



WATERCOURSE PROTECTION BYLAW

NO. 3152

A bylaw to protect watercourses in the City of Langley

The Council for the City of Langley, in open meeting assembled, hereby enacts as follows.

DEFINITIONS

For the purposes of this Bylaw, the following words and terms mean unless the context otherwise requires:

City

means the City of Langley.

Construction Works

means any activity which might cause or permit sediment, construction-related water or a Prohibited Material to be discharged into the Drainage System, including land clearing, agriculture, land development, site grading, excavation, filling construction or repair of any underground services, construction or repair of any buildings, structures or works.

Contaminant

includes any substance that may constitute a hazard to the health of humans or animals or that may be detrimental to the environment, including but not limited to:

- (a) Pollution, water and special waste as defined in the Environmental Management Act, SBC 2003, c. 53, as amended from time to time;
- (b) Waterborne wastes derived from human or animal sources;
- (c) Water, liquids and substances having a temperature higher than those defined in the British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture, August 2019, Tables 42A and 42B, as amended from time to time.

Deleterious Substance

means any substance that, if added to any water, would degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered harmful to fish or fish habitat.

Discharge

means to discharge, deposit, dump, release, spill or wash.

City Engineer

means the Director of Engineering, Parks & Environment or designate.

Drainage System

means the system and network of watercourses, waterworks, swales, drainage works, mains, pipes, culverts, catch basins, leads, sidewalks and curbs and gutters located in the City on private or public property.

Environmentally Sensitive Area (ESA)

means an area defined in the City's Official Community Plan (OCP) bylaw as a preserved natural area, which includes steep slopes, sensitive habitat, and riparian corridors.

Erosion and Sediment Control (ESC) Plan

means the specifications, drawings, plans, and design calculations of a Professional Engineer, with proven experience in ESC planning and design, to control the discharge of Prohibited Material from a construction site into the Drainage System in accordance with this Bylaw and City's other bylaws and design standards.

Impede

means block, divert, obstruct, or detrimentally interfere or affect.

NTU

means "Nephelometric Turbidity Units", which is a measure to assess turbidity (i.e., cloudiness or haziness) of water.

pH

means a measure of how acidic/basic water is. The range goes from 0 to 14, with 7 being neutral. pHs of less than 7 indicate acidity, whereas a pH of greater than 7 indicates a base.

Professional Engineer

means an engineer who is registered with the Engineers and Geoscientists of British Columbia.

Prohibited Material

means:

- (a) Any sediment, earth, construction or excavation wastes, cement, concrete or other substances which, when mixed with water, will result in a discharge with turbidity higher than what is set in this Bylaw;
- (b) A Deleterious Substance which, if introduced to the Drainage System, would foul it;
- (c) Pesticides, fertilizers, chlorinated water, cleaning compounds, paints, waste oil or any material or substance which is a hazardous product, toxic substance, special waste, dangerous good or reportable substance that is identified or described in or defined by any applicable statute, regulation or law, including other City bylaws which, if introduced to the Drainage System, would foul it; or
- (d) A contaminant which, if introduced to the Drainage System, would foul it.

Qualified Environmental Professional (QEP)

means an individual, as defined by the "Riparian Areas Protection Act", that can be an applied

scientist or technologist who is registered and in good standing with an appropriate BC professional organization constituted under an Act such as a professional Biologist, Agriologist, Forester, Geoscientist, Engineer, Technologist, or Landscape architect.

A person may only be considered a Qualified Environmental Professional if that person specifically possesses proven credentials and expertise in providing water quality assessment reports at construction sites.

Soil

means soil, sand, gravel, rock or other similar material.

Turbidity

means the measure of relative clarity of a liquid. It is an optical characteristic of water and is a measurement of the amount of light that is scattered due to the presence of suspended solids in the water when a light is shined through the water sample.

Watercourse

means stream, spring, pond, creek, lake, waterway, swamp, gulch, ravine, ditch, drain, sewer or other similar bodies of water.

1. PROHIBITIONS

1. No person shall:
 - (a) Foul or impede or cause or permit another to foul or impede the flow of the Drainage System whether or not situated on private property; or
 - (b) Deposit or cause or permit another to deposit soil in the Drainage System or in an ESA whether or not situated on private property.

2. PROHIBITION OF DISCHARGE

1. No person shall cause or permit to be released, directly or indirectly into the Drainage System any Prohibited Materials, including but not limited to, sediment, earth, construction or excavation wastes, cements, concrete, or other substances, which when mixed with water will result in:
 - (a) A pH value outside the range of 6.5 to 8.0; or
 - (b) a turbidity level exceeding:
 - 25 NTU during dry/normal weather conditions; and
 - 100 NTU when the site from which the Prohibited Material originates has received at least 25 mm of rain within the last 24 hours of the sampling time.
2. The City Engineer may require the owner of a parcel on which Construction Works are occurring to monitor and report on the presence of Prohibited Materials, including but not limited to, pesticides, fertilizers, chlorinated water, cleaning compounds, paints, etc. It is the professional duty of the QEP associated with the parcel on which the Construction Works are proceeding to inform the City Engineer of the necessity of monitoring and reporting of Prohibited Materials, in addition to turbidity and pH. In these cases, the criteria set by the provincial and federal governments shall be met.

3. WATER QUALITY MONITORING AT CONSTRUCTION AND DEVELOPMENT SITES

1. The quality of any water discharged directly or indirectly from any construction site shall meet the criteria set out in this Bylaw and/or any other applicable bylaws, statutes, or regulations. The samples for water quality monitoring:
 - (a) Shall be taken at the point of discharge from the site (outlet).
 - (b) Shall not be taken at the introduction point or downstream of the outlet.
2. The measuring of the flow shall be conducted by the QEP or an independent certified professional acceptable to the City Engineer who shall forward a copy of the complete results to the City Engineer as soon as the results become available.
3. Every person undertaking Construction Works shall place, store, transport or dispose of all excavation wastes, overburden soil, earth, sediment laden water, sediment or Prohibited Material in such a manner and in accordance with prudent practices so as to prevent the likely escape of the materials into the Drainage System.
4. Every person undertaking any Construction Works shall submit an ESC Plan for the proposed Construction Works as part of the servicing design drawings submitted to the City Engineer for review.
5. The ESC Plan must be implemented prior to the commencement of the Construction Works and must be carried out for the duration of the Construction Works.
6. No person shall wash or permit the washing of dirt, oil, or cement from exposed aggregate driveways, patios, or other surfaces or from trucks into the Drainage System.

4. ESC PLAN SUBMISSION

1. An ESC Plan shall set out the ESC facilities and measures required during Construction Works to meet water quality criteria set out in this Bylaw to protect the City's Drainage System.
2. The ESC Plan must be signed and sealed by a Professional Engineer and shall include, but not be limited to:
 - (a) Detailed plans, specifications, design calculations, and measures necessary to describe any works required to convey, control and treat suspended solids in run-off water from the Construction Works;
 - (b) Without limiting any other obligation within this Bylaw, the stabilization of all exposed soil areas resulting from the Construction Works that will remain dormant for 45 days or more by either mulching, seeding or plastic covering;
 - (c) A phased construction schedule that limits the extent of tree clearing and soil disturbance to those areas immediately required for site construction;
 - (d) A monitoring program with a schedule, test points and methodology to be used to measure the suspended solids in the run-off water discharged from the Construction Works;

- (e) An operation and maintenance program during the Construction Works that contains a maintenance schedule, methodology and the maintainer's name, address, and emergency contact telephone number; and
 - (f) A letter of undertaking signed by a QEP who commits to undertake responsibility for management of the ESC Plan and includes a commitment to monitor and inspect the Construction Works and to certify that they are being carried out in accordance with the ESC Plan and this Bylaw.
3. Any modification or revision of the ESC Plan to suit field conditions for the purpose of achieving more effective suspended solids control and treatment must be submitted in writing to the City Engineer within two days of making a modification or revision.

5. INSPECTION, MONITORING AND REPORTING FREQUENCY

1. All construction sites (excluding single family residential development):

No person shall commence Construction Works unless a Qualified Environmental Professional (QEP) is retained to supervise implementation of the ESC plan for the Construction Works.

For the duration of the Construction Works, the QEP shall:

- (a) Certify that the designed ESC facilities are still in place and functioning as designed;
- (b) Inspect all the Construction Works and take samples of site discharges, prepare reports of their water quality at the intervals given in the Table below, and email a copy of the results to the City Engineer;

Weather Condition	Minimum Monitoring and Reporting Frequency
Wet Weather Condition as defined in Section 2.1(b) ¹	Daily
Wet Season (October 15 to May 15)	Weekly ²
Dry Season (May 16 to October 14)	Bi-Weekly ²

Note 1: This refers to a day when the site had received at least 25 mm of rain during its last 24 hours.

Note 2: It is the professional responsibility of the assigned QEP to schedule more frequent site visits, monitoring, and reporting when the planned site activities and/or weather condition could lead to potentially violating the water quality criteria set in this Bylaw.

- (c) Inspect the discharge overland flow path, when applicable, from the site to each downstream receiving watercourse and the watercourse itself at every Construction Works inspection, for up to 200 meters outside of the construction area, and look for signs of Prohibited Materials discharge violations as set in this Bylaw;

- (d) Maintain a log book which includes detailed documentation of the above-noted activities and provide the log book to the City Engineer within twenty-four (24) hours of any request for it;
 - (e) Immediately report all contraventions of this bylaw and the ESC Plan by telephone to the owner of the Construction Works and the City Engineer, and email a signed, sealed and dated copy of the report to the City Engineer; and
 - (f) At the minimum include the following information in the report:
 - Weather conditions during the last 24 hours (i.e., rainfall, etc.);
 - Site observations:
 - Water quality: Water discharge NTU, pH, and/or other metals if required (as per City's Watercourse protection Bylaw No. 3152);
 - Observed ESC facilities conditions (catch basin bags and sediment fence's conditions, presence of mud at access pad, driveway/ramp, etc.);
 - Visual inspection of downstream flow path to the receiving watercourses; and
 - Action items to rectify deficiencies and concerns.
2. All single-family residential construction sites:
- For the duration of the Construction Works, the Site Supervisor shall monitor and record in the logbook the maintenance of the ESC facilities. Maintenance may include, but not be limited to, the removal and proper disposal of accumulated sediment and the replacement of ESC facilities if they deteriorate or fail to operate efficiently or as designed.

6. OFFENCES, PENALTIES AND REMEDIES

1. Where any inspection carried out pursuant to this Bylaw discloses conditions contrary to this Bylaw or the City-approved ESC Plan, a subsequent inspection shall be arranged at a fee, as per the City's Fees and Charges Bylaw No. 2837, as amended. The purpose of the subsequent inspection is to ensure the required remedial actions have been implemented and the site is in compliance with the requirements outlined in this Bylaw.
2. The City Engineer may issue a "Stop Work Order" when Construction Works are proceeding in contravention of this Bylaw or a City-approved ESC Plan and post a notice to that effect at the place where the Construction Works are occurring.
3. No person shall conduct Construction Works on any property in respect of which a Stop Work Order has been issued until the non-compliance or the contravention has been remedied to the satisfaction of the City Engineer.
4. If, in the opinion of the City Engineer, immediate steps should be taken to prevent the likely escape of Prohibited Material or to stop an escape of Prohibited Material which is on-going, and if the City Engineer is not satisfied that the owner or other responsible person shall take appropriate steps, the City may enter onto the property to take such steps as are necessary in the circumstances to prevent or stop the escape Prohibited Material.

- (a) If such an event occurs, the full amount of the City's costs, including the City's related administration costs, shall be payable by the owner of the property where the Construction Works have occurred.
5. In respect of every contravention of this bylaw and an ESC Plan:
 - (a) The QEP associated with the Construction Works shall, when appropriate, inform federal and provincial agencies of the situation; and
 - (b) The owner of the Construction Works shall cease all discharge and must not resume work that would result in discharge until appropriate remedial measures satisfactory to the City Engineer are undertaken.
6. Every person who contravenes a provision of this Bylaw, who suffers or permits a contravention of this Bylaw and who neglects or refrains from doing anything required by a provision of this Bylaw, is guilty of an offence and shall be liable upon summary conviction to a fine not exceeding \$10,000 and not less than \$5,000.

A prosecution under this Bylaw may be commenced by proceedings under Division 3 of Part 8, of *Community Charter*, SBC 2003, Chapter 26; or prosecution of the offence in accordance with the *Offence Act*, RSBC 1996, Chapter 338.
7. A separate offence is deemed to be committed on each day during or on which a violation occurs or continues.

ADMINISTRATION

1. If any section or portion of this Bylaw is held invalid by a court of competent jurisdiction, it will be severed and the validity of the remaining provisions of this Bylaw will not be affected.
2. The City of Langley Watercourse Protection Bylaw, 2003, No. 2518 and all amendments thereto are hereby repealed.

This Bylaw may be cited for all purposes as the "Watercourse Protection Bylaw, 2021, No. 3152.

READ A FIRST, SECOND AND THIRD TIME this day of , .

RECONSIDERED, FINALLY PASSED AND ADOPTED this day of , .

MAYOR

CORPORATE OFFICER