Hydrotechnical Engineering



Trinity Consultants Canada is a leading environmental consultancy that brings together trusted advisors, scientists and engineers to help clients solve their most complex challenges. With deep local roots and the strength of a global organization, Trinity Consultants Canada delivers innovative, scientifically sound and future-ready solutions that help industry, government and Indigenous Communities navigate complex regulatory landscapes, secure project permits and approvals to achieve better environmental outcomes. They are internationally respected leaders with decades of proven expertise in Water & Ecology, Environmental Health and Safety (EHS), Built Environment and Life Sciences.

Our Water & Ecology teams are recognized leaders in environmental assessment, permitting and monitoring, offering key services to sectors including renewables, mining, ports and terminals, marine shipping, linear development, liquefied natural gas (LNG), ecological restoration, municipal wastewater, energy, and forestry.

Our Expertise

Trinity Consultants Water & Ecology provides engineering design and construction support across a wide range of project sectors to solve water-related challenges. Our team of engineers and geomorphologists focus on process-based design approaches that meet both biological and engineering design criteria.

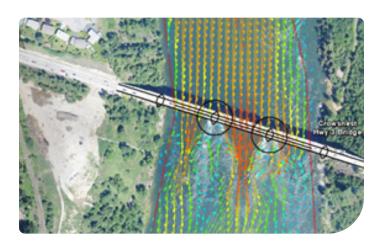
Our team works collaboratively within multi-disciplinary project teams to develop designs that are sustainable, resilient, and effective. We can provide design, analysis, and drafting services at various project stages, through field data collection, options identification, conceptual design, detailed design, and construction.

Our areas of work include habitat restoration works (e.g., fish passage analysis, stream restoration, saltmarsh/eelgrass enhancement), river engineering works (e.g., bank protection, woody debris structures, channel features), and hydraulic structure design (e.g., hydrotechnical design of channels, culverts, weirs, spillways, floodgates, etc.).

We work with clients to develop bespoke solutions for their spatial analysis needs, from simple web-app services to complex multi-year Environmental Assessments.

Our Services

- Hydraulic, geomorphic, and hydrologic assessment and modelling
- Fish passage analysis and design



- River engineering and erosion protection design
- Topographic and bathymetric surveys, and drone data collection
- Stream restoration and process-based design
- Habitat restoration and offsetting design
- Flood and watershed management planning
- Hydrotechnical design of water-related infrastructure
- Civil design and drafting
- Construction planning, construction direction, and field review services

CONTACT OUR TEAM!

For more information about how we can help your organization, please contact us.

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