

## Changes to the Watercourse Alteration Program: What are the qualifications?

New requirements for watercourse alteration work come into effect October 1, 2014. This document describes the types of work that can be conducted by people with varying qualifications.

For more information see the Watercourse Alteration User Guide, Activities Designation Regulations and NS Watercourse Alteration Standard at [novascotia.ca/nse](http://novascotia.ca/nse).

**Note:** The expertise needed to design/plan activities requiring approval varies significantly depending on the complexity of the project or the sensitivity of the site.

### Certified Watercourse Alteration Sizers can...

Plan the following types of watercourse crossings and get authorization through **notification**:

Culverts, where:

- watercourse has a slope of less than 0.5%, and
- watershed above crossing site is less than 20 square kilometres (km<sup>2</sup>), and
- culvert is less than 25 metres long, and
- meets Nova Scotia Watercourse Alteration Standard.

Bridges and other open bottom structures, where:

- bridge span is 15 metres or less or structural plate arch or other open-bottom structure span is 3600 mm or less, and
- bank of the watercourse is altered, and
- bed of the watercourse is not altered, and
- structural plate arch is not more than 25 metres long, and
- meets Nova Scotia Watercourse Alteration Standard.

Plan some watercourse crossings and get authorization through **approval**:

- Culverts and bridges that do not qualify for notification

### Professional engineers can...

Design the following types of watercourse crossings and get authorization through **notification**:

Culverts, where

- watercourse has a slope of less than 8%, and
- watershed above crossing site is less than 20 km<sup>2</sup>, and
- culvert is less than 25 metres long, and
- Nova Scotia Watercourse Alteration Standard is met.

Bridges, where

- bridge span is 15 metres or less or structural plate arch or other open-bottom structure span is 3600 mm or less, and

- bank of the watercourse is altered, and
- bed of the watercourse is not altered, and
- structural plate arch is not more than 25 metres long, and
- Nova Scotia Watercourse Alteration Standard is met.

Design some watercourse crossings and get authorization through **approval**:

- Culverts and bridges that do not qualify for notification

### **Certified Watercourse Alteration Installers can...**

Install the following types of watercourse alteration crossings:

- Culverts requiring notification or approval
- Bridges requiring notification or approval
- Maintenance work on crossings requiring notification

Install/conduct the following types of watercourse alteration activities:

- Wharves, docks requiring notification or approval
- Boat launches, slipways requiring notification or approval
- Water intake structures requiring notification or approval
- Utility crossings requiring notification or approval
- Remove material from a watercourse requiring approval
- Erosion protection work requiring notification or approval
- Fish habitat improvement structures requiring notification or approval
- Fishing equipment requiring notification or approval
- Other watercourse alterations requiring approval

### **Those without the above qualifications can...**

Plan and/or install watercourse crossings or other watercourse alteration activities that do not require notification or approval, including

- Temporary crossings that span the watercourse entirely (where there is no disturbance to the bed or bank of the watercourse)
- Wharves/docks that float or are on posts that rest on the bed of the watercourse

Design/plan the following other types of watercourse alteration activities

- Culverts, bridges or other crossing structure requiring approval
- Wharves, docks requiring notification or approval
- Boat launches, slipways requiring notification or approval
- Water intake structures requiring notification or approval
- Utility crossings requiring notification or approval
- Erosion protection work requiring notification or approval
- Fish habitat improvement structures requiring notification or approval
- Fishing equipment requiring notification or approval
- Dams requiring approval
- Other watercourse alterations requiring approval

Activity		Sizer	PEng	Installer	Anyone with necessary expertise*
<b>Culvert</b>	Design/plan a culvert under notification for watercourse with slope less than 0.5%	✓	✓		
	Design/plan a culvert under notification for watercourse with slope less than 8%		✓		
	Design/plan a culvert under approval				✓
	Install a culvert			✓	
<b>Bridge</b>	Design/plan a bridge under notification	✓	✓		
	Design/plan a bridge under approval				✓
	Install a bridge			✓	
<b>Maintenance</b>	Plan maintenance work under notification				✓
	Install maintenance work			✓	
<b>Wharf/dock</b>	Design/plan a wharf under notification				✓
	Design/plan a wharf under approval				✓
	Install a wharf			✓	
<b>Boat launch/slipway</b>	Design/plan a boat launch/slipway under notification				✓
	Design/plan a boat launch/slipway under approval				✓
	Install a boat launch/slipway			✓	
<b>Water intake structure</b>	Design/plan a water intake structure under notification				✓
	Design/plan a water intake structure under approval				✓
	Install a water intake structure			✓	

**\*Note:** The expertise needed to design/plan activities requiring approval varies significantly depending on the complexity of the project or the sensitivity of the site.

Activity		Sizer	PEng	Installer	Anyone with necessary expertise*
Utility crossing	Design/plan a utility crossing under notification				✓
	Design/plan a utility crossing under approval				✓
	Install an utility crossing structure			✓	
Material removal	Remove material from a watercourse			✓	
Erosion protection	Design/plan erosion protection under notification				✓
	Design/plan erosion protection under approval				✓
	Install erosion protection materials			✓	
Fish habitat improvement	Design/plan fish habitat improvement structures under notification				✓
	Design/plan fish habitat improvement structures under approval				✓
	Install fish habitat improvement structures			✓	
Fishing equipment	Design/plan fishing equipment structures under notification				✓
	Design/plan fishing equipment structures under approval				✓
	Install fishing equipment structures			✓	
Dam	Design/plan dam or water storage structure				✓
	Install dam or water storage structure				✓
Other	Design/plan other watercourse alteration structures (i.e., bypass ponds, beach construction, causeways)				✓
	Install other watercourse alteration structures			✓	

\*Note: The expertise needed to design/plan activities requiring approval varies significantly depending on the complexity of the project or the sensitivity of the site.