

Continent-Scale Aquifer Maps

World-wide Hydrogeological Mapping and Assessment Programme (WHYMAP)

UNESCO and BGR

To contribute to world-wide efforts to better study, manage, and protect freshwater resources, the Worldwide Hydrogeological Mapping and Assessment Programme (WHYMAP) was launched in 1999. The

program aims to collect, collate, and visualize hydrogeological information at a global scale. Currently available for download are groundwater resources maps of the world, as well as of each continent. Additional maps show global river basins and mean annual river discharge, mean annual precipitation, and groundwater recharge per capita.

Visit www.whymap.org.

Eight Years of CALFED Science Summarized

State of Bay-Delta Science, 2008

CALFED Science Program

This is the CALFED Science Program's first extensive effort at compiling, synthesizing, and communicating the current scientific understanding of the San Francisco Bay Estuary and Sacramento-San Joaquin Delta ecosystems. The report focuses on what was learned during the first eight years of CALFED and provides a basis for upcoming decisions during the next stage, the Delta Vision Strategic Plan, and other delta planning initiatives.

Chapters address delta history, science, geophysics, water quality and supply, aquatic ecosystems, levees, climate change, and policy development.

Download the 174-page report (or summary pages) from www.science.calwater.ca.gov/publications/sbds.html.

Abstracts now being accepted!

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Arizona Hydrological Society
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Southwest HYDROLOGY

Nonperennial Stream Benefits Evaluated

The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-arid American Southwest

U.S. EPA and USDA-Agricultural Research Service

Following recent federal-level discussions and Supreme Court decisions as to whether ephemeral and intermittent streams constitute “waters of the United States” under the Clean Water Act, the U.S. EPA funded this study to determine the connection and value of ephemeral and intermittent streams to perennial stream systems. Such streams in Arizona, California, Colorado, Nevada, New Mexico, and Utah were included in the study, which looked at hydrologic features, geomorphic characteristics, biogeochemical functions, plant community support, faunal habitat and support, and anthropogenic impacts.

The 76-page (plus references) report (EPA/600/R-08/134 or ARS/233046) is available at www.tucson.ars.ag.gov/unit/publications/PDFfiles/1981.pdf.

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For more information, contact Brad Cross at 480.905.9311 or via e-mail at brad.cross@lfr.com.

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Spring Ecosystems Examined

Arid Land Springs in North America: Ecology and Conservation

L.E. Stevens and V.J. Meretsky (eds.)

This substantial book focuses on spring ecosystems in arid North America. It draws on noted experts in a variety of fields, including hydrology, conservation biology, ecosystem dynamics, water law, geology, paleoecology, and cultural anthropology. Chapters cover spring classification, conservation issues, questions of human land use, plant diversity and vegetation dynamics, and biophysical and legal aspects of spring management.

The 432-page book is available from the University of Arizona Press for \$75 at www.uapress.arizona.edu/BOOKS/bid1963.htm.

Info on AZ Wells and Springs

GWSI Web Application

Arizona Dept. of Water Resources

This new website provides data from the Arizona Department of Water Resources (ADWR) Groundwater Site Inventory (GWSI) database, a repository for field-verified data on Arizona groundwater collected by personnel from ADWR and the U.S. Geological Survey. Well information can be located by well ID, through an interactive map, or by specifying spatial criteria, including groundwater basin, subbasin, cadastral, and USGS topographic quad. Hydrographs are interactive and may be customized to the desired scale. The site is continually updated.

Visit arcims.azwater.gov.

More Advice to Obama

A National Agenda for Drinking Water

American Water Works Association and others

The water industry is calling on President Obama to make drinking water issues such as safe drinking-water standards, source-water protection, and infrastructure investment a priority in his administration.

The National Agenda is a collaboration of the American Water Works Association, Association of Metropolitan Water Agencies, National Association of Water Companies, and National Rural Water Association. They urge the President to support both an economic stimulus package for drinking water projects and long-term water-infrastructure

investment. They suggest that all the recommendations should be viewed as an investment in America's future. Some will require legislation, others new federal appropriations—"though none will require large sums"—or policy and direction from the president.

The 16-page report is available at www.awwa.org/files/GovtPublicAffairs/PDF/Transition.pdf.



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Isotope Analysis

D/H ¹³C/¹²C ¹⁵N/¹⁴N ¹⁸O/¹⁶O ³⁴S/³²S

¹³C/¹²C of Chlorinated Solvents in Groundwater and Soils

¹⁵N/¹⁴N of NO₃, NH₃; D/H + ¹⁸O/¹⁶O in Groundwater
D/H, ¹³C/¹²C, ¹⁴C of Crude, Petroleum Fuels & Gases

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Methods and indicators for assessment of regional ground-water conditions in the southwestern United States, by F.D. Tillman, S.A. Leake, M.E. Flynn, J.T. Cordova, K.T. Schonauer, and J.E. Dickinson
<http://pubs.usgs.gov/sir/2008/5209/>

Ground-water, surface-water, and water-chemistry data, Black Mesa area, northeastern Arizona, 2006-07 by Margot Truini and J.P. Macy
<http://pubs.usgs.gov/of/2008/1324/>

Three-dimensional numerical model of ground-water flow in Northern Utah Valley, Utah County, Utah, by Philip M. Gardner
<http://pubs.usgs.gov/sir/2008/5049/>

Hydrology of Northern Utah Valley, Utah County, Utah, 1975-2005 by J.R. Cederberg, P.M. Gardner, and S.A. Thiros
<http://pubs.usgs.gov/sir/2008/5197/>

Using logistic regression to predict the probability of debris flows in areas burned by wildfires, southern California, 2003-2006 by M.G. Rupert, S.H. Cannon, J.E. Gartner, J.A. Michael, and D.R. Helsel
<http://pubs.usgs.gov/of/2008/1370/>

Atmospheric deposition and surface-water chemistry in Mount Rainier and North Cascades National Parks, U.S.A., water years 2000 and 2005-2006 by D.W. Clow and D.H. Campbell
<http://pubs.usgs.gov/sir/2008/5152/>

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