

Reference sources on ground-water hydrology

By:

Vorhis, R. C.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
GROUND WATER BRANCH
Washington 25, D. C.

GROUND WATER NOTES
REPORTS

No. 29

June 1957

REFERENCE SOURCES
ON
GROUND-WATER HYDROLOGY

By

Robert C. Vorhis

CONTENTS

	Page
Introduction	2
Serial publications on ground water and related subjects by governmental agencies, societies, and organizations	2
Bibliographies and abstracts	6
Dictionaries and glossaries	9
Handbooks and manuals	10
Societies and biographic data	11

Open file
For distribution in the Ground Water Branch only

INTRODUCTION

Material relating to ground-water hydrology is scattered through a wide range of the "knowledge spectrum". Original contributions to ground-water science may appear in journals of civil engineering, geology, chemistry, meteorology, and even seismology, among others. Such diversity in published sources makes it difficult to do a thorough job of examining current literature or conducting library research.

With the output of scientific papers as great as it is, you as an individual and a scientist are undoubtedly finding it time consuming to do the library research needed to keep abreast of whatever field that you would like to call your own. This Ground Water Note has been prepared in the hope that it will help you to find shortcuts to the published literature that you may need. In the preparation of this note, four publications have been of special help. Grateful acknowledgement is made to their authors, and a hearty recommendation is made for the high value of their work as guideposts to geologic literature:

Pearl, Richard M.

1951. Guide to geologic literature: New York, McGraw-Hill Book Co., Inc.

Mason, Brian

1953. The literature of geology: Ann Arbor, Edwards Bros., Inc.

Howell, J. V., and A. I. Levorsen

1946. Directory of geological material in North America: Am. Assoc. Petroleum Geologists Bull., v. 30, no. 8, pt. 2, p. 1321-1432.

Long, Harriet K.

1950. Manual of reference sources in geology: Wash. Univ. Libraries (St. Louis) Ref. Man. 5.

Following are references of a general nature. The writer hopes later to prepare a companion note summarizing reference sources on a regional basis.

SERIAL PUBLICATIONS ON GROUND WATER AND RELATED SUBJECTS BY GOVERNMENTAL AGENCIES, SOCIETIES, AND ORGANIZATIONS

Agricultural Engineering

Occasional papers on water spreading, infiltration, and drainage.

American Association of Petroleum Geologists Bulletin

Occasional papers on water chemistry and oil-field hydrology.

American Geophysical Union Transactions

American Water Works Association Journal

Centre Belge d'Etude et de Documentation des Eaux Bulletin

Civil Engineering (Publication of Am. Soc. Civil Engineers)
Occasional papers on hydrologic subjects

Civil Engineering (published in Great Britain)
Occasional papers on hydrologic subjects

Comptes Rendus des Séances de l'Académie des Sciences (Paris)
Occasional papers on hydrology, fluid mechanics, geology, etc.

Driller

L'Eau (France)

Economic Geology (published by Society of Economic Geologists)
Occasional papers on ground-water subjects

Engineering News-Record
Often contains news notes on ground-water developments, and applications of hydrologic knowledge to engineering problems.

Le Genie Civil
Occasional articles on ground-water hydraulics

Geochimica et Cosmochimica Acta
Often contains articles on ground-water geochemistry

Geotechnique
Contains articles on ground water as related to soil mechanics.

G W F (Das Gas- und Wasserfach)
Issues with odd numbers are devoted entirely to gas; even numbers, entirely to water.

La Houille Blanche
Frequent articles on ground-water flow; generally highly theoretical

Ingenieria Hidráulica en México
Occasional articles on hydrology and hydraulics

Institut d'Hydrologie et de Climatologie Annales (France)
Articles on trace elements, complete chemical analyses of waters, and geochemistry

Institution of Water Engineers Journal

Occasional papers in this journal are among the very best published on ground water--for example, Buchan's paper on "Artificial replenishment of aquifers".

Johnson National Drillers Journal

Ground-water articles, especially on well construction and practical ground-water hydraulics, generally in nontechnical style.

Mining Engineering (Published by Am. Inst. Mining and Metallurgical Engineers).Monde Souterrain

Contains mention of ground-water incidental to underground construction and operations.

New England Water Works Association Journal

Occasional papers on ground water as related to public water supply.

Petroleum Engineer

Frequent papers on fluid flow

Public Roads

Occasional papers on highway hydrology, especially drainage

Recherches Hydrauliques

A publication that lists and describes hydraulic research projects being carried on throughout the world. Supplements U. S. Commerce Department publication "Hydraulic Research in the United States".

Revista de Obras Sanitarias de la Nación (Argentina)

Has republished a number of Survey-prepared ground-water papers, as translated into Spanish

Soil Science

Occasional papers on infiltration, soil-moisture determination, etc.

Soil Science Society of America Proceedings

Generally contains highly mathematical and technical papers on soil-moisture movement, etc.

Technique de l'Eau (France)

Occasional articles on ground-water occurrence, water quality, etc., especially as they pertain to public supply

Terres et Eaux (Algeria)

Articles on irrigation, ground-water dams, drainage, etc. Includes the Supplement Scientifique, the interim

journal for the projected International Association of Hydrogeologists.

U. S. Coast and Geodetic Survey

United States Earthquakes.--An annual publication; includes data from earthquakes registered on water-level recorders.

U. S. Geological Survey

Water-Supply Papers.--The principal means of publishing the results of ground-water investigations of the Geological Survey. It includes descriptive and theoretical reports of substantial value and lasting interest.

Circulars.--Intended primarily for reports of temporary interest, and progress reports that are to be followed by comprehensive reports.

Professional Papers.--Includes unusually large or comprehensive ground-water or water-resources reports and interdivision or interagency reports.

Hydrologic Atlas.--Used primarily to publish maps, charts, tables, and other such material on ground water and water resources.

Ground-Water Notes.--A series, released to the open file but distributed only within the Survey, of (1) papers describing new advances in ground-water hydrology which otherwise would not be available, or would be available only after considerable delay, (2) to provide reprints of older papers, generally ones that are out of print.

Vom Wasser (German)

An annual publication devoted mainly to water chemistry.

Water (Netherlands)

All articles in Dutch; rarely contains significant articles on ground water.

Water and Sewage Works

News items on ground-water developments, chiefly for public supply.

Water and Water Engineering (published in Great Britain)

News items on ground-water developments, chiefly for public supply.

Water Power (published in Great Britain)

Chiefly concerns hydroelectric development.

Water Well Journal (Journal of the National Water Well Association)

Occasional popularized articles on ground-water subjects.

Water Works Engineering

News items on ground-water developments, chiefly for public supply.

BIBLIOGRAPHIES AND ABSTRACTS

American Geophysical Union

Transactions.--Published bimonthly; each issue includes a list of current references on hydrology.

Bibliography of hydrology, 1935-39.--(1935-36 under one cover; others issued annually).

Annotated bibliography on hydrology, 1941-50.--(United States and Canada).

American Water Works Association Journal

Each issue contains abstracts and reviews of articles dealing with water supply, water chemistry, etc.

Annotated Bibliography of Economic Geology

A semiannual publication that contains a section on Water supply with abstracted references grouped under subheadings of Water resources, Ground waters, Mineral and thermal waters, and Miscellaneous. Other sections that may list papers pertaining to hydrology include Soils and weathering, Engineering geology, Geophysical investigations, and Geochemical investigations.

Bulletin Signalétique (a French publication)

Each monthly issue organizes the newly published scientific literature giving bibliographic citations and very brief annotations. Journal name formerly was Bulletin Analytique.

Applied Mechanics Reviews

Topflight scientists all over the world prepare the abstracts and reviews for this publication, so the reviews are among the best written and most critical of those that are published anywhere. The articles relating to ground water are generally found under the heading Soil mechanics, seepage; some are found under Geophysics, Meteorology, and Oceanography.

Bibliography Index. 1937 to date

A quarterly compilation of bibliographies that appear in books and in 300 periodicals. Arranged by subject. Includes bibliographies in fields of geology and water.

Bibliography of Agriculture

References on ground water are generally given under the headings Soil management, Drainage, and

Utilities, water supply.

Bibliography of Translations from Russian Scientific and Technical Literature

Very rarely lists any translations from the extensive Soviet publications on ground water.

Chemical Abstracts

Section 14 of each issue groups together abstracted references to all phases of water chemistry.

Current Geophysical Publications

Gives references with numbers used to indicate general subject of each paper (43 for geology, 44 for hydrology).

Dissertation Abstracts

Each monthly issue has abstracts of dissertations grouped by subject. Those rare ones that pertain to ground water are generally under headings of geology, geography, or civil engineering.

East European Accessions List

This Library of Congress publication includes references and index to all publications of the eastern European countries. Ground-water publications, if any, are generally indexed under Water, underground.

Geological Society of London

Geologic literature added to the Geological Society's library, v. 1 - v. 37, 1895-1934.

Geological Society of America

Bibliography and index of geology exclusive of North America, published annually from 1933 to 1940, biennially from 1941 to 1946, and annually from 1947 through 1951.

L'Eau

Each issue contains abstracted references on water grouped by subject.

Geologiska Föreningens

The number 4 issue of each volume of this journal contains reviews and abstracts of major Swedish geological and some hydrological papers. The abstracts appear in French, German, or English.

Geophysical Abstracts

A quarterly serial of world literature on gravity, magnetism, seismology, electricity, radioactivity, volcanology, and tectonophysics, and geophysical exploration.

La Houille Blanche

Each issue contains reviews and numerous references grouped by subject.

Meteorological Abstracts and Bibliography

Occasional abstracted references to ground water or related fields are given under the following headings: Hydrometeorology, Climatology, and Climatic change.

Monthly Catalog of U. S. Government Publications

An annual index included in the December issue makes this series more usable.

Monthly List of Russian Accessions

This Library of Congress publication includes references and index to all Russian publications. Ground-water publications, if any, are generally indexed under Water, underground.

Pangborn, M. W.

1950. The earth for the layman: Am. Geol. Inst. Rept. 2, 50 p. \$1.00. Lists four papers on ground water and springs.

Public Health Engineering Abstracts (now published by Robert A. Taft, Sanitary Engineering Center, Cincinnati, Ohio)

Each issue contains references to and abstracts of numerous articles, generally relating to public water supplies.

U. S. Department of Defense

Annotated bibliography of snow, ice, and permafrost: Snow, Ice, and Permafrost Research Establishment (SIPRE) Rept. 12, v. 1 to 6 are published.

U. S. Geological Survey

Catalog and index of contributions to North American geology, 1732-1891, by N. H. Darton: U. S. Geological Survey Bull. 127.

Bibliography of North American Geology:

1785-1918,	Bull.	747
1919-1928,	"	823
1929-1939,	"	937
1940-1941,	"	938
1942-1943,	"	949
1944-1945,	"	952
1946-1947,	"	958
1948,	"	968
1949,	"	977
1950,	"	985
1951,	"	1025
1952-1953,	"	1035
1954,	"	1054

U. S. Geological Survey (continued)

Bibliography and index of publications relating to ground water prepared by the Geological Survey and cooperating agencies (to 1946): Water-Supply Paper 992.

Incorporates contents of Water-Supply Paper 427, which covered the period up to about 1917.

Annotated bibliography of publications relating to ground water prepared by the Geological Survey and cooperating agencies, 1946-55: Water-Supply Paper 1492 (in press).

References on ground-water hydrology: Prepared for internal circulation in the Ground Water Branch; 18 lists prepared between January 1952 and April 1957. Most references are accompanied by an abstract or review.

DICTIONARIES AND GLOSSARIES

American Geological Institute

1957. A glossary project covering geology and related sciences.

American Society of Civil Engineers

1949. Glossary of water and sewage control engineering.

Colas, René, and M. Gasser

1955. Glossary of water terms, French - English, English - French: Internat. Water Supply Assoc.

Meinzer, O. E.

1923. Outline of ground-water hydrology, with definitions: U. S. Geological Survey Water-Supply Paper 494.

Rice, C. M.

1948. Dictionary of geological terms (exclusive of stratigraphic formations and paleontologic genera and species): Ann Arbor, Mich., Edwards Brothers, Inc.

U. S. Geological Survey

1955 (revised edition). Hydrologic definitions, chapter 10 in Handbook for hydrologists; prepared for use within the Geological Survey only.

Wilmarth, M. Grace

1938. Lexicon of geologic names of the United States: U. S. Geol. Survey Bull. 896. Geologic units are listed alphabetically and each is described as to

lithology, thickness, age, underlying and overlying formations, and type locality.

HANDBOOKS AND MANUALS

Anderson, Keith E.

1948. Water well handbook: Missouri Water Well Drillers Association.

Chemical Rubber Publishing Co.

1955. Handbook of chemistry and physics, 37th edition: Cleveland.

Eshback, Ovid W.

1952. Handbook of engineering fundamentals: New York, John Wiley and Sons, Inc., 2d ed.

Rohwer, Carl

1940. Putting down and developing wells for irrigation: U. S. Dept. Agr. Circ. 546.

Stevens, J. C.

Data Book, 5th ed: Portland, Oregon. Data given are useful primarily in installing and maintaining water-level recorders.

U. S. Bur. Reclamation

1953. Water measurements manual, a manual pertaining to measurement of water for irrigation projects.

U. S. Department of the Army

1943. Well drilling: Tech. Man. TM 5-297.

1944. Ground water supply for military operations: Tech. Man. TM 5-296.

U. S. Geological Survey

1924. Data of geochemistry, by F. W. Clarke: Bull. 770.

1930. Hydraulic conversion tables and convenient equivalents.

1935. Suggestions to authors.

1946, on. Handbook for hydrologists. (For use within Geological Survey only.) The 11 chapters issued so far deal primarily with aspects of surface water.

U. S. Government Printing Office

1953. Style Manual

SOCIETIES AND BIOGRAPHIC DATA

American Association of Petroleum Geologists

Membership list published annually in March issue

American Geophysical Union

Alphabetical and geographical lists of members, lists of committees, and lists of publications are published in the Transactions, v. 35, no. 61, pt. 2, 1954.

Cattell, Jaques

1955. American men of science, a biographical directory, 9th ed., v. 1, Physical sciences: Lancaster, Pa., Science Press. Data for 43,518 persons engaged in the physical sciences. Data includes major field and present position, address, birth and family, education and degrees, previous positions, and specialized fields of interest.

Geological Society of America

Membership list published annually

International Association of Hydrologists

Organized provisionally during the Algiers meetings of the 19th International Geological Congress. Formal establishment of the organization was discussed further at Mexico City in connection with the meetings of the 20th International Geological Congress.

International Association of Hydrology

Commission des Eaux Souterraines

The international counterpart of the Hydrology section of the American Geophysical Union. Meetings are held every 3 years.

International Geological Congress (Algiers)

1952. Liste des geologues du monde invites a assister an XIX Congres Geologique International. Alphabetical and geographical lists.

Society of Economic Geologists

Proceedings for 1950-53 contains lists of present officers and committees former officers, and members.