



DAM AND RESERVOIR SERVICES



HOLDREGE & KULL has significant and meaningful experience with many aspects of dam and reservoir construction, maintenance and repair. We have provided services for a wide variety of projects, including many that were under jurisdiction of the California Division of Safety of Dams (DSOD). H&K has reliably assisted local agencies, special districts, land trusts, home owners, and home owners associations in securing DSOD permits, providing quality assurance during construction, and resolving issues that could lead to dam failure or loss of reservoir use. H&K has earned the trust of DSOD personnel by accurately identifying problems and developing practical and economical solutions that comply with state guidelines. H&K's services include:

- » Full scale design and source material evaluation
- » Consultation for repair and rehabilitation
- » Construction quality assurance and materials testing
- » Compliance monitoring and reporting, and assistance with permit issues

EXPERIENCE MATRIX

Project Name	Design Services	Consultation & Repair	Construction Quality Assurance	Permitting & Compliance
Aukum View Dam		X		
Mammoth Dam			X	
Betz Pond	X			
Naggiar Vineyards Dam	X		X	X
Winchester Estates Dam	X		X	X
Dark Horse Dam	X		X	
Lake Van Norden Spillway		X		X
Pine Grove Dam		X		
Anthony House Dam		X		X
Magalia Reservoir		X	X	
South Main Regulating Reservoir		X	X	
Wildcat Dam	X	X		
Gardella Dam		X		
Sly Creek Dam		X		
Folsom Lake Spillway	X		X	
Jackson Meadows Spillway		X		X
Cashman Dam Rehabilitation	X	X		
French Meadows Spillway	X	X		
Rancho Santa Fe Dam	X			
Brichetto Reservoir		X	X	



Professional Registrations

- Geotechnical Engineer
- Certified Engineering Geologist
- Civil Engineer
- Professional Geologist
- Certified Hydrogeologist
- Qualified SWPPP Developer/Practitioner
- Certified Professional in Erosion and Sediment Control

H&K professional staff hold registrations in: California, Nevada, Arizona, Utah, Oregon, Washington, and Hawaii

Aukum Dam, El Dorado County, CA

- » Provided geotechnical consultation following citation by DSOD.
- » Diagnosed cause of dam seepage and developed economical repair plans and methodology that was approved by DSOD.
- » Earth dam repairs were successfully completed in 2012.

Mammoth Dam, Placer County, CA

- » Provided CQA services for rehabilitation of leaking earth dam under DSOD jurisdiction.
- » Provided full-time observation during dam reconstruction, soil and materials testing, and laboratory testing at frequencies required by DSOD.
- » Served as the liaison between Project Manager and DSOD Design Branch and Field Branch Engineers.

Van Norden Spillway Repairs - Norden, CA

- » Provided geotechnical consultation to evaluate and develop a strategy for emergency repairs that would survive the oncoming winter at this high elevation site.
- » Received DSOD approval and temporary repairs were made prior to the first snow storm.
- » Performed a hydrographic survey to evaluate long term dam and spillway repairs.
- » Developed a long term repair approach to the spillway that received DSOD approval and avoided lake draw-down.

Jackson Meadows Reservoir Spillway - Nevada County, CA

- » Performed slope stability analysis above the spillway.
- » Estimated amount of soil/rock that could impact the spillway if a slope failure occurred.
- » Performed laboratory testing of soil and rock samples; mapped joints, fractures and bedding attitudes in the volcanic rock at the site; coordinated large scale shear strength testing; and correlated primary joint and bedding orientation.

Wildcat Dam Removal - Tehama & Shasta Counties, CA

- » Developed rock fall mitigation plan to address the potential for hazardous rock fall during demolition and site work.
- » Performed hydraulic analysis and design for stream diversion during dam removal.
- » Provided environmental site characterization and construction quality control services related to heavy metals and asbestos contamination associated with pipeline coatings and support structures.

Anthony House Dam - Nevada County, CA

- » Evaluated previously reported anomalous dam movement, as requested to maintain DSOD compliance.
- » Currently performing monthly and quarterly monitoring of site piezometers and other monitoring points.
- » Performing engineering analysis of data to determine dam status.
- » Providing annual report to DSOD.

“Holdrege & Kull’s commitment to Aukum View Dam DSOD 346 I was instrumental in completing the repair to the dam. They worked closely with DSOD to develop an economical and practical repair to the earth dam and toe drain. H&K keenly understood our financial constraints and provided value engineering wherever possible”.

Mr. Lee Hodge and Ms. Cindy Skelton-Hodge
Showcase Ranches Community District

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Video web page



Project web page

