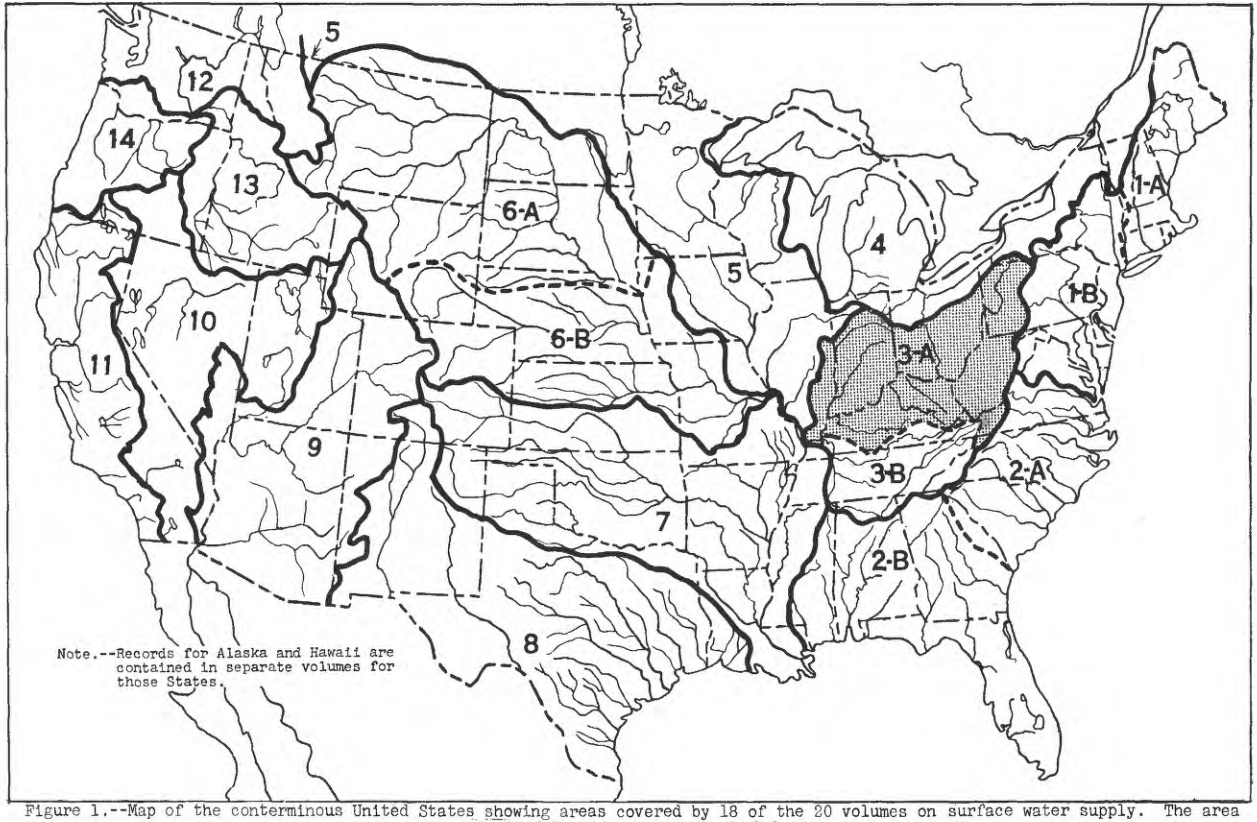

Figure 1.--Map of the conterminous United States showing areas covered by 18 of the 20 volumes on surface water supply. The area covered by this report is shaded.

Part 3. Ohio River basin, in two volumes:
A, Ohio River basin except Cumberland and Tennessee River basins.
B, Cumberland and Tennessee River basins.
4. St. Lawrence River basin.
5. Hudson Bay and upper Mississippi River basins.
6. Missouri River basin, in two volumes:
A, Missouri River basin above Sioux City, Iowa.
B, Missouri River basin below Sioux City, Iowa.
7. Lower Mississippi River basin.
8. Western Gulf of Mexico basins.
9. Colorado River basin.
10. The Great Basin.
11. Pacific slope basins in California.
12. Pacific slope basins in Washington and upper Columbia River basin.
13. Snake River basin.
14. Pacific slope basins in Oregon and lower Columbia River basin.

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 25, D. C., 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.

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

3. Sets are available for consultation in the offices of the Water Resources Division of the Geological Survey. Addresses of the offices in the area covered by this report are given on page 2.

Early records of the flow of streams in the United States are published in the reports listed below. In many of these reports records for years earlier than those indicated have been included for some streams.

Streamflow data for the years 1884-1901, in reports of the Geological Survey
(A = Annual Report; B = Bulletin)

Report	Character of data	Year
10th A, pt. 2	Descriptive information only.	
11th A, pt. 2	Monthly discharge and descriptive information.....	1884 to September 1890.
12th A, pt. 2	....do.....	1884 to June 30, 1891.
13th A, pt. 3	....do.....	1884-92.
14th A, pt. 2	Monthly discharge.....	1888-93.
B 131.....	Descriptions, measurements, gage heights, and ratings.....	1893-94.
16th A, pt. 2	Descriptive information only.	
B 140.....	Descriptions, measurements, gage heights, ratings, and monthly discharge.	1895.
WSP 11.....	Gage heights.....	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge..	1895-96.
WSP 15.....	Descriptions, measurements, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries above Kansas River.	1897.
WSP 16.....	Descriptions, measurements, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries above Kansas River.	1897.
19th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge..	1897.
WSP 27.....	Measurements, ratings, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries.	1898.
WSP 28.....	Measurements, ratings, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries.	1898.
20th A, pt. 4	Monthly discharge.....	1898.
WSP 35 to 39.	Descriptions, measurements, gage heights, and ratings.....	1899.
21st A, pt. 4	Monthly discharge.....	1899.
WSP 47 to 52.	Descriptions, measurements, gage heights, and ratings.....	1900.
22d A, pt. 4.	Monthly discharge.....	1900.
WSP 65, 66...	Descriptions, measurements, gage heights, and ratings.....	1901.
WSP 75.....	Monthly discharge.....	1901.

Reports on surface-water supply containing records from 1899 to date for drainage basins in this report are listed on the following page. The data for any particular gaging station will, in general, be found in the reports covering the years during which the station was maintained. Before 1951, records for the Cumberland and Tennessee River basins were included with those of the other rivers of the Ohio River basin.

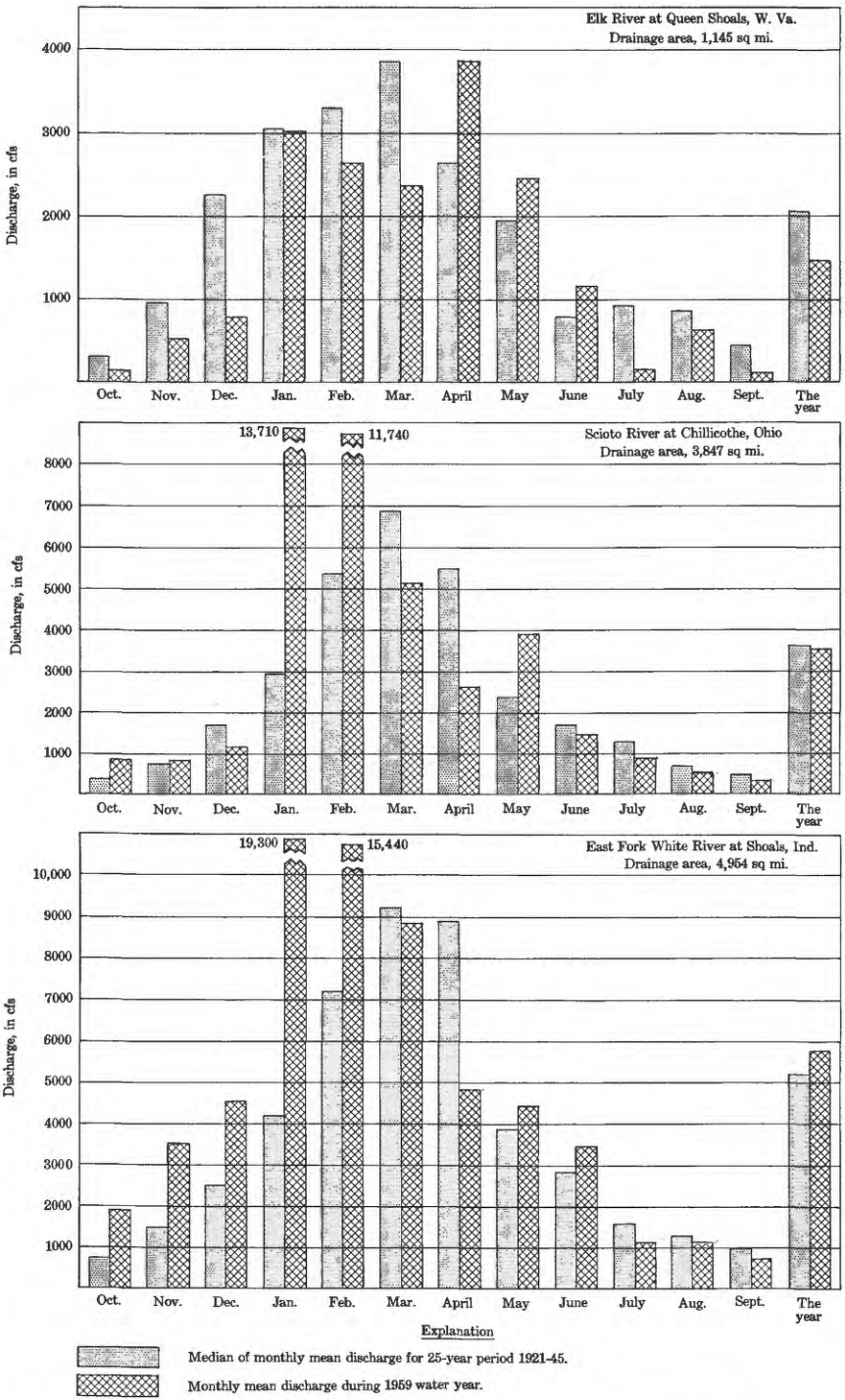

Figure 2. Comparison of discharge at three key gaging stations during 1959 water year with median discharge for 25-year period.

OHIO RIVER MAIN STEM

105. Allegheny River at Eldred, Pa.

Location.--Lat 41°57'50", long 78°23'10", on right bank at site of former highway bridge, 600 ft upstream from bridge on State Highway 346, 1,000 ft upstream from Knapp Creek, and half a mile north of Eldred, McKean County.

Drainage area.--550 sq mi.

Records available.--July 1939 to September 1959.

Gage.--Water-stage recorder. Datum of gage is 1,416.20 ft above mean sea level, unadjusted.

Average discharge.--20 years, 966 cfs.

Extremes:--Maximum discharge during year, about 16,500 cfs Jan. 23; maximum gage height, 20.38 ft Jan. 23 (backwater from ice); minimum discharge, 22 cfs Sept. 29, 30 (gage height, 1.27 ft).
1939-59: Maximum discharge, 55,000 cfs July 19, 1942 (gage height, 27.6 ft, from floodmark), from rating curve extended above 15,000 cfs on basis of slope-area measurement of peak flow; minimum, that of Sept. 29, 30, 1959.

Remarks.--Records good except those for periods of ice effect, no gage-height record, or backwater from Knapp Creek, which are fair.

Rating tables, water year 1958-59, except periods of ice effect or backwater from Knapp Creek (gage height, in feet, and discharge, in cubic feet per second)

Oct. 1 to Nov. 17		Nov. 18 to Sept. 30			
2.7	203	1.2	17	10.0	3,080
3.0	260	1.5	41	13.0	5,000
4.0	520	2.0	95	16.0	8,630
5.0	855	3.0	255	18.0	12,100
		4.0	497	20.0	17,000
		6.0	1,180		

Discharge, in cubic feet per second, water year October 1958 to September 1959

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	750	320	640	300	1,500	1,100	2,430	2,840	265	135	111	41
2	820	318	660	360	1,200	1,180	3,320	2,230	331	c242	83	71
3	645	330	700	500	1,100	980	4,640	1,780	319	242	68	66
4	580	368	760	450	1,500	840	6,470	1,500	267	158	58	93
5	535	342	800	380	1,500	690	5,790	1,260	226	123	55	64
6	475	328	700	350	1,200	*1,420	4,630	1,060	205	138	64	47
7	430	325	660	400	900	2,840	3,980	945	188	209	67	41
8	392	310	620	380	900	1,930	3,260	840	177	187	58	36
9	368	310	580	370	1,000	1,580	*2,680	720	164	132	55	33
10	342	392	560	360	2,840	1,540	2,280	660	153	128	89	31
11	342	445	520	350	4,840	1,220	1,930	690	146	128	119	30
12	330	392	560	340	5,470	1,100	1,660	690	153	112	84	29
13	298	380	600	330	4,560	945	1,460	660	262	112	67	27
14	276	475	540	320	3,530	858	1,300	*675	294	98	56	26
15	268	535	520	350	2,840	1,210	1,100	630	188	95	51	26
16	*264	698	490	540	2,280	2,380	945	615	154	102	47	25
17	252	732	460	520	1,780	1,620	840	570	144	99	45	24
18	256	1,020	450	500	1,620	1,260	770	525	*145	84	48	24
19	238	1,060	*440	520	1,340	1,060	735	525	138	78	51	25
20	220	*1,020	440	560	960	1,500	735	675	129	83	47	26
21	212	980	390	1,600	960	2,130	720	570	115	99	42	26
22	205	910	330	9,000	960	2,130	615	600	120	*111	38	26
23	224	822	350	16,000	960	1,700	570	555	188	89	37	a28
24	260	752	400	13,000	945	1,740	525	511	178	93	38	a27
25	242	752	360	10,000	700	2,230	497	469	c156	114	48	a26
26	254	770	280	7,000	700	2,730	540	417	270	98	48	a25
27	318	910	280	4,000	770	3,620	1,440	391	214	77	*45	a23
28	342	760	330	2,600	805	3,980	2,900	379	267	63	37	a23
29	355	720	330	1,400	-	3,800	3,140	355	214	c63	44	*22
30	342	660	330	*2,000	-------	3,080	3,140	319	159	247	47	26
31	325	-------	310	2,100	-------	2,430	-------	282	-------	141	42	-------
Total	11,160	18,136	15,390	76,880	49,660	56,823	65,042	24,938	5,929	3,880	1,789	1,037
Mean	360	605	496	2,480	1,774	1,833	2,168	804	198	125	57.7	34.6
Cfsm	0.655	1.10	0.902	4.51	3.23	3.33	3.94	1.46	0.360	0.227	0.105	0.063
In.	0.75	1.23	1.04	5.20	3.36	3.84	4.40	1.69	0.40	0.26	0.12	0.07

Calendar year 1958: Max 7,760 Min 160 Mean 850 Cfsm 1.55 In. 20.97
Water year 1958-59: Max 16,000 Min 22 Mean 906 Cfsm 1.65 In. 22.36

Peak discharge (base, 5,000 cfs).--Jan. 23 (time unknown) about 16,500 cfs; Feb. 12 (3 to 7 a.m.) 5,680 cfs (13.71 ft); Apr. 4 (1 to 6 p.m.) 6,590 cfs (14.46 ft).

* Discharge measurement made on this day.
a No gage-height record; discharge estimated on basis of recorded range in stage and records for nearby stations.
c Backwater from Knapp Creek.
Note.--Stage-discharge relation affected by ice Nov. 28 to Feb. 9, Feb. 20-23, 25, 26 (no gage-height record Jan. 23-30).