

Options Analysis for Discharge Location

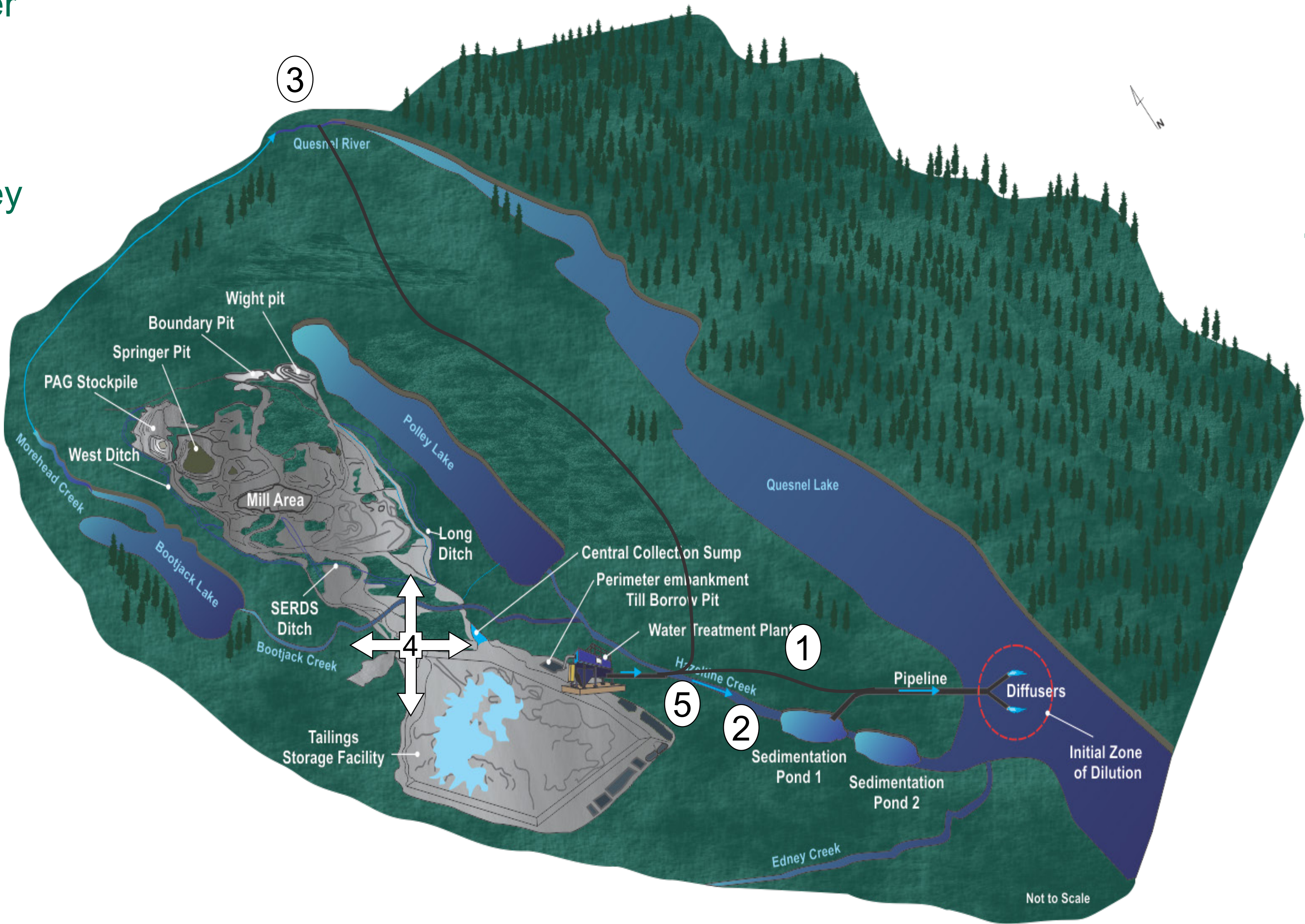


Options analysis to select treated effluent discharge location

Options Considered

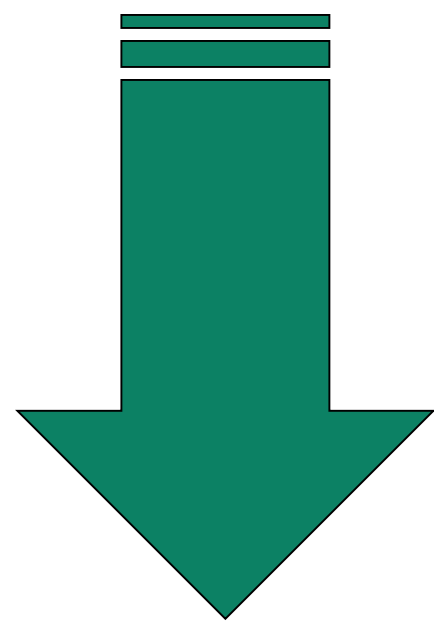
- 1. Pipeline to Quesnel Lake
- 2. Relocating Hazeltine Creek further Downstream
- 3. Pipeline to Quesnel River
- 4. Discharge to Bootjack Lake, Polley Lake, and Hazeltine Creek
- 5. Developing science-based bench marks, discharge to Hazeltine Creek*
- 6. Status Quo

*Option subsequently rejected based on discussions with BC Ministry of Environment

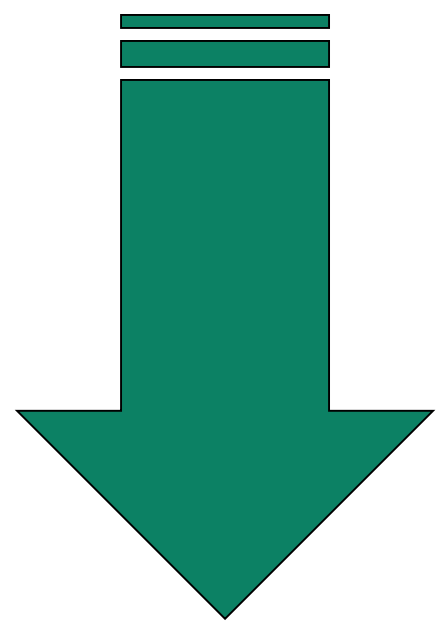


Evaluation Criteria

- Environmental:**
- No Impairment of Water Uses
 - No Unacceptable Aquatic Effects
 - No Unacceptable Terrestrial Effects
 - Long-term Sustainability
- Technological:**
- System Resilience against Failure
 - Complexity/Simplicity
 - Flexible Design
 - Consistent Permit Compliance
- Social:**
- Rehabilitation of Fish Habitat
 - Consideration of Community Concerns and Desires
- Economic:**
- Capital Cost
 - Operating Cost



When environmental, technological, social, and economic criteria are considered, the pipeline to Quesnel Lake is the most appropriate option overall



The pipeline to Quesnel Lake option was preferred due to:

- No impairment of water uses
- Minimized aquatic and terrestrial effects
- Long-term sustainability
- System resilience against failure
- Flexible design

Option	Title	Score	Overall Rank
1	Pipeline to Quesnel Lake	394	1
2	Relocating Hazeltine Creek Discharge	180	5
3	Pipeline to Quesnel River	315	4
4	Distributed to Bootjack Lake, Polley Lake, Hazeltine Creek	321	3
5	Science-Based Environmental Benchmarks	333	2
6	Status Quo	182	-

Table 4 of Appendix G of the TAR



Pipeline and Diffuser Location in Quesnel Lake