



# ENVIRONMENTAL STEWARDSHIP

## NEWSLETTER

VOLUME 5, ISSUE 1

### VISION

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*"We, the Musqueam, will work together to take care of our territory so the following generations will know how to be self-reliant. We will remember our own history and as well, use our traditional teachings to take care of everyone and everything on this earth".*

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## FROM THE EDITOR

Happy September Everyone!

On behalf of the Environmental Stewardship team, we hope everyone had an amazing summer and some much needed relaxation. As we transition into Autumn, many are beginning to prepare for cooler weather and a return to usual routines of work and school. With cooler days approaching, it is important to give time to reflect on environmental events that have transpired (such as the BC wildfires) and what we can do individually and as a society to begin restoring the natural disasters brought on by a changing climate. We hope everyone continues to stay safe with their families and wish the community a prosperous Fall before we enter the new year.

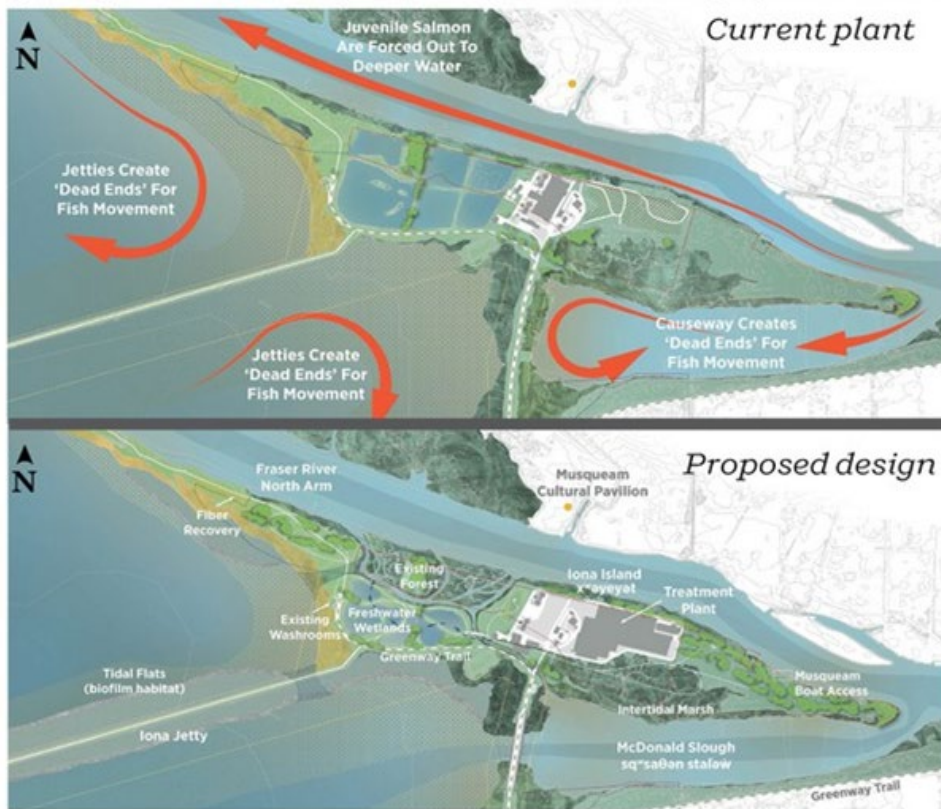
Sincerely,

Yeganeh Asadian, M.Sc., P.Ag., Environmental Stewardship Department Manager

## REPLACING IONA SEWAGE TREATMENT PLANT

**\$10 BILLION FOR SEWAGE PLANT UPGRADE**

The proposed design for replacing the aging Iona wastewater treatment plant will restore salmon and bird habitat, increase park space and reduce pollution – at a cost of roughly \$10 billion.



SOURCE: METRO VANCOUVER

N. GRIFFITHS / POSTMEDIA NEWS

The Iona Sewage Treatment Plant is Musqueam 2's neighbour, directly across the river on Iona Island. Built in the 1960's, the plant was created to treat the sewage from the surrounding areas. Now, in 2021, the plant is in desperate need of repairs, seismic upgrades and updated treatment plans as the system does not currently meet federal rules for secondary treatment of waste water. The plant has created many barriers for the Musqueam community. Musqueam relies heavily on seafood such as crabs, eulachon, salmon and more. The treatment plant has negatively impacted the health of these culturally and dietary important creatures, resulting in a loss of food that the community has available to them.

The creation of the new treatment plant will hopefully allow for the culturally important seafood in the Fraser River to bounce back to a healthier state. At this point in time, the cost of replacing the treatment plant is at \$10 billion. Initially, the plants budget was set at \$1.9 billion, this estimate was out of date and did not consider that fact that the treatment plant was originally built on a sandbar so ground stabilization along with building on an incredibly small parcel of land, the budget needed to be increase dramatically. Along with ground stabilization and seismic upgrades, the new treatment plant will include:

- Improvements to the level of treatment from primary to tertiary to ensure the protection of water quality and the nearby marine environment.
- Integration of the Iona Beach Regional Park.
- Restoration of fish habitat, protect bird habitat and enhance the terrestrial ecosystems located on the island.
- Minimization of odour.
- Recover sustainable energy from waste water.

Currently, the Iona Treatment plant only provides a primary treatment of sewage before being pumped into the Georgia Strait. Primary treatment only filters out bulkier contaminants and sediments but nothing that is dissolved such as chemicals like CO<sub>2</sub>. With the addition of secondary treatment, the plant will be able to treat the waste water at a microbiological level and remove a considerably larger amount of waste. Although the new plant will have a smaller footprint than the original, it is expected that it will have an added tertiary level of treatment which is the highest level of wastewater treatment available. This final level of treatment would prevent toxins such as pharmaceuticals, heavy nitrogen, and phosphorus charged chemicals from going into the water.

Metro Vancouver is currently working with stakeholders, the public and local First Nations. Jerry Dobrovolsky, Metro Vancouver's chief administrative officer acknowledges that the initial creation of the treatment plant built in the 60's was "at the front door" of the Musqueam Nation and without consultation. Furthermore, he hopes that the new plant can partner with Musqueam in developing and operating projects like a proposed district energy heating system that would generate energy from waste heat. He has also gone on to explain that the negative impact that the jetties and causeway have had on salmon migration and the effluent and microplastic from the wastewater system impacting the southern resident killer whales will be addressed in the new plant with hopes to help restore the salmon habitat.

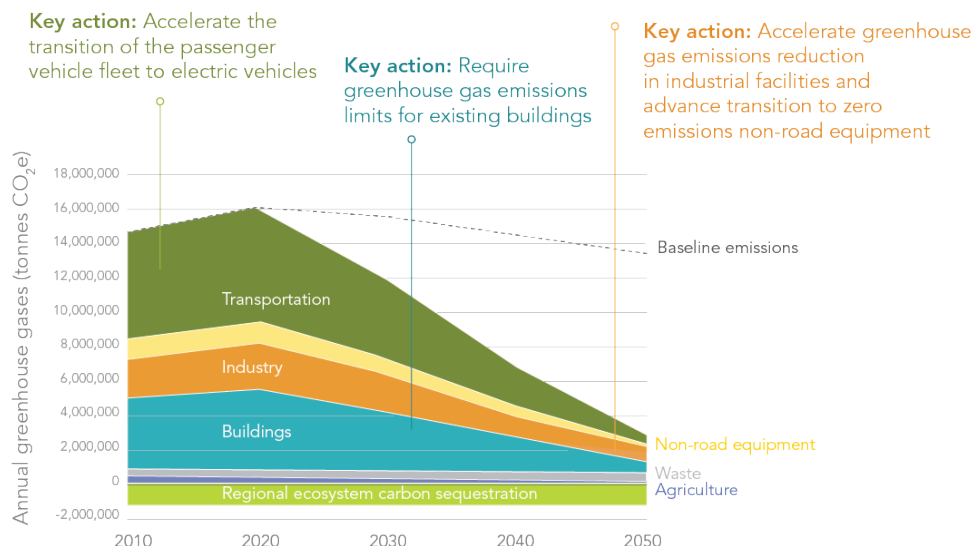
The rebuilding of the plant comes with a high price tag but with good intentions. The current state of mind for the new plant is to add as many seismically, environmentally and, community minded protection measures as possible so the city will not have to rebuild an entirely new plant in fifty years. Along with the extensive protection measures, the project is anticipated to create around 100,000 jobs over the next 20 years. At this point in time, the plant is expected to be operational in 2034 and complete by 2042 with a final project report and design completed by early 2022.

## VANCOUVER'S IMPROVED AIR QUALITY AND WHAT WE CAN DO TO HELP



Anyone living in the Fraser Valley knows that during the summer months the air quality is not something to be proud of. Due to wild fires, smog, increased traffic and a lack of rain or wind the air becomes stagnant and views become minimal to non-existent. During the pandemic though, the City of Vancouver saw air quality improve and pollution declined to levels not expected until 2050. The reason for improved air quality during the pandemic? Large reductions in traffic. As more businesses closed and more people worked from home, less cars were on the road. This led to a reduction in Nitrogen Dioxide (NO<sub>2</sub>) in the air. The City saw these reductions and wanted to share them with the citizens of Vancouver in hopes that it would prompt more people to use alternative modes of transportation. The City also created the Clean Air 2021 and climate action plans (Metro 2050 Vision).

### Estimated Greenhouse Gas Emissions Reductions



The Clean Air Plan has three main goals:

- 1) Reduce greenhouse gas emissions by 45% from 2010 levels by 2050,
- 2) Ensure outdoor air quality meets air quality standards and,
- 3) Increase the time that visual air quality is classified as excellent.

To add on, the Clean Air Plan has 132 actions and the City is asking that the residents of Metro Vancouver read through the *Clean Air Plan* and to pick a few of those action items that are most attainable for them to be a part of. Some of those action items include:

- Using alternative modes of transportation such as public transportation or biking to your destinations.
- Initiating environmentally friendly programs at your school or workplace such as recycling programs, fundraising for solar panels and so on.
- Changing your lawn from traditional grass over to native plants that will help local wildlife and absorb more CO<sub>2</sub> from the air.

As more people make the switch over to riding bikes or e-bikes to get around, not only is the positive impact on the environment noticed but the improvement in people's health is as well. Dr. Melissa Lem, a clinical assistant professor at UBC, stated that there is evidence to show that people who commute to work may have more mood issues and have worse cardiovascular health. If you have the ability to walk, bike, or even take public transportation to your destination, try to choose that option as much as possible. Dr. Lem also stated that using the above modes of transportation helps citizens connect with their communities and after a whole year and a half of being shut off from family, friends and the public due to the pandemic, now is the best time to make those connections!

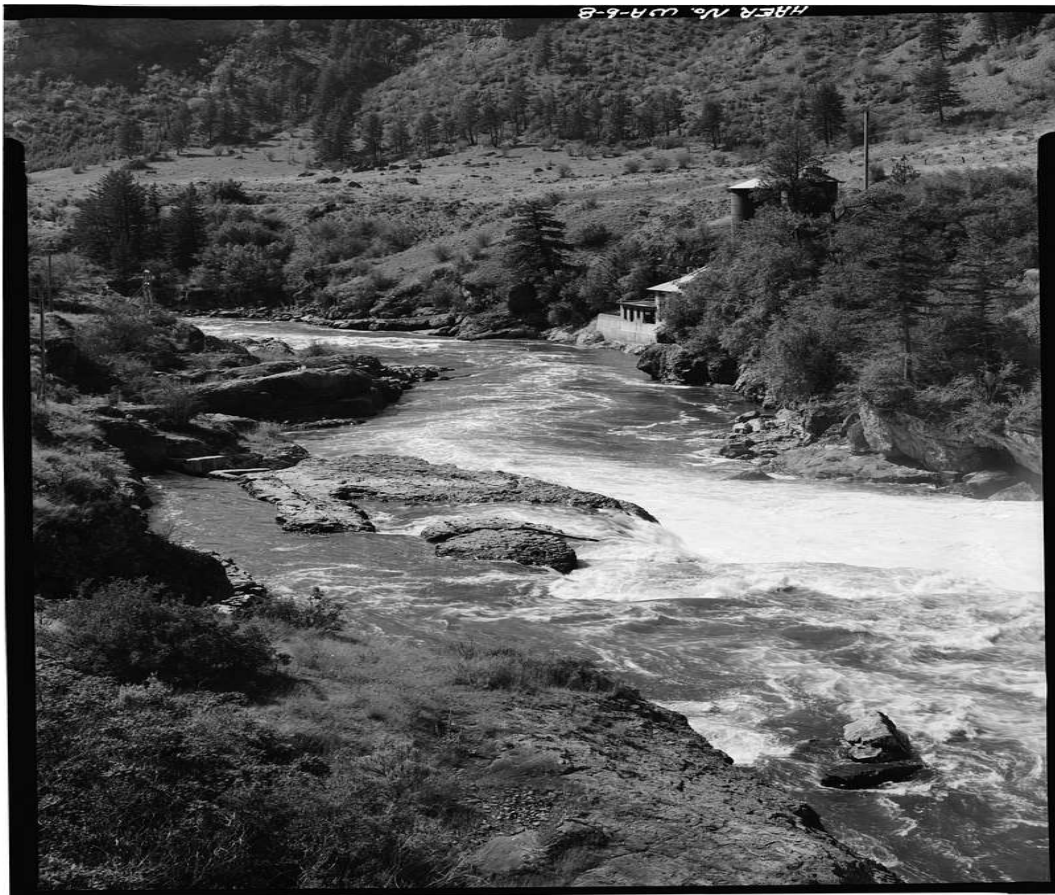
Here are some places you can find affordable bikes or alternate modes of transportation:

- Ride On Bike Shop - <http://www.rideon.com/used-bikes-vancouver/>
- Sports Junkies Clearance Centre - <https://sportsjunkies.com/new-and-used-bikes-vancouver/>
- Bikes for All - <https://www.bikesforall.ca/>

As we move closer to 2022, thinking about our environmental impact is critical to helping keep our temperatures below 1.5 degrees Celsius. The improvement in Vancouver's air quality just due to a reduction in traffic shows us that we can make a difference and should continue to do so. We don't need one person making perfectly executed environmentally conscience decisions, we need a handful of people doing it imperfectly.



## POTENTIAL REMOVAL OF ENLOE DAM



The Similkameen River originates in Manning Park and is fed by the Tulameen and Ashnola Rivers. It continues on past Princeton, Hedley, Keremeos and Cawston before passing through the border into the United States. 101 years ago, the Similkameen River was dammed, negatively impacting salmon that lived in the river, Indigenous communities that relied on those salmon and wildlife that relied on the river as a food source. Sixty years ago, the power generating dam halted work, resulting in what we see now, the abandoned grand structure that is Enloe Dam. Indigenous communities and environmentalists alike have been asking for the dam to be decommissioned for decades. For good reason too, the dam is still blocking 560 km of pristine river habitat that could be the very landscape that helps start to restore Pacific Salmon numbers.

At the beginning of June, BC's Environment Minister, George Heyman, sent a letter to the state of Washington's director of ecology, Laura Watson. In the letter Heyman voices British Columbia's support for decommissioning the dam. The provincial government is currently working to study the impacts of removal of the dam. There is potential for contaminated sediment to flow through the river, once the dam is removed. As well, there is a risk to introduce invasive species to the river region impacting the beautiful native flora and fauna that reside along the banks. Despite those risks, the removal of the dam would have the potential to help restore salmon stocks that have been critically low for years.



Conservationist and emeritus of the Rivers Institute, Mark Angelo, strongly supports the notion that there were salmon in the river at one point in time. Angelo paddled through the Similkameen in the 1970's and spoke with Indigenous elders, Hedley and Cawston of the Confederated Tribes of the Colville Reservation, who remember seeing salmon in the river in the early 1900's. Since then, scientists have also found salmon protein in the river sediment, further confirming what the elders already saw and knew to be true. To solidify those statements, in recent years there has been videos showing salmon at the base of the dam jumping into the waterfall, attempting to make it up river.

Many parties would like to see the removal of the dam, most notably the Indigenous Nations that tie their culture to the river and rely on it for various resources. The Confederated Tribes of the Colville Reservation commissioned a conceptual dam removal plan and the U.S Geological Survey will be studying the issue of sediment loads with a report due in the Spring of 2022. The decommissioning of the dam would provide both countries an opportunity to work together to restore the landscape, salmon population numbers and relationships with Indigenous peoples impacted by the dam.

## AUTUMN EVENTS AROUND METRO VANCOUVER

\* Please note that all events are in accordance with BC Health & Safety Guidelines regarding COVID-19\*

### ❖ Chilliwack Sunflower Festival, July 26<sup>th</sup> to Sept 6<sup>th</sup> 2021

The Chilliwack Sunflower Festival is going on for its fourth year of operation and not only does it have sunflowers but there are dahlias, gladiolas, and wildflowers. Currently there are over 40 kinds of sunflowers that can be viewed along with a 'U-Pick' store where festival goers can find fresh-cut or potted sunflowers, sunflower seeds, bulbs and some delicious Chilliwack corn! For more information and to purchase your tickets at: <https://chilliwacksunflowerfest.com/rates-dates-hours/>



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❖ **Nikkei Matsuri, Sept 2<sup>th</sup> and 5<sup>th</sup> 2021**

This Japanese festival although a larger festival in previous years, this year will contain tea ceremonies, performances, marketplaces and food vendors. The event will run from 11:00 am until 7:00 pm and is held at the Nikkei National Museum and Cultural Centre. For more information and tickets: <http://nikkeimatsuri.nikkeiplace.org/>

❖ **Odlum Brown Fort Langley Jazz & Arts Festival, Sept 2<sup>nd</sup> to 5<sup>th</sup>**

The Odlum Jazz Festival will be hosting virtual concerts on each of the four nights which will require tickets as well as a free, socially distanced in-person concert at the Fort Langley Community Hall. For more information and to purchase your tickets at: <https://www.fortlangleyjazzfest.com/>

❖ **Maan Farms Pumpkin Patch, Sept 25<sup>th</sup> to Nov 1<sup>st</sup>**

Last year not only did Maan Farms have a pumpkin patch, they had a Haunted Corn Maze as well. Maan farms will have caramel apples, kettle corn and pumpkin pie available. More details are to be released closer to but, pumpkins, tasty treats and some furry friends at the petting zoo are sure to make this a great visit into the Valley. For more information: <https://www.maanfarms.com/family-fun/fall-the-farm>

❖ **Bike to Work Week Round Two, Sept 27<sup>th</sup> to Oct 3<sup>rd</sup>**

What better time to bike to work than during the fall before the rainy season hits! If you're able to this week, bike to work! Not only will have it have you awake and ready to go by the time you get to your destination, it's great for your cardiovascular health too. You can register for the Bike to Work week as an individual or as a team and prizes are available to whoever registers. For more information: <https://bikehub.ca/bike-events/go-by-bike-week>

❖ **The Sky's No Limit & Girls Fly Too! Oct 2<sup>nd</sup> to 3<sup>rd</sup>**

The Abbotsford International Airport is hosting the world's largest diversity outreach of its kind to help instill an interest in future female leaders in the field of aviation. This event is free and all ages and genders are welcome! You can meet a NASA astronaut and if you register there's a possibility of flying for free! For more information: <https://www.girlsfly2.ca/events.html>

❖ **Pumpkin Patches & Corn Mazes, October 2021**

All throughout October various cities throughout the Fraser Valley will be hosting Halloween and Fall attractions like pumpkins patches, hay rides and corn mazes. Some of the cities to check out are Richmond, Surrey, Vancouver and Delta. For more information on pumpkin patches: <https://vancouverbestplaces.com/vancouver-pumpkin-patches/> and for more information on corn mazes: <https://vancouverbestplaces.com/vancouver-fraser-valley-corn-mazes/>

❖ **Musqueam Day, Nov 1<sup>st</sup> 2021**

November 1<sup>st</sup> is a day to remember and celebrate the Guerin case that changed Aboriginal law in Canada. In 1975, the Guerin case was filed and the long journey of suing the government began. Chief Delbert Guerin realized the terms of the lease for the Shaughnessy Golf and Country Club were not the terms Musqueam had agreed to and pushed forward to fight for Musqueam's inherent right to their land. Later winning what is now called a landmark Supreme Court decision.

❖ **Masters of Illusion, Nov 8<sup>th</sup> 2021**

Masters of Illusion is an interactive magic show involving comedic acts, risky escapes and grand illusions. As seen on TV, this cast will shock and awe the audience with their amazing acts that have taken decades to perfect. This is a fantastic way to get the kids out of the house, for more information: <https://www.mastersofillusionlive.com/tickets>

❖ **Remembrance Day Nov 8<sup>th</sup>**

First Nations, Inuit and Metis peoples fought in Canada's wars, sacrificing their lives and demonstrating incredible acts of bravery. Indigenous veterans were not recognized for their contributions to the first and second world wars so, the first Indigenous Veterans Day was held in Winnipeg on November 8, 1994. It is estimated that over 12,000 Indigenous peoples volunteered in all three wars.

## CONTACT US

For further inquiries regarding the newsletter and our green initiatives, please contact:

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Facebook: Enviro Stewardship

