# Curriculum Vitae of GARY L. HIX, R.G., CWD/PI

## **EDUCATION & TRAINING**

University of Phoenix, 1984, M. A. Business Management University of Arizona, 1979, B. S. Geology

#### CERTIFICATIONS, REGISTRATION'S, & LICENSES

Certified Well Driller and Pump Installer, National Ground Water Association Certified Real Estate Instructor (Retired) Arizona Department of Real Estate Certified Professional Geologist, (Retired) American Institute Professional Geol. Registered Professional Geologist, Arizona #13515

## **ASSOCIATION MEMBERSHIPS:**

Arizona Hydrological Society, Hydro-geologist member Arizona Water Well Association, Member & Past President 2012 – 2013 American Institute of Professional Geologists, 25+ Year member Groundwater Foundation, McEllhiney Lecturer for 2019 National Ground Water Association, Scientist & Engineer Member > 40 Years

#### **EXPERIENCE BRIEFS**

Gary's career in hydrogeology and resource management began as a full time Hydrologist1 for Tucson Water in 1979. He became a groundwater scientist member of the NGWA in 1980. At Tucson Water he was involved in many of their water resource evaluations and well drilling and construction projects. He left Tucson Water in 1986 to become VP and Sales Manager for a water well drilling company. When he did, he became an Arizona licensed water well drilling contractor and a Contractor member of the NGWA.

After a few years of being the Qualifying Party on a well driller's license for others, Gary went out on his own in 1991 forming Saguaro Environmental Services Co. and was very active providing services in the groundwater monitor well market. After several years he changed the name to Saguaro Well & Pump serving mainly the domestic water well market. When he sold his business in 2007 he was no longer a contractor and changed his NGWA membership back being a Scientist and Engineer.

He currently provides water well consulting services to well drillers, pump installers and to buyers of real estate served by private or shared water wells. He also serves as an expert witness on cases related to well drilling contracts and well share agreement disputes. Gary' emphasis today is on: Outreach, Education and Participation in the water well industry.

#### JOB HISTORY

- 2007 Present. Water Well Consultant dba In2Wells, LLC.
- 1992 2007 Owner Manager of Saguaro Well & Pump Co.
- 1991 1992 Vice President Maher Environmental Drilling, Inc. Tempe, AZ.
- 1990 1990 Sr. Hydro-geologist Applied Geosciences, Inc. Tustin, CA.
- 1986 1990 Vice President, Western Well & Pump, Inc., Tempe, AZ.
- 1985 1986 Capital Improvement Program Engineer, Tucson Water
- 1979 1985 Hydro-geologist, Tucson Water, Planning Division
- 1968 1979 Explorationist, Heinrichs Geo Exploration Co. Tucson, AZ.

# PARTIAL LIST OF TECHNICAL PRESENTATIONS, AND PUBLISHED ARTICLES, RELATED TO WATER WELL DRILLING, CONSTRUCTION AND GROUNDWATER RESOURCE MANAGEMENT

- 1. "Shared Water Wells in Arizona, A Guide-Book for Well Managers", a Kindle e-book available through Amazon.com published April 2020.
- 2. "Don't Go Drilling Alone", article in the Irrigation Today magazine, Spring, 2020. A publication of the Irrigation Association.
- 3. "A Guide for Operating Shared Water Wells In Arizona", A publication of the U of A Co-Op Extension. Bulletin1810. by G. Hix & J. Artiola, February 2020.
- 4. "Continuing to Learn" Guest Editorial WWJ, a publication of the National Groundwater Association, February 2020.
- 5. McEllhiney Distinguished Lecturer for 2019, giving talks throughout the US. Continuing a tradition of honoring William A McEllhiney first president of the National Ground Water Association. Sponsored by the Groundwater Foundation.
- 6. "Experts Preparing Lawyers for Trial" article published in the Arizona Attorney magazine March 2019 a publication of Target Market Media.
- 7. "Adapting to the Changing Nature of Water Well Drilling Markets", Guest Editorial WWJ. a publication of the National Groundwater Association, February 2018.
- 8. "Drilling Disasters and What We Learned From Them", a Continuing Education presentation for the New Mexico Ground Water Association, Albuquerque, NM, January 2016 & 2018.

- 9. "Well, What Do We Know" a series of workshops for private well owners conducted with J. Artiola, Ph.D. and Ms. Kristine Uhlman, of the University of Arizona Co-Operative Extension. Starting in December 2009 and continuing through June of 2020.
- 10. "Private Water Well and Residential Properties", a 3 Hour Continuing Education course for Real Estate Agents & Appraisers taught at the Hogan School of Real Estate, Tucson from 2006 to 2018, and also taught at the Scottsdale School of Real Estate and Business from 2014 to Dec 2017.
- 11. "Water Well System Inspections" a Brown Bag webinar presented for the National Ground Water Association October 25, 2017.
- 12. "Arizona Well Owner's Guide to Water Supply, 2<sup>nd</sup>. Ed. A publication of the U of A Co-Op Extension. Bulletin 1485 Revised. by J. Artiola, K. Uhlman, G. Hix. June 2017.
- 13. "Due to Drought, Farming, Irrigation and Groundwater Wells Are Forever Linked" Irrigation Today, a publication of the Irrigation Association, April 2017.
- 14. "Domestic Water Wells in Arizona, A Guide for Realtors and Mortgage Lenders" an e-book available through Amazon published September 2016.
- 15. "Water Well Drilling Methods", a workshop for Bureau of Land Management employees, Las Vegas, NV. and Phoenix, AZ. Different dates from 2002 to June 2018.
- 16. "Drilling In Extremely Hot Weather" Article in NGWA Newsletter, a publication of the National Groundwater Association, July 5, 2016.
- 17. "What All Arizonans Should Know About Private Water Wells" a presentation at the Appleton-Whittell Research Ranch, Elgin, AZ, March 12, 2016.
- 18. "Ethical Issues Surrounding Well Inspections" article published in the June 2015 issue of the Water Well Journal, a publication of the National Groundwater Association. Followed by a workshop given at the December NGWA Expo and Conference, Las Vegas, NV. Dec 16, 2015.
- 19. "Warning to Realtors and Mortgage Lenders, Shared Water Wells Carry No Warranty of a Future Water Supply" Article published in Hogan School or Real Estate newsletter The Front Runner, November December 2016.
- 20. "What Does It Mean to Certify? Article published in Hogan School or Real Estate newsletter Front Runner, July-August 2015.
- 21. "Private Wells And Their Place in Future Plans for Arizona" A Power Point presentation made at 6<sup>th</sup>. Annual Science on the Sonoita Plains, Appleton-Whittell Research Ranch of the Audubon Society, Elgin, AZ. June 6, 2015

- 22. "An Arizona Guide to Domestic Well Registration and Record-keeping" Co authored with J. Artiola, Ph D., University of Arizona Cooperative Extension Bulletin AZ1663, May 2015.
- 23. "Straight Well Require Straight Drilling Methods", article published in Arizona Water Well Association newsletter Well Said, Fall 2014 and as "On Target" in the Water Well Journal, a publication of the National Ground Water Association. March 2015.

References to additional publications and presentations (approx. 80) dating back to 1980 are available on request.