

Restoration Planting for Fisheries Watercourses (Class A, Class A/O, Class B)

Restore disturbed areas with native plants. Generally, native plants are planted at one plant per m². Plant stock must be #5 pot size plants consisting of at least three (3) different species from the plant list provided in this brochure. The Restoration Planting must be placed in areas not likely to be disturbed due to routine ditch mowing or maintenance. Plantings should also be located at the top of bank, i.e. not on the roadside bank. Plant maintenance (watering, brushing) will be necessary until the plants are established. Plants must be guaranteed for 100% survival for 3 years.

Acceptable Native Shrubs:

Hardhack (<i>Spirea douglasii</i>)	Common Snowberry (<i>Symphoricarpos albus</i>)
Salmonberry (<i>Rubus spectabilis</i>)	Saskatoon Berry (<i>Amelanchier alnifolia</i>)
Willow (<i>Salix sp.</i>)	Pacific Ninebark (<i>Physocarpus capitatus</i>)
Twinberry (<i>Lonicera involucrate</i>)	Nootka Rose (<i>Rose nutkana</i>)
Oceanspray (<i>Holodiscus discolor</i>)	Black Hawthorn (<i>Crataegus douglasii</i>)

Local Nurseries for Native Plants:

Art's Nurseries Ltd. – Surrey: 604-882-1201 or <http://www.artsnursery.com>
Peel's Nurseries Ltd. – Mission: 604-820-7381 or <http://www.peelsnurseries.com>
Pacific Rim Native Plants Ltd. – Chilliwack: 604-792-9279 or <http://www.hillkeep.ca>

Contact Agencies & Related Information

BC Ministry of Environment: Phone: 604-582-5200

Notification Process: http://www.env.gov.bc.ca/wsd/water_rights/licence_application/section9/index.html
Standards and Best Practices for Instream Works:
<http://www.env.gov.bc.ca/wld/documents/bmp/iswstdsbpsmarch2004.pdf>

Fisheries & Oceans Canada: Phone: 604-666-7575

Federal Fisheries Act: <http://www.pac.dfo-mpo.gc.ca/habitat/steps/praf/index-eng.htm>
Land Development Guidelines: <http://www.dfo-mpo.gc.ca/Library/165353.pdf>

BC Ministry of Transportation: <http://www.gov.bc.ca/tran/>.

Questions

For all other questions, please contact:
City of Surrey – Engineering Department - Engineering Counter
14245 – 56 Avenue, Surrey, BC V3X 3A2
Tel: 604-591-4276 Fax: 604-591-8693
EngLD@surrey.ca

- Please contact the City of Surrey Environmental Coordinator to determine ERC submission requirements and dates.

* The data provided is compiled from various sources and is NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, legal descriptions and encumbrances must be confirmed at the Land Title Office.

** This guideline is intended to provide general information only. City by-laws and policies shall take precedence. Issuance of a permit does not exempt a permit holder, property owner or contractor from complying with all applicable municipal, provincial and federal statutes, by-laws and regulations. Applicable laws include but are not limited to, the City's Erosion and Sediment Control By-law, Federal Migratory Birds Convention Act, Federal Fisheries Act, Federal Species at Risk Act, Provincial Wildlife Act and the Provincial Water Act.

A General Guide to Construction Over or Near Watercourses

*This guide describes the Engineering Department's requirements when constructing or replacing driveways and services within the road right of way over or near fisheries sensitive watercourses. Prior to construction, you will have to obtain a **City Road and Right-of-Way Permit**. You should also review your plans with the City to ensure that you are constructing to City standards and that you comply with the Federal Fisheries Act and Provincial Water Act.*

General Information

Protection of the City's fishery sensitive watercourses, including road side ditches, is an important environmental objective. Under the authority of the Federal Fisheries Act, and the Provincial Water Act, Fisheries and Oceans Canada (DFO) and the BC Ministry of Environment (MOE) respectively, have decision-making authority for the conservation and protection of fish and fish habitat.

The City of Surrey maintains a Fish Classification Map, which designates most watercourses in Surrey*. Please refer to this Fish Classification map to determine the classification of watercourses within proximity of your construction project. This Fish Classification map is available at the Engineering Counter, Engineering Department, City Hall or on-line at:

http://cosmos.surrey.ca/geocortex/essentials/web/Viewer.aspx?Project=Drainage_Map

Fish Classification Map and Watercourse Description

Class A & A/O - Red-coded

Indicate year round presence of fish (salmon and regionally significant fish). Red-dashed watercourses denote seasonal (winter) fish presence in lowland watercourses.

Class B - Yellow-coded

Provide valuable food and nutrients to downstream fisheries watercourses, but do not support salmon or regionally significant fish; however, they are considered fish habitat and may provide habitat for course fish species.

Class C - Green-coded

Typically ditches with insignificant food and nutrient input, and do not support fish. They are designed for the conveyance of storm water and are typically dry 48-72 hours following a significant rainfall event.

In British Columbia, the ownership of water is vested in the Crown as stated in the Water Act - the primary provincial statute regulating water resources. Under the Water Act, a "stream" is defined as "includes a natural watercourse or source of water supply, whether usually containing water or not, and a lake, river, creek, spring, ravine, swamp and gulch." Section 9 of the Water Act requires that a person may only make "changes in and about a stream" under an Approval; in accordance with Part 7 of the Water Regulation including Notification where required; or under a Water Licence or Order. For more information on submitting a Water Act notification or application, please visit the Ministry of Environment website. Also refer to the Provincial Standards and Best Practices for Instream Works for further guidance.

Fisheries Watercourses are regulated under the *Federal Fisheries Act*. In context with construction over or near watercourses, there are two main provisions in which DFO may regulate:

- a) Deleterious substances
- b) Harmful Alteration, Disruption or Destruction (HADD) of fish habitat



City Requirements, Permits, and Design Standards**

Prior to starting construction, permits are required if construction occurs within the City roads and rights of way. A **City Road & Right-of-Way Permit** and a **Traffic Obstruction Permit** are issued by the Engineering Department at the Engineering Counter at City Hall. When working within Provincial Highways, a permit from the Ministry of Transportation is also required.

All culvert designs must comply with the applicable standards in the City of Surrey, Engineering Department, Design Criteria Manual (May 2004), The Master Municipal Constructions Documents (MMCD 1996) and the City of Surrey Supplementary MMCD (May 2004).

All contractors undertaking this type of work must be skilled in the installation of driveways and construction within fisheries sensitive watercourses.

Preliminary Construction Documents

Prior to the City of Surrey issuing a City Road and Right of Way Permit, proof of environmental submissions may be required. Construction requirements vary with the watercourse fish classification and are generally as follows:

Red-Coded – Class A

- Engage a Qualified Environmental Professional (QEP) consultant to review and address the following
 - Preliminary site condition
 - Construction plans
 - Develop a site specific environmental assessment
 - Develop a management plan that;
 - Mitigates for potential fisheries impacts
 - Identifies and mitigates for potential impacts to Species at Risk Act (SARA) Schedule 1 listed species
 - Erosion and Sediment Control (ESC) Plan
 - If a Fisheries Act Harmful Alteration Disruption or Destruction (HADD) is likely to occur, submit management plan to the City for the Environmental Review Committee (ERC).
 - Must ensure that no fish are present; accomplished by a QEP with fish salvage, isolation and pumping around
 - Monitor construction work
 - Submit a monitoring report to DFO and the City upon completion
- Work shall only be conducted with low water flows between **August 1st** and **September 15th**

Red-Dash-Coded – Class A(O)

- Comply with same requirements as Class A, except, work may be conducted with low water flows between **June 15th** and **September 30th**.

Yellow-Coded – Class B

- Comply with same requirements as Class A, except, work may be conducted with low water flows between **June 1st** and **September 30th**

Green-Coded – Class C

- No specific requirements to protect fish habitat – follow *Standards and Best Practices for Instream Works*
- Where more than one culvert currently exists, additional culverts will have to be reviewed by City of Surrey Engineering Department.
- During construction effective Erosion and Sediment Control Measures are to be employed to ensure sediment-laden water is not released into the watercourse.
- During construction and upon completion of the culvert and permit requirements please contact the Engineering Department, Engineering Counter as described in the permit to arrange for inspections.

Conditions for Class A, A/O, and B Watercourses

Before construction may occur within and around a watercourse, various environmental permits and approvals may be required, depending upon the classification of the watercourse.

- This plan will have to be developed, signed off by the QEP and submitted to the City prior to issuance of a City permit.
- If a HADD is likely to occur, the project and management plan will have to be petitioned at the City of Surrey Engineering ERC by the QEP.
- Additional culverts will have to be petitioned to the ERC.
- Culvert lengths exceeding standard length will also have to be petitioned at the ERC.
- Submit a Water Act Notification/Application for the works **at least 45 days prior to construction** to the British Columbia Ministry of Environment and comply with the Provincial Standards and Best Practices for Instream Works publication.
- Proof of an ERC Decision Sheet and Water Act Notification/Application (copy acceptable) must be submitted to the City prior to issuance of the City permit.
- Effective Erosion and Sediment Control measures are to be employed
- Restore all disturbed areas with native shrubs (see *Restoration Planting for Fisheries Watercourses* below).
- Upon completion of the culvert and permit requirements please contact the Engineering Department, Engineering Counter as described in the permit to arrange for an inspection.



Inspections

Prior to installing the culvert you should check with the Engineering Department to verify jurisdiction of Road Right-of-Way, potential of culvert installation and to determine appropriate size and length.

During construction and upon completion of the culvert and permit requirements, please contact the Engineering Department, Engineering Counter as described in the permit to arrange for inspections.