

Wagner & Bonsignore

Consulting Civil Engineers, A Corporation

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Patrick W. Ervin, P.E.
Martin Berber, P.E.
Ryan E. Stolfus

James C. Hanson, P.E.
Henry S. Matsunaga

DAVID P. LOUNSBURY PROFESSIONAL RESUME

REGISTRATION:

Civil Engineer, California (License. No. 61729)

EDUCATION:

B.S. Civil Engineering – University of the California, Davis – 1998

EXPERIENCE:

David Lounsbury is a registered civil engineer with over 19 years' experience in water resources management, hydrologic analyses, design of water diversion and conveyance facilities, design of levee improvement and habitat restoration projects, and analyses and design of embankment dams.

Mr. Lounsbury has extensive experience in the design, analysis, and construction of embankment dams and reservoirs under the jurisdiction of the California Division of Safety of Dams (DSOD) pursuant to California Water Code, Division 3, and also under local jurisdictions. Projects include new dams as well as the repair, alteration, and rehabilitation of existing dams, and also include impoundments with soil and/or synthetic liners for the containment of wastes subject to regulation by various Regional Water Quality Control Boards. He has performed embankment stability analyses on homogeneous and zoned embankments, and hydrologic and hydraulic analyses in connection with design of spillways and other hydraulic structures. Mr. Lounsbury has been the design and resident engineer on numerous dam construction and rehabilitation projects, many under DSOD jurisdiction, and has performed preconstruction and construction services including inspection, contract administration, and coordination of activities with State engineers and regulatory agencies.

Mr. Lounsbury has designed and overseen numerous levee improvement and habitat restoration projects in the Sacramento-San-Joaquin Delta from initial planning and funding phases, through environmental review and permitting, final design, and completion of construction.

Mr. Lounsbury has extensive experience in the acquisition and administration of appropriative water rights pursuant to Title 23 of the California Code of Regulations, including the preparation of water right applications and interaction with the State Water Resources Control Board, Division of Water Rights to obtain water right permits. Related activities include hydrologic analyses and water availability studies, acquisition of other regulatory permits, and coordination with regulatory agencies and other consultants in the preparation of supporting environmental documentation to address California Environmental Quality Act requirements.

RECENT EXPERIENCE INCLUDES THE FOLLOWING:

- ***Brooktrails Township Community Services District, Mendocino County - Lake Emily Dam Improvement Project:*** Design and resident engineer for the rehabilitation and enlargement of the Lake Emily Dam and water storage reservoir which is under State jurisdiction. Project included removal of potentially liquefiable material from beneath the dam embankment, installation of a drainage system within the embankment, and the construction of a new pneumatically-actuated bladder-gate water control structure. Total project cost including engineering services was over \$3 million.
- ***Lake Madrone Water District, Butte County – Lake Madrone Outlet Repair Project:*** Evaluate and develop strategies for the repair or replacement of a low-level outlet conduit extending through a State jurisdictional dam and under Quincy-Oroville Highway. Outlet remediation alternatives evaluated included abandonment and replacement, repair by slip-lining with various liner pipe materials, and repair with Cured In Place Pipe (CIPP). Prepared construction drawings and contract documents, obtained project approval from Division of Safety of Dams, and served as resident engineer during construction, including contract administration and coordination with State engineers and regulatory agencies. Total project cost including engineering services was about \$420,000.
- ***Reclamation District 341, Sherman Island, Sacramento County - Setback Levee Habitat Project:*** Design and resident engineer for construction of a setback levee and development of waterside habitat along 1.5-miles of levee on Sherman Island. Project design and construction began in 2002 and continued through completion in 2009. Total project cost including engineering services was over \$7 million. Project was awarded *2009 Environmental Project of the Year Award* by American Society of Civil Engineers, Sacramento Section.
- ***Reclamation District 348, New Hope Tract – Thornton/New Hope Flood Control Project, Phase 2:*** Design and resident engineer for the construction of four miles of levee and drainage improvements and crest repair on five miles of levee on the left bank of the Mokelumne River. Project was completed in 2013 with a total project cost including engineering services of over \$9 million.

- ***Kendall-Jackson, Jackson Family Investments, Sonoma County – Pine Top Reservoir Project:*** Design and resident engineer for the construction of an 88 acre-foot balanced cut-and-fill water storage reservoir located on a hilltop with a buried synthetic liner and house pad area requiring over 170,000 cubic yards of earthwork. Total project cost including engineering services was about \$1.4 million.
- ***Private developer (confidential project):*** Prepared water resources evaluations for a 9,000-acre agricultural property in northern California. Researched and evaluated existing water rights and water storage facilities to evaluate compliance with State regulations and requirements, and prepared a hydrologic analyses to evaluate water availability to support the development of up to 3,000 acres of new vineyard, and preliminary designs and cost estimates for up to 4,000 acre-feet of new water storage facilities situated throughout the property.
- ***Calaveras Public Utility District, Calaveras County - Middle Fork Dam FERC Evaluation:*** Evaluation of dam stability, embankment seepage rates, piezometer level fluctuations, and hydrologic flood flow updates for Federal Energy Regulatory Commission Part 12 Inspection of hydroelectric project.

CONTINUING EDUCATION:

- “Pumping Systems Design for Civil Engineers”, ASCE, December 1999
- “HEC-RAS Computer Workshop”, ASCE, January 2005
- “HEC-RAS Dam Breach Analysis Computer Workshop”, ASCE, September 2007
- “Construction Administration for Engineers”, ASCE, May 2008
- “Introduction to Dam and Levee Safety, Evaluation and Rehabilitation”, ASCE, February 2011
- “Streambank Stabilization for Restoration and Flood Control Projects”, ASCE, February 2011
- “Storm Water Treatment Using Detention and Commercial Devices”, ASCE, March 2012

PROFESSIONAL MEMBERSHIPS:

American Society of Civil Engineers