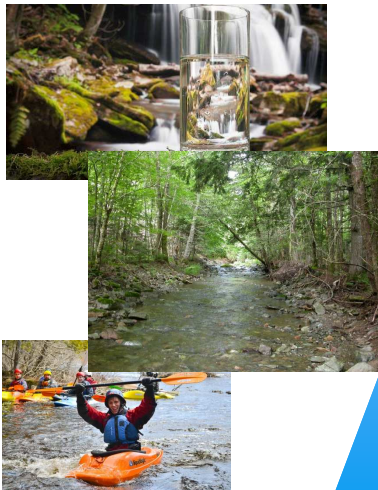


Watercourse Alteration Program

Kevin Garroway,
Nova Scotia Environment
2016



Surface Water Management



OBJECTIVE:

- to protect surface water resources and ensure sustainable use for all beneficial uses.

Beneficial uses:

- drinking water supplies,
- habitat for aquatic life,
- recreational use,
- Agricultural and industrial uses.

Sustainable uses:


- support economic development,
- health of humans and aquatic ecosystems,
- overall environmental protection, and
- a high quality of life for Nova Scotians.




Surface Water Management

What is a watercourse alteration?

- When someone wants to interact with a watercourse, such as install a crossing, withdrawal water, or add erosion protection, they must follow the rules set in the Activity Designation Regulations and the Nova Scotia Watercourse Alterations Standard.




Management



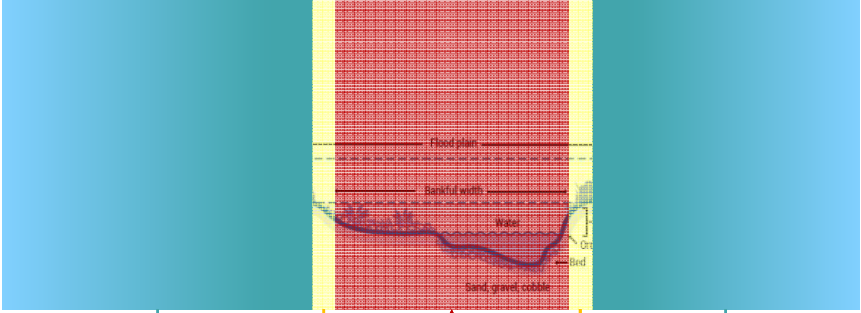
Tools

Watercourse Alterations

- Regulations
- Standard
- Approvals
- Notifications
- Training
- Certification
- Audit
- Evaluation




Watercourse Features




Approval

Notification

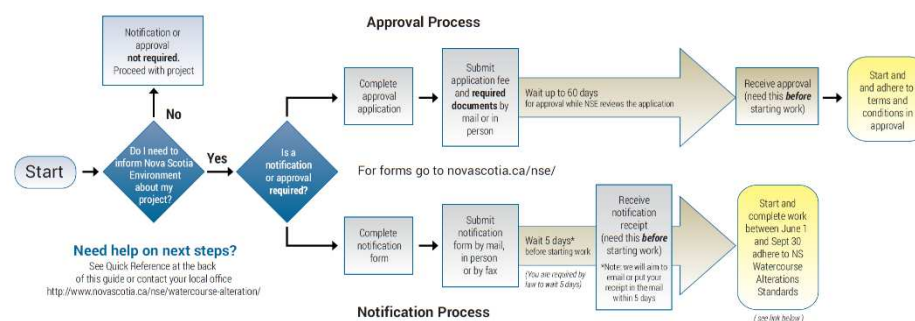
No Submission





When to Apply to NSE?

How the process works



Nova Scotia Watercourse Alterations Standard

Requirements in the Nova Scotia Watercourse Alterations Standard must be followed for watercourse alterations under a notification.

See the standards here: www.novascotia.ca/nse/watercourse-alteration/



Activities Designation Regulations

Approval

Altering any of the following, or the flow of water in any of the following requires an approval, unless eligible for a notification or exempt:

- A watercourse
- A water resource
- A wetland

Water withdrawals, water storage, dams, wetland alterations status quo



Activities Designation Regulations

5 **notification** categories with conditions:

Fish Habitat Improvement

Culverts

Bridges & Open Bottom Structures

Bank Alteration

Maintenance



Bridges

Notification if:

- Span \leq 15m
- Bank altered; Bed not altered
- June 1 – Sept 30
- Follow *Standard*
- Planned/ designed by Sizer or P.Eng

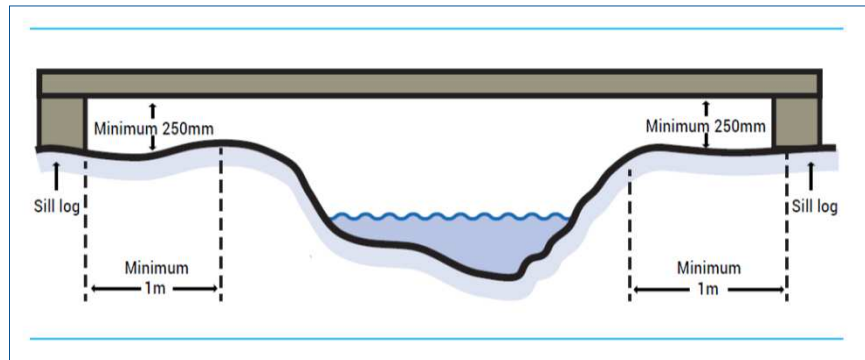
Approval if:

- Notification conditions exceeded
- If wetland altered



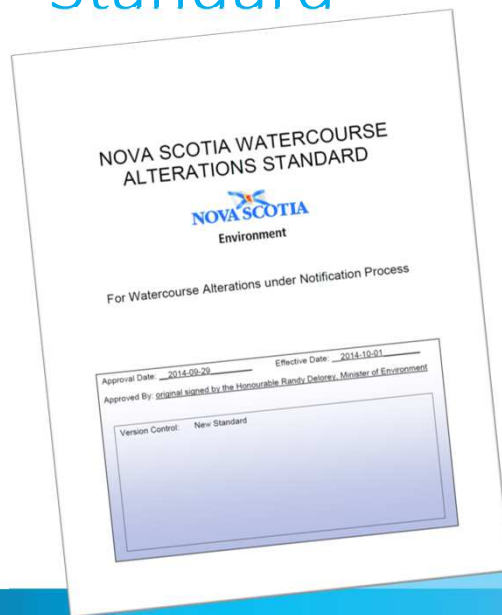
Bridges

No submission:



NOVA SCOTIA

Standard



THREE SECTIONS:

- Introduction
- General Conditions
- Activity Specific Conditions
 - Culvert <0.5%
 - Culvert >0.5%
 - Bridge
 - Wharf/Dock
 - Water Intake
 - Removal of Bank
 - Erosion Protection
 - Beaverdams
 - Foreign Material
 - Utility Crossings
 - Decommissioning

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Standard...

Culverts

- Watercourse Slope
- Embedded Properly
 - Water backing into the pipe
 - Inlet invert elevation
- Energy dissipation Pool
 - Dimensions
 - Transition into natural stream



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Watercourse Alteration Certification

- An **Installer** is required for:
 - All watercourse alterations under *Notification*
 - All watercourse alterations under *Approval**
(*except wetland alterations, withdraws, or dams)
- A **Sizers** is required for:

<ul style="list-style-type: none"> • Single Culverts, if <ul style="list-style-type: none"> - Under 25 m - Watercourse slope is $< 0.5\%$ - Watershed is $< 20 \text{ km}^2$ 	<ul style="list-style-type: none"> • Bridges, if <ul style="list-style-type: none"> - The bed is not altered - The span is max 15 m, or 3600 mm (arch) - Arches less than 25 m
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****All certification is managed by the Maritime College of Forest Technology (mcft.ca)**

NOVA SCOTIA

How to get certified

- Take course approved by Minister
- Maritime College of Forest Technology courses
 - Watercourse Alteration Sizer course
 - Watercourse Alteration Installer course
- Valid for 10 years

Visit www.mcft.ca for information on upcoming courses



Existing certifications

- Valid Watercourse Alteration Certifications (since Jan 2008)
- Can do work as a Sizer & as an Installer until **September 30, 2019**
- Update information
- Get on the public list



Transitioning approvals

- Existing approvals, including blanket approvals, valid until expiry date

Going forward

- No “blanket approvals”
- No up-front approval application
- Formalized notification process



More information

Website

- <http://novascotia.ca/nse/watercourse-alteration/>

Questions about program changes

- Kevin Garroway – 902.424.3401
- Steve Conway – 902.424.4034

Questions about other specific projects

- Local NS Environment office

