



Gary E. Freeman, Ph.D., PE, D.WRE
President

Dr. Gary Freeman is a principle of R₂D with more than 25 years experience in dealing with water related engineering issues. He is a registered Civil Engineer in eight states and taught stream restoration courses for ASCE. He has supervised a number of floodplain studies in in the western United States and has been deeply involved in performing and directing hydraulics and sediment transport studies in the western United States for both rivers and alluvial fans. Projects have included hydraulics, hydrology, sediment transport and geomorphology. Dr. Freeman's training and broad background in hydraulics give him an understanding of the forces associated with the flow of water.

Areas of Expertise

Hydraulics/Hydraulic Modeling
Fluvial Geomorphology
Sedimentation Transport
Multi-dimensional Modeling
Water Resources

Education

BS, Ag & Irr. Engineering, Utah State
MS, Irrigation Engineering, Utah State
PhD, Civil Engineering, Texas A&M
JD, Law, Brigham Young University

Professional Affiliations

Am. Society of Civil Engineers, Fellow
ASFP, Certified Floodplain Manager
Am. Acad. of Wat. Res. Eng., Diplomate
U.S. Committee on Irrigation and
Drainage
U.S. Society on Dams
Phi Delta Phi
Tau Beta Pi
Sigma Xi

Publications/Teaching/Research

Authored more than 50 publications
(List available upon request)
Taught Stream Restoration courses for
ASCE and AFMA as well as two-
dimensional modeling courses U.S.
Army Corps of Engineers

Dr. Freeman spent seven and a half years with the U.S. Army Waterways Experiment Station in Vicksburg, MS as a Research Hydraulic Engineer. During this time he served as a member of two White House Committees for which he was awarded the Army's Achievement Medal for Civilian Service. Dr Freeman modified and applied the Corps two-dimensional hydrodynamic model, RMA-2, to a wide variety of applications including both coastal and inland applications.

Dr. Freeman also holds a law degree and was a licensed attorney in Arizona for 10 years. This perspective gives him the ability to adapt engineering designs to fit within the legal constraints of the project. His law degree also allows him to be successful in permitting projects. He has a broad background in the application of hydraulic principle to complex problems allows him to assist clients in the successful completion of difficult projects. He has been successful on projects that have removed 60+ acres from waters of the United States and redelineated complex floodplains.

Recent projects include sediment problems associated with the Ohio River, headcuts from sand & gravel mining operations, and comparisons of the ability of hydraulic and sediment transport models to predict headcut erosion associated with sand and gravel pits.

Clients include the U.S. Army Corps of Engineers, USAID, local flood control districts, private clients and state agencies. He has worked internationally in Africa and Central America.

Contact Information

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