

DFO APPLICATION FOR THE INSTALLATION OF INSTREAM STRUCTURES FOR FISH HABITAT RESTORATION

NOTE:

Works built or placed in, on, over, under through or across a navigable waterway may require an approval under the *Navigable Waters Protection Act* (NWPA).

Mr. Jon Prentiss, Navigable Waters Protection Officer, NWP Program, Transport Canada, P.O. Box 1000, Dartmouth, N.S., B2Y 3Z8, (902) 426-0797 should be contacted before any restoration work is done.

It is the responsibility of the proponent to obtain any other federal, provincial or municipal approvals.

Please note: It is important that sufficient information be supplied in the application to expedite the administration of legal documents and ensure all regulatory requirements are met.

**APPLICATION FOR THE INSTALLATION OF INSTREAM
STRUCTURES FOR FISH HABITAT RESTORATION**

A: Name of contact: _____		
Name of organization: _____		
Mailing Address: _____ _____ _____		
Phone numbers:	Business _____ Cell _____	Home _____ Fax _____

DFO Stewardship and Science Liaison Unit Contact:	
Name: _____	Phone number: _____
Type of equipment to be used: (circle all that apply) Excavator; Backhoe; Pay-loader; Other _____	
Hand tools	

If work is not being undertaken by “A”, please provide the following:

Company or Organization operating mechanical equipment: _____		
Contact person: _____		
Mailing Address: _____ _____ _____		
Phone numbers:	Business _____ Cell _____	Home _____ Fax _____
Email Address: _____		

Location of work site (Identify work site(s) on map attached to this application)

Name of waterway: _____

County _____ Province _____

Latitude _____ Longitude _____

Name of nearest community to the proposed work (city, town, and village)

Topographical map _____ or Hydrographic chart _____

Name of upland owner _____

Has owner ever been contacted Yes _____ No _____ N/A _____

If yes, please provide written confirmation.

If no, is there intent to make contact? Yes _____ No _____ N/A _____

Please explain:

Access road to proposed work site (i.e. Route number, highway series number or civic number)

Briefly describe location of site (i.e. other existing works, notable landmarks, etc.)

Description of Work to be done at site(s)

1. Please circle appropriate work and indicate number of structures

Rock sills; Groyens; Digger Logs; Bank stabilization; Deflectors;

Plantings; Fords; Other _____

2. Please check status of project: New ____ Existing ____ Maintenance ____

3. Will the work be completed this season? Yes ____ No ____

If no, please explain and timeframe of installation

4. Please describe the type and size of materials that will be used (ie. Non-acid bearing rocks, etc.)

5. Average width and depth of waterway at the proposed work site

6. Type of navigation (recreation/commercial) _____

7. Have you included photos and aerial photos or provided these electronically?

Yes ____ No ____

Please ensure the following documents/information are included

- A detailed project description with construction schedule
- Property ownership status (if you are not the upland owner, attach a letter of permission from the owner)
- A map or chart to show location of project
- A sketch or drawing of your project, including side and top view and showing all dimensions of the project
- A survey plan or sketch with dimensions indicating the location of existing shoreline structures, bridges, cables, property lines, high and low water marks, etc.
- Current photographs of the proposed work site
- Photographs or drawings of the specific type(s) of structure to be used.

Description of Project

General (Location, rationale for work, proponent and associates)

The installation of a rock sill in the Little Sackville River is part of a research project conducted by the Department of Fisheries and Oceans, Oceans and Environment Branch, in cooperation with the Sackville Rivers Association. These rock sills are structures designed to restore the natural habitat of rivers by rebuilding the banks and creating pools and riffles in areas where rivers have been widened and water levels have dropped. Rock sills are structures constructed of small or large boulders, dependent on the size and current of the river, which are dug into the riverbed and lined up at a 30° angle to the bank.

Specifics of the site (Where, when, structures to restore what? Expected maintenance schedule)

Rock sills will be placed at various locations along the Little Sackville River. They will start from the mouth of the Bedford Basin and run throughout the river until it meets the Sackville River. They will be positioned in a manner to aid in the restoration of the natural meander of the river. This is to be determined by the Habitat Management Division, Department of Fisheries and Oceans once they have walked the river to determine the pattern of meander. After a distance has been determined, the structures will be positioned to restore the meander of the river and stabilize the riverbanks. An aerial photo and map of the area are attached with the location of the rock sills to be shown later. The installation of these structures will occur between the dates of July 1st, 2003 and July 31st, 2003 (dependent on weather conditions). These structures are to be left in the river permanently and should not require much maintenance or repair. The structures will be inspected biyearly to determine any maintenance required.

The dimensions of the rock sills will be dependent on the width of the river at the points of installation (See attached photo). The rocks will be placed at a 30° angle to the bank and will alternate from left bank to right bank (See attached photo and drawing for exact construction).

Known Navigation

The Little Sackville River is a shallow salmonid river, which is not navigable by canoes and kayaks during normal flows.

Include a detailed map of individual site(s), identifying locations of work to be done

Air Photo - Identify location(s) of site(s) where work will be done

ADOPT-A- STREAM: WATERSHED, MARSH, LAKE, RIVER, ESTUARY

Stream Enhancement

Plan view diagram

IDENTIFICATION OF WORK TO BE DONE

Digger Log installation

Average Width:

Average Depth:

MATERIAL

Large boulders (12-15") in diameter. Rocks.

Excavator and payloader.

Cross Section diagram

INSTALLATION

1/ Dig out trench to insert the rocks.

2/ Insert boulders into trench at a **30** degree angle. Make sure that all rocks are sitting at the same height.

3/ Move the rocks downstream of the rock sill to speed up the digging of the pool. Place these rocks above the rock sill to keep it in place.'

Photograph of the View Downstream

Photograph of the View Upstream

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