



# Disposal Options Under Consideration

Due to changing climate, reduced summer river flows and a lease agreement commitment to Cowichan Tribes to move the outfall, the Cowichan Valley Regional District (CVRD) is proposing to move the existing JUB treated effluent discharge location from the Cowichan River. Research into possible options has been undertaken for a number of years. Below is a summary of options considered to date.

	OPTION 1	OPTION 2	OPTION 3	OPTION 4	OPTION 5	OPTION 6
	Route to Catalyst Paper Crofton, for reuse	Route to Catalyst Paper Crofton, for treatment and discharge	Disposal to ground	Reuse as irrigation	Disposal to other surface waters	Marine outfall (Satellite Channel)
IDEA	Pipe treated wastewater to mill for reuse in paper production.	Pipe wastewater to onsite treatment system at existing Catalyst Paper Crofton (mill), accessing the existing treatment and approved outfall.	Release treated effluent to ground disposal fields for natural absorption.	Treat wastewater to the extent that it could be used as irrigation for public lands.	Use Quamichan Lake or Somenos Lake as possible receiving waters for treated effluent.	Use marine environment as receiving waters. Of marine options previously reviewed, the Satellite Channel option offers the best opportunity for ocean outfall.
ADVANTAGES	Offers opportunity for reuse of resource.	Existing infrastructure and outfall would reduce the capital costs and the process for approval of new locations.	Offers a non-marine discharge option that would include natural filtration as part of the treatment process.	Offers reuse of resource.	Offers a non-marine discharge option in closer proximity to JUB with lower routing costs.	Province indicated support for idea in 1990s; Best option for high dilution to minimize risk to environment and humans; Most cost effective.
CHALLENGES	Requires a very high level of treatment. Water supply from wastewater does not significantly offset need by mill (around 3 per cent).	Risk of relying on outside provider. Existing treatment plant would not operate properly if only domestic wastewater were treated. Major amendment to discharge permit is also required.	No location within reasonable distance with sufficient buffer from drinking water wells. Local hatchery tried and was unable to make this option succeed.	Requires very high level of treatment. Extensive storage would be required during wet weather periods.	Both lakes are sensitive to nutrient enrichment and potential algae growth, making the addition of an outfall unacceptable to the lake environment.	Identifying an acceptable location that protects shellfish beds, traditional fishing areas and other existing uses/interests.
SUITABILITY						
NEXT STEP	No further review considered.	No further review considered.	No further review considered.	No further review considered.	No further review considered.	Continue with review and investigation, including public consultation via the central sector LWMP process.