

Before 2010 the Town had expended well over \$200,000 to complete the ground disposal studies, the pre-design report, conduct two pre-registration meetings with the Ministry of Environment, submit the Environmental Impact Study (EIS) and complete 90% of the detail design drawings and specifications. The Ministry of Environment commended these efforts. However, funding limitations have stalled progress in this regard.

The Town now wishes to advance the planning and implementation of the remaining upgrades to the Sewer Treatment Plant in its continued efforts to improve the quality of the treated effluent being discharged into the Cowichan River and to provide increased treatment capacity to support growth and development in the Town as well as in the neighbouring Ts'uubaa-asatx First Nations Community. The planned upgraded facility is expected to provide secondary treatment and disinfection and it is expected that all established effluent parameters of potential concern will be met.

In 2015 the construction of a third cell was completed at a cost of under \$1.6 million with grants totalling \$1.35 million from Gas Tax Fund transfers. This phase, however, will continue to serve no useful purpose if the remaining required sewer treatment plant upgrades consisting of the following is not completed:

- the Hydraulic connection of Lagoon Cell No. 3 and aeration upgrades;
- Construction of headworks (screening) facility;
- Construction of phosphorus removal and filtration facility; and
- Construction of disinfection facilities are not completed by the Town.

In addition, a higher allowable discharge rate will sooner be required to meet the current population growth. To obtain the higher discharge rate, the Sewer Treatment Plant will have to be registered under the Municipal Sewage Regulation (MSR).

The Town has been instructed by the Ministry of Environment at various times to promptly implement the necessary measures or modifications to correct the non-compliance issues under the Environmental Management Act if it is to avoid penalties. There has always been a requirement that the regional water quality objectives and parameters for the Cowichan River must be met, which include meeting standards established for phosphorous, ammonia and fecal coliform. The resulting algal growth has also been a growing concern for the Cowichan River.

CURRENT STATUS

The Cowichan River, a federally and provincially designated heritage river, is a sensitive ecosystem. The Cowichan River must be protected and properly maintained so that downstream users are not adversely affected. These include a total of 24 water license holders. In addition, the Cowichan River happens to be one of the most important on Vancouver Island for recreational activities and commercial fish species. The river supports spawning populations of chinook, Coho, and chum salmon, steelhead and resident rainbow trout, sea-run and resident cutthroat trout. It is incumbent upon the Town to treat its sewer effluent so there are no adverse effects on the aquatic environment.

The processes occurring in the existing wastewater treatment plant will be further affected by climate change which is causing more extreme weather events such as droughts and earlier snowmelt runoff which in turn could lead to untreated sewer overflows. The recent summer droughts may adversely impact dilution rates that can in turn negatively impact the fish

population and result in lower water quality standards for users of the river. This makes the capacity and treatment upgrade requirements more urgent.

An important cultural and economic factor that must be considered is the ability of the adjacent First Nations community to continue its economic growth path which can only be sustained by the Town's capacity to meet the former's growing water and sewer utility service needs.

The engineering firm of WSP has provided a Class "D" estimate of \$10.134 million for the sewer treatment plant upgrades to be completed and which cost will be the basis of an application under the Investing in Canada Infrastructure - Environmental Quality Program.

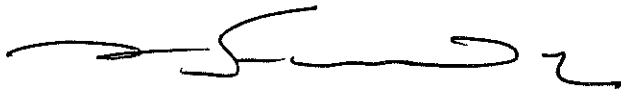
With the rather lengthy application that I have almost completed there are two council resolutions that are still required as part of the application process; one for the water conservation plan and the other to authorize staff to make an application under this program. The first was previously referred to council.

The second resolution to be approved must read as follows:

Recommended Resolution

that staff submit an application for grant funding for the Final Phase of Wastewater Treatment Plant Upgrades through the Investing in Canada Infrastructure Program – Environmental Quality;

and that Council supports the project and commits to its share of \$2,702,738 for the project, as well as cost overruns.



Joseph A. Fernandez