

"With a dams team of more than 100 technical staff throughout Australia GHD has been involved in dams since the company's birth almost 90 years ago."

Dams engineering requires understanding and control of the enormous forces and potential energy of water. From foundation and seismic assessments through to geotechnical, hydrological, hydraulic, mechanical and structural design, projects demand in-depth skills and a coordinated, client-focussed approach.

Identifying needs

We recognise our clients' need for solutions that harness indepth knowledge with forward thinking to produce innovative, safe and cost-effective outcomes. We'll work collaboratively with you to deliver results in line with these objectives.

Services

Investigations, appraisals and studies - We can work with you through the early phases of projects in the identification of project opportunities, site selection and optimisation, site investigations including geotechnical, hydrogeological and hydrological/hydrometeorological assessments, feasibility and option studies, environmental assessments and input for gaining statutory approvals.

Design services - We provide design services through all phases of a project regardless of size from concept through to detailed engineering. Our experience covers all disciplines including foundation design, dam design including sizing, zoning and stability, investigation and assessment of construction materials, modelling, analysis and design of hydraulic and structural components and design of mechanical components including gates and outlet works.

Tender and construction phase services - Development of robust tender documentation is critical to the successful delivery of your project. Our team brings their depth of experience to this task in the development of documentation to ensure the design intent is carried through to the finished product. We provide experienced construction engineers in both technical and project management through the construction phase to ensure the quality of the end result.

Operational support - Our people provide support throughout the operational life of dam assets in areas including asset management and valuations, condition assessments, dam safety and risk assessments, rehabilitation works including corrosion control and concrete repairs, sediment deposition management and seepage analysis and control solutions.

Dam safety and risk assessment - Ongoing maintenance of the safety of a dam and associated infrastructure is crucial in protecting communities and your assets. We're experienced in all aspects of dam safety requirements including inspections, surveillance reviews, detailed safety reviews, development of dam safety documentation including dambreak analysis and emergency planning, dam safety training, and post-disaster inspection and assessment. A key strength of our team is the use of risk assessment for the review of both individual dams and dam portfolios.

Owner's engineer and review panels - Successful project delivery starts with selecting the right solution and the right strategy. We offer experienced professionals in a range of technical and project management roles to provide guidance through all phases of a project including development of procurement strategies, technical peer review, due diligence assessments, construction phase services and certification services.

Benefits

Work with us and benefit from one of the largest dedicated dams teams across the globe. This team is backed by industry professionals in related fields including geotechnics, geology, hydrogeology, hydrology, river hydraulics, mechanical engineering, environmental sciences, materials technology and structures.

What to expect

You can expect surety of outcome through our depth of experience and breadth of services. We will work closely with you throughout the entire project life cycle to develop safe, innovative and cost-effective outcomes, maximising benefits for all stakeholders.





Cover page: Enlarged Cotter Dam, Canberra (Courtesy of Bulk Water Alliance); Above left: Elidon Dam; Above right: Googong Dam Spillway Upgrade, Canberra (Courtesy of Bulk Water Alliance)

