

Water Resources Engineering

Trinity Consultants is a leading global environmental consulting firm with 50 years of experience providing services and solutions in the Water & Ecology, EHS Regulatory Compliance, Built Environment, and Life Sciences markets. Trinity has the technical expertise, industry depth, and specialized capabilities to help clients achieve their goals across natural and built environments.

Trinity Consultants' Water & Ecology teams, Ecofish Research and Minnow Environmental, are recognized leaders in environmental assessment, permitting and monitoring offering key services to industry, all levels of government, not-for-profit organizations, and First Nations. Our teams have extensive experience gained from thousands of successful project engagements and a unique perspective gained by writing environmental guidelines on behalf of government. We provide proven complex problem-solving expertise 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

Industrial and land developments often have complex effects on stream and waterbody hydrology, hydraulics, water quality, and geomorphology. Through the latest scientific monitoring and modelling techniques, we can help you to characterize, manage, and mitigate these effects to balance the needs of the project, the environment, and other stakeholders.

Trinity Water & Ecology's success in water resource engineering lies in our highly qualified engineers, hydrologists, hydrogeologists, data analysts, and aquatic scientists, who also have specializations in wetlands, geomorphology, climate science, habitat restoration, and permitting. Our combined skill set allow us to effectively inform project design, identify environmental and permitting risks associated with water use or land development on waterbodies, support sustainable management of water resources, and guide habitat restoration.



Our Services

- ▶ Numerical and statistical hydrological modelling
- ▶ Assessment of streams, groundwater, wetlands, and surface-ground water interactions
- ▶ Fish passage analysis and design
- ▶ Flow routing through reservoirs and water residency calculations
- ▶ Hydrometric and water quality data collection and analysis
- ▶ Dye tracer and plume delineation studies
- ▶ Assessment of ungauged flow, low flow, and flood frequency
- ▶ Hydraulic modelling of open channels and pipes
- ▶ Water quality modelling
- ▶ Water balance calculations
- ▶ Mixing zone modelling
- ▶ Modelling climate change impacts
- ▶ Floodplain and watershed mapping
- ▶ Geomorphic assessments
- ▶ Sediment transport modelling
- ▶ Watershed management decision support

For more information about our services, contact us today!

Minnow
bd@minnow.ca

Ecofish
bd@ecofishresearch.com