



Native Women's
Association of Canada

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L'Association des  
femmes autochtones  
du Canada

# INDIGENOUS WOMEN'S VOICES ON MARINE SAFETY, OCEANS, AND WATERWAY ENVIRONMENTAL PROTECTION

AN INITIAL DISCUSSION PAPER

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## ORGANIZATIONAL SUMMARY

**The Native Women’s Association of Canada (NWAC) is a national Indigenous organization representing the political voice of Indigenous women, girls, and gender-diverse people in Canada, inclusive of First Nations on and off reserve, status and non-status, disenfranchised, Métis, and Inuit. An aggregate of 12 Indigenous women’s organizations, NWAC was founded on the collective goal to enhance, promote, and foster the social, economic, cultural, and political well-being of Indigenous women within their respective communities and Canadian societies.**

For over 44 years, NWAC has established strong and lasting governance structures, decision-making processes, financial policies and procedures, and networks to help achieve its overall mission and goals. Today, NWAC engages in national and international advocacy aimed at legislative and policy reforms that promote equality for Indigenous women, girls, Two-Spirit, and gender-diverse people, including LGBTQ2S+ people. Through advocacy, policy, and legislative analysis, NWAC works to preserve Indigenous culture and advance the well-being of all Indigenous women, girls, and gender-diverse people, as well as their families and communities.

NWAC is looking to build capacity to advance the voices of Indigenous women in discussions related to marine safety, and to call for greater engagement of Indigenous women in discussions on the ecosystem conservation and environmental protection of Canada’s oceans and waterways. We will bring together NWAC’s Board of Directors composed of Elders, youth, and representatives of NWAC’s Provincial Territorial Member Associations (PTMAs) to discuss the greatest challenges to marine safety and ocean and waterway protection in their regions and to steer NWAC’s development of its policy positions and recommendations.

# INTRODUCTION

Indigenous communities experience the most extreme burdens of climate change, which threatens their economic, cultural, and spiritual practices. The pollution of waters and lands is changing the way Indigenous people interact with the environment. NWAC believes that Indigenous women impacted by environmental degradation and climate change must be central to climate change conversations and considered active and consenting participants in the healing and wellbeing of the land and its inhabitants.

This initial discussion paper was created to provide an initial overview of the Oceans Protection Plan (OPP) and the associated gaps as seen by Indigenous women. This overview is meant to familiarize and guide the board of directors, with the ultimate goal being the development of NWAC's policy position on marine safety, oceans, and waterways in Canada.

Although the Government of Canada is striving to improve our coasts and waterways, there is still work that needs to be done.

In this document, NWAC discusses the perceived gaps related to climate change policy at the federal level. These gaps include a number of failures: to involve Indigenous women in the decision-making process; to apply a gender-based analysis (GBA+) lens to the OPP process; to mention the added negative effects that proposed pipelines will bring to marine ecosystems; to include valuable inland waters in the discussion; and to not consider the legal personality of water. In order to better protect Canada's oceans and waterways and to move reconciliation forward with the Indigenous peoples of Canada, it is important to voice our concerns and be involved in every aspect of policy making and change.



## OVERVIEW OF THE OCEANS PROTECTION PLAN

In 2016, the Government of Canada launched the Oceans Protection Plan (see Appendix A for an infographic of the Plan), promising to invest \$1.5 billion to protecting our coasts and waterways for present and future generations. This five-year project is being managed by Transport Canada in partnership with Fisheries and Oceans Canada and Environment and Climate Change Canada. Four main themes in the plan cover more than 50 interconnected initiatives, all with the overall goal of protecting Canada's coastlines. A brief overview of each theme is provided. Priorities of the OPP include the creation of a world-leading marine safety system; the preservation and restoration of coastal marine ecosystems; the introduction of new research programs; and the enhancement of current ocean models. The intent of the OPP is to improve how to prevent and respond to marine pollution incidents and to develop a better emergency response plan in partnership with Indigenous and coastal communities.

To **improve marine safety** in Canada's coastal waters, the OPP plans to establish a 24/7 emergency response and incident management system. This response system will help to ensure speedier actions in response to marine pollution situations. Part of this initiative involves increasing on-scene environmental response capacity, which includes acquiring new environmental response equipment, all of which will help to improve the current oil spill response plan.



To **preserve and restore coastal marine ecosystems**, the OPP aims to better protect marine mammals and the delicate ecosystems that are vulnerable to marine shipping by increasing the number of fishery officers as well as surveillance activities for protected areas. A total of \$75 million has been set aside for the Coastal Restoration Fund, and the Marine Mammal Response and Marine Protected Area Surveillance Program. There are also plans to develop an initiative to eliminate abandoned boats and wrecks, with the focus on prevention, removal, and recycling, along with the ability to make owners liable for clean-up costs.

New **multi-partnered research programs** aim to bring scientists together in a number of areas. One area of interest is to improve our understanding of how oil spills behave and how to best clean them up. There is also a need to **enhance current ocean models** that will lead to improvements in marine navigation and emergency response times to track spills and predict their path. Another deliverable will focus at assessing underwater noise caused by marine shipping and its effects on marine mammals and ecosystems. Through these multi-partnership research projects, the OPP hopes to establish speed restrictions and safe passage routes as well as modernize legislation and regulations to the *Pilotage Act* and other shipping regulations.

Since the launch of the OPP in 2016, Transport Canada has been steadily working through their initiatives, with some notable accomplishments being achieved in Indigenous communities. To date, over 350 engagement sessions have been held with Indigenous groups.

On the West Coast in Haida Nation, British Columbia, Transport Canada has revised a regional plan and established places of refuge around the islands to ensure that ships requiring assistance during storms have a pre-surveyed location in which to stabilize; this initiative will not only reduce hazards to navigation but will have a positive impact on human life and the environment. The Government of Canada has also worked with our West Coast nations to deliver training on marine search and rescue and environmental responses. In British Columbia, a collaborative partnership has also been implemented to manage the governance of 14 Pacific, North, and Central Coast First Nations communities to address marine planning, shipping, safety, and protection issues. On Canada's North Coast, in Rankin Inlet, Nunavut, a seasonal Inshore Rescue Boat Station has opened to enhance the local search-and-rescue coverage area, with the aim to reduce response times for incidents in local waters. The OPP has also facilitated funding to four northern Indigenous communities to buy search-and-rescue boats and equipment.

With Canada having the longest coastline in the world, Transport Canada is working hard to improve our oceans and waterways. While the Oceans Protection Plan is the foundation to making sure Canada's coastlines are protected for generations to come, there are still critical areas that require improvement. In the following section, we identify the gaps — and their implications — that pertain to or impact Indigenous women. Where appropriate, we have proposed recommendations for consideration.

## IDENTIFICATION OF GAPS

Below is a summary list of the identified gaps within the Oceans Protection Plan, which will drive amendments. Each gap is further discussed in the following sections:

1. Lack of inclusion for Indigenous women in the decision-making process
2. Lack of Gender-Based Analysis Plus (GBA+) lens to all initiatives
3. Lack of mention of what added negative effects a proposed pipeline will bring
4. Lack of inclusion to inland waters
5. Lack of consideration of the legal personality of water

## LACK OF INCLUSION OF INDIGENOUS WOMEN IN THE DECISION-MAKING PROCESS

**The Oceans Protection Plan fails to mention the importance of including the voices of Indigenous women in the decision-making process. While the OPP has broadly included women and Indigenous people in their specific initiatives, there is no specific mention of “Indigenous women.” As Indigenous women, our voices are vitally critical in the decision-making process as we have traditionally been known as Water Carriers or Water Protectors.**

As the first true environmentalists of Turtle Island, Indigenous people have enjoyed a close relationship with water. For many Indigenous people, water is considered to be a relative, teacher, a medicine, and a healer. As first peoples of the land, water is characterized as a “more-than-human person” or “spirit” (Wilson & Inkster, 2018) in which there exists a

reciprocal relationship that must be continuously nurtured and respected. We operate under the basic principle that if you take care of the water, it will take care of you. Indigenous people understand that a healthy ecosystem is fundamental to our ability to exercise our Indigenous rights and laws; to our ability to fish, hunt, gather, and practise our traditional ceremonies. For Indigenous women, that connection deepens through our roles as childbearers. Just as water from Mother Earth carries life to us, we as women also carry life and water in our womb during pregnancy. In this way, we recognize that all aspects of creation are inter-related.

When the colonial settlers arrived, Indigenous natural law was replaced by colonial government laws, which characterized water not as a “human-like” but rather as a “resource” that can be bought or sold. These colonial laws changed the way the water is respected. Colonialism has had negative ramifications, which have led to a disconnect where the intergenerational transfer of knowledge of the roles and responsibilities of women has been diminished (Cave & McKay, 2016). These ways of being were not passed on from grandmothers to mothers, who in turn were unable to teach their children. As a result, a culture of discrimination and disenfranchised women and children has emerged and traditional roles, responsibilities, and practices have been lost.

On an encouraging note, the Government of Canada has begun to understand the vast knowledge that Indigenous people possess. The OPP will be looking to Indigenous and coastal communities for their input and expertise in a number of areas given the plan’s overall intent to partner with Indigenous people and seek their advice and traditional knowledge. Partnerships will be sought in the form of locally held engagement sessions, with baseline data collected that can lead to the development of a collaborative management framework between the federal government and a specific community, as well as new training programs to help Indigenous people launch a Community Boat Volunteer program and a Community Response Team within their own community. These initiatives are a start, but there still remains work to be done.

To begin, the voices of Indigenous women should be included in Oceans Protection Plan initiatives. This will help Indigenous women rebuild the connection that has been altered or lost as a result of Western influences and to reclaim our roles in water governance. This can be achieved by having women sit at the decision-making tables in a hybridized Indigenous colonial co-management setting. The biggest challenge in co-management will be how both parties will be able to integrate different worldviews in order to advance sustainable water measures.

Currently, there are no known tables where Indigenous women are involved in decision-making processes; however, a number of First Nations in Western Canada are at the forefront of governance.

One example of an Indigenous community that is asserting its jurisdiction on water governance is the Okanagan Nation Alliance (ONA) in Syilx Nation Siw'ikw, British Columbia. The ONA was formed in 1981 and represents West Coast Canadian and United States communities, including the Okanagan Indian Band, Upper Nicola Band, Westbank First Nation, Penticton Indian Band, Osoyoos Indian Band, Lower and Upper Similkameen Indian Band, and Colville Confederated Tribes (Okanagan Nation Alliance, 2017). A true example of stewards of the land, the ONA endorsed the Syilx Water Declaration in 2014.

This living document communicates the importance of water and outlines the responsibilities of the Syilx community with respect to water governance, sustainability, and management. As a result of poor management by government, water supplies have become over-allocated and water resources abused, and polluted. The ONA further states that the Syilx people have inherent and implicit title and rights to water, including the right to decide how it is used within and around their territory, and that the provincial and federal governments have no jurisdiction or ownership (Syilx Nation Siw'ikw Declaration, 2014).

Other leading Indigenous leaders are the five First Nations of the Nicola Valley. Their communities (Coldwater, Lower Nicola, Nooaithe, Shackan, and Upper Nicola Bands) signed a Memorandum of Understanding (MOU) with the Province of British Columbia in 2018 with a commitment to co-manage the watershed (Curran, 2019). The parties acknowledge the signed MOU as a “government-to-government” partnership in sustainably managing the Nicola Watershed in which there is dual jurisdiction. Interestingly, this agreement also commits to the implementation of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), which these First Nations views as a first step towards reconciliation.

Both the Syilx Nation and the five First Nations of Nicola Valley are prize examples of how Indigenous communities are bypassing the restrictive framework of consultation and accommodation and demonstrating how we as a community can depoliticize and govern in multiple ways.

Besides having Indigenous women participate at these decision-making tables, NWAC could further participate by being the national voice that helps to re-educate Indigenous women in general and about their roles with respect to water in particular. Knowledge sharing to both Indigenous and non-Indigenous populations could be achieved by NWAC through government-funded engagement sessions, learning workshops, toolkits, and activities on water. Regularly scheduled engagement sessions with Indigenous women would not only ensure we are heard at a national level but would also provide a forum for receiving various perspectives from Indigenous women across Canada. Our voices could be transmitted to those who sit at the decision-making tables. Toolkits could be developed and used to educate the public about marine safety and sustainable ecosystem issues. These toolkits could be available through our website and dispersed to Indigenous women and communities through our Provincial Territorial Member Association (PTMAs) offices. A “Mother Earth Water Walk” in the spring of each year, with participation nationally from each PTMA, could be offered. Spring is ideal as it represents the natural re-growth of the land. Through each of these activities, NWAC will help to educate and form relationships among Indigenous women.



# LACK OF GENDER -BASED ANALYSIS PLUS LENS

Women and Gender Equality Canada (WAGE), formally the Status of Women Canada (Status of Women Canada, 2018) state, “GBA+ is an analytical process used to assess how diverse groups of women, men and non-binary people may experience policies, programs and initiatives.” Having such a process in place would align with the Canadian Charter of Rights, Freedoms and the *Canadian Human Rights Act*. The Government of Canada committed back in 1995 to including GBA+. According to the 2015 fall reports (1) of the Auditor General of Canada, the Auditor General identified the need to incorporate a GBA+ lens into all government policy and programs across all federal departments and agencies (Government of Canada, 2016).

In Canada, the female Indigenous population accounts for 51.3% of the total Indigenous population, according to Statistics Canada (2016). Making reference to Canada’s Marine Safety Response, the Government of Canada’s Gender Report Budget (Department of Finance, 2019, 149) states that “Indigenous and coastal communities are expected to benefit from this measure through a co-development of response plans, training and capacity building so that they may more actively participate in Canada’s marine safety regime” and that “this measure will indirectly impact men, as the marine industry (e.g., commercial and recreational fishing, search and rescue, and shipping) has historically been male-dominated.” In light of this statement, how can Indigenous women be expected to benefit or provide meaningful input? When there is a lack of GBA+, Indigenous people become “pan-Indigenous,” meaning we are viewed as a homogenous group, rather than completely distinct from one another. Developing a more inclusive program would likely reveal new considerations that were not previously considered. The application of a GBA lens would establish a more equitable and inclusive approach to policy development, where

a goal would be to create equal outcomes between genders. GBA views women in relation to men in society rather than in isolation (Native Women’s Association of Canada, 2011). The end result would ensure that the intended purpose of the initiatives actually reach the intended populations.

Indigenous women experience the highest rates of chronic illness, mental health issues, spousal abuse, and are at higher risk of succumbing to alcohol and substance abuse. They also have a higher rate of unemployment, poverty, incarceration, and victimization compared to the rest of the Canadian population. Sadly, Indigenous women are also five times more likely than other Canadian women to go missing or be murdered. As such, the unique life experiences and perspectives of Indigenous women must play an important role in policy development and decision-making processes regardless of the policy issue being addressed, whether it targets Indigenous women directly, or whether it indirectly impacts them.

NWAC’s role in representing Indigenous women is to try to shift societal attitudes through education and awareness-raising efforts. For this reason, the culturally relevant gender-based analysis (CRGBA) was developed. The analysis looks at four areas: distinctions-based, sexual and gender diversity, intersectionality, and Indigenous knowledge (Native Women’s Association of Canada, 2019 unpublished). Integrating this analysis in the Oceans Protection Plan would be an opportunity to challenge the assumption that all people are affected by policies and programming in the same way.



## PROPOSED PIPELINES ADDING TO MARINE TRANSPORT ISSUES

The Oceans Protection Plan makes no mention of the added negative effects that the proposed pipeline will have on marine ecosystems. In 2016, Prime Minister Justin Trudeau approved the expansion of the Kinder Morgan's Trans Mountain pipeline project (Figure 1). Although there are other pipeline projects (Northern Gateway, Energy East, Keystone XL), this particular one hopes to carry crude oil from Edmonton, Alberta, to a marine terminal in Burnaby, British Columbia. The expansion of this pipeline would mean that capacity would triple from about 300,000 barrels per day (bpd) to about 890,000 bpd (Alini, 2018).

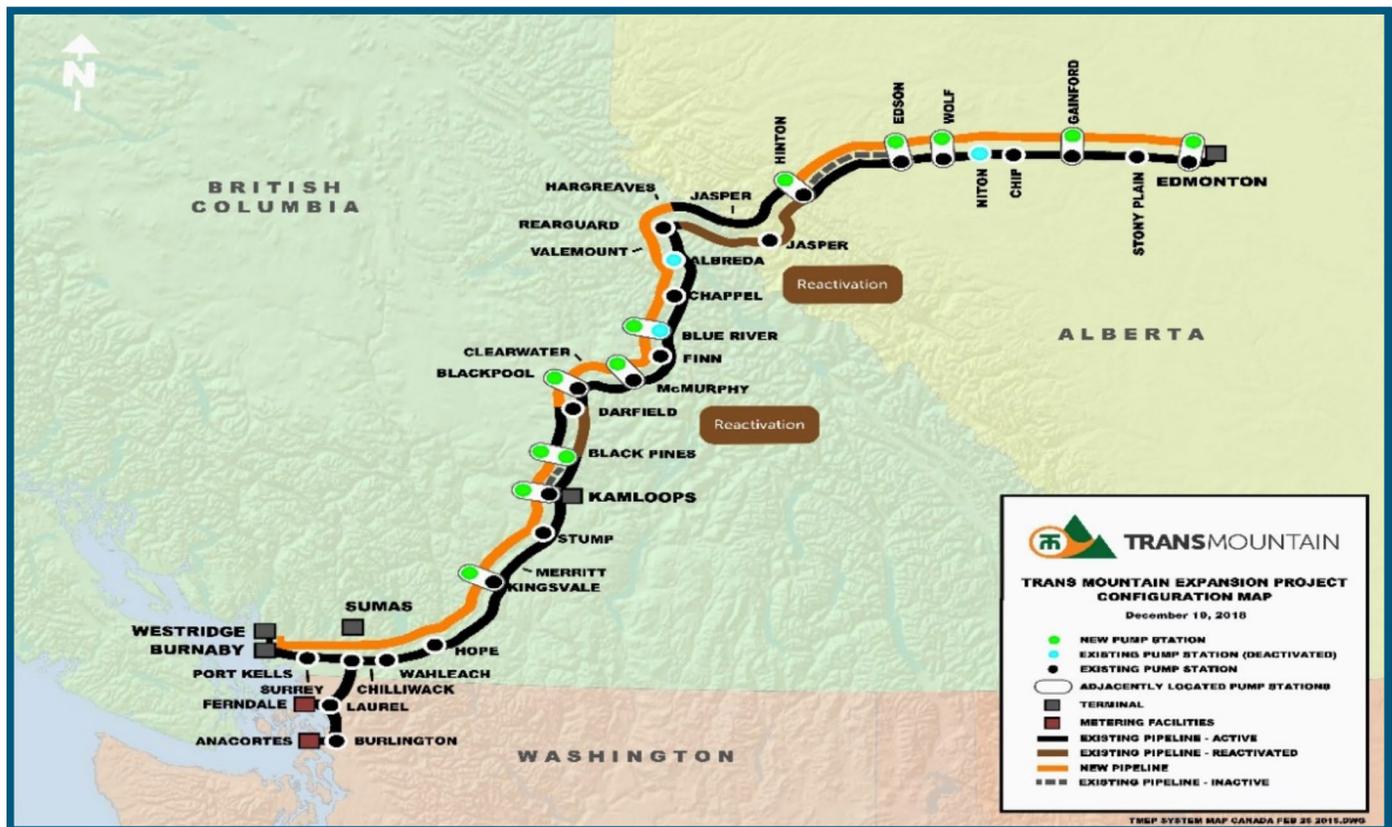


Figure 1. Proposed Trans Mountain pipeline from Edmonton, Alberta, to Burnaby, British Columbia. Map courtesy of Trans Mountain; <https://www.transmountain.com/planning-the-route>.

One of the major issues with the Trans Mountain pipeline is that it will increase the number of tankers in British Columbia waters from the monthly average of five (Hopper, 2018). If the expansion sees the light of day, this number will increase to more than 30 tankers a month (360/year). The negative impacts from such an increase include air pollution, the potential of spills from ships, improper garbage management, end-of-life ship disposal, ballast water containing invasive species, underwater noise, ship-strikes on marine megafauna, and damage to the surrounding terrestrial habitat and marine ecosystem (Walker et al., 2019).

A brief summary of each overlying issue is provided below.

## AIR POLLUTION

Air pollution caused by marine shipping impacts environmental and human health. Approximately 70% of all pollutants from marine vessels occur less than 400 km from shore (Walker et al., 2019). Fuel type (marine diesel oil, marine fuel oil, heavy fuel oil, and liquified natural gas), as well as engine efficiency, will dictate the level of emissions. Typical pollutants include sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), particulate matter (PM), volatile organic compounds (VOCs), carbon monoxide (CO), black carbon, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). High levels of SO<sub>x</sub> and NO<sub>x</sub> are known to cause respiratory issues, form smog, increase ocean acidity, and create PM with atmospheric chemicals, which have been linked to thousands of cases of lung cancer and cardiopulmonary disease (USEPA, 2016), whereas greenhouse gases, (CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O) are known to contribute to climate change.

## SPILLS FROM SHIPS

Oil spills (gasoline, diesel, bunker fuel, and unrefined crude oil) and dry bulk spills (iron, ore, coal, grain, bauxite, and phosphate rock) result from a number of reasons, including human error, explosions, and neglect (Walker et al., 2019). How the oil spill reacts once it reaches the water is not well understood. In part, it is weather-dependent. In wavy conditions, oil will mix vertically throughout the water; in calm conditions, oil will typically spread horizontally. In the event of a spill, the company that collects the oil (e.g., Kinder Morgan) is no longer liable once the vessel leaves port. This leaves the surrounding community to seek compensation from whatever foreign vessel is carrying the load. The top five ship-owning countries come from Greece, Japan, China, Germany, and Singapore (Walker et al., 2019).

Most of the harm from oil spills affects birds and marine mammals by fouling skin and feathers, but spills can also cause digestive, respiratory, and circulation system issues, which can result in reduced fitness, disruption, or displacement of marine communities, or death. On the other hand, while dry bulk spills are usually non-toxic, they can still negatively affect the marine ecosystem when released in large quantities (for example, in 1975, the M.V. Lindenbank dumped 17,797 tons of vegetable oil near Fanning Island in the Pacific Ocean causing marine biota mortality) (Russel & Carlson, 1978). Dry bulk spills remain largely unreported and are therefore not well-documented; more studies are needed to better understand the full impacts.

## GARBAGE MANAGEMENT

Cruise ships (~ 3,000 passengers) are capable of generating about 70 tons of solid waste per week (Walker et al., 2019). Waste includes glass, metal, plastic, organic waste, oily bilge water, wastewater, and hazardous waste. Some processing occurs onboard (e.g., glass crushing, organic waste incineration) whereas some occurs once the ship reaches land (e.g., recycling plastic). Usually the largest environmental impact contributor is food waste, which can be discharged directly overboard. Even though there are restrictions as to how close to land food waste can be discharged, impacts include reduced water/sediment quality, damage to marine biota, increased turbidity, and increased nutrient levels (Walker et al., 2019).





## END OF LIFE SHIP DISPOSAL

“Shipbreaking” is a method used for sunken vessels where it is cut into pieces. It can negatively impact environmental and human health by releasing oil and metal fragments, and causing noise and vibrations underwater. Above water, fumes can impact health. The longer a boat is sunken, the greater the possibility of contamination from iron and rust precipitate, which can stick to eggs and larvae and alter the feeding and respiratory systems of aquatic organisms (Walker et al., 2019).

## BALLAST WATER

Ballast water is considered a significant threat to marine ecosystems since it can introduce invasive species, including bacteria, microbes, and algae to water. Ballast water is usually pumped onboard to help stabilize boats when cargo is being loaded and unloaded. It is important to vessels since it helps maintain buoyancy and safety. This is typically done at the loading ports and requires adjustments to ballast water levels as cargo is unloaded. For example, a boat will load its cargo at a port in Singapore, pump water onboard, and travel to Burnaby, British Columbia. Once this ship unloads cargo off the ship, it needs to adjust ballast water levels to account for the lighter load of cargo. To do this, it releases the initial pumped water (from Singapore) into water in Burnaby. In this way, invasive species may be introduced into Canadian waters and are difficult to control.

## NOISE

Oceans are a naturally noisy environment due to ambient underwater noise. However, man-made noise has increased ~15 decibels in the past 50 years due to increased marine transportation, resource extraction, fishing, and recreational activities (Walker et al., 2019). This increase in noise has been documented to change movement and patterns in Atlantic cod and herrings (Slabbekoorn et al., 2010). It can impact fish, including marine mammals in all aspects of life, such as swim patterns (direction, speed, dive duration, decreased time searching for food, avoidance behaviour, predation, hazard avoidance), respiration patterns, disruptions to breeding, nursing, migration, lesions, strandings, and even death (Pine et al., 2016; Walker et al., 2019).

## SHIP-STRIKES

Marine transportation most commonly affects whales, but can also affect other species such as turtles, manatees, and dugongs. North Atlantic right whales are the most impacted, however, many ship strikes are not reported due to a lack of reporting requirements in different jurisdictions (Walker et al., 2019). For many large vessels, they are not even aware of the strike until they reach port with the whale draped over the bow of the boat.

## TERRESTRIAL AND MARINE ECOSYSTEMS

Marine transportation, port activities, and port expansions that are built to accommodate an increase in production, such as that of the proposed Trans Mountain pipeline, can create many disturbances to both the terrestrial and marine ecosystems. This disturbance results in a total loss of habitat for everything that existed there beforehand (e.g., plants, animals, insects, and fish nurseries).

Vessels coming into port generate noise, cause oil spills, and discharge ballast water. Cargo deposits also accumulate over time and in large will remain in the water or sink to benthic sediments, all of which make both the terrestrial and marine environment uninhabitable to native species (Walker et al., 2019).

In summary, it is impossible to eliminate all of the environmental impacts of pipelines. For the time being, the risks outweigh the benefits of these proposed pipelines. Until better technology is available to decrease the potential environmental impacts, we should not be increasing marine traffic to our waters. For the multitude of ships already in motion, there are better ways to protect the environment. To start, Canada needs a more sustainable port management system. We can adopt a standardized market-based approach at all Canadian ports, with low-polluting emitters being rewarded with lower port fees and high emitters penalized. This strategy can be implemented in the short term to give vessels time to correct other issues. We should do make all regulations mandatory, not voluntary, where access to Canadian waters is denied for those vessels that do not adhere to the regulations.

Other countries are using similar tactics for other industries. For example, the U.S. and Europe recently (January 2020) implemented new regulations relating to flight navigation systems, require airplanes to be equipped with the new ADS-B system. Because of the increase in air traffic, airplanes will start to

fly at different altitudes to decrease the possibility of collisions (e.g., 1,500 ft and 2,500 ft, as opposed to 1,000 ft and 2,000 ft). Some older aircrafts are not equipped with this newer technology. These new regulations have implications for the Trudeau government, which will have to purchase new executive jets to replace the older aircraft. The Prime Minister will be required to comply with these upgrades or be denied entry into U.S. and EU airspace (McGregor, 2019).

Mandatory legislative changes in Canada should ensure that old engine systems be replaced and vessels required to switch to low-sulphur fuels, as well as acquire better methods for cleaning exhaust (e.g., through selective catalytic reduction, which according to Han (2010), can reduce NO<sub>x</sub> emissions by ~ 95%). Ports should incorporate shore-side electricity stations so that vessels can connect to these stations and shut off engines, which will further reduce emissions. In addition, ports should be equipped with adequate facilities for receiving ship-generated waste. Europe has already implemented a similar directive in all of its ports to promote the proper disposal of wastes. In terms of reducing underwater noise, vessels should be required to reduce travel speeds and only enter with noise-reducing propellers that are regularly maintained. These recommendations will not only reduce noise, but also emissions, and will decrease the number of ship-strikes with marine megafauna. The impacts of noise and ship-strikes can further be reduced by placing strict geographic (e.g., avoiding marine-protected areas, migratory pathways) and seasonal (e.g., avoiding ice-breaking to improve movement of polar bears, mating season of whales) restrictions on shipping (Williams et al., 2014).





## LACK OF INCLUSION OF INLAND WATERS

**The Oceans Protection Plan has also missed opportunities to address the protection of our inland waters. The OPP mentions that its initiatives include our three coastlines, the Great Lakes, the St. Lawrence Seaway, and some inland waters. The protection of these waterways will be addressed by establishing a 24/7 emergency response and incident management; increasing on-scene environmental response capacity; improving oil spill response plans; acquiring new environmental response equipment; sharing near real-time information on marine traffic with Indigenous and coastal communities; and modernizing Canada's marine safety regulations and enforcement regime.**

These initiatives are important improvements to our water. However, there are other issues within the Fraser River and the St. Lawrence Seaway that should be addressed. To enter the Port of Vancouver, vessels must travel through the Fraser River. The Fraser River is home to many Indigenous communities who depend on the health of this river as a food source. It is also a high marine traffic area. As discussed earlier, there are many negative impacts associated with marine transport. In addition to those already discussed, the Fraser River is dredged on an annual basis (Sweet, 2016).

Dredging involves excavating the bottom of a body of water and removing it from the water. The material (sand, silt, etc.) is usually transported to another area within the water or is removed and disposed of. Because of currents, flows, and inflows from tributary streams and rivers, a great deal of silt gets deposited in the Fraser River, which decreases the depth of the water over time. Dredging is done annually to remove silt and to deepen the water depth, which ensures that vessels can safely navigate the waterway.

There are many known environmental issues associated with the dredging process itself and the disposal of the dredged material (Haider, 2016). Regular dredging overtime breaks down the natural structural strength of the sediment bed, making the dredged area more prone to erosion. Ultimately, eroded banks further contribute to the build-up of silt, which exacerbates the problem. Dredging also removes vegetation, which provides shade to the water. Without it, light is able to penetrate a larger area and thereby increases water temperature. Many shallow-water juvenile species depend on vegetation for protection from currents and predators.



Furthermore, when sediment is removed from the water, it can grab fish eggs, fry, larvae, mollusks, and amphibians, causing injury, stress, disorientation, abrasions, infections, and death (Erftemeijer et al., 2012). The removal of sediment also increases turbidity, which decreases photosynthesis and leads to suffocation and death.

Within the St. Lawrence Seaway, pollution is a concern. Pollution is not only caused by marine transport, but also from agricultural and manufacturing activity (Neufeld, King, & Roberge, 2015). The St. Lawrence River is the only pathway for vessels wanting to enter the Great Lakes. The river supports more than 100 ports, and vessels carry more than 160 million tons of cargo each year (Research and Traffic Group, 2014). The river is also under constant threat of expansion (Save the River, 2019). The Research and Traffic Group (2014) reported a total of 801 (271 in Canada, 530 in the U.S.) vessel accidents (collision, striking, or grounding) and safety occurrences throughout the Seaway between 2002 and 2011. From incidents reported, 130 were spills. On top of oil spills, the St. Lawrence River is said to have 186 different invasive species that have been introduced thanks to ballast water (Save the River, 2019).

When these non-native species establish themselves in our local ecosystems, they outcompete and disrupt the species that have evolved to specifically live there. Invasive species also degrade soil, which can lead to erosion and a decline in water quality. While the Ministry of Natural Resources and Forestry (2012) has a strategic plan in place to control and manage aquatic invasive species, removal and complete eradication is difficult once invasive species have established themselves. With marine traffic and invasive species comes loss of biodiversity and diminished water quality.

Although the governments of Canada and Québec have been looking into these issues since 1988 (Government of Canada, 2017), issues still persist. Currently, the multi-year St. Lawrence Action Plan 2011-2026 strives to continue to address issues on biodiversity, sustainability, and water quality. However the St. Lawrence Seaway remains in a fragile state. Unfortunately, marine transport pressures continue, making it difficult to resolve such complex challenges.



## LEGAL PERSONALITY OF WATER

Indigenous “ways of being” have long recognized water as a living entity. Sadly, Indigenous communities have had to witness the harmful degradation of sacred water since the enactment of protective colonial laws. This has led to a worldwide water governance movement, with some First Nations self-governing water within their territory, to rivers being recognized as a legal distinct personality. Although there are no cases in Canada to date, the idea of legal personality should be considered for our coastlines and inland waters as its intent is to plug gaps that environmental regulations have failed to do.

Legal personality, a concept introduced in 1972, designates certain natural entities (such as rivers, lakes, or mountains) the status of a legal person. This means that natural entities gain rights, protection, privileges, responsibilities, and the legal liability of a person. While the intent is to provide better protection to the environment, it can also fulfill a dual purpose of acting as a vehicle for recognizing Indigenous peoples’ relationships to nature and thus providing the opportunity for Indigenous peoples to exercise their human rights.

In 2017, New Zealand’s Maori tribe was the first Indigenous community to have a river granted a legal personality. This historic change came about after many years of degradation to the Whanganui River and its catchment. Damage included rapids that were dynamited to create easier passage for tourist paddlers, gravel that was extracted for railway ballast and road metal, and a drain for a city’s effluent (Warne, 2018).

This eventually led to legislation declaring the Whanganui River, referred to by the Maori tribe as *Te Awa Tupua*, “an indivisible and living whole from the mountains to the sea, incorporating the Whanganui River and all of its physical and metaphysical elements” (O’Byan, 2018). This legal recognition means that *Te Pou Tupua* (the human face of the Whanganui River) can initiate legal proceedings to protect the Whanganui River if it is damaged or if any of its values are compromised. Made up of only two people – one government and one Maori member – they represent the River in a guardianship role and not for community interest. For that, another council comprising 17 members, including six Maori, was established.

Another example of water gaining legislative protection is the Yarra River in Australia. Guardianship of the Yarra River differs from the Whanganui River in a few ways. The voice of the river is managed by the Birrarung Council, which comprises 12 community and skill-based members, two of whom must be chosen by the Indigenous Wurundjeri people. The result is a Council membership representing a wide range of values and perspectives, including Indigenous, environmental, social, recreational, and management. Government representatives are not permitted to serve as members of the Birrarung Council. The Council’s role is to provide advice to the Minister and to advocate for the protection and preservation of the Yarra River (O’Byan, 2018). While the *Yarra River Protection Act* protects the river as one living and integrated natural entity, it does not, however, grant the river independent legal status,

with all of the rights and liabilities. The Birrarung Council is only able to advocate on behalf of the Yarra; it is not considered its legal guardian or given any legislative power. Essentially, the Birrarung Council acts as an advisory board.

Both legal guardianship and advisory boards sound like good ideas, however, careful consideration is required. Unless the proper precautions are taken, acting as an advisory board with less liability may be more beneficial to guardians. Such is the case in India where the High Court of Uttarakhand awarded the Ganga and Yamuna Rivers legal status and nominated individuals within the state government to act as guardians. The government immediately appealed this decision to the Supreme Court of India for fear of being sued for any future damages caused by the rivers during flooding events (O’Donnell, 2018). Without broader institutional and financial support, this means that only the wealthy will be able to challenge decisions and enter into costly litigation should a river wish to sue or be sued.

Ultimately, there are many variables to consider and it is too early to predict how these new legislations will impact water. O’Donnell (2018) states that one impact that is already emerging from these new legal personalities is the paradox that as legal rights increase, it can weaken community support for protecting the environment in the first place. More time to observe is needed and more research and analysis are required to make an informed decision.

Please see Appendix B for additional information.

# ENVIRONMENTAL SCAN

## – LEGAL COMPONENT

This scan revealed 16 initiatives that involved Indigenous participation, consultation, or other involvement. No initiative explicitly referenced Indigenous women, but many of these initiatives could make room for the input and/or involvement of Indigenous women.

The environmental scan further provides a brief overview of issues where Indigenous women intersect with climate change. The scan also includes a brief overview of the Indigenous water governance case law and water law, as well as the framework for actualizing Indigenous rights to water. The jurisprudence concerning what Indigenous sovereignty over water law could look like is scant.

### Indigenous water governance uses a pre-contact understanding that water is a non-human being with rights

- ◆ Christensen, R., Linter, A. M. Trading our Common Heritage? The Debate over Water Rights Transfers in Canada in K. Bakker, ed., *Eau Canada*. Vancouver: UBC Press, 2007.
- ◆ Curran, D. Indigenous Processes of Consent: Repoliticizing Water Governance through Legal Pluralism, *Water* (2019) 11:3, 571.
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- ◆ MacGregor, D. Traditional Knowledge and Water Governance, *Alternatives Journal* (2014) 10:5, 493.
- ◆ UN General Assembly. *United Nations Declaration on the Rights of Indigenous Peoples: Resolution*, adopted by the General Assembly October 2, 2007, A/RES/61/295, Article 25: “Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard.”

## Water is sacred and gives spiritual teachings

- ◆ Assembly of First Nations. *Climate Change and Water: Impacts and Adaptations for First Nations Communities*, AFN Environmental Stewardship Unit, March 2008.
- ◆ Walkem, A. Water Philosophy, *Alternatives Journal* (2007) 33:4.
- ◆ Maracle, L. Water in D. Christian & R. Wong, eds., *Downstream: Reimagining Water*. Waterloo: Wilfrid Laurier University Press, 2017, 33.
- ◆ Laboucane-Benson, P. Are We Seeking Pimatisiwin or Creating Pomewin? Implications for Water Policy, *International Indigenous Policy Journal* (2012) 3:3.

## Women are water protectors

- ◆ NWAC's water policies, <https://www.nwac.ca/policy-areas/water/>
- ◆ Profile of Josephine Mandamin, Anishinaabe Elder. The Water Walker, *Indigenous Rising*, Sept. 25, 2014, <http://indigenoustrising.org/josephine-mandamin/>.
- ◆ Cave, K. Water Song: Indigenous Women and Water, *The Solutions Journal* (2016) 7:6b, 64.
- ◆ Szack, Natasha J. *Keepers of the Water: Exploring Anishinaabe and Métis Women's Knowledge of Water and Participation in Water Governance in Kenora, Ontario* (2013 unpublished, archived at University of Manitoba).
- ◆ MMIWG transcripts:
  - ◆ Moncton, N.B., 2018-02-13, Public Volume 44(a), *Knowledge Keepers*, 45-46.
  - ◆ Vancouver, B.C., 2018-04-05, Public Volume 90, *Heiltsuk Panel*, 34: water stewardship

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- ◆ Foreword, Rebecca Moore, water protector
- ◆ Women as water carriers, Dawnis Kennedy, 152
- ◆ Women as water protectors, four types of water, 158-9

## Women are vulnerable to climate change/marine ecosystem changes

- ◆ Williams, L., et al. *Women and Climate Change Impacts and Action in Canada*. Canadian Research Institute for the Advancement of Women and the Alliance for Intergenerational Resilience, 2018); [https://www.criaw-icref.ca/images/userfiles/files/Women%20and%20Climate%20Change\\_FINAL.pdf](https://www.criaw-icref.ca/images/userfiles/files/Women%20and%20Climate%20Change_FINAL.pdf).
- ◆ Ford, J. D., et al. Vulnerability of Indigenous Health Systems in Canada to Climate Change, *Global Environmental Change* (2010) 20:4, 668-680.

## Common Law scan

### Water-related rights:

- ◆ Water rights
- ◆ Right to self-government
- ◆ Right to environmental protection in Indigenous lands (by title, treaty, or unceded)

(See Phare, M. A. S. *Indigenous Water Rights Primer*, April 6, 2009; <http://www.onwa.ca/upload/documents/Indigenous-water-rights-primer-canada.pdf>.)

## Water rights

### 1. *R v Van der Peet* (1996) 2 SCR 507.

McLachlin, J. (in dissent, but on another point):

- ◇ “This right to use the land and adjacent waters as the people had traditionally done for its sustenance may be seen as a fundamental Indigenous right. It is supported by the common law and by the history of this country. It may safely be said to be enshrined in s. 35(1) of the Constitution Act, 1982.” (para 275)
- ◇ “In so far as an Indigenous people under internal law or custom had used the land and its waters in the past, so it must be regarded as having the continuing right to use them, absent extinguishment or treaty.” (para 269)
- ◇ The distinctive rights test (from *Van der Peet*) could be met by water-related activities that could include fishing for sustenance, travel for food, cultural, or ceremonial uses.

### 2. *Claxton v Saanichton Marina Ltd* (1989) 3 CLNR 46.

- ◇ BCCA held the fishing right, the fish and their habitat, the right to travel to the fishery are protected as rights incidental to the appellant’s treaty right to fish (*Saanich Treaty* 1852).

### 3. *Halalt First Nation v British Columbia (Minister of the Environment)* 2011 BCSC 945.

- ◇ FN argues Indigenous title and proprietary rights to all areas encompassing development project, including to the fish and groundwater, with specific emphasis to their cultural and spiritual connection to the Chemainus River, which was to be greatly affected by the development project.
- ◇ Freshwater resources governed by the Hul’qumi’num treaty, to which the Halalt is a member.
- ◇ Case issue is a duty to consult.
- ◇ “The Province was also aware that Halalt claimed an Indigenous right to fish in the Chemainus River and gather certain plants from the River and its banks for a variety of uses, bathe in the Chemainus River for ceremonial bathing purposes, hunt in areas supported by the River, and use the groundwater from the Chemainus Aquifer to supply its potable water.” (para 450)

### 4. Title to water: common law only recognizes riparian rights along shorelines or under riverbeds.

- ◇ Has Indigenous title test been applied to historically occupied waterways?
- ◇ Could these be used to protect waterways/ coastlines/marine environments from a conservation perspective?

## Self-government rights

- ◇ A section 35 right to water governance argument could be made.
  - ◇ Right to fish cases.
  - ◇ Indigenous water governance rights may also run contrary to Canadian common law and international legal conventions about ocean conservation and protection (among other things).
1. *Klahoose First Nation v Sunshine Coast Forest District (District Manager)* 2008 BCSC 1642.
    - ◇ Nation given authority over waterways, use of waterways, watershed area.
  2. *Tsleil-Wauthuth Nation v Canada* 2018 CAF 153.
    - ◇ Marine shipping, duty to consult at Phase III not met.
  3. *Delgamuukw v British Columbia* (1997) 3 SCR 1010.
    - ◇ Case gives test for Indigenous title claims, but not hints as to whether the test extends to water, outside common law property ownership.
  4. *Lax Kw'alaams Indian Band v Canada (Attorney General)* 2011 SCC 56.
    - ◇ Fishing right test extending traditional practices to modern application of commercial fishing, appeal fails because they were, traditionally, not a trading people.

## Right to environmental protection

- ◇ Water protection/conservation and the relationship with Indigenous people can be adequately summarized in the struggles many reserves face in accessing clean drinking water; that is to say 'not great.' The OPP doesn't address drinking water issues, but more ocean coastline conservation
  - ◇ There may be a fiduciary argument stemming from s 91(24) of the *Constitution Act*
    - ◆ Environment is under several jurisdictions, the principle of federal paramountcy suggests the responsibility is vested in them (for Indian lands, treaty lands, and the like). Trend towards increasing consultation with Indigenous groups about any development of watersheds
      - ❖ See: *First Nation of Nacho Nyak Dun v Yukon* 2017 SCC 58, *Beckman v Little Salmon/Carmacks First Nation* 2010 SCC 53.
1. *Haida Nation v British Columbia (Minister of Forests)* 2004 SCC 73.
    - ◇ Crown can use 'strategic planning' reasons to justify an infringement of Indigenous title (para 76), which could include watershed management.
    - ◇ Knowledge of a *credible* but unproven claim to Indigenous title triggers the duty to consult and accommodate. So, when it comes to claims to water and submerged lands, it will be up to the courts to determine what is credible. (para 37)

The OPP's listed initiatives (thus far) offer a tangible beginning towards achieving meaningful Indigenous involvement. There is much distance to cover, however, in acknowledging and acting upon Indigenous women's traditional roles as waterkeepers in ocean-front initiatives.

# ENVIRONMENTAL SCAN - OVERALL

The literature review revealed a clear lack of inclusion or examples of where Indigenous women were part of decision making relating to marine safety, oceans and waterways. In fact, no examples were found to date. It is clear that moving forward, Indigenous women need to be at the forefront of these decision-making tables.

## RECOMMENDATIONS

Each identified gap and the recommendations that have been previously discussed in this paper are summarized below.

### **Lack of inclusion for Indigenous women in decision-making process**

- I. The Government of Canada should include the voices of Indigenous women at decision-making tables related to marine safety, oceans, and waterways, as Indigenous women have traditionally held roles and responsibilities to water.
2. NWAC should be the national voice that helps to re-educate Indigenous women and their roles with respect to water through:
  - I. Engagement sessions
  - II. Learning workshops
  - III. Toolkits
  - IV. Activities on water

### **Lack of Gender-Based Analysis Plus lens applied to all initiatives**

1. The Government of Canada should incorporate NWAC's culturally relevant gender-based analysis (CRGBA).

### **Lack of mention of what added negative effects proposed pipeline will bring**

1. The Government of Canada should change voluntary legislation to mandatory legislation.
  - I. Ensure that old engine systems are replaced
  - II. Require vessels to switch to low-sulphur fuels
  - III. Acquire better methods for cleaning exhaust
  - IV. Mandate that ports incorporate shore-side electricity stations
  - V. Equip ports with adequate facilities for reception of ship-generated waste
  - VI. Require vessels to reduce travel speeds
  - VII. Only enter ports with noise-reducing propellers
  - VIII. Place geographic and seasonal strict restrictions on shipping

### **Lack of inclusion to inland waters**

1. The Government of Canada should expand its initiatives for inland waters, particularly the Fraser River and St. Lawrence Seaway.

### **Lack in considering the legal personality of water**

1. More time is needed to observe, research, and analyze to make an informed decision.



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# APPENDIX A: ENVIRONMENTAL SCAN

## OCEANS PROTECTION PLAN

Canada's coasts and waterways are an important facet of Canadian life and culture. They are a workplace for some and a playground for others. They allow us to travel and exchange goods. They are a source of inspiration and pride for us all. The \$1.5 billion Oceans Protection Plan is the largest investment ever made to protect Canada's coasts and waterways, while growing our economy. With this Plan, future generations will continue to enjoy and benefit from this key part of Canada's identity.



### OBJECTIVES

- Create a world-leading marine safety system that protects Canada's waters.
- Restore and protect marine ecosystems and habitats.
- Create stronger local emergency response capacity by establishing Indigenous partnerships and by engaging coastal communities.
- Invest in oil spill cleanup research and methods to ensure that decisions taken to protect the marine environment are evidence-based.

### OPP ENGAGEMENT APPROACH

Partnership and collaboration are the foundation of the Government of Canada's actions to protect our coasts. We are partnering with Indigenous peoples and coastal communities and seeking their advice and traditional knowledge in a number of areas concerning the Oceans Protection Plan. Our engagement is locally coordinated, transparent, collaborative, and supports reconciliation with Indigenous peoples.



More information: [www.canada.ca/protecting-our-coasts](http://www.canada.ca/protecting-our-coasts)

### FEDERAL GOVERNMENT AND PARTNERS





## OCEANS PROTECTION PLAN

### PRESERVING ECOSYSTEMS

- **Conserve or restore marine ecosystems** through the \$75-million Coastal Restoration Fund, and Marine Mammal Response and Marine Protected Area Surveillance Program.
- **Mitigate the risks of shipping on marine mammals and the environment** like underwater noise through assessments of current and potential mitigation measures; and, marine environmental quality assessments.
- **Assess the impacts of marine shipping on the environment** by evaluating cumulative impacts of shipping in key ecosystems, and building a program to assess potential impacts of future development.
- **Eliminate abandoned boats and wrecks** by developing a plan that focusses on prevention, removal and recycling, **making vessel owners liable for any cost of clean-up and through education and outreach programs.**
- **Collect environmental baseline data** through engagement with Indigenous peoples and coastal communities.

### EVIDENCE-BASED DECISION MAKING

- **Better understand oil spills in water** with research funding on how oil behaves in water, multi-partner research funding on oil spill response technology, and oil spill drift prediction.
- **Conduct research to improve measures for oil spill response planning and clean-up.**

### PARTNERSHIPS AND ENGAGEMENT

- **Build Indigenous partnerships in the marine safety system**, creating two new Coast Guard Auxiliary chapters; launching an Indigenous Community Boat Volunteer program; and creating Indigenous Community Response Teams.
- **Develop oceans collaborative management frameworks** with the public, Indigenous peoples and other stakeholders.
- **Increase participation of Indigenous peoples, coastal communities and women** by providing training opportunities and including Indigenous Traditional Knowledge in decision making.
- **Create national public forums** for Canadians to discuss shipping safety and environmental issues.



### WORLD-LEADING MARINE SAFETY

- **Provide and share real-time marine traffic information** with local communities.
- **Collaborate on local marine traffic management**, including establishing speed restrictions and safe passage routes.
- **Improve incident management toward seamless response** by implementing the Incident Command System; new mobile command posts; and, marine communications and traffic services delivery.
- **Expand risk-based response planning tailored to local needs** through enhanced risk analysis of maritime search and rescue.
- **Modernize legislation and regulations** to strengthen the polluter pay principle by amending the Ship-Source Pollution Fund to include access to adequate compensation and amending the *Pilotage Act* and other shipping regulations.
- **Modernize hydrography and charting in key areas**, as well as near shore and high-priority ports.
- **Increase on-water presence and marine emergency response capacity** by implementing Primary Environmental Response Teams and modernizing Coast Guard environmental response equipment.
- **Expand the role of Coast Guard Auxiliary** to include environmental response training.
- **Invest in safety equipment and basic marine infrastructure** through additional RADAR sites, new tow kits on Coast Guard's large vessels, and improve maritime communications capabilities including enhancements to Marine Communications and Traffic Centres.



More information: [www.canada.ca/protecting-our-coasts](http://www.canada.ca/protecting-our-coasts)

January 2018



Native Women's  
Association of Canada

L'Association des  
femmes autochtones  
du Canada