

# **SOUTHWEST GEOLOGY, INC.**

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**GARY L. DIXON, Geologist**

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## **EDUCATION**

B.A. in Geology – Western State College, Gunnison, Colorado, 1964-1969. Numerous courses in technical and scientific fields such as geophysical exploration, geophysical logging techniques and many administrative short courses.

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## **MEMBERSHIP IN PROFESSIONAL SOCIETIES**

Geological Society of America (1972-1997)  
American Geophysical Union (1980)  
Colorado Scientific Society (1970-1981)  
Geological Society of Nevada (1998)  
Nevada Water Resources Association (1999-present)  
Nevada Geological Society (1990-present)

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## **EXPERIENCE**

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United States Geological Survey  
1999 – 2007

Scientist Emeritus: Geologic Division Regional Geologist Office, Menlo Park California. Provides scientific and technical leadership and guidance to USGS scientists and staff as needed.

Southwest Geology, Inc.  
1999 – present

Consulting geologist in the southwest United States. Founder of Southwest Geology, Inc. Focus is primarily in the desert southwest specializing in geologic framework studies related to geologic hazards, the potential of ground-water resources, geologic mapping, geophysical investigations as applied to solving aforementioned framework studies, and working closely with other geosciences in solving modern urban problems. Prior to forming his own company he worked for 33 years with the United States Geological Survey. Provides consulting services to:

--Southern Nevada Water Authority in matters of geology, geophysics, and hydrogeology as needed. Currently working on the geologic framework of the White River Flow System in anticipation of the Delamar/Dry Lake/Cave Valley water right hearings.

--C-Punch Ranch properties as an expert witness for the protestant at the Granite Springs water right hearings.

--Southern Nevada Water Authority as an expert witness at the Spring Valley water right hearings.

--Provided geology and hydrogeologic expertise to the SEMBRA corporation for evaluation and ground-water modeling of the Smoke Creek Desert Hydrologic-Basin, Washoe County, Nevada and Lassen County, California

--Provided geology and hydrogeologic expertise to the Washington County Water Conservancy District for work on the route of the Lake Powell water pipeline.

--Provided geologic and hydrogeologic data to the Washington County Water Conservancy District for work on the Sand Hollow Reservoir and well field area.

--Southern Nevada Water Authority as an expert witness at the Three Lakes Valley water rights hearings.

--Virgin Valley Water District as expert witness for the protestant in the Tule Desert water right hearings. Provides geologic and hydrogeologic expertise to the VVWD as needed.

United States Geological Survey  
1965-1999

Geologist: Project Chief, National Cooperative Geologic Mapping Program, Las Vegas Urban corridor Project. Coordinated 15 project scientists in the geologic mapping (1:100,000-scale geologic mapping) in the Las Vegas and Lake Mead quadrangles. The purpose of the mapping was to record the geologic, geophysical, and hydrologic history of the quadrangles before urbanization destroyed the record. The study resulted in over 50 publications, which was concluded in 1999 with the publications of the two maps. Worked closely with the Las Vegas Valley Water District, Southern Nevada Water Authority, Virgin Valley Water District, National Park Service-Lake Mead National Recreation Area, and Nevada Bureau of Mines and Geology - Las Vegas, Nevada.

Geologist: Coordinator/liaison for EPA sponsored projects in the southwest for the Geologic Division of the USGS - Las Vegas, Nevada.

Geologist: Coordinated the Geologic Division efforts in the Nevada Carbonate Aquifer Program. Principal program responsibility included providing scientific, technical, and

administrative leadership to the Program participants: Water Resources Division, U.S. Bureau of Reclamation, Las Vegas Valley Water District, Nevada Bureau of Mines and Geology – Las Vegas, Nevada.

Geologist: Program Manager, Radioactive Waste Disposal at the Nevada Test Site, and assistant Branch Chief, Engineering Geology Branch, USGS – Denver, Colorado. Managed and coordinated over 40 employees that had scientific and investigative responsibilities to the Waste Disposal Program at the Nevada Test Site. Represented the USGS in interfacing with the DOE.

Geologist: Acting Branch Chief, Special Projects Branch. Supervised over 50 employees while the Branch was being disbanded and dispersed into other branches in the USGS – Denver, Colorado.

Geologist: Special Projects Branch geologist working at the Nevada Test Site starting research to identify storage sites for radioactive wastes and siting underground nuclear tests. Included geologic mapping at the Nevada Test Site and detailed geologic mapping in Central Nevada. While in Central Nevada, supervised deep drilling (>6,000') program and bore hole geophysics in support of the drilling. Over 20 holes were drilled and logged.

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Barnes, Harley, Fernald, A.T., and Dixon, G.L., 1965, Surface effects from an underground test at the U9bs site, Yucca Flat, Nevada Test Site: U.S. Geological Survey Technical Letter NTS-147, 4 p., 2 figs.

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