
30	0	0	0	0	------	0	0	0	0	0	0	0
31	0	------	0	0	------	0	------	0	------	0	3.3	------
TOTAL	0	0	0	0	0	136.50	1.60	3.90	0	0	5.00	65.40
MEAN	0	0	0	0	0	4.40	.053	.13	0	0	.16	2.18
MAX	0	0	0	0	0	73	1.4	1.9	0	0	3.3	25
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	271	3.2	7.7	0	0	9.9	130

CAL YR 1960: TOTAL 1,387.30 MEAN 3.79 MAX 340 MIN 0 AC-FT 2,750
WAT YR 1961: TOTAL 212.40 MEAN .58 MAX 73 MIN 0 AC-FT 421

9-1855. Hatch Wash near La Sal, Utah--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1961 TO SEPTEMBER 1962

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	0	.50	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	.10	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	4.0	0	0	0	0	0	0	0	0	0	0	0
9	19	0	0	0	0	0	0	0	0	0	0	0
10	28	0	0	0	0	0	0	0	0	0	0	0
11	1.5	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	.20	0	0	0	0	0	0	0
13	0	0	0	0	5.2	0	0	0	0	0	0	0
14	0	0	.10	0	1.2	0	0	0	0	0	0	0
15	0	0	.10	0	.10	0	0	0	0	0	0	0
16	0	0	.10	0	.10	0	0	0	0	0	0	0
17	0	0	.10	0	0	0	0	0	0	0	0	0
18	0	0	.10	0	0	0	0	0	0	0	0	0
19	0	0	.10	0	0	0	0	0	0	0	0	0
20	0	0	.10	0	0	4.8	0	0	0	0	0	0
21	0	0	.10	0	0	1.1	0	0	0	0	0	0
22	0	0	.10	0	0	0	0	0	0	0	0	0
23	0	0	.10	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	.10	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	.70	0	0	0	0	0	.80
28	0	0	0	0	0	6.5	0	0	0	0	0	1.4
29	0	0	0	0	------	9.1	.10	0	0	0	0	0
30	0	0	0	0	------	.20	0	0	2.3	0	0	0
31	.50	------	0	0	------	0	------	0	------	0	0	------
TOTAL	53.00	0.60	1.10	0	6.80	22.40	0.10	0	2.3	0	0	2.20
MEAN	1.71	.020	.036	0	.24	.72	.003	0	.077	0	0	.073
MAX	28	.50	.10	0	5.2	9.1	.10	0	2.3	0	0	1.4
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	105	1.2	2.2	0	13	44	.2	0	4.6	0	0	4.4

CAL YR 1961: TOTAL 267.10 MEAN .73 MAX 73 MIN 0 AC-FT 530
WAT YR 1962: TOTAL 88.50 MEAN .24 MAX 28 MIN 0 AC-FT 176

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1962 TO SEPTEMBER 1963

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	0	0	.10		.50	.10	0	0	0	0	0	
2	0	0	.10			.10	0	0	0	0	0	
3	0	0	.10			.10	.10	0	0	0	0	
4	0	0	0			.10	.10	0	0	0	0	
5	0	0	0		.10	.10	.10	0	0	0	0	0
6	0	0	0			.10	.10	0	0	0	0	
7	0	0	0		.10	.10	.10	0	0	0	0	
8	0	0	0		.10	.10	.10	0	0	0	0	
9	0	0	0		.10	.10	.10	0	0	0	0	
10	0	0	0		.10	.10	.10	0	0	0	.40	0
11	0	0	0		.10	.10	.10	0	0	0	0	0
12	0	0	.10		.10	.10	.10	0	0	0	0	0
13	0	0	.10		.10	.10	.10	0	0	0	0	0
14	0	0	.10		.10	.10	.10	0	0	0	0	0
15	0	.10	.10	0	.10	.10	.10	0	0	0	0	0
16	0	.10	.10		.10	.10	.10	0	0	0	0	0
17	0	.10	.10		.10	.10	.10	0	0	0	0	0
18	0	.10	.10		.10	.10	.10	0	0	0	0	.10
19	0	0	.10		.10	.10	.10	0	0	0	0	0
20	.10	0	.10		.20	.10	.10	0	0	0	0	0
21	0	.10	.10		.30	.10	.10	0	0	0	180	.10
22	0	.10	.10		.10	.10	.10	0	0	.30	20	.10
23	0	.10	.10		.10	.10	.10	0	0	.70	.10	0
24	0	.10	.10		.10	0	.10	0	0	0		0
25	0	.10			.10	0	.10	0	0	0		0
26	0	.10			.10	0	.10	0	0	0		0
27	0	.10			.10	0	.10	0	0	0	0	0
28	0	0	0		.10	.10	.10	0	0	0		0
29	0	0			------	.10	0	0	0	0		0
30	0	.10			------	0	0	0	0	0		0
31	0	------			------	0	------	0	------	0		------
TOTAL	0.10	1.20	1.60	0	3.50	2.50	2.60	0	0	1.00	200.50	0.30
MEAN	.003	.040	.052	0	.13	.081	.087	0	0	.032	6.47	.010
MAX	.10	.10	.10	-	.50	.10	.10	0	0	.70	180	.10
MIN	0	0	-	-	-	0	0	0	0	0	-	-
AC-FT	.2	2.4	3.2	0	6.9	5.0	5.2	0	0	2.0	398	.6

CAL YR 1962: TOTAL 36.70 MEAN .10 MAX 9.1 MIN 0 AC-FT 73
WAT YR 1963: TOTAL 213.30 MEAN .58 MAX 180 MIN 0 AC-FT 423

Note.--No gage-height record Dec. 25 to Feb. 7.