

EDUCATION

- , California State University, Sacramento
MS in Civil Engineering, 1998
with emphasis in Water Resources
- , California State University, Sacramento
BS in Civil Engineering, 1996

PROFESSIONAL LICENSES and SOCIETIES

- , Registered Civil Engineer in California, 60093
- , Member, American Society of Civil Engineers

EXPERIENCE

- 2000 to present MBK Engineers, Sacramento, CA
Consulting Civil Engineer
Practice in the fields of hydrology, hydraulics, flood control, ecosystem restoration, streambank protection design.
- 1999 - 2000 US Army Corps of Engineers, Sacramento, CA
Senior Project Planner
Developed and reviewed reconnaissance and feasibility reports in support of congressional authorizations. Responsible for alternative development, incremental analysis, policy compliance, document preparation, and coordination with the local sponsor as well as the public.
- 1998 US Army Corps of Engineers, Sacramento, CA
Research Hydraulic Engineer (USACE, Waterways Experiment Station)
Developmental assignment to enhance knowledge of interrelationship between hydrologic processes and ecosystem function. Supported development of stream restoration and biotechnical streambank stabilization guidelines for HQUSACE.
- 1995 - 1999 US Army Corps of Engineers, Sacramento, CA
Technical Manager and Civil Designer
Responsible for engineering design of flood damage reduction and ecosystem restoration projects. Coordinated structural, hydraulics, hydrology, geotechnical, and civil design aspects of project developmental. Developed biotechnical streambank stabilization plans, mitigation design, grading plans, utility relocations and conducted hydraulic analysis.
- 1994 - 1995 US Army Corps of Engineers, Sacramento, CA
Student Assistant
Developed database to track and store technical documents.

PROJECT HISTORY

05/00 to Present

- , Developed solution to correct spillway deficiencies at Smoke Creek Dam.
- , Designed 13,000 feet of streambank protection for Grand Island. Design includes environmental features to enhance near shore habitat.

1995 - 2000

- , Prepared alternatives paper for the American River Watershed Project in response to a congressional request. Report analyzed economics, and technical feasibility of raising Folsom Dam and updated the without project condition, costs and impacts of the Stepped Release Plan.
- , Developed alternatives, conducted incremental analysis and insured policy compliance for the Limited Reevaluation Report on the American River Watershed, Folsom Modifications Project.
- , Developed alternatives, performed incremental analysis and insured policy compliance for the Second Addendum to the Supplemental Investigation Report on the American River Watershed, Common Features Project.
- , Prepared a Preliminary Restoration Plan for an ecosystem restoration project in Wasach Mountain State Park, Utah at the Olympic cross-country venue site.
- , Conducted hydrologic analysis and floodplain mapping for Spring City, Utah.
- , Developed a biotechnical streambank stabilization plan and grading plan for two mitigation sites for off-site mitigation of bank protection work done at Site 5 on the Lower American River.
- , Developed a new method for evaluating energy and momentum losses dealing with floodplain water surface modeling in support of the Environmental Impact Research Program. Published as Master's Thesis.
- , Developed systematic approach toward obtaining permits related to stream restoration activities in support of the Environmental Impact Research Program.
- , Conducted a literature search and compiled information dealing with the flood tolerance of native vegetation in support of the Environmental Impact Research Program.
- , Reviewed hydraulic and stream restoration reports for technical accuracy as well as field applicability in support of the Environmental Impact Research Program.
- , Developed design surfaces for use in hydraulic simulations, grading plans, and utility relocation requirements for the Napa River Project.
- , Used HEC-2 and HEC-RAS to model small tributaries and develop flood reduction alternatives.
- , Developed biotechnical streambank stabilization plan for Napa Creek.
- , Developed biotechnical streambank stabilization plan for the Napa River.

- , Developed and designed mitigation plan for the Napa River Project.
- , Engineering and hydraulic analysis of Tulocay Creek.
- , Engineering and hydraulic analysis of Napa Creek.
- , Worked with all aspects of EIR/EIS process on the Napa River Project.
- , Wrote correspondence to Department of Water Resources, South Pacific Division, and several cities and counties to coordinate 1995 PL84-99 effort.
- , Responsible for design, plans and specifications, and construction inspection for three 1995 PL84-99 repair sites.
- , Conducted civil design tasks in support of the development of the Supplemental General Design Memorandum for the Merced County Streams.

CONTINUING EDUCATION

- , Stream Corridor Restoration
- , Streambank Protection
- , Flood Fight Methods
- , Applied Biogeotechnology
- , Readiness Management Basic
- , Shoreline Erosion Control & Revegetation
- , Erosion Control & Land Restoration
- , Stable Channel Design

BOARDS and COMMITTEES

- , AE Selection Panel for Napa River Bridge Design Contract
- , Lower American River Task Force Fish Work Group