Gary Smith, P.E.

Gary Smith is a Senior Project Manager with FNI with experience in water and wastewater engineering. He has been involved in project management and design for water and wastewater treatment plants, pump stations, water storage facilities and water distribution systems. He has managed all phases of projects, including studies, design, construction services, start-up and operator training. He has managed large and complex water and wastewater projects for major municipalities throughout Texas.

Mr. Smith is active in professional organizations, both at the state and national levels. He was involved in forming the local chapters of the American Water Works Association in both the Dallas/Fort Worth and Houston areas and has served as the chairman of the Texas Section. Mr. Smith was recipient of the 2003 George Warren Fuller Award from the Texas Section for his contributions to the water industry.

Relevant Project Experience

Desalination Feasibility Study, Clayton Williams Farms (Fort Stockton) – Project Manager for feasibility evaluation for desalination of brackish groundwater to meet the Texas Secondary Drinking Water Standards. Evaluated alternate technologies and reviewed analytical data to provide a recommendation for the most appropriate technology. Prepared conceptual-level designs and cost estimates for reverse osmosis.

Port Lavaca Water Treatment Plant Capacity Evaluation, Guadalupe-Blanco River Authority – Project Manager for evaluation of 4.9-MGD water treatment plant for future expansion to 7.0 MGD and 7.6 MGD. Performed analysis on existing plant's process, equipment and structures for future expansion. Prepared hydraulic schematics for liquid and solids processes and conceptual site plans for each plant expansion scenario. Offered recommendations for increasing plant capacity based on existing equipment, structures and TCEQ requirements along with recommendations for multiple phases of plant expansions.

Seymour-Capilano Filtration Plant, Greater Vancouver Water District (British Columbia) – Task Manager for design of residuals-handling facilities for 800-MGD water filtration plant. Residuals-treatment facility included chemical addition, flocculation and sedimentation of backwash water; thickening of the solids from the clarifier; solid dewatering; and polishing of the thickener overflow and belt press pressate using ballasted flocculation prior to recirculation to the head of the plant.

Northeast Water Treatment Plant, Houston Area Water Corporation – Design manager for 30-percent design for bidding the first phase of a new 60-MGD water treatment plant using design-build delivery method. Included a new intake in Lake Houston and a conventional sedimentation-filtration treatment train followed by UV reactors to provide a higher level of pathogen removal.

River Intake and Water Treatment Plant, Bexar Metropolitan Development Corporation – Project Manager for design and construction phase services for the International Business Park Production Facility using design-build delivery method. Project included a river intake with ultimate capacity of 20 MGD, 24-inch raw water transmission line and a 9-MGD treatment plant that uses membrane filtration technology.

Information Collection Rule for O.N. Stevens Water Treatment Plant, City of Corpus Christi – Project Manager for Information Collection Rule (ICR) for the 165-MGD plant, assisting the City in obtaining compliance with EPA-mandated ICR. Project included an 18-month sampling and analysis program and bench-scale studies. Additional studies included a pilot study to develop strategies for treating a blend of two raw water sources and a filter media study to prepare the plant for the Interim Enhanced Surface Water Treatment Rule.

Water Treatment Plant, Greater Texoma Utility Authority – Project Manager for pre-design, design and construction phase services for a 10-MGD water treatment plant. Included conventional water treatment processes such as flocculation, sedimentation, filtration and disinfection. Used demineralization for a portion of the plant flow to reduce Total Dissolved Solids (TDS) and chlorides to TCEQ standards. A pilot study was conducted to select the demineralization process. Also included a state-of-the-art instrumentation and control system.

Water Treatment Plant Expansion, Palo Pinto County Municipal Water District No. 1 – Project Manager for water treatment plant expansion to 8 MGD to provide potable water to Mineral Wells and other nearby communities. Included the addition of flocculation basins, clarifiers, rapid sand filters, chemical feed building and a high-service pump station

Wastewater Reclamation, Kimberly-Clark, Paris, Texas – Project Manager for an industrial wastewater reclamation facility. Kimberly-Clark built a disposable diaper manufacturing facility that used high pressure water jets to cut paper as part of the manufacturing process. Kimberly-Clark elected to build an on-site treatment plant to remove the paper fibers from the wastewater stream so that the water could be recycled for irrigation of the plant's grounds.

Wastewater Reclamation, Levi Strauss, San Antonio, Texas – Project Manager for an industrial wastewater pretreatment facility. Levi Strauss' facility in San Antonio used a large volume of potable water to process fabric. The resulting wastewater contained solids and was highly colored from the fabric dyes. The project included upgrading the solids removal facility to reduce wastewater surcharges and examining the feasibility of using ozone to oxidize the color so that a portion of the water could be recycled.

Education

B.S., Environmental Engineering, Purdue University

Registrations/Certifications

Professional Engineer, Texas #50030 (two states total)

Areas of Expertise

Water Treatment Advanced Water Treatment Alternative Disinfection Membrane Technology Regulatory Compliance

Papers and Presentations

Optimization of Water Treatment Plants, Texas Water Utilities Association Annual Short School (2002)

Design-Build Operate Delivers and Saves, U.S. Water and Wastewater Summit (2000)

Taking Advantage of the ICR, Texas Water Conference (1999)

Preserving the Past – Planning for the Future, Texas Water Conference (1998)

What is the Real Capacity of Your Treatment Plant?, Water Environmental Association of Texas Annual Conference (1992)

Was the Pilot Study Worthwhile?, American Water Works Association Annual Conference (1992)

Bachman Water Treatment Plant Rehabilitation Study, American Water Works Association Texas and Southwest Sections (1990)

Safe Drinking Water Act Amendments and Their Impact on the Water Industry, Texas Section of the American Society of Civil Engineers (1988)