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The Honourable Jonathan Wilkinson, P.C., M.P. Minister of Environment and Climate Change House of Commons Ottawa, Ottawa, Ontario K1A 0A6

Submitted By:

Chief Ross Montour, Consultation Portfolio Chief Mohawk Council of Kahnawà:ke

Direct Correspondence to:

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Re: Request for a Region Impact Assessment - St. Lawrence River

Dear Minister Wilkinson,

Please consider this letter as an official request from the Mohawk Council of Kahnawà:ke (MCK) for a Regional Impact Assessment (RIA) of the St. Lawrence River as per Sections 92-93 of the Impact Assessment Act (IAA). The MCK is the governing body for Kahnawà:ke, a Mohawk community located on the south shore of the St. Lawrence River across from the island of Montreal. In the last seven years, the MCK has been involved in numerous consultations related to project-based Environmental Assessments and federal and provincial strategies, policy reviews and modifications to legislation. Through these processes, the MCK has repeatedly stressed the need for a more comprehensive, regional approach to assessing the potential impacts and ramifications of projects and government decisions on the St. Lawrence River and the rights and interests of the Mohawks of Kahnawà:ke.

Unfortunately, no mechanism existed to enable the initiation of an RIA and we have therefore been unable to appropriately assess impacts to date. We are pleased that the new IAA has provided this mechanism and we look forward to discussing this request in more detail with IAAC staff. We present below the historical context of the Mohawks of Kahnawà:ke, leading to the rationale for an RIA and some

preliminary considerations on a suitable approach to address the inherent complexity of completing a study of this nature in a large, diverse setting.

Historical context

The St. Lawrence River is an integral part of Mohawk territory, and has been since time immemorial. The Mohawk Nation's historical connections to the River extend deep into our pre-contact history.

The ancestors of present-day Mohawks of Kahnawà:ke have historically used and occupied territories along the St. Lawrence River. Within the Iroquois Confederacy, the Mohawks are the keepers of the Eastern Door and are responsible to address the issues that arise from the east from the mouth of the St. Lawrence River eastward.

The St. Lawrence River, including its wetlands and many of its tributaries, has long supplied our Nation with an abundance of fish and game. When the air, water, and land were clean, we depended on this watershed for sustenance. The St. Lawrence River flowed uninterrupted from the upper reaches to the salt water. Eels and other fish migrated in great numbers through our territory. We harvested eels, sturgeon, walleye, perch, and many other species of fish. Large expanses of coastal marsh supported muskrat, beaver, and waterfowl, among other animals, and our medicines grew in abundance. Our water was clean to drink and our gardens provided us with corn, beans, squash, and a variety of fruits and vegetables.

It is important to point out that until the 1950s, hunting, fishing, trapping and horticulture sustained our families, and were the basis for Mohawk livelihoods. Since contact, we have experienced many changes, but as long as our foods were abundant and safe to eat, we were able to adapt our cultural practices to new economic and environmental conditions. The harvesting, processing, and sharing of foods in family groups allowed us to maintain healthy bodies and minds, and it sustained our language and our systems of traditional governance and law.

Traditional land use, which includes harvesting for food and for trade or sale, was at the core of our way of life and values. We harvested at many sites along the St. Lawrence River, and depended on an intact ecosystem, that stretched from what is now known as Lake Ontario to the salt water estuary of the St. Lawrence River. Migratory fish and birds moved throughout the St. Lawrence River and the river's coastal wetlands. This entire region supplied us with an abundance of wild foods and medicines. Networks of sharing and commerce connected Kahnawà:ke to other communities, both Indigenous and non-Indigenous.

Harvesters expect high quality meat, fish, and water, and suspicions of contamination are generally met with significantly reduced traditional land use of an area, until the harvesters themselves see signs of recovery. We also require healthy fish and wildlife populations that can be reliably and sustainably harvested. Today, it is extremely difficult to find fish and game in the places, and in the quantities that would allow us to support our families with safe, healthy foods.

The ecological damage to the St. Lawrence River has included alteration of the river's flow patterns, degradation of water quality, riverbank denaturalization and erosion, and a decline in plant and animal communities. Major excavation and shoreline modification has taken place for navigation, erosion control, and industrial development. In the 20th century, more than 175 million m³ of sediment were

dredged and dumped in the river and dredging for channel and harbor maintenance and expansion continues to this day.¹ Sediments from dredging activities have damaged seagrass beds and other fish habitats.

The dams that were constructed on the St. Lawrence River reduce the natural water level variations needed to maintain healthy wetlands. The dams also obstruct the movement of migratory fish, such as sturgeon, shad, and eel. These structures disrupt the river's food web and have caused devastating declines to one of the most important components of the ecosystem – the American eel – for which recruitment in the St. Lawrence River population has declined by over 99% since 1993.² Adult eels, having spent 12 or more years maturing in inland waters, must navigate the turbines of many hydro dams on their downstream migration. Two dams in proximity to Valleyfield alone cause a cumulative mortality on the St. Lawrence River of more than 40% of the population.³ Shad is another species of migratory fish that suffers very high mortalities when passing downstream through dam turbines.

Hydro dams have also fragmented populations of sturgeon, reducing their access to spawning grounds and other critical habitats these fish need to complete their life cycles.

Excessive nutrient discharge from farms and cities has caused excess aquatic plant growth in slow moving sections of the St. Lawrence River, and despite efforts to curb these discharges, water quality continues to be a concern both upstream and downstream of Kahnawà:ke. The nutrient-fueled growth of toxic cyanobacteria has caused fish habitats to deteriorate and has contributed to declines in fish populations.⁴

Encroachment on the St. Lawrence River floodplain has degraded, eliminated, and fragmented wetlands important for sustaining ecosystem function and biodiversity. Wetlands filter and retain water that would otherwise pollute and flood downstream areas. Wetlands also act as nurseries for fish, waterfowl, amphibians, and reptiles. The loss of submerged and emergent vegetation in wetlands has led to declines in the animals that depend on wetlands for food and shelter. Invasive species, including Phragmites, are diminishing the biodiversity in wetlands that remain intact. In the river's coastal flood zone, an intensification of agriculture, and the overall shift from pasture and hayfields to annual crops such as corn and soybean, means that these coastal zones now constitute poor wildlife and fish spawning habitats.⁵ Corn and soy agriculture also require significant amounts of fertilizers and pesticides, severely degrading water quality and fish habitats.

One of the most profound changes to our territory and way of life have come about as a direct consequence of the shipping industry on the St. Lawrence River. While the River has been dredged for

¹ Dumont, Pierre and Yves Mailhot. 2013. "The St. Lawrence River Lake Sturgeon: Management in Quebec, 1940s – 2000s" In Nancy Auer and Dave Dempsey, eds. *The Great Lake Sturgeon*. East Lansing: Michigan State University Press. p. 101-132.

² MacGregor, R., et al. 2009. "Natural heritage, anthropogenic impacts, and biopolitical issues related to the status and sustainable management of American eel: a retrospective analysis and management perspective at the population level." *American Fisheries Society Symposium* 69. p. 713-740.

³ MacGregor, R., et al. 2009. "Natural heritage, anthropogenic impacts, and biopolitical issues related to the status and sustainable management of American eel: a retrospective analysis and management perspective at the population level." American Fisheries Society Symposium 69. p. 713-740.

⁴ Working Group on the State of the St. Lawrence Monitoring. Overview of the State of the St. Lawrence 2014. St. Lawrence Action Plan.

Environment Canada, Québec's ministère du Développement durable, de l'Environnement et de la Lutte contre les changements chinatiques), Québec's ministère des Forêts, de la Faune et des Pares, Parks Canada, Fisheries and Oceans Canada, and Stratégies Saint-Laurent. 52 p.

⁵ Hudon, C. Jean, M. and G. Letourneau. 2018. "Temporal (1970-2016) changes in human pressures and wetland response in the St. Lawrence River (Quebec, Canada)." Science of the Total Environment 643: 1137-1151.

construction of a navigation channel since the 19th century, the building of the Seaway brought a sharp increase in industrial impacts to our territory.

The construction of the Seaway in the 1950s was accompanied by the large-scale industrialization of the region.⁶ As a consequence, our harvesting has been severely reduced, and we no longer have reasonable access or sufficient opportunity to exercise our inherent right to hunt, fish, and gather plants. The expansion of shipping on the River and the associated increase in contamination, the degradation of habitat and water quality, and the incursion of invasive species, have also interfered with our ability to exercise our governance rights and stewardship responsibilities.

The impacts of shipping on our territory can be summarized as follows.

1. The building of the Seaway

Prior to the St. Lawrence Seaway, access to the river for fishing, transit, trade and recreation constituted a fundamental part of what it meant to be Kahnawakehró:non. The River was a rich, year-round source of food. Fish and berries were mainstays of our diet, and fishing was an important source of income for many Kahnawakehró:non. We swam in the River, it was our source of drinking water, and we had businesses on the waterfront that catered to non-Indigenous people. The River was the hub for economic activity, recreation, and social life of the community. The construction of the Seaway cut off access to the River, displaced our people and attempted to destroy our connection with the River. The environmental implications of Seaway construction were unmeasured and immeasurable, with traumatic effects on our social, cultural, economic, and spiritual life that continue to this day.

The Seaway replaced our vibrant, flowing river front with an industrial canal. This reduced the quality and flow of water, and some of the islands in the River, including their trees, berries, and other resources, were filled in or submerged. Many of our local fishing spots simply disappeared. Fish became less plentiful, and many of the fish that remained showed signs of disease and could not be eaten. Residential and farm lands in Kahnawà:ke were appropriated to make way for the Seaway channel, and arable farm land was covered with clay dredged from the River. Before the Seaway was built, the community was tightly knit and structured around the River's edge, with large forested tracts that lay to the south, east, and west. The construction of the Seaway required the re-routing of roads and highways, bounding the community from the land side and boxing us in an even tighter enclosure than we were before.

One token of "compensation" was to ensure that the water in the Recreation Bay area in Kahnawà:ke was "kept fresh" so that it could continue to act as a gathering place and provide access to the river for the exercise of traditional activities and of our aboriginal fishing rights. Now, due to excessive sedimentation and nutrient loading, the bay is experiencing eutrophication. This situation, along with existing ship and non-Indigenous usages of the Seaway has resulted in limited access and uses of the River at this site. Limited access to the River is also available at other points in Kahnawà:ke, for example the "North Wall" area is used as a gathering site and to exercise our fishing rights. However, access to this area is challenging as the Seaway has bisected the community and a lengthy detour by car is required. Furthermore, when ships pass through our territory, a lift bridge is raised, disrupting circulation and access to the area each time a ship passes (approximately 3,200 times per year in recent years). Shipping is also impacting the

⁶ St. Regis Mohawk Tribe Environment Division. 2013. St. Lawrence River Environment Natural Resource Damage Assessment: Restoration and Compensation Determination Plan and Environmental Assessment. 498 p.

integrity of the remaining natural shoreline that exists in Kahnawake as vessel wakes contribute to bank erosion resulting in significant losses of land since the construction of the Seaway.⁷

2. The expansion of shipping and the large-scale industrialization of the St. Lawrence River valley

The construction of the Seaway between 1954 and 1959 was an important step in the large-scale industrialization of the area. Since the 1950s Kahnawà:ke has experienced the continued ecological decline of the St. Lawrence River associated with urbanization. The repeated dredging of the navigation channel, the building of dams, population growth and industrialization have resulted in contamination of the water, habitat destruction and fragmentation, and the introduction of large numbers of aquatic invasive species. Ships passing through the navigation channel are also an important cause of shoreline erosion.

At many places along the length of the St. Lawrence River, material dredged from the navigation channel was deposited on the side of the channel and used to construct artificial islands. Shorelines created in this way do not favor the establishment of wetlands. Erosion of the dredge deposits has increased the sediment load of the water, increasing the turbidity of water and releasing contaminants.⁸

The building of the Seaway coincided with the development of hydro-electric power along the River. The power generated by dams stimulated the expansion of heavy industry, and at the same time, Seaway transport. Upriver from Kahnawà:ke, near Akwesasne, where Alcoa had already been operating since 1950, companies such as General Motors and Reynolds established large industrial plants. Consequently, the River became a dumping ground for PCBs, polychlorinated dibenzofurans, dioxins, polyaromatic hydrocarbons, fluorides, aluminum, and a variety of heavy metals.⁹

These pollutants have contaminated the water, fish and wildlife in the downstream area, particularly in Lake St. Francis and Lake St. Louis. Kahnawà:ke continues to experience the toxic legacy of industry on the St. Lawrence River, with levels of mercury and PCBs in certain populations of piscivorous fish species (walleye, sucker, and pike) at or near the limits for safe consumption set by Health Canada. For example, the Kahnawà:ke Environment Protection Office still encourage the consumption of fish as a healthy option for community members, however, it is recommended to limit this consumption to one fish meal per week for certain species due to high mercury levels.

While the levels of certain industrial pollutants have been decreasing since the 1990s, new industrial contaminants, such as the flame-retardant polybrominated diphenyl ethers (PBDEs), are present in increasing concentrations in water and sediments. Contaminants such as pharmaceuticals (including hormones), pesticides, and personal care products are emerging sources of contamination. These chemicals interfere with the life cycles of fish and amphibians and are adding to our concerns about the health of the River and the safety of the water and our traditional foods.

Shoreplan Engineering Ltd. 2018. Kahnawake Shoreline Vulnerability Assessment, 153 p.

⁸ Hudon, C. Jean, M. and G. Letourneau. 2018. "Temporal (1970-2016) changes in human pressures and wetland response in the St. Lawrence River (Quebec, Canada)." *Science of the Total Environment* 643: 1137-1151.

⁹ St. Regis Mohawk Tribe Environment Division. 2013. St. Lawrence River Environment Natural Resource Damage Assessment: Restoration and Compensation Determination Plan and Environmental Assessment. 498 p.

Working Group on the State of the St. Lawrence Monitoring. 2015. Overview of the State of the St. Lawrence 2014. Environment Canada and Québec's ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques. 52 p.

More than 180 species of invasive aquatic organisms have established themselves in the Great Lakes – St. Lawrence River system. Since the Seaway opened in 1959, over 65% of these introductions have been attributed to ballast water release. Invasive species have disrupted chemical, physical, and biological processes in the St. Lawrence River. Invasive species alter nutrient dynamics, predator-prey relationships, and compete with non-invasive species for habitat, thereby directly impacting the river's food webs and causing declines in fish harvested by our Nation. Invasive species also undermine efforts to improve water quality and restore St. Lawrence River wetlands and fish populations.

Aboriginal Governance Rights

When it comes to the St. Lawrence River and fisheries related issues, we have established and constitutionally protected aboriginal fishing rights within the meaning of s. 35(1) of the Constitution Act (1982)¹². Furthermore, the Mohawks of Kahnawà:ke also assert other rights, including, but not limited to, aboriginal title, governance rights (including environmental stewardship), gathering and commercial trading rights over the St. Lawrence River as inherent and s. 35(1) rights under the Constitution Act (1982).

Governance framework based on Ohen:ton Karihwatehkwen

We assert inherent and aboriginal governance (jurisdictional) rights to the St. Lawrence River. In accordance with the Two Row Wampum treaty relationship, Mohawk jurisdiction continues to apply independently and in parallel to the Crown. The Two Row Wampum is the most important diplomatic instrument in our history. Wampum belts were among the first documented agreements between First Nations and European settlers. The Two Row Wampum belt consists of two rows of purple beads separated by three rows of white. The white symbolizes the river of life or the land that we all now share. The two purple rows symbolize the Haudenosaunee and the Europeans traveling side by side, never imposing the laws and customs of the one upon the other in that journey. Subsequent agreements were predicated upon this one. While each nation recognized the other's sovereignty, ecological stewardship was central to the maintenance of peaceful co-existence¹³. As part of our governance rights, we have a responsibility to care for and protect the St. Lawrence River ecosystem. We take our responsibility as stewards of the lands and waters for future generations seriously.

When considering the impact of projects, the Mohawks of Kahnawà:ke base decision-making on respect for all parts of the natural world. In our language Ohen:ton Karihwatehkwen means "the words that come before all else." It is the opening address at gatherings, schools, ceremonies and the beginning and end of each day, to remind us of the important responsibility we all share to ensure that the cycles of life continue and to remind us that all of Creation is sacred and interconnected. We acknowledge that every part of the natural world has importance, not only for the benefits they provide for human survival, but also for the role they play within the web of life.

The Ohen:ton Karihwatehkwen is the basis of our approach to environmental assessment because it outlines the roles and responsibilities of all of the components of the natural world, including humans. These components are as follows: The People; The Earth, Our Mother; The Plants, Berries, and the Three

¹¹ Ricciardi, A. 2006. Patterns of invasion in the Laurentian Great Lakes in relation to changes in vector activity. *Diversity and Distributions* 12: 425-433.

¹² R. v. Adams, [1996] 3 SCR 101

¹³Summary of Two Row Wampum Treaty relationship taken from: https://cinelasamericas.org/new-releases-claiff19/2016/the-grandfather-of-all-treaties (accessed online on August 19, 2019).

Sisters (corn, beans and squash); The Medicines; The Waters; The Fish; The Trees; The Animals; The Birds; The Winds; The Thunderers, Our Grandfathers; The Sun, Elder Brother; The Moon, Our Grandmother; The Stars; and Our Creator. The purpose of each component, how humans benefit from it, and the role assigned by the Creator are recited. In this way, we give thanks and re-orient our minds to show respect and understanding of our relatives -- the non-humans as well as the natural elements. Reciting the "words that come before all else" was our first instruction from the Creator, and as a ceremonial practice it reinforces the relationships and conditions that promote health and a healthy environment. The Ohen:ton Karihwatehkwen is also an environmental code that is based on Kanien'kehá:ka (Mohawk) traditional laws and practices. Its underlying philosophy provides us with a framework for categorizing and assessing the health of the environment, including the impacts of current actions on future environmental health.

In all environmental decision-making, we consider the principle of the Seven Generations. Any decisions taken today must consider the impact of the selected actions on the next seven generations. By anticipating the consequences of our actions, seven generations into the future, we ensure that our actions reflect our responsibility to maintain the cycles of life.

The approach we take to environmental assessment reflects our jurisdictional responsibilities and our inherent and aboriginal rights as Indigenous peoples in this territory. In assessing the impacts of projects we are guided by the knowledge that the lands and waters are inseparable from who we are as Kanien'kehá:ka. Our decision-making is informed by the following principles:

- (1) The timeframe of our connection to the St. Lawrence River -- from time immemorial to the end of time -- requires us to consider the long-range consequences of human actions and environmental change. We depend on this place the St. Lawrence River to keep us alive as Indigenous peoples.
- (2) All of the existing connections between species and their habitats have a role to play in maintaining functioning food webs and ecological health, and must be respected and maintained as parts of a living ecosystem.

Our responsibilities towards the River require us to carefully consider the regional impacts of projects (both individually and collectively). Many existing and proposed activities along the St. Lawrence River constrain our ability to exercise our rights, through their impacts on the water, wetlands, and the aquatic ecosystem. These activities include urban development, agricultural and industrial activities, bridge construction and repairs, port expansions, maintenance of the navigation channel, and other activities related to the shipping industry.

Historically, consultation was virtually non-existent and consideration of the impacts of projects on the environment and the rights of Indigenous peoples were largely ignored. It is understood that what Canada considered acceptable in the past is different than current thinking, however it must be recognized and understand that the legacy of historic development continues to heavily impact our ecosystems. A few examples illustrate this point.

Hydroelectric dams, dating back to the turn of the century, pose many significant environmental harms and exist at many locations within the St. Lawrence River and along most major tributaries. The construction of these dams has had major impacts on ecosystems, but continued operations are equally troubling. One example is the Beauharnois and Pointe-des-Cascades generating stations, upstream from

Kahnawà:ke. At this location, the entirety of the flow of the St. Lawrence River is diverted into raceways for power development. The main branch of the river is maintained at an artificially elevated level in the summer through the use of three additional dams to allow the illusion of a scenic river where fishing and boating activities occur. Water levels are drawn down each winter and a large 'fish rescue' occurs annually to try to save the fish left behind.¹⁴

Pollutants from historic industry continue to impact water quality. For example, Canada took action in 2018 to remove the 'Kathryn Spirit', a large shipping vessel that had been abandoned at a dock in Beauharnois¹⁵. As part of the removal effort, heavily contaminated sediments were identified and assessed below the vessel. MCK lobbied for these sediments to be remediated as part of the project but were told that the source of the contamination, namely an adjacent industrial facility (who incidentally also brought the 'Kathryn Spirit' to the site and were then engaged by Canada to remove it) was still actively leaching contaminants into the river so that any effort at a clean-up would be futile and the source of the contaminants was outside federal jurisdiction. Efforts to address the source of the issue with Quebec were unsuccessful. Apparently, because the facility was not recently constructed, it is acceptable to continue to contaminant the river.

Municipal sewage systems are another on-going source of contamination in the St. Lawrence River. Municipalities appear unable or unwilling to keep up with the pace of growth in their cities and the volume of the water in the St. Lawrence (and the dilution effect provided) have prevented this concern from becoming a priority even as we continue to learn about the impacts of emerging contaminants in wastewater such as pharmaceuticals. Similarly, runoff from agricultural production introduces excessive levels of nutrient, sediment and pesticides into our waterways. The detrimental impacts of these diffuse pollution sources are understood but not well studied and have become a major barrier for the survival of species in many tributaries to the St. Lawrence. 16, 17

Rationale for an RIA

Against the historic backdrop presented above, the MCK, through the Consultation Committee, is now frequently offered the opportunity to comment on proponent-led projects, legislation and other government initiatives. Recently, a renewed focus on the economic opportunities associated with the St. Lawrence River has resulted in the release of a Quebec Maritime Strategy by the provincial government (unfortunately not subject to a Strategic Impact Assessment despite the need to understand the implications of this massive investment in river-based development) and a federal review of the economic opportunities of the Seaway. Both initiatives support responsibly maximizing the economic potential of the St. Lawrence River and the Quebec Maritime Strategy has resulted in the initiation of numerous proponent-driven proposals, particularly port projects.

¹⁴ History of the Parc Régional des Îles-de-Saint-Timothée taken from: http://plagevalleyfield.ca/ete/histoire.html (accessed on-line on June 1, 2020).

¹⁵ Transport Canada News Release taken from: https://www.canada.ca/en/transport-canada/news/2018/10/work-to-remove-the-kathryn-spirit-is-completed.html (accessed on-line on June 1, 2020).

¹⁶ David J. Marcogliese, Christian Blaise, et al., 2015. Effects of a major municipal effluent on the St. Lawrence River: A case study. *Ambio*.; 44(4): 257–274.

¹⁷ Montiel-León JM, Munoz G, Vo Duy S, et al., 2019. Widespread occurrence and spatial distribution of glyphosate, atrazine, and aconicotinoids pesticides in the St. Lawrence and tributary rivers. Environ Pollut. 250:29-39.

The MCK is involved in many (but not all) of the Environmental Assessments for these projects (these projects are following the CEAA 2012 federal process or the Quebec Environment Quality Act process) including the Laurentia project (an expansion of the Port of Quebec), the Contrecoeur Port expansion, the Trois-Rivieres port expansion, the Salaberry-Valleyfield port expansion and the Ste-Catherine port expansion. In each case, the MCK has raised location-specific concerns but also identified the impacts of the increase in shipping associated with these enlarged ports as well as the cumulative impacts of the ongoing industrialization of the shoreline. Unfortunately, we are unable to acquire satisfactory answers to our questions because of the scope of the assessments offered under CEAA 2012 and Quebec legislation. Impacts from shipping are only considered within the immediate project area, if at all. Cumulative effects are cursorily considered of the port expansion itself and potential future development but not the associated activity or development outside the project area. The current state of the St. Lawrence River is taken as a given status quo situation that must be accepted. Throughout these engagements, federal and provincial officials as well as proponents themselves have recognized these gaps in the assessment process and agreed that an RIA would be highly beneficial to understanding the true impacts to the river¹⁸. All have concluded, however, that there was either no mechanism or no responsibility for them to carry out a detailed assessment. The MCK, as well as IAAC, proponents and other interested parties, are therefore left without a true understanding of the impact of these projects in the regional context.

Port project proponents are required to complete project specific environmental assessments (in most cases, though exclusions were possible under CEAA 2012). These project specific environmental assessments require that each project attempt to mitigate the impacts associated with their development. This often takes the form of standard best management practices around construction sites, species inventories to demonstrate the absence (and occasionally presence) of 'important' wildlife or archaeological remains, rudimentary consideration of social and Indigenous project impacts, rationale for why project impacts ultimately cause no or few long term impacts and compensation for the loss of fish habitat associated with the project (which is often a very challenging proposition given the unique flow / substrate / aquatic plant / fish diversity that exists throughout different areas of the St. Lawrence River). While these elements are important and can help limit the impacts of the project itself, in the absence of a suitable understanding of the larger surroundings (the "region"), the cumulative impacts of the project on an already stressed environment and the associated industrial activities that the project will bring, it is not possible for the MCK to accept conclusions that the project will not further impair the environment and impact the rights and interests of community members. Indeed, common sense suggests that the conversion of natural areas to industrial developments must have some long-term impacts to the surrounding environment despite the conclusions of project-based environmental assessments.

When considering RIAs, a common starting point is to consider the 'tipping point' for which certain historical habitats, populations, and / or activities are no longer sustainable within the study region. The MCK has concluded that the St. Lawrence River has surpassed these tipping points in many areas as described above, and future development should not proceed without starting to address some of the impacts wrought by the industrialization of the past.

¹⁸ Personal communications but also see for example MDDELCC letter of May 4, 2017 to Mohawk Council of Kahnawà:ke.

Despite historic and present day impacts to the River, proponents of new development are often challenged to identify suitable methods to offset impacts from their projects. Loss of fish habitat requires reconstructing compensatory habitat however, within the greater Montreal region, the sheer quantity of new projects requiring compensation has resulted in a limited number of available options for proponents and compensation projects often take place far from the project location and often within existing natural areas. The results of these efforts are variable, not always well monitored and, depending on the location, may not address the adverse effects caused to the rights of the Mohawks of Kahnawà:ke. Other impacts are mitigated to the extent possible on-site but it is undeniable that the replacement of natural habitat with infrastructure ultimately reduces wildlife opportunities in the vicinity. Often, expensive on-site interventions result in limited gains because they are focused only within the immediate project area rather than considering the regional context.

It is clear to MCK that to adequately address impacts from modern projects, an RIA is required that compiles knowledge on all past, present and known future development and considers the impacts on a regional scale. The environmental health of the St. Lawrence River is such that many species are already challenged to maintain sustainable, vibrant populations within its waters. Similarly, we are not able to fully exercise our rights within the River due to concerns with access, contamination and sustainability. Therefore, projects that wish to move forward must contribute not only to mitigating associated impacts from their developments but also to the restoration of the St. Lawrence River more generally. By fully documenting the adverse effects from the past and present, future proponents would be able to offset project impacts through targeted, well-documented interventions that mitigate associated impacts from their projects as well as making incremental progress towards a regional restoration of the St. Lawrence River.

It is no longer acceptable to work towards maintaining the status quo for this region. In order to ensure the long-term protection of the water, wildlife habitat and traditional activities, new development must be associated with incremental gains in environmental quality. By completing an RIA we can better identify the stressors and drivers of environmental deterioration and better target proponent compensation through collaboration among stakeholders. Balancing modern development with the remediation of historic industrial activity will enable on-going economic development while making progress towards restoring and enhancing the St. Lawrence and provide the necessary information to the Mohawks of Kahnawà:ke to assure us that new projects will not further hinder, and may in fact enhance, the practice of our rights and interests.

Scope

MCK recognizes the inherent challenges of completing an RIA for a region as large and complex as the St. Lawrence River, one of the largest rivers in the world and the home to highly diverse ecosystems and approximately 45 million people within its watershed. The geographic scale, level of detail, jurisdictional context, stakeholders and the purpose of the RIA must all be considered. The development of an RIA is an iterative, collaborative process however we offer the following initial vision of an RIA for the St. Lawrence River that we believe will meet the stated objectives.

As noted above, the primary purpose for the RIA is to better understand the existing effects of development on the St. Lawrence River to ensure that future projects can actively work to reduce these effects, not only related to their own activities, but also to mitigate historical effects that have greatly suppressed the ability of the Mohawks of Kahnawà:ke to safely practice traditional activities within their waters. IAAC has provided guidance with respect to three types of RIA's that could be pursued. MCK believes the second type, "Setting Thresholds and Standards Mitigation" best approximates the level of effort required. The complexity of the region prevents a more prescriptive approach offered through a "Regional Development Planning" approach and "Data Gathering / Trend Analysis", while a necessary component of an RIA, is not sufficient to craft a strategy for future project mitigation and compensation. Additionally, the St. Lawrence River is a well studied system and a significant amount of data already exists to support a more involved RIA.

In order to bound the geographic scale and level of complexity of the RIA, MCK is proposing a species-specific focus for the RIA. This approach recognizes the inherent benefits of targeted improvements for a specific keystone species on the entirety of the ecosystem and the exercise of our rights while simplifying the analysis required. MCK proposes that the Lake Sturgeon act as the focal point for the St. Lawrence River RIA.

Why Lake Sturgeon?

Using Lake Sturgeon as the focal point of the RIA presents several advantages. For starters, Lake Sturgeon in Canada have been relatively well studied and have been classified into distinct "designatable units" (DU's) and "management units" (MU's) by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) based on genetic similarity and barriers to movement¹⁹. The population relevant to the Mohawks of Kahnawà:ke belongs to DU4, the "Great Lakes-St. Lawrence population", and MU12. MU12 is bound upstream by the Carillon Dam on the Ottawa River and the Beauharnois-Pointe des Cascades generating station on the St. Lawrence River, and downstream by the start of the St. Lawrence estuary at the eastern tip of Orléans Island east of Québec City. Tributaries entering the St. Lawrence along this reach also did, or continue to, support specimens from this MU. In most cases, physical barriers or excessively poor water quality clearly define the limits of the sturgeon population within these tributaries, thereby creating a reasonably succinct study boundary for the RIA.

Lake Sturgeon is an important species to Kahnawa'kehró:non, both pre-historically, with fossil records within camps in proximity to Kahnawa:ke dating back to at least 1450-1400 BCE²⁰ and continuing through to present day. Community members harvest the species for commerce, recreation and sustenance. Lake Sturgeon are also relatively sensitive to environmental disturbance. As a weak swimmer, even small dams often completely cut off upstream habitat for the species and fish ladders implemented to date have had little success in facilitating passage for Lake Sturgeon. Sturgeon are primarily bottom feeders, consuming mussels, small fish, leeches and other soft-bodied organisms, and are therefore susceptible to bioaccumulation of pollutants. Conversely, the species is evolutionary ancient, present in the area for millions of years. It therefore offers an interesting 'historical reference point' for the RIA e.g. an

²⁰ GEO Morphix, 2020. Kahnawa:ke Community Lake Sturgeon Management Plan.

¹⁹ COSEWIC, 2017, COSEWIC assessment and update status report on the Lake Sturgeon Acipenser fulvescens in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa, www.sararegistry.gc.ca/status/status_e.cfm

appropriate goal is to restore the historic range and connectivity for the species. Additionally, while the population is considered "Threatened" by COSEWIC²¹, MU12 is the most abundant in North America and is large enough to sustain a regulated fishery so that future interventions could be appropriately studied.

The MCK recognizes that the purpose of an RIA is to study the entirety of an ecosystem to grasp how past, current and future activities impact habitats, species and their interactions. However, we also understand that a thorough assessment of every interaction would be extremely challenging if not impossible and could quickly eclipse the overall purpose of the study. By focusing primarily on Lake Sturgeon, a keystone species, we believe the ecosystem as a whole and those within it will also benefit. For example, the American Eel, another migratory species, is also significantly constrained by dams and pollution. The Hickorynut Mussel requires Lake Sturgeon to carry out part of their life cycle. Endangered fish such as the Striped Bass, Copper Redhorse, and Bridle Shiner benefit from reductions in pollution levels and habitat restoration. While we propose a focus on Lake Sturgeon, some consideration of potential impacts and opportunities for other identified species should also be included in the RIA.

Similarly, enhancements to the environment and the health of the Lake Sturgeon population will further enable our ability to exercise our rights, though some additional consideration of access and archaeological resources may be required separately within the RIA.

MCK puts forward the above-mentioned approach for consideration when bounding an RIA for the St. Lawrence River. We recognize that if the request is granted, additional consideration of the scope and scale of the RIA will be required and we welcome the opportunity to exchange ideas to optimize the achievement of RIA objectives.

Stakeholders and information sources

As noted above, the notion of an RIA for the St. Lawrence River has been discussed in the past with many stakeholders and has been widely recognized as an advantageous proposition^{22,23}. MCK envisions relevant stakeholders for an RIA to include federal, provincial, Indigenous and municipal governments, Indigenous land users, local environmental groups including relevant *Organismes des Bassins Versants* and *Comité ZIPs*, agricultural organizations, and industry.

MCK has collaborated with and is being formally supported in this request by the Grand Conseil de la Nation Waban-Aki (GCNWA; please see attached letter of support). Other Indigenous communities within the project area have been contacted and are generally supportive of the initiative.

MCK is also aware of, and participates in, to various degrees, several other initiatives that could be useful sources of data for an RIA. This includes the work of *Plan St. Laurent* including through the *Table de Concertation Régionale – Haut-St-Laurent*, as well as on-going efforts by Transport Canada through the Ocean Protection Plan to complete a Cumulative Impact Assessment of Marine Shipping.

²¹ COSEWIC, 2017. COSEWIC assessment and update status report on the Lake Sturgeon Acipenser fulvescens in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa, www.sararegistry.gc.ca/status/status_e.cfm

²² Ghislain Picard, First Nations of Quebec and Labrador, Dec. 21, 2017 to Prime Minister Trudeau

²³ MDDELCC letter of May 4, 2017 to Mohawk Council of Kahnawake

Finally, the St. Lawrence River has been well studied and information gathered from Indigenous communities, academia, industry, municipalities and others would further enhance the implementation of the RIA. For example, the Odanak and W8linak Environment Protection Offices, (the two communities making up the GCNWA), have gathered data on Lake Sturgeon over the years and has capacity to continue and / or expand on these initiatives.

Conclusion

The MCK strongly believes a Regional Impact Assessment of the St. Lawrence River is required. We have offered an option for scoping the study based on the habitat of one management unit of Lake Sturgeon. The goal of the RIA would be to understand the past, current, and future effects of anthropogenic activity that exist within the St. Lawrence River and relevant tributaries so that future development within the area could focus compensation / offsetting efforts on improving the environment beyond the status quo by directly addressing these effects, particularly those associated with the historic industrialization of the region at a time when environmental concerns and Indigenous rights were not considered. A focus on Lake Sturgeon would allow us to look for ways to enhance productivity within the region as well as strategies for pushing beyond the artificial barriers that have been created (physical and chemical) in an attempt to restore the historic connectivity for this species. The benefits would extend well beyond this keystone species to the whole ecosystem as well as enhancing the ability for the Mohawks of Kahnawà:ke to exercise their traditional rights. Finally, it would enable additional certainty for project proponents and Indigenous communities consulting on these projects as it would be easier to understand potential project impacts and how they are being offset to create net gains for the environment and the economy. We look forward to further dialogue with you and your team.

In Peace and Friendship,

ON BEHALF OF THE OFFICE OF THE COUNCIL OF CHIEFS MOHAWK COUNCIL OF KAHNAWA:KE

<Original signed by>

Chief Ross Montour Consultation Portfolio Chief Mohawk Council of Kahnawà:ke

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Figure 1: Proposed Regional Impact Assessment Boundary

