

Recovering Resources

In recent years, there has been increasing interest in recovering resources created through the collection and treatment of wastewater – such as reusable water, or heat. Resource recovery can have environmental benefits and generate revenue streams, but these must be weighed against increased capital and operations costs. As part of this planning process, options for resource recovery are being considered.

RECLAIMED WATER

- Some of the treatment plant options on the long list are designed to produce effluent that meets requirements for reclaimed water.
- Since this adds to cost of treatment, it's key to find a market for the resulting product.
- Onsite, this could include expanded use of reclaimed water, or offsite applications could use larger amounts (ie: irrigation or industrial use) – but this would require installation of pipes to get the water to where it is needed.

HEAT RECOVERY

- The use of heat extracted from the treatment process for space heating of buildings is becoming more common.
- Along with water reclamation, heat recovery for use onsite at wastewater treatment facilities is more cost effective than heat recovery at pump stations.
- Need to consider whether there's a nearby user who could use exported heat.

BENEFICIAL USE OF TREATED SOLIDS

- The CVRD already has a system in place to recover nutrients from the solids collected through the wastewater treatment process using a composting system.
- The final product – SkyRocket – is a Class A compost and is allowed for sale to individuals and commercial use.

Technical consultants also looked at other resource recovery options but suggest they are not feasible at this point:

- Production of Biogas: The current plant production is not large enough to make this economical.
- Extraction of Nitrogen and Phosphorus for Fertilizer Pellets: Due to the treatment processes currently in place, and cost, this is not feasible.
- Hydroelectric Turbine at Outfall: There is insufficient pressure head at the treatment plant's outfall for this.

Visit: www.comoxvalleyrd.ca/lwmp

Email: engineering@comoxvalleyrd.ca

Phone: 250-334-6000