



Toney River Consultation Summary and Responses

Project Title: Proposed Dredge Material Management Site, Toney River, Pictou County, Nova Scotia
Proponent: Fisheries and Oceans Canada – Small Craft Harbours

Under section 82 of the *Impact Assessment Act*, Fisheries and Oceans Canada – Small Craft Harbours (DFO-SCH) must determine whether the proposed Dredge Material Management Site, on a parcel of land located across from the harbour along the Sunrise Trail (Hwy 6) in Toney River, NS (PID 65230708) is likely to cause significant adverse environmental effects.

To help inform this decision, the project was posted online on the Canadian Impact Assessment Registry for a 30 day public review/comment period which took place between October 14, 2020 and November 14, 2020. A virtual Town Hall and Q&A session was also held on December 16 and 17, 2020 to present additional project details and provide an opportunity for members of the public to discuss the proposed activities with the project team.

The following (**Table 1**) provides a summary of public comments received with regards to the proposed project along with an explanation of how these concerns were considered during the assessment and subsequent project planning and design. It is important to note that all public comments received in relation to the proposed project were considered during the assessment of significant environmental effects in accordance with the Canadian Impact Assessment Act.



Table 1: Summary of Public Concerns with Regards to the Proposed Dredge Material Management Site at Toney River, Pictou County, Nova Scotia

Issue/Concern	Number of Comments Received	Discussed During Virtual Town Hall	How Concern has been Addressed
<p>Potential aesthetic impacts/ and concerns related to site design such as:</p> <ul style="list-style-type: none"> • What will the site look like? • How site will be viewed from the highway and neighbouring community. • Impacts on current views of the water and landscape. 	9	√	<ul style="list-style-type: none"> • Vegetated berms will be created to contain the dredged sediment. These berms will be designed with the minimum height required to achieve containment cell capacity while minimizing the visual impacts of the site within the existing landscape. • Fencing will be designed and constructed to fit in with the community setting. • Exposed soil will be allowed to revegetate naturally; however, hydroseeding may be conducted in areas of high visibility or areas of high potential for to minimize the time soil is exposed. • The site management and monitoring plan will incorporate design criteria to further reduce visual impacts of the site, such as establishing optimal berm height and design, re-vegetation measures, site access measures, etc.
<p>Concerns related to proximity to community hall/public areas/residential areas:</p> <ul style="list-style-type: none"> • Events held at community hall may be impacted by site activities. • Impacts on quality of life of adjacent residences and tourists visiting area. 	12	√	<ul style="list-style-type: none"> • Measures outlined in the site management and monitoring plan will be established to minimize the off-site impacts of the proposed dredge material management site. This will include design procedures to minimize the impacts to soil, surface water, and groundwater quality over the lifetime of the site as well as mitigation to address potential air quality impacts associated with odour, noise, dust, and emissions resulting from site activities. • Where possible, site activities will be conducted outside of the peak tourist season (June to October). Dredging will occur in March-April and activities associated with removing dried material from the site will be conducted in late fall/winter.
<p>Concerns related to increased truck traffic and condition of roads such as:</p> <ul style="list-style-type: none"> • Increased potential for accidents. • Potential to create a mess on roads during wet material transport. • Speed vehicles travel on highway pose safety concerns. • Safety concerns with trucks crossing highway. 	5	√	<ul style="list-style-type: none"> • The dredge cycle at Toney River Small Craft Harbour (SCH) will not change because of the establishment of the proposed dredge material management site and will not result in an increase in truck traffic from current volumes. Where this site is located closer to the harbour than the previous dredge material management site, the distance required to transport the material will be reduced thus reducing the overall impact of transporting the material. • Most dredging activities at Toney River SCH take place in the spring between ice break-up and the start of the lobster fishing season in April. This time of year avoids the peak traffic season during the summer months when many seasonal residences and tourists return/visit the area. • Potential impacts associated with the transportation of material to the proposed disposal site have been assessed during the impact assessment and applicable mitigation measures will be incorporated into the site management and monitoring plan.



			<ul style="list-style-type: none"> When material is being transported to the site from the SCH during dredging activities and dried material is being removed from the site, signage will be placed at appropriate locations on Highway 6, Toney River Road, and Meadowville Station Road to warn motorists of trucks entering the highway and slow-moving vehicles. Proper handling procedures will be in place (e.g., use water tight boxes, do not overfill loads, etc.) during dredging and transport across the road to the site to minimize spills of material onto the ground.
<p>Potential soil/surface water/groundwater/well contamination:</p> <ul style="list-style-type: none"> What measures are in place to ensure surrounding wells will not be contaminated/impacted? How will the groundwater be monitored? 	12	√	<ul style="list-style-type: none"> Based on the chemistry of sediment from Toney River SCH and baseline conditions at the site, any potential risk to human or ecological health will be low. The base of the constructed containment cell will have more than 3 meters of relatively impervious, low permeability (10^{-7} cm/second), clay rich, sandy silt till that will prevent water and leachate from the dredged sediment from migrating to groundwater over time. The containment cell will be designed, and the site management and monitoring plan will be developed to avoid off-site surface water/groundwater impacts. As a component of the site management and monitoring plan, a long-term monitoring program will be developed to assess the effectiveness of mitigation measures and ensure off-site impacts are avoided. As part of the monitoring plan, surface water, sediment, and groundwater will be monitored. A drainage blanket will be constructed on the southeast side of the containment cell to receive water draining from the dredged sediment via an interior cell drainage system. A drainage swale will be installed around the west and south sides of the containment cell to divert surface water runoff. A perimeter ditch will also be installed to prevent surface water runoff onto private property. The groundwater monitoring plan will be implemented to confirm and monitor possible variations over time in the groundwater quality conditions at the site following sediment disposal activities. Best management practices and mitigation measures will be implemented to prevent releases of contaminated material and spills (e.g., proper maintenance and use of equipment on-site), and response measures will be developed in the event of an accident/malfunction.
Concerns related to the timing and extent of consultation	6	-	<p>Under section 82 of the IAA, DFO-SCH must determine whether the proposed DMMS, on a parcel of land located across from the harbour along the Sunrise Trail (Highway 6) in Toney River, NS (PID 65230708), is likely to cause significant adverse environmental effects. To help inform this decision, the following consultations were completed.</p> <ul style="list-style-type: none"> The project was posted online on the Canadian Impact Assessment Registry for a 30-day public review/comment period that took place between October 14, 2020 and November 14, 2020. On October 15, 2020 letters were delivered to adjacent property owners and during the week of October 19, 2020 a letter was placed in all the mailboxes located at the Toney River Community Hall through the River John Post Office. These letters provided notification that the project was posted for public review and comment on the Canadian Impact Assessment Registry.



			<ul style="list-style-type: none"> • Public Notices were also published in the Chronicle Herald (October 17, 2020) and Le Courrier de la Nouvelle-Ecosse (October 19, 2020) informing the public of the project. • In keeping with recommendations provided by the Department of Health regarding preventing the spread of COVID-19, it was determined that a public meeting was not appropriate. However, a virtual town hall and Q&A session was held on December 16 and 17, 2020 to present additional project details and provide an opportunity for members of the public to discuss the proposed activities with the project team. Details on the results of the town halls are presented in section 23. To let community members know of the virtual town hall sessions, notifications were distributed in the following ways: <ul style="list-style-type: none"> ○ A digital advertisement was placed in The Pictou Advocate (English) from December 11 to 18, 2020 and Le Courrier de la Nouvelle-Ecosse on December 11, 2020. ○ A bilingual letter was placed in all the mailboxes located at the Toney River Community Hall through the River John Post Office on December 10, 2020. ○ Everyone who posted comments and/or questions during the public review and comment period on the Canadian Impact Assessment Registry received an email notification on December 11, 2020 with the virtual town hall details. <ul style="list-style-type: none"> ▪ The sessions were hosted via Zoom webinar, which community members could access by phone or computer. The first session was on December 16, 2020; twenty-five community members participated, and 27 questions were asked. The second session was held on December 17, 2020; sixteen community members participated and four of them asked questions. ▪ Other comments were received via four phone calls and 20 emails. Two community members provided comments in person. ▪ The comments provided by the community expressed a variety of concerns and included, in order of prevalence, increased odour, noise, and air emissions; proximity to community hall; aesthetic impacts; soil/surface water/groundwater/well contamination; impacts on recreation and tourism; alternative options; property values; PAHs; consultation process; other materials being brought to the site; increased truck traffic; and decommissioning of the site.
<p>Concerns related to odour, noise, and air emissions:</p> <ul style="list-style-type: none"> • Concerns related to how odours will be managed. • How long will odours persist? 	<p>14</p>	<p>√</p>	<ul style="list-style-type: none"> • Construction activities must be carried out during hours agreed upon with the project manager and times acceptable to local authorities to mitigate disturbance to residents. Smaller, less disturbing equipment will be used where possible. • Dust suppression by the application of water must be employed when required. The project authority shall determine locations where water is to be applied, the amount of water to be applied, and the times at which it shall be applied. Waste oil must not be used for dust control under any circumstances. • To reduce emissions of air contaminants and greenhouse gases, implement a vehicle idling policy.



			<ul style="list-style-type: none">• It is anticipated that due to the organic content of the material, odours are expected to occur during placement of dredged material at the site and immediately after in the early spring (March 10 to end of April), which may persist for a short period of time following completion of placement. If odours persist, methods will be established to address odour, dust, and noise from site activities (i.e., contact SCH Area Office in Antigonish). Additional mitigation measures may be utilized (e.g., cover material, hydroseeding, etc.).• A site management and monitoring plan will be developed to minimize emissions, noise, and dust.
Potential impacts of Polycyclic Aromatic Hydrocarbons (PAHs) on human health	6	√	<ul style="list-style-type: none">• The site management and monitoring plan will incorporate all mitigation measures identified during the assessment process to ensure impacts to human health resulting from project activities are avoided.• All PAH compounds in sediment that was analyzed from Toney River SCH were either not detected or detected at concentrations below the human health and ecological guidelines.
Potential negative impact on property value in the area.	8	-	<ul style="list-style-type: none">• Potential impacts to socio-economic factors such as tourism, recreation, and impacts on surrounding community were assessed during the impact assessment process in the context of how potential off-site effects to the environment resulting from the project may impact these factors (tourism, recreation, etc).• The site management and monitoring plan will also incorporate design criteria to further reduce visual impacts of the site, such as establishing optimal berm height and design, re-vegetation measures, site access measures, etc.
Concerns related to alternative options considered: <ul style="list-style-type: none">• Why was this site selected?• Were other options considered?	7	√	<p>Several alternative disposal options were considered when determining the most technically and economically feasible option for managing dredged sediment resulting from maintenance dredging at Toney River SCH.</p> <ul style="list-style-type: none">• Disposal on private property (status-quo) – Historically, dredged sediment from Toney River that did not meet beach nourishment criteria was transported and disposed of on private property, located approximately 5 km from the harbour in Toney River. In NS, DFO is subject to new provincial regulations and standards established in 2013/2014 with regards to disposal of dredge materials from harbour basins and channels that no longer permits disposal on private lands. As such, this option is no longer available as it does not adhere to provincial legislation.• Beach nourishment/disposal at sea – Approximately half of the dredged material is currently placed along the eastern shoreline adjacent to Toney River Harbour for beach nourishment under a permit issued by Environment and Climate Change Canada under Schedule 6 of the <i>Canadian Environmental Protection Act</i>, 1999. To be suitable for beach nourishment and in adherence with permit conditions, the material must meet specific criteria with regards to physical and chemical properties, which is verified through periodic sampling and analytical testing. Typically, at Toney River this has included sediment that is deposited in the outer channel of the harbour and this practice will continue to take place (in adherence with applicable permits and approvals). Sample results have indicated that the physical and chemical composition of sediment located within the inner



			<p>portion of the harbour does not meet permit criteria and as such is not suitable for beach nourishment. Therefore, beach nourishment is not a viable option for all the material resulting from maintenance dredging at Toney River SCH.</p> <ul style="list-style-type: none">• Construction of on-site containment cell at harbour – The option of constructing a containment cell within the existing federal property was also considered as this option has been successfully implemented at other SCH properties to manage dredge sediment originating from the harbour. This option is not viable at Toney River SCH however, as the federal property boundaries do not provide adequate space to construct a containment cell large enough to meet the disposal needs of the harbour. Additional environmental factors would also need to be considered for this option as the construction of a containment cell at the harbour would likely be subject to authorizations and approvals under federal legislation, such as the <i>Fisheries Act</i> and <i>Canadian Navigable Waters Act</i>.• Construct land-based management site on another property – Alternative properties were considered during selection of the proposed DMMS. The site in Toney River was selected for its proximity to the harbour and accessibility during the spring. As Toney River harbour is dredged in the spring when road weight restrictions are in place, reduced trucking activity makes this site the most practical and economically feasible option. Spring road closures would impact the viability of alternative properties to meet the disposal needs of the spring maintenance dredging at Toney River.• Trucking to provincially approved waste management facility (e.g., landfill) – Consideration was given to trucking the dredge material to a provincially approved waste management facility. The nearest facility that could take the material is located near New Glasgow (approximately 30 km from the site). The tipping fees associated with disposal at the waste management site and trucking over this extended distance would result in an additional \$400,000 - \$550,000 to the maintenance dredging program on an annual basis, and as such, renders the annual spring dredge program fiscally challenging, if not unfeasible.• Do nothing – The do-nothing option was included in the consideration of alternatives to provide a baseline reference of the implications of not moving forward with a selected disposal option. Dredging is required to ensure safe navigability and berthage of vessels at DFO-SCH facilities. Like many harbours, dredging is required at Toney River in the spring of each year to support the fishing industry and provide harbour access. Without a viable option to manage dredged sediment, dredging would not be able to take place within the inner channel and basin, which would create a navigational scenario where the harbour would only be accessible during a portion of the tidal cycle (i.e., high tide) and may result in abandonment of the harbour. Limited navigability would also create a safety concern for fishers should they need to return to the harbour outside of high tide during inclement weather. Toney River DFO-SCH is a core fishing harbour and continues to be a valuable resource for the commercial fishery, therefore, abandonment and displacement of the fishing fleet was not considered to be a viable socio-economic alternative.
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<p>Concerns related to impacts on tourism and recreation:</p> <ul style="list-style-type: none"> • Site is visible from Highway and neighbouring cottages and residences. • Site located near Toney River (used for swimming, paddling, boating, etc.). • Site is visible from popular hiking and walking trails. 	8	√	<ul style="list-style-type: none"> • Potential impacts to socio-economic factors, such as tourism, recreation, and impacts on surrounding community were assessed during the impact assessment process in the context of how potential off-site effects to the environment resulting from the project may impact these factors (tourism, recreation, etc.). • Where possible, site activities will be conducted outside of the peak tourist season (June to October). Dredging will occur in March-April and activities associated with removing dried material from the site will be conducted in late fall/winter. • Measures outlined in the site management and monitoring plan will be established to minimize the off-site impacts of the proposed dredge management site. This will include design procedures to minimize the impacts to soil, surface water, and groundwater quality over the lifetime of the site as well as mitigation to address potential air quality impacts associated with odour, noise, dust, and emissions resulting from site activities. The site management and monitoring plan will also incorporate design criteria to further reduce visual impacts of the site, such as establishing optimal berm height and design, re-vegetation measures, site access measures, etc. • Management practices and mitigation measures will be implemented to prevent negative impacts to local tourism and recreation activities and to adapt the site to the local landscape. • The containment cell will be designed, and the site management and monitoring plan will be developed to avoid off-site surface water / groundwater impacts.
<p>Site decommissioning plan:</p> <ul style="list-style-type: none"> • What will happen to the site once filled? 	2	√	<ul style="list-style-type: none"> • This facility is not presently planned to be decommissioned. At the time of decommissioning, DFO-SCH will develop a site-specific re-use or reclamation plan that is appropriate for the applicable environmental legislation and Fisheries and Oceans Canada policies. • This site is being proposed to support dredging activities at Toney River by receiving and storing wet material. Understanding that this site would have a limited capacity, long term solutions for managing dredge material at Toney River and other SCH are in various stages of development and include working with regulators to use more of the material in beach nourishment options that will keep the material in the natural transport system rather than removing it and disposing of it on land. SCH are also looking at different options of diverting or moving material from these sites for beneficial reuse (e.g., soil amendments for topsoil programs and top cover for landfills). • The goal is to manage this material in a sustainable manner and reduce the need for long-term storage. With regards to the Toney River site, wet material would be temporarily managed on-site. Other options would be assessed based on soil chemistry with the intention to remove a portion of this material periodically to make room for additional dredge cycles. • Longer-term storage of this material will also be incorporated in the regional plan where material will be moved from the Toney River site to a longer-term storage site.
<p>Concerns of potential disposal of material other than sediment originating from Toney River SCH such as:</p> <ul style="list-style-type: none"> • Domestic/construction/ commercial waste. • Industrial waste from Boat Harbour. 	6	√	<ul style="list-style-type: none"> • The purpose of the proposed dredge material management site is to receive and manage sediment originating from maintenance dredging activities conducted at Toney River SCH and is not intended to receive waste material from other sources.



<ul style="list-style-type: none">Dredge material originating from other harbours.			<ul style="list-style-type: none">The site management and monitoring plan will include measures to deter and prevent the unauthorized disposal of material within the site which will be achieved through measures such as erecting signage, restricting site access, etc.
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