

# Surface Water Supply of the United States 1959

## Part 7. Lower Mississippi River Basin

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GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1631

*Prepared in cooperation with the States  
of Arkansas, Colorado, Kansas,  
Kentucky, Louisiana, Mississippi,  
Missouri, New Mexico, Oklahoma,  
Tennessee, and Texas, and with other  
agencies*





















































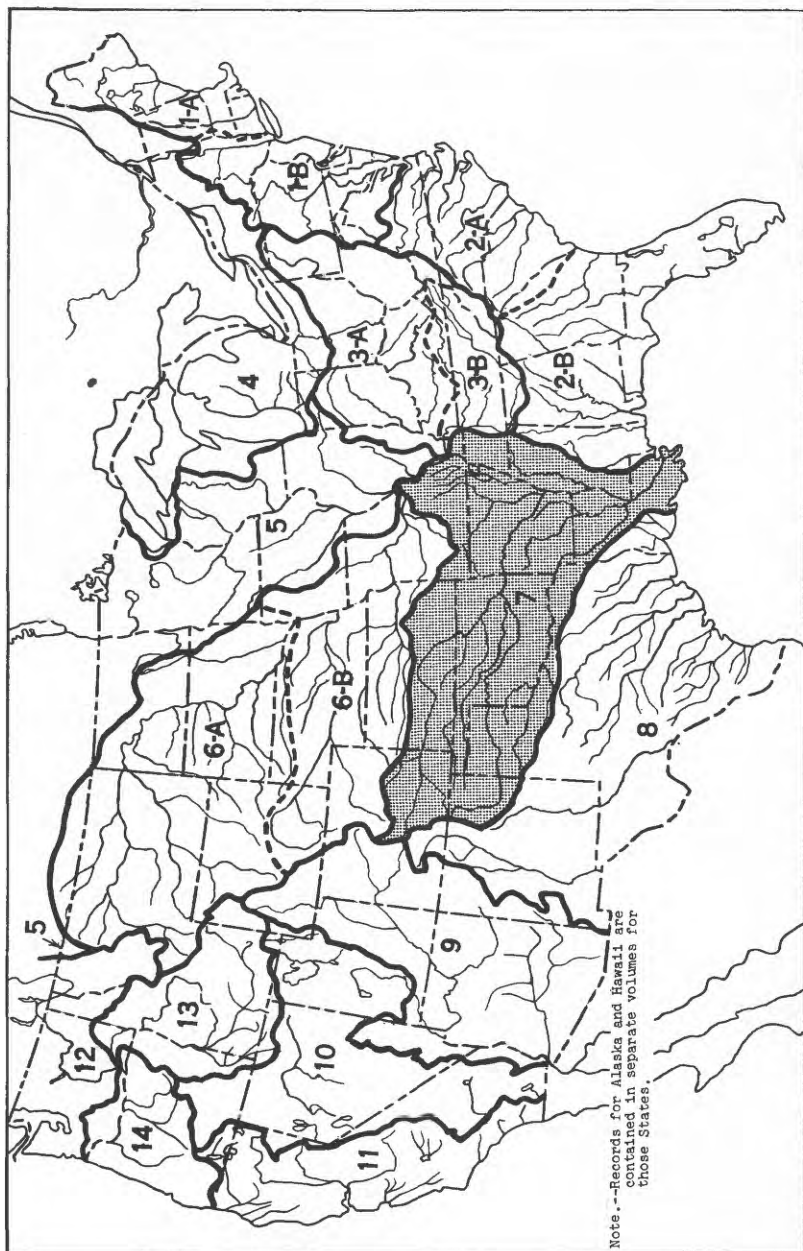


Figure 1.--Map of contiguous United States showing areas covered by 18 of the 20 volumes on surface water supply. The area covered by this report is shaded.

Special reports of floods published by the Geological Survey and other agencies--Continued

| Report   | Issued by                            |
|--|--------------------------------------|
| WSP 1139: Kansas-Missouri floods of July 1951.                             | U. S. Geological Survey.             |
| WSP 1227-B: Floods of May 1951 in western Oklahoma and northwestern Texas. | Do.                                  |
| WSP 1227-D: Summary of floods in the United States during 1951.            | Do.                                  |
| WSP 1320-C: Floods of April-June 1953 in Louisiana and adjacent States.    | Do.                                  |
| WSP 1320-E: Summary of floods in the United States during 1953.            | Do.                                  |
| WSP 1370-C: Summary of floods in the United States during 1954.            | Do.                                  |
| Cir. 99: Flood of August 1-6, 1950, at Wichita Falls, Tex.                 | Do.                                  |
| Bull. 66: North Mississippi floods in February 1948.                       | Mississippi State Geological Survey. |
| Floods in Louisiana, magnitude and frequency.                              | Louisiana Department of Highways.    |

# RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

The table below contains a list of gaging stations for the area covered by this report, at which records of discharge were collected during the water year October 1958 to September 1959 by agencies other than the Geological Survey. The records of these stations are not contained in publications of the Geological Survey.

Records of discharge collected by agencies other than the Geological Survey

| Stream                         | Location   | Period           | Collected by                             |
|--------------------------------|--|------------------|--|
| Atchafalaya River.....         | Simmesport, La.....                              | 1928-59          | Corps of Engineers.                      |
| Bayou Bodcau.....              | Shreveport, La.....                              | 1937-39, 1950-59 | Do.                                      |
| Bayou DeView.....              | Morton, Ark.....                                 | 1937-59          | Do.                                      |
| Bear Creek.....                | Near Colorado Springs, Colo.                     | 1918-59*         | Colorado Springs Water Department, Colo. |
| Boehmer Creek.....             | Near Pikes Peak, Colo...                         | 1909-59*         | Do.                                      |
| Cabin Creek.....               | Near Halfway, Colo.....                          | 1906-59*         | Do.                                      |
| Cache River.....               | Patterson, Ark.....                              | 1937-59†         | Corps of Engineers.                      |
| Caddo River.....               | Alpine, Ark.....                                 | 1939-41, 1946-59 | Do.                                      |
| Coldwater River.....           | Crenshaw, Miss.....                              | 1945-59          | Do.                                      |
| Crystal Creek.....             | Below reservoir near Green Mountain Falls, Colo. | 1935-59          | Colorado Springs Water Department, Colo. |
| Do.....                        | Near Green Mountain Falls, Colo.                 | 1935-59          | Do.                                      |
| Cypress Bayou.....             | Shreveport, La.....                              | 1939-40, 1944-59 | Corps of Engineers.                      |
| Cypress Creek.....             | Jefferson, Tex.....                              | 1955-59          | Do.                                      |
| Do.....                        | Ramer, Tenn.....                                 | 1940-59          | Do.                                      |
| Forked Deer River, North Fork. | Dyersburg, Tenn.....                             | 1947-59          | Do.                                      |
| Forked Deer River, South Fork. | Halls, Tenn.....                                 | 1947-59          | Do.                                      |
| French Creek.....              | Near Cascade, Colo.....                          | 1935-59          | Colorado Springs Water Department, Colo. |
| Hatchie River.....             | Poehontas, Tenn.....                             | 1940-59          | Corps of Engineers.                      |
| Do.....                        | Rialto, Tenn.....                                | 1939-59          | Do.                                      |
| Do.....                        | Walnut, Miss.....                                | 1947-59          | Do.                                      |
| L'Anguille River.....          | Palestine, Ark.....                              | 1949-59          | Do.                                      |
| Lion Creek.....                | Near Halfway, Colo.....                          | 1908-59†         | Colorado Springs Water Department, Colo. |
| Little Beaver Creek.....       | Near Pikes Peak, Colo...                         | 1909-59†         | Do.                                      |
| Little Missouri River.....     | Eughton, Ark.....                                | 1938-42, 1946-59 | Corps of Engineers.                      |
| Do.....                        | Murfreesboro, Ark.....                           | 1943-59          | Do.                                      |
| Little River.....              | Riverdale, Ark.....                              | 1936-59          | Do.                                      |
| Loosahatchie River.....        | Brunswick, Tenn.....                             | 1936-59          | Do.                                      |
| Mississippi River.....         | Arkansas City, Ark.....                          | 1928-59          | Do.                                      |
| Do.....                        | Helena, Ark.....                                 | 1928-59          | Do.                                      |
| Do.....                        | Hickman, Ky.....                                 | 1928-59          | Do.                                      |
| Do.....                        | Natchez, Miss.....                               | 1936-48, 1950-59 | Do.                                      |
| Do.....                        | Red River Landing, La.....                       | 1928-59          | Do.                                      |
| Do.....                        | Tarbert Landing, Miss.....                       | 1936-59          | Do.                                      |
| Muddy Fork Creek.....          | Murfreesboro, Ark.....                           | 1940-42, 1947-59 | Do.                                      |
| North Cascade Creek.....       | At Cascade, Colo.....                            | 1935-59†         | Colorado Springs Water Department, Colo. |
| North Catamount Creek....      | Near Green Mountain Falls, Colo.                 | 1935-59†         | Do.                                      |
| Obion River.....               | Ecota, Tenn.....                                 | 1939-59          | Corps of Engineers.                      |
| Do.....                        | River, Tenn.....                                 | 1954-59          | Do.                                      |
| Obion River, North Fork        | Martin, Tenn.....                                | 1939-59          | Do.                                      |
| Old River, Lower.....          | Torras, La.....                                  | 1928-59          | Do.                                      |
| Ouachita River.....            | Arkadelphia, Ark.....                            | 1930-59          | Do.                                      |
| Do.....                        | Camden, Ark.....                                 | 1930-59†         | Do.                                      |
| Do.....                        | Hot Springs, Ark.....                            | 1951-59          | Do.                                      |
| Panola-Quitman Floodway..      | Batesville, Miss.....                            | 1940-42, 1944-59 | Do.                                      |
| Quiver River.....              | Doddsville, Miss.....                            | 1938-59          | Do.                                      |
| Sackett Creek.....             | Near Pikes Peak, Colo...                         | 1909-59†         | Colorado Springs Water Department, Colo. |
| St. Francis Bay.....           | Riverfront, Ark.....                             | 1933-59          | Corps of Engineers.                      |
| St. Francis River.....         | Lake City, Ark.....                              | 1931-59          | Do.                                      |
| Do.....                        | Parkin, Ark.....                                 | 1928-59          | Do.                                      |
| Do.....                        | St. Francis, Ark.....                            | 1930-59          | Do.                                      |
| Do.....                        | Wittsburg, Ark.....                              | 1950-59          | Do.                                      |

\* Records prior to 1931 are contained in water-supply papers published by the Geological Survey.

† Records prior to 1951 published in WSP 1311.

Records of discharge collected by agencies other than the Geological Survey--Continued

| Stream                    | Location   | Period   | Collected by                                |
|---------------------------|--|----------|---|
| Sheep Creek.....          | Near Halfway, Colo.....                                | 1906-59† | Colorado Springs Water<br>Department, Colo. |
| South Cascade Creek.....  | At Cascade, Colo.....                                  | 1935-59† | Do.   |
| South Catamount Creek.... | Below reservoir near<br>Green Mountain Falls,<br>Colo. | 1935-59  | Do.   |
| Do.....                   | Near Green Mountain<br>Falls, Colo.                    | 1935-59  | Do.   |
| South Ruxton Creek.....   | At Halfway, Colo.....                                  | 1906-59* | Do.   |
| Sulphur River.....        | Texarkana, Tex.....                                    | 1954-59  | Corps of Engineers.                         |
| Sutherland Creek.....     | Near Manitou, Colo.....                                | 1918-59* | Colorado Springs Water<br>Department, Colo. |
| Tuscumbia River.....      | Corinth, Miss.....                                     | 1949-59  | Corps of Engineers.                         |
| Tyroneza River.....       | Tyroneza, Ark.....                                     | 1949-59  | Do.   |
| White River.....          | Clarendon, Ark.....                                    | 1928-59  | Do.   |
| Wolf River.....           | Raleigh, Tenn.....                                     | 1936-59  | Do.   |
| Yalobusha River.....      | Whaley, Miss.....                                      | 1936-59  | Do.   |

\* Records prior to 1931 are contained in water-supply papers published by the Geological Survey.

† Records prior to 1951 published in WSP 1311.

Note.--The Agricultural Research Service of the U. S. Department of Agriculture has collected records beginning in 1942 from 9 areas of 1.75 to 8.5 acres near Cherokee, Okla., beginning in 1951 from 3 areas of 16.7, 92.0, and 206 acres near Stillwater, Okla., beginning in 1957 from 12 areas of 113 to 75,010 acres near Oxford, Miss., and in 1958 in 4 areas of 1.45 to 3.88 acres near Holly Springs, Miss. These records are not published but are available in the files of the Agricultural Research Service.

## HYDROLOGIC CONDITIONS

Runoff was generally below median to deficient in the western and southern part of area during the water year, while in the northern and eastern part of region, runoff varied from deficient to excessive. A record flood occurred June 9 at Bayou D'Arbonne near Dubach, La., and then on Sept. 22 a devastating flood occurred on Walnut Creek at Albert, Kans., where the damage was estimated at over a million dollars. High runoff occurred in other scattered areas during September, particularly in the Canadian and Cimarron River basins in Oklahoma.

Figure 2 on page 14, for which records of three long-term gaging stations were used, shows a comparison of the monthly and yearly mean discharges for the 1959 water year with the median discharge for the period 1921-45.

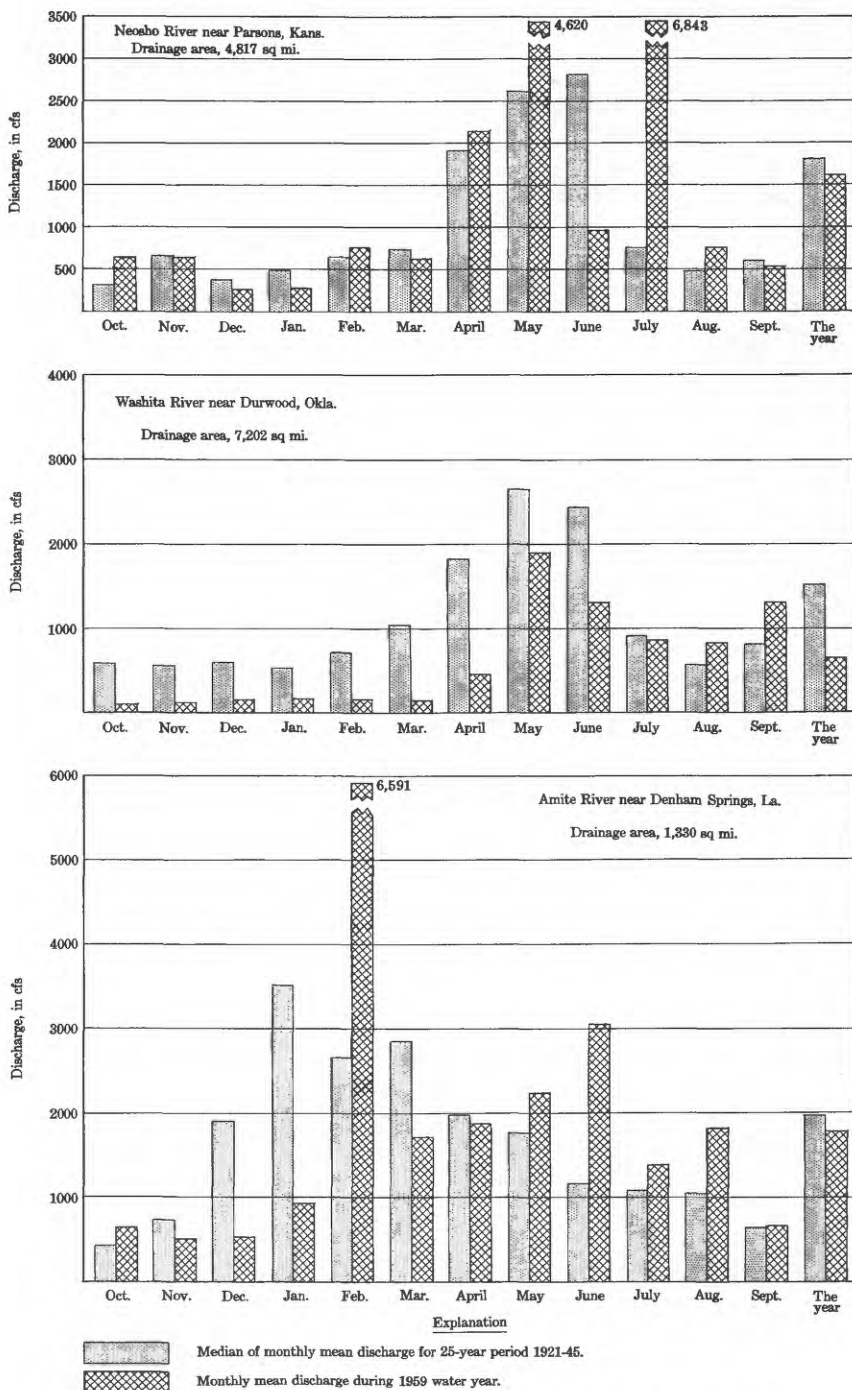


Figure 2. Comparison of discharge at three key gaging stations during 1959 water year with median discharge for 25-year period.









































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































































