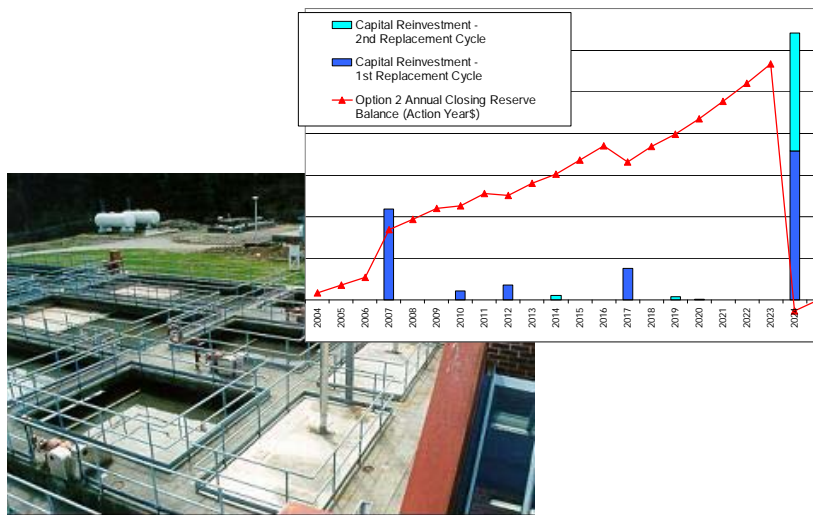


# Wastewater Utility Financial Model for Infrastructure Reinvestment



Earth Tech was retained by the Regional District of Comox-Strathcona to develop a financial model for the purpose of contributing to and maintaining an equipment reserve fund. A complete facility review was completed to consolidate all assets and assess their condition to develop a highly accurate model.

One of a utility's primary functions must become asset management, and the implementation of effective strategies to not only maximize the benefit from infrastructure assets, but to ensure that they have the financial tools and means to guarantee their continuing financial sustainability in an equitable manner. Utilities need to forecast, plan, and manage the financial challenge of replacing and renewing assets in a fair and equitable manner, before asset deterioration affects utility service levels. In the case of the Regional District of Comox-Strathcona (Regional District), the regional wastewater system (including a wastewater treatment plant, and associated trunk sewer system) was installed in the mid 1980's at an approximate cost of \$34 Million. This infrastructure was about 20 years old, and no specific policy or program to support and fund ongoing infrastructure renewal needs was implemented.

The methodology used to develop the financial model is based on the National Research Council of Canada's "Six Whats of Asset Management Planning". The major tasks are; consolidating the asset inventory, calculating the replacement value of all assets, conducting a condition assessment, determining the replacement needs, identifying any immediate replacement needs, determining future asset/equipment replacement requirements and required contributions to reserves, and the preparation of the financial model.

## PROJECT DETAILS

CLIENT: Regional District of Comox-Strathcona

LOCATION: Courtenay, British Columbia, Canada

## REFERENCE INFORMATION

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## PROBLEM

The District's wastewater infrastructure was about 20 years old and at the time there were no policies or programs to allocate funds for major infrastructure repair and replacement.

## CHALLENGES

What strategies should be implemented that would allow the District to respond in the most cost effective and sustainable manner?

## SOLUTION

This study provides a sustainable financial model for infrastructure reinvestment to help the District plan for the future.

## BENEFITS

The long-term planning and contributions to a reinvestment fund was developed in an equitable manner to replace assets, and if adequate funds are placed in reserve in time, the Regional District can avoid paying interest expenses on future asset replacement programs.