Water Management During Construction

Instructors’ Bios

David B. Paul, P.E., is a Senior Technical Advisor for Dams and Levees for HDR Inc./Denver Office. He retired from the US Army Corps of Engineers (USACE) at the end of 2018 after 42 years of Federal service, as the Dam Safety Officer for the Mosul Dam Task Force which provided technical assistance to the Government of Iraq in to mitigate dam safety issues associated with Mosul Dam. He also served as Special assistant for Dam Safety at the U.S. Army Corps of Engineers (USACE) headquarters in Washington, D.C., responsible for managing the USACE’s portfolio of 715 dams. He was the national specialist on critical infrastructure design, dam design, levee design, construction engineering, engineering risk assessments, interim risk reduction measures (IRRM), and dam and levee safety modifications. He recently participated in the Risk Assessment for Oroville Dam in California. Mr. Paul is currently a Trustee of the Deep Foundations Institute and a member of the United States Society of Dams (USSD), Association of State Dam Safety Officials (ASDSO) and American Society of Civil Engineers (ASCE). He is DFI Trustee for the Seepage Control and Grouting Committees and serves as Chairman of the USSD Committee on Construction and is also active with the Embankment Dams Committee. He is the USSD Representative to the International Commission on Large Dams (ICOLD) Embankment Dams Committee.

Daniel Johnson
Dam and Hydropower Engineer D
Daniel Johnson Consultants, Inc., Boulder, CO
Dan@djohnsonconsultants.com; 303-717-4443

Mr. Daniel Johnson, PE. MS. is a Principal Dam and Hydropower Engineer with a long list of projects performed when associated with the leading consulting engineering firms in the world. Dan is well qualified civil Engineer with about 45 years of experience in water resources, dam engineering, geotechnical engineering and civil engineering. He has been deeply involved as project manager or technical lead on about 220 water resource and mine tailings dam projects, in the U.S., Canada, Africa, Asia, Australia, New Zealand, and Central and South America. His roles have covered all project components from planning, evaluations, design, bidding, construction, and operations.

He is active in USSD, ICOLD, and ASDSO participating as past-Chairman of the USSD Construction and Rehabilitation Committee and Vice-Chairman of ICOLD Committee on Operations, Maintenance, and Rehabilitation. He has authored many papers on the RCC technology and in dam foundations and embankment dams, in general, and has assisted in preparation of Portland Cement Association (U.S.) guidelines for RCC dam rehabilitation and quality control and on the USSD publication on Construction of RCC Dams.

He is actively associated in project management and worked as senior technical lead/senior reviewer on design/construction projects such as:

- Lake Gregory Dam, San Bernardino County, California, seismic rehabilitation an 35m high embankment dam
- Diamond Valley Lake, California, the largest embankment dam (100,000,000 m³) project ever constructed in California
- Los Vaqueros Dam, Contra Costa County, California, a clay core, rockfill dam, over 60m high
- Olivenhain Dam, San Diego, California, a 60m foot high RCC gravity dam that was eventually enlarged to over 100m high
- Upper Chase Creek Dam, Arizona, a 35m high, membrane-faced rockfill dam
- Dillon Dam, Colorado, seismic evaluation, a 75m high zoned earth-rockfill dam
- John Hart Hydro Project, Canada, embankment dam seismic retrofit
- Demodara Dam, Sri Lanka, 18m high concrete gravity dam
- Lower Baker Dam seismic evaluation, 40m high arch dam
- Shiroro 635 MW Hydropower project, Nigeria, dam safety and operation upgrade

**Gregory G Hammer, P.E.** has over 40 years of experience in the field of dam engineering, with time spent as a designer, regulator, and owner. After several years in the Bureau of Reclamation’s embankment dams design branch, Mr. Hammer joined the Colorado Dam Safety program. After almost 28 years of inspecting dams, and reviewing designs for repairs and modifications he returned to Reclamation, as Chief of the Technical Analysis Branch in their Casper, Wyoming office. In that role he was responsible for the oversight of inspection and monitoring of the dams and appurtenant structures under the purview of that office. In 2015 he joined the US Army Corps of Engineers Dam Safety Modification Mandatory Center of Excellence.

Prior to joining the Colorado dam safety program, Mr. Hammer was employed by the US Bureau of Reclamation’s Embankment Dam Design Branch where he was responsible for the safety analysis of several USBR dams, including seismic evaluation for liquefaction potential. As a designer, Mr. Hammer was the lead design engineer for the embankment raise to Pactola Dam, near Rapid City, South Dakota. This structure was the first USBR application where a geomembrane was used as the impervious element in an embankment dam.

After retiring from the Colorado dam safety program, Mr. Hammer rejoined the USBR to serve the Chief of the Technical Analysis Branch in the Wyoming Area Office, where he oversaw the inspection and monitoring of the 13 dams and appurtenant structures under the purview of that office. In 2015 he joined the US Army Corps of Engineers Dam Safety Modification Mandatory Center of Excellence, providing technical guidance for design and construction of dam safety modifications, SQRA risk assessments, and review of District instrumentation program activities.

Mr. Hammer is a member of the Construction and Rehabilitation and Dam Safety committees of the US Society of Dams, where he is a life member. He is also a member of the American Society of State Dam Officials.

**Dan Hertel, P.E., Private Consultant**
*Engineering Solutions, LLC*
dhertel@q.com; 406.579.6261
*Construction Cost Estimating and Constructability Review*
Mr. Hertel is a registered professional engineer and private consultant. With his 36-year background in the construction of dams, pipelines, and other water resource projects, Mr. Hertel provides constructability reviews, cost estimates, value engineering and engineering support services to the engineering profession. He has been a private consultant since 2010, providing services on major dam projects in the United States for a variety of federal, state, and local agencies and engineers. His career includes 20 years as Vice President with Barnard Construction Company, one of the USA premier dam constructors. During his career at Barnard, Mr. Hertel held positions of Chief Estimator, Operations Manager, and Manager of Business Development. Mr. Hertel is a member of ASDSO and past President, Vice President, and Treasurer of USSD.