



THOMAS E. RILEY, P.E.
Water Resources/Environmental Engineer

SUMMARY OF PROFESSIONAL QUALIFICATIONS...

- President and operating partner of successful Midwest environmental consulting firm.
- Exhibited success in project direction, supervision, and management, as well as proposal development and client cultivation.
- Skilled in hydraulic and hydrologic modeling, computer aided drafting and design, stream flow and water quality assessment, project cost-estimating, instrument-oriented surveying, and GPS data collection
- Directed multiple inter-disciplinary projects, including efforts related to water resources engineering, hazardous and solid waste investigations, groundwater restoration, and environmental compliance.
- Illustrated problem-solving abilities and strong facilitation skills for developing solutions for multi-objective groups.

ACADEMIC PROFILE...

PhD: University of Nebraska, Lincoln: Biological System Engineering; in progress
M.S.; University of Nebraska, Lincoln; Civil Engineering; 1988
B.S.; University of Nebraska, Lincoln; Civil Engineering; 1986

CERTIFICATION and AFFILIATIONS...

Registered Professional Engineer in Nebraska (E-7137), Iowa, Missouri, Kansas & South Dakota
Wetlands Seminar for the Creation of Wetlands for Wastewater Treatment, Enhancement, and Mitigation
40-hour OSHA hazardous waste health and safety training
American Society of Civil Engineers

PROFESSIONAL EXPERIENCE...

Hydrology - Conducts or participates in all phases of hydrologic investigation, including watershed response modeling, stream flow and flood hydrology, and statistical evaluation of hydrologic data. Participates in inter-disciplinary efforts in Wetland Hydrology and restoration. Coordinates data collection and database management, liaison with government agencies (local, state, and federal), application of current hydrologic techniques and software, permit applications, client recommendations, and report writing. Experienced with HEC-1, HEC-HMS, TR-55, HECWRC, and TR-20. Responsible for the development of monitoring program for stream flow monitoring and sampling. Developed and taught university graduate course in hydrology as ad hoc instructor for the University of Nebraska.

Hydraulics - Developed and directed a river model study evaluating roadfill embankments located on floodplains and their effects on flood backwater. Has performed many hydraulic evaluations of bridges, culverts, and floodplains. Experienced user of HEC-2, HEC-RAS, FHWA's HY-7 (WSPRO) program, FESWMS-2DH two-dimensional modeling program, UNET one-dimensional unsteady flow program, and HY-8 Culvert Analysis program. Project director for many wetland restoration projects and lake rehabilitation designs requiring hydraulic design. Manages urban stream bank rehabilitation projects that include two-stage channel design, bioengineering and riparian improvement techniques. Analyzed modeling data to receive a no-rise certification for stream bank projects by ensuring that design components did not increase the height of flood elevations on existing properties.

Project Management - Mr. Riley manages inter-disciplinary multi-office projects in both the environmental and water resources areas. Responsibilities include management of support staff, contract negotiation, proposal preparation, personnel assignment and oversight, coordination of field efforts, subcontractor management, report preparation, QA/QC, client correspondence, agency liaison, and presentations.

Habitat Restoration and Evaluation – Mr. Riley participates in various projects addressing water resources planning and engineering, habitat restoration evaluation and design, watershed and river basin analysis (surface and ground water), stream stability, and geomorphic analysis. Mr. Riley has recently concentrated on solutions for stream degradation and habitat loss for the Salt Creek Tiger Beetle near Lincoln, Nebraska. He also directed the design of Missouri River backwater habitat for the pallid sturgeon. His focus has been ephemeral and perennial streams developing long term interventions for restoration and the development of improved habitat. In particular, he has focused on restoration using his experience, hydrologic/hydraulic modeling, and GIS applications to minimize the anthropogenic effects on hydrologic/geomorphic processes and their effects on aquatic habitat.

Water Supply Management – Mr. Riley assists clients in evaluation of water supply and management issues through the use of multi-objective decision making processes. He uses complex surface and groundwater modeling along with other data to prepare evaluations and solutions for supply issues. He continues to work with DNR in finding solutions to water shortages in the Republican River Basin and with other entities across the region in this time of stressed water supply.

Litigation Support - Provided project management and technical support to the State of Nebraska's Attorney General for the Republican River Compact litigation heard before the Supreme Court. Provided expert witness testimony for No. 126, Original, Kansas v. Nebraska. Technical expert for multiple non-binding arbitrations related to the Republican River Compact. Expert in evaluating and presenting technical analysis for water dispute resolution.

Hazardous Waste Management - Managed comprehensive CERCLA PA investigations for USACE Civil Works recreational facilities at four mainstem dams on Missouri River. Included coordination of multi-location/disciplinary teams throughout 5 states. The project consisted of the research and reconnaissance of over 400 sites. Senior Engineer for feasibility studies for RI/FS at 12 Operable Units at Ellsworth AFB, SD. Used Presumptive remedy approach to accelerate cleanup and save Air Force resources. Project Manager for PA/SI for Hickam AFB, Hawaii. Project involved extensive community relations and tight schedule and budget. Project Manager for FS phase for Lake City Army Ammunition Plant. Act as facilitator for Army and regulator interactions. Project Engineer for "Fast Track" design of 58 oil/water separators at Fort Campbell, KY. Project Engineer for treatability studies of contaminated wastewater and completed Remedial Design for treatment of contaminated wastewater.

Solid Waste Management - University Instructor for graduate course in Solid Waste Management. Project Engineer for the preparation of a Closure/Post Closure Plan for 120-acre landfill at Minot Air Force Base. Managed projects for the preparation of RCRA Closure Plans, including development of sampling plans and cleanup efforts. For USACE-Nashville, managed development of engineering drawings, calculations, design analysis report, and cost estimate for upgrade of 58 oil/water separators. Led field program to characterize existing conditions at each site and performed sampling of influent and effluent at selected sites. Fast track design project worth over \$2 million completed in less than three months.

Surveying and Database Management - Works with current state-of-the-art surveying and data collection equipment. Performed numerous surveys for hydraulics evaluations, topographic analysis, wetland restoration, and dam site evaluation. Developed software for integrating electronic survey data with CADD. Routinely operates database management software by developing custom applications for office users. Laboratory instructor for beginning survey class at the University of Nebraska.

SELECTED PUBLICATIONS...

Coke, Gordon & Riley, Thomas. November/December 2011. "Restoring Eastern Nebraska's Saline Wetlands." Land and Water.

Riley, Tom et al. May/June 1998. "Creative Funding Results in Lake Restoration Success Story." Land and Water.

Riley, T.E., Todd, R. Petersen, D. November 1997. "Road to ROD." The Military Engineer.

Riley, T.E. 1996. Solid and Hazardous Waste Engineering. Undergraduate/Graduate environmental engineering course taught at the University of Nebraska-Lincoln.

Riley, T.E., et al. 1996. A Statistically Biased and Sequential Approach to Data Collection for a Hawaii Wartime Fuel System. Presented at SUPERFUND '96, Washington, D.C.

Todd, R.D., Riley, T.E., et al. 1996. Integrating Presumptive Remedies into the CERCLA Process: A Case Study of the Accelerated RI/FS at Ellsworth Air Force Base, SD. Presented at SUPERFUND '96, Washington, D.C.

Riley, T.E. 1996. Solid and Hazardous Waste Engineering. Undergraduate/Graduate solid waste management taught at the University of Nebraska-Lincoln.

Riley, T.E. 1993. Hydrology. Undergraduate/Graduate water resources course taught at the University of Nebraska-Lincoln.

Dahab, M.F., Becker, H.L., Riley, T.E. July 1991. Treatment of a Wood Products Superfund Wastewater: A Case Study. Canada Journal of Civil Engineering.

Riley, T.E. April 1990. Introductory training workshop for AutoCad users. Inter-office training seminar.

Riley, T.E. 1988. A Hydrologic Evaluation of Twenty-four Small Watersheds in Nebraska. Masters Thesis, University of Nebraska-Lincoln.

Riley, T.E. 1987. Hydrologic and Hydraulic Design of Culverts. Unpublished report for the Nebraska Department of Roads.

EMPLOYMENT HISTORY...

Senior Engineer/Principal, The Flatwater Group, Incorporated; Lincoln, Nebraska; 2000-present

Serves as a firm President and active as project director/manager. Civil engineer with extensive experience in both environmental and water resources engineering. He manages various projects addressing water resources planning and engineering, CERCLA preliminary assessment and site inspections, solid and hazardous waste management, remediation and feasibility studies, database management, and project report writing. Mr. Riley is a project director/manager for inter-disciplinary projects ranging from litigation support; environmental restoration; site inspections; preparation of CERCLA feasibility studies, proposed plans, records of decision, and engineering evaluations/cost assessments; hydrologic analyses; and hydraulic structure evaluation and design.

Senior Engineer/Project Manager, EA Engineering, Science, and Technology, Incorporated; Lincoln, Nebraska; 1988-2000

Served as a civil engineer with extensive experience in both environmental and water resources engineering. He managed various projects addressing water resources planning and engineering, CERCLA preliminary assessment and site inspections, solid and hazardous waste management, remediation and feasibility studies, database management, CADD/GIS, computer graphics and design applications, cost estimation, and project report writing. Mr. Riley was project manager for inter-disciplinary projects ranging from preliminary assessments and site inspections; preparation of CERCLA feasibility studies, proposed plans, records of decision, and engineering evaluations/cost assessments; hydrologic analyses; and hydraulic structure evaluation and design. Project Director for Lake Restoration projects for the Midwest.

Ad-Hoc Instructor, University of Nebraska-Lincoln Civil Engineering Department; Lincoln, Nebraska; 1993-Present

Research Assistant/Graduate Student, University of Nebraska-Lincoln Civil Engineering Department; Lincoln, Nebraska; 1985-1988