

**FISHERIES AND OCEANS  
CANADIAN ENVIRONMENTAL ASSESSMENT ACT (CEAA) 2012  
PROJECT EFFECTS DETERMINATION REPORT**

**GENERAL INFORMATION**

<b>1. Project Title:</b> Breakwater and Floating Docks Construction, Petite Forte, NL	
<b>2. Proponent:</b> Fisheries and Oceans Canada, Small Craft Harbours (DFO SCH)	
<b>3. Other Contacts (Other Proponent, Consultant or Contractor):</b> Public Services and Procurement Canada	<b>4. Role:</b> OGD Consultant
<b>5. Source of Project Information:</b> Paul Curran, DFO Regional Manager	
<b>6. Project Review Start Date:</b> April 18, 2017	
<b>7. DFO File No.:</b> 15-HNFL-00373	<b>8. PSPC File No.:</b>
<b>9. TC File No.:</b> NPP #2008-700095 / NEATS: 45041	

**BACKGROUND**

<p><b>10. Background about Proposed Development (including a description of the proposed development):</b></p> <p>The scope of work for the proposed Project includes the construction of a new rubble-mound breakwater structure and two floating dock sections in Petite Forte, NL (Appendix A). The new breakwater will provide the protection for new and existing infrastructure at the site, and the floating docks will increase the capacity of the site.</p>
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**PROJECT REVIEW**

<p><b>11. DFO's rationale for the Project review:</b></p> <p>Project is on federal land <input checked="" type="checkbox"/> <u>and</u>:</p> <p><input checked="" type="checkbox"/> DFO is the proponent</p> <p><input type="checkbox"/> DFO to issue <i>Fisheries Act</i> Authorization or <i>Species at Risk Act</i> Permit</p> <p><input type="checkbox"/> DFO to provide financial assistance to another party to enable the Project to proceed</p> <p><input type="checkbox"/> DFO to lease or sell federal land to enable the Project to proceed</p> <p><input type="checkbox"/> Other</p>	
<b>12. Fisheries Act Sections (if applicable):</b> n/a	
<p><b>13. Other Authorities</b></p> <p>Transport Canada, Navigation Protection Program (TC NPP) and Environmental Affairs &amp; Aboriginal Consultation Unit</p>	<p><b>14. Other Authorities rationale for involvement:</b></p> <p><i>Navigation Protection Act</i></p>

15. Other Jurisdiction: n/a	
16. Other Expert Departments Providing Advice: Fisheries and Oceans Canada, Fisheries Protection Program (DFO FPP)	17. Areas of Interest of Expert Departments: <i>Fisheries Act</i>
18. Other Contacts and Responses: n/a	
19. Scope of Project (details of the Project subject to review): <div> <u>Project Description</u>   <u>Construction/Installation:</u>  The proposed Project is for the construction of a rubble-mound breakwater, and floating docks with associated timber cribs and gangways. The breakwater will measure approximately 100 m in length, while the width of the breakwater will measure approximately 15 m along the bottom (refer to attached site plan in Appendix A). The new floating docks will measure approximately 16 m long by 3 m wide. Construction will consist of importing and installing core material, filter stone, and armourstone for the breakwater. The floating docks will involve assembling the cribs and docks near the site with treated timber and materials (see Appendix B), and then positioning them to their correct locations. The rubble-mound breakwater construction materials will be obtained from a licensed quarry and trucked in dump trucks to the Project site, where excavators will place the materials along the ocean floor.   The successful contractor will determine the approved detailed construction plan, but it will likely involve the use of heavy equipment such as excavators, dump trucks, and barges to create and install the structures, along with manual labour. It is not anticipated that the Project will involve dredging in the marine environment.   <u>Operation</u>  The Environmental Management System with an integrated Environmental Management Plan for the Harbour Authority of Petite Forte will cover operational aspects of environmental management at the harbour (fuelling, waste disposal, activities on the property and water).   <u>Decommissioning</u>  This facility is not presently planned to be decommissioned. At the time of decommissioning, SCH will develop a site-specific re-use or reclamation plan that is appropriate for the applicable environmental legislation and DFO policies.   <u>Scheduling</u>  Subject to regulatory approval and DFO SCH operational priorities and funding, this Project may commence during the 2017 fiscal year. </div>	
20. Location of Project:  Petite Forte is located on the Burin Peninsula, on the western side of Placentia Bay, approximately 291 km west of St. John's at coordinates 47°24'15" N, 54°39'37" W.	

## **21. Environment Description:**

The immediate Project site is located adjacent to the local access road and consists of an existing finger pier wharf, boat launch, and parking area. These features are depicted in the attached site photographs (see Appendix A). The surrounding shoreline is characterized primarily by pebble-cobble material. The uplands are characterized by exposed bedrock, grass cover, and tree cover. As the Project is located in the town of Petite Forte, there is residential housing less than a kilometre from the Project site.

The Project site is located within the Maritimes Barrens Ecoregion and associated Southeastern Barrens Subregion. The Maritime Barrens Ecoregion extends from the east coast of Newfoundland to the west coast through the south-central portion of the Island. This ecoregion has the coldest summers, with frequent fog and strong winds. Winters are relatively mild with intermittent snow cover, particularly near the coastline. Annual precipitation exceeds approximately 1,250 mm. Within the Southeastern Barrens Ecoregion, the physical environment is characterized primarily by areas of exposed bedrock, and extensive barrens, with tree growth often limited to protected valleys and coves. Wetlands are also present in certain areas of this subregion. Summers are generally cool and characterized by frequent fog and strong winds, while winters are relatively mild.

Bird species within forests of the Southeastern Barrens Subregion include various species of thrush, sparrow, and warbler. Dark-eyed junco and pine grosbeak also are found in this region. Within the barrens and wetlands, sparrows, ptarmigan, snipe, least sandpiper, and greater yellowlegs have been recorded. Mammal species include moose, mink, snowshoe hare, red fox, voles, beavers, red squirrels, and eastern chipmunk. Freshwater fish species within this region include Atlantic salmon, brook and brown trout, rainbow smelt, three-spine and nine-spine sticklebacks, and banded killifish. During summer months, Atlantic salmon, brook trout, brown trout and American eel migrate to and from rivers that empty into Placentia Bay.

The Project is located in the waters on the western side of Placentia Bay. The western half of Placentia Bay is characterized by numerous banks, shoals and reefs. Because of the orientation of its mouth, Placentia Bay is exposed to winds, waves and currents propagating in from the Atlantic Ocean. Seafloor surficial sediments vary from coarse-grained glacial deposits in the nearshore regions to fine-grained sediments near the centre of Bay.

There are a variety of marine species known to inhabit Placentia bay. Benthic species include sand dollars, sea urchin, barnacle, periwinkles, sea star, crab species, mussels, and scallops. Fish species include sculpin, flounder, Atlantic cod, American plaice, cunner, herring, capelin, and mackerel. There have been no specific site surveys conducted for the Project, but depending on the suitability of habitat at the Project site, these species have the potential to occur.

The existing site is characterized by cobblestone and exposed bedrock, directly adjacent to a local highway (see Appendix A), and would not be considered suitable habitat for many terrestrial species, including birds and wildlife.

### **Species at Risk (Aquatic and Terrestrial)**

A search of the Atlantic Canada Conservation Data Centre (ACCDC) database was conducted which produced a list of rare / unique species (i.e., plants and animals) within a 5 km buffer zone (standard ACCDC procedure) of the site of the proposed work. Species were cross-referenced with Schedule 1 of the *Species At Risk Act* (SARA) and none were found to be listed as extirpated, endangered, threatened, or of special concern.

## 22. Scope of Effects Considered (sections 5(1) and 5(2)):

**Table 1: Potential Project / Environment Interactions Matrix**

Project Phase / Physical Work/Activity	As per Section 5(1)			Section 5(1c)				Section 5(2)			Due Diligence			
	Fish / Fish Habitat (Fisheries Act)	Aquatic Species (SARA)	Birds (MBCA)	Health and Socio-economic	Physical and cultural heritage	Land use	*HAPA Significance	Health and Socio-economic	Physical and cultural heritage	*HAPA Significance	Water (ground, surface, drainage, etc.)	Terrestrial / Aquatic Species	Soil / Sediment	Air Quality
Construction / Installation														
Construction of breakwater	P	-	-	-	-	-	-	P	-	-	P	-	P	P
Construction of floating docks	P	-	-	-	-	-	-	P	-	-	P	-	P	P
Operation / Maintenance	P	-	-	-	-	-	-	P	-	-	P	-	-	-
Decommissioning / Abandonment	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\*structure, site or thing that is of historical, archaeological, paleontological or architectural significance.  
Legend: P = Potential Effect of Project on Environment; '-' = No Interaction

### Navigation Consideration

Environmental effects of the Project on navigation are taken into consideration as part of the environmental assessment only when the effects are indirect (i.e., resulting from a change in the environment affecting navigation). Direct effects on navigation are not considered in the environmental assessment, but measures necessary to mitigate direct effects will be included as conditions of the *Navigation Protection Act* approval.

- ☒ Only direct effects are identified; therefore the effects of the Project on navigation are not addressed in this environmental assessment.
- ☐ Indirect effects were identified and have been addressed in this environmental assessment.

### **23. Environmental Effects of Project:**

Potential Project / environmental interactions and their effects are outlined below:

#### **Fish / Fish Habitat:**

- Sedimentation as a result of construction activities for the breakwater, boat launch, and floating docks may negatively affect fish and quality of fish habitat at the immediate Project site.
- Accidental discharge of heavy machinery fuel / fluids or hazardous substances could negatively affect fish and fish habitat.
- Fish habitat within the Project footprint will be destroyed during construction activities, such as installing the breakwater and laying down cribbing and ballast stone. Post-construction, the rubble-mound breakwater may result in an increase in habitat complexity at the Project site, which has been shown to increase overall availability and use of fish habitat.

#### **Health and Socio-economic:**

- Potential for safety hazards to workers during construction activities, and during operation of the harbour.

#### **Water**

- Sedimentation as a result of construction activities has the potential to negatively affect marine water quality at the immediate Project site.
- Construction related refuse may be accidentally be deposited in water-body, decreasing marine water quality.
- Accidental discharge of heavy machinery fuel / fluids or hazardous substances (e.g., concrete wash water) may result in a decrease of marine water quality.
- Construction activities taking place near the shoreline (e.g., Infilling) has the potential to result in runoff / erosion, which could affect the marine water quality.

#### **Soils**

- Accidental discharge of heavy machinery fuel / fluids or other hazardous substances on land adjacent to the marine environment has the potential to contaminate the surrounding soil.

#### **Air quality**

- Construction activities may result in nuisance effects due to an increase in noise and dust and the use of heavy equipment.

#### **24. Mitigation Measures for Project (including Habitat Compensation):**

Work should be scheduled to avoid periods of heavy precipitation. Erosion control structures (temporary matting, geotextile filter fabric) are to be used, as appropriate, to prevent erosion and release of sediment and/or sediment laden water during the construction phase.

Weather conditions should be assessed on a daily basis to determine the potential risk on Project activities.

Materials and equipment used for the purpose of site preparation and Project construction are operated and stored in a manner that prevents a deleterious substance (e.g., petroleum products, silt) from entering a body of water.

Appropriate sedimentation control measures (e.g., silt curtains, booms) should be deployed where required.

Shoreline disturbance should be restricted to the immediate work area. Shoreline areas disturbed by Project activities should be stabilized as soon as possible, to prevent erosion.

Where feasible, pre-treated wood cut to pre-determined lengths should be used as much as possible. Pressure treated materials for the floating docks should be thoroughly dried before being used in construction or placed into the marine environment. Additional application of preservatives should take place away from the marine environment.

Pre-treated wood waste will be disposed of at an approved disposal facility.

The in-water use of heavy equipment is not permitted. The operation of such equipment should be from dry / stable shoreline areas.

Machinery must be checked for leakage of lubricants or fuel and must be in good working order. Refuelling must be done at least 100 m from a water body. Basic petroleum spill clean-up equipment should be on-site. Spills or leaks should be promptly contained, cleaned up, and reported to the 24-hour environmental emergencies report system (1-800-563-9089). The proponent should consider developing a contingency plan specific to the proposed undertaking to enable a quick and effective response to a spill event.

Work should be properly timed to avoid potential interference with commercial and/or recreational fisheries that may be going on in the area.

Wastes should be recycled where possible or otherwise disposed of appropriately at an approved facility.

Breakwater construction materials should be clean and free of fine materials to reduce the potential for sedimentation. These materials will be obtained from an approved quarry.

Where feasible, construction material for the breakwater should be installed in a manner that reduces the potential for sedimentation, such as having material placed by an excavator rather than end dumped.

Machinery should be muffled and local municipality construction by-laws must be adhered to.

Adequate road signage should be placed adjacent to the Project site, to increase safety around the Project site and for local residents.

The proponent should keep copies of regulatory approvals available on-site during Project activities.

Proper safety procedures must be followed during the duration of the project as per applicable municipal, provincial, and federal regulations;

Employees will be trained in health and safety protocols (e.g. safe work practices, emergency response).

**25. Significance of Adverse Environmental Effects of Project:**

Taking into account the proposed mitigation measures for the Project, and the relatively small scale of Project activities, significant adverse environmental effects are not anticipated.

**26. Other Considerations (Public Consultation, Aboriginal Consultation, Follow-up)**

**Public Consultation**

The proposed Project will provide safer conditions and extra protection for the facility users. Negative public concern is not expected as a result of this Project. Public consultation was not deemed necessary as part of this determination.

**Aboriginal Consultation**

Aboriginal fishers are not known to use the Petite Forte SCH facility, nor are there known Aboriginal groups in the surrounding area. As such, Aboriginal consultation was not deemed necessary as part of this determination.

**Government Consultation**

Federal and provincial authorities likely to have an interest in the Project were consulted by Public Services and Procurement Canada, Environmental Services, during the course of this assessment. A Project Description was distributed to the following authorities:

- DFO FPP
- TC NPP

Expert advice / specialist information provided by the above-noted departments, at the time of writing, has been incorporated into this document. Regulatory approvals for the Project are located in Appendix C.

**Accuracy and Compliance Monitoring**

A follow-up program (as defined in S. 2(1) and as applicable to non-designated projects on federal lands) is a program for determining the effectiveness of mitigation measures. Site monitoring (accuracy and compliance monitoring) may be conducted to verify whether required mitigation measures were implemented. The proponent must provide site access to Responsible Authority officials and/or its agents upon request.

**27. Other Monitoring and Compliance Requirements (e.g. *Fisheries Act* or *Species at Risk Act* requirements)**

n/a

## CONCLUSION

### 28. Conclusion on Significance of Adverse Environmental Effects:

The Federal Authorities have evaluated the Project in accordance with Section 67 of *Canadian Environmental Assessment Act (CEAA), 2012*. On the basis of this evaluation, the departments have determined that the Project is not likely to cause significant adverse environmental effects with mitigation and therefore can proceed using mitigation measures as outlined.

29. Prepared by:

*Cathy Martin*

30. Date: June 28, 2017

31. Name:

Cathy Martin

32. Title:

Environmental Specialist, PWGSC-ES

## DECISION

### 33. Decision Taken

- ☒ DFO may exercise its power, duty or function, i.e. may issue the authorization - where the Project is not likely to cause significant adverse environmental effects. Confirm below the specific power, duty or function that may be exercised.
- ☐ DFO to issue *Fisheries Act* Authorization or *Species at Risk Act* Permit
  - ☒ DFO to proceed with Project (as proponent)
  - ☐ DFO to provide financial assistance for project to proceed
  - ☐ DFO to provide federal land for project to proceed
- ☐ DFO has decided not to exercise its power, duty or function because the Project is likely to cause significant adverse environmental effects.
- ☐ DFO to ask the Governor in Council to determine if the significant adverse environmental effects are justified in the circumstances

34. Approved by:

*Paul Curran*

35. Date:

*Jun 28/17*

36. Name:

Paul Curran

37. Title:

Regional Engineer, DFO-SCH, NL

38. References: n/a



# **TRANSPORT CANADA RECOMMENDATION**

<b>Project Title:</b>	Petite Forte, NL – Breakwater Construction	
<b>TC File No.:</b>	45041	
<b>NPP File No.:</b>	2008-700095	
<b>Environmental Review Decision:</b>	Taking into account the implementation of any mitigation measures that Transport Canada considers appropriate, the project <b><u>is not likely</u></b> to cause significant adverse environmental effects and, as such, Transport Canada may exercise any power or perform any duty or function that would permit the project to be carried out in whole or in part.	
<b>Prepared by:</b>		
<b>Signature:</b>		<b>Date:</b>
<b>Mailing Address:</b>	10 Barter's Hill, St. John's, NL	
<b>Tel:</b>	709-351-3200 / 709-772-3088	
<b>Fax:</b>	709-772-3072	
<b>Email:</b>	<a href="mailto:melissa.ginn@tc.gc.ca">melissa.ginn@tc.gc.ca</a>	
<b>Recommended by:</b>	<b>J. Jason Flanagan</b> Senior Environmental Assessment Officer Environmental Affairs and Aboriginal Consultation Unit	
<b>Signature:</b>		<b>Date:</b>
<b>Approved by:</b>	<b>Kevin LeBlanc</b> Regional Manager Environmental Affairs and Aboriginal Consultation Unit	
<b>Signature:</b>		<b>Date:</b>

## **APPENDICES**

- Appendix A: Topographic Map and Aerial Photographs
- Appendix B: Site Plans
- Appendix C: Regulatory Approvals / Responses

**Appendix A**  
**Topographic Map and Aerial Photographs Map and Aerial Photographs**

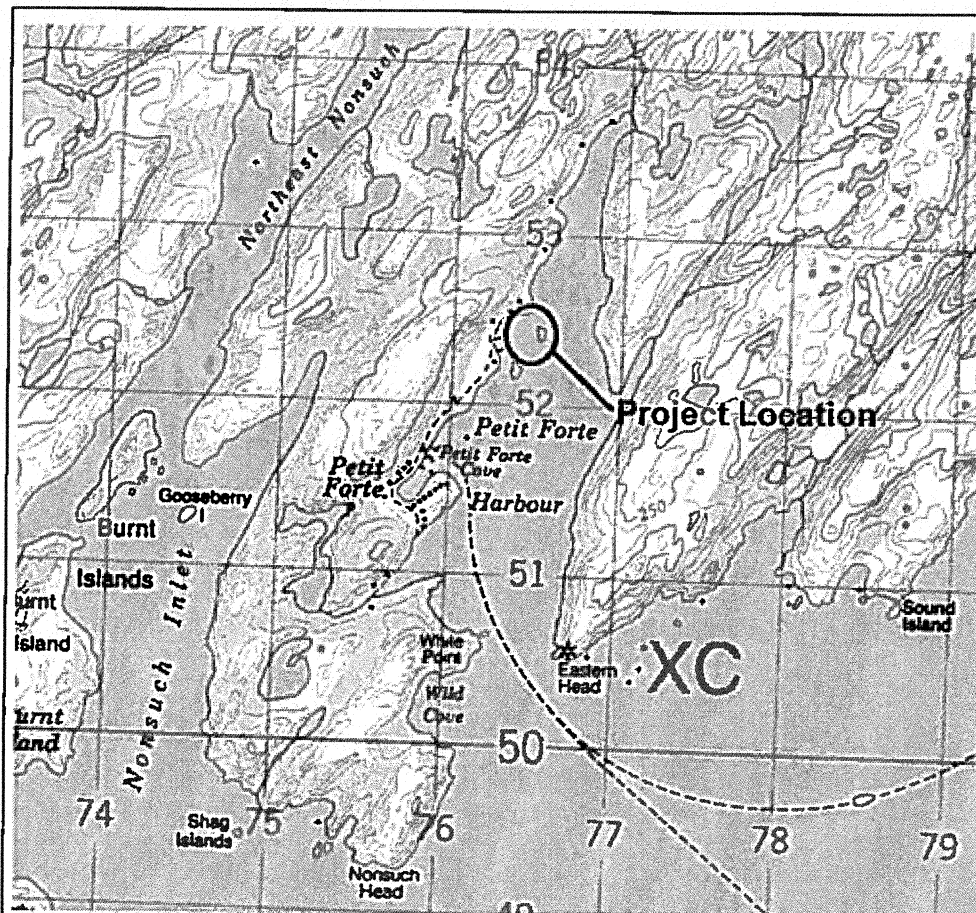


Figure 1: Topographical Map of Petite Forte, NL

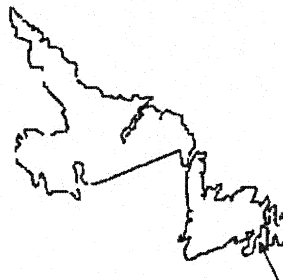


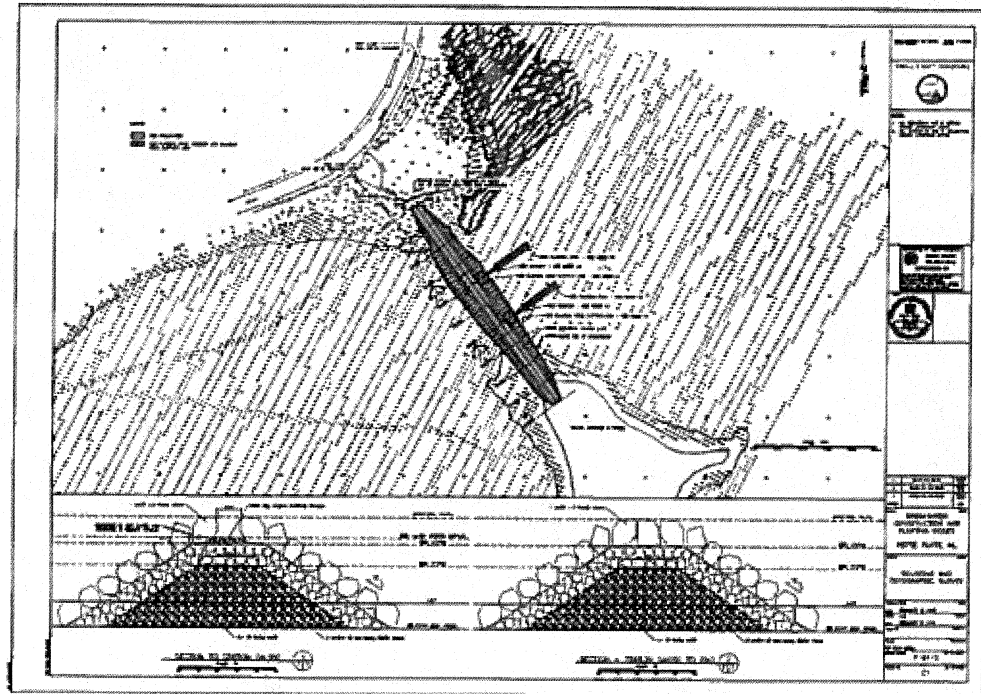


Figure 2: Photo Indicating proposed breakwater construction



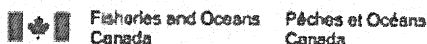
Figure 3: Photo indicating proposed breakwater construction

**Appendix B**  
**Site Plans**



**Appendix C**  
**Regulatory approvals/response**





Fisheries Protection Program-Regulatory Review  
PO Box 5667  
St. John's NL A1C 5X1

AUG 17 2015

Our file / Notre référence  
15-HNFL-00373

Attn: Paul Curran  
Regional Engineer  
DFO, SCH  
10 Barter's Hill  
St. John's, NL A1C 5X1

Dear Mr. Curran:

**Subject: Proposal Requires Additional Assessment by Regulatory Review Unit.**

The Fisheries Protection Program of Fisheries and Oceans Canada (DFO) received your proposal on July 30, 2015. Please refer to the file number and title below:

DFO File No.: 15-HNFL-00373  
Title: Installation of Rock Wall/Breakwater, Petit Fort, NL

Your proposal is being reviewed to determine whether it is a work, undertaking or activity that results in serious harm to fish that are part of a commercial, recreational or Aboriginal fishery, or to fish that support such a fishery which is prohibited by the fisheries protection provisions of the *Fisheries Act*.

Based on the information provided, the Program is of the view that your proposal could potential result in serious harm to fish. In order for DFO to complete the review of your proposal and determine whether serious harm to fish is likely, your proposal has been triaged to the Program's Marine and Coastal Development Regulatory Review Unit for further assessment.

Should you have any questions please contact Darrin Sooley at our St. John's office at (709)772-3521, by fax at (709)772-5562 or via e-mail at [Darrin.Soolley@dfo-mpo.gc.ca](mailto:Darrin.Soolley@dfo-mpo.gc.ca). Please refer to the file number referenced above when corresponding with the Program.

Yours truly,

Michelle M. Roberge  
Team Leader-Triage and Planning

\*Those sections most relevant to the review of development proposals include 20 and 35 of the *Fisheries Act* and sections 32, 33 and 58 of the *Species at Risk Act*. For more information please visit [www.dfo-mpo.gc.ca](http://www.dfo-mpo.gc.ca).

Canada



Fisheries and Oceans Canada Pêches et Océans Canada

P.O. Box 5667  
St. John's, NL A1C 5X1

September 16, 2015

Your file Votre référence

Our file Notre référence  
15-HNFL-00373

Mr. Paul Curran  
Fisheries and Oceans Canada  
Small Craft Harbours Branch  
10 Barter's Hill, St. John's NL A1C 5T2

Dear Mr. Curran:

**Subject: Implementation of mitigation measures to avoid and mitigate serious harm to fish – Breakwater Construction, Petite Forte Harbour.**

The Fisheries Protection Program (the Program) of Fisheries and Oceans Canada received your proposal on August 20, 2015. Your proposal has been reviewed to determine whether it is likely to result in serious harm to fish which is prohibited under subsection 35(1) of the *Fisheries Act*.

The proposal has also been reviewed to determine whether it will adversely impact listed aquatic species at risk and contravene sections 32, 33 and 58 of the *Species at Risk Act*.

Our review consisted of:

- DFO Request for Review Application;
- Project description and project site photographs;
- Site visit Sept 1, 2015 (Sooley); and
- Project drawings received Sept 7, 2015.

We understand that you propose to construct a breakwater in Petite Forte Harbour using rock infill which will extend 100 m from shore to a small island at ~1.3 m water depth and 15 m wide.

To avoid the potential of serious harm to fish and their habitat, we are recommending that the following mitigation measures be included into your plans:

- Measures should be implemented to minimize the release of sediment, turbid water or other project related substances that could be harmful to fish and/or fish habitat into the marine environment, including:
  - All vehicles and equipment must be clean and in good repair, free of mud and oil, or other harmful substances that could impair water quality.

Canada

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- o The rock material to be used should be clean, free of fine materials and of sufficient size to resist displacement during peak storm and/or flood events.
- o Rock material should not be end dumped, but should be dumped on land and placed on station using an excavator or similar equipment.
- o To the extent possible, the proposed work should be carried out during low tide and low wind/wave conditions to minimize turbidity and to minimize the area that might be affected by turbidity.
- o Shoreline disturbance should be restricted to the immediate work area. Any shoreline areas disturbed by project activities should be stabilized as soon as possible to prevent erosion.

Provided that these mitigation measures are incorporated into your plans, the Program is of the view that your proposal will not result in serious harm to fish. The Program is also of the view that your proposal will not contravene sections 32, 33 or 58 of the *Species at Risk Act*. No formal approval is required from the Program under the *Fisheries Act* or the *Species at Risk Act* in order to proceed with your proposal.

If your plans have changed or if the description of your proposal is incomplete, or changes in the future, you should consult our website (<http://www.dfo-mpo.gc.ca/pnw-pro/index-eng.html>) or consult with a qualified environmental consultant to determine if further review is required by the Program.

Please notify this office at least 10 days before starting your project. A copy of this letter should be kept on site while the work is in progress. Please contact Darrin Soolcy (phone (709) 772-3521, fax (709) 772-5562 or email [darrin.soolcy@dfo-mpo.gc.ca](mailto:darrin.soolcy@dfo-mpo.gc.ca)) if you have any questions. Please refer to the file number referenced above when corresponding with the Program.

Sincerely,



Tilman Bieger  
Manager, Fisheries Protection - Regulatory Reviews  
Ecosystems Management Branch  
NL Region

Cc: Cathy Martin, PWGSC - St. John's



Government of Newfoundland and Labrador  
Department of Environment and Conservation  
Water Resources Management Division

File Reference #

December 15, 2010

Paul Curran, P. Eng.  
Regional Engineer  
Small Crafts Harbours  
St. John's NL A1C 5X1

Dear Mr. Curran:

Re: Section 48 Permitting Requirements under the Water Resources Act -  
Wharves, Breakwaters, Slipways and Boathouses

This letter is to inform you that as of January 1, 2011 permits will no longer be required under Section 48 of the Water Resources Act for the construction and maintenance of wharves, breakwaters, slipways and boathouses. Therefore blanket permit ALT5055 is canceled effective January 1, 2011. Water Resources Management Division is currently preparing guidelines on environmental controls which should be followed during the construction and maintenance of wharves, breakwaters, slipways and boathouses. These guidelines will be posted on the department's website once they are completed. In the interim, we have attached a list of terms and conditions which we recommend be followed when completing these types of projects.

This letter does not affect other activities, such as dredging, which will continue to require permits under Section 48 of the Act. As such existing blanket permit ALT5054 remains valid.

This letter does not release Small Crafts Harbours from the obligation to obtain permits and approvals from other concerned provincial, federal and municipal agencies for wharves, breakwaters, slipways and boathouses.

Please do not hesitate to contact this office at 729-5713 if you have any questions.

Yours truly,

Clyde McLean, P.Eng.  
Manager Water Investigations

cc. Shawn Kean  
Haseon Khan

RCM/W3Mord 2003  
SCH Wharves Breakwaters Permitting Dec 15 2010.doc

PO Box 8700, St. John's NL A1B 4J6 tel: 709.729.2563 fax 709.729.0320 www.gov.nl.ca/enr/water

## Environmental Terms and Conditions

### General Alterations

1. All work must take place within the legal boundaries of the proponent or with the approved of the land owner. The constructed works must comply with all other terms and conditions provided in the Crown Lands grant, lease or license for occupancy.
2. Any work that must be performed below the high water mark must be carried out during a period of low water levels.
3. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.
4. Water pumped from excavations for work areas, or any runoff or effluent directed out of work sites, must have silt and turbidity removed by settling ponds, filtration, or other suitable treatment before discharging to a body of water. Effluent discharged into receiving waters must comply with the *Environmental Control Water and Sewage Regulations, 2003*.
5. All operations must be carried out in a manner that prevents damage to land, vegetation, and watercourses, and which prevents pollution of bodies of water.
6. The use of heavy equipment in streams or bodies of water is not permitted. The operation of heavy equipment must be confined to dry stable areas.
7. All vehicles and equipment must be clean and in good repair, free of mud and oil, or other harmful substances that could impair water quality.
8. During the construction of concrete components, formwork must be properly constructed to prevent any fresh concrete from entering a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.
9. Wood preservatives such as penta, CCA or other such chemicals must not be applied to timber near a body of water. All treated wood or timber must be thoroughly dry before being brought to any work site and installed.
10. The use of creosote treated wood is strictly prohibited within 15 metres of all bodies of fresh water in the province.
11. Any areas adversely affected by this project must be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if considered necessary in the opinion of the Department of Environment and Conservation.

12. All waste materials resulting from this project must be disposed of at a site approved by the regional Government Service Center of the Department of Government Services. The Department of Government Services may require samples to be submitted for testing and analysis.
13. Periodic maintenance such as painting, resurfacing, clearing of debris, or minor repairs, must be carried out without causing any physical disruption of any watercourse. Care must be taken to prevent spillage of pollutants into the water.
14. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by the wind, wave, ice action, or structural failure.
15. Sediment and erosion control measures must be installed before starting work. All control measures must be inspected regularly and any necessary repairs made if damage is discovered.
16. Fill or ballast material must be of good quality, free of fines or other substances including metals, organics or chemicals that may be harmful to the receiving waters.
17. Armour stone must be placed around cribbing, where required, to prevent erosion.
18. Suitable booms must be deployed around construction sites to contain any floating debris that might otherwise be carried away. All booms must be properly maintained and remain in place until all work is completed.
19. The proponent must consult with the Department of Fisheries and Oceans should the total combined footprint of the dock exceed 15 metres squared ( $15m^2$ ) and/or it is made of concrete or steel sheeting or any other skirting that isolates the inside of the crib from the rest of the water.
20. This work must not interfere with the operation of any sanitary or storm sewer outfalls in the area. If it is determined that your work adversely impacts any outfalls, you will be responsible for any repairs, modifications or associated costs to correct the problem.
21. Before commencing work on this project, approval must first be obtained from any municipality in which the work is planned.