

EDUCATION

- ◆ California State University, Sacramento
MS in Civil Engineering, 1998
- ◆ 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
Principal
Practice in the fields of hydrology, hydraulics, flood control, ecosystem restoration and streambank stabilization 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.
- 1994 - 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 development. Developed biotechnical streambank stabilization plans, mitigation design, grading plans, utility relocations and conducted hydraulic analysis.

PROJECT HISTORY

2000 to Present

- ◆ Program manager for the Three Rivers Levee Improvement Authority. Responsible for planning, design and construction of a \$400 million levee improvement program to provide 200 year protection to South Yuba County. The Program includes two setback levees, restores over 2000 acres of habitat and improves 29 miles of levees.
- ◆ Program manager for the Sacramento Area Flood Control Agency, Natomas Levee Improvement Program. Responsible for planning, design and construction of a \$620 million levee improvement program to provide 200 year protection to the Natomas Basin in Sacramento, CA. The Program consists of raising and strengthening 42 miles of levees.
- ◆ Program manager for the West Sacramento Area Flood Control Agency Levee Improvement Program. Responsible for planning, design and construction of a \$460 million levee improvement program to provide 200 year protection to the City of West Sacramento. The Project consists of raising and strengthening 50 miles of levee.
- ◆ District Engineer for RD 2103 and RD 817. Responsible for planning and design of a \$20 million levee improvement project to protect the City of Wheatland.
- ◆ Project manager and plan formulator for multiple SAFCA Projects including:
 - American River Watershed Project Long Term Study (Folsom Dam Raise).
 - Lower American River erosion monitoring and bank protection design
 - Common Features Project
- ◆ Project manager and planner for the City of St Helena Comprehensive Flood Control Project.
- ◆ YCWA project manager for the Corps of Engineers' Yuba Basin Project.

1995 - 2000

- ◆ Lead Project Planner on the following Corps of Engineers Projects:
 - American River Watershed Project Long Term Study.
 - Limited Reevaluation Report on the American River Watershed, Folsom Modifications Project.
 - Second Addendum to the Supplemental Investigation Report on the American River Watershed, Common Features Project.
- ◆ Prepared Preliminary Ecosystem Restoration Plan for project in Wasach Mountain State Park.
- ◆ Conducted hydrologic analysis and floodplain mapping for Spring City, Utah.
- ◆ Developed a biotechnical streambank stabilization plan and grading plan for:

- Mitigation sites on the Lower American River.
- Napa River and Napa Creek.

- ◆ 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.

- ◆ Used HEC-2 and HEC-RAS to model small tributaries and develop flood reduction alternatives.

- ◆ Lead Designer for the Napa River Flood Control Project.

- ◆ Responsible for design and construction inspection for 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