

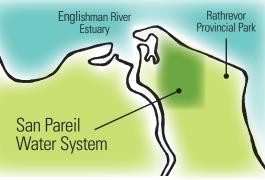
Regional District of Nanaimo Water & Utility Services Department

June 2016

VATERnews

BACKGROUND

In 2012 Thurber Engineering was retained by the Regional District of Nanaimo (RDN) to determine if the groundwater source wells for the San Pareil Water Service Area were at risk of containing pathogens. Due to their proximity and connection to surface



water sources, including the Englishman River and the marsh/wetland area around the wellfield, it was determined that the source wells were

at risk of containing pathogens. As a result, Island Health revised the 2014 Operating Permit for the Water Service Area to include a clause that requires the RDN to meet the updated Drinking Water Treatment **Objectives (Microbiological) For Surface Water** Supplies in British Columbia by December 31st, 2016.

In order to meet the objectives, the RDN would have been required to install a treatment system, including both filtration and UV disinfection. However, due to the low turbidity levels in the source water, the RDN believed that

filtration would not be necessary. Over the past year, working with Thurber Engineering, the RDN has performed continuous monitoring of the turbidity of the source water as well as Microscopic Particular Analyses, Particle Size Analyses, Groundwater and Surface water Level Monitoring, and Bacteriological Sampling.



LINKED TO HIGHER LEVELS OF CONTAMINANTS

PROGRESS

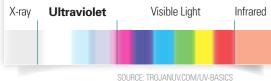
A report titled "Aquifer Filtration Assessment -San Pareil Well Field" was prepared by Thurber Engineering in March of 2016 and submitted to Island Health for their review. Based on this report, Island Health has now granted a filtration deferral to the San Pareil Water Service Area. The report can be found on the San Pareil website at www.sanpareilwater.ca.

The result of this deferral is that filtration is no longer needed; however, the installation of UV disinfection is still required with additional ongoing monitoring and assessment of the

source water. By working to obtain a filtration deferral for the San Pareil Water Service Area the capital costs required for treatment have been reduced by almost \$700,000.

Ultraviolet [UV] Light

Ultraviolet (UV) light is a form of light that is invisibile to the human eye. It occupies the portion of the electromagnetic spectrum between X-rays and visible light. The sun emits ultraviolet light; however, much of it is absorbed by the earth's ozone layer.



Estimates prepared by Koers Engineering show the upfront capital costs associated with filtration and UV disinfection to be approximately

\$1,524,000 while the capital costs associated with UV disinfection only have been estimated at \$840,000.

SKEHI NIEWS!

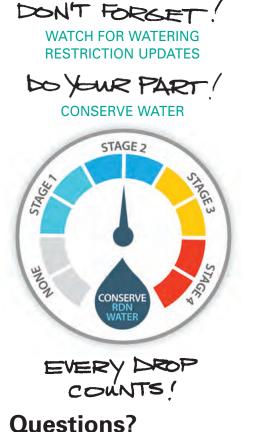




WHAT'S NEXT

The RDN recently submitted an application to the **New Building Canada Fund – Small Communities Fund** to help offset the costs to the service area for the required UV upgrade. After receiving a response to our funding application, expected this fall, We will be working with the San Pareil Water Service Area residents to initiate an approval process which would allow the RDN to borrow money, on behalf of the residents, to fund the remaining amount required for the UV disinfection upgrades.





If you have any questions please contact Water & Utility Services at 1-877-607-4111, rcu@rdn.bc.ca or visit the WaterSmart website at www.rdn.bc.ca

WATERING RESTRICTION STAGE		1	2	3	4
EFFECTIVE DATES		April and October	May to September	Only as Required	
Frequency	670 1315 70210	Any Day	Every Other Day: Even# Houses – Even# Days Odd# Houses – Odd# Days	Voluntary Reductions on top of Stage 2	SPRINKLING BAN: Lawn Watering NOT PERMITTED
Watering Times		Between 7pm and 7am	Between 7-10am or 7-10pm for 2 hrs MAX		
Hand-watering, drip irrigation, micro irrigation		ANYTIME	ANYTIME		Between 7-10am or 7-10pm
Washing vehicles, boats, houses (siding)		ANYTIME	ANYTIME		NOT PERMITTED
Filling fountains, pools, hot tubs		ANYTIME	ANYTIME		NOT PERMITTED
New lawn permits	REW GRASS	Can apply for a permit	Can apply for a permit		NO PERMITS ISSUED
Pressure washing walkways, driveways, siding		ANYTIME	ANYTIME		ONLY prior to application of paint, preservative, stucco, or sealant

Vegetable gardens and fruit trees are exempt from all watering restrictions, even Stage 4.

