



ENVIRONMENTAL STEWARDSHIP

NEWSLETTER

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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 Department team, we hope everyone is having an amazing summer and has had a chance to get some rest and relaxation. ESD prides itself on being a strong representative voice for Musqueam and Musqueam's lands, water and territory and with the help of our new additions, Kieran Wilson, Dani Guerin, Ruthie Speck and Morgan Suhm, we look forward to continuing to represent and serve the community. We hope everyone continues to stay safe and enjoys the rest of summer.

Happy fall and all the best,

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

LANDMARK AGREEMENT GIVES INDIGENOUS GUARDIANS LEGAL AUTHORITY



The Kitasoo Xai'xais and Nuxalk have been the stewards of their traditional territories, which are within the Great Bear Rainforest, since time immemorial. The Great Bear Rainforest is an extremely productive ecosystem home to an abundance of wildlife and is the largest coastal temperate rainforest left on Earth. It is also rich in history and culture for Indigenous Groups and contains many culturally important areas including the traditional areas known as Txalgiu, Tsee-Motsa, Waglisla, Klemdulxk, and Aweenak'ola. Roughly the size of Ireland, the 64,000 km² large Great Bear Rainforest extends from the northern tip of Vancouver Island to Alaska.

Under the Great Bear Rainforest Agreement, a significant amount of this region is now protected, including 40 protected areas that are found within the territories of the Kitasoo Xai'xais and Nuxalk.

Currently, the two Nations and BC Parks collaboratively manage the various types of provincial-protected areas within their respective territories, the most notable of which is Tweedsmuir Provincial Park.

In recent years many Nations, including Kitasoo Xai'xais and Nuxalk, have set up programs to steward and monitor their territories. These programs, which are usually called Guardian or Guardian Watchmen programs, and their employees, called guardians, act as eyes and ears in their territories. First Nations have been the stewards of their lands and territories for thousands of years and the Guardian Watchmen programs are, in some ways, a modern version of what Nations have always done: monitor, protect, and restore environmental and cultural resources.

Kitasoo Xai'xais and Nuxalk have had these types of programs since 2010. Under various Guardian Watchmen programs, Nations primarily undertake monitoring activities, including looking for illegal activities. However, a newly signed agreement will introduce a pilot program to increase the scope of the Guardian Watchmen programs of Kitasoo Xai'xais and Nuxalk.

Earlier this year, the Kitasoo Xai'xais and Nuxalk First Nations signed a first of its kind agreement with BC Parks to increase their stewardship of the provincial-protected areas found in their traditional territories. Instead of primarily being involved in monitoring activities, the agreement, in the form of a memorandum of understanding (MOU), establishes the framework to develop a program of shared compliance and enforcement of the protected areas under the jurisdiction of BC Parks. Called the Guardian Shared Compliance and Enforcement Pilot Project, this initiative will give certain guardians the same powers and legal authority as BC park rangers, which has never happened in the province to date. While Nations in BC have previously worked on various initiatives with BC Parks through the Guardian Watchmen programs, the inclusion of legal authority bestowed on guardians make this agreement very significant.

The expanded powers are a welcomed development for guardians like Ernie Tallio who noted, "We're out all the time on our territories. We already do compliance checks in the valley and out in our waters, so this gives us a tool in our back pocket that we can use if need be."

The MOU signed between the Nations and BC Parks creates a technical working group (TWG) that will develop the terms of reference of the pilot program. The technical working group will also be responsible for developing other relevant policies and procedures of the pilot program. While the MOU contains funding that the Nations can use to participate in the TWG and train staff, among other things, the operational costs and the wages of employees will remain the responsibility of the Nations. This is due in part because while guardians will have the same authority as park rangers, they remain employees of their Nations, not the provincial government.

The original desire for Guardians programs stemmed from a desire to continue to steward the land and advance reconciliation. They also arose to address the fact that government ministries involved in conservation are often understaffed and have insufficient presence in many areas, especially rural and remote areas. This is a point emphasized by Tallio who says, "For years we didn't have conservation officers, DFO rarely out in the field, not nearly as much as we are... we're out monitoring our cultural sites, village sites, passing on knowledge from one generation to the next." In this vein, guardians help to address and fill the gaps in the monitoring, compliance, and enforcement responsibilities of government by creating a mutually beneficial partnership.

While relatively small in scope, the lessons learned through this pilot project will be used to guide the potential expansion of this type of initiative, a desire of Nations. Chief Neasloss of Kitasoo Xai'xais First Nation explains, "We are the model on how we can conduct compliance and enforcement to protect these special areas. This could be a powerful tool for many Nations. I'm hoping this gets rolled out to every Nation across the province."

The chiefs of both Nations as well as minister George Heyman have said that they believe this agreement sets a strong example for reconciliation and cooperation between the province and First Nations. Chief Neasloss summarized this sentiment in saying, "The central coast region of the Great Bear Rainforest is world-renowned for its beauty and rich ecological and cultural values. We all have a responsibility to ensure our actions keep it that way and this agreement is a positive step toward that goal and reconciliation."

THE CLEAN COAST, CLEAN WATERS INITIATIVE



The B.C. provincial government has announced plans to spend \$3.8 million on marine cleanup projects for the second phase of the Clean Coast, Clean Waters Initiative. Projects during this phase are focused on the recovery of plastic pollution, shoreline debris, and abandoned marine vessels.

According to the Department of Fisheries and Oceans, every year over eight million metric tons of plastic find their way into the world's oceans. In an effort to help combat the problem and recover some of the debris in our coastal marine environment, three organizations whose project proposals align with the initiative's goals have been identified as recipients for funding. All three of the 2022 recipients, the Ocean Legacy Foundation (Richmond), the Misty Isles Economic Development Society (Haida Gwaii) and the Coastal Restoration Society (Port Alberni), are BC-based organizations.

The Clean Coast, Clean Waters Initiative receives its funding from the B.C. provincial government as part of a far-ranging pandemic response and economic recovery initiative, which intends to support all sectors of the economy that have been affected by the pandemic. According to the BC Government's

website, “The fund was established to create jobs and support coastal communities as they recover from the COVID-19 economic downturn and loss of tourism”.

The previous phase of the provincially funded initiative successfully removed 1,000 tons of debris from the BC coast, including 86 derelict vessels, and 65% of all materials recovered from the shoreline project was recycled or upcycled. Throughout the first phase of the initiative, 4000 kilometers of shoreline was cleaned, which created almost 1,300 jobs. The second phase will see as much as 1,000 kilometers of B.C.’s coastline cleaned and as many as 30 derelict vessels removed.

It should be noted that the recovery of derelict fishing vessels falls within federal jurisdiction and is not the responsibility of the provincial government. BC Environmental Minister George Heyman stated that the provincial government is addressing the problem due to many coastal communities and First Nations expressing their frustration over the inaction to recover abandoned boats and other fishing debris.

“We urge the federal government to take action to stop the problem from getting worse”, said Heyman.

For more information about the Clean Coast, Clean Waters Initiative Fund, visit: www.bccleancoast.ca

CRUISE SHIPS DUMP TOXIC WASTE IN BC WATERS



Most Canadians are well aware of major environmental threats like climate change and habitat loss; however, there are dozens, if not hundreds, of other threats that cumulatively act to degrade our environment. One of these is the threat posed by large cruise ships. The large emissions produced by these ships is well documented but the impact they cause from water pollution has, until recently, gone relatively unnoticed. Vessels discharge huge quantities of polluted water into Canada’s waters each year. According to a study by the World Wildlife Foundation (WWF) they discharge 147 billion liters of polluted water into our oceans each year, the equivalent of 59,000 Olympic-sized swimming pools. Despite making up only 2% of boats, cruise ships are the largest source of this pollution. They account for 61%, 70% and 66% of the sewage, greywater, and scrubber washwater dumped into Canadian waters.

Pollution from cruise ships is also a significant problem in the waters off BC. A large number of cruise ships traverse through BC’s waters each year, most of them going to and from Alaska. These Alaskan

cruises are the most booked holiday in the US. It is estimated that 300 cruises will stop in Vancouver and 350 will stop in Victoria this year alone. A recent report by environmental groups West Coast Environmental Law and Stand.earth estimated that these cruise ships dump 31 billion liters of polluted water off the coast of BC each year.

What Types of Pollution Are Dumped by Cruise Ships?

Cruise ships generate 4 types of polluted water: sewage, grey water, bilge water, and scrubber washwater. Most cruise ships have advanced sewage treatment systems that treat sewage to a tertiary level, better than many coast communities including Vancouver's main wastewater treatment plant. However, not all the sewage dumped by cruise ships has been treated. Cruise ships also produce grey water, the water from sinks, showers, laundry and other similar sources. The third type of polluted water produced by cruise ships is called bilge water. This is the water that collects in the bilge of the ship, the lowest point in a ship designed to collect water. Bilge water contains grease, oil, hydraulic fluid and other contaminants from the machines and equipment within a ship.

By far the largest source of pollution from ships is the water used by scrubbers. Historically, cruise and other large ships have used heavy oil fuel to power their engines since it is cheap. However, it is very dirty and in 2020 the International Maritime Organization adopted requirements for ships to use cleaner fuels. Yet, ships can continue to use the heavy, dirty fuel if they have Exhaust Gas Cleaning Systems, also known as scrubbers. Scrubbers clean the exhaust from engines but the toxic water produced, which is highly acidic and contains many contaminants, is dumped into the ocean instead. A single 1-week cruise to Alaska can generate 200 million liters of this washwater and while it can be disposed of in port, it usually is not.

Why is this a Particularly Bad Problem of the BC Coast?

The problem of pollution generated by cruise ships is made worse by Canada's weak regulations compared to nearby states. For example, 6000 km² of ocean is protected in the Strait of Juan de Fuca and Puget Sound and Alaska requires cruise ships to receive permission prior to dumping waste. California has even banned the dumping of scrubber washwater off its coast. The stronger regulations and standards in the US incentivize ships to hold onto their waste when in American waters and subsequently dump it in Canadian waters.

Environmental Considerations

While the waste water dumped by cruise ships can be very harmful to the environment regardless of where it is dumped, it can be even worse when dumped in ecologically significant areas. For example, one study found that of all the scrubber washwater dumped in BC's waters, 10% of it is dumped in the critical habitat of killer whales. Another study by the WWF found that Scott Islands Marine National Park, off the northern coast of Vancouver Island, is more polluted by cruise ships than anywhere else in the province. The park is home to over 1 million seabirds including half the world's population of Cassin's auklets, among a diversity of other wildlife. It is estimated that since the park was created in 2018, over 4 million liters of waste has been dumped in the park. The waste from cruise ships can be dumped in Marine Protected Areas (MPAs), like Scott Islands, because of the extremely weak levels of protection currently afforded to them.

What is Being Done to Address the Problem?

Growing concern about the issue is slowing leading to solutions being implemented. Earlier this year, Transport Canada introduced new measures including the ban of treated sewage and greywater within 3 nautical miles of shore and requiring that both greywater and sewage be treated if they are to be dumped between 3-12 nautical miles off shore, while also increasing the level of treatment required. However, all the new measures are voluntary with no timetable to make them mandatory. Also, vessels self-report compliance with no third-party monitoring, as is the case in Alaska, and none of the new measures address scrubber washwater. These concerns have been raised by environmental groups who generally believe that more needs to be done to address pollution from cruise ships.

Other work is also being done regarding pollution prevention. In 2019 the federal government said they would introduce minimum protection standards for MPAs but nothing has been introduced to date. Part of the delay is due to uncertainty and discussions over what exactly should be banned and prohibited within MPAs. Until recently, the Port of Vancouver has been one of the ports most impacted by scrubber washwater in the world. They are in the process of banning the discharge of scrubber washwater in areas under their jurisdiction. The City of Vancouver has officially supported the Port's measures and has called on the provincial and federal government to do more.

While the cruise ship industry provides important economic contributions, contributing roughly \$4 billion across the country, it should be managed in a way that provides the economic benefits while minimizing the environment harm it causes. While some measures are beginning to be introduced, clearly more needs to be done to regulate the industry.

FALL EVENTS AROUND VANCOUVER

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

❖ BC Culture Days, September 23 – October 16

Culture Days is a nation-wide celebration of arts and culture. There are events around the country, including tons of fun things to do here. Events in Metro Vancouver include art exhibits, dance and music performance, workshops and many other events for people of all ages. There are also several events focused specifically on Indigenous arts and culture. For a full list of events visit <https://culturedays.ca/en/events>.

❖ Tapestry of Change, June 9 – October 2

This exhibit of Inuit textiles, prints, and artwork is being held daily at the Vancouver Maritime Museum until October 2nd. Explore Inuit art and culture and learn the Inuktitut alphabet through tapestry. Staff from the Maritime Museum worked with the Museum of Anthropology to find these talented artists, so you won't want to miss it. For more information visit <https://www.destinationvancouver.com/event/tapestry-of-change%3a-inuit-art-in-context/22802/>.

❖ True to Place: stímetstexw tel xéltel, June 15 – March 19

Hosted at the Bill Reid Gallery of Northwest Coastal Art, this exhibit features the works of 10 prominent Indigenous artists from the Northwest Coast. The exhibit features a range of art forms including canvas paintings, carvings, sculptures, digital creations, and traditional basketry. These

works explore topics from contemporary issues to ancestral stories. For more information visit <https://www.destinationvancouver.com/event/true-to-place%3a-st%3admetstexw-tel-x%3a9ltel/22799/>.

❖ **Uninvited: Canadian Women Artists in the Modern Moment, June 11 2022 – January 8 2023**

This exhibition features paintings, photography, bead work, sculptures and other art work from female artists of the 1920's – 1940's. While many male artists at the time focus on landscape paintings, female artists at the time are known for tackling issues such as psychology, urbanization, environmental destruction, and immigration. For more information visit <https://www.destinationvancouver.com/event/uninvited%3a-canadian-women-artists-in-the-modern-moment/22859/>.

❖ **Vancouver International Film Festival, September 29 - October 9**

The annual Vancouver International Film Festival is back this year and will feature around 120 feature films and 100 short films. There will also be talks, conferences, performances and other events that celebrate film culture. With films and events daily, there is something for everyone. For more information visit <https://viff.org/>.

❖ **Wildlife Rescue – Miracles in Conservation, May 14 – September 25**

The Vancouver Aquarium is hosting an immersive new experience about endangered species and conservation. Take a close look at animals like the Burmese Star Tortoise and Dwarf Caiman while learning from experts and taking part in interactive displays. For more information visit <https://www.vanaqua.org/explore/experiences/wildlife-rescue/>.

❖ **Beyond King Tut, October 27 – January 8**

In partnership with National Geographic, the Vancouver Convention Center is hosting the Canadian premiere of *Beyond King Tut: The Immersive Experience*. The exhibit commemorates the 100th anniversary of the discovery of King Tutankhamun's tomb in Egypt. This immersive cinematic journey features the wonder of ancient Egypt in high-resolution detail in an event that makes ancient history come to life. For more information visit <https://www.destinationvancouver.com/event/beyond-king-tut/22860/>.

❖ **Vancouver Cheese and Meat Festival, November 5**

The Cheese and Meat Festival will be held November 5th in North Vancouver where you can discover the finest flavours from across the province and the Pacific Northwest. The Cheese and Meat Festival is all about indulging in the small plate, so be ready to mingle with BC's finest artisanal food and beverage vendors and try multiple samples of their best creations. For more information visit <https://dailyhive.com/vancouver/vancouver-cheese-and-meat-festival>.

For many more events taking place in Metro Vancouver this summer, visit Destination Vancouver's website at <https://www.destinationvancouver.com/events/calendar-of-events/>.

CONTACT US

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