



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 Canada is a recognized leader in environmental flows across resource sectors, including mining. Our experience spans the full mine lifecycle: baseline data collection and screening to inform design at greenfield sites, environmental assessment and permitting support for new developments and expansions at operating mines, and technical support for water management planning and water use permitting throughout operations and into closure. Our environmental flows practice draws on two decades of experience and in-house data and modeling capacity. We combine environmental data and habitat modelling studies with your site water balance models to quantify how water use, dewatering, and landscape change affect stream ecology. Our technical services translate into practical design input, aquatic environmental assessment, permitting strategy, and monitoring programs that continue through operations and closure.

Our Services

- **Baseline studies:** field-based characterization of existing flow, fish, and fish habitat conditions to support environmental flow assessments
- **Design-stage input:** identifying opportunities to reduce environmental flow risk during project design and engineering
- **Permitting and regulatory support:** engaging directly with regulators to navigate water licensing, offsetting, and authorization requirements



- **Cumulative effects and watershed context:** assessing how existing flow alterations, climate change, and other water users on the same system affect available flow
- **Flow scenario assessment:** modelling how water use, dewatering, and landscape change affect flows, fish habitat, and fish passage, from early screening through detailed assessment, to inform environmental assessments and water permitting
- **Water management and supplementation planning:** informing site water balance models with environmental flow thresholds and drought response triggers, and developing supplementation strategies to address flow changes through operations and closure
- **Trade-off analysis and decision support:** comparing habitat, passage, water availability, and water quality outcomes across alternatives to support transparent decisions
- **Long-term monitoring:** field studies that build scientific understanding of how mine-associated changes to flow affect fish and fish habitat over time
- **Adaptive management:** designing decision frameworks and trigger points that guide when and how mitigation or operations should adjust as new information emerges
- **Third-party review and expert support:** independent review of environmental flow assessments, and technical support for your most challenging environmental flows problems

CONTACT OUR TEAM!

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

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