

BIBLIOGRAPHY OF OKLAHOMA HYDROLOGY --  
REPORTS PREPARED BY THE U.S. GEOLOGICAL SURVEY  
AND PRINCIPAL COOPERATING AGENCIES, 1901-88

Compiled by John S. Havens

---

U.S. GEOLOGICAL SURVEY  
Open-File Report 89-33

Oklahoma City, Oklahoma

1989

DEPARTMENT OF THE INTERIOR  
DONALD PAUL HODEL, Secretary  
UNITED STATES GEOLOGICAL SURVEY  
Dallas L. Peck, Director

---

For additional information  
write to:  
District Chief  
U.S. Geological Survey  
215 Dean A. McGee, Room 621  
Oklahoma City, Oklahoma 73102

Copies of this report can  
be purchased from:  
Books and Open-File Reports  
U.S. Geological Survey  
Federal Center, Bldg. 810, Box 25425  
Denver, Colorado 80225

## CONTENTS

	Page
Introduction.....	1
Sources of U.S. Geological Survey publications.....	4
U.S. Geological Survey.....	6
Professional Papers.....	6
Water-Supply Papers.....	6
Hydrologic Atlases.....	8
Miscellaneous Geologic Investigations.....	9
Open-File Reports.....	10
Water-Resources Investigations Reports.....	21
Federal Emergency Management Flood Insurance Studies.	25
Water-Resources Data Reports.....	27
Circular.....	28
Annual Reports.....	28
Miscellaneous reports.....	29
Oklahoma Water Resources Board.....	29
Bulletins.....	29
Hydrologic Investigation.....	32
Oklahoma Geological Survey.....	32
Bulletins.....	32
Circulars.....	33
Mineral Reports.....	33
Geologic Map.....	34
Educational Publication.....	34

	Page
Hydrologic Atlases.....	34
The Hopper and Geology Notes.....	35
Special Publication.....	37
Professional societies' abstracts and journal articles .....	37
Other miscellaneous reports.....	39
Author index.....	41
Subject index.....	44

BIBLIOGRAPHY OF OKLAHOMA HYDROLOGY--  
REPORTS PREPARED BY THE U.S. GEOLOGICAL SURVEY  
AND PRINCIPAL COOPERATING AGENCIES, 1901-88

Compiled by John S. Havens

INTRODUCTION

The mission of the U.S. Geological Survey with respect to water resources is to provide the hydrologic information needed by others to help manage the Nation's water resources. Among other tasks, the Survey, in cooperation with State and local governments, and other Federal agencies:

- o Collects data on a systematic basis to determine the quantity, quality, and use of surface and ground water, and the quality of precipitation.
- o Conducts water-resources investigation and assessments at national, State, and local scales, characterizes water-resources conditions, and provides the capability to predict the effect on the resource of managerial actions, proposed development plans, and natural phenomena.
- o Conducts basic and problem-oriented hydrologic and water-related research.
- o Acquires information useful in predicting and eliminating water-related natural hazards.
- o Disseminates data and the results of investigations through reports, maps, and other forms of public release.
- o Provides scientific and technical assistance in hydrology to other Federal agencies and to State and local agencies.

Reports on the hydrology of Oklahoma have been issued by the U.S. Geological Survey since 1901. Many of these reports have been prepared in cooperation with State and local agencies. Of the nearly 350 reports issued from 1901 through 1988, about 200 have been concerned primarily with ground water; the remainder have dealt with some aspect of surface water, water quality, or geology.

Early Annual Reports by the Director, U.S. Geological Survey, contained articles dealing with the geology of Oklahoma, specifically the Indian Territory coal fields in eastern Oklahoma. In 1901 and 1902, the Twenty-first and Twenty-second Annual Reports contained an article, "The High Plains and their utilization." C.N. Gould's 1905 "Geology and water resources of Oklahoma," U.S. Geological Survey Water-Supply Paper 148, was one of the first papers dealing

with the hydrology of Oklahoma. Until the late 1930's, only a few reports dealing with water supplies for isolated areas were issued. In the late 1930's and early 1940's, intensive water-resources studies were begun in the Oklahoma Panhandle, probably as a result of drought and dust-bowl conditions throughout the State.

Records of ground-water-level data have been published since 1935. From 1935 through 1974, these records were published as Water-Supply Papers, "Ground-water levels in the United States," in either an annual or 5-year compilation. Beginning with 1956-60 records and continuing until 1985, ground-water-level data for Oklahoma have been published annually in cooperation with the Oklahoma Water Resources Board. Beginning in 1985, ground-water level data reports will be published at 5-year intervals.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were published first in a series of Water-Supply Papers, "Surface-water supply of the United States." Through 1960 these reports were published in an annual series and from 1961 through 1970 as 5-year compilations. From 1961 to the present, Oklahoma streamflow data have been published in cooperation with the State of Oklahoma as a series of annual "Water-Resources Data Reports."

Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of Water-Supply Papers entitled "Quality of surface water of the United States." Surface-water-quality data for water years 1964 to the present have been published either as separate reports or in conjunction with the Water-Resources Data Reports. Records of ground-water quality have been published on an irregular basis, either as part of a ground-water study or as separate reports.

Areal-investigations reports of ground-water occurrence may include tables of well information, geologic logs, water-quality data, and surface-water data. Surface-water reports, in addition to the annual Water-Resources Data Reports, include investigations of floods, flood characteristics, surface-water quality, flow-frequency analyses and projection, statistical analyses of streamflow records, and surface-water resources of river basins. Water-quality reports include chemical data, water-quality statistics, and water quality of lakes.

The most requested reports have been the annual Water-Resources Data Reports, which provide information on streamflow and water quality of Oklahoma streams for the year, and the reconnaissance Hydrologic Atlases prepared in cooperation with the Oklahoma Geological Survey, which contain

maps of geology and hydrology of the State at a scale of 1:250,000.

In addition to reports issued by the U.S. Geological Survey, this bibliography lists selected journal articles and reports issued by the principal State cooperators, the Oklahoma Water Resources Board and Oklahoma Geological Survey, dealing with the hydrology and geology of Oklahoma. Many of these reports were written by Survey authors and published by the cooperators. Some of these reports are now out-of-print; copies of most are available for inspection at the U.S. Geological Survey library in Oklahoma City.

An attempt has been made to include all Open-File Reports pertaining to water resources in Oklahoma that have been released by the U.S. Geological Survey. A limited number of copies of some of these reports are available for distribution at:

U.S. Geological Survey - Water Resources Division  
Room 621, 215 Dean A. McGee Avenue  
Oklahoma City, OK 73102

In addition, open-file reports may be obtained from the Books and Open-File Reports Section, Denver. (See "Sources of U.S. Geological Survey Publications and Books.")

Reports are listed in this bibliography first by publishing agency (U.S. Geological Survey, Oklahoma Water Resources Board, and Oklahoma Geological Survey), then by type of report (Professional Paper, Water-Supply Paper, and so forth), and, last, by author and date of publication.

## SOURCES OF U.S. GEOLOGICAL SURVEY PUBLICATIONS

### BOOKS, MAPS, AND PERIODICALS

Since 1879, the U.S. Geological Survey has served the public, and Federal, State, and local governments by collecting, analyzing, and publishing detailed information about the Nation's mineral, land, and water resources. This information is in a variety of map, book, and other formats, and is available from several sources within the Geological Survey.

### Text Products--Books and Open-File Reports

To order U.S. Geological Survey book publications, catalogs, and pamphlets, and to obtain information on the availability of microfiche or duplicated paper copies of selected Open-File Reports, write to:

U.S. Geological Survey  
Books and Open-File Reports Section  
Federal Center, Building 810, Box 25425  
Denver, CO 80225

### Maps

To order geologic, hydrologic, topographic, and land-use and land-cover maps published by the U.S. Geological Survey, write to:

U.S. Geological Survey  
Map Distribution Section  
Federal Center, Box 25286  
Denver, CO 80225

### New Publications

To be added to the mailing list for the free monthly catalog "New Publications of the Geological Survey" write to:

U.S. Geological Survey  
582 National Center  
Reston, VA 22092

### INFORMATION

#### Public Inquiries Office

Public Inquiries Offices of the U.S. Geological Survey provide general information about the Geological Survey's programs and its publications, and they sell, over the counter,

maps of local areas and books of local and general interest. The nearest Public Inquiries Office to the Oklahoma City area is:

U.S. Geological Survey  
Public Inquiries Office  
169 Federal Building  
1961 Stout Street  
Denver, CO 80294  
(303) 844-4169

Data Information Services:

The Oklahoma District of the U.S. Geological Survey also manages the following data information services that provide water-resources data in an easy-to-use and readily available form:

National Water Data EXchange (NAWDEX) provides information on the location and types of data available on water and related subjects. (District contact for this information is Lionel D. Mize.)

WATER Data STORAGE and RETRIEVAL System (WATSTORE) provides the following types of information:

1. Well depth, depth to water, well yield, name of aquifer, and well-construction data for nearly 20,000 ground-water wells in Oklahoma.
2. Current discharge and quality-of-water data from about 150 streams, lakes, and springs in Oklahoma.
3. Current peak-flow data from about 40 partial-record stations in Oklahoma.

(District contacts for this information are Joanne K. Kurklin and Jayne E. May.)

General information on Oklahoma water resources and publications:

For general information on water resources and availability of publications dealing with Oklahoma, contact:

Charles R. Burchett, District Chief  
U.S. Geological Survey, Water Resources Division  
Rm. 621, 215 Dean A. McGee Avenue  
Oklahoma City, OK 73102  
(405) 231-4256

## U.S. GEOLOGICAL SURVEY

### PROFESSIONAL PAPERS

- Bedinger, M.S., and Sneigocki, R.T., 1976, Summary appraisals of the Nation's ground-water resources--  
Arkansas-White-Red Region: U.S. Geological Survey  
Professional Paper 813-H, 31 p.
- Bergman, D.L., and Sullivan, C.W., 1963, Channel changes on Sandstone Creek near Cheyenne, Oklahoma, in Geological Survey Research 1963: U.S. Geological Survey Professional Paper 475-C, p. C145-C148.
- Clark, W.E., 1963, Evapotranspiration and relation of ground water to surface water in the Pond Creek basin, Oklahoma, in Geological Survey Research 1962: U.S. Geological Survey Professional Paper 450-E, p. E142-E145.
- Leonard, A.R., and Ward, P.E., 1962, Use of Na/Cl ratios to distinguish oil field from salt springs brines in western Oklahoma, in Geological Survey Research 1962: U.S. Geological Survey Professional Paper 450-B, p. B126-B127.
- U.S. Geological Survey, 1954, Water-loss investigations; Lake Hefner studies, technical report: U.S. Geological Survey Professional Paper 269, 158 p.
- Ward, P.E., 1962, Shallow halite deposits in the Flowerpot Shale in southwestern Oklahoma: U.S. Geological Survey Professional Paper 450-E, p. E40-E42.
- Ward, P.E., and Leonard, A.R., 1961, Hypothetical circulation of ground water around salt springs in western Oklahoma, Texas, and Kansas, in Geological Survey Research 1961: U.S. Geological Survey, Professional Paper 424-D, p. D150-D151.

### WATER-SUPPLY PAPERS

- Bedinger, M.S., Reed, J.E., Wells, C.V., and Swafford, B.F., 1970, Methods and applications of electrical simulation in ground-water studies in the lower Arkansas and Verdigris River valleys, Arkansas and Oklahoma: U.S. Geological Survey Water-Supply Paper 1971, 71 p.
- Blumer, S.P., 1986, Oklahoma, Surface-water resources, in National Water Summary, 1985: U.S. Geological Survey Water-Supply Paper 2300, p. 375-382.

- Dover, T.B., Leonard, A.R., and Laine, L.L., 1968, Water for Oklahoma: U.S. Geological Survey Water-Supply Paper 1890, 107 p.
- Gould, C.N., 1905, Geology and water resources of Oklahoma: U.S. Geological Survey Water-Supply Paper 148, 178 p.
- Havens, J.S., Marcher, M.V., and Schuelein, J.W., 1985, Oklahoma--Ground-water resources, in U.S. Geological Survey, 1985, National Water Summary 1984: U.S. Geological Survey Water-Supply Paper 2275, 467 p.
- Horak, W.F., and Stoner, J.D., 1988, Oklahoma--Ground-water quality, in U.S. Geological Survey, 1988, National Water Summary 1986: U.S. Geological Survey Water-Supply Paper 2325, 560 p.
- Kennon, F.W., 1966, Hydrologic effects of small reservoirs in Sandstone Creek watershed, Beckham and Roger Mills Counties, western Oklahoma: U.S. Geological Survey Water-Supply Paper 1839-C, 39 p.
- Leonard, A.R., 1963, Oklahoma, in The role of ground water in the Nation's water situation: U.S. Geological Survey Water-Supply Paper 1800, p. 671-698.
- Marine, I.W., 1963, Correlation of water-level fluctuations with climatic cycles in the Oklahoma Panhandle: U.S. Geological Survey Water-Supply Paper 1669-K, 10 p.
- Renick, B.C., 1925, Additional water supplies for the city of Enid, Oklahoma: U.S. Geological Survey Water-Supply Paper 520-B, p. 15-26.
- Schwenneson, A.T., 1915, Ground water for irrigation in the vicinity of Enid, Oklahoma: U.S. Geological Survey Water-Supply Paper 345-B, p. 11-23.
- 1915, Ground water for irrigation in the valley of North Fork of Canadian River near Oklahoma City, Oklahoma: U.S. Geological Survey Water-Supply Paper 345-D, p. 41-51.
- Tanaka, H.H., 1972, Geohydrology of the lower Verdigris River valley between Muskogee, and Catoosa, Oklahoma: U.S. Geological Survey Water-Supply Paper 1999-A, 23 p.
- Tanaka, H.H., Hollowell, J.R., and Murphy, J.J., 1966, Hydrology of the alluvium of the Arkansas River, Muskogee, Oklahoma, to Fort Smith, Arkansas, with a section on Chemical quality of the water, by J.J. Murphy: U.S. Geological Survey Water-Supply Paper 1809-T, 42 p.

Thompson, D.C., 1922, Ground water for irrigation near Gage, Ellis County, Oklahoma: U.S. Geological Survey Water-Supply Paper 500-B, p. 33-53.

U.S. Geological Survey, 1954, Floods of May 1951 in western Oklahoma and northwestern Texas: U.S. Geological Survey Water-Supply Paper 1227-B, p. 135-199.

----- 1984, Oklahoma water issues, in U.S. Geological Survey, 1984, National Water Summary 1983--Hydrologic events and issues, U.S. Geological Survey Water-Supply Paper 2250, 243 p.

*Water-Supply Papers containing ground-water level data for Oklahoma*

Calendar Year	Water-Supply Paper	Calendar Year	Water-Supply Paper
1935	777	1947	1099
1936	817	1948	1129
1937	840	1949	1159
1938	845	1950	1168
1939	886	1951	1194
1940	909	1952	1244
1941	939	1953	1268
1942	947	1954	1324
1943	989	1955	1407
1944	1019	1956-59	1549
1945	1026	1960-64	1824
1946	1074	1965-69	1979
		1970-74	2172

**HYDROLOGIC ATLASES**

Hart, D.L., Jr., 1966, Base of fresh ground water in southern Oklahoma: U.S. Geological Survey Hydrologic Investigations Atlas HA-223, scale 1:250,000, 2 sheets.

Krothe, N.C., Oliver, J.W., and Weeks, J.B., 1982, Dissolved solids and sodium in water from the High Plains aquifer in parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming: U.S. Geological Survey Hydrologic Investigations Atlas HA-658, scale 1:2,500,000, 2 sheets.

Lohman, S.W., Burtis, V.M., and others, 1953, Areas of principal ground-water investigations in the Arkansas, White, and Red River basins: U.S. Geological Survey

Hydrologic Investigations Atlas HA-2, scale 1:2,500,000, 2 sheets.

----- 1953, General availability of ground water and depth to water level in the Arkansas, White, and Red River basins: U.S. Geological Survey Hydrologic Investigations Atlas HA-3, scale 1:2,500,000.

Luckey, R.R., Gutentag, E.D., and Weeks, J.B., 1981, Water-level and saturated-thickness changes, predevelopment to 1980, in the High Plains aquifer in parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming: U.S. Geological Survey Hydrologic Investigations Atlas HA-652, scale 1:2,500,000, 2 sheets.

Morton, R.B., and Goemaat, R.L., 1972, Reconnaissance of the water resources of Beaver County, Oklahoma: U.S. Geological Survey Hydrologic Investigations Atlas HA-450, scale 1:125,000, 3 sheets.

Sapik, D.B., and Goemaat, R.L., 1972, Reconnaissance of the ground-water resources of Cimarron County, Oklahoma: U.S. Geological Survey Hydrologic Investigations Atlas HA-373, scale 1:125,000, 3 sheets.

Weeks, J.B., and Gutentag, E.D., 1981, Bedrock geology, altitude of base, and 1980 saturated thickness of the High Plains aquifer in parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming: U.S. Geological Survey Hydrologic Investigations Atlas HA-648, scale 1:2,500,000, 2 sheets.

Wood, P.R., and Hart, D.L., Jr., 1967, Availability of ground water in Texas County, Oklahoma: U.S. Geological Survey Hydrologic Investigations Atlas HA-250, scale 1:125,000, 3 sheets.

#### MISCELLANEOUS GEOLOGIC INVESTIGATIONS

Morton, R.B., 1973, Preliminary investigations of the hydrogeology of the Middle Permian to Tertiary rocks of the Oklahoma Panhandle: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-738, scale approximately 1:250,000, 2 sheets.

## OPEN-FILE REPORTS

- Andreasen, G.E., and Bromery, R.W., 1963, Total intensity aeromagnetic profiles over northeastern Oklahoma: U.S. Geological Survey Open-File Report 63-3, 1 map, in 2 parts.
- Barclay, J.E., 1951, Ground-water levels in Oklahoma: U.S. Geological Survey Open-File Report 51-200, 3 p.
- Bednar, G.A., and Waldrep, T.E., 1973, Fluvial sediment in Double Creek sub-watershed no. 5, Washington County, Oklahoma: U.S. Geological Survey Open-File Report 73-22, 38 p.
- Bergman, D.L., and Huntzinger, T.L., 1981, Rainfall-runoff hydrographs and basin characteristics data for small streams in Oklahoma: U.S. Geological Survey Open-File Report 81-824, 320 p.
- Bingham, R.H., 1969, Ground-water levels in observation wells in Oklahoma, 1967-68: U.S. Geological Survey Open-File Report 69-335, 92 p.
- Blumer, S.P., 1983, Sediment data for Mid-Arkansas and Upper Red River basins through 1980: U.S. Geological Survey Open-File Report 83-692, 799 p.
- Blumer, S.P., and Alf, L.A., 1986, Hydrologic data for selected streams in the coal area of southeastern Oklahoma, July 1978 to September 1982: U.S. Geological Survey Open-File Report 86-319, 337 p.
- Blumer, S.P., and Hauth, L.D., 1984, Use and availability of continuous streamflow records in Oklahoma: U.S. Geological Survey Open-File Report 84-747, 23 p.
- Blumer, S.P., and Scott, J.C., 1984, Hydrologic data for the Lehigh area, southeastern Oklahoma, May 1977 to January 1982: U.S. Geological Survey Open-File Report 84-599, 212 p.
- Bohn, J.D., and Hoffman, G.L., 1970, A proposed streamflow data program for Oklahoma: U.S. Geological Survey Open-File Report 70-32, 44 p.
- Buckner, H.D., and Kurklin, J.K., 1984, Floods in south-central Oklahoma and north-central Texas: U.S. Geological Survey Open-File Report 84-065, 112 p.

- Cady, R.C., 1937 (?), Ground water in Creek County, Oklahoma:  
U.S. Geological Survey Open-File Report 37-2, 12 p.
- Carr, J.E., and Havens, J.S., 1976, Records of wells and water quality for the Garber-Wellington aquifer, northern Oklahoma and southern Logan Counties, Oklahoma:  
U.S. Geological Survey Open-File Report 76-619, 32 p.
- Carr, J.E., and Marcher, M.V., 1977, A preliminary appraisal of the Garber-Wellington aquifer, southern Logan and northern Oklahoma Counties, Oklahoma: U.S. Geological Survey Open-File Report 77-278, 23 p.
- Christenson, S.C., Morton, R.B., Havens, J.S., and Fairchild, R.W., 1988, Geologic logs for selected deep wells in parts of Oklahoma, Texas, and New Mexico: U.S. Geological Survey Open-File Report 86-541, 161 p.
- Christenson, S.C., and Parkhurst, D.L., 1987, Ground-water quality assessment of the Central Oklahoma Aquifer, Oklahoma: Project Description: U.S. Geological Survey Open-File Report 87-235, 30 p.
- Corley, R.K., and Huntzinger, T.L., 1979, Flood of August 27-28, 1977, West Cache Creek and Blue Beaver Creek, southwestern Oklahoma: U.S. Geological Survey Open-File Report 79-256, scale 1:24,000, 1 sheet.
- D'Lugosz, J.J., and McClafflin, R.G., 1977, Hydrologic data for the Vamoosa aquifer, east-central Oklahoma:  
U.S. Geological Survey Open-File Report 77-487, 38 p.
- 1978, Geohydrology of the Vamoosa aquifer, east-central Oklahoma: U.S. Geological Survey Open-File Report 78-781, 63 p.
- Davis, L.V., 1955, Ground-water investigations in Oklahoma:  
U.S. Geological Survey Open-File Report 55-36, 4 p.
- Davis, L.V., and Schoff, S.L., 1948, Ground water in the Blanchard area, McClain County, Oklahoma: U.S. Geological Survey Open-File Report 48-80, 11 p.
- Davis, R.E., and Christenson, S.C., 1981, Geohydrology and numerical simulation of the alluvium and terrace aquifer along the Beaver-North Canadian River from the Panhandle to Canton Lake, northwestern Oklahoma: U.S. Geological Survey Open-File Report 81-483, 42 p.
- Davis, R.E., Christenson, S.C., and Blumer, S.P., 1980, Hydrologic data for the alluvium and terrace aquifer along the Beaver-North Canadian River from the Panhandle to

- Canton Lake, northwestern Oklahoma: U.S. Geological Survey Open-File Report 80-159, 77 p.
- Davis, R.E., and Hart, D.L., Jr., 1978, Hydrologic data for the Antlers aquifer, southeastern Oklahoma: U.S. Geological Survey Open-File Report 78-1038, 24 p.
- Dennis, P.E., 1950, Geology and ground-water hydrology of the Lake Hefner area in Oklahoma County, Oklahoma: U.S. Geological Survey Open-File Report 50-68, 19 p.
- Dover, T.B., 1950, Mineral constituents in water and their significance: U.S. Geological Survey Open-File Report 50-69, 6 p.
- 1957, Chemical quality of surface waters in the Arkansas River basin of Oklahoma: U.S. Geological Survey Open-File Report 57-40, 13 p.
- Dover, T.B., and Geurin, J.W., 1953(?), Changes in chemical quality of the Arkansas River in Oklahoma and Texas [1946-52]: U.S. Geological Survey Open-File Report 53-289, 33 p.
- Ellis, A.J., 1918, Sources of water supply for the military establishments at Fort Sill, Oklahoma: U.S. Geological Survey Open-File Report 18-1, 11 p.
- Fader, S.W., and Morton, R.B., 1975, Ground water in the Verdigris River basin, Kansas and Oklahoma: U.S. Geological Survey Open-File Report 75-365, 26 p.
- 1975, Ground water in the middle Arkansas River basin, Kansas and Oklahoma: U.S. Geological Survey Open-File Report 75-367, 44 p.
- Fairchild, R.W., 1983, Hydrologic data for Arbuckle Mountain area, south-central Oklahoma: U.S. Geological Survey Open-File Report 83-28, 74 p.
- Fairchild, R.W., Hanson, R.L., and Davis, R.E., 1982, Hydrology of the Arbuckle Mountain area: U.S. Geological Survey Open-File Report 82-775, 153 p.
- Ferree, D.M., 1983, Ground-water quality data for Oklahoma, 1981: U.S. Geological Survey Open-File Report 83-686, 78 p.
- 1985, Ground-water quality data for Oklahoma--1982-84: U.S. Geological Survey Open-File Report 85-417, 43 p.

- Goemaat, R.L., 1976, Ground-water levels in observation wells in Oklahoma, 1971-74: U.S. Geological Survey Open-File Report 76-664, 142 p.
- 1977, Selected water-level records for western Oklahoma, 1950-75: U.S. Geological Survey Open-File Report 77-73, 94 p.
- 1977, Ground-water levels in observation wells in Oklahoma, 1975: U.S. Geological Survey Open-File Report 77-238, 35 p.
- 1977, Selected water-level records for western Oklahoma, 1975-76: U.S. Geological Survey Open-File Report 77-239, 50 p.
- Goemaat, R.L., Mize, L.D., Madaj, A.J., and Spiser, D.E., 1986, Ground-water levels in observation wells in Oklahoma, period of record to March 1985: U.S. Geological Survey Open-File Report 86-314, 461 p.
- Goemaat, R.L., Mize, D.L., and Spiser, D.E., 1983, Ground-water levels in observation wells in Oklahoma, 1980-82: U.S. Geological Survey Open-File Report 83-760, 604 p.
- 1984, Ground-water levels in observation wells in Oklahoma, 1982-83 climatic years: U.S. Geological Survey Open-File Report 84-472, 583 p.
- 1985, Ground-water levels in observation wells in Oklahoma, 1983-84 climatic years: U.S. Geological Survey Open-File Report 85-87, 588 p.
- Goemaat, R.L., and Spiser, D.E., 1978, Selected water-level records for Oklahoma, 1975-77: U.S. Geological Survey Open-File Report 78-721, 58 p.
- 1979, Selected water-level records for Oklahoma, 1976-78: U.S. Geological Survey Open-File Report 79-1580, 48 p.
- Goemaat, R.L., and Willard, C.C., 1983, Ground-water records for the area surrounding the Chickasaw National Recreation Area, Murray County, Oklahoma: U.S. Geological Survey Open-File Report 83-27, 13 p.
- Gould, C.N., and Schoff, S.L., 1939, Geological report on water conditions at Platt National Park, Oklahoma: National Park Service Report 249, 38 p., 3 plates. (Also cataloged as U.S. Geological Survey Open-File Report 39-14)

- Gutentag, E.D., and Weeks, J.B., 1980, Water table in the High Plains aquifer in 1978 in parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, and Wyoming: U.S. Geological Survey Open-File Report 80-50, scale 1:2,500,000, 1 sheet.
- Hanson, R.L., 1984, Droughts: U.S. Geological Survey Open-File Report 84-724, p. 773-811, in Carla Kitzmiller, compiler, 1984, Proceeding of the geologic and hydrologic hazards training program: U.S. Geological Survey Open-File Report 84-760, 1,112 p.
- Hanson, R.L., Scott, J.C., and Kurklin, J.K., 1983, Oklahoma: A summary of activities of the U.S. Geological Survey, Water Resources Division for 1983: U.S. Geological Survey Open-File Report 83-767, 104 p.
- Hart, D.L., Jr., 1961, Ground water in the alluvium of Beaver Creek basin, Oklahoma: U.S. Geological Survey Open-File Report 61-59, 13 p.
- 1963, Ground-water levels in observation wells in Oklahoma, 1956-60: U.S. Geological Survey Open-File Report 63-150, 196 p.
- 1967, Ground-water levels in observation wells in Oklahoma, 1965-66: U.S. Geological Survey Open-File Report 67-285, 61 p.
- Hart, D.L., Jr., and Davis, R.E., 1978, Geohydrology of the Antlers area, southeastern Oklahoma: U.S. Geological Survey open-file report, 35 p. [Released as Oklahoma Geological Survey Circular 81.]
- Hart, D.L., Jr., Hoffman, G.L., and Goemaat, R.L., 1972, Records of water-level measurements in the Oklahoma Panhandle, 1971-72: U.S. Geological Survey Open-File Report 72-464, 39 p.
- Hart, D.L., Jr., and others, 1971, Records of water-level measurements in wells in the Oklahoma Panhandle, 1966-70: U.S. Geological Survey Open-File Report 71-344, 66 p.
- Hauth, L.D., 1985, Floods in central, southwest Oklahoma, October 17-23, 1983: U.S. Geological Survey Open-File Report 85-494, 17 p.
- Havens, J.S., 1978, Ground-water records for eastern Oklahoma, Part 2, water-quality records for wells, test-holes, and springs: U.S. Geological Survey Open-File Report 78-357, 139 p.

- 1978, Reconnaissance of ground water in the vicinity of the Wichita Mountains, southwestern Oklahoma: U.S. Geological Survey Open-File Report 78-857, 27 p.
- 1985, Hydrologic data: North Canadian River from Lake Overholser to Lake Eufaula, central Oklahoma: U.S. Geological Survey Open-File Report 84-808, 52 p.
- 1988, Oklahoma, a summary of activities of the U.S. Geological Survey, Water Resources Division, in fiscal years 1986-87: U.S. Geological Survey Open-File Report 88-172, 141 p.
- 1988, U.S. Geological Survey ground-water studies in Oklahoma: U.S. Geological Survey Open-File Report 88-140, 2 p.
- Havens, J.S., and Bergman, D.L., 1976, Ground-water records for southeastern Oklahoma--Part 1, Records of wells, test holes, and springs: U.S. Geological Survey Open-File Report 76-889, 59 p.
- 1976, Ground-water records for northeastern Oklahoma--Part 1, Records of wells, test holes, and springs: U.S. Geological Survey Open-File Report 76-890, 100 p.
- Hoffman, G.L., and Hart, D.L., Jr., 1973, Records of selected water wells and test holes in the Oklahoma Panhandle: U.S. Geological Survey Open-File Report 73-376, 59 p.
- Hollowell, J.R., 1961, Ground water in the alluvium of Elk Creek basin, Oklahoma: U.S. Geological Survey Open-File Report 61-65, 20 p. [Also published as Oklahoma Water Resources Board Bulletin 28, 15 p.]
- 1961, Ground water in the vicinity of Roosevelt, Oklahoma: U.S. Geological Survey Open-File Report 61-67, 8 p.
- Horak, W.F., and Stoner, J.D., 1988, Oklahoma ground-water quality: U.S. Geological Survey Open-File Report 87-746, 9 p.
- Huntzinger, T.L., 1978, High-flow frequencies for selected streams in Oklahoma: U.S. Geological Survey Open-File Report 78-161, 30 p.
- 1978, Low-flow characteristics of Oklahoma streams: U.S. Geological Survey Open-File Report 78-166, 93 p.

- 1978, Application of hydraulic and hydrologic data in urban storm water management: U.S. Geological Survey Open-File Report 78-414, 33 p.
- Jacobson, C.L., 1951, Memorandum on ground water from Mississippian rocks in the vicinity of Miami, Okla.: U.S. Geological Survey Open-File Report 51-120, 9 p., 1 fig.
- Jacobson, C.L., and Reed, E.W., 1951, Memorandum on results of pumping tests at Goodrich plant site, Miami, Okla.: U.S. Geological Survey Open-File Report 51-121, 11 p., 13 graphs, 3 figs.
- Kurklin, J.K., 1979, Statistical summaries of surface-water-quality data for selected sites in Oklahoma, through the 1975 water year: U.S. Geological Survey Open-File Report 79-219, 185 p.
- Laine, L.L., 1956, Surface-water resources of Polecat Creek basin, Oklahoma: U.S. Geological Survey Open-File Report 56-75, 20 p., 2 figs.
- 1958, Surface-water resources of the Washita River basin in Oklahoma--magnitude, distribution, and quality of streamflow: U.S. Geological Survey Open-File Report 58-58, 34 p.
- 1958, Surface waters of North Boggy Creek basin in the Muddy Boggy Creek basin in Oklahoma, with a section on Chemical character of surface water, by T.B. Dover: U.S. Geological Survey Open-File Report 58-59, 34 p.
- 1959, Surface waters of Little River basin in central Oklahoma, with a section on Chemical character of surface waters, by T.B. Dover: U.S. Geological Survey Open-File Report 59-75, 47 p.
- 1959, Surface waters of Illinois River basin in Arkansas and Oklahoma, with a section on Chemical character of surface waters, by T.B. Dover: U.S. Geological Survey Open-File Report 59-76, 65 p.
- 1959, Correlative estimates of discharge for Verdigris River (tributary to Arkansas River) near Tenapah, Oklahoma, for year ending Septemer 30, 1938: U.S. Geological Survey Open-File Report 59-77, 2 p.
- 1962, Surface waters of Cottonwood Creek in the Cimarron River basin in central Oklahoma, with a section on Chemical quality of surface waters, by R.P. Orth: U.S. Geological Survey Open-File Report 62-75, 41 p.

- 1963, Surface water of Kiamichi River basin in southeastern Oklahoma, with a section on Quality of water, by T.R. Cummings: U.S. Geological Survey open-file report, 39 p.
- Laine, L.L., and Murphy, J.J., 1962, Surface water of Beaver Creek basin in south-central Oklahoma: U.S. Geological Survey Open-File Report 62-162, 28 p.
- Laine, L.L., Schoff, S.L., and Dover, T.B., 1951, Public water supplies in Oklahoma: U.S. Geological Survey Open-File Report 51-201, 110 p.
- Leonard, A.R., 1960, Ground water in Oklahoma: U.S. Geological Survey Open-File Report 60-166, 12 p.
- Leonard, A.R., Davis, L.V., and Stacy, B.L., 1958, Ground water in the alluvial deposits of the Washita River and its tributaries in Oklahoma: U.S. Geological Survey Open-File Report 58-63, 13 p.
- MacLachlan, M.E., 1964, The Anadarko Basin (of parts of Oklahoma, Texas, Kansas, and Colorado): U.S. Geological Survey Open-File Report 64-112, 75 p.
- Mize, L.D., 1975, Statistical summaries of streamflow records, Oklahoma, through 1974: U.S. Geological Survey Open-File Report 75-684, 399 p.
- Moore, R.L., 1972, Ground-water levels in observation wells in Oklahoma, 1969-70: U.S. Geological Survey Open-File Report 72-463, 85 p.
- Morton, R.B., 1980, Digital-model projection of saturated thickness and recoverable water in the Ogallala aquifer, Texas County, Oklahoma: U.S. Geological Survey Open-File Report 79-565, 34 p.
- Morton, R.B., and Fader, S.W., 1975, Ground water in the Grand (Neosho) River basin, Kansas and Oklahoma: U.S. Geological Survey Open-File Report 75-366, 35 p.
- Parkhurst, D.L., 1987, Chemical analyses of water samples from the Picher mining area, northeast Oklahoma and southeast Kansas: U.S. Geological Survey Open-File Report 87-453, 43 p.
- 1988, Chemical analyses of stream sediment in the Tar Creek basin of the Picher mining area, northeast Oklahoma: U.S. Geological Survey Open-File Report 88-469, 13 p.

- Playton, S.J., and Davis, R.E., 1977, Preliminary report on the quality of water in abandoned zinc mines in northeastern Oklahoma and southeastern Kansas: U.S. Geological Survey Open-File Report 77-163, 36 p.
- Playton, S.J., Davis, R.E., and McClaflyn, R.G., 1980, Chemical quality of water in abandoned zinc mines in northeastern Oklahoma and southeastern Kansas: U.S. Geological Survey Open-File Report 78-294, 67 p. [Published as Oklahoma Geological Survey Circular 82.]
- Schoff, S.L., 1948, Ground-water conditions in the vicinity of Enid, Oklahoma: U.S. Geological Survey Open-File Report 48-81, 4 p.
- 1948, Ground-water in the Beggs area, Okmulgee County, Oklahoma: U.S. Geological Survey Open-File Report 48-82, 7 p.
- 1948, Ground-water available in the Davenport area [Lincoln County], Oklahoma: U.S. Geological Survey Open-File Report 48-83, 6 p.
- 1948, Ground water in the Anadarko area [Caddo County], Oklahoma: U.S. Geological Survey Open-File Report 48-84, 7 p.
- Schoff, S.L., and Davis, L.V., 1948, Ground water in the Blanchard area, McClain County, Oklahoma: U.S. Geological Survey open-file report.
- Schoff, S.L., Dott, R.H., and Lalicker, D.G., 1941, Contamination of Lake Wewoka and fresh-water sands by disposal of oil-well brines near Wewoka, Seminole County, Oklahoma: U.S. Geological Survey Open-File Report 41-32, 8 p.
- Slack, L.J., and Blumer, S.P., 1984, Physical and chemical characteristics of water in coal-mine ponds, eastern Oklahoma, June to November 1977-81: U.S. Geological Survey Open-File Report 84-446, 185 p. [Published as Oklahoma Geological Survey Special Publication 87-2.]
- Stacy, B.L., 1960, Ground water in the alluvial deposits of Cottonwood Creek basin, Oklahoma: U.S. Geological Survey Open-File Report 60-130, 8 p.
- 1961, Ground-water resources of the alluvial deposits of the Canadian River valley near Norman, Oklahoma: U.S. Geological Survey Open-File Report 61-177, 61 p.

- Stoner, J.D., 1977, Index of published surface-water-quality data for Oklahoma, 1946-1975: U.S. Geological Survey Open-File Report 77-204, 212 p.
- 1980, Reconnaissance of polychlorinated biphenyls in the Arkansas River between Muskogee and Webbers Falls Lock and Dam, Oklahoma: U.S. Geological Survey Open-File Report 80-216, 6 p.
- Tanaka, H.H., 1960, Water-level and water-level change maps for the irrigation area in the Rush Springs sandstone in Caddo County and adjacent area: U.S. Geological Survey Open-File Report 60-138, 4 maps.
- Tanaka, H.H., Hart, D.L., Jr., and Knott, R.K., 1965, Ground-water data of selected test holes and wells along the Arkansas River in Muskogee County, Oklahoma: U.S. Geological Survey Open-File Report 65-155, 287 p.
- 1965, Ground-water data of selected test holes and wells along the Verdigris River in Wagoner and Rogers Counties Oklahoma: U.S. Geological Survey Open-File Report 65-156, 411 p.
- 1965, Ground-water data of selected test holes and wells along the Arkansas River in Sequoyah County, Oklahoma: U.S. Geological Survey Open-File Report 65-157, 238 p.
- 1965, Ground-water data of selected test holes and wells along the Arkansas River in LeFlore and Haskell Counties, Oklahoma: U.S. Geological Survey Open-File Report 65-158, 236 p.
- Theis, C.V., 1934, Preliminary geological report on the Salt Plains reservoir site [Alfalfa County], Oklahoma: U.S. Geological Survey Open-File Report 34-2, 15 p.
- Thomas, W.O., Jr., and Corley, R.K., 1974, Floodflows from small drainage areas in Oklahoma: Progress report and data compilation: U.S. Geological Survey Open-File Report 74-1099, 50 p.
- Tortorelli, R.L., Huntzinger, T.L., Bergman, D.L., and Patneau, A.L., Jr., 1983, Urban flood analysis in Oklahoma City, Oklahoma: U.S. Geological Survey Open-File Report 83-26, 94 p.
- Turner, S.F., 1931, Report on water supply for the proposed Southwestern Reformatory at El Reno, Oklahoma: U.S. Geological Survey Open-File Report 31-1, 20 p.

- U.S. Geological Survey, 1945, Water facts for Oklahoma:  
U.S. Geological Survey Open-File Report 45-110, 35 p.
- 1945, Chemical analyses of surface waters in Oklahoma,  
September-December 1944: U.S. Geological Survey Open-File  
Report 45-111, 51 p.
- 1953(?), Summary of annual records of chemical quality of  
the Arkansas River in Oklahoma and Arkansas, 1945-1952:  
U.S. Geological Survey Open-File Report 53-288, 38 p.
- 1966, Ground water in the Cimarron River basin, New  
Mexico, Colorado, Kansas, and Oklahoma: U.S. Geological  
Survey Open-File Report 66-159, 51 p.
- 1985, Oklahoma: A summary of activities of the  
U.S. Geological Survey, Water Resources Division, for  
1985: U.S. Geological Survey Open-File Report 85-328,  
129 p.
- Ward, P.E., 1961, Geology and ground-water features of salt  
springs, seeps, and plains in the Arkansas and Red River  
basins of western Oklahoma and adjacent parts of Kansas  
and Texas: U.S. Geological Survey Open-File Report  
63-132, 94 p.
- Weiss, D.L., and Sullivan, C.L., 1958(?), Floods of April-June  
1957 in Oklahoma and western Arkansas: U.S. Geological  
Survey Open-File Report 57-127, 21 p.
- Westfall, A.O., 1962, Surface waters of Elk Creek basin in  
southwestern Oklahoma: U.S. Geological Survey Open-File  
Report 63-138, 18 p.
- 1962, Surface waters of Otter Creek basin in southwestern  
Oklahoma, with a section on Chemical quality of surface  
water, by J.J. Murphy: U.S. Geological Survey Open-File  
Report 62-155, 37 p.
- 1963, Surface water of Muddy Boggy River basin in  
south-central Oklahoma, with a section on Quality of  
water, by T.R. Cummings: U.S. Geological Survey Open-File  
Report 63-148, 71 p.
- 1963, Surface water of Little River basin in southeastern  
Oklahoma, with a section on Quality of water, by  
R.P. Orth: U.S. Geological Survey Open-File Report  
63-151, 66 p.
- Westfall, A.O., and Patterson, J.L., 1964, Floods in Oklahoma,  
magnitude and frequency: U.S. Geological Survey Open-File  
Report 64-170, 105 p.

Wood, P.R., 1965, Records of ground-water levels and effects of pumping in the Ardmore well-field area, Carter County, Oklahoma: U.S. Geological Survey Open-File Report 65-176, 14 p.

----- 1965, Ground-water levels in observation wells in Oklahoma, 1963-64: U.S. Geological Survey Open-File Report 65-184, 82 p.

Wood, P.R., and Moeller, M.D., 1964, Ground-water levels in observation wells in Oklahoma, 1961-62: U.S. Geological Survey Open-File Report 64-169, 119 p.

#### WATER-RESOURCES INVESTIGATIONS REPORTS

Bingham, R.H., Bergman, D.L., and Thomas, W.O., Jr., 1974, Flood of October 1973 in Enid and vicinity, north-central Oklahoma: U.S. Geological Survey Water-Resources Investigations 27-74, scale 1:250,000, 1:126,720, 2 sheets.

Christenson, S.C., 1983, Numerical simulation of the alluvium and terrace aquifer along the North Canadian River from Canton Lake to Lake Overholser, central Oklahoma: U.S. Geological Survey Water Resources Investigations Report 83-4076, 36 p.

Feder, G.L., and Krothe, N.C., 1981, Results of a reconnaissance water-quality sampling program of the Ogallala aquifer in Colorado, Kansas, Nebraska, Oklahoma, South Dakota, and Texas: U.S. Geological Survey Water-Resources Investigations 81-65, 7 p.

Hart, D.L., Jr., Hoffman, G.L., and Goemaat, R.L., 1976, Geohydrology of the Oklahoma Panhandle, Beaver, Cimarron, and Texas Counties: U.S. Geological Survey Water-Resources Investigation 25-75, 62 p.

Havens, J.S., 1982, Altitude and configuration of the 1980 water table in the High Plains regional aquifer, northwestern Oklahoma: U.S. Geological Survey Water-Resources Investigations Open-File Report 81-100, scale 1:250,000, 2 sheets.

----- 1982, Altitude and configuration of the predevelopment water table in the High Plains regional aquifer, northwestern Oklahoma: U.S. Geological Survey Water-Resources Investigations Open-File Report 81-275, scale 1:250,000, 2 sheets.

- 1982, Saturated thickness of the High Plains regional aquifer in 1980, northwestern Oklahoma: U.S. Geological Survey Water-Resources Investigations Open-File Report 81-760, scale 1:250,000, 2 sheets.
- 1982, Generalized altitude and configuration of the base of the High Plains regional aquifer, northwestern Oklahoma: U.S. Geological Survey Water-Resources Investigations Open-File Report 81-1117, scale 1:250,000, 2 sheets.
- 1983, Water-level changes in the High Plains regional aquifer, northwestern Oklahoma, predevelopment to 1980: U.S. Geological Survey Water-Resources Investigations Report 83-4073, scale 1:500,000, 1 sheet.
- Havens, J.S., and Christenson, S.C., 1983, Numerical simulation of the High Plains regional aquifer, northwestern Oklahoma: U.S. Geological Survey Water-Resources Investigations Report 83-4269, 27 p.
- Heimann, D.C., and Tortorelli, R.L., 1988, Statistical summaries of streamflow records in Oklahoma in parts of Arkansas, Kansas, Missouri, and Texas through 1984: U.S. Geological Survey Water-Resources Investigations Report 87-4205, 387 p.
- Heimes, F.J., and Luckey, R.R., 1982, Method for estimating historical irrigation requirements from ground water in the High Plains in parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming: U.S. Geological Survey Water-Resources Investigations Report, 82-40, 64 p.
- Krothe, N.C., and Oliver, J.W., 1982, Sulfur isotopic composition and water chemistry in water from the High Plains aquifer, Oklahoma Panhandle and southwestern Kansas: U.S. Geological Survey Water-Resources Investigations 82-12, 27 p.
- Kurklin, J.K., 1985, Water quality in the Blue Creek arm of Lake Eufaula and Blue Creek, Oklahoma, March-October 1978: U.S. Geological Survey Water-Resources Investigations Report 85-4039, 91 p.
- 1986, Water quality in Gaines Creek and Gaines Creek arm of Eufaula Lake, Oklahoma: U.S. Geological Survey Water-Resources Investigations Report 86-4169, 153 p.
- Marcher, M.V., Bergman, D.L., Slack, L.J., and Blumer, S.P., 1984, Hydrology of Area 41, Western Region, Interior Coal Province, Oklahoma and Arkansas: U.S. Geological Survey

Water-Resources Investigations Open-File Report 84-129,  
86 p.

Marcher, M.V., Bergman, D.L., Stoner, J.D., and Blumer, S.P.,  
1981, Preliminary appraisal of the hydrology of the  
Blocker area, Pittsburg County, Oklahoma: U.S. Geological  
Survey Water-Resources Investigations Report 81-1187,  
48 p.

----- 1983a, Preliminary appraisal of the hydrology of the Rock  
Island area, Le Flore County, Oklahoma: U.S. Geological  
Survey Water-Resources Investigations Report 83-4013,  
35 p.

----- 1983b, Preliminary appraisal of the hydrology of the Red  
Oak area, Latimer County, Oklahoma: U.S. Geological  
Survey Water-Resources Investigations Report 83-4166,  
44 p.

Marcher, M.V., Huntzinger, T.L., Stoner, J.D., and Blumer,  
S.P., 1983, Preliminary appraisal of the hydrology of the  
Stigler area, Haskell County, Oklahoma: U.S. Geological  
Survey Water-Resources Investigations Report 82-4099,  
37 p.

Marcher, M.V., Kenny, J.F., and others, 1984, Hydrology of Area  
40, Western Region, Interior Coal Province, Kansas,  
Oklahoma, and Missouri: U.S. Geological Survey  
Water-Resources Investigations Open-File Report 83-266,  
97 p.

Parkhurst, R.S., and Christenson, S.C., 1987, Selected chemical  
analyses of water from formations of Mesozoic and  
Paleozoic age in parts of Oklahoma, northern Texas, and  
Union County, New Mexico: U.S. Geological Survey  
Water-Resources Investigations Report 86-4355, 222 p.

Reed, J.E., 1982, Preliminary projections of the effects of  
chloride-control structures on the Quaternary aquifer at  
Great Salt Plains, Oklahoma: U.S. Geological Survey  
Water-Resources Investigations Report 80-120, 45 p.

Sauer, V.B., 1974, Flood characteristics of Oklahoma streams:  
U.S. Geological Survey Water-Resources Investigations  
52-73, 301 p.

----- 1974, An approach to estimating flood frequency for urban  
areas in Oklahoma: U.S. Geological Survey Water-Resources  
Investigations 23-74, 10 p.

- Slack, L.J., 1983, Hydrology of an abandoned coal-mining area near McCurtain, Haskell County, Oklahoma: U.S. Geological Survey Water-Resources Investigations Report 83-4202, 117 p.
- Stoner, J.D., 1981, Water type and suitability of Oklahoma surface waters for public supply and irrigation, Part 1; Arkansas River mainstem and Verdigris, Neosho, and Illinois River basins through 1978: U.S. Geological Survey Water-Resources Investigations 81-33, 297 p.
- 1981, Water type and suitability of Oklahoma surface waters for public supply and irrigation, Part 2; Salt Fork Arkansas and Cimarron River basins through 1978: U.S. Geological Survey Water-Resources Investigations 81-39, 150 p.
- 1981, Water type and suitability of Oklahoma surface waters for public supply and irrigation, Part 3; Canadian, North Canadian, and Deep Fork River basins through 1979: U.S. Geological Survey Water-Resources Investigations 81-80, 210 p.
- 1982, Water type and suitability of Oklahoma surface waters for public supply and irrigation, Part 4; Red River mainstem and North Fork Red River through 1979: U.S. Geological Survey Water-Resources Investigations 82-9, 235 p.
- 1982, Water type and suitability of Oklahoma surface waters for public supply and irrigation, Part 5; Washita River basin through 1979: U.S. Geological Survey Water-Resources Investigations 82-29, 150 p.
- 1984, Estimate of self-supplied domestic water use in Oklahoma during 1980: U.S. Geological Survey Water-Resources Investigations Report 83-4223, 20 p.
- 1985, Reported withdrawals and estimated use of water in Oklahoma during 1982: U.S. Geological Survey Water-Resources Investigations Report 85-4084, 96 p.
- Thomas, W.O., Jr., 1976, Techniques for estimating flood depths for Oklahoma streams: U.S. Geological Survey Water-Resources Investigations 2-76, 170 p.
- Thomas, W.O., Jr., and Corley, R.K., 1973, 1971-72 Floods of Glover Creek and Little River in southeastern Oklahoma: U.S. Geological Survey Water-Resources Investigations 5-73, scale 1:24,000, 2 sheets.

----- 1977, Techniques for estimating flood discharges for Oklahoma streams: U.S. Geological Survey Water-Resources Investigations 77-54, 170 p.

Tortorelli, R.L., and Bergman, D.L., 1984, Techniques for estimating flood peak discharges for unregulated streams and streams regulated by small floodwater retarding structures in Oklahoma: U.S. Geological Survey Water-Resources Investigations Report 84-4358, 85 p.

Weeks, J.B., 1978, Plan of study for the High Plains regional aquifer systems analysis in parts of Colorado, Kansas, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming: U.S. Geological Survey Water-Resources Investigations 78-70, 28 p.

#### FEDERAL EMERGENCY MANAGEMENT FLOOD INSURANCE STUDIES

Bergman, D.L., 1980, City of Sallisaw, Oklahoma: Washington D.C., Federal Emergency Management Agency Flood Insurance Study, community number 400199, 23 p.

----- 1980, City of Edmond, Oklahoma: Washington D.C., Federal Emergency Management Agency Flood Insurance Study, community number 400252, 41 p.

----- 1980, City of the Village, Oklahoma: Washington D.C., Federal Emergency Management Agency Flood Insurance Study, community number 400420, 15 p.

----- 1982, City of Nichols Hills, Oklahoma: Washington D.C., Federal Emergency Management Agency Flood Insurance Study, community number 400423, 15 p.

Bergman, D.L., and Walton, C., 1979, City of Duncan, Oklahoma: Washington D.C., Federal Emergency Management Agency Flood Insurance Study, community number 400202, 24 p.

Corley, R.K., 1980, City of Ponca City, Oklahoma: Washington D.C., Federal Emergency Management Agency Flood Insurance Study, community number 400080, 23 p.

Huntzinger, T.L., 1979, City of Enid, Oklahoma: Washington D.C., Federal Emergency Management Agency Flood Insurance Study, community number 400062, 31 p.

----- 1979, City of McAlester, Oklahoma: Washington D.C., Federal Emergency Management Agency Flood Insurance Study, community number 400170, 22 p.

- 1980, City of Mustang, Oklahoma: Washington D.C.,  
Federal Emergency Management Agency Flood Insurance Study,  
community number 400409, 15 p.
- 1980, Town of Nicoma Park, Oklahoma: Washington D.C.,  
Federal Emergency Management Agency Flood Insurance Study,  
community number 400424, 15 p.
- 1981, Town of North Enid, Oklahoma: Washington D.C.,  
Federal Emergency Management Agency Flood Insurance Study,  
community number 400425, 14 p.
- 1981, City of Choctaw, Oklahoma: Washington D.C.,  
Federal Emergency Management Agency Flood Insurance Study,  
community number 400357, 23 p.
- 1981, City of Midwest City, Oklahoma: Washington D.C.,  
Federal Emergency Management Agency Flood Insurance Study,  
community number 400405, 21 p.
- Huntzinger, T.L., and Tortorelli, R.L., 1980, City of Spencer,  
Oklahoma: Federal Emergency Management Agency Flood  
Insurance Study, community number 400412, 15 p.
- 1980, City of Warr Acres, Oklahoma: Washington D.C.,  
Federal Emergency Management Agency Flood Insurance Study,  
community number 400449, 13 p.
- 1981, Town of Jones, Oklahoma: Washington D.C., Federal  
Emergency Management Agency Flood Insurance Study,  
community number 400141, 20 p.
- 1981, Town of Valley Brook, Oklahoma: Washington D.C.,  
Federal Emergency Management Agency Flood Insurance Study,  
community number 400445, 13 p.
- Huntzinger, T.L., Tortorelli, R.L., and Bergman, D.L., 1982,  
City of Oklahoma City, Oklahoma: Washington D.C., Federal  
Emergency Management Agency Flood Insurance Study,  
community number 405378, 194 p.
- Tortorelli, R.L., 1982, Town of Piedmont, Oklahoma: Washington  
D.C., Federal Emergency Management Agency Flood Insurance  
Study, community number 400027, 17 p.
- 1986, Limited detail flood insurance study, City of  
Tishomingo, Johnston County, Oklahoma: Washington D.C.,  
Federal Emergency Management Agency Flood Insurance Study,  
community number 400077, Washington, D.C., 9 p.

Tortorelli, R.L., Huntzinger, T.L., and Bergman, D.L., 1982, Oklahoma County, Oklahoma: Washington D.C., Federal Emergency Management Agency Flood Insurance Study, community number 400466, 21 p.

#### WATER-RESOURCES DATA REPORTS

Hauth, L.D., Kurklin, J.K., and Walters, D.M., 1985, Water resources data for Oklahoma, water year 1983: U.S. Geological Survey Water-Data Report OK-83-1, 286 p.

----- 1986, Water resources data, Oklahoma, water year 1984: U.S. Geological Survey Water-Data Report OK-84-1, 302 p.

----- 1988, Water resources data, Oklahoma, water year 1986: U.S. Geological Survey Water-Data Report OK-86-1, 316 p.

Hauth, L.D., Kurklin, J.K., Walters, D.M., and Ferree, D.M., 1984, Water resources data, Oklahoma, water year 1982: U.S. Geological Survey Water-Data Report OK-82-1, 336 p.

U.S. Geological Survey, 1961-64, Surface-water records of Oklahoma. (One volume for each year).

----- 1964, Quality-of-water records of Oklahoma, 62 p.

----- 1965-74, Water resources data for Oklahoma--Part 1, Surface-water records; Part 2, Water-quality records. (One volume of each for each year).

----- 1976, Water resources data for Oklahoma, water year 1975: U.S. Geological Survey Water-Data Report OK-75-1, 528 p.

----- 1977, Water resources data for Oklahoma, water year 1976, Volume 1, Arkansas River basin: U.S. Geological Survey Water-Data Report OK-76-1, 513 p.

----- 1977, Water resources data for Oklahoma, water year 1976, Volume 2, Red River basin: U.S. Geological Survey Water-Data Report OK-76-2, 216 p.

----- 1978, Water resources data for Oklahoma, water year 1977, Volume 1, Arkansas River basin: U.S. Geological Survey Water-Data Report OK-77-1, 542 p.

----- 1978, Water resources data for Oklahoma, water year 1977, Volume 2, Red River basin: U.S. Geological Survey Water-Data Report OK-77-2, 235 p.

----- 1979, Water resources data for Oklahoma, water year 1978, Volume 1, Arkansas River basin: U.S. Geological Survey Water-Data Report OK-78-1, 523 p.

- 1979, Water resources data for Oklahoma, water year 1978,  
Volume 2, Red River basin: U.S. Geological Survey  
Water-Data Report OK-78-2, 249 p.
- 1981, Water resources data for Oklahoma, water year 1979,  
Volume 1, Arkansas River basin: U.S. Geological Survey  
Water-Data Report OK-79-1, 629 p.
- 1981, Water resources data for Oklahoma, water year 1979,  
Volume 2, Red River basin: U.S. Geological Survey  
Water-Data Report OK-79-2, 249 p.
- 1982, Water resources data for Oklahoma, water year 1980,  
Volume 1: U.S. Geological Survey Water-Data Report  
OK-80-1, 613 p.
- 1983, Water resources data--Oklahoma, water year 1981:  
U.S. Geological Survey Water-Data Report OK-81-1, 546 p.
- 1984, Water resources data--Oklahoma, water year 1982:  
U.S. Geological Survey Water-Data Report OK-82-1, 336 p.

#### CIRCULAR

Irwin, J.H., and Morton, R.B., 1969, Hydrogeologic information on the Glorieta Sandstone and Ogallala Formation in the Oklahoma Panhandle and adjoining areas as related to underground waste disposal: U.S. Geological Survey Circular 630, 26 p.

#### ANNUAL REPORTS

- Johnson, W.D., 1901, The High Plains and their utilization:  
U.S. Geological Survey Twenty-first Annual Report, IV,  
p. 601-741.
- 1902, The High Plains and their utilization: U.S. Geological Survey Twenty-second Annual Report, IV, p. 631-639.

#### MISCELLANEOUS REPORTS

- Miser, H.D., 1954, Geologic map of Oklahoma: Oklahoma Geological Survey and U.S. Geological Survey, scale 1:500,000.
- U.S. Geological Survey, 1976, Hydrologic Unit Map of Oklahoma -- 1974: Scale 1:500,000, 1 sheet.
- 1977, Water-resources investigations in Oklahoma, 1976:  
U.S. Geological Survey miscellaneous report, 6 p.

OKLAHOMA WATER RESOURCES BOARD

BULLETINS

Barclay, J.E., and Burton, L.C., 1953, Ground-water resources of the terrace deposits and alluvium of western Tillman County, Oklahoma: Oklahoma Planning and Resources Board Division of Water Resources Bulletin 12, 71 p.

Burton, L.C., 1965, Ground water in terrace deposits of central Beckham County, Oklahoma: Oklahoma Water Resources Board Bulletin 25, 30 p.

Cummings, T.R., 1963, Chemical character of surface waters in Oklahoma 1957-58: Oklahoma Water Resources Board Bulletin 19, 165 p.

----- 1964, Chemical character of surface waters in Oklahoma 1958-59: Oklahoma Water Resources Board Bulletin 20, 133 p.

----- 1965, Chemical character of surface waters in Oklahoma 1960-61: Oklahoma Water Resources Board Bulletin 23, 178 p.

----- 1965, Chemical character of surface waters in Oklahoma 1961-62: Oklahoma Water Resources Board Bulletin 24, 203 p.

----- 1966, Chemical character of surface waters in Oklahoma 1959-60: Oklahoma Water Resources Board Bulletin 22, 167 p.

----- 1966, Chemical character of surface waters in Oklahoma 1962-63: Oklahoma Water Resources Board Bulletin 30, 200 p.

Dover, T.B., 1953, Chemical character of surface waters in Oklahoma 1950-51: Oklahoma Planning and Resources Board Division of Water Resources Bulletin 7, 88 p.

----- 1953, Chemical character of public water supplies of Oklahoma 1953: Oklahoma Planning and Resources Board Division of Water Resources Bulletin 8, 47 p.

----- 1954, Chemical character of surface waters of Oklahoma 1951-52: Oklahoma Planning and Resources Board Division of Water Resources Bulletin 10, 115 p.

- 1956, Chemical character of surface waters of Oklahoma 1953-54: Oklahoma Planning and Resources Board Division of Water Resources Bulletin 14, 141 p.
- 1958, Chemical character of surface waters of Oklahoma 1954-55: Oklahoma Water Resources Board Bulletin 15, 117 p.
- 1959, Chemical character of surface waters of Oklahoma 1955-56: Oklahoma Water Resources Board Bulletin 16, 144 p.
- Dover, T.B., and Murphy, J.J., 1955, A reconnaissance of the chemical and physical quality of Pryor Creek in the vicinity of Pryor, Oklahoma: Oklahoma Planning and Resources Board Division of Water Resources Bulletin 13, 32 p.
- Gilbert, C.R., 1959, Hydrologic and physical data for Sandstone Creek watershed in western Oklahoma 1951-56: Oklahoma Water Resources Board Bulletin 17, 124 p.
- Hart, D.L., Jr., 1965, Ground water in the alluvial deposits of the Washita River between Clinton and Anadarko, Oklahoma: Oklahoma Water Resources Board Bulletin 26, 23 p.
- Hollowell, J.R., 1965, Ground water in the alluvium of Otter Creek basin, Oklahoma: Oklahoma Water Resources Board Bulletin 27, 15 p.
- 1965, Ground water in the alluvium of Elk Creek basin, Oklahoma: Oklahoma Water Resources Board Bulletin 28, 12 p.
- Murphy, J.J., 1955, Chemical character of surface waters of Oklahoma 1952-53: Oklahoma Planning and Resources Board Division of Water Resources Bulletin 11, 128 p.
- Pate, C.O., Murphy, J.J., and Orth, R.P., 1961, Chemical character of surface waters of Oklahoma 1956-57: Oklahoma Water Resources Board Bulletin 18, 138 p.
- Reed, E.W., Mogg, J.L., Barclay, J.E., and Peden, G.H., 1952, Ground-water resources of the terrace deposits along the northeast side of the Cimarron River in Alfalfa, Garfield, Kingfisher, and Major Counties, Oklahoma: Oklahoma Planning and Resources Board Division of Water Resources Bulletin 9, 101 p.
- Steele, C.E., and Barclay, J.E., 1965, Ground-water resources of Harmon County and adjacent parts of Greer and Jackson Counties, Oklahoma: Oklahoma Water Resources Board

Bulletin 29, 96 p.

Walling, I.W., 1949, Chemical character of surface waters in the Washita River basin of Oklahoma, 1946-47: Oklahoma Planning and Resources Board Division of Water Resources Bulletin 4, 31 p.

----- 1952, Chemical character of surface waters in Oklahoma 1949-50: Oklahoma Planning and Resources Board Division of Water Resources Bulletin 6, 70 p.

Walling, I.W., Schoff, S.L., and Dover, T.B., 1951, Chemical character of surface waters in Oklahoma 1946-49: Oklahoma Planning and Resources Board Division of Water Resources Bulletin 5, 180 p.

Wood, P.R., and Stacy, B.L., 1965, Geology and ground-water resources of Woodward County, Oklahoma: Oklahoma Water Resources Board Bulletin 21, 114 p.

## HYDROLOGIC INVESTIGATION

Wickersham, Ginia, 1979, Ground water resources of the southern part of the Garber-Wellington ground water basin, in Cleveland and southern Oklahoma Counties and parts of Pottawatomie County, Oklahoma: Oklahoma Water Resources Board Hydrologic Investigations Publication 86, 3 sheets.

## MISCELLANEOUS REPORTS

Laine, L.L., 1940(?), Provisional report on flood of September 1940, and miscellaneous discharge measurements, in Dam failure at Cleveland caused by storm of September 4, 1940: Oklahoma Planning and Resources Board Division of Water Resources, p. 7-18.

Reed, E.W., Oakland, G.L., and Jacobsen, C.L., 1945, Oklahoma water: Oklahoma Planning and Resources Board Division of Water Resources, 145 p.

U.S. Geological Survey, 1945, Oklahoma water--Quantity, occurrence, and quality of surface and ground water: Oklahoma Planning and Resources Board, 145 p.

## OKLAHOMA GEOLOGICAL SURVEY

### BULLETINS

Bingham, R.H., 1979, Water Resources [of Noble County, Oklahoma], in Shelton, J.W., 1979, Geology and mineral resources of Noble County, Oklahoma: Oklahoma Geological Survey Bulletin 128, 66 p.

Davis, L.V., 1955, Geology and water resources of the Grady and northern Stephens Counties, Oklahoma: Oklahoma Geological Survey Bulletin 73, 184 p.

----- 1960, Geology and ground-water resources of southern McCurtain County, Oklahoma: Oklahoma Geological Survey Bulletin 86, 108 p.

Hart, D.L., Jr., 1978, Ground water in Custer County, in Fay, R.O., 1978, Geology and mineral resources (exclusive of petroleum) of Custer County, Oklahoma: Oklahoma Geological Survey Bulletin 114, 88 p.

Marine, I.W., and Schoff, S.L., 1962, Ground-water resources of Beaver County, Oklahoma: Oklahoma Geological Survey Bulletin 97, 74 p.

- Mogg, J.L., Schoff, S.L., and Reed, E.W., 1960, Ground water resources of Canadian County, Oklahoma: Oklahoma Geological Survey Bulletin 7, 112 p.
- Motts, W.S., 1963, Water resources of Okmulgee County, part 2 of Oklahoma Geological Survey, Geology and water resources of Okmulgee County, Oklahoma: Oklahoma Geological Survey Bulletin 91, p. 5-6, 81-123.
- Schoff, S.L., 1939, Geology and ground-water resources of Texas County, Oklahoma: Oklahoma Geological Survey Bulletin 59, 248 p.
- 1943, Geology and ground-water resources of Cimarron County, Oklahoma, with a section on Mesozoic stratigraphy by J.W. Stovall: Oklahoma Geological Survey Bulletin 64, 317 p.
- Schoff, S.L., Reed, E.W., and Branson, C.C., 1955, Geology and ground-water resources of Ottawa County, Oklahoma: Oklahoma Geological Survey Bulletin 72, 203 p.
- Warren, J.H., 1952, Water resources of Tulsa County, in Oakes, M.C., Geology and mineral resources of Tulsa County, Oklahoma: Oklahoma Geological Survey Bulletin 69, p. 140-155.

#### CIRCULARS

- D'Lugosz, J.J., McClafflin, R.G., and Marcher, M.V., 1986, Geohydrology of the Vamoosa-Ada aquifer, east-central Oklahoma: Oklahoma Geological Survey Circular 87, 42 p.
- Hart, D.L., Jr., and Davis, R.E., 1981, Geohydrology of the Antlers aquifer (Cretaceous), southeastern Oklahoma: Oklahoma Geological Survey Circular 81, 33 p.
- Havens, J.S., 1983, Reconnaissance of ground water in the vicinity of the Wichita Mountains, southwestern Oklahoma: Oklahoma Geological Survey Circular 85, 13 p.
- Morton, R.B., 1986, Effects of brine on the chemical quality of water in parts of Creek, Lincoln, Okfuskee, Payne, Pottawatomie, and Seminole Counties, Oklahoma: Oklahoma Geological Survey Circular 89, 38 p.
- Playton, S.J., Davis, R.E., and McClafflin, R.G., 1980, Chemical quality of water in abandoned zinc mines in northeastern Oklahoma and southeastern Kansas: Oklahoma Geological Survey Circular 82, 49 p. (Also released as USGS OFR 78-294.)

Schoff, S.L., and Reed, E.W., 1951a, Ground-water resources of the Arkansas River flood plain near Fort Gibson, Muskogee County, Oklahoma: Oklahoma Geological Survey Circular 28, 55 p.

Tanaka, H.H., and Davis, L.V., 1963, Ground-water resources of the Rush Springs Sandstone in the Caddo County area, Oklahoma: Oklahoma Geological Survey Circular 61, 63 p.

Wood, P.R., and Burton, L.C., 1968, Ground-water resources of Cleveland and Oklahoma Counties, Oklahoma: Oklahoma Geological Survey Circular 71, 75 p.

#### MINERAL REPORTS

Davis, L.V., 1950, Ground water in the Pond Creek basin, Caddo County, Oklahoma: Oklahoma Geological Survey Mineral Report 22, 23 p.

----- 1953, Oil possibilities near Idabel, McCurtain County, Oklahoma: Oklahoma Geological Survey Mineral Report 23, 26 p.

Dott, R.H., 1942, Geology of Oklahoma ground-water supplies: Oklahoma Geological Survey Mineral Report 11, 26 p.

Jacobsen, C.L., and Reed, E.W., 1949, Ground-water supplies in the Oklahoma City area, Oklahoma: Oklahoma Geological Survey Mineral Report 20, 25 p.

Schoff, S.L., 1948, Ground-water irrigation in the Duke area, Jackson and Greer Counties, Oklahoma: Oklahoma Geological Survey Mineral Report 18, 8 p.

----- 1949, Ground-water in Kingfisher County, Oklahoma: Oklahoma Geological Survey Mineral Report 19, 20 p.

----- 1950, Ground-water in the Cherokee area, Alfalfa County, Oklahoma: Oklahoma Geological Survey Mineral Report 21, 17 p.

#### GEOLOGIC MAP

Schoff, S.L., 1955, Map of ground-water reservoirs in Oklahoma: Oklahoma Geological Survey Geologic Map GM-2, scale 1:750,000, 1 sheet.

## EDUCATIONAL PUBLICATION

Marcher, M.V., 1972, Major sources of water in Oklahoma, in Johnson, K.S., and others, 1972, Geology and earth resources of Oklahoma, An atlas of maps and cross sections: Oklahoma Geological Survey Educational Publication 1, p. 8.

## HYDROLOGIC ATLASES

Bingham, R.H., and Bergman, D.L., 1980, Reconnaissance of the water resources of the Enid quadrangle, north-central Oklahoma: Oklahoma Geological Survey Hydrologic Atlas HA-7, 4 sheets, scale 1:250,000.

Bingham, R.H., and Moore, R.L., 1975, Reconnaissance of the water resources of the Oklahoma City quadrangle, central Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 4, scale 1:250,000, 4 sheets.

Carr, J.E., and Bergman, D.L., 1976, Reconnaissance of the water resources of the Clinton quadrangle, west-central Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 5, scale 1:250,000, 4 sheets.

Hart, D.L., Jr., 1974, Reconnaissance of the water resources of the Ardmore and Sherman quadrangles, southern Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 3, scale 1:250,000, 4 sheets.

Havens, J.S., 1977, Reconnaissance of the water resources of the Lawton quadrangle, southwestern Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 6, scale 1:250,000, 4 sheets.

Marcher, M.V., 1969, Reconnaissance of the water resources of the Fort Smith quadrangle, east-central Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 1, scale 1:250,000, 4 sheets.

Marcher, M.V., and Bergman, D.L., 1983, Reconnaissance of the water resources of the McAlester and Texarkana quadrangles, southeastern Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 9, scale 1:250,000, 4 sheets.

Marcher, M.V., and Bingham, R.H., 1971, Reconnaissance of the water resources of the Tulsa quadrangle, northeastern Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 2, scale 1:250,000, 4 sheets.

Morton, R.B., 1980, Reconnaissance of the water resources of the Woodward quadrangle, northwest Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 8, scale 1:250,000, 4 sheets.

#### THE HOPPER AND GEOLOGY NOTES

Bingham, R.H., 1969, Springs in northeastern Oklahoma [abs.]: Oklahoma Geological Survey Oklahoma Geology Notes, v. 29, no.1, p. 19.

----- 1969, Springs in the Ozark Region, northeastern Oklahoma: Oklahoma Geological Survey Oklahoma Geology Notes, v. 29, no. 6, p. 135-145.

Blumer, S.P., and Slack, L.J., 1986, Physical and chemical characteristics of water in coal-mine ponds, eastern Oklahoma: Oklahoma Geological Survey Oklahoma Geology Notes, v. 46, no. 4, p. 128-134.

Davis, L.V., 1958, Ground water in the Arbuckle and Simpson Groups in the Arbuckle Mountains, Oklahoma: Oklahoma Geological Survey Oklahoma Geology Notes, v. 18, no. 10, p. 152-157.

----- 1958, Oklahoma's underground water: Oklahoma Geological Survey Oklahoma Geology Notes, v. 18, no. 12, p. 189-202.

Dott, R.H., 1948, Ground-water supplies in Oklahoma and their development: Oklahoma Geological Survey, The Hopper, v. 8, part 1, July, p. 63-68, part 2, August, p. 71-74, part 3, September, p. 81-89.

Fairchild, R.W., 1984, Springs in the Arbuckle Mountain area, south-central Oklahoma: Oklahoma Geological Survey Oklahoma Geology Notes, v. 44, no. 1, p. 4-11.

Hart, D.L., Jr., 1961, Fluctuations of water levels in wells: Oklahoma Geological Survey Oklahoma Geology Notes, v. 21, no. 2, p. 41-47.

Hauth, L.D., 1985, An overview of hydrologic-data collection by the U.S. Geological Survey in Oklahoma: Oklahoma Geological Survey Oklahoma Geology Notes, v. 45, no. 4, p. 149-161.

Havens, J.S., 1985, Water-level changes in the Ogallala aquifer, northwestern Oklahoma: Oklahoma Geological Survey Oklahoma Geology Notes, v. 45, no. 5, p. 205-210.

- Reed, E.W., 1949, Unusual fluctuations in Rush Springs wells: Oklahoma Geological Survey, The Hopper, v. 9, no. 7, p. 69-70.
- 1950, Increased use of ground water for irrigation in the Duke area, Oklahoma: Oklahoma Geological Survey, The Hopper, v. 10, p. 86-90.
- Reed, E.W., and Schoff, S.L., 1947, Ground-water storage increases in Tillman County, Oklahoma: Oklahoma Geological Survey, The Hopper, v. 7, p. 77-80.
- Schoff, S.L., 1942, Geology and ground-water resources of Beaver County, Oklahoma: Oklahoma Geological Survey, The Hopper, v. 2, no. 10, p. 94-97.
- 1948, Ground-water at high stage in Oklahoma Panhandle: Oklahoma Geological Survey, The Hopper, v. 8, no. 8, p. 74-76.
- 1950, Deep well irrigation in Oklahoma Panhandle: Oklahoma Geological Survey, The Hopper, v. 10, no. 8, p. 76.
- 1953, Ground-water pumpage and water levels in Oklahoma: Oklahoma Geological Survey, The Hopper, v. 13, no. 9-12, p. 51-57.
- 1956, Laverne formation: Oklahoma Geological Survey Oklahoma Geology Notes, v. 16, no. 1, p. 3-5.
- Scott, J.C., 1984, Use of minicomputers in water-resources investigations: Oklahoma Geological Survey Oklahoma Geology Notes, v. 44, no. 6, p. 188-89.
- Tanaka, H.H., 1958, Changes in ground-water levels in Oklahoma during 1957: Oklahoma Geological Survey Oklahoma Geology Notes, v. 18, no. 3, p. 57.
- U.S. Geological Survey, 1974, Summary of October 1973 rainstorm, Enid and vicinity, north-central Oklahoma: Oklahoma Geological Survey Oklahoma Geology Notes, v. 34, no. 6, p. 209-212.
- Ward, P.E., 1961a, Salt springs in Oklahoma: Oklahoma Geological Survey Oklahoma Geology Notes, v. 21, no. 3, p. 81-84.
- 1961b, Shallow halite deposits in northern Woodward and southern Woods Counties, Oklahoma: Oklahoma Geological Survey Oklahoma Geology Notes, v. 21, no. 10, p. 275-277.

## SPECIAL PUBLICATION

Slack, L.J., and Blumer, S.P., 1987, Physical and chemical characteristics of water in coal-mine ponds, eastern Oklahoma: Oklahoma Geological Survey Special Publication 87-2, 116 p.

## PROFESSIONAL SOCIETIES' ABSTRACTS AND JOURNAL ARTICLES

Clark, W.E., 1956, Forecasting the dry-weather flow of Pond Creek, Oklahoma--A progress report: American Geophysical Union Transactions, v. 37, no. 4, p. 442-450.

Dover, T.B., Horton, John, and Leonard, A.R., 1957, A look at the water resources of Oklahoma: Oklahoma City Geological Society Shale Shaker, v. 7, no. 10, p. 18-22, 24-32.

Fairchild, R.W., and Christenson, S.C., 1982, Potential contamination of the Roubidoux aquifer by water from abandoned zinc mines, northeastern Oklahoma [abs.]: Geological Society of America Abstracts with Programs, v. 13, no. 3.

Fairchild, R.W., and Davis, R.E., 1978, Structural control of ground-water flow in the Arbuckle Mountain area, south-central Oklahoma [abs.]: Geological Society of America Abstracts with Programs, v. 10, no. 1, p. 5.

Fairchild, R.W., Davis, R.E., and Hanson, R.L., 1979, Aquifer characteristics of the Arbuckle aquifer, south-central Oklahoma [abs.]: in Geological Society of America, South-Central Section, Mountain View, Ark., 1979: Proceedings, Geological Society of America, South-Central Section, v. 11, no. 2, p. 147.

Frye, J.C., and Schoff, S.L., 1942, Deep-seated solution in the Meade basin and vicinity, Kansas and Oklahoma: American Geophysical Union Transactions, v. 24, pt. 1, p. 35-39.

Hart, D.L., Jr., and Davis, R.E., 1979, Geohydrology of the Antlers aquifer, southeastern Oklahoma [abs.]: in Geological Society of America, South-Central Section, Mountain View, Ark., 1979: Proceedings, Geological Society of America, South-Central Section, v. 11, no. 2, p. 148.

Irwin, J.H., 1971, Ground-water investigations in Oklahoma, in Rose, W.D., ed., Environmental aspects of geology and engineering in Oklahoma, Annals of the Oklahoma Academy of Science Publication No. 2: Oklahoma Geological Survey, p. 58.

- 1977, Water resources of Oklahoma, in Morris, J.W., ed., Geography of Oklahoma: Oklahoma City, Oklahoma Historical Society, p. 25-39.
- Irwin, J.H., and Morton, R.B., 1970, Hydrogeologic information on the Ogallala Formation in the Oklahoma Panhandle and adjoining areas as related to underground waste disposal [abs.]: in Symposium on the Ogallala Aquifer, Lubbock, Tex., 1970: Texas Technological University, p. 30.
- Leonard, A.R., 1960?, Ground water studies in Oklahoma: Midwestern States Flood Control and Water Resources Conference, 14th, Oklahoma City, 1959, 4 p. [Follows p. 52]
- 1961?, Problems in protecting and developing underground waters in Oklahoma, in Industrial Wastes Conference, 11th, Oklahoma City, 1961?, Proceedings, part 1: Oklahoma City, Oklahoma Water, Sewage, and Industrial Wastes Association, p. 51-55.
- Moench, A.F., Sauer, V.B., and Jennings, M.E., 1974, Modification of routed streamflow by channel loss and base flow: Water Resources Research, v. 10, p. 963-968.
- Muller, A.B., Parkhurst, D.L., and Tasker, P.W., 1986, Use of the PHREEQE code in modelling environmental geochemical problems encountered in performance assessment modelling, in U.S. Department of Energy, 1985, Symposium on ground-water flow and transport modelling for performance assessment of deep geologic disposal of radioactive waste--A critical evaluation of the state of the art: Albuquerque, N.Mex.
- Playton, S.J., Davis, R.E., and McClafflin, R.G., 1978, Water quality in abandoned zinc mines in the Picher field, Tri-State mining district [abs.]: in Geological Society of America Abstracts with Programs, v. 10, no. 1, p. 24.
- Reed, E.W., and Schoff, S.L., 1952, Aquifers in Ottawa County, Oklahoma: Oklahoma Academy of Science Proceedings, v. 33, p. 194-195.
- Sauer, V.B., 1973, Unit response method of open-channel flow routing: American Society of Civil Engineers Proceedings, Journal of the Hydraulics Division, v. 99, p. 179-193.
- Schoff, S.L., 1940, Ground Water in the Oklahoma Panhandle: Economic Geology, v. 35, no. 4, p. 534-545.

- 1948, Ground-water supplies and uses in Oklahoma, in Oklahoma Conservation Conferences, 3d, 1948, Report of Proceedings: Stillwater, Okla., Oklahoma Research Foundation, Oklahoma Agricultural and Mechanical College, p. 24-36.
- 1955, Triassic rocks on Goff Creek, Texas County, Oklahoma: Oklahoma Academy of Science, v. XXXIV, p. 149-152.
- 1956, Pliocene and Pleistocene fossils from Beaver County, Oklahoma: Oklahoma Academy Science Proceedings, v. 35, p. 94.
- Schoff, S.L., and Reed, E.W., 1951, Ground water in alluvial deposits in Oklahoma: Economic Geology, v. 46, no. 1, p. 76-83.
- Smith, O.M., 1942, The chemical analysis of the waters of Oklahoma, with contributions by R.H. Dott and E.C. Warkentin: Oklahoma Agricultural and Mechanical College, Engineering Experiment Station Publication 52, 474 p.

#### OTHER MISCELLANEOUS REPORTS

- Gould, C.N., and Schoff, S.L., 1939, Geological report on water conditions at Platt National Park, Oklahoma: National Park Service Report 249, 38 p., 3 plates. (Also cataloged as U.S. Geological Survey Open-File Report 39-14)
- Irwin, J.H., 1971, The Glorieta Sandstone and the Ogallala Formation as related to underground disposal in the High Plains: Tulsa, Arkansas-White-Red River Basins Interagency Committee, January 1971, Minutes, appendix X, p. 2-15.
- Oklahoma Water Resources Board, 1975, Salt water detection in the Cimarron terrace, Oklahoma: U.S. Environmental Protection Agency Ecological Research Series EPA-660/3-74-033, 166 p.

## AUTHOR INDEX

	Page
Alf, L.A. ....	10
Andreasen, G.E. ....	10
Barclay, J.E. ....	10, 29, 30, 31
Bedinger, M.S. ....	6
Bednar, G.A. ....	10
Bergman, D.L. ....	6, 10, 15, 19, 21, 23, 25, 26, 27, 35
Bingham, R.H. ....	10, 21, 32, 35, 36
Blumer, S.P. ....	6, 12, 10, 18, 23, 36, 38
Bohn, J.D. ....	10
Branson, C.C. ....	33
Bromery, R.W. ....	10
Buckner, H.D. ....	10
Burtis, V.M. ....	9
Burton, L.C. ....	29, 34
Cady, R.C. ....	11
Carr, J.E. ....	11, 35
Christenson, S.C. ....	11, 12, 21, 22, 23, 38
Clark, W.E. ....	6, 38
Corley, R.K. ....	11, 19, 24, 25
Cummings, T.R. ....	17, 20, 29
D'Lugosz, J.J. ....	11, 33
Davis, L.V. ....	11, 17, 18, 32, 34, 36
Davis, R.E. ....	11, 12, 14, 18, 33, 38, 39
Dennis, P.E. ....	12
Dott, R.H. ....	18, 34, 36
Dover, T.B. ....	7, 12, 16, 17, 29, 30, 31, 38
Ellis, A.J. ....	12
Fader, S.W. ....	12, 17
Fairchild, R.W. ....	11, 12, 36, 38
Feder, G.L. ....	21
Ferree, D.M. ....	12, 27
Frye, J.C. ....	38
Geurin, J.W. ....	12
Gilbert, C.R. ....	30
Goemaat, R.L. ....	9, 13, 14, 21
Gould, C.N. ....	7, 13, 40
Gutentag, E.D. ....	9, 14
Hanson, R.L. ....	12, 14, 38
Hart, D.L., Jr. . . . .	8, 9, 12, 14, 15, 19, 21, 30, 32, 33, 35, 36, 38
Hauth, L.D. ....	10, 14, 27, 36
Havens, J.S. ....	7, 11, 14, 15, 21, 22, 33, 35, 36

	Page
Heimann, D.C. ....	22
Heimes, F.J. ....	22
Hoffman, G.L. .... 10, 14, 15,	21
Hollowell, J.R. .... 7, 15,	30
Horak, W.F. .... 7,	15
Horton, John ....	38
Huntzinger, T.L. .... 10, 11, 15, 16, 19, 23, 25, 26,	27
Irwin, J.H. .... 28, 38, 39,	40
Jacobsen, C.L. .... 16, 32,	34
Jennings, M.E. ....	39
Johnson, W.D. ....	28
Kennon, F.W. ....	7
Kenny, J.F. ....	23
Kitzmilller, Carla ....	14
Knott, R.K. ....	19
Krothe, N.C. .... 8, 21,	22
Kurklin, J.K. .... 10, 14, 16, 22,	27
Laine, L.L. .... 7, 16, 17,	32
Lalicker, D.G. ....	18
Leonard, A.R. .... 6, 7, 17, 38,	39
Lohman, S.W. ....	9
Luckey, R.R. .... 9,	22
MacLachlan, M.E. ....	17
Madaj, A.J. ....	13
Marcher, M.V. .... 7, 11, 23, 33,	35
Marine, I.W. .... 7,	32
McClaflin, R.G. .... 11, 18, 33,	39
Miser, H.D. ....	28
Mize, L.D. .... 13,	17
Moeller, M.D. ....	21
Moench, A.F. ....	39
Mogg, J.L. .... 30,	33
Moore, R.L. .... 17,	35
Morton, R.B. .... 9, 11, 12, 17, 28, 33, 36,	39
Motts, W.S. ....	33
Muller, A.B. ....	39
Murphy, J.J. .... 7, 17, 20,	30
Oakland, G.L. ....	32
Oklahoma Water Resources Board ....	40
Oliver, J.W. .... 8,	22
Orth, R.P. .... 16, 20,	30
Parkhurst, D.L. .... 11, 17,	39
Parkhurst, R.S. ....	23

	Page
Pate, C.O. ....	30
Patneau, A.L., Jr. ....	19
Patterson, J.L. ....	20
Peden, G.H. ....	30
Playton, S.J. .... 18, 33,	39
Reed, E.W. .... 6, 16, 23, 30, 32, 33, 34, 37, 39,	40
Renick, B.C. ....	7
Sapik, D.B. ....	9
Sauer, V.B. .... 23,	39
Schoff, S.L. .... 11, 13, 17, 18, 31, 32, 33, 34, 37, 38, 39,	40
Schuelein, J.W. ....	7
Schwenneson, A.T. ....	7
Scott, J.C. .... 10, 14,	37
Slack, L.J. .... 18, 23, 24, 36,	38
Smith, O.M. ....	40
Sneigoeki, R.T. ....	6
Spiser, D.E. ....	13
Stacy, B.L. .... 17, 18,	31
Steele, C.E. ....	31
Stoner, J.D. .... 7, 15, 19, 23,	24
Sullivan, C.L. ....	20
Sullivan, C.W. ....	6
Swafford, B.F. ....	6
Tanaka, H.H. .... 7, 19, 34,	37
Tasker, P.W. ....	39
Theis, C.V. ....	19
Thomas, W.O., Jr. .... 19, 21, 24,	25
Thompson, D.C. ....	8
Tortorelli, R.L. .... 19, 22, 25, 26,	27
Turner, S.F. ....	19
U.S. Geological Survey .... 6, 8, 20, 27, 28, 32,	37
Waldrep, T.E. ....	10
Walling, I.W. ....	31
Walters, D.M. ....	27
Walton, C. ....	25
Ward, P.E. .... 6, 20,	37
Warren, J.H. ....	33
Weeks, J.B. .... 8, 9, 14,	25
Weiss, D.L. ....	20
Wells, C.V. ....	6
Westfall, A.O. ....	20
Wickersham, Ginia ....	32
Willard, C.C. ....	13
Wood, P.R. .... 9, 21, 31,	34

## SUBJECT INDEX

Page

### A

Aeromagnetic profiles, northeastern Oklahoma .....	10
Alfalfa County, ground water .....	34
Alfalfa County, Salt Plains reservoir site, geology .....	19
Alluvium and terrace aquifer, Beaver-North Canadian River .....	11, 12
Alluvium, Canadian River valley, Norman .....	18
Anadarko Basin .....	17
Anadarko, ground water .....	18
Antlers aquifer, geohydrology .....	33, 38
Antlers aquifer, hydrologic data .....	12
Antlers area, geohydrology .....	14
Aquifer base, High Plains aquifer .....	22
Aquifer characteristics, Arbuckle aquifer .....	38
Aquifers, Ottawa County .....	39
Arbuckle and Simpson Groups, ground water .....	36
Arbuckle aquifer, aquifer characteristics .....	38
Arbuckle Mountain area, ground-water flow .....	38
Arbuckle Mountain area, Hydrologic data .....	12
Arbuckle Mountain area, Hydrology .....	12
Arbuckle Mountain area, springs .....	36
Arbuckle Mountains, ground water .....	36
Ardmore, ground-water levels, pumping .....	21
Ardmore-Sherman quadrangles, water resources .....	35
Arkansas and Red River basins, salt springs .....	20
Arkansas River alluvium, chemical quality.....	7
Arkansas River alluvium, hydrology.....	7
Arkansas River basin, chemical quality, surface waters .....	12
Arkansas River flood plain, ground-water resources .....	34
Arkansas River, chemical quality, 1945-52 .....	20
Arkansas River, ground-water data .....	19
Arkansas River, Oklahoma and Texas .....	12
Arkansas River, polychlorinated biphenyls .....	19
Arkansas, White, and Red River basins, ground water and depth to water .....	9
Arkansas, White, and Red River basins, ground-water investigations .....	9
Arkansas-White-Red Region, Summary appraisals.....	6

### B

Base of fresh ground water, southern Oklahoma.....	8
Basin characteristics data, small streams .....	10
Beaver County, fossils .....	40
Beaver County, geology and ground-water resources .....	37
Beaver County, ground-water resources .....	32
Beaver County, water resources.....	9
Beaver Creek basin, ground water .....	14

Beaver Creek, surface water .....	17
Beaver-North Canadian River, geohydrology .....	11
Beaver-North Canadian River, hydrologic data .....	12
Beckham and Roger Mills Counties, small reservoirs.....	7
Beckham County, ground water .....	29
Beggs, ground water .....	18
Blanchard area, ground water .....	11
Blanchard, ground water .....	18
Blocker area, hydrology .....	23
Blue Beaver Creek, flood, 1977 .....	11
Blue Creek, water quality .....	22

## C

Caddo County, Anadarko, ground water .....	18
Caddo County, ground-water resources .....	34
Caddo County, Pond Creek basin, ground water .....	34
Caddo County, water levels, Rush Springs Sandstone .....	19
Canadian County, ground-water resources .....	33
Canadian River valley, ground water, alluvium .....	18
Carter County, Ardmore, ground-water levels, pumping .....	21
Central Oklahoma Aquifer, ground-water quality assessment .....	11
Channel changes, Sandstone Creek.....	6
Channel loss and base flow, modification of routed streamflow .	39
Chemical analyses, Mesozoic- and Paleozoic-age formations .....	23
Chemical analyses, stream sediment, Picher mining area .....	17
Chemical analyses, surface waters, 1944 .....	20
Chemical analyses, water samples, Picher mining area .....	17
Chemical character, Illinois River .....	16
Chemical character, Little River .....	16
Chemical quality of water, zinc mines .....	33
Chemical quality, Arkansas River .....	12
Chemical quality, Arkansas River, 1945-52 .....	20
Chemical quality, Cottonwood Creek .....	16
Chemical quality, Kiamichi river .....	17
Chemical quality, Little River basin .....	20
Chemical quality, Muddy Boggy River basin .....	20
Chemical quality, Otter Creek basin .....	20
Chemical quality, surface water, Arkansas River basin .....	12
Cherokee, ground water .....	34
Chickasaw National Recreation Area, ground-water records .....	13
Chloride-control structures, Great Salt Plains .....	23
Choctaw, FEMA .....	26
Cimarron County, geology and ground-water resources .....	33
Cimarron County, ground-water resources.....	9
Cimarron River basin, ground water .....	20
Cimarron river, ground-water resources .....	30
Cimarron terrace, salt water detection .....	40
City of the Village, FEMA .....	25
Cleveland and Oklahoma Counties, ground-water resources .....	34

Cleveland, flood, September 1940 .....	32
Cleveland, southern Oklahoma, and Pottawatomie Counties, ground-water resources .....	32
Climatic cycles, water-level fluctuations.....	7
Clinton quadrangle, water resources .....	35
Coal area, Hydrology of Area 40 .....	23
Coal area, Hydrology of Area 41 .....	23
Coal area, southeastern Oklahoma, hydrologic data .....	10
Coal-mine area, hydrology, McCurtain .....	24
Coal-mine ponds, water .....	18
Coal-mine ponds, water characteristics .....	36, 38
Contamination, Roubidoux aquifer, zinc mines .....	38
Continuous streamflow records .....	10
Cottonwood Creek basin, ground water .....	18
Cottonwood Creek, chemical quality .....	16
Cottonwood Creek, surface water .....	16
Creek County, effects of brine .....	33
Creek County, ground water .....	11
Custer County, ground water .....	32

## D

Davenport, ground water .....	18
Digital model, Ogallala aquifer, Texas County .....	17
Dissolved solids, sodium, High Plains aquifer.....	8
Double Creek, fluvial sediment .....	10
Droughts .....	14
Dry-weather flow, Pond Creek .....	38
Duke, ground-water irrigation .....	34
Duke, ground-water use .....	37
Duncan, FEMA .....	25

## E

Edmond, FEMA .....	25
Effects of brine on chemical quality .....	33
El Reno, water supply, Southwestern Reformatory .....	19
Electrical simulation, ground-water studies.....	6
Elk Creek basin, ground water .....	15, 30
Elk Creek basin, surface waters .....	20
Ellis County, ground-water irrigation.....	8
Enid quadrangle, water resources .....	35
Enid, 1973 flood .....	21
Enid, FEMA .....	25
Enid, ground-water conditions .....	18
Enid, ground-water irrigation.....	7
Enid, October 1973 rainstorm .....	37
Enid, water supplies.....	7
Estimating irrigation requirements, High Plains .....	22

	Page
Eufaula Lake, water quality .....	22
Evapotranspiration, Pond Creek basin.....	6

F

Flood analysis, Oklahoma City .....	19
Flood characteristics .....	23
Flood depths, estimating .....	24
Flood discharge, estimating .....	25
Flood peak discharge, estimating .....	25
Flood, 1973, Enid .....	21
Flood, 1977, West Cache and Blue Beaver Creeks .....	11
Flood, September 1940, Cleveland .....	32
Flood-frequency estimation, urban areas .....	23
Floodflows, small drainage areas .....	19
Floods, 1983 .....	14
Floods, Glover Creek and Little River .....	24
Floods, magnitude and frequency .....	20
Floods, May 1951, western Oklahoma and northwestern Texas.....	8
Floods, Oklahoma and Texas .....	10
Flow routing, unit response method .....	39
Flowerpot Shale, Shallow halite deposits.....	6
Fluvial sediment, Double Creek .....	10
Fort Gibson, Arkansas River flood plain near .....	34
Fort Sill, water supply .....	12
Fort Smith quadrangle, water resources .....	35
Fossils, Beaver County .....	40

G

Gage, ground-water irrigation.....	8
Gaines Creek, water quality .....	22
Garber-Wellington aquifer, ground-water resources .....	32
Garber-Wellington aquifer, Oklahoma and Logan Counties .....	11
Garber-Wellington aquifer, preliminary appraisal .....	11
Geohydrology, Antlers aquifer .....	33, 38
Geohydrology, Antlers area .....	14
Geohydrology, Beaver-North Canadian River .....	11
Geohydrology, Oklahoma Panhandle .....	21
Geohydrology, Vamoosa aquifer .....	11
Geohydrology, Vamoosa-Ada aquifer .....	33
Geohydrology, Verdigris River valley, Muskogee to Catoosa.....	7
Geologic logs, deep wells, Oklahoma, Texas, and New Mexico ....	11
Geologic map, Oklahoma .....	28
Geological report, water conditions, Platt National Park .....	40
Geology and ground-water hydrology, Lake Hefner area .....	12
Geology and ground-water resources, Beaver County .....	37
Geology and ground-water resources, Cimarron County .....	33
Geology and ground-water resources, McCurtain County .....	32
Geology and ground-water resources, Ottawa County .....	33

Geology and ground-water resources, Texas County .....	33
Geology and ground-water resources, Woodward County .....	31
Geology and water resources of Oklahoma.....	7
Geology and water resources, Grady and Stephens Counties .....	32
Geology of ground-water supplies .....	34
Geology, ground water, salt springs, Arkansas and Red River basins .....	20
Geology, hydrology, High Plains aquifer.....	9
Geology, Salt Plains reservoir site, Alfalfa County .....	19
Glorieta Sandstone and Ogallala Formation, hydrogeology .....	28
Glorieta Sandstone and Ogallala Formation, underground disposal, High Plains .....	40
Glover Creek and Little River, floods .....	24
Goff Creek, Triassic rocks .....	40
Grady and Stephens Counties, geology and water resources .....	32
Grand (Neosho) River basin, ground water .....	17
Great Salt Plains, chloride-control structures .....	23
Ground water .....	17
Ground water and depth to water, Arkansas, White, and Red River basins .....	9
Ground water circulation, salt springs.....	6
Ground water in alluvium, Washita River .....	17
Ground water, alluvial deposits .....	40
Ground water, alluvium, Canadian River valley, Norman .....	18
Ground water, alluvium, Cottonwood Creek basin .....	18
Ground water, Anadarko, Caddo County .....	18
Ground water, Arbuckle and Simpson Groups, Arbuckle Mountains .	36
Ground water, Beaver Creek basin .....	14
Ground water, Beckham County .....	29
Ground water, Beggs, Okmulgee County .....	18
Ground water, Blanchard area, .....	11
Ground water, Blanchard, McClain County .....	18
Ground water, Cherokee, Alfalfa County .....	34
Ground water, Cimarron River basin .....	20
Ground water, Creek County .....	11
Ground water, Custer County .....	32
Ground water, Davenport, Lincoln County .....	18
Ground water, Elk Creek basin .....	15
Ground water, Elk Creek basin .....	30
Ground water, Grand (Neosho) River basin .....	17
Ground water, middle Arkansas River basin, Kansas and Oklahoma .....	12
Ground water, Mississippian rocks, Miami .....	16
Ground water, Oklahoma.....	7
Ground water, Otter Creek basin .....	30
Ground water, Panhandle .....	37, 39
Ground water, Pond Creek basin, Caddo County .....	34
Ground water, Roosevelt .....	15
Ground water, Texas County.....	9
Ground water, Verdigris River basin, Kansas and Oklahoma .....	12

	Page
Ground water, Washita River .....	30
Ground water, Wichita Mountains .....	15, 33
Ground-water condition, Enid .....	18
Ground-water data, Arkansas River, LeFlore and Haskell Counties .....	19
Ground-water data, Arkansas River, Muskogee County .....	19
Ground-water data, Arkansas River, Sequoyah County .....	19
Ground-water data, Verdigris River, Wagoner and Roger Mills Counties .....	19
Ground-water flow, Arbuckle Mountain area .....	38
Ground-water investigation, Oklahoma .....	38
Ground-water investigations .....	11
Ground-water investigations, Arkansas, White, and Red River basins .....	9
Ground-water irrigation, Duke, Jackson and Greer Counties .....	34
Ground-water irrigation, Ellis County .....	8
Ground-water irrigation, Enid .....	7
Ground-water irrigation, Gage .....	8
Ground-water irrigation, North Canadian River, Oklahoma City .....	7
Ground-water levels, 1956-60 .....	14
Ground-water levels, 1961-62 .....	21
Ground-water levels, 1963-64 .....	21
Ground-water levels, 1965-66 .....	14
Ground-water levels, 1967-68 .....	10
Ground-water levels, 1969-70 .....	17
Ground-water levels, 1971-74 .....	13
Ground-water levels, 1975 .....	13
Ground-water levels, 1980-82 .....	13
Ground-water levels, 1982-83 climatic years .....	13
Ground-water levels, 1983-84 climatic years .....	13
Ground-water levels, Oklahoma [1951] .....	10
Ground-water levels, pumping, Ardmore, Carter County .....	21
Ground-water levels, to March 1985 .....	13
Ground-water levels, Water-Supply Papers .....	8
Ground-water pumpage and water levels .....	37
Ground-water quality .....	15
Ground-water quality assessment, Central Oklahoma Aquifer .....	11
Ground-water quality data, 1981 .....	12
Ground-water quality data, 1982-84 .....	12
Ground-water records, Chickasaw National Recreation Area .....	13
Ground-water records, northeastern Oklahoma .....	15
Ground-water records, southeastern Oklahoma .....	15
Ground-water reservoirs .....	34
Ground-water resource, Cleveland and Oklahoma Counties .....	34
Ground-water resources, Arkansas River flood plain .....	34
Ground-water resources, Beaver County .....	32
Ground-water resources, Canadian County .....	33
Ground-water resources, Cimarron County .....	9
Ground-water resources, Cimarron River .....	30
Ground-water resources, Garber-Wellington aquifer .....	32

Ground-water resources, Harmon, Jackson, and Greer Counties ...	30
Ground-water resources, Rush Springs Sandstone, Caddo County ..	34
Ground-water resources, Tillman County .....	29
Ground-water storage, Tillman County .....	37
Ground-water studies .....	15
Ground-water studies, Lower Arkansas and Verdigris River valleys .....	6
Ground-water studies, Oklahoma .....	39
Ground-water supplies .....	36
Ground-water supplies and uses, Oklahoma .....	40
Ground-water supplies, Oklahoma City area .....	34
Ground-water use, Duke .....	37
Ground-water, Kingfisher County .....	34
Ground-water-level changes 1957 .....	37
Ground-water-quality records, eastern Oklahoma .....	14

## H

Halite deposits, Woodward and Woods Counties .....	37
Harmon, Jackson, and Greer Counties, ground-water resources, ..	30
Haskell County, hydrology, coal-mine area .....	24
Haskell County, Stigler area, hydrology .....	23
High Plains .....	28, 28
High Plains aquifer, 1978, Water table .....	14
High Plains aquifer, 1980 saturated thickness .....	22
High Plains aquifer, aquifer base .....	22
High Plains aquifer, dissolved solids and sodium.....	8
High Plains aquifer, geology, hydrology.....	9
High Plains aquifer, numerical simulation .....	22
High Plains aquifer, predevelopment water table .....	21
High Plains aquifer, sulfur isotopic composition .....	22
High Plains aquifer, water chemistry .....	22
High Plains aquifer, water table 1980 .....	21
High Plains aquifer, Water-level and saturated-thickness changes, predevelopment to 1980 .....	9
High Plains aquifer, water-level changes to 1980 .....	22
High Plains regional aquifer, study plan .....	25
High Plains, estimating irrigation requirements .....	22
High Plains, Glorieta Sandstone and Ogallala Formation, underground disposal .....	40
High-flow frequencies .....	15
HP RASA, study plan .....	25
Hydrogeologic information, Ogallala aquifer, Panhandle, waste disposal .....	39
Hydrogeology, Glorieta Sandstone and Ogallala Formation, Panhandle .....	28
Hydrogeology, Middle Permian to Tertiary, Oklahoma Panhandle...	9
Hydrologic data, alluvium and terrace aquifer, Beaver-North Canadian River .....	12
Hydrologic data, Antlers aquifer .....	12

	Page
Hydrologic data, Arbuckle Mountain area .....	12
Hydrologic data, coal area, southeastern Oklahoma, 1978-82 ....	10
Hydrologic data, Lehigh area, 1977-82 .....	10
Hydrologic data, North Canadian River .....	15
Hydrologic data, Sandstone Creek watershed, 1951-56 .....	30
Hydrologic data, Vamoosa aquifer .....	11
Hydrologic unit map, Oklahoma .....	28
Hydrologic-data collection .....	36
Hydrology of Area 40, coal area .....	23
Hydrology of Area 41, coal area .....	23
Hydrology, Arbuckle Mountain area .....	12
Hydrology, Arkansas River alluvium, Muskogee to Fort Smith.....	7
Hydrology, Blocker are, Pittsburg County .....	23
Hydrology, coal-mine area, McCurtain, Haskell County .....	24
Hydrology, geology, High Plains aquifer.....	9
Hydrology, Red Oak area, Latimer County .....	23
Hydrology, Rock Island area, Le Flore County .....	23
Hydrology, Stigler area, Haskell County .....	23

#### I

Idabel, oil possibilities .....	34
Illinois River, chemical character .....	16
Illinois River, surface water .....	16
Index, surface-water-quality data .....	19
Irrigation, Panhandle .....	37

#### J

Jackson and Greer Counties, ground-water irrigation .....	34
Jones, FEMA .....	26

#### K

Kansas and Oklahoma, middle Arkansas River basin .....	12
Kansas and Oklahoma, Verdigris River basin .....	12
Kiamichi River, chemical quality .....	17
Kiamichi River, surface water .....	17
Kingfisher County, ground-water .....	34

#### L

Lake Hefner, geology and ground-water hydrology .....	12
Lake Hefner, water loss.....	6
Lake Wewoka, oil-well brine contamination .....	18
Latimer County, Red Oak area, hydrology .....	23
Laverne Formation .....	37
Lawton quadrangle, water resources .....	35
Le Flore County, Rock Island area, hydrology .....	23

LeFlore and Haskell Counties, Arkansas River, ground-water data .....	19
Lehigh area, hydrologic data .....	10
Lincoln County, Davenport, ground water .....	18
Lincoln County, effects of brine .....	33
Little River basin, chemical quality .....	20
Little River basin, surface water .....	20
Little River, chemical quality .....	16
Little River, surface water .....	16
Low-flow characteristics .....	15
Lower Arkansas and Verdigris River valleys, ground-water studies .....	6

## M

McAlester, FEMA .....	25
McAlester-Texarkana quadrangles, water resources .....	35
McClain County, Blanchard, ground water .....	18
McClain County, ground water .....	11
McCurtain County, geology and ground-water resources .....	32
McCurtain County, oil possibilities .....	34
McCurtain, hydrology, coal-mine area .....	24
Meade basin, Kansas and Oklahoma, solution .....	38
Mesozoic- and Paleozoic-age formations, chemical analyses .....	23
Miami, ground water .....	16
Miami, pumping test, Goodrich plant .....	16
Mid-Arkansas and Upper Red River basins, sediment data .....	10
Middle Arkansas River basin, Ground water .....	12
Middle Permian to Tertiary, Oklahoma Panhandle.....	9
Midwest City, FEMA .....	26
Mineral constituents in water .....	12
Minicomputers, water-resources investigations .....	37
Mississippian rocks, ground water .....	16
Muddy Boggy Creek, surface water .....	16
Muddy Boggy River basin, chemical quality .....	20
Muddy Boggy River basin, surface water .....	20
Murray County, ground-water records .....	13
Muskogee County, Arkansas River, ground-water data .....	19
Muskogee County, ground-water resources .....	34
Muskogee to Catoosa, geohydrology.....	7
Muskogee to Fort Smith, hydrology.....	7
Mustang, FEMA .....	26

## N

Na/Cl ratios, western Oklahoma.....	6
National Water Summary 1984.....	7
National Water Summary 1985 .....	6
National Water Summary 1986.....	7
Nichols Hills, FEMA .....	25

	Page
Nicoma Park, FEMA .....	26
Noble County, water resources .....	32
Norman, ground water, alluvium .....	18
North Boggy Creek, surface water .....	16
North Canadian River, hydrologic data .....	15
North Canadian River, numerical simulation .....	21
North Canadian River, Oklahoma City.....	7
North Enid, FEMA .....	26
Northeastern Oklahoma, aeromagnetic profiles .....	10
Numerical simulation, alluvium and terrace aquifer, Beaver-North Canadian River .....	12
Numerical simulation, alluvium and terrace aquifer, Beaver-North Canadian River, Panhandle to Canton Lake .....	11
Numerical simulation, High Plains aquifer .....	22
Numerical simulation, North Canadian River .....	21

O

Ogallala aquifer, digital model, Texas County .....	17
Ogallala aquifer, waste disposal .....	39
Ogallala aquifer, water-level changes .....	36
Ogallala aquifer, water-quality sampling .....	21
Oil possibilities, Idabel, McCurtain County .....	34
Oil-well brine contamination, Lake Wewoka, Seminole County ....	18
Okfuskee County, effects of brine .....	33
Oklahoma City area, ground-water supplies .....	34
Oklahoma City quadrangle, water resources .....	35
Oklahoma City, FEMA .....	26
Oklahoma City, ground-water irrigation.....	7
Oklahoma City, urban flood analysis .....	19
Oklahoma County, FEMA .....	27
Oklahoma County, Lake Hefner .....	12
Oklahoma Panhandle, hydrogeology.....	9
Oklahoma Panhandle, water-level fluctuations.....	7
Oklahoma water .....	32
Oklahoma's underground water .....	36
Oklahoma, ground water.....	7
Oklahoma, Ground-water quality.....	7
Oklahoma, Ground-water resources.....	7
Oklahoma, Surface-water resources.....	6
Oklahoma, western, and northwestern Texas, floods, May 1952....	8
Okmulgee County, Beggs, ground water .....	18
Okmulgee County, water resources .....	33
Ottawa County, aquifers .....	39
Ottawa County, geology and ground-water resources .....	33
Otter Creek basin, chemical quality .....	20
Otter Creek basin, ground water .....	30
Otter Creek basin, surface waters .....	20
Ozark Region, springs .....	36

## P

Panhandle, geohydrology .....	21
Panhandle, ground water .....	37, 39
Panhandle, hydrogeology .....	28
Panhandle, irrigation .....	37
Panhandle, waste disposal .....	39
Panhandle, water levels, 1966-70 .....	14
Panhandle, water levels, 1971-72 .....	14
Panhandle, well records .....	15
Payne County, effects of brine .....	33
PHREEQE code .....	39
Picher field, water quality .....	39
Picher mining area, chemical analyses, stream sediment .....	17
Picher mining area, chemical analyses, water samples .....	17
Piedmont, FEMA .....	26
Pittsburg County, Blocker area, hydrology .....	23
Platt National Park, Geological report on water conditions ....	13
Platt National Park, geology and water conditions .....	40
Polecat Creek, surface-water resources .....	16
Polychlorinated biphenyls, Arkansas River .....	19
Ponca City, FEMA .....	25
Pond Creek basin, Evapotranspiration.....	6
Pond Creek basin, ground water .....	34
Pond Creek, dry-weather flow .....	38
Pottawatomie County, effects of brine .....	33
Preliminary appraisal, Garber-Wellington aquifer .....	11
Protecting and developing underground water, Oklahoma .....	39
Pryor Creek, water quality .....	30
Public water supplies .....	17
Public water-supply quality 1953 .....	29
Pumping test, Goodrich plant, Miami .....	16

## R

Rainfall-runoff hydrographs, small streams .....	10
Rainstorm, October 1973, Enid .....	37
Red Oak area, hydrology .....	23
Relation of ground water to surface water, Pond Creek basin....	6
Rock Island area, hydrology .....	23
Roosevelt, ground water .....	15
Roubidoux aquifer, contamination .....	38
Routed streamflow, modification .....	39
Rush Springs Sandstone, ground-water resources .....	34
Rush Springs Sandstone, water levels .....	19
Rush Springs wells, unusual fluctuations .....	37

Sallisaw, FEMA .....	25
Salt Plains reservoir site, geology .....	19
Salt springs .....	37
Salt springs, Arkansas and Red River Basins .....	20
Salt springs, western Oklahoma, Texas, and Kansas.....	6
Salt water detection, Cimarron terrace .....	40
Sandstone Creek watershed, hydrologic data, 1951-56 .....	30
Sandstone Creek watershed, small reservoirs.....	7
Sandstone Creek, channel changes.....	6
Saturated thickness 1980, High Plains aquifer .....	22
Sediment data, Mid-Arkansas and Upper Red River basins .....	10
Sediment, chemical analyses, Picher mining area .....	17
Seminole County, effects of brine .....	33
Seminole County, oil-well brine contamination, Lake Wewoka ....	18
Sequoyah County, Arkansas River, ground-water data .....	19
Shallow halite deposits, Flowerpot Shale.....	6
Small reservoirs, Sandstone Creek watershed.....	7
Small streams, Rainfall-runoff hydrographs and basin characteristics data .....	10
Solution, deep-seated, Meade basin, Kansas and Oklahoma .....	38
Sources of water, Oklahoma .....	35
Southern Oklahoma, base of fresh ground water.....	8
Spencer, FEMA .....	26
Springs, Arbuckle Mountain area .....	36
Springs, northeastern Oklahoma .....	36
Springs, Ozark Region .....	36
Statistical summaries, streamflow records through 1984 .....	22
Statistical summaries, streamflow records, through 1974 .....	17
Statistical summaries, surface-water-quality data, through 1975	16
Stigler area, hydrology .....	23
Streamflow data program, proposed .....	10
Streamflow records through 1984, statistical summaries .....	22
Streamflow records, statistical summaries, through 1974 .....	17
Study plan, High Plains regional aquifer .....	25
Suitability, surface water .....	24
Sulfur isotopic composition, High Plains aquifer .....	22
Summary appraisals, Arkansas-White-Red Region.....	6
Summary of activities, 1983 .....	14
Summary of activities, 1985 .....	20
Summary of activities, 1986-87 .....	15
Surface and ground water, quantity, occurrence, and quality ...	32
Surface water, Arkansas, Verdigris, Neosho, and Illinois River basins .....	24
Surface water, Beaver Creek .....	17
Surface water, Canadian, North Canadian, and Deep Fork River basins .....	24
Surface water, Cottonwood Creek .....	16
Surface water, Illinois River .....	16
Surface water, Kiamichi River .....	17

Surface water, Little River .....	16
Surface water, Little River basin .....	20
Surface water, Muddy Boggy River basin .....	20
Surface water, North Boggy Creek .....	16
Surface water, Red River and North Fork Red River .....	24
Surface water, Salt Fork Arkansas and Cimarron River basins ...	24
Surface water, Washita River basin .....	24
Surface waters, chemical analyses, 1944 .....	20
Surface waters, Elk Creek basin .....	20
Surface waters, Otter Creek basin .....	20
Surface-water quality 1946-47 .....	31
Surface-water quality 1946-49 .....	31
Surface-water quality 1949-50 .....	31
Surface-water quality 1950-51 .....	29
Surface-water quality 1951-52 .....	29
Surface-water quality 1952-53 .....	30
Surface-water quality 1953-54 .....	29
Surface-water quality 1954-55 .....	30
Surface-water quality 1955-56 .....	30
Surface-water quality 1956-57 .....	30
Surface-water quality 1957-58 .....	29
Surface-water quality 1958-59 .....	29
Surface-water quality 1959-60 .....	29
Surface-water quality 1960-61 .....	29
Surface-water quality 1961-62 .....	29
Surface-water quality 1962-63 .....	29
Surface-water quality, Arkansas River basin .....	12
Surface-water resources, Polecat Creek .....	16
Surface-water resources, Washita River .....	16
Surface-water-quality data, index .....	19
Surface-water-quality data, statistical summaries, through 1975 .....	16

## T

Tenepah, Verdigris River .....	16
Texas County, geology and ground-water resources .....	33
Texas County, ground water .....	9
Texas County, Ogallala aquifer .....	17
Texas County, Triassic rocks .....	40
Tillman County, ground-water resources .....	29
Tillman County, ground-water storage .....	37
Tishomingo, FEMA .....	26
Triassic rocks, Goff Creek, Texas County .....	40
Tulsa County, water resources .....	33
Tulsa quadrangle, water resources .....	35

## U

Underground disposal, High Plains .....	40
Unusual fluctuations, Rush Springs wells .....	37
Urban areas, flood-frequency estimation .....	23
Urban flood analysis, Oklahoma City .....	19
Urban storm-water management .....	16

## V

Valley Brook FEMA .....	26
Vamoosa aquifer, geohydrology .....	11
Vamoosa aquifer, hydrologic data .....	11
Vamoosa-Ada aquifer, geohydrology .....	33
Verdigris River basin, ground water .....	12
Verdigris River valley, Muskogee to Catoosa.....	7
Verdigris River, ground-water data .....	19
Verdigris River, Tenepah .....	16

## W

Wagoner and Roger Mills Counties, Verdigris River, ground-water data .....	19
Warr Acres, FEMA .....	26
Washington County, fluvial sediment .....	10
Washita River, ground water .....	30
Washita River, ground water in alluvium .....	17
Washita River, surface-water resources .....	16
Waste disposal, Ogallala aquifer, geohydrology .....	39
Water characteristics, coal-mine ponds .....	36, 38
Water chemistry, High Plains aquifer .....	22
Water facts, Oklahoma .....	20
Water for Oklahoma.....	7
Water levels, Panhandle, 1966-70 .....	14
Water levels, Panhandle, 1971-72 .....	14
Water levels, Rush Springs Sandstone, Caddo County .....	19
Water quality, Blue Creek, Eufaula Lake .....	22
Water quality, Gaines Creek, Eufaula Lake .....	22
Water quality, Oklahoma .....	40
Water quality, Pryor Creek .....	30
Water quality, zinc mines .....	18
Water quality, zinc mines, Picher field .....	39
Water resources, Ardmore-Sherman quadrangles .....	35
Water resources, Beaver County.....	9
Water resources, Clinton quadrangle .....	35
Water resources, Enid quadrangle .....	35
Water resources, Fort Smith quadrangle .....	35
Water resources, Lawton quadrangle .....	35
Water resources, McAlester-Texarkana quadrangles .....	35
Water resources, Noble County .....	32

Water resources, Oklahoma .....	38, 39
Water resources, Oklahoma City quadrangle .....	35
Water resources, Okmulgee County .....	33
Water resources, Tulsa County .....	33
Water resources, Tulsa quadrangle .....	35
Water resources, Woodward quadrangle .....	36
Water supplies, Enid.....	7
Water supply, Fort Sill .....	12
Water supply, Southwestern Reformatory, El Reno .....	19
Water table 1980, High Plains aquifer .....	21
Water table, High Plains aquifer, 1978 .....	14
Water table, predevelopment, High Plains aquifer .....	21
Water use, estimated, domestic .....	24
Water use, estimated, reported withdrawals .....	24
Water, physical and chemical characteristics, coal-mine ponds .	18
Water-level and saturated-thickness changes, predevelopment to 1980, High Plains aquifer .....	9
Water-level changes to 1980, High Plains aquifer .....	22
Water-level changes, Ogallala aquifer .....	36
Water-level fluctuations .....	36
Water-level fluctuations, climatic cycles.....	7
Water-level records for western Oklahoma, 1950-75 .....	13
Water-level records for western Oklahoma, 1975-76 .....	13
Water-level records, 1975-77 .....	13
Water-level records, 1976-78 .....	13
Water-loss, Lake Hefner.....	6
Water-quality data 1964 .....	27
Water-quality sampling, Ogallala aquifer .....	21
Water-Resources Data 1961-64 .....	27
Water-Resources Data 1965-74 .....	27
Water-Resources Data 1975 .....	27
Water-Resources Data 1976 .....	27
Water-Resources Data 1977 .....	27
Water-Resources Data 1978 .....	27
Water-Resources Data 1979 .....	28
Water-Resources Data 1980 .....	28
Water-Resources Data 1981 .....	28
Water-Resources Data 1982 .....	27
Water-Resources Data 1982 .....	28
Water-Resources Data 1983 .....	27
Water-Resources Data 1984 .....	27
Water-Resources Data 1986 .....	27
Water-resources investigations, Oklahoma .....	28
Water-Supply Papers, ground-water levels.....	8
Well and water-quality records, Garber-Wellington aquifer .....	11
Well records, Panhandle .....	15
West Cache and Blue Beaver Creeks, flood 1977, .....	11
Western Oklahoma, Na/Cl ratios.....	6
Western Oklahoma, Texas, and Kansas, salt springs.....	6
Wichita Mountains, ground water .....	15, 33

	Page
Woodward and Woods Counties, halite deposits .....	37
Woodward County, geology and ground-water resources .....	31
Woodward quadrangle, water resources .....	36

Z

Zinc mines, chemical quality of water .....	33
Zinc mines, contamination, Roubidoux aquifer .....	38
Zinc mines, water quality .....	18, 39