

Qualifications Summary

- Professional engineer with 30 years of experience in developing and implementing projects in the environmental and water resources sectors
- Extensive experience in planning, managing, and implementing infrastructure programs for water resources projects in the United States, Latin America, the former Soviet Union, the Pacific Rim, and the Middle East countries.
- Proven ability to work effectively in a multinational team environment and liaise effectively with government agencies, civil society, and international donors
- Capability for managing multiple assignments with skills for resolution of issues in multi-cultural settings

PAUL C. DREYER, PE, BCEE

Senior Civil Engineer

Professional Affiliations

- PE Professional Engineer licensed by examination in New Jersey in 1972, Massachusetts in 1974, and New York in 1992
- BCEE Board Certified as Environmental Engineer by the American Academy of Environmental Engineers (AAEE) in 1973

Fields of Expertise

Professional environmental engineer with 30 years of experience in planning, managing, and implementing infrastructure development programs for water resources, water, and wastewater projects in the United States, the Caribbean, Central and South America, the Middle East, the South Caucasus, Central Asia, and the Pacific Rim countries.

Recent experience includes the Mid-Program Review of an environmental Task Order contract for the USACE, the design and coordination of a major remediation program in the desert and coastal areas of eastern Saudi Arabia, and the development and implementation of a regional transboundary program for USAID in the three countries of the South Caucasus.

Excellent knowledge of all phases of engineering projects with a demonstrated ability to oversee the management of all program activities. Proven ability to work effectively in a multinational team environment and liaise effectively with government agencies, donors, and civil society.

Higher Education

- MSCE Civil Engineering - North Carolina State University, Raleigh, North Carolina in 1969
- BSCE Civil Engineering - Newark College of Engineering, Newark, New Jersey in 1964

Employment History

- 2010-present Woods Hole Group Inc., Falmouth, Massachusetts
- 2004-2010 Woods Hole Group Middle East, Riyadh, Saudi Arabia
- 2001-2004 Development Alternatives, Inc., Bethesda, Maryland
- 1994-2001 CH2M Hill, Inc., Denver, Colorado
- 1969-1994 Camp Dresser & McKee Inc., Cambridge, Massachusetts

Country Experience

Argentina, Armenia, Azerbaijan, the Bahamas, Bahrain, Cayman Islands, Chile, Colombia, Costa Rica, Dominican Republic, Dubai, Ecuador, Egypt, Republic of Georgia, Guatemala, Honduras, Hong Kong, Kazakhstan, Kyrgyz Republic, Mexico, Panama, Paraguay, Peru, the Philippines, Qatar, Romania, Puerto Rico, Saudi Arabia, Singapore, Thailand, Taiwan, Turkmenistan, Ukraine, United Arab Emirates, United States, U.S. Virgin Islands, Uruguay, Uzbekistan, and Venezuela.

Key Projects

Various Engineering Projects in the Middle East - Deputy Program Manager (2005-2010)

Clients: Presidency for Meteorology and the Environment and the Royal Commission for Jubail and Yanbu
Responsible for the development and implementation of engineering activities that includes planning, design, and implementation of water, ecological remediation, and training programs for private and public sector clients in Saudi Arabia and in the Middle East. Specific activities include the remediation design of the coastal and terrestrial areas in northeast Saudi Arabia as a result of the Gulf War and data collection and the development of groundwater models for the remediation in the major industrial areas.

Water Management in the South Caucasus - Regional Manager (2001-2004)

Client: United States Agency for International Development (USAID)
Developed and coordinated a regional water management program with Armenia, Azerbaijan, and Georgia for fostering cooperation in the South Caucasus that included monitoring of meteorological and hydrological data, training in computer programs, preparation of pre-feasibility water studies, development of river basin councils, and regional cooperation on trans-boundary issues in bi-lateral settings (USAID).

Water and Wastewater Projects in Puerto Rico - Strategic Project Manager (1998-2000)

Client: Agency for Financing Infrastructure (AFI)
Developed and implemented three strategic projects as part of a major water infrastructure program on the island of Puerto Rico that considered alternative delivery methods and innovative design and included development, design, permitting, bidding, and services during construction with local funding (AFI).

Rehabilitation of the Water and Wastewater Sector in Perú - Project Manager (1997-1998)

Client: Servicio de Agua y Alcantarillado (SEDAPAL)
Completed engineering studies and design for a rehabilitation program of the water and wastewater systems in a section of the historic area of Lima that included field studies, modeling, engineering design, detailed drawings and specifications, and bidding with international funding (IBRD).

Environmental Policy and Technology Project in Central Asia - Regional Manager (1994-1996)

Client: United States Agency for International Development (USAID)
Developed and implemented a series of water management policy workshops leading to interregional agreements on water use in the five countries of Central Asia that were the first international effort and with the donor community and counterparts from Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan. Specific activities included oversight for the design and construction of water system improvements in remote areas of Kazakhstan, Turkmenistan, and Uzbekistan that included a reverse osmosis water treatment facility, improvements to water treatment plants, well field rehabilitation, and the provision of laboratory instruments and training as part of the U.S. Aral Sea Program (USAID).

Wastewater System for Seven Mile Beach in the Cayman Islands - Engineering Advisor (1993)

Client: Water Authority of the Cayman Islands (WA)
Advisor for a major infrastructure project including design, bidding, and construction services for the first wastewater system in the country for the Water Authority with various international funding sources (GCI, IBRD, and CDB).

Conception Water Supply Development in Honduras - Project Manager (1992)

Client: Servicio Autonomo Nacional de Acueductos y Alcantarillados (SANAA)
Managed a multidisciplinary team that conducted microcomputer simulation models, geotechnical evaluations of dam sites, and treatment options for the development of a new water supply for Tegucigalpa with international funding (TDA). The project received recognition for excellence from the ASCE.

Key Projects (Continued)

Guatemala Water and Wastewater National Plan in Guatemala - Project Manager (1990-1991)

Client: Instituto de Fomento Nacional de Guatemala (INFOM)

Conducted a national planning inventory for 329 communities in Guatemala and developed prioritized planning criteria for water and wastewater systems based on extensive field studies, and prepared detailed feasibility studies for thirty communities with a local counterpart (IDB).

Water and Wastewater Projects in Florida and the Bahamas - Team Leader (1980-1989)

Clients: Broward County Department of Utilities, City of Hallendale, and Water Authority of the Bahamas

Project Manager of a regional wastewater system expansion in Florida that included the design, permitting, bidding, and construction services, and for a series of projects that included elevated water storage tanks, booster pumping stations, sewerage systems, and treatment plants (USEPA). Also responsible for the design and implementation of a series of water projects in the islands of the Bahamas and South Florida.

Other Significant Activities

Mid-Program Review for Environmental Planning in New England – Senior Civil Engineer

Responsible for the detailed review of a U.S. Army Corps of Engineers Task Order contract for environmental planning and consulting services ranging from field and laboratory analyses to mitigation of Superfund sites that included the review of more than 30 task orders and two dozen partners in the New England District (USACE).

Asia Bureau Water Strategy for South Asia - Consultant

Participated on a multi-disciplinary team that developed an Asia Bureau Water Strategy for sustainable water resource development and management for planning of future investments (USAID).

Environmental Action Plan for Central Asia - Consultant

Participated on a multi-disciplinary team that developed an Environmental Action Plan for the Central Asian Republics in Kazakhstan that included sustainable water management of the Aral Sea and reduced pollution levels as strategic objectives for planning of future investments (USAID).

Wastewater Technology Case Study Lectures - Consultant

Invited lecturer in wastewater treatment technology and case studies as part of a training course for World Bank environmental engineers sponsored by the University of North Carolina at Chapel Hill, NC (IBRD).

Quality Control of Subsurface Data Collection – Quality Assurance Officer

Implemented a quality control program as Quality Assurance Officer for the assessment and remediation services contract of a major highway program for the Massachusetts Highway Department in Boston (USDOT).

American Water Works Association International Affairs Committee - Chairman

Chairman of the International Affairs Committee of the American Water Works Association (AWWA) and Member of the first Board of Directors that initiated Water for People (WPF) program for short-term technical assistance in the developing world that has recently completed ten years of successful operations.

Publications and Presentations

Mr. Dreyer has presented more than twenty technical papers on international development and policy issues in the environmental and water sectors in sixteen different countries.