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UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGIC AND WATER-SUPPLY REPORTS AND MAPS

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UNIVERSITY OF UTAH
RESEARCH INSTITUTE
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This list contains reports and maps published by the Geological Survey relating to the geology and mineral and water resources of Hawaii. A separate list of bibliographies and publications of general interest is available on request, as are a general catalog of Geological Survey publications (not including topographic maps) and State indexes to topographic mapping.

Bulletins, professional papers, water-supply papers, and other book reports for which a price is stated, including some that have gone out of print at the Government Printing Office, as indicated by an asterisk (*), are for sale by the BRANCH OF DISTRIBUTION, U.S. GEOLOGICAL SURVEY, 1200 SOUTH EADS STREET, ARLINGTON, VA 22202, and from the U.S. Geological Survey, Public Inquiries Offices: Federal Bldg., 300 North Los Angeles Street, Room 7638, Los Angeles, CA 90012; and Customhouse, 555 Battery Street, Room 504, San Francisco, CA 94111 (authorized agents of Superintendent of Documents). Prepayment is required and should be made by check or money order payable to the U.S. Geological Survey. Numerous libraries and educational institutions throughout the country are depositories for this material, and a list of Hawaii depositories is included.

Maps, folios, hydrologic atlases, and charts are sold by the Geological Survey. They may be purchased over the counter or ordered from the BRANCH OF DISTRIBUTION, U.S. GEOLOGICAL SURVEY, BLDG. 41, FEDERAL CENTER, DENVER, CO 80225. Remittances should be made by check or money order payable to U.S. Geological Survey. A discount of 30 percent is allowed on an order of \$300 or more, based on the retail price. No other discount is applicable. Maps may also be purchased *over the counter* at the U.S. Geological Survey offices where books are sold, and at the Survey's Public Inquiries Offices: Room 1C402, Geological Survey, National Center, 12201 Sunrise Valley Drive, Reston, Va.; and Room 1028, General Services Building, 19th and F Streets NW., Washington, D.C.

Reference to geologic information on Hawaii may be obtained from the following Geological Survey publications: Bibliographies of North American Geology - Bulletins *746 (1785-1918), *747 (1785-1918), *823 (1919-28), *937 (1929-39), *985 (1950), *1025 (1951), *1035 (1952-53), *1049 (1940-49), *1054 (1954), *1065 (1955), *1075 (1956), *1095 (1957), *1115 (1958), *1145 (1959), *1195 (1950-59) set of 4 volumes, *1196 (1960), *1197 (1961), *1232 (1962), *1233 (1963), *1234 (1964), *1235 (1965), 1266 (1966) \$8.25, *1267 (1967), *1268 (1968), 1269 (1969) \$11.35, and 1370 (1970) \$8.70. Bibliographies and indexes of publications relating to ground water are Water-Supply Papers *992 (1879-1945), *1492 (1946-1955), *1863 (1963), and 1864 (1964) \$1. A water resources investigations folder for Hawaii, Guam, and American Samoa, available free upon request to the Geological Survey, 420 National Center, 12201 Sunrise Valley Drive, Reston, VA 22092, shows the location of stream-gaging stations, observation wells, quality-of-water sample collection sites, areal hydrologic studies, average annual runoff, average discharge of principal streams, and availability of ground water. A brief text lists the hydrologic network, the areal and Statewide projects, and selected references. Additional information on Hawaii is obtainable from U.S. Geological Survey, 1833 Kalakaua Avenue, Honolulu, HI 96815, and the Manager-Chief Engineer, Division of Water and Land Development, State Department of Land and Natural Resources, Honolulu, HI 96809.

Information on altitudes in the United States is contained in Bulletins *5, *76, *160, *274, *689, *817, and *1212; information on boundaries and areas of the United States and the several States, with historical outlines of boundary changes, is contained in Bulletins *13, *171, *226, *302, *689, *817, *1212, and Professional Paper 909; information on results of primary triangulation and primary traverse from 1894 to 1918 is contained in Bulletins *122, *181, *201, *216, *245, *276, *310,

*440, *496, *551, *644, *709, and parts 1 of the *18th, *19th, *20th, and *21st Annual Reports. Further information on more recent triangulation, transit traverse, and spirit leveling in Hawaii is obtainable upon specific request.

Current publications are announced by means of monthly notices, "New Publications of the Geological Survey." Free on application to the Geological Survey, 329 National Center, 12201 Sunrise Valley Drive, Reston, VA 22092.

ANNUAL REPORTS

*Fourth, 1882-83. 1884. Contains: Hawaiian volcanoes, by C. E. Dutton. p. 75-219.

*Nineteenth, 1897-98. Part 6 contains: Mineral resources of Hawaii. p. 681-686.

(Beginning with the twenty-third (1901-2), the annual reports of the Geological Survey contain no technical papers but were published separately until 1933. Since 1933 a condensed form has been included in the annual report of the Secretary of the Interior. For the fiscal years 1936 to 1963, a limited number of copies of the report as it appeared in the annual report of the Secretary were reprinted separately for official use; copies of these may be had free by persons directly interested, insofar as they are in stock.)

MINERAL RESOURCES OF THE UNITED STATES

The annual volumes of Mineral Resources of the United States contain statistics of production by calendar years and matters relating to technology and resources. Some of the chapters deal with a particular mineral or group of minerals, but much of the information is statistical. These volumes are not listed. The volumes of Mineral Resources were issued by the Geological Survey for the years 1882 to 1923. Reports for 1924 and subsequent years are published by the Bureau of Mines, Washington, DC 20240, as Minerals Yearbooks.

PROFESSIONAL PAPERS

*88. Lavas of Hawaii and their relations, by Whitman Cross. 1915. 97 p.

*214-D. Petrography of the island of Hawaii, by G. A. Macdonald. 1949. p. 51-96.

*400-A. Geological Survey Research 1960, Synopsis of geologic results. 1960. p. A1-A136.

*400-B. Short papers in geological sciences, Articles 1-232. 1960. p. B1-B515. Contains the following article, which is not available separately.

163. Pahala ash—An unusual deposit from Kilauea Volcano, Hawaii, by G. D. Fraser. p. B35.

*424-A. Geological Survey Research 1961, Synopsis of geologic and hydrologic results. 1961. p. A1-A194.

*424-B. Short papers in the geologic and hydrologic sciences, Articles 1-146. 1961. p. B1-B344. Contains the following article, which is not available separately.

89. Xenolithic nodules in the 1800-1801 Kaupulehu flow of Hualalai Volcano, by D. H. Richter and K. J. Murata. p. B214.

*424-C. Short papers in the geologic and hydrologic sciences, Articles 147-292. 1961. p. C1-C398. Contains the following article, which is not available separately.

219. Weathered basalt in the eastern part of Kauai, Hawaii, by S. H. Patterson and C. E. Robertson. p. C195.

*424-D. Short papers in the geologic and hydrologic sciences, Articles 293-435. 1961. p. D1-D408. Contains the following articles, which are not available separately.

359. Relation of discharge rate to drawdown in wells in Oahu, Hawaii, by E. R. Lubke. p. D204.

360. Preliminary gravity survey of Kilauea Volcano, Hawaii, by H. L. Krivoy and J. P. Eaton. p. D205.

377. Discharge of ground water by phreatophytes in the Waianae district, Oahu, Hawaii, by C. P. Zones. p. D240.

*450-A. Geological Survey Research 1962, Synopsis of geologic, hydrologic, and topographic results. 1962. p. A1-A257.

*450-B. Short papers in geology, hydrology, and topography, Articles 1-59. 1962. p. B1-B145. Contains the following articles, which are not available separately.

20. Recent growth of Halemaumau, Kilauea Volcano, Hawaii, by D. H. Richter, J. G. Moore, and R. T. Haugen. p. B53.

29. Index of refraction measurements of fused Hawaiian rocks, by D. B. Stewart. p. B76.

HYDROLOGIC INVESTIGATIONS ATLASES—Continued

- HA-267. Land use and its effects on the basal water supply, Pearl Harbor area, Oahu, Hawaii, 1931-65, by R. H. Dale. 1967. Scale 1:62,500. 2 sheets. \$3.50 per set.
- HA-314. Floods in Waimanalo area, Oahu, Hawaii, by Reuben Lee and W. C. F. Chang. 1968. Scale 1:12,000. \$2.
- HA-358. Ground water in the Waianae district, Oahu, Hawaii, by K. J. Takasaki. 1971. Scale 1:62,500. 2 sheets. \$3 per set.
- HA-473. Floods in Punaluu—Hauula area, Oahu, Hawaii, by T. M. Ushijima and C. J. Ewart. 1973 (1974). Scale 1:12,000. \$1.25.
- HA-531. Floods in Waiahole-Waikane area, Oahu, Hawaii, by C. J. Ewart and Reuben Lee. 1974 (1975). Scale 1:12,000. \$1.75.

STATE HYDROLOGIC UNIT MAP

Hawaii 1974. An overprint of the 1:500,000-scale State base map. Shows counties, location, and names of all cities and towns and most of the smaller settlements and railroads in black; water features in blue; hydrologic boundaries and codes in red; county codes in green. No contours. \$1.25.

MISCELLANEOUS INVESTIGATIONS SERIES

- I-175. Paleotectonic maps of the Jurassic System, by E. D. McKee, S. S. Oriol, V. E. Swanson, J. E. MacLachlan, J. C. MacLachlan, K. B. Ketner, J. W. Goldsmith, R. Y. Bell, and D. J. Jameson, *with a separate section on Paleogeography*, by R. W. Imlay. 1956. Scales 1:2,500,000 and 1:5,000,000. \$15.
- I-299. Epigenetic uranium deposits in the United States, by W. I. Finch, I. S. Parrish, and G. W. Walker. 1959. Scale 1:5,000,000. 3 sheets. \$4.25 per set.
- I-300. Paleotectonic maps of the Triassic System, by E. D. McKee, S. S. Oriol, K. B. Ketner, M. E. MacLachlan, J. W. Goldsmith, J. C. MacLachlan, and M. R. Mudge. 1959. Scale 1:5,000,000. \$15.
- I-450. Paleotectonic maps of the Permian System, by E. D. McKee, S. S. Oriol, and others. 1967. \$38.
- I-456. Bathymetric, topographic, and structural map of the south-central flank of Kilauea Volcano, Hawaii, by J. G. Moore and D. L. Peck. 1965. Scale 1:62,500. \$1.25.
- I-677. Bathymetry and geology—east cape of the Island of Hawaii, by J. G. Moore. 1971. Scale 1:62,500. \$1.25.
- I-688. Generalized tectonic map of North America, by P. B. King and G. J. Edmonston. 1972. Scale 1:15,000,000. \$1.75.
- I-911. Magnetic declination in the United States—Epoch 1975.0, by E. B. Fabiano. 1975. Scale 1:5,000,000. \$3.

MISCELLANEOUS REPORTS (free upon application to the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202):

- List 1. Press releases, preliminary maps, and preliminary reports released between Jan. 1, 1938, and Jan. 1, 1945.
- List 2. Press releases, preliminary maps, and preliminary reports released between Jan. 1, 1945, and Jan. 1, 1946.

REFERENCE LIBRARIES

Many of the publications listed herein may be consulted in the following libraries in HONOLULU:

Bernice Pauahi Bishop Museum.	Geological Survey, 1833 Kalakaua Ave.
Chaminade College Library.	Library of Hawaii.
Civil Engineering Dept., University of Hawaii.	University of Hawaii Library.

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PROFESSIONAL PAPERS—Continued

- *450-C. Short papers in geology and hydrology, Articles 60-119. 1962. p. C1-C146. Contains the following article, which is not available separately.
108. Effect of the Haiku tunnel on Kahaluu Stream, Oahu, Hawaii, by G. T. Hirashima. p. C118.
- *474-D. The 1961 eruption of Kilauea Volcano, Hawaii, by D. H. Richter, W. U. Ault, J. P. Eaton, and J. G. Moore. 1964. p. D1-D34. (See GQ-667; Professional Papers 537-A, B, C, D, E, and 607.)
- *475-A. Geological Survey Research 1963, Summary of investigations. 1963. p. A1-A300.
- *475-B. Short papers in geology and hydrology, Articles 1-59. 1963. p. B1-B219. Contains the following articles, which are not available separately.
6. Some new data on the arsenic content of basalt, by A. J. Bartel, E. J. Fennelly, Claude Huffman, Jr., and L. F. Rader, Jr. p. B20.
20. Pillow structures of submarine basalts east of Hawaii, by J. G. Moore and R. K. Reed. p. B153.
- *475-C. Short papers in geology and hydrology, Articles 60-121. 1963. p. C1-C234. Contains the following article, which is not available separately.
89. Gravity survey of the island of Hawaii, by W. T. Kinoshita, H. L. Krivoy, D. R. Mabey, and R. R. MacDonald. p. C114.
- *475-D. Short papers in geology and hydrology, Articles 122-172. 1964. p. D1-D223. Contains the following article, which is not available separately.
144. Hawaiian seismic events during 1962, by R. Y. Koyanagi. p. D112.
- *492. Thermal springs of the United States and other countries of the world—A summary, by G. A. Waring, revised by R. R. Blankenship and Ray Bentall. 1965. 383 p.
- *501-A. Geological Survey Research 1964. 1964. p. A1-A367.
- *501-B. Geological Survey Research 1964. 1964. p. B1-B191. Contains the following article, which is not available separately.
T-phase of May 11, 1962, recorded in Hawaii, by H. L. Krivoy and R. A. Eppley. p. B105.
- *501-C. Geological Survey Research 1964. 1964. p. C1-C197. Contains the following article, which is not available separately.
Seismicity of the lower east rift zone of Kilauea Volcano, Hawaii, January 1962-March 1963, by R. Y. Koyanagi. p. C103.
- *501-D. Geological Survey Research 1964. 1964 (1965). p. D1-D209. Contains the following articles, which are not available separately.
Temperatures in the crust and melt of Alae lava lake, Hawaii, after the August 1963 eruption of Kilauea Volcano—A preliminary report, by D. L. Peck, J. G. Moore, and George Kojima. p. D1.
Giant submarine landslides on the Hawaiian Ridge, by J. G. Moore. p. D95.
- *525-A. Geological Survey Research 1965. 1965. p. A1-A376.
- *525-B. Geological Survey Research 1965. 1965. p. B1-B195. Contains the following article, which is not available separately.
Hawaiian seismic events during 1963, by R. Y. Koyanagi and E. T. Endo. p. B13.
- *525-C. Geological Survey Research 1965. 1965. p. C1-C219. Contains the following article, which is not available separately.
X-ray determinative curve for Hawaiian olivines of composition Fe_{76-88} , by K. J. Murata, Harry Bastron, and W. W. Brannock. p. C35.
- *537-A. Chemistry of the lavas of the 1959-60 eruption of Kilauea Volcano, Hawaii by K. J. Murata and D. H. Richter. 1966. p. A1-A26.
- *537-B. Petrology of the Kilauea Iki Lava Lake, Hawaii, by D. H. Richter and J. G. Moore. 1966. p. B1-B26.
- *537-C. An acid fumarolic gas from Kilauea Iki, Hawaii, by K. J. Murata. 1966. p. C1-C6.
- *537-D. Petrography of the lavas of the 1959-60 eruption of Kilauea Volcano, Hawaii, by D. H. Richter and K. J. Murata. 1966. p. D1-D12.
- *537-E. Chronological narrative of the 1959-60 eruption of Kilauea Volcano, Hawaii, by D. H. Richter, J. P. Eaton, K. J. Murata, W. U. Ault, and H. L. Krivoy. 1970 (1971). p. E1-E73. Title page and contents for volume available free on application to the Geological Survey.
- *544-C. Hydrologic effects of the earthquake of March 27, 1964, outside Alaska, by R. C. Vorhis, E. E. Rexin, and R. W. Coble. 1967. p. C1-C54.
- *550-A. Geological Survey Research 1966. 1966. p. A1-A385.

PROFESSIONAL PAPERS—Continued

- *550-B. Geological Survey Research 1966. 1966. p. B1-B227. Contains the following article, which is not available separately.
Lava coils of some recent historic flows, Hawaii, by D. L. Peck. p. B148.
- *550-C. Geological Survey Research 1966. 1966. p. C1-C269. Contains the following article, which is not available separately.
Organic geochemistry of three North Pacific deep-sea sediment samples, by J. G. Palacas, V. E. Swanson, and G. W. Moore. p. C102.
- *550-D. Geological Survey Research 1966. 1966. p. D1-D267. Contains the following articles, which are not available separately.
Volcanic rocks dredged southwest of the Hawaiian Islands, by C. G. Engel and A. E. J. Engel. p. D104.
"Eclogite" in Hawaiian basalts, by E. D. Jackson. p. D151.
Rate of palagonitization of submarine basalt adjacent to Hawaii, by J. G. Moore. p. D163.
- *575-A. Geological Survey Research 1967. 1967. p. A1-A377.
- *575-B. Geological Survey Research 1967. 1967. p. B1-B265. Contains the following articles, which are not available separately.
Water and deuterium in pumice from the 1959-60 eruption of Kilauea Volcano, Hawaii, by Irving Friedman. p. B120.
Geochemistry of deep-sea sediment along the 160° W. meridian in the North Pacific Ocean, by V. E. Swanson, J. G. Palacas, and A. H. Love. p. B137.
- *575-C. Geological Survey Research 1967. 1967. p. C1-C251. Contains the following article, which is not available separately.
May 1963 earthquakes and deformation in the Koa'e fault zone, Kilauea Volcano, Hawaii, by W. T. Kinoshita. p. C173.
- *575-D. Geological Survey Research 1967. 1967. p. D1-D297. Contains the following articles, which are not available separately.
Infrared radiation from Alae Lava Lake, Hawaii, by R. W. Decker and D. L. Peck. p. D169.
A determination of the daily mean discharge of Waiakea Pond springs, Hilo, Hawaii, by G. T. Hirashima. p. D242.
- *600-A. Geological Survey Research 1968. 1968. p. A1-A371.
- *600-B. Geological Survey Research 1968. 1968. p. B1-B235. Contains the following article, which is not available separately.
Hawaiian seismic events during 1965, by R. Y. Koyanagi. p. B95.
- *600-C. Geological Survey Research 1968. 1968. p. C1-C225. Contains the following article, which is not available separately.
Earthquakes from common sources beneath Kilauea and Mauna Loa Volcanoes in Hawaii from 1962 to 1965, by R. Y. Koyanagi. p. C120.
- *607. The December 1965 eruption of Kilauea Volcano, Hawaii, by R. S. Fiske and R. Y. Koyanagi. 1968. 21 p.
- *614-C. The October 1963 eruption of Kilauea Volcano, Hawaii, by J. G. Moore and R. Y. Koyanagi. 1969. p. C1-C13.
- *650-A. Geological Survey Research 1969. 1969 (1970). p. A1-A425. \$7.55.
- *650-B. Geological Survey Research 1969. 1969. p. B1-B203. \$4.60. Contains the following article, which is not available separately.
Hawaiian seismic events during 1966, by R. Y. Koyanagi. p. B113.
- *650-C. Geological Survey Research 1969. 1969. p. C1-C247. \$5.40. Contains the following article, which is not available separately.
Hawaiian seismic events during 1967, by R. Y. Koyanagi. p. C79.
- *650-D. Geological Survey Research 1969. 1969 (1970). p. D1-D299. Contains the following article, which is not available separately.
Hawaiian seismic events during 1968, by R. Y. Koyanagi. p. D168.
- *656. Investigations of ferruginous bauxite and other mineral resources on Kauai and a reconnaissance of ferruginous bauxite deposits on Maui, Hawaii, by S. H. Patterson. 1971. 74 p.
- *680-A. Deep drilling on Midway atoll, by H. S. Ladd, J. I. Tracey, Jr., and M. G. Gross. 1970. p. A1-A22.
- *680-B. Petrology of the basalt cores from Midway atoll, by G. A. Macdonald. 1969. p. B1-B10.
- *680-C. Larger Foraminifera from deep drill holes on Midway atoll, by W. S. Cole. 1969. p. C1-C15.

CIRCULARS—Continued

676. Estimated use of water in the United States in 1970, by C. R. Murray and E. B. Reeves. 1972. 37 p.
682. Summary of United States mineral resources, by D. A. Brobst, W. P. Pratt, and V. E. McKelvey. 1973. 19 p.
701. Goals, strategy, and tasks of the earthquake hazard reduction program, by R. E. Wallace. 1974. 26 p. (Reprint.)
713. Seismic engineering program report, October—December 1974. 1974. 19 p.
- 715-E. Selection of streamflow and reservoir-release models for river-quality assessment, by M. E. Jennings, J. O. Shearman, and D. P. Bauer. 1976. p. E1-E12.
- 717-A. Seismic engineering program report, January—March 1975. 1975. 17 p.
- 717-B. Seismic engineering program report, April—June 1975. 1976. 6 p.
- 717-C. Seismic engineering program report, July—September 1975. 1976. 17 p.
- 717-D. Seismic engineering program report, October—December 1975. 1976. 16 p.
720. Mineral resource management of the Outer Continental Shelf, by M. V. Adams, C. B. John, R. F. Kelly, A. E. LaPointe, and R. W. Meurer. 1975. 32 p. (Reprint.)
721. Earth-science information in land-use planning—guidelines for earth scientists and planners, by William Spangle and Associates; F. Beach Leighton and Associates; and Baxter, McDonald and Company. 1976. 28 p. (Reprint.)
- 723-A. Earthquakes in the United States, January—March 1974, by C. W. Stover, R. B. Simon, and W. J. Person. 1976. p. A1-A18.
- 723-B. Earthquakes in the United States, April—June 1974, by R. B. Simon, C. W. Stover, and W. J. Person. 1976. p. B1-B24.
- 723-C. Earthquakes in the United States, July—September 1974, by C. W. Stover, R. B. Simon, and W. J. Person. 1976. p. C1-C19.
726. Assessment of geothermal resources of the United States—1975, by D. E. White and D. L. Williams, editors. 1975. 155 p. (Reprint.)
729. Earthquake prediction—opportunity to avert disaster, 1976. 35 p. (A conference on earthquake warning and response held in San Francisco, California, on November 7, 1975.) (Reprint.)
731. A guide to State programs for the reclamation of surface mined areas, by E. A. Imhoff, T. O. Friz, and J. R. LaFavers. 1976. 33 p.
- 736-A. Seismic engineering program report, January—March 1976. 1976. 17 p.
- 736-B. Seismic engineering program report, April—June 1976. 1976. 12 p.
740. Earthquakes and related catastrophic events. Island of Hawaii, November 29, 1975: A preliminary report, by R. I. Tilling, R. Y. Koyanagi, P. W. Lipman, J. P. Lockwood, J. G. Moore, and D. A. Swanson. 1976. 33 p.

MAPS, CHARTS, AND ATLASES

(See ordering instructions on p. 1.)

GEOLOGIC QUADRANGLE MAPS

- ✓ GQ-667. Geologic map of the Kilauea Crater quadrangle, Hawaii, by D. W. Peterson. 1967. Lat 19° 22'30" to 19° 30', long 155° 15' to 155° 22'30". Scale 1:24,000. \$1.75.
- ✓ GQ-827. Geologic map of the Kau Desert quadrangle, Hawaii, by G. W. Walker. 1969 (1970). Lat 19° 15' to 19° 22'30", long 155° 15' to 155° 22'30". Scale 1:24,000. \$1.75.
- ✓ GQ-897. Geologic map of the Mauna Loa quadrangle, Hawaii, by G. A. Macdonald. 1971. Lat 19° 22'30" to 19° 30', long 155° 30' to 155° 37'30". Scale 1:24,000. \$1.75.
- ✓ GQ-957. Geologic map of the Kipuka Pakekake quadrangle, Hawaii, by G. A. Macdonald. 1971. Lat 19° 22'30" to 19° 30', long 155° 22'30" to 155° 30'. Scale 1:24,000. \$1.75.

HYDROLOGIC INVESTIGATIONS ATLASES

- HA-200. Chemical quality of public water supplies of the United States and Puerto Rico, 1962, shown as Statewide averages, mainly in graphic and tabular form, by C. N. Durfor and Edith Becker. 1964. \$1.25.
- ✓ HA-218. Fresh-water springs of Hawaii from infrared images, by W. A. Fischer, D. A. Davis, and T. M. Sousa. 1966. \$1.25.
- HA-239. Floods in Kahaluu area, Oahu, Hawaii, by M. M. Miller. 1966. Scale 1:12,000. \$2.

WATER-SUPPLY PAPERS-Continued

Annual reports of the Geological Survey containing data of the water resources of the United States

Year	WSP	Price	Year	WSP	Price	Year	WSP	Price	Year	WSP	Price
Information on water levels and artesian pressure in observation wells											
1935	*777		1942	*949		1949	*1161		1956-60	*1770	
1936	*817		1943	*991		1950	*1170		1961-65	*1855	
1937	*840		1944	*1021		1951	*1196		1966-70	*2010	\$1.15
1938	*845		1945	*1028		1952	*1226				
1939	*886		1946	*1076		1953	*1270				
1940	*911		1947	*1101		1954	*1326				
1941	*941		1948	*1131		1955	*1409				
Stream measurements in the years mentioned											
1909-11	*318		1926	*635		1940	*905		1954	*1349	
1912	*336		1927	*655		1941	*935		1955	*1399	
1913	*373		1928	*675		1942	*965		1956	*1449	
1914-15	*430		1929	*695		1943	*985		1957-58	*1569	
1916	*445		1929-30	*710		1944	*1015		1959	*1639	
1917	*465		1930-31	*725		1945	*1045		1960	*1719	
1918	*485		1931-32	*740		1946	*1065		1961-65	*1937	\$6.75
1919	*515		1932-33	*755		1947	*1095				
1920	*516		1933-34	*770		1948	*1125				
1921	*535		1934-35	*795		1949	*1155				
1922	*555		1935-36	*815		1950	*1185				
1923	*575		1936-37	*835		1951	*1219				
1924	*595		1937-38	*865		1952	*1249				
1925	*615		1939	*885		1953	*1289				

CIRCULARS (Circulars are distributed free upon specific request to the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202, as long as editions last.)

- *64. Preliminary maps and reports released by the Geologic Division and the Conservation Division, 1948, compiled by R. A. Atherton, Jane Titcomb, and R. E. Spratt. 22 p.
- *367. Developed and potential water power of the United States and other countries of the world, December 1954, by L. L. Young. 1955. 14 p., 1 fig. (See Circular 483.)
- *395. Index of surface-water records to September 30, 1955, Hawaii, by E. G. Bailey. 1956. 12 p. (Superseded by Circulars 515, 586, and 666.)
- Open-file report lists for 1949-74 (annual, except as indicated):
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