

Who We Are

Geosyntec is a leading engineering and environmental consulting firm providing innovative solutions for today's infrastructure challenges. For close to 40 years, Geosyntec's engineers and scientists have leveraged their experience, expertise, and ingenuity to address complex issues for hundreds of dam projects across four continents.

We are:

- Responsive, striving to develop genuine understanding of our clients' objectives.
- Technically advanced, applying deep expertise for confident solutions to complex problems.
- Flexible, scaling our approach and applying creativity to adapt to each situation.

In addition to exceptional client service and technical excellence, we embrace our responsibility for good stewardship. We are committed to the health and safety of our personnel and others we work with, and this commitment also influences how we evaluate the hazards and safety of dams, levees, and flood-control structures that affect the lives of the general public. We advance dam safety projects and programs with our clients' environmental, social, and governance (ESG) goals in mind. We foster an inclusive, diverse, and equitable environment for all our employees, clients, and partners, as well as the communities we serve.

What We Do

Geosyntec provides dam safety evaluation, engineering, and construction phase services for new dams and rehabilitation projects. Our integrated services range from existing conditions assessments and risk characterization to developing buildable designs and providing engineering support during construction. We are widely respected for advanced geotechnical numerical modeling to analyze complex loading conditions, site response, and soil-structure interaction to optimize solutions and designs. Geosyntec is a leader in applying state-of-the-practice seismic hazard analyses, developing design ground motions, and assessing stability and seismically induced ground deformation and liquefaction. We conduct design flood analyses, spillway assessments, dam break analyses, inundation mapping and hazard assessment, regulatory compliance, and water quality evaluation.

Our dam safety professionals are fluent in both standards-based (deterministic) methods and risk-based (probabilistic) methods to evaluate earthen and concrete dams, spillways, outlet works, and other ancillary structures. We use state-of-the-practice modeling and analytical methods to support quantitative and semi-quantitative risk assessments (QRA and SQRA). We have expertise in leveraging these tools and processes for effective application to the risk-informed decision making (RIDM) frameworks of our clients. As part of the RIDM process, we evaluate potential failure modes and their consequences, provide expert consultation to support risk-informed decisions, develop and help implement risk-reduction measures, and prepare emergency action plans and risk management strategies.

Geosyntec is also a pioneer in developing geographic information system (GIS)-based data management tools to optimize the construction process by collecting, compiling, analyzing, 3-D visualizing, and presenting instrumentation data in real time. We customize these tools so users

can measure progress, track details, analyze trends, achieve construction quality assurance targets, and automatically generate geospatially accurate as-built drawings.

We provide our clients with exceptional service and innovative solutions to address the challenges of today and tomorrow.