

# Silverhawk Utilities Inc.

## Annual Newsletter



Volume 8, Summer 2015



## NEW WASTEWATER TREATMENT PLANT

During the past three summers (2012 – 2014), several important and essential upgrades / updates were completed on the Wastewater Treatment Plant to improve the effluent quality. This upgrade was necessary to meet the newly mandated discharge criteria set forth by the BC Ministry of Environment (MOE). A few of the major upgrades include:

- An advanced primary filtration mechanism has been installed to automatically remove the primary solids from the influent stream that comes from the village.
- Four large steel process tanks were installed to assist with removal of Chemical Oxygen Demand (COD) and Total Nitrogen (mainly ammonia & nitrate).
- A fine membrane filtration system, known as a Membrane Bioreactor (MBR), was added to the end of the treatment process to remove all the fine particles including, but not limited to, bacteria. The result is a final effluent coming from the plant that is free from suspended solids including bacteria.



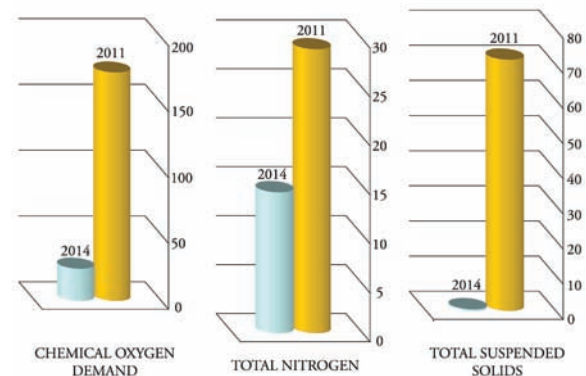
The final phase of the upgrade was completed towards the end of October of 2014, and the treatment plant was re-started at the beginning of November last year. The MOE visited the plant in early November to inspect the upgrades, and the officials were very impressed with the new state of the art plant and how effectively it deals with the widely fluctuating flows and temperatures while still meeting strict new environmental guidelines.

The new Wastewater Treatment plant at Silver Star Mountain is amongst the very few treatment plants in the region that produces such a high quality effluent. The effluent is crystal clear, with absolutely no smell, and the carbonaceous Biological Oxygen Demand (cBOD) is almost completely removed from it. As well, the Total Nitrogen (TN) is now well below 10 mg/L. Reducing the Total Nitrogen below this limit was achieved only after the last upgrade was completed in November of 2014.

*“The effluent is crystal clear, with absolutely no smell”*

Due to the high quality of the effluent produced, “it is classified as being permitted for use as irrigation for unrestricted public access”, and therefore has many potential suitable applications. Once the effluent leaves the plant, it is stored in the 20-million gallon infiltration pond during winter months and is then used for irrigation during the summer months when the ground is dry. Silverhawk Utilities is currently investigating additional ways to have this effluent used for beneficial applications other than only being used for irrigation around the plant.

Now, with such a high quality of effluent coming from the treatment plant, there will remain no concerns about plant effluent negatively impacting the environment, especially the highly sensitive ecological integrity of the receiving waters of the Coldstream Creek.



COD (mg/L)		TN (mg/L)		TSS (mg/L)	
2011	2014	2011	2014	2011	2014
173.5	24.5	29	14.4	71.5	0.5

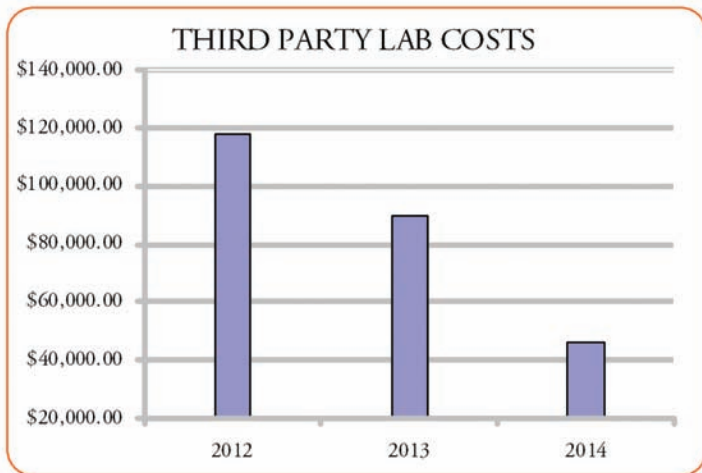


## TREATMENT PLANT TOURS OFFERED

Silverhawk Utilities will be offering educational tours of the Wastewater Treatment Plant. These educational tours will include a comprehensive description of the process that is involved in treating wastewater, a tour of the inside of the plant and what regulations and laws are being followed to treat effluent to the highest standards. The tour will be conducted by one of Silverhawk Utilities Certified Wastewater Treatment Operators who have hands-on experience with operating water and wastewater treatment systems. Please contact our Silver Star office (250) 558-9877.

## REDUCTION OF LABORATORY COSTS

Silverhawk Utilities on-site laboratory was in full operation during 2014. The sophisticated lab equipment and testing capabilities have enabled Silverhawk to conduct a significant amount of tests ourselves. As a result, Silverhawk Utilities has managed to reduce our third-party costs by almost 50%.



## 2014 SERVICE YEAR RATES

The Sewer Rates for the 2014 Service Year have increased over the previous year. Some of the items associated with higher operating costs for the 2014 Service Year are:

- Increased operational costs associated with a more advanced treatment plant.
- Higher than normal repair and maintenance was required for existing sewer lines and treatment ponds.
- Increased costs associated with collecting payment for delinquent accounts and unpaid sewer bills.

## HELP AVOID WATER LEAKS

A reminder to all property owners at Silver Star Mountain to please turn off your water if your home or business is going to be vacant for an extended period of time. An undetected leak can cause significant damage to your property and waste a very large amount of water. For example, it is estimated that a running toilet can use up to 10 cubic meters of water per day.

## CAPITAL UPGRADE REIMBURSEMENT FUND

The third and final installment of the Capital Upgrade Replacement Fund was invoiced in the spring of 2015. Silverhawk Utilities would like to thank all of our customers who promptly paid their CURF invoices. This fund has been used to help significantly upgrade the quality of wastewater treatment at Silver Star Mountain.

## DELIQUENT ACCOUNTS

A major area of concern for the utility has been a small group of customers deciding to not pay for any of their sewer services. As a result, Silverhawk Utilities has had to either send the account to a collection agency, or to physically disconnect the sewer service. Both of these methods incur significant costs, which ultimately impacts all residents on Silverstar Mountain as it affects the rates being charged.

## PROTECT OUR WATER

Please do your part by not pouring any chemicals, cooking oil, grease or materials down the sink or toilet that can be harmful to the environment. A list of restricted materials can be found on our website at [www.silverhawkutilities.com](http://www.silverhawkutilities.com), or if in doubt please contact our utility at (250) 558-9877.