

Appendix A



PARAGRAPH 35(2)(b) *FISHERIES ACT* AUTHORIZATION

Authorization issued to

Small Craft Harbours (*hereafter referred to as the "Proponent"*)

Attention to: Mr. Gary Hubbard, SCH-DFO, Maritimes/Southwestern Nova Scotia, 215 Main Street,
Yarmouth, Nova Scotia, B5A 1C6

Location of Proposed Project

Nearest community (city, town, village):	Shelburne
Municipality, district, township, county:	Shelburne County
Province:	Nova Scotia
Name of watercourse, waterbody:	Shelburne Harbour
Longitude and latitude, UTM Coordinates:	43° 67865743" N, 65°30201358611" W

Description of Proposed Project

The proposed project of which the work, undertaking or activity authorized is a part involves:

Extending the south breakwater approximately 100 metres (m) to reduce wave swell agitation within the basin. The structure will be constructed with a base of corestone, overlain with filterstone and followed by one to two layers of armourstone. Corestone will be end-dumped from dump trucks while filterstone and armourstone will be placed using an excavator. Dredging is not anticipated for this project.

Description of Authorized work(s), undertaking(s) or activity(ies) likely to result in serious harm to fish

The work(s), undertaking(s), or activity(ies) associated with the proposed project described above, that are likely to result in serious harm to fish, are:

- Infilling of benthic habitat for the construction of a breakwater extension.

The serious harm to fish likely to result from the proposed work(s), undertaking(s), or activity(ies), and covered by this authorization includes:

- Destruction of 5,063 m² of marine fish habitat consisting primarily of sand, silt and lesser amounts of gravel and boulders as a result of the placement of fill material on the seabed including the death of non-motile fish.

Conditions of Authorization

The above-described work, undertaking or activity that is likely to result in serious harm to fish must be carried on in accordance with the following conditions.

1. Conditions that relate to the period during which the work, undertaking or activity that will result in serious harm to fish can be carried on

The work, undertaking or activity that results in serious harm to fish is authorized to be carried on during the following period:

From date signed by Regional Director General to December 31, 2021.

If the Proponent cannot complete the work, undertaking or activity during this period, Fisheries and Oceans Canada-Fisheries Protection Program (DFO-FPP) must be notified in advance of the expiration of the above time period. The Proponent may, where appropriate, provide written notice that the period to carry on the work, undertaking or activity has been extended.

The periods during which other conditions of this authorization must be complied with are provided in their respective sections below. The Proponent may, where appropriate, provide written notice that these periods have been extended, in order to correspond to the extension of the period to carry on a work, undertaking, or activity.

2. Conditions that relate to measures and standards to avoid and mitigate serious harm to fish

2.1 Sediment and erosion control: Sediment and erosion control measures must be in place and shall be upgraded and maintained, such that release of sediment is avoided at the location of the authorized work, undertaking, or activity.

2.2 List of measures and standards to avoid and mitigate serious harm to fish:

- 2.2.1. An erosion and sediment control plan will be developed for the site that minimizes risk of sedimentation to the marine environment.
- 2.2.2. All rock material, coming from outside the site, that will be used for the project must be free of excessive fines, clean, non-ore bearing, non-toxic material (i.e., free of fuel, oil, grease and/or other contaminants) from a provincially-approved non-watercourse source.
- 2.2.3. Turbidity levels shall not exceed 8 NTUs above the background level when background levels are between 8 and 80 NTUs OR exceed 10% above background levels when background is > 80 NTUs. Background levels shall be measured in the closest undisturbed area adjacent to the work. Background and in-plume turbidity samples shall be measured in as close a timeframe as technically possible.
- 2.2.4. Avoid work during periods which Environment and Climate Change Canada has issued rainfall or wave warning for the work area.
- 2.2.5. Wherever possible, machinery will operate from a barge or from land or infrastructure above the high water mark in a manner that minimizes disturbance.
- 2.2.6. Project machinery will not access beaches, dunes, or coastal wetlands. These areas shall not be used as staging areas for the project.
- 2.2.7. Equipment will be washed, maintained and fuelled in areas that avoid the potential for deleterious substances to enter the marine environment or local watercourses.

- 2.2.8. An emergency response plan will be developed to be implemented in the event of sediment release or spill of a deleterious substance. An emergency spill kit will be on-site. All spills or leaks must be promptly contained, cleaned up, and reported to the 24-hour environmental emergencies reporting system (1-800-565-1633).
- 2.3 Contingency measures: Additional sedimentation controls shall be put in place if condition 2.2.3 above below indicates that the measures and standards to avoid and mitigate serious harm to fish are not successful.
- 2.4 Dates by which these measures and standards shall be implemented: Measures and standards to avoid and mitigate serious harm to fish shall be implemented, as necessary, prior to, during and after construction activities.
- 3. Conditions that relate to monitoring and reporting of measures and standards to avoid and mitigate serious harm to fish**
- 3.1 Monitoring of avoidance and mitigation measures: The Proponent shall monitor the implementation of avoidance and mitigation measures referred to in section 2 of this authorization and report to DFO-FPP within 30 days that the work authorized has been completed, and indicate whether the measures and standards to avoid and mitigate serious harm to fish were conducted according to the conditions of this authorization. This shall be done, by:
- 3.1.1 Demonstration of effective implementation and functioning: Providing dated photographs and inspection reports to demonstrate effective implementation and functioning of mitigation measures and standards described above to limit the serious harm to fish to what is covered by this authorization.
- 3.1.2 Contingency measures: Providing details of any contingency measures that were followed, to prevent impacts greater than those covered by this authorization in the event that mitigation measures did not function as described.
- 3.1.3 Completing and submitting to DFO-FPP the attached Completion of Authorized Work(s), Undertaking(s) or Activity (ies) and monitoring details within 30 days.
- 3.2 Other monitoring and reporting conditions: When sediment is observed in the water from onsite activities, turbidity measurements (NTUs) shall be collected approximately midway through daily activities both within 30 metres of the in-water activity (in-plume) and at a background location (at least 100 metres outside the plume). Turbidity reports shall be sent to FPP within 30 days and shall include, but not limited to, the following information: date, time, weather conditions, in-water activity, GPS location where the sample was taken, and measurement in NTUs.
- 4 Conditions that relate to the offsetting of the serious harm to fish likely to result from the authorized work, undertaking or activity**
- 4.1 Letter of credit: N/A
- 4.2 Scale and description of offsetting measures: Offsetting measures shall be carried out in accordance with the measures set out in the proponent's offsetting plan for the Department of Fisheries and Oceans Small Craft Harbours Lower Sandy Point Harbour, Shelburne County, Nova Scotia, dated January 27, 2017 approved by DFO-FPP and attached to this authorization. The offsetting plan proposes to withdraw 2,988 m² of habitat credits from the St. Mary's River Restoration Project, Guysborough County, Nova Scotia.

- 4.3 Offsetting criteria to assess the implementation and effectiveness of the offsetting measures: All fish habitat offsetting measures shall be completed and functioning according to the St. Mary's River Association, West Branch River Restoration Project, Interim Report dated November 3, 2014. The final monitoring report to assess the implementation and effectiveness of the offsetting measures is due to FPP by December 31, 2019 and will include thalweg depths and location, bankfull/wetted widths, bank condition, substrate composition, percent cover, pool depths, percent pools, juvenile salmon data, and stability and function of structures. This information will be compared to the baseline data and river conditions as recorded by the St. Mary's River Association (Hunter and Mitchell, 2013) and by DFO (juvenile salmon data).
- 4.4 Contingency measures: If the results of monitoring as required in condition 5 indicate that the offsetting measures are not completed by the date specified and/or are not functioning according to the above criteria in 4.3, the Proponent shall give written notice to DFO-FPP and shall implement the contingency measures and associated monitoring measures, as contained within the approved offsetting plan (attached to this authorization and referenced in section 4.2), to ensure the implementation of the offsetting measures is completed and/or functioning as required by this authorization.
- 4.5 The Proponent shall not carry on any work, undertaking or activity that will adversely disturb or impact the offsetting measures.
- 4.6 Other conditions related to offsetting: N/A

5 Conditions that relate to monitoring and reporting of implementation of offsetting measures (described above in section 4):

- 5.1 Schedule(s) and criteria: The Proponent shall conduct monitoring of the implementation of offsetting measures according to the approved timeline and criteria below:
- 5.1.1 Monitoring will be conducted annually for three years post restoration (2017-2019).
 - 5.1.2 The monitoring criteria includes thalweg depths and location, bankfull/wetted widths, bank condition, substrate composition, percent cover, pool depths, percent pools, juvenile salmon data, and stability and function of structures.
- 5.2 List of reports to be provided to DFO: The Proponent shall report to DFO on whether the offsetting measures were conducted according to the conditions of this authorization by providing the following:
- 5.2.1 'Post Construction Report', dated October 30, 2016, is complete and submitted to FPP.
 - 5.2.2 Annual Monitoring Reports are to be submitted to DFO-FPP prior to December 31, 2017, 2018 and 2019. The reports shall include photos, maps, thalweg depths and location, bankfull/wetted widths, bank condition, substrate composition, percent cover, pool depths, percent pools, juvenile salmon data, and stability and function of structures. This information will be compared to the baseline data and river conditions as recorded by the St. Mary's River Association (Hunter and Mitchell, 2013) and by DFO (juvenile salmon data).
- 5.3 Other monitoring and reporting conditions for offsetting: N/A

Authorization Limitations and Application Conditions

The Proponent is solely responsible for plans and specifications relating to this authorization and for all design, safety and workmanship aspects of all the works associated with this authorization.

The holder of this authorization is hereby authorized under the authority of Paragraph 35(2)(b) of the *Fisheries Act*, R.S.C., 1985, c.F. 14 to carry on the work(s), undertaking(s) and/or activity(ies) that are likely to result in serious harm to fish as described herein. This authorization does not purport to release the applicant from any obligation to obtain permission from or to comply with the requirements of any other regulatory agencies.

This authorization does not permit the deposit of a deleterious substance in water frequented by fish. Subsection 36(3) of the *Fisheries Act* prohibits the deposit of any deleterious substances into waters frequented by fish unless authorized by regulations made by Governor in Council.

This authorization does not permit the killing, harming, harassment, capture or taking of individuals of any aquatic species listed under the *Species at Risk Act* (SARA) (s. 32 of the SARA), or the damage or destruction of residence of individuals of such species (s. 33 of the SARA) or the destruction of the critical habitat of any such species (s. 58 of the SARA).]

At the date of issuance of this authorization DFO has determined that impacts from the work, undertaking, or activity proposed, to aquatic species listed under the *Species at Risk Act* are not likely.

The failure to comply with any condition of this authorization constitutes an offence under Paragraph 40(3)(a) of the *Fisheries Act* and may result in charges being laid under the *Fisheries Act*. This authorization must be held on site and work crews must be made familiar with the conditions attached.

This authorization cannot be transferred or assigned to another party. If the work(s), undertaking(s) or activity(ies) authorized to be conducted pursuant to this authorization are expected to be sold or transferred, or other circumstances arise that are expected to result in a new Proponent taking over the work(s), undertaking(s) or activity(ies), the Proponent named in this authorization shall advise DFO in advance.

Date of Issuance: JUL 18 2017

Approved by: 

Mary-Ellen Valkenier
A/Regional Director General
Maritimes Region
Fisheries and Oceans Canada



COMPLETION OF AUTHORIZED WORK(S), UNDERTAKING(S) OR ACTIVITY(IES)

A condition of this Authorization requires that the Authorization Holder notify Fisheries and Oceans Canada within 30 days that the work(s), undertaking(s) or activity(ies) authorized has been completed.

Please enter the information on this sheet and return it to Fisheries and Oceans Canada at the following address:

Fisheries and Oceans Canada, Maritimes Region
Fisheries Protection Program
6th Floor Polaris Building, BIO
PO Box 1006, 1 Challenger Drive
Dartmouth, Nova Scotia, B2Y 4A2

Phone: (902) 401-0897
Fax: (902) 426-1489
Email: ReferralsMaritimes@dfo-mpo.gc.ca
DFO-FPP Contact: Colleen Smith, Marine and Coastal Development

AUTHORIZATION NUMBER: 16-HMAR-00586

NAME OF AUTHORIZATION HOLDER: Fisheries and Oceans Canada - Small Craft Harbours (SCH)

NAME OF WATERBODY: Shelburne Harbour

WORK(S), UNDERTAKING(S) OR ACTIVITY(IES) AUTHORIZED: Infilling of 5,063 m² of marine fish habitat below the ordinary high water mark to extend a breakwater at SCH - Lower Sandy Point.

NAME OF CONTRACTOR(S): _____

DATE AUTHORIZED WORK(S), UNDERTAKING(S) OR ACTIVITY(IES) COMPLETED: _____

COMMENTS (please attach photos and provide the final footprint area below):

By signing below the Authorization Holder verifies the work was done in accordance with the terms and conditions of this Authorization.

SIGNATURE: _____

DATE: _____

POSITION TITLE: _____