



Ymir Water Treatment Plant Regional District of Central Kootenay



Project Costs:

Grant Contribution = \$400,000

Community Reserve Contribution = \$200,000

Per user water rates after construction = **UNCHANGED at \$400 per year**

Designed and manufactured by BI Pure Water (Canada) Inc.

Project Lead: Don Nash P.Eng.

RDCK Staff: Rob Lang, Jesse Reel, Dave Rowe, Ken Anderson,
Shanna Eckman, Nicole Ward, Tom Dool.

Contractor: Custom Dozing LTD.



Key Objectives:

- Reduce our carbon footprint and maximize energy conservation
- Apply a triple bottom-line framework that met the financial, environmental and social goals of the community of Ymir and the RDCK
- Build sustainable infrastructure comprised of recyclable material, and energy efficient components
- Utilize construction techniques that had a low environmental impact, thereby reducing the carbon footprint.

Drinking Water Quality:

- The facility exceeds the 4-3-2-1-0 drinking water objectives established by the Interior Health Authority
- An analysis of the project was made using RETScreen Clean Energy Project Analysis Software, a support tool to evaluate the energy savings, costs, emission reductions, financial viability and risk for various types of Renewable-energy and Energy-efficient Technologies (RETs).

Energy Conservation:

- Minimum R40 structural insulated panels for ceiling ,R20 for walls
- Energy efficient lighting on motion sensors
- Gravity feed to the raw water pumps and for the distribution system
- Dual raw water pumps for seasonal flows
- High efficiency electrical motors and VFDs installed for flow control
- Solar powered exterior lighting.

Environmental Considerations:

- Utilize low impact construction techniques
- Utilize local resources where possible
- Recharge groundwater with naturally filtered, chemical free backwash water
- Exceed minimum riparian setbacks
- Utilize propane backup power to eliminate risk of liquid fuel contaminating the water supply.

