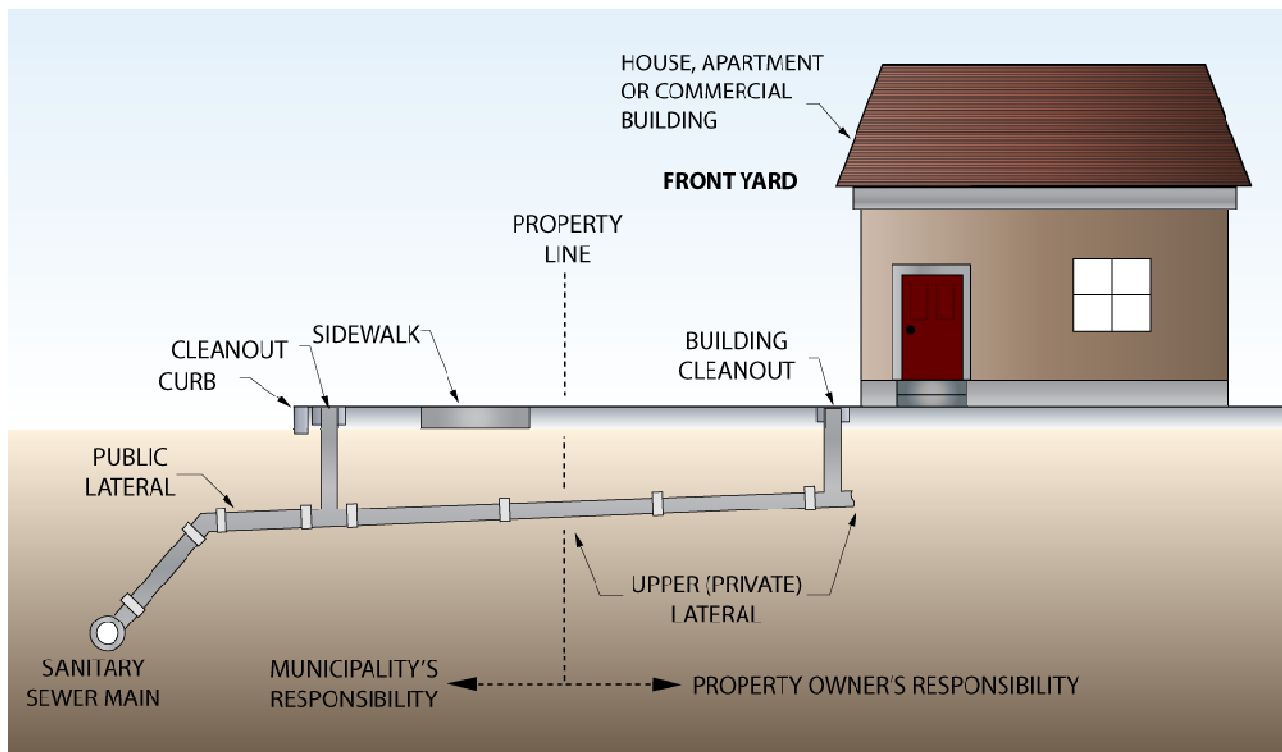




**metro vancouver**

## **Private Sewer Lateral Programs:**

**A Study of Approaches and Legal Authority for Metro Vancouver Municipalities**



**Final Report**

**December 2008**

*(Executive Summary added July 2009)*



**The Sheltair Group**  
*A Jacques Whitford company*



## Executive Summary

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Private sewer lateral connections have been identified as a significant source of inflow and infiltration (I/I) that may contribute significantly to total wastewater volumes in the public sewer system. Excessive wastewater flows may lead to:

- Sanitary Sewer Overflows (SSOs) and Combined Sewer Overflows (CSOs)
- Sewer backflows onto private property
- Increased maintenance and treatment costs
- Unnecessary high costs for conveyance and treatment infrastructure upgrades

In Metro Vancouver, private sewer laterals typically extend from the private structure to the property line. These private connections collectively account for over 50% of the length of the region's wastewater system. Often homeowners are not aware of their responsibility over regular maintenance of this section of the sewer system, resulting in unmaintained connections that are left in disrepair until a serious problem occurs.

Several jurisdictions throughout the United States and some jurisdictions in Canada have implemented programs to address private property I/I. Agencies (municipalities, counties, or utilities where applicable) have undertaken a wide variety of approaches to advance the inspection and repair or replacement of leaky private sewer laterals. These approaches include:

1. Incentive-based approaches:
  - grants or rebates for inspection, repair or replacement
  - deferred payment program (low or no-interest loan)
2. Enforcement-based approaches:
  - time of sale requirement to obtain a sewer lateral certificate before transfer of title
  - fines on monthly utility bills for non-compliance
  - termination of water or sewer service for non-compliance
3. Agency-driven approaches:
  - agency identifies problem connections through Sewer System Evaluation (SSE)
  - agency may fund and/or undertake work to repair identified problems
  - alternatively, agency may employ incentive or regulatory mechanisms to have homeowners repair identified problems

The provincial *Municipal Sewage Regulation* requires the elimination of SSOs and CSOs during storm events with less than a 5-year return period. In response to this, Metro Vancouver and its members endorsed a Liquid Waste Management Plan (LWMP) in 2002 and are currently in the process of reviewing an updated draft LWMP. The management of I/I from private sewers is included under Goal 1 (Protect public health and the environment) of the “draft” updated LWMP.

Metro Vancouver municipalities have the power to implement private sewer lateral programs through the *Community Charter* (for all municipalities except Vancouver) and the *Vancouver Charter* (for Vancouver). This report identifies the relevant existing legislation that equips Metro Vancouver municipalities to implement a detailed program of action. Specifically, the report identifies the following key legal issues municipalities must consider before developing a private sewer lateral program (e.g. a bylaw), and the legal authority for addressing them:

- providing public financing for private property improvements,
- providing municipal property tax exemptions,
- imposing and enforcing regulatory bylaws in relation to private laterals,
- accessing private property for inspection and enforcement purposes,
- placing conditions on the transfer of land title,
- placing conditions on / withholding building permits (for renovations), and
- expropriating private property in relation to sewer laterals.

The report also provides (at Appendix G) a sample “Bylaw for the Maintenance and Repair of Private Sewer Laterals” developed for Metro Vancouver municipalities, which sets out a combination incentive-based / enforcement-based approach.

Metro Vancouver municipalities need to consider the potential liabilities and certain costs associated with inaction on the private laterals issue. For example, if the sewer system failed (e.g. an overflow occurred) due to insufficient capacity the municipality may be liable for ensuing damages. Finally, it is certain that ongoing I/I from private laterals is significantly contributing to the need for costly conveyance and treatment infrastructure upgrades that likely would not be required if I/I were brought under control.

With proactive actions, municipalities face a range of possible liabilities when undertaking regulatory action that requires private property owners to inspect and maintain their private sewer laterals. These include potential liability for damage to private property, injury to persons, breach of statute, tort, and/or breach of contract. However, there are a variety of strategies that municipalities may apply to significantly reduce and manage the risk of these potential liabilities. These strategies include defining clear policy and legislative basis for action, providing solid internal staff training, creating strong external communications, placing the duty of inspection and repair on the homeowner, and limiting exposure through the judicious use of contractual agreements with homeowners.

To effectively reduce I/I from private sewer laterals throughout the region, Metro Vancouver and the member municipalities are anticipated to adopt a policy to endorse private lateral rehabilitation. Further to this, Metro Vancouver and the member municipalities should support a region-wide education and information campaign for homeowners and realtors to clarify homeowner’s responsibilities with respect to private sewer lateral maintenance. Additional capacity may be needed in the industry to support a region-wide effort. This may involve working with professional associations to develop appropriate training courses and/or certification for plumbers to undertake inspection, repair and installation of sewer laterals that meet a certain standard region-wide.

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# 1 Introduction

## 1.1 Background and purpose

Throughout North America, many jurisdictions are concerned about the increased volumes of stormwater and groundwater that are entering sanitary sewer systems. This extraneous water, termed inflow and infiltration (I/I), can cause public sewer systems to exceed their capacity, especially during large or extended rain events. This may result in sewer overflows into waterways and backflows of sewage into private property that pose public health and environmental concerns. In addition to increasing maintenance, treatment costs and wear and tear on public conveyance and treatment systems, excessive I/I can lead to the unnecessary construction of oversized conveyance and treatment facilities that result in inefficient use of public money.

After implementing comprehensive I/I reduction programs in the public sewer systems, many jurisdictions continue to have high volumes of I/I. These volumes are attributed to significant I/I from private sewer lateral connections, based on pilot studies conducted by several municipalities, primarily in the US<sup>1</sup>. The reductions measured for rehabilitation of private laterals are often in the range of 50% or sometimes more prior to public system rehabilitation<sup>[2]</sup>. One example of such a pilot project is described in the example box on this page.

A private sewer lateral refers to the pipe that conveys sanitary sewage from a private building to the public sewer system. The property owner is responsible for maintaining the private lateral; however, most private laterals tend to be neglected because they are not visible to the homeowner.

In response to this issue, many jurisdictions are investigating and/or implementing programs to reduce the total inflow and infiltration that enters the sanitary sewer system from private sewer laterals in addition to dealing with I/I reduction in public systems. These programs range greatly in their design, from voluntary incentive-based measures, to agency-led and funded programs, to mandatory compliance measures. This document provides a synopsis of the range of programs that have been implemented in other jurisdictions, analyzes these options within the context of the Metro Vancouver regulatory environment, and provides recommendations/pathways for moving forward.

### **Pilot projects: Olympia, Washington**

The City of Olympia conducted two pilot studies to reduce I/I in the sewer system as follows:

**Pilot 1:** All mainline sewers and the public portion of the laterals were replaced in Phase 1 resulting in a 17% reduction in 10-year RDI/I. All private laterals were replaced in Phase 2 resulting in a total 67% reduction in 10-year RDI/I.

**Pilot 2:** In an area with 334 private laterals, 64 were replaced (the rest were deemed up to standard) resulting in a 50% reduction in 10-year RDI/I.

<sup>1</sup> WERF: "Methods for cost-effective rehabilitation of private lateral sewers" by Sterling, et. al., 2006 provides a synopsis studies and experiences in private lateral rehabilitation from municipalities across the US and Canada.

<sup>2</sup> The King County report "Executive's Recommended Regional Infiltration/Inflow Control Program" chapter 3 lists reductions from 10 pilot I/I reduction areas, and indicates reductions up to 76% for lateral rehabilitation areas.

## 1.2 Definition of key terms

### Private Sewer Lateral

A private sewer lateral is the portion of the sewer pipe that extends from a house, apartment, or commercial building to the publicly-owned sewer system. Each municipality defines where the private lateral extends to in its bylaws; though typically in Metro Vancouver the private lateral ends at the property line.

### Inflow / Infiltration (I/I)

**Inflow** is stormwater that enters the sanitary sewer system through downspouts, foundation drains, cross-connections and others. **Infiltration** is groundwater that enters the sanitary sewer system through cracks or breaks in the pipe and defective connections.

The potential for inflow and infiltration into private laterals arises from several factors. These factors include:

- ageing pipes that crack or break over time, especially clay pipes still present in many older neighbourhoods,
- inappropriate pipe material that fails over time (e.g. Bituminous Fibre or "no-corrode" pipes commonly installed in the 1950s and 1960s),
- intruding tree roots that enter the pipe through small cracks, expand the cracks, and clog the pipes,
- improper installation resulting in a defective and/or illegal connection to the public sewer, and
- connected downspouts and foundation drains.

## 1.3 Drivers for private sewer lateral programs

Sanitary sewer systems are designed with adequate capacity to transport sewage to waste water treatment plants. During rain events, sewer system flow rates typically rise due to imperfections in the system that allow I/I. Substantial I/I in the system can lead to excessive peak flows and may have detrimental impacts, including:

- Sanitary Sewer Overflows (SSOs), or spills into private or public land and waterways from sanitary sewers causing potential damage to the environment and sensitive ecosystems, and causing public health concerns,
- sewer backflows onto private property, including sewage backups into basements, causing potential health problems and damage to private property and buildings,
- increased maintenance and treatment costs (with increased volumes flowing through the system, there are increased costs associated with additional wear and tear on the system, as well as the need to treat additional wastewater), and
- unnecessary high costs for conveyance and treatment infrastructure upgrades (i.e. when a system approaches capacity new storage facilities or wastewater treatment plants may be required to accommodate the additional flow).



## 1.4 Approaches for private sewer lateral programs

Private Sewer Lateral Programs are increasingly being implemented throughout North America, with particularly proactive models in several jurisdictions throughout the US. At this point in time, programs in Canada tend to be less comprehensive and more reactive in nature. All of these programs vary in their design and implementation, but can generally be characterized as taking a:

- voluntary, incentive-based approach,
- regulatory, enforcement-based approach,
- informational approach, or
- hybrid approach (some combination of the first 3).

This report investigates the tools associated with each of these approaches, and the legal implications of applying these tools in the Metro Vancouver context.

## 2 Private sewer lateral programs in other jurisdictions

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### 2.1 Programs in Canada

The programs and regulations identified in Canada that deal with private sewer laterals are primarily reactive in nature. That is, they have been implemented in response to sewer function issues - commonly sewer back-ups into buildings. These programs include providing clean-out services, providing grants to install protective plumbing, and providing compensation where the City's boulevard tree roots have caused backup problems. One proactive program identified in Canada is the Fort Erie, Ontario Extraneous Flow Reduction Program that started in 2006. This program includes both an incentive for sewer lateral replacement of 100% up to \$1,500 and an enforcement program whereby owners identified to be out of compliance with the private sewer lateral requirements are ordered to repair or replace the lateral within 120 days or face potential termination of water service. Also, in both Waterloo, Ontario and Surrey, British Columbia, programs have been set up to replace the "Black Pipe" sewer laterals. In Waterloo, the City is replacing these at the City's expense at a rate of approximately 150 to 200 per year.

Other municipalities are in the middle of defining more proactive approaches to I/I. In October 2008, Utilities Kingston (in Ontario) presented a proposed revised sewer bylaw to the Environment, Infrastructure and Transportation Policies Committee. The proposed bylaw includes provisions regarding the City's ability to perform inspections on properties and enables new enforcement measures for not complying with the bylaw through fines, orders and court proceedings. Table 1 summarizes some of the programs in other jurisdictions in Canada that deal with private sewer laterals and I/I control for private properties.

### 2.2 Programs in the United States

There exist a large variety of private sewer lateral programs throughout the US. These programs demonstrate a great variety of tools available for influencing the state of private sewer laterals. The tools vary from public education campaigns, to providing incentives (grants, interest-free loans, etc.), to enforcing upgrades at the point of sale of the home, or through fines or extra charges incorporated into the utility bill structure.

Table 2 provides a synopsis of tools used in private sewer lateral programs in various jurisdictions throughout the US.

**Table 1. Examples of private sewer lateral and I/I control programs in Canada**

<b>Voluntary (Incentives) Programs</b>			
<b>Type</b>	<b>Location</b>	<b>Notes / Uptake</b>	<b>Reference/By-law No.</b>
Financial assistance (grant or rebate)	Windsor, Ontario	City will clean-out private lateral up to 3 times in 24 months if tree roots cause a blockage, then owner must repair/replace at own cost. Owner chooses to get City contractor (can pay immediately or over 5 year period, added to taxes (plus interest)) or own contractor (City will provide up to \$1,621.00 grant).	Bylaw 4921: Servicing of Private Sewer Connections: <a href="http://www.citywindsor.ca/000026.asp">http://www.citywindsor.ca/000026.asp</a>
	Waterloo, Ontario	City installed Black Pipe sanitary laterals that require replacement due to structural failure - the entire cost of replacement will be borne by the City. Rehabilitating approximately 150-200 per year.	Bylaw 81-118 <a href="http://city.waterloo.on.ca/DesktopDefault.aspx?tabid=319">http://city.waterloo.on.ca/DesktopDefault.aspx?tabid=319</a>
	Kingston, Ontario	Staff suggested program: City provides free inspection & report of private lateral (agreement from homeowner); City recommends how to fix it; provides incentive (recommended 50% up to \$1,000); if no action, considers enforcement (only if very high flows). Initially provide in conjunction with Extraneous Flow Reduction Pilot Program. Also Downspout disconnection incentive suggested: 100% up to \$100.	<a href="http://www.cityofkingston.ca/pdf/council/agenda/2006/A20_Rpt106B.pdf">http://www.cityofkingston.ca/pdf/council/agenda/2006/A20_Rpt106B.pdf</a>
	Fort Erie, Ontario	Bylaw to authorize a Financial Assistance Program and an Extraneous Flow Reduction Program has reduced extraneous flow from 60 to 40% over 3 years; provide 100% reimbursement for repair / replacement of lateral up to \$1,500.	<a href="http://www.town.forterrie.ca/WebSite/Bylaws.nsf/0/0E3F053E7DDF2F54852572AE00C9D00/\$FILE/2006-068.pdf">http://www.town.forterrie.ca/WebSite/Bylaws.nsf/0/0E3F053E7DDF2F54852572AE00C9D00/\$FILE/2006-068.pdf</a>
	Ottawa, Ontario	Residential Protective Plumbing Grant Program offers homeowners in flood prone areas, the opportunity to have their protective plumbing requirements evaluated by a City of Ottawa representative and obtain grants to offset the cost of protective measures required to prevent basement and cellar flooding.	<a href="http://ottawa.ca/residents/funding/protective_plumbing_en.html">http://ottawa.ca/residents/funding/protective_plumbing_en.html</a>
	Toronto, Ontario	Homeowners who have experienced basement flooding or wish to undertake flood protection activities are eligible for subsidies.	<a href="http://www.toronto.ca/water/sewers/basement_flooding.htm">http://www.toronto.ca/water/sewers/basement_flooding.htm</a>
	Halton, Ontario	Prevention Subsidy, up to a maximum of \$2,725. Subsidy program for preventing basement backups (reactive – must show evidence of previous backups to get subsidy).	
<b>Enforcement -based Activities</b>			
<b>Type</b>	<b>Location</b>	<b>Notes / Uptake</b>	<b>Reference/By-law No.</b>
Terminate water service	Kingston, Ontario	Proposed bylaw has been presented to committee, but has not yet been adopted by council. Includes ability for City to terminate water service for non-compliance with the bylaw.	<a href="http://www.cityofkingston.ca/pdf/cityhall/committees/infrastructure/agenda/2008/EIT_A1008-SchedB.pdf">http://www.cityofkingston.ca/pdf/cityhall/committees/infrastructure/agenda/2008/EIT_A1008-SchedB.pdf</a>
	Fort Erie, Ontario	Bylaw 68-06 to Regulate the Management of a System of Sewer Works and Drainage Works in the Fort Erie. If a lateral is found to be non-compliant with the bylaw, the Town may terminate water service.	<a href="http://www.town.forterrie.ca/WebSite/Bylaws.nsf/0/0E3F053E7DDF2F54852572AE00C9D00/\$FILE/2006-068.pdf">http://www.town.forterrie.ca/WebSite/Bylaws.nsf/0/0E3F053E7DDF2F54852572AE00C9D00/\$FILE/2006-068.pdf</a>
Cost of repair added to municipal taxes	Fort Erie, Ontario	Bylaw 68-06 also states that the Town may perform the necessary repairs if the owner does not after sufficient notice. The Town may then recover the full cost of the work from the owner through municipal taxes.	
Mandatory Downspout	St. Catharines, Ontario	95% downspouts disconnected (mandatory, no incentive); backflow installation	

Disconnection Program		incentive.	
	Toronto, Ontario	Certain homeowners will be required to disconnect their homes downspout from the City's combined sewer system where feasible and within three years. There will be enforcement after the three year phase-in period and fines may be issued for non-compliance.	<a href="http://www.toronto.ca/water/protecting_quality/downspout.htm">http://www.toronto.ca/water/protecting_quality/downspout.htm</a>
Agency Driven Programs			
Program Type	Location	Notes / Uptake	Reference
City fix due to City tree roots	Oak Bay, B.C.	Public Sewer Bylaw - City will repair/replace lateral if blockage occurs solely due to tree roots from City boulevard (Section 7 (1)).	<a href="http://www.oakbaybc.org/bylaws/3891.pdf">http://www.oakbaybc.org/bylaws/3891.pdf</a>
Subsidy Repair Program	London, Ontario	The City offers to replace private drains in areas it is currently working. If a homeowner wishes to have a private drain connection repaired, the City will undertake the repair, at a fixed cost to the homeowner of \$6,000, and assume the remainder. Typical repairs cost the City approximately \$11,000; therefore the City subsidizes approximately 50% of the costs. Also, it will guarantee the work for 20 years against failure due to faulty workmanship or materials.	<a href="http://www.london.ca/d.aspx?s=/Sewer_and_Wastewater/PDC_QandA.htm#Why_do_I_have_to_report_drain_problems_to_the_City">http://www.london.ca/d.aspx?s=/Sewer_and_Wastewater/PDC_QandA.htm#Why_do_I_have_to_report_drain_problems_to_the_City</a>

**Table 2. Examples of private sewer lateral and I/I control programs in the US**

Incentive Programs			
Type	Location	Notes / Uptake	Reference/By-law No.
Financial assistance (grant or rebate)	San Luis Obispo, California	City covers 50% of costs up to \$1000 of owner initiated repair in Voluntary Service Lateral Rehabilitation Program.	<a href="http://www.ci.san-luis-obispo.ca.us/utilities/vslrp.asp">http://www.ci.san-luis-obispo.ca.us/utilities/vslrp.asp</a>
	Castro Valley, California	Reimbursement for owner initiated repair. Covers 50% of costs up to \$2000 – Only available if repair costs are \$2000+.	<a href="http://www.cvsan.org/grants.htm">http://www.cvsan.org/grants.htm</a>
	Vallejo, California	Reimbursement for owner initiated repair. Zero to 50 feet: \$570 to \$1670. Over 50 feet \$20 feet per foot.	<a href="http://www.vsfcd.com/">http://www.vsfcd.com/</a> (navigate to "Forms" → "Upper Lateral Program")
	Albany, Oregon	Sewer Lateral Replacement Program Ordinance which allows one time replacement. All costs for pipe installation and basic levelling of trench area and grass seeding are paid for by program fund. Fund also covers up to \$750 for restorative work, remainder is responsibility of the owner. City coordinates work, hires private contractor to execute work. New lateral comes with 1-year warranty against defects in workmanship.	<a href="http://www.cityofalbany.net/publicworks/sewer/lateral_replacement/faq.php">http://www.cityofalbany.net/publicworks/sewer/lateral_replacement/faq.php</a>
	Brentwood, Missouri	This is for residential properties only. The City will repair and replace sewer laterals. All landscaping the responsibility of the owner.	<a href="http://www.brentwoodmo.org/index.asp?NIID=69">http://www.brentwoodmo.org/index.asp?NIID=69</a>
	Clayton, Missouri	The owner of a single family home, townhouse, duplex, condominium, or a multi-family building containing not more than six (6) dwelling units, may recover one hundred percent (100%) of the eligible costs (up to \$4,000), in repairing defective sanitary sewer laterals serving the property of the owner, in compliance with the City's policy and procedures governing this program.	<a href="http://www.ci.clayton.mo.us/index.aspx?location=286">http://www.ci.clayton.mo.us/index.aspx?location=286</a>

Deferred payment (loan) program	Pacific Grove, California	City lends up to \$10,000 at a simple interest rate of 3%. Property owners that have discovered damaged sewer laterals through a City notification are NOT eligible for the loan/rebate program.	<a href="http://www.ci.pg.ca.us/cdd/plsrp-loanappbackside.pdf">http://www.ci.pg.ca.us/cdd/plsrp-loanappbackside.pdf</a>
	Austin, Texas	Utility buys down the interest from a private lender for amounts between \$1,000 and \$3,000.	<a href="http://www.ci.austin.tx.us/fag/sewerline_faq.htm">http://www.ci.austin.tx.us/fag/sewerline_faq.htm</a>
Enforcement Programs			
Trigger	Location	Notes / Uptake	Reference/By-law No.
Building Permit requirement	Berkeley, California	Compliance required for sewer lateral to be less than 20 years old prior to remodelling or retrofit, or to have a recent Sewer Lateral Certificate.	Ordinance No. 6924-N.S. amending Ordinance No. 6914-N.S. Berkeley Municipal Code Chapter 17.24
	Ukiah, California	Requirements for new connections, remodels, installation and change of use.	Ordinance No. 1091 <a href="http://www.cityofukiah.com/pageserver/?page=hot_topics&amp;record=sewer_compliance_files&amp;department=Water and Sewer Division&amp;subcateg1=">http://www.cityofukiah.com/pageserver/?page=hot_topics&amp;record=sewer_compliance_files&amp;department=Water and Sewer Division&amp;subcateg1=</a>
Title Transfer	Golden Valley, Minnesota	Must obtain Certificate of Compliance, otherwise a fine of \$500 residential/\$1000 commercial will be added to the monthly bill until compliance is reached.	Golden Valley City Code, Section 3.31 Certificate of Inflow and Infiltration Compliance <a href="http://gv-img.ci.golden-valley.mn.us/Public/DocView.aspx?id=252683&amp;dbid=2">http://gv-img.ci.golden-valley.mn.us/Public/DocView.aspx?id=252683&amp;dbid=2</a>
	Berkeley, California	Sewer Lateral Certificate or sewer lateral less than 20 years old prior to transfer of title. May put funds in escrow for 6 months if work is not urgent and City agrees, but work must be done in 6 months. If non-compliant after escrow, fines or lien is placed on the property until the issue is resolved	Ordinance No. 6924-N.S. amending Ordinance No. 6914-N.S. Berkeley Municipal Code Chapter 17.24
	Ukiah, California	Escrow model to hold funds to establish compliance during a change of ownership to receive a Certificate of Lateral Compliance.	Ordinance No. 1091 <a href="http://www.cityofukiah.com/pageserver/?page=hot_topics&amp;record=sewer_compliance_files&amp;department=Water and Sewer Division&amp;subcateg1=">http://www.cityofukiah.com/pageserver/?page=hot_topics&amp;record=sewer_compliance_files&amp;department=Water and Sewer Division&amp;subcateg1=</a>
Fines on monthly utility bill	McMinnville, Oregon	Key areas are identified and homeowners in area must comply. After grace period, \$50 monthly fines are attached to the water bill. City provides financial assistance if the owner is unable to pay.	<a href="http://www.ci.mcminnville.or.us/city/departments/public-works-and-park-maintenance-sewer-faq/">http://www.ci.mcminnville.or.us/city/departments/public-works-and-park-maintenance-sewer-faq/</a>
Terminate water service	Knoxville, Tennessee	Key areas are identified and homeowners in area must comply. If no arrangements made to repair lateral within 120 days, water service is shut off. Private Lateral Program grant/loan program for certain circumstances (income, medical expenses, family size considered).	<a href="http://www1kub.org/newsite/plp.shtml">http://www1kub.org/newsite/plp.shtml</a>
Insurance program	Mishawaka, Indiana	\$1.50 fee per month for sewer insurance program and \$250 deductible for the residential home-owner.	<a href="http://www.mishawakacity.com/SewerInsurance.asp">http://www.mishawakacity.com/SewerInsurance.asp</a>
	Kirkwood, Missouri	Annual fee \$28. Homeowner pays City contractor to video inspect line. City pays 60% repair cost.	<a href="http://www.ci.kirkwood.mo.us/pworks/sewer-lat.htm">http://www.ci.kirkwood.mo.us/pworks/sewer-lat.htm</a>

Agency Driven Programs			
Program Type	Location	Notes / Uptake	Reference
Problem identified through evaluation	King County, Washington	County leads and funds initial projects. Currently County is in planning/ design phase to test 3 projects for evaluation on cost-effective I/I reduction actions.	<a href="http://dnr.metrokc.gov/wtd/I-I/">http://dnr.metrokc.gov/wtd/I-I/</a>
	Miami-Dade County	Lateral testing program. This program consisted of a pilot study to determine how much wet-weather inflow and rain-induced infiltration takes place through service laterals. The study also examined the feasibility of implementing a service lateral repair program. Recommendations included a five step program to reduce RDII (rain-induced inflow/infiltration) and system overflows and with the lowest capital and expense. The program will continue and results will monitor peak flow reduction, which will inform the Wastewater Master Plan and future capital program development.	<a href="http://www.miamidade.gov/wasd/library/report/lateral_investigation-07-02.pdf">http://www.miamidade.gov/wasd/library/report/lateral_investigation-07-02.pdf</a>
	Sweet Home, Oregon	Pilot project to improve city's sanitation system. City borrows \$2million from Oregon Department of Environmental Quality.	Ordinance 11 (2005) amending Sweet Home Municipal Code 13.08 <a href="http://www.ci.sweet-home.or.us/DocumentView.asp?DID=45">http://www.ci.sweet-home.or.us/DocumentView.asp?DID=45</a>
	City of Portland	In 2003, the Portland City Council approved the Mandatory Sewer Connection Program, which requires developed properties to connect to the system within three years after sewer service becomes available. The program also provides low interest loans to finance connection costs and gives some property owners the option of delaying connection in case of financial hardship.	<a href="http://www.portlandonline.com/bes/index.cfm?a=71590&amp;c=30999">http://www.portlandonline.com/bes/index.cfm?a=71590&amp;c=30999</a>

### 3 Legal authority in relation to private sewer laterals

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This section reviews the legal responsibility and authority for local municipal governments to play a role in private lateral management in British Columbia.

#### 3.1 Mandate for improving private laterals

The *Municipal Sewage Regulation* requires the elimination of combined sewer overflows (CSOs) and sanitary sewer overflows (SSOs) during storm events with less than a 5-year return period (Schedule 1, Conditions 15 and 16). In order to meet this requirement and other waste management challenges, Metro Vancouver and its member municipalities created a Liquid Waste Management Plan (LWMP) in 2002 and are in the process of updating the LWMP.

The draft version of the LWMP that is slated to be approved in 2009 currently proposes the following actions under Goal 1 (Protect public health and the environment):

*3 Prevent rainwater and groundwater from entering sanitary sewer systems*

*3.2 As a component to municipal asset management plans and as a strategy to reduce sanitary sewer overflows, develop and implement inflow and infiltration management plans so that wet weather inflow and infiltration are less than Metro Vancouver's inflow and infiltration allowance as measured at Metro Vancouver's flow metering stations*

*i) use the Metro Vancouver template to guide the development of inflow and infiltration management plans*

*ii) inflow and infiltration management plans will consider **inspection of private sewers** connected to municipal sewers:*

*a) as part of the municipal process in evaluating and issuing renovation and building permits for serviced properties,*

*b) at the time of property transfer and/or*

*c) targeted inspection.*

*iii) **require the repair or replacement of private sewers:***

*a) that have cross-connections between storm sewers and sanitary sewers*

*b) identified as being in poor condition*

#### 3.2 Provincial legislation (Enabling tools)

BC municipalities (except Vancouver, which has its own governing legislation) have general purposes and fundamental powers further to the *Community Charter* sections 7 and 8 that enable them to deal with the impact of private sewer laterals on the public system:

*7 The purposes of a municipality include:*

*(a) providing for good government of its community,*

*(b) providing for services, laws and other matters for community benefit,*

*(c) providing for stewardship of the public assets of its community, and*

*(d) fostering the economic, social and environmental well-being of its community.*

8 Fundamental powers:

*(2) A municipality may provide any service that the council considers necessary or desirable, and may do this directly or through another public authority or another person or organization.*

The City of Vancouver has powers to deal with the impact of private sewer laterals on the public system, in a regulatory way, further to section 302 of the of the *Vancouver Charter*, its broad authority over sewers and drains. The City also has “Added powers of Council”, as described in section 199, allowing Council to do all things incidental or conducive to the exercise of the allotted powers. Alternatively, the City could establish a program whereby it would undertake a service of inspection or repair, further to its power to engage in any commercial, business or industrial undertaking and to provide for the upkeep of city property (sections 145 and 185).

### 3.3 Legal issues: opportunities and impediments

Key legal issues that municipalities must consider before developing a private sewer lateral program (e.g. a bylaw) include:

- providing public financing for private property improvements (e.g. through grants),
- providing municipal property tax exemptions,
- imposing and enforcing regulatory bylaws in relation to private laterals,
- accessing private property,
- placing conditions on the transfer of land title,
- placing conditions on /withholding building permits (for renovations), and
- expropriating private property in relation to sewer laterals.

For each key issue, relevant sections of BC law were identified that would impact the development of a private sewer lateral program in the current legislative environment. These relevant sections are listed (organized by key issue) in Appendix A for reference. A summary of the opportunities and impediments identified in the existing provincial legislation are shown in Table 3.

**Table 3. Summary of existing legal authority in BC in relation to private sewer laterals**

Key Issue	Relevant Legislation and Section*	Opportunity or Impediment?
Public financing for private property improvements	Regional Districts: LGA 176	Allows Regional Districts to provide assistance such as grants, benefits, advantages, tax exemptions, loans, etc. Note that due to the prohibition against providing a benefit to business, a board may not provide financial assistance to an industrial, commercial or business undertaking.  Must publicly publish program.



Key Issue	Relevant Legislation and Section*	Opportunity or Impediment?
	Municipalities: CC 24	Powers and restrictions for providing assistance are similar to rules applicable to Regional Districts. Must publicly publish program. Note: CC Part 6, Division 1 describes requirements for the annual financial plan of the municipality, and therefore an assistance or expenditure program must comply with these requirements.
	Vancouver: VC 204, 206	May be more limited. Additional powers under 199 ("Added powers of Council") or 302 may make possible.
Municipal property tax exemptions	Municipalities: CC 226	May provide revitalization tax exemption for environmental, economic or social objectives. Exemption may be made available to any property owner - the prohibition against providing a benefit to business does not apply to a revitalization tax exemption.
	Vancouver: VC 396E	
Imposing and enforcing regulatory bylaws	Municipalities: Imposing regulation: CC 8, 69 Enforcement: CC 17, 18, 72, 74, 75, 259, 260, 264-275	Broad fundamental powers. Specific and sole authority in relation to sewage and drainage. Regulate the design and installation, impose requirements on private connections to public, impose requirements related to maintenance of flow in a sewer. Enforcement powers include: taking action at defaulter's expense, imposing a lien to recover costs, discontinuing service, imposing remedial action requirements, imposing a lien for special fees, enforcement through <i>Offence Act</i> , ticketing, bringing civil enforcement action to Supreme Court, obtaining entry warrant.
	Vancouver: Imposing regulation: VC 302 Enforcement: VC 333, 336, 409	Broad regulatory authority over sewers and rains. Enforcement powers include: imposing a fine, enforcement through prosecution, civil court or bylaw notice under <i>Local Government Bylaw Notice Enforcement Act</i> , recovering expenses at defaulter's cost as property tax, placing a Land Title notice of bylaw contravention.
Access to private property	Municipalities: CC 16, 17, 18	May enter property to inspect and enforce bylaw, taking reasonable steps to advise owner. Rules regarding entering dwelling are more strict, but still possible with more warning and/or obtaining permission. May take action at defaulter's expense. May discontinue providing a service, given reasonable notice.
	Vancouver: VC 270, 271, 336	Inspection powers for private property. May enforce building bylaws during construction and after. May procure work and authorize workers/others to enter premises to do the work and recover funds from defaulter through property taxes.
Transfer of land title	Province: <i>Land Title Act</i>	Governs the transfer of land title. Provincial responsibility.
	Municipalities (incl. Vancouver): <i>Land Title Act</i> 23(2)(c)	Fee simple title is subject to municipal charges, rates or assessments. However, no direct provision for transfer of fee simple title to be procedurally impeded due to non-compliance with bylaw.
	Vancouver: VC 336D	May place notice of bylaw contravention on Land Title if contravention would cause unaware purchaser significant loss or expense if bylaw were enforced.
Building permits	Municipalities: CC 8(3)(l), 15, Division 8	Have regulatory authority over both the sewer system and building construction and renovation activities. May establish bylaws requiring inspection and upgrades to private sewer laterals concurrent with new building or renovation activities.

Key Issue	Relevant Legislation and Section*	Opportunity or Impediment?
	Vancouver: VC 302, 306	City of Vancouver's sewer bylaw already enables this. See section 2.2 of the bylaw.
Expropriating private property	Regional District: LGA 309, 312; <i>An Act to Incorporate the Greater Vancouver Sewerage and Drainage District 26</i>	Powers to expropriate private property under specific conditions.
	Municipalities: CC 31, 33	Powers to expropriate private property under specific conditions, in accordance with <i>Expropriation Act</i>
	Vancouver: VC 540.1	Powers to expropriate private property under specific conditions.
* "Municipalities" refers to all municipalities, except City of Vancouver. LGA=Local Government Act, CC=Community Charter, VC=Vancouver Charter		

Appendix B lists the existing municipal bylaws in relation to sewers.

The following sections describe the basic features of voluntary, regulatory and municipally-driven private sewer lateral programs. If specific legal reference is desired while reading about these programs, the reader should refer to Appendix A.

## 4 Private Sewer Lateral Program Approaches

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### 4.1 Incentive-based approaches

#### 4.1.1 Description

Incentive-based programs encourage a targeted activity by rewarding people's pocketbooks (financial incentives) or by promising some other desired reward. The latter, for example, could be a Metro Vancouver Sustainability Award or Certificate.

Local governments are authorized to establish programs that rely on either of these kinds of incentives. Financial incentives could consist of either an outright refund (grant) to the homeowner for some or all of the costs involved with getting an inspection and repair completed, or could consist of a program allowing a reduction in property taxes or a preferential water or sewer rate.

Conversely, there are negative incentives: programs that advertise who has not complied, or that penalize non-compliance with higher rates for water or sewer rates.

Typically purely incentive-based approaches tend to have low uptake unless there is a very strong financial incentive (e.g. offering a full or substantial rebate for rehabilitating the sewer lateral). However, they can be effective if used as a "carrot" to get homeowners to comply with an impending regulatory requirement where the owners take on the full cost themselves.

#### 4.1.2 Types of incentives

##### Subsidies: rebates and loan programs

The municipality can offer a financial incentive to a homeowner for testing and/or rehabilitating a private sewer lateral. This may take the form of a:

- **Rebate**            The municipality refunds the homeowner for the partial or full cost of inspecting and/or rehabilitating the private lateral.
- **Loan**                The municipality offers a low or no-interest loan (either directly or by buying-down the interest from a private lender) to the homeowner.

The assistance or expenditure must be consistent with municipal purposes as set out and authorized in the annual financial plan of the municipality (see *Community Charter* Part 6, Division 1). Therefore, municipalities should keep records of all infiltration and inflow issues to support this public purpose argument if implementing such a program.

##### *Rebate Programs*

The municipality must identify specific criteria to enable proper administration of the program. Appendix C provides a sample rebate program and the associated set of criteria as defined in the Santa Barbara Sewer Lateral Inspection Program (SLIP) to receive a cash rebate (up to \$150 for inspection and up to \$2,000 for lateral rehabilitation). London, Ontario provides a Canadian example of a rebate program where the municipality replaces private sewer laterals on a voluntary basis at a set fee of \$6,000 for the homeowner. The municipality assumes the remainder of the cost, where the total cost typically ranges between \$7,500 and \$15,000.

### *Loan Programs*

The loan amount is placed as a lien against the property, which must be paid at the time of property sale. Registration of a lien as security in respect of a loan could be made a condition of receipt of this sort of financial assistance. Appendix D provides a sample deferred payment program in Pacific Grove, CA that lends up to \$10,000 at a simple interest rate of 3%. Another example is Austin, TX where the utility buys down the interest from a private lender for amounts between \$1,000 and \$3,000.

### *Considerations for implementing rebate or loan programs*

- **Equity** In some municipalities, homeowners are required by bylaw to pay for sewer rehabilitation in connection with major renovations. Introducing a cash incentive to other homeowners, after having a regulatory requirement in place for several years may appear inequitable.
- **Timeline** How long will the incentive program run? Having an expiry date may contribute to earlier uptake if the incentive is substantial enough.
- **Amount** Value of the rebate will strongly influence uptake of the initiative. Unless the incentive covers a significant proportion of the cost, there is likely to be limited proactive uptake. For example, Santa Barbara, CA and Castro Valley, CA both provide up to \$2,000 rebates for rehabilitating the sewer lateral. In Canada, the Fort Erie, Ontario offers up to \$1,500 for replacement and the City of London, Ontario subsidizes the replacement by paying all costs above \$6,000.
- **Eligibility** Specific criteria need to be defined to delineate which costs are eligible for financial assistance and under what circumstances. This includes proof of payment, inspection/approval of work done, and types of costs covered (inspection, materials, labour, backfill, landscaping, etc.).
- **Budget** A program may be implemented with a set budget where the financial incentive is provided on a “first come, first served” basis.

### **Municipal property tax exemption**

Section 226 of the *Community Charter* allows municipalities to implement a Revitalization Tax Exemption to provide a partial or full exemption from municipal property taxes for up to 10 years, to achieve environmental, economic or social objectives. Vancouver has been granted equivalent powers further to section 396E of the *Vancouver Charter*. To implement a Revitalization Tax Exemption program, a municipality must:

1. Establish a bylaw that defines the program. The bylaw could include:
  - **Policy goals and objectives:** policy and financial benefits to community from revitalizing this infrastructure.
  - **Eligibility criteria:** e.g. sewer lateral inspection performed and results of inspection submitted to municipality.

- Conditions: exemption may apply to certain classes of property only, e.g. properties built on or before a certain date or to certain geographic areas of the municipality only.
  - Schedule: level of property tax discount or exemption available, related to each of the activities (this will require municipalities to consider what level of tax exemption will be effective in providing an incentive for voluntary action).
  - Public notice requirements: to establish a bylaw, Council not only has to fulfill the general requirements for public notice under section 94 of the *Community Charter* but must also fulfill the specific requirements for public notice in relation to this kind of bylaw, that are set out in section 227 of the *Community Charter*.
2. Enter into an agreement with the property owner that specifies criteria to be met for eligibility. For example, the agreement may specify that a CCTV video must be performed and provided to City engineers for approval after the work is completed. This could be a fairly standardized agreement, which would minimize administration.
  3. Provide a certificate for a tax exemption once all the requirements in the bylaw and agreement are met.
  4. Provide an exemption to the extent authorized by the certificate. Note certificates have to be issued by October 31 of the year *before* the exemption is applied.

### **Provincial tax exemption**

When a home is purchased in BC, the buyer is required to pay a Land Transfer Tax to the provincial government further to the provincial *Property Transfer Tax Act*. Exemptions from property transfer tax are authorized in some circumstances; for example, the exemption for first-time homebuyers. First-time homebuyers may receive a rebate on the property transfer tax of up to \$6,500 if they meet certain eligibility criteria (e.g. the property may not be purchased for more than \$425,000). Section 37 of the Act authorizes the province of British Columbia to exempt a person or class of persons, or to provide for a refund of the tax, and the terms and conditions under which a refund may be made.

### **4.1.3 Opportunities and challenges**

Opportunities and challenges for incentive tools are identified in the following table.

**Table 4. Opportunities and challenges for incentive tools**

Type	Mechanism (Tool)	Opportunity	Challenges
Financial Incentive	Rebate	<ul style="list-style-type: none"> <li>• Mechanism exists in legislation</li> <li>• Reduced direct cost to individual homeowner, easy political sell</li> </ul>	<ul style="list-style-type: none"> <li>• Cost – need to provide substantial enough incentive or there will be no uptake</li> <li>• Not equitable for homeowners that have already upgraded</li> </ul>
	No-interest	<ul style="list-style-type: none"> <li>• Mechanism exists in</li> </ul>	<ul style="list-style-type: none"> <li>• Potential for high capital cost to</li> </ul>

Type	Mechanism (Tool)	Opportunity	Challenges
	loan + lien (deferred payment)	<p>legislation</p> <ul style="list-style-type: none"> <li>• Cost transfers to homeowner over long-term (sale of house), but no / limited immediate “hit” to homeowner</li> </ul>	<p>municipality, unless options are explored for municipality to “buy-down” interest from a private lender</p>
Municipal tax exemption	Revitalization tax exemption	<ul style="list-style-type: none"> <li>• Mechanism exists in law and has been used for variety of purposes</li> <li>• Option to provide exemption to current homeowner only or to continue exemption on title change</li> </ul>	<ul style="list-style-type: none"> <li>• Municipality loses tax revenue</li> <li>• Has not been used for sewer infrastructure before</li> <li>• Requires considerable planning ahead – homeowner has to apply by October 31 of the year before the tax exemption will be issued</li> </ul>
Provincial tax exemption	Property transfer tax exemption	<ul style="list-style-type: none"> <li>• Incentive is provided to homebuyer rather than seller. Buyer has more interest in investing in property than seller. Also, buyer is already working with bank/lender to arrange mortgage and could account for lateral upgrade cost at same time</li> <li>• Province has an interest in reducing I/I because of expected cost savings to sewage treatment infrastructure, and reduction of SSOs</li> </ul>	<ul style="list-style-type: none"> <li>• Needs amendment to provincial regulations (Property Transfer Tax Act) or exemption to current Act</li> <li>• Exemptions have only been granted in a few circumstances. Examples include land transfers for projects including Habitat for Humanity, construction of rapid transit, corridor protection land, and charitable purposes land.</li> <li>• Province may not be interested in funding sewer-related upgrades, as this is typically in municipal jurisdiction</li> </ul>

## 4.2 Regulatory approaches

### 4.2.1 Description

Enforcement-based programs impose requirements on private property owners to maintain their private sewer laterals in good condition. There are numerous enforcement options, and these are explored below. Although regulatory approaches tend to have higher rates of uptake, there is a risk of public outcry, particularly when the cost of rehabilitating a lateral can be quite onerous for the homeowner (in the range of \$2,000 to \$10,000 depending on the conditions), which may make these approaches less politically attractive. Furthermore, there are more potential liability risks associated with a regulatory approach.

Regulatory strategies will vary between municipalities. Before deciding to embark on a regulatory program, municipalities must decide on a strategy for enforcing compliance with the regulatory bylaw. BC local government legislation provides a range of authority by which municipalities may seek bylaw compliance. Also, because every municipality is characterized by a different ethos in respect of public and private infrastructure rights and obligations, each municipality will need to consider what resources are available for enforcement, and how each of the different possible enforcement approaches would be received by the public.

### 4.2.2 Types of regulations and enforcement options

#### Municipal bylaw

Bylaws are laws enacted by municipal governments to govern in relation to municipal jurisdiction, as defined in the *Community Charter* and *Vancouver Charter*. The municipality may enact a bylaw requiring that private sewer connections be maintained in good condition, so that they are not contributing significant quantities of I/I to the public system. Furthermore, the bylaw may specify the enforcement measures for non-compliance, and the activities that will trigger enforcement of the bylaw.

#### *Enforcement options*

The *Community Charter* and the *Vancouver Charter* define the following options for enforcing bylaws:

- **Fines:** A bylaw is required to define the amount of the fine, and would be strongest if it clearly defines the conditions for the fine and the triggers for the fine. Fines can be imposed via prosecution of bylaw violation under the provincial *Offence Act*, as a ticket offence, or as a ticketable offence by bylaw notice under *Local Government Bylaw Notice Enforcement Act*. See e.g. part 8 of the *Community Charter*.
- **Property liens:** Municipality may place liens against properties for special fees or for costs incurred while taking action at a bylaw defaulter's expense (e.g. rectifying a private sewer lateral that is contributing significant I/I).

- **Building permits:** Municipality withholds a building permit until the property's sewer lateral is in compliance with the bylaw. The municipality defines criteria that trigger the bylaw, e.g. in Vancouver the bylaw is triggered for a major renovation over \$95,000 or two new plumbing fixtures, or an additional bedroom. This would require enabling language in the municipality's sewer and building bylaws.
- **Termination of a service:** The municipality may terminate a service it provides, e.g. water or sewer services. This would require enabling language in the municipality's sewer or utility bylaw(s), authorizing service to be discontinued as a consequence of non-compliance with the rules for use of the service, and on reasonable notice and with the opportunity for affected persons to make representations to council (see e.g. *Community Charter*, section 18(1)(b)).
- **Land Title notice:** City of Vancouver council, after consideration, may resolve to place a Land Title notice of bylaw contravention (*Vancouver Charter*, section 336D) in situations where the contravention is of a nature that a purchaser, unaware of the contravention, would suffer a significant loss or expense if the by-law were enforced against him. *Note: this is a power unique to Vancouver. A similar Community Charter power (section 57) only allows such notices to be placed on title in cases where the contravention relates to a serious safety issue or a failure to comply with a required permit or inspection related to the construction.*
- **Civil proceedings:** *Community Charter*, section 274 allows enforcement of a bylaw via a civil proceeding. This is an option but is very expensive.
- **Performs work:** Municipality discovers non-compliance, attempts enforcement but proceeds with work itself to bring the lateral into compliance with the bylaw and charges the cost of the rehabilitation work back to the property owner, as a last resort. These special fees may be recovered as property taxes and are also liens against the property (further to *Community Charter* sections 17 and 258-59, *Vancouver Charter* sections 336 and 409). Although this power is authorized under these Acts, it is recommended for transparency that the bylaw list such municipal action and expense recovery as part of the enforcement to be used to address non-compliance.
- **Imposing remedies:** Remedial actions may be imposed in relation to declared nuisances, or possibly in relation to harm to drainage.



### *Trigger mechanisms*

Actions that cause the bylaw requirements to be brought into force may be termed trigger mechanisms. Municipalities should identify in the bylaw one or more mechanism(s) that will trigger municipal enforcement of the bylaw's inspection and/or rehabilitation action requirements. These triggers may include:

- **Municipal SSEs:** Identifying areas with high I/I through a municipal sewer system evaluation (SSE) program (see section 4.3) and setting deadlines for inspection/rehabilitation action within those areas. This trigger is very effective at locating and dealing with areas considered the “worst offenders”. Depending on the design of the program, it may take a long period of time before substantial rehabilitation takes place. For example, to setup and implement a full-scale flow-monitoring program to identify the worst areas and initiate some pilot projects has taken over 15 years in King County, Washington. Therefore, this is likely most effective if combined with other triggers.
- **Complaint-driven:** Investigating recurring sewer backups to identify if I/I from private laterals are contributing to the problem. This is considered a reactive approach because it only triggers after an event occurs as the result of non-compliance.
- **Arbitrary date:** Setting a date by which all properties must be in compliance.
- **Age of lateral/building:** Requiring all laterals older than a certain age (e.g. 30 years) be tested for compliance and rehabilitated as necessary.
- **Change of ownership:** Requiring sewer laterals to be inspected/rehabilitated either by the date of transfer of ownership of a property or within a period of time after the transfer, e.g. 6 months.

### *Considerations for implementing regulatory programs*

A key consideration when implementing a regulatory approach is whether or not the program will be affordable for low-income or fixed-income homeowners. This is particularly applicable when the trigger occurs at a time other than the point of sale, or the time of major renovation. Many municipalities in the US that have implemented enforcement-based programs have included provisions for hardship cases, where a homeowner may apply for deferred payment or rebates due to inability to access sufficient funds to rehabilitate the private lateral.

### **Provincial regulation**

Provincial legislation governs the activities of transferring properties between owners, including any terms and conditions (covenants) associated with the transfer. There is no current enforceable mechanism by which municipalities may attach conditions (e.g. proof of successful sewer inspection/rehabilitation as a condition precedent) to the point of sale / transfer of title of a home, without a legislative amendment at the provincial level. The two most likely avenues for

this change are either: 1) *Land Title Act* or 2) BC Building Code under the *Local Government Act*.

We approached various provincial representatives on a preliminary basis to determine whether an appetite exists at the provincial scale for establishing a regulation that would require homeowners to inspect and rehabilitate their private sewer laterals on, before or shortly following the title transfer of their property – a regulation that municipalities could “opt in” to, similar to how the requirements set out in the Water Conservation Plumbing Regulation were introduced. Our conversations have confirmed that there is interest among some provincial ministry officials to continue exploring this topic, and that there may be an opportunity to streamline a proposal of this nature with a ministry-led initiative that is already under discussion to have an energy efficiency label required at the point of sale of a home or other building, by 2012.

The State of California currently allows municipalities to attach conditions to the point of sale. For example, the City of Berkeley has implemented a Private Sewer Lateral Compliance Policy that includes a point of sale trigger for ensuring private laterals are in compliance with the bylaw.

### **Insurance program**

An insurance program would charge an additional annual fee on property taxes to all residential property owners to cover the cost of repairing a defective residential sanitary sewer lateral. As an alternative to proactively enforcing sewer lateral upgrades on a case-by-case basis, municipalities may implement a region-wide mandatory insurance program for private sewer laterals. The City of Florissant, Missouri operates a residential sanitary sewer lateral insurance program that charges homeowners an annual fee of \$50 and is included on the property tax bill.

### **Expropriate private sewer laterals**

A legal approach that warrants brief mention but which seems unlikely to draw favour with Metro Vancouver municipalities is that a local government body expropriate private sewer lateral infrastructure and assume the responsibility and cost of maintenance and repair of that infrastructure alongside the public sewer system. This is an approach that the utilities in England recently adopted<sup>[3]</sup>.

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<sup>3</sup> [http://www.sourceuk.net/article/9/9394/private\\_sewers\\_go\\_public\\_.html](http://www.sourceuk.net/article/9/9394/private_sewers_go_public_.html)

### 4.2.3 Opportunities and challenges

Opportunities and challenges for regulatory tools are identified in the following table.

**Table 5. Opportunities and challenges for regulatory tools**

Type & Mechanism	Trigger(s)	Opportunities	Challenges
Bylaw: Fines for non-compliance	Municipal sewer system evaluations, complaints of backups, date deadline, age of home	<ul style="list-style-type: none"> <li>Fines are regularly used by municipalities for various non-compliance situations.</li> </ul>	<ul style="list-style-type: none"> <li>Difficult for low or fixed income homeowners</li> <li>Requires comprehensive evaluation program to identify non-compliance, or</li> <li>Heavy administration for date or age of home deadline</li> <li>Substantial public education required for date or age of home deadline</li> </ul>
	Sale of home	<ul style="list-style-type: none"> <li>Unpaid fines for non-compliance create a liability for a purchaser, as fee simple title under section 23(2)(c) of the Land Title Act is subject to municipal charges, rates or assessments. Wise purchasers verify that there are no outstanding municipal charges, rates or assessments associated with the property, and that the property complies with all local bylaws.</li> </ul>	<ul style="list-style-type: none"> <li>This kind of trigger is difficult for municipalities to enforce, as no current legal mechanism exists by which municipalities may insert such requirements as a condition precedent to the successful conclusion of the title transfer process.</li> </ul>
Bylaw: Building permit requires sewer lateral certificate	Major renovation: e.g. adding 2+ plumbing fixtures; value greater than \$100,000; addition of a bedroom; addition of greater than 400sqft	<ul style="list-style-type: none"> <li>Accesses ageing homes in need of updating – higher chance sewer lateral also needs repair</li> <li>Only impacts homeowners who have some available money for renovations</li> </ul>	<ul style="list-style-type: none"> <li>Homeowners circumvent requirement – for example, by splitting a renovation over 2 years</li> <li>Only accesses a small portion of ageing homes</li> </ul>
Bylaw: Terminate water or sewer service	Municipal sewer system evaluations, complaints of backups	<ul style="list-style-type: none"> <li>Strong incentive for compliance</li> <li>US municipalities that have implemented this find high levels of</li> </ul>	<ul style="list-style-type: none"> <li>Politically sensitive</li> <li>Legally authorized if established by bylaw, but very harsh consequence</li> <li>Requires comprehensive</li> </ul>

Type & Mechanism	Trigger(s)	Opportunities	Challenges
		compliance	<ul style="list-style-type: none"> <li>evaluation program to identify non-compliance</li> <li>• Difficult for low or fixed income homeowners</li> </ul>
Bylaw: Land Title notice for bylaw contravention	Municipal SSE + due diligence by lawyer or notary public before title transfer	<ul style="list-style-type: none"> <li>• Triggers at time when seller / buyer has most financing available</li> <li>• Note: this bylaw is in addition to a bylaw requiring the sewer to be in good shape</li> </ul>	<ul style="list-style-type: none"> <li>• City of Vancouver only, Community Charter would need ammendment</li> <li>• No trigger if due diligence not properly performed</li> </ul>
Bylaw: Charge homeowner for work to bring into compliance (through property taxes)	Municipal sewer system evaluations, complaints of backups	<ul style="list-style-type: none"> <li>• Effective at getting work done, and work is done to City standards</li> <li>• Recovering fees for work done by the City is a regular</li> </ul>	<ul style="list-style-type: none"> <li>• Requires comprehensive evaluation program to identify non-compliance</li> <li>• Difficult for low or fixed income homeowners</li> </ul>
Provincial regulation: Land Title Act amendment	Sale of home	<ul style="list-style-type: none"> <li>• Trigger occurs at the most affordable time for the seller/buyer</li> <li>• Application is equitable</li> <li>• Establishes a recurring process that will maintain private sewer laterals in good condition over the long-term</li> <li>• Transforms the market so that condition of private sewer laterals becomes a component of house sales (along with age of furnace, condition of roof, etc.)</li> <li>• Program has a broad application which may lead to broader results for reducing wastewater treatment and conveyance costs for the long-term</li> </ul>	<ul style="list-style-type: none"> <li>• Needs ammendment to provincial regulations (<i>Land Title Act</i>) which takes a significant length of time</li> </ul>
Provincial regulation: BC Building Code amendment	Sale of home, date deadline, age of home, or other defined criteria	See sale of home opportunities above	<ul style="list-style-type: none"> <li>• Needs modification of provincial regulations (BC Building Code) which takes a significant length of time</li> </ul>
Insurance	Sewer backup into	<ul style="list-style-type: none"> <li>• No need to “force”</li> </ul>	<ul style="list-style-type: none"> <li>• The key drawback for this</li> </ul>

Type & Mechanism	Trigger(s)	Opportunities	Challenges
program: Annual fee on property taxes	private property (reactive)	homeowners into compliance because it's a mandatory program across the municipality	type of approach is that it has a reactive trigger. That is, only homeowners that experience sewer backups are eligible to have their private lateral upgraded. This will not help municipalities in Metro Vancouver reduce overall I/I.
Expropriate private sewer laterals into the public system	All private laterals expropriated, then rehabilitation occurs according to standard maintenance/rehab schedules	<ul style="list-style-type: none"> <li>Public policy priorities for both the public and private components of the sewer system can be aligned, with some cost-savings flowing from the efficiency gains of a streamlined system</li> </ul>	<ul style="list-style-type: none"> <li>Large additional cost and burden for maintenance and liability</li> </ul>
<i>Real estate property disclosure statement</i>	<i>Sale of home</i>	<ul style="list-style-type: none"> <li><i>Provides an opportunity to educate realtors and home buyers that a bylaw exists and that many houses may be out of compliance, however, not enforceable directly</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Provision of a property condition disclosure statement is not statutorily required</i></li> </ul>

Note: the final item in the table (real estate property disclosure statements) is not a regulatory tool itself, but a tool that may bring into force other regulatory tools.

#### 4.2.4 Liability considerations

The potential for a range of possible liabilities arises if a municipality undertakes regulatory action by adopting a bylaw (or other regulatory mechanism) that requires private property owners to inspect and maintain their private sewer laterals and that requires the municipality to take action/spend money to rehabilitate ageing private sewer infrastructure. Where a contractor hired by the homeowner performs the inspection and rehabilitation work, possible liabilities are greatly reduced. Risks for the local government could include (amongst other things) potential liability for:

- damage to private property,
- injury to persons, or
- other liability, arising from the following causes of action:
  - breach of statute,
  - tort (trespass, negligence, nuisance), and/or
  - breach of contract.

In addition to the potential liability of taking action, municipalities need also consider the potential liabilities associated with inaction on this issue. Although section 288 of the *Local Government Act* states there is no liability for damages arising from breakdown or malfunction of a sewer system, this section has been judicially interpreted to provide no immunity to action for negligent / insufficient design (e.g. if the system fails because it was not designed to handle X volume of wastewater). In other words, if the system overflows because it was only designed to handle X volume of water and instead it received X+Y volume of flow, and overflowed as a result, there would not be any municipal immunity provided by this section, as no “malfunction” occurred.

### **Damage to property**

One of the largest sources of concern for local governments is that they will be at risk of potential liability for alleged damage to private property. The kinds of potential allegations that might arise in respect of a sewer program could include:

- sewer lateral repair not done properly,
- not doing repair promptly and consequential damage ensuing,
- other property damage being sustained while workers are on site,
- city property/lack of repair alleged to be the cause of private lateral failure (e.g. tree root from city tree),
- liability for additional collateral repair costs (grading, sodding, other landscaping, repair to public sidewalk or road and property owner’s driveway or walkway, cost to remove debris (e.g. car) before being able to access sewer lateral, failure of new sod from not being watered),
- damage to home re: connection work,
- responsibility for “prior damage”, i.e. damage sustained to lateral prior to homeowner’s entry into any maintenance/insurance program that might be established,
- liability for advising homeowner of wrong location of lateral, causing homeowner to dig up wrong location,
- without policy decision, liability for asking homeowner to dig up lateral, without first ensuring (e.g. with video) that the blockage is not on city property,
- liability for failure to establish an inspection maintenance system (likely a policy decision would protect against this),
- failure to design the system so as to incorporate a method to inspect/clean out the laterals regularly, and/or
- liability for non-direct connections being determined to be a “public concern” (health concern most likely) or municipal responsibility.

### **Injury to persons**

Concerns over liability in relation to injury to persons may arise in the following circumstances:

- contractor getting injured or equipment being damaged,
- contractor injuring homeowner or third party, and/or
- personal injury/accident to home owner or third party as a result of unsafe or hazardous worksite arising (trench etc.) during performance of work.

### **Other liability**

- Risk of a suit challenging legal authority to regulate or inspect,
- negligent inspection or assessment,
- trespass,
- nuisance,
- liability re: potential unauthorized use of public funds, and/or
- liability or breach of contract in respect of sewer lateral repair/program.

### **Addressing liability concerns**

The risk of potential liabilities may be reduced by applying a variety of strategies. These include:

1. Define a clear policy and legislative basis for actions and support actions with a solid external communications and internal staff training plan, to ensure that respective homeowner/local government responsibilities are clearly delineated.
2. Ensure that staff are properly trained to follow the legislative authority/procedural requirements for entry onto private property, or into private dwellings (see Appendix A), and document such entries/inspections with a paper trail that records date, procedure followed and findings, as well as any interactions with the homeowner.
3. Programs that place the duty of inspection and repair on the private property owner, so that it is the property owner who is directing the contractor and/or is responsible for the work, not the municipality, are less likely to invite allegations of wrongdoing by the municipality.
4. Ensure that the system relies on qualified contractors. Consider the benefits of requiring contractors to be insured and having the local government named as an “additional insured”, if local governments are involved in directing the work.
5. It may be possible to further limit exposure through the judicious use of contractual agreements with homeowners, with appropriate waiver and indemnity provisions, provisions making the agreement bind successors and assigns and requiring that the local government be named as an additional insured on the homeowner’s or contractor’s insurance policy.

6. Any potential municipal liability that might be alleged to arise as a result of a municipality providing financial assistance or an incentive to an owner, or for effecting repairs to a defaulting owner's lateral, may be limited through the insertion of a "no liability" clause into the bylaw.
7. Deliberate policy decisions by council that define the scope of local government action that will be undertaken (and conversely, what is not affordable for local government action) may serve to limit local government exposure.
8. Taking bonds or security from homeowners until the problem is fixed to satisfaction.
9. It may be possible to work with the provincial government to establish a maximum dollar limit for liability in respect of any claim arising in respect of a private sewer lateral.



## 4.3 Municipally-driven approaches

### 4.3.1 Description

A municipally-driven approach is one in which the municipality implements a comprehensive municipal sewer evaluation program to identify the areas deemed the "worst offenders" and applies a private sewer lateral program to the identified areas first. The evaluation program may include flow-monitoring, smoke and dye testing, CCTV scans, and possibly also the use of municipal records to identify laterals older than a particular age or of a particular material. Municipal evaluation programs can be a trigger for either an incentive-based approach, an enforcement-based approach, or an approach where the municipality undertakes the work and costs of upgrading the private laterals. The municipally-driven technique is employed in many jurisdictions throughout the US and in some jurisdictions in Canada as well. It is particularly prevalent in municipalities where the land title trigger option is not available, as is currently the case in BC.

Once key areas are identified, the municipality may proceed with any one, or a combination, of the following options:

- voluntary approach, using any of the tools outlined in section 4,
- regulatory approach, using any of the tools outlined in section 4.2, and/or
- municipally-led approach, where the municipality conducts the work required to bring all sewer laterals into compliance. In this case, the municipality may choose to fund the work by:
  - assuming full responsibility for the cost,
  - giving the homeowner full responsibility for the cost, or
  - sharing the cost with the homeowner.

In the municipally-led approach, consideration should be given to additional liabilities associated with taking the lead on any work carried out. Municipalities can decide to accept liability and deal with claims through their normal risk management program, or to take steps to limit their liability as described in section 4.2.4 under "Addressing Liability Concerns".

### 4.3.2 Opportunities and challenges

Opportunities and challenges for municipally-driven approaches are identified in the following table.

**Table 6. Opportunities and challenges for municipally-driven programs**

Type	Opportunity (Tool)	Challenges
Municipality identifies problem areas	<ul style="list-style-type: none"> <li>• Many municipalities throughout the US and some in Canada (e.g. Kingston) have implemented programs whereby the municipality is performing system-wide evaluations and determining the contributions made by private sewer laterals and lessons may be learned from these cases.</li> <li>• King County, Washington is an example where monitoring was implemented on all catch basins in the entire county to get a more regional perspective on the I/I issue.</li> <li>• Modelling can be used to supplement measured I/I where recorded wet weather events are not available.</li> </ul>	<ul style="list-style-type: none"> <li>• Implementing comprehensive flow-monitoring may be expensive and takes time to establish. Substantive wet weather events are necessary to measure the I/I contributions from private sewer laterals and may not occur within the first couple of years after installation.</li> </ul>
Municipality ties upgrades to ongoing public sewer work	<ul style="list-style-type: none"> <li>• Costs may be reduced significantly if upgrades can be linked to areas where public sewers are currently being investigated and upgraded by the municipality. For example, this applies well when municipalities are undergoing long-term sewer separation projects.</li> <li>• Costs may be borne by municipality or homeowner, depending on the program put in place.</li> </ul>	<ul style="list-style-type: none"> <li>• If maintenance schedule is not defined by flow-monitoring, the “worst offending” areas may not be targeted as early as they should be.</li> </ul>
Municipality conducts work	<ul style="list-style-type: none"> <li>• Municipality has direct control of the quality of work conducted.</li> </ul>	<ul style="list-style-type: none"> <li>• Increases potential for liability issues.</li> </ul>

## 5 Program options for Metro Vancouver municipalities

### 5.1 Unique features in Metro Vancouver

Metro Vancouver municipalities have an opportunity to take a proactive approach on private sewer lateral maintenance, and to integrate this with the Liquid Waste Management Plan which is currently being updated. This section of the report looks at three case studies of different proactive approaches that have been taken in other municipalities to encourage and/or enforce proper maintenance of private sewer laterals. For each case study, implications for implementing such a program in the Metro Vancouver context are highlighted. Finally, Metro Vancouver's role is discussed, from the perspective of encouraging regional coordination when implementing private lateral programs. However, it is expected that each individual municipality will select the appropriate set of tools given local conditions. These may include:

- presence of combined sewers in the public and private systems,
- age of infrastructure,
- existing practices regarding voluntary vs. enforcement-based approaches,
- equity with respect to existing practices (e.g. if homeowners are currently required to upgrade laterals for renovation work at their own cost, it might be inequitable to begin offering an incentive).

### 5.2 A voluntary approach: City of San Luis Obispo case study

Action	Applied in San Luis Obispo	Application in Metro Vancouver
Define problem	<ul style="list-style-type: none"> <li>• Excessive I/I during rainy season</li> <li>• During rainstorm sewer flows increase from daily average of 4.5 million gallons to over 30 million</li> <li>• Water reclamation facility being pushed beyond design limits during rainstorms</li> <li>• Divided city into 14 drainage basis and flow-monitored each area between 1991 and 1994</li> <li>• Determined largest contributor was area with homes from 1930 to 1965 – investigated main line and determined major contributor was private sewer laterals</li> <li>• Smoke testing indicated few illegal cross connections and downspouts</li> </ul>	<ul style="list-style-type: none"> <li>• Document the problem that continued inaction on private sewer laterals poses to the environment, public health and safety, and public infrastructure costs</li> <li>• Documentation can: <ul style="list-style-type: none"> <li>• provide the policy basis for further action, e.g. use of public funds to upgrade private property</li> <li>• demonstrate the effectiveness of I/I reduction measures as they are implemented, and inform adjustments to the program to improve its effectiveness over time</li> </ul> </li> <li>• Consider implementing flow-monitoring on catch basins to</li> </ul>

Action	Applied in San Luis Obispo	Application in Metro Vancouver
		<p>determine largest contributor(s)</p> <ul style="list-style-type: none"> <li>• Determine if inflow is large contributor (downspouts connected) and establish a policy to reduce inflow</li> <li>• Investigate and implement a program to disconnect downspouts where possible, and otherwise ensure separated stormwater pipes are being installed</li> </ul>
Determine preferred approach	<ul style="list-style-type: none"> <li>• City held community hearings and meetings to develop the Voluntary Sewer Lateral Rehabilitation Program (VSLRP)</li> <li>• "Our City preferred that the program be voluntary, because the homeowner owns their lateral from their house to the wye connection at the city main. The City assumes no ownership of any portion of sewer laterals. Staff want to groom a positive relationship with its residents rather than an adversarial relationship that would have resulted from requiring lateral replacement."</li> <li>• Program implemented July 1997</li> </ul>	<ul style="list-style-type: none"> <li>• Decide between voluntary, regulatory, or municipally-driven approaches; or a combination of these</li> <li>• Consider holding engagement sessions or meetings with residents for input into the decision</li> </ul>
Determine program budget	<ul style="list-style-type: none"> <li>• Starting September 1997, City approved limited amount of funding and ran out by 2004; new funding allocated July 2007</li> <li>• No funding available 2004 – 2007 but City instituted retroactive reimbursements for this period</li> <li>• Reimbursements on a first come, first served basis</li> </ul>	<ul style="list-style-type: none"> <li>• Determine funding level desired and for what duration. Consider amount for rebates, as well as staff time required for inspections and provision of technical advice to homeowners</li> <li>• Include funding for an education campaign to encourage uptake from residents</li> </ul>
Determine program eligibility criteria	<ul style="list-style-type: none"> <li>• Detached, single family, owner or renter occupied</li> <li>• May be a condominium, if separate sewer lateral from dwelling to main</li> <li>• Must have access to sewer lateral for video inspection</li> <li>• No commercial or multi-family properties</li> </ul>	<ul style="list-style-type: none"> <li>• Consider implementing required private sewer lateral maintenance for multi-family and commercial properties if not included in voluntary program</li> </ul>
Determine program requirements	<ul style="list-style-type: none"> <li>• Limited to once per property</li> <li>• All work with City permits</li> <li>• Applicant must show proof of material and contract labour expenses</li> <li>• Inspections are required. City staff to</li> </ul>	<ul style="list-style-type: none"> <li>• Municipality must have technical staff trained and available to inspect video tapes and provide technical support to residents</li> <li>• Criteria for "rehabilitated" sewer lateral needs to be clearly</li> </ul>

Action	Applied in San Luis Obispo	Application in Metro Vancouver
	<p>make recommendations to property owner</p> <ul style="list-style-type: none"> <li>• May perform complete lateral rehabilitation or only make recommended point repairs</li> </ul>	<p>defined in bylaw, particularly if allowing point repairs only</p> <ul style="list-style-type: none"> <li>• Staff must understand and uphold standards set out in bylaw</li> <li>• Requirements should be clearly laid out for applicants prior to work commencing (e.g. when staff makes recommendations)</li> <li>• Some municipalities require estimates to be submitted from contractors prior to approving applicant for participation in the rebate program</li> </ul>
<p>Determine amount for incentive</p>	<ul style="list-style-type: none"> <li>• 50% of costs up to \$1,000</li> <li>• Permit fees waived</li> </ul>	<ul style="list-style-type: none"> <li>• Higher participation will result from substantial cost coverage. Other municipalities provide incentives up to \$2,000 per property</li> <li>• Consider waiving permit fees</li> <li>• Consider reimbursing part or all of the video inspection costs</li> </ul>
<p>Enact Municipal law</p>	<ul style="list-style-type: none"> <li>• Enacted program in 1997</li> </ul>	<ul style="list-style-type: none"> <li>• See Section 6 for considerations in writing a strong sewer lateral bylaw</li> </ul>
<p>Create education campaign</p>	<ul style="list-style-type: none"> <li>• Website for residents the explains the program and provides forms for participating: <a href="http://www.ci.san-luis-obispo.ca.us/utilities/vslrp.asp">http://www.ci.san-luis-obispo.ca.us/utilities/vslrp.asp</a></li> </ul>	<ul style="list-style-type: none"> <li>• Create website with justification for program, benefits of private sewer lateral rehabilitation, program requirements and application procedure</li> <li>• If particular area of municipality is identified to have high I/I, target homes in area with door hangers or mail-out</li> <li>• Consider implementing a region-wide education campaign through Metro Vancouver</li> </ul>

### 5.3 A regulatory approach: City of Berkeley case study

Action	Applied in Berkeley	Application in Metro Vancouver
Federal requirement	<ul style="list-style-type: none"> <li>US EPA Clean Water Act, section 301(a) from 1972 requires the control of sewer overflows</li> </ul>	<ul style="list-style-type: none"> <li>No federal requirements regarding the sewer-related practices (e.g. sanitary sewer overflows)</li> </ul>
State (provincial) requirement	<ul style="list-style-type: none"> <li>State of California Water Resources Control Board's California Water Code Section 13243 from 1986 issued a cease and desist order to the City of Berkeley</li> </ul>	<ul style="list-style-type: none"> <li>BC <i>Municipal Sewage Regulation</i> requires the elimination of combined sewer overflows (CSOs) and sanitary sewer overflows (SSOs) during storm events with less than a 5-year return period (Schedule 1, Conditions 15 and 16) or, the implementation of a Liquid Waste Management Plan (LWMP)</li> </ul>
Regional requirements	<ul style="list-style-type: none"> <li>Regional Water Quality Control Board, San Francisco Bay Region's Order No. R2-2004-0010, NPDES Permit No. CA 0038466 October 2005</li> </ul>	<ul style="list-style-type: none"> <li>Metro Vancouver's LWMP implemented in 2002 which includes:                             <ul style="list-style-type: none"> <li>Policy 10 regarding elimination of SSOs for less than 5-year rain events, and other targets</li> <li>Policy 20 regarding elimination of stormwater discharges into sanitary sewers</li> </ul> </li> </ul>
Define problem	<ul style="list-style-type: none"> <li>Conducted SSE study in 1985</li> <li>Determined the significant component of I/I is infiltration of groundwater through defects in sewer pipes</li> <li>City conducted evaluations and determined 40-50% of the I/I peak flows in wet weather are from private sewer laterals, as supported by leakage test data, internal inspection by television, smoke test results, conditions documented by "archaeological" type excavations, and direct flow measurements</li> </ul>	<ul style="list-style-type: none"> <li>Document the problem that continued inaction on private sewer laterals poses to the environment, public health and safety, and public infrastructure costs. This documentation can:                             <ul style="list-style-type: none"> <li>provide the policy basis for further action, e.g. use of public funds to upgrade private property</li> <li>demonstrate the effectiveness of I/I reduction measures as they are implemented, and inform adjustments to the program to improve its effectiveness over time</li> </ul> </li> <li>Consider implementing flow-monitoring on catch basins to determine largest contributor(s)</li> <li>Determine if inflow is large contributor (downspouts connected). Establish a policy to reduce inflow. Investigate and implement a program to disconnect downspouts where possible, and otherwise ensure separated stormwater pipes are being installed</li> </ul>
Determine preferred approach	<ul style="list-style-type: none"> <li>Due to strict state requirements and the results of investigation that indicated significant I/I contribution from private sewer laterals, the City decided to implement an</li> </ul>	<ul style="list-style-type: none"> <li>Decide between voluntary, regulatory, or municipally-driven approaches; or a combination of these</li> <li>Consider holding engagement sessions</li> </ul>

Action	Applied in Berkeley	Application in Metro Vancouver
	<p>enforcement-based program that tied rehabilitation to renovations and sale of home</p>	<p>or meetings with residents for input into the decision</p>
<p>Determine trigger mechanisms</p>	<ul style="list-style-type: none"> <li>• City chose 2 key trigger mechanisms: time of home sale and time of major remodel on home</li> </ul> <p>Time of home sale authority:</p> <ul style="list-style-type: none"> <li>• California Civil Code (sections 1102.6a, 1103.4 and 1353) imposes disclosure requirements on sellers of property, and further, any city or county can elect to require disclosures in the form provided under the statute, or can (without limits on its authority) require additional or different disclosures on its own form, in connection with transactions subject to the article</li> <li>• Furthermore, the bylaw enacted imposes a responsibility on the seller to disclose the requirements of the ordinance to the prospective purchaser, and notes that the buyer will be responsible for compliance, regardless of any disclosure or failure to disclose</li> </ul> <p>Major remodel on home criteria that trigger bylaw enforcement:</p> <ul style="list-style-type: none"> <li>• All remodelling with costs over \$100,000 or \$50,000 with 2 or more new plumbing fixtures</li> </ul>	<p>Time of home sale considerations:</p> <ul style="list-style-type: none"> <li>• All title transfer authority currently rests with the provincial government</li> <li>• Section 23(2)(c) of the <i>Land Title Act</i> states that title transfer is subject to municipal charges, rates and assessments <ul style="list-style-type: none"> <li>• E.g. unpaid fines imposed due to lack of compliance with a sewer lateral bylaw are carried forward to the new owner</li> <li>• This outstanding charge would present itself to a buyer through due diligence searches of municipal records performed by the buyer's lawyer</li> </ul> </li> <li>• Section 336D(1)(c) of the <i>Vancouver Charter</i> states that a bylaw contravention may be attached to the land title <ul style="list-style-type: none"> <li>• E.g. Council may attach a notice to land title for lack of compliance with a sewer lateral bylaw where there may be a significant cost to the new owner to bring the property into compliance</li> <li>• This would appear with any land title search performed by a buyer's lawyer or notary public prior to purchase</li> <li>• The <i>Community Charter</i> has a similar provision, but only allows it for health and safety purposes</li> <li>• Consideration should be given to amending the <i>Community Charter</i> to add a case similar to Vancouver's power</li> </ul> </li> <li>• A good awareness strategy if the above were used would be to work with the BC Real Estate Association to have the state of the building's sewer lateral added as an item requiring disclosure on the property disclosure statement <ul style="list-style-type: none"> <li>• This statement is not required by statute, the BC Real Estate</li> </ul> </li> </ul>

Action	Applied in Berkeley	Application in Metro Vancouver
		<p>Association promotes it as good practice</p> <ul style="list-style-type: none"> <li>• The statement is generally used in property sale transactions and provides an opportunity to alert realtors, sellers, and buyers to the possibility a property is not in compliance with a municipal bylaw with respect to the private sewer lateral connection</li> <li>• To have powers equivalent to the City of Berkeley, the <i>Land Title Act</i> would need to be amended to require property disclosure forms for all property sale transactions and allow municipalities to add their own requirements (or ensure private sewer lateral certificate requirements are listed on the provincial form)</li> <li>• Time of major remodelling:</li> <li>• Municipalities have power to impose requirements for building permits</li> <li>• A bylaw must be created (or existing sewer bylaw amended) to enact this requirement</li> <li>• City of Vancouver currently has this requirement in its sewer bylaw, and the text is available in Appendix A</li> </ul>
Enact municipal law	<ul style="list-style-type: none"> <li>• Bylaw requires all property owners that plan to sell or remodel homes to prove their private sewer laterals are in good shape, effective October 2006</li> <li>• Bylaw added Chapter 17.24 to the Berkeley Municipal Code and includes sections for: <ul style="list-style-type: none"> <li>• Standards for maintenance of private sewer laterals</li> <li>• Requiring cleanouts</li> <li>• Conditions re: public nuisance</li> <li>• Inspection at time of sale:</li> <li>• Inspection at time of major remodel</li> <li>• Inspection and repair requirements</li> <li>• Sewer Lateral Certificates</li> <li>• Fees and penalty</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• See Section 6 for considerations in writing a strong sewer lateral bylaw</li> <li>• Consider the staff required to enforce the bylaw: <ul style="list-style-type: none"> <li>• Municipality must have technical staff trained and available to inspect video tapes and provide technical support to residents</li> <li>• Criteria for "rehabilitated" sewer lateral needs to be clearly defined in bylaw, particularly if allowing point repairs only</li> <li>• Staff must understand and uphold standards set out in bylaw</li> </ul> </li> </ul>
Create	<ul style="list-style-type: none"> <li>• City has set up a dedicated phone line</li> </ul>	<ul style="list-style-type: none"> <li>• Municipality, or possibly Metro</li> </ul>



Action	Applied in Berkeley	Application in Metro Vancouver
education campaign	<p>for private sewer lateral questions</p> <ul style="list-style-type: none"> <li>Website for residents the explains the program, references ordinances, and provides required forms: <a href="http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=8160">http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=8160</a></li> </ul>	Vancouver, may wish to set up a “Sewer lateral hotline” to answer homeowner questions about compliance with sewer lateral programs

#### 5.4 A municipally-led approach: City of Santa Barbara case study

The City of Santa Barbara has taken a comprehensive approach to private sewer lateral management that includes a municipally-led identification of problem areas, an incentive program and an enforcement program. The steps taken are summarized in the following table in order to demonstrate how a comprehensive approach may be implemented.

Action	Applied in Santa Barbara
Define problem	<ul style="list-style-type: none"> <li>Comprehensive City-led sewer system evaluation identified problem areas by ranking each basin for degree of I/I contribution</li> <li>Using ranking, each basin was allocated to a maintenance year between 2007 and 2016 and a map was created to demonstrate this maintenance schedule</li> </ul>
Criteria for required inspection	<ul style="list-style-type: none"> <li>City requires inspections for: <ul style="list-style-type: none"> <li>Response to spill from private lateral, and/or</li> <li>Observed lateral problems during inspection of City line, and/or</li> <li>Potential problems noted during smoke testing</li> </ul> </li> </ul>
Define incentive program	<ul style="list-style-type: none"> <li>Incentives available for properties without a previous order, i.e. for properties that have not had an Administrative Penalty applied for failure to inspect and/or repair the lateral within the last 12 months</li> <li>\$150 provided for inspection – must be performed by Qualified Inspection Company</li> <li>Up to \$2,000 or 50% provided for rehabilitation</li> <li>Permit fees are waived</li> <li>Low interest loans may also be available to homeowners in need of financial assistance</li> </ul>
Define enforcement program	<p>Four components:</p> <ul style="list-style-type: none"> <li>(1) Notice of defect and requirement to fix if identified during City investigations <ul style="list-style-type: none"> <li>Notice sent to owner requiring CCTV inspection to be performed and submitted to City within 30 days</li> <li>If not completed, 2<sup>nd</sup> letter with 15 days grace period until issuance of administrative citation</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• If not completed, Notice of Administrative Citation issued and direction to complete inspection within 10 days</li> <li>• If not completed, Administrative Penalty of \$150 and referral to City Attorney's office for enforcement</li> <li>• (2) Building permit             <ul style="list-style-type: none"> <li>• Addition of 400sqft or more new dwelling space requires inspection of sewer lateral and rehabilitation if necessary</li> <li>• Two or more new plumbing fixtures requires inspection of sewer lateral and rehabilitation if necessary</li> </ul> </li> <li>• (3) Commercial properties, condominiums and other common interest developments             <ul style="list-style-type: none"> <li>• Required to inspect laterals every 10 years</li> <li>• Procedure for identifying, notifying and requiring inspection</li> <li>• Similar penalties to those described in (1)</li> </ul> </li> </ul>
Develop certification program	<ul style="list-style-type: none"> <li>• City-run certification program available for plumbers</li> <li>• Once certified, plumbers are added to City's list of Qualified Inspection Companies</li> </ul>
Enact municipal law	<ul style="list-style-type: none"> <li>• Santa Barbara Municipal Code Chapter 14.46, January 2007</li> </ul>
Create education campaign	<ul style="list-style-type: none"> <li>• Zoning information report (ZIR)* at time of home sale             <ul style="list-style-type: none"> <li>• ZIR modified to indicate if sewer lateral inspection report is on file at City</li> <li>• ZIR will include advisory statement informing buyer that of property owner's responsibility to maintain the lateral in good condition and informing owner of City's active inspection program to identify laterals in poor condition</li> <li>• ZIR advises buyer to have lateral inspected prior to close of escrow</li> <li>• Buyer must sign to acknowledge advisories</li> </ul> </li> <li>• Website describing program and supplying all forms for incentive programs: <a href="http://www.santabarbaraca.gov/Resident/Licenses_Permits/SLIP/">http://www.santabarbaraca.gov/Resident/Licenses_Permits/SLIP/</a></li> </ul>
<p>* this method of educating the buyer is similar to the suggested approach in Case Study 2 – having sewer lateral requirements added to the property disclosure statement</p>	

## 5.5 Metro Vancouver considerations

Implementing a private sewer lateral program is the responsibility of the individual municipalities; however, a coordinated effort made by all levels of government (federal, provincial, and municipal) will ensure municipalities have the required resources to effectively address the issue of I/I from the private system. Federal and provincial governments can encourage proactive programs to reduce I/I through funding, research, and communication strategies and thereby reduce potentially more costly options such as unnecessary expansion of conveyance and wastewater treatment facilities. The provincial government can further assist by removing any legislative barriers to a municipality implementing a private lateral program. The regional district also plays a significant role in supporting a coordinated policy direction for its member municipalities for reducing I/I. Further details about Metro Vancouver's role are provided in sections 5.5.2 through 5.5.4 below.

### 5.5.1 I/I reduction activities in Metro Vancouver municipalities

Some municipalities in Metro Vancouver have undertaken pilot studies for reducing I/I in order to meet the regional volume targets for wastewater flow. Here are some results of studies conducted to date<sup>4</sup>:

- **City of White Rock:** The City replaced the sewer mains and repaired the service laterals in one subcatchment (Area 2A). Based on flow monitoring and analysis, the 5-year, 24-hour I/I rate was reduced by 69%.
- **City of Surrey:** The City undertook rehabilitation of the public sewer system in two subcatchments. The flow monitoring and modelling results indicated minimal changes in I/I, therefore suggesting that the primary source of I/I in those catchments is from the private sewer laterals. The City has also undertaken the replacement of bitumen fibre service connections as part of the I/I investigation program.
- **District of West Vancouver:** The District rehabilitated and/or replaced mainlines, manholes, and private laterals to the house. The flow monitoring results indicated that I/I was reduced by 69%.
- **City of Burnaby:** The City performed I/I rehabilitation in a study catchment and is currently collecting data to evaluate costs and program effectiveness.

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<sup>4</sup> Personal communications with Dave Dunkley, Metro Vancouver, December 2008.

### 5.5.2 Establish region-wide (Metro Vancouver) policies

In order to effectively reduce I/I in the sanitary sewer system in the region as a whole, Metro Vancouver should adopt a strong policy that endorses or requires private lateral rehabilitation. For example, in San Francisco Bay the California Regional Water Quality Control Board has adopted the following as part of their policy:

...BE IT RESOLVED

that this Water Board *supports and encourages* local communities and sanitary sewer collection system agencies, especially those experiencing significant infiltration and inflow from private sewer laterals, *to have a program* that requires inspection and rehabilitation of private sewer laterals. (See Appendix E for full text).

Furthermore, regional policies should reflect/encourage:

- proper design, material selection and installation
- on-going preventative maintenance
- I/I reduction targets

### 5.5.3 Support a region-wide education / information campaign

As part of this study, a sample “Resident’s guide to the Private Sewer Lateral Program” brochure was developed, and is attached as Appendix F. This brochure can be adapted to each municipality’s specific bylaw and/or program put into place. In addition to providing this initial brochure, Metro Vancouver can:

1. Work with member municipalities to create a homeowner education campaign. This may include making information available on a website, publishing a guidebook for homeowners, writing newsletters with featured projects and ongoing projects to clarify the homeowner’s responsibilities with respect to private sewer lateral maintenance.
2. Work with the BC Real Estate Association to develop awareness of the homeowner’s responsibility with respect to private sewer laterals. This may involve providing homeowner education brochures, having information about sewer laterals added to the BCREA’s “Green Tool kit for REALTORS”, providing a list of relevant bylaw requirements for municipalities in Metro Vancouver. Furthermore, consider working with BCREA to have a line item added to the property disclosure statement that states the private sewer lateral is in compliance with municipal bylaws.

### 5.5.4 Seek opportunities to build capacity in the industry

Work with member municipalities to ensure strong installation and inspection standards are being upheld in both new construction and rehabilitation of sewer laterals. Furthermore, Metro Vancouver can work with local community colleges to create a college certification program that ensures plumbers performing the installation and/or inspection of sewer laterals meet a certain basic standard for the whole region. Alternatively, Metro Vancouver can work with a professional association such as the BC Water and Waste Association (BCWWA) to develop an appropriate training course for plumbers in the region.

The City of Santa Barbara has implemented its own Certification Program for licensed plumbers. In order for plumbers to be eligible to perform certified inspections, they are first required to complete the program.

## 6 Sample bylaw for Metro Vancouver municipalities

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### 6.1 Municipal policies

Each municipality should create a policy that:

- defines the scope of local government action that will be undertaken with respect to private sewer laterals (and conversely, what is not affordable for local government action),
- requires from private homeowners high standards of inspection, installation and ongoing maintenance of private sewer laterals,
- sets up complementary measures for increasing compliance with the bylaw (e.g. companion communications, consultation, education or monitoring program),
- sets up a program for monitoring/evaluating/reporting on the effectiveness of the program (transparency in governance), and
- commits to a future review of the bylaw (e.g. sunset clause).

### 6.2 Sample bylaw for Metro Vancouver

A sample bylaw “for the maintenance and repair of private sewer laterals” was developed for Metro Vancouver municipalities as part of this study. Refer to Appendix G for the full bylaw. The sample bylaw developed includes both an enforcement approach over the longer-term, and an incentive approach over the shorter-term. Some key features of the sample bylaw include:

Sewer Lateral Certificates:

- Certificates will be given to property owners for compliance with the standards set forth in the bylaw.
- Property owners apply for a certificate by providing appropriate documentation indicating compliance with the bylaw.

Incentive program (optional):

- Effective until September 30, 2014, property owners may apply for a rebate of up to \$1,000 or 25% of the cost of lateral rehabilitation (whichever is less) once a Sewer Lateral Certificate is issued.

Financial assistance program:

- The City may provide a no-interest loan to residents that must upgrade their lateral, but do not have sufficient funds to do so.
- The property owner must agree to repay the loan through 5 equal payments collected annually as property taxes, to have a lien placed on the property’s title until full payment

is made, and to pay the full balance immediately upon any change in ownership of the property.

Enforcement program:

- Effective January 1, 2015, all residential properties with three or fewer units will be required to have a Sewer Lateral Certificate prior to a change of ownership.
- Effective January 1, 2015, the City may establish a program requiring property owners to obtain a Sewer Lateral Certificate in identified neighbourhoods to proactively reduce I/I on a proactive basis.
- Effective December 31, 2011, all commercial, strata, and multi-family properties (with more than four units) must obtain a Sewer Lateral Certificate, and must renew the certificate every 10 years thereafter.

More generally, a bylaw that addresses private sewer lateral standards and maintenance should<sup>5</sup>:

- be written using plain language,
- explain rationale / justification (issue and purpose/objective of bylaw),
- quote applicable laws (legislative authority),
- specify scope and application,
- define prohibited or limited acts – types and degrees of I/I prohibited, types of discharges into public sewer prohibited, and types of defects requiring corrective action,
- define each required task in the program and identify who is responsible for compliance with each task, as well as any exceptions to compliance requirement,
- define clear deadlines/timelines/triggers for compliance,
- define continuing responsibilities of homeowner (standards to meet),
- lay out rights of municipality:
  - access & inspection
  - identify and specify design and performance standards
  - issue orders to inspect, correct & maintain system
  - perform work if owner fails to, and rights/procedures for recovery of costs of rectifying default
  - specific enforcement powers, rights, remedies, procedures & fines, penalties, offences, etc. associated with non-compliance

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<sup>5</sup> Adapted from: "It can be done. Some legal issues to consider when managing infiltration and inflow from laterals" by Michael H. Simpson in WE&T July 2005. For further guidance, see also "Regulatory Best Practices Guide" by BC Ministry of Community, Aboriginal and Women's Services (2004).

- define available financing / assistance (including any conditions of ineligibility) & procedures or legal agreements required for accessing it,
- define applicable permits (including conditions of permit) authorizing certain actions & fees required,
- lay out homeowner's appeal rights, and
- note severability of any bylaw provision found invalid.

### **6.3 Bylaw and/or program re: inflow sources**

Each municipality should also implement policies prohibiting storm water inflow into the public sanitary sewer (some concessions may be allowed where older homes have not been triggered to separate). This may include investigating and implementing a downspout disconnection program where feasible.



## Appendix A - Synopsis of relevant BC regulations

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This appendix provides a synopsis of the applicable legislation currently enacted in BC, organized by key legal issues that pertain to private sewer lateral programs.

Note that the *Community Charter* and *Local Government Act* apply to all municipalities except the City of Vancouver, which is governed almost exclusively by the authorities granted under the *Vancouver Charter*. Only a few provisions of the *Local Government Act* and *Community Charter* apply to the City of Vancouver: see section 2.1 of the *Vancouver Charter*.

### Public financing of private property improvements (e.g. providing grants)

The allocation of public funds to a program that has a public policy goal of providing a benefit to the community is authorized under a variety of legislation.

For regional districts, this type of funding is authorized for Regional Districts under the *Local Government Act*, section 176 that states regional districts may provide assistance for the benefit of the community by way of grants, benefits, advantages, tax exemptions, loans, etc (as defined in sections 181 and 185), under the condition that the program is published to the public. For municipalities, the *Community Charter* section 24 also requires the publication of an intention to provide assistance. Under the *Community Charter*, municipalities enjoy similar powers, with similar public notice requirements for certain kinds of assistance (see e.g. section 24). The City of Vancouver's spending authority under sections 204 and 206 of the *Vancouver Charter* appears on its face to be more limited; however, it is possible the "Added powers of Council" under section 199 or powers in relation to providing for a sewer system under section 302 may be sufficiently broad to authorize such financial expenditures or assistance.

### Municipal property tax exemption

Section 226 of the *Community Charter* allows municipalities to implement a Revitalization Tax Exemption to provide a partial or full exemption from municipal property taxes for up to 10 years, to achieve environmental, economic or social objectives. Vancouver has been granted equivalent powers further to section 396E of the *Vancouver Charter*. For more information on revitalization tax exemption programs, see the Ministry of Community Development publication, *Revitalization Tax Exemptions: A Primer on the Provisions in the Community Charter*, available for download online from [www.cd.gov.bc.ca/lgd/gov\\_structure/library/community\\_charter\\_revital\\_tax\\_exemptions.pdf](http://www.cd.gov.bc.ca/lgd/gov_structure/library/community_charter_revital_tax_exemptions.pdf).

### Authority to impose and enforce regulatory bylaws

The *Community Charter* and the *Vancouver Charter* contain both broad and specific provisions that would authorize the imposition of bylaws regulating private sewer laterals.

For example, section 8 of the *Community Charter* provides municipalities with broad fundamental powers that include powers to regulate e.g., municipal services, public health, the natural environment and buildings and structures. As an example, municipalities may create bylaws:

*8(8)(c) to require persons to do things with their property, to do things at their expense and to provide security for fulfilling a requirement.*

Some municipal authority is stipulated to be exercised concurrently with the province (see section 9); other municipal authority is not constrained in this fashion. Notably, however, municipalities are granted specific (and sole) authority in relation to sewage and drainage, pursuant to section 69 of the *Community Charter*, which authorizes regulation of the design and installation of drainage and sewage works provided by persons other than the municipality, requiring persons to connect their buildings in the manner specified, and imposing requirements related to maintenance of flow in a sewer.

For the City of Vancouver, broad regulatory authority over sewers and drains is established further to section 302 of the *Vancouver Charter*.

The ranges of possible enforcement tools for BC and Vancouver municipalities are respectively described below:

***Community Charter (applies to non-Vancouver municipalities)***

Bylaws created by municipalities may be enforced using any of the following methods:

- taking action at the defaulter's expense (section 17), and imposing a lien to recover the costs of taking action (section 259)
- discontinuing to provide a service (section 18)
- imposing remedial action requirements (section 72) in relation to declared nuisances (section 74) or possibly in relation to harm to drainage (section 75)
- imposing a lien against the property for special fees (section 259)
- enforcing bylaws through the *Offence Act*, through ticketing, or through court action (section 260) (The bylaw would need to provide that failure to comply with the bylaw is an offence or a ticket offence and set minimum, maximum and continuing offence fine amounts)
- ticketing (sections 264-273)
- bringing civil enforcement action to Supreme Court (section 274)
- obtaining an entry warrant (section 275)

***Vancouver Charter (applies to Vancouver)***

Bylaws created by the City of Vancouver may be enforced using any of the following methods<sup>6</sup>:

- imposing a fine (section 333)

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<sup>6</sup> Although not the most direct course, there is also a possibility of exploring enforcement of a declared nuisance (section 324A) if other avenues fail.

- enforcing bylaws through prosecution, proceedings in civil court, proceeding by bylaw notice under the *Local Government Bylaw Notice Enforcement Act* (section 333B)
- recovering expenses from defaulter and as property tax (section 336, also see section 409)
- after council consideration and resolution to place a Land Title notice of bylaw contravention (section 336D) in situations where the contravention is of a nature that a purchaser, unaware of the contravention, would suffer a significant loss or expense if the by-law were enforced against him (*Note: this is an interesting power unique to Vancouver. A similar Community Charter power (section 57) only allows such notices to be placed on title in cases where the contravention relates to a serious safety issue or a failure to comply with a required permit or inspection related to the construction*)

Regional districts also have enforcement powers under the *Local Government Act* but given that it is unlikely that a regulatory program would be delivered directly by the regional district, these will not be discussed in this report.

### **Access to private property**

In order to implement private sewer lateral programs that are either led by or enforced by the municipality, access to private property is required. Municipalities may require access in order to:

1. inspect with respect to determining compliance with a bylaw, or
2. perform work to bring the property into compliance with a bylaw

### ***Community Charter (applies to non-Vancouver municipalities)***

Section 16 of the *Community Charter* permits a municipality to enter on property for the purposes of inspection and enforcement of a bylaw. Under section 16, inspectors may only enter private land at reasonable times and after taking reasonable steps to advise the owner.

The rules governing entry into a private dwelling are more strict. If there are no exterior cleanouts available for inspection and entry into a private dwelling is required for inspection, then the municipality must comply with additional rules, such as serving notice to the occupier and/or obtaining the occupier's consent to enter. This additional complexity is avoided if municipalities inspect the lateral from the public side or from a private exterior cleanout where possible.

The power to enter on property includes the right to enter and inspect to ensure regulations are being met (section 16(6)(a)). The municipality may also enter property to rectify a non-compliance situation (section 16(6)(b)) and take action at the defaulter's expense (section 17). This allows the municipality to perform work on the private property and to recover the costs from the owner as a debt in order to bring the property into compliance with a regulation.

As an alternative to performing the work, the municipality may establish rules that set out consequences of non-compliance. Section 18 gives the power to discontinue providing a service for non-compliance, given reasonable notice.

### ***Vancouver Charter (applies to Vancouver)***

Sections 270 and 271 of the *Vancouver Charter* give the City powers of inspection on private property. These sections further provide that owners/occupiers of private property must allow inspectors/authorized staff members access and to enable inspection. For those inspections, the inspector can enter onto property at reasonable times to inspect. There is also a power to inspect in respect of enforcing building bylaws, during construction and “thereafter as occasion may require”.

### **Land title transfer**

While fee simple title is subject to municipal charges, rates or assessments (Land Title Act section 23(2)(c)), there is no direct provision in the Land Title Act for transfer of fee simple title to be procedurally held up or impeded as a result of a property’s state of non-compliance with a bylaw.

### **Building permits / renovations**

Local governments have regulatory authority over both the sewer system and building construction and renovation activities. With these powers, regulatory bylaws may be established requiring inspection and if necessary, upgrades, to private sewer laterals concurrent with Council permitting new building construction or building renovation activities.

Municipal authority over buildings and other structures is established by the *Community Charter*, section 8(3)(l) and Division 8. There is also a general licensing and standards authority set out in section 15. Specific authority in relation to sewage and drainage is found in section 69.

The Vancouver Charter, section 302 provides the City of Vancouver with authority over sewers and drainage; section 306 grants Vancouver a broad authority over building construction.

The City of Vancouver has an existing bylaw that requires a new sewer connection for certain renovations as follows:

*2.2 NEW PUBLIC SEWER CONNECTION FOR CONSTRUCTION - Subject to Section 2.9, a new public sewer connection is required whenever:*

- (a) a new house or building is constructed, or*
- (b) an existing house or building is renovated and the estimated construction value is more than:*
  - *(i) 100% of the latest building assessment (from the BC Assessment Authority), or*
  - *(ii) \$95,000, whichever is the greater, and the work involves:*
  - *(iii) extensive excavation work,*
  - *(iv) enlargement of the plumbing system by adding two or more fixtures,*
  - *(v) an increase in the number of bedrooms, or*
  - *(vi) a resulting increased demand upon the existing sewer system after renovations are complete.*

*2.9 USE OF EXISTING PUBLIC SEWER CONNECTION – may use existing connection if built after 1985, is not a combined sewer, and it meets approval of City Engineer*

### **Expropriation of private property in relation to sewer laterals**

Expropriation powers are found as follows:

- *Community Charter*, sections 31 and 33 (in accordance with *Expropriation Act*)
- *Vancouver Charter*, section 540.1
- *Local Government Act*, sections 309 and 312
- *An Act to Incorporate the Greater Vancouver Sewerage and Drainage District*, section 26

## Appendix B - Metro Vancouver municipality sewer bylaws

Municipality	Type	Sewer Bylaw
Anmore	Village	n/a
Belcarra	Village	n/a
Bowen Island	Island Municipality	n/a
Burnaby	City	Sewer Connection Bylaw No. 4247
Coquitlam	City	Sewerage System Bylaw No. 3151
Delta	District Municipality	Sanitary Sewer Bylaw No. 5783
Langley	City	n/a
Langley	Township	Sewerworks Bylaw No. 3701
Lions Bay	Village	n/a
Maple Ridge	District Municipality	Sanitary Sewer Bylaw No. 691-1964
New Westminister	City	Sewer and Drainage Systems Regulation Bylaw No. 4524
North Vancouver	City	Sewer Connections Bylaw No. 1201
North Vancouver	District Municipality	Sewer Bylaw No. 6656
Pitt Meadows	City	Sewer & Storm Drainage Bylaw No. 1702
Port Coquitlam	City	Sewer Connection Bylaw No. 1090
Port Moody	City	Stream and Drainage System Protection Bylaw No. 2470
Richmond	City	Drainage, Dyke and Sanitary Sewer System Bylaw No. 7551
Surrey	City	Sanitary Sewer By-law No. 2240
Vancouver	City	Sewer and Watercourse By-law No. 8093
West Vancouver	District Municipality	Sewer and Drainage Utility Fee Bylaw No. 4538
White Rock	City	Sewer Connection Bylaw No. 396
Unincorporated Areas	Regional district remainder	n/a

## Appendix C - Sample incentive program: Santa Barbara, CA

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### SECTION V - INCENTIVE PROGRAM

Purpose: To encourage City residents connected to the City's sewer system to proactively inspect and repair private sewer laterals.

#### A. Incentives

1. Inspection incentive - Up to \$150 per property when City is provided a videotape and inspection report by a qualified inspector and the City review certifies that the lateral is in good repair. Rebate amount shall not exceed the cost of the inspection.
2. Replacement repair incentive – Up to \$2,000 per property. Rebate amount limited to half the cost of repairs or \$2,000, whichever is less.

#### B. Eligible Properties

1. Residential properties with three or fewer units (regardless of zoning); and
2. These properties have not been issued an Administrative Penalty for failure to inspect and/or repair the sewer lateral within the last twelve months.

#### C. Ineligible Properties

1. Commercial properties.
2. Residential properties with four or more units.
3. Common interest developments.
4. Any property that has received an Administrative Penalty within the past 12 months for failure to inspect or repair their sewer.

#### D. Eligible Repairs

1. Sewer lateral repair or replacement.

#### E. Eligible Costs

1. City-approved costs and work. (All costs must be approved by the City and all work must be done and completed under appropriate permit or permits.)
2. Costs associated with repair/replacement of lateral.
3. Slip lining costs where slip lining is done by a method approved by the City.
4. Replacement of the line through pipe-bursting when done in accordance with City standards.
5. Installation of cleanout(s) if associated with repair or replacement of existing line.
6. Installation of back-water valve if associated with replacement/repair costs to lateral.
7. Materials for work performed by property owner.

## **F. In-eligible Costs**

1. Labor if performed by property owner.
2. Installation of backwater valve or clean-out not associated with repair/replacement work on lateral.
3. Work performed without required permit(s).
4. Landscaping.

Eligible properties will be identified by information contained in the City's Building Permit tracking system and the City's automated map. Eligibility will be determined by the Public Works Director or his designee(s).

## **G. Requests To Receive Incentive Payment For Inspection Or Repair**

All requests for reimbursement shall be made to the Wastewater Collection System Superintendent. Incentive payment requests must be received by the City within 30 days of completion of the work.

1. Incentive payment request forms and all accompanying materials shall be mailed or hand delivered to one of the following locations:

Public Works Counter

630 Garden Street

Santa Barbara, CA 93101

Wastewater Collection System Project Coordinator

El Estero Wastewater Treatment Plant

520 East Yanonali Street

P.O. Box 1990

Santa Barbara, CA 93102-1990

2. Sewer Lateral Incentive Payment Request Forms may be hand delivered between the hours of 8:00 a.m. and 12:00 p.m. and 1:00 p.m. and 4:00 p.m. Monday through Friday.
3. Requests shall be made using the standard Sewer Lateral Incentive Payment Request Form (Exhibit F).
4. Proof of work completed shall include:
  - a. A copy of the inspection tape and inspection form (Exhibit A);
  - b. A copy of the invoice from a licensed plumber detailing the work performed and listing the cost of the work; and
  - c. A copy of the inspection form showing the work was completed in compliance with City codes.

The amount of money available for incentives, and the amount of the incentives, shall be set by City Council each year as part of the budget process. Incentive payments will be provided to eligible properties on a first-come, first-served basis as long as funds are available.



## H. Other Financial Assistance

Low interest loans may also be available to qualified owners for sewer repair. Please visit the City's housing program on-line at:

<http://www.santabarbaraca.gov/Resident/Home/Housing/preservation.htm>  
or phone the Affordable Housing Programs staff at (805) 564-5461.

## I. Permit Fees

Eligible properties (as described in paragraph B above) shall have the permit fees listed below waived:

### 1. Construction Permit.

A Sewer Line Permit issued by the Building Division typically runs about \$220.00. Eligible property owners will be provided with a transfer slip that will allow the Wastewater Fund to be charged for the amount of this fee.

### 2. Public Works Fees.

a. Public Works Trench Inspection Permits are required for work in the public right-of-way. The amount of this fee is currently \$279.50 (2006). Eligible property owners who are required to do repairs in the public right-of-way will be issued a form waiving this fee.

b. Public Works Tap - When replacement of the lower lateral and re-connection to the sewer main is required, the work will be completed by the City of Santa Barbara or a City contractor.

Normally the person undertaking the work reimburses the City for the cost of labor and materials to connect to the City's sewer. The fee for work performed at eligible properties will be waived. This fee is \$553.00 (2006).

## Appendix D - Sample deferred payment program: Pacific Grove, CA

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### CITY OF PACIFIC GROVE PRIVATE LATERAL SEWER REPLACEMENT PROGRAM SEWER LATERAL LOAN PROGRAM GUIDELINES

This program begins on \_\_\_\_\_. Loan funding is limited and is available on a first come first serve basis to qualified applicants. Loans are NOT available to those required to replace sewer laterals as a result of mandatory inspections pursuant to the City's municipal code, Chapter 9.20. Chapter 9.20 of the Pacific Grove Municipal Code is available for review at City Hall, the Pacific Grove Library, and on the internet at: [www.ci.pg.ca.us](http://www.ci.pg.ca.us)

#### A. APPLICATION BY PROPERTY OWNER

1. Fill out information on the attached application form.
2. If available, provide any history of problems with the sewer lateral line (if you have already obtained a written or video assessment of your lateral submit it with your application).
3. Return completed application to the Pacific Grove Community Development Department at City Hall, 300 Forest Avenue, Pacific Grove, California 93950.

#### B. CITY REVIEW PROCEDURE

The following procedure is to be followed when the city receives your application:

1. City will verify ownership of property.
2. Property owner will obtain a written or video assessment of their sewer lateral from a licensed plumbing contractor.
3. The completed assessment documentation and receipt should be submitted to the city for review as soon as possible. In most cases, the assessment will disclose whether there is a break in the sewer lateral line. The cost of the assessment inspection is eligible for reimbursement from the loan only if the property owner receives a city loan.
4. Upon review of the assessment, the city will determine eligibility for the Private Lateral Sewer Replacement Loan Program (PLSRLP) and notify the property owner of their eligibility status.
5. The property owner will then obtain at least two written estimates from plumbing contractors or drain layer licensed to perform such work and submit them to the city for review. City maintains a list of contractors with sufficient experience and qualification to perform such work. City cannot recommend any particular contractor. Bids for work shall be fixed bids, without allowance for extra costs.

### **C. LOAN PROCEDURE**

1. The city shall determine the loan amount and terms based on consideration of:  
The selected bid contractual amount  
Cost of lateral inspection  
Loan recordation fee  
Building and encroachment permit fees  
Availability of funding from City  
Prioritization of projects based on financial need and condition of lateral  
Other factors deemed appropriate by City staff to fully carry out the intent and purpose of the PSLRP.
2. The city shall provide the property owner with loan disclosure information.
3. Once the property owner has approved the disclosure, the city shall process the loan and prepare loan documents.
4. The property owner will sign the following:  
Loan Program Agreement  
Promissory Note  
Deed of Trust  
Disclosure Statement  
Rescission Notice
5. If after the 3-day rescission period the property owner does not rescind the loan, the Deed of Trust shall be recorded at the Monterey County Recorder's Office and the property owner will be given notice to have their contractor proceed with the work. All necessary city permits must be obtained prior to commencement of the work. The work shall not be backfilled until inspected and approved by City.
6. Once the work is completed and has received final inspections by the appropriate city departments, the contractor will be paid directly by the city and the property owner will be reimbursed for the video inspection of the sewer lateral (if applicable). City fees mentioned above will be deducted from the loan amount. If there are any funds remaining a loan reduction will be processed.

### **D. LOAN TERMS**

1. The maximum loan amount is \$10,000.
2. This loan program provides a deferred payment loan at 3% simple interest.
3. The loan including any interest is due and payable upon voluntary or involuntary transfer of title, contract to sell or transfer, or sale of the secured property, subordination of the city's loan, whichever is earlier.
4. There are no pre-payment penalties if you want to pay this loan off. No partial payments of monthly payments will be accepted.
5. Actual loan terms may vary from borrower to borrower depending on special circumstances.

## Appendix E - San Francisco Bay Regional policy

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### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

### SAN FRANCISCO BAY REGION

### RESOLUTION NO. R2-2005-0059

## In Support of Programs for Inspection and Rehabilitation of Private Sewer Laterals

The California Regional Water Quality Control Board, San Francisco Bay Region, finds as follows:

1. A private sewer lateral is that portion of the sanitary sewer line that connects a house or building's plumbing to the public sanitary sewer system. Such laterals can comprise up to fifty percent of the total linear sewer in a community.
2. Many homes in the San Francisco Bay Region were built before 1950 and have never had their original sewer laterals inspected. Over time, as these pipelines age, they may deteriorate and need inspection or rehabilitation.
3. Sewer laterals that are in poor condition or have illegal connections may allow entry of storm water and groundwater into the system. This additional water can cause surcharging of public sewers and overload pump stations and wastewater treatment facilities. These problems can result in a discharge from the sewer system to waters of the State including the San Francisco Bay.
4. Both the California Regional Water Quality Control Board, San Francisco Bay Region (Water Board), and the Bay Area Clean Water Agencies (BACWA) agree that the discharge from the sanitary sewer system to the environment, may, in some cases, pose localized human health and environmental risks.
5. In many local jurisdictions, the maintenance of the sewer lateral, up to and including the connection to the sewer main, is the responsibility of the private property owner, while the local jurisdiction is responsible for maintenance of the sewer main. Local efforts to minimize infiltration and inflow will not be fully effective so long as laterals that feed into them are deteriorated.
6. Some local agencies in the Region already have programs for the inspection and rehabilitation of private laterals, such as inspection at the time of property sale.
7. Local programs for inspection and rehabilitation of private laterals are a means of assuring that laterals are not a source of unreasonable amounts of inflow and infiltration or blockages.
8. The Water Board and BACWA have developed a sanitary sewer overflow control program for the Region which includes electronic reporting of sanitary sewer overflows and the preparation of a sewer system management plan development guide for collection system agencies in the Region.

9. Some local agencies may have significant amounts of private lateral infiltration and inflow that may be a contributing factor to sanitary sewer overflows. It is recognized that other agencies may not have these types of problems and there is considerable variation in the condition of laterals among agencies.

THEREFORE, BE IT RESOLVED that this Water Board supports and encourages local communities and sanitary sewer collection system agencies, especially those experiencing significant infiltration and inflow from private sewer laterals, to have a program that requires inspection and rehabilitation of private sewer laterals.

FURTHER, BE IT RESOLVED that this Water Board will consider the existence of such programs, especially in jurisdictions experiencing significant infiltration or inflow from private sewer laterals, as an important factor when considering enforcement actions for sewer system overflows.

I, Bruce H. Wolfe, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on October 19, 2005.

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Bruce H. Wolfe  
Executive Officer

## Appendix F - Sample Resident's Guide Book

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The following 4 pages contain a sample Resident's Guide Book to Private Sewer Laterals. It is intended to be printed double-sided, folded, then stapled in the middle.



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## Appendix G - Sample Bylaw: Full Text

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This sample bylaw was developed for Metro Vancouver municipalities as a component of this study.

**CITY OF \_\_\_\_\_**

**BYLAW NO. \_\_\_\_, 2009**

**FOR THE MAINTENANCE AND REPAIR OF PRIVATE SEWER LATERALS**

**WHEREAS** the Council of \_\_\_\_ is authorized to provide laws and services for the benefit of the community, and to provide for responsible stewardship and management of the public assets of the community;

**AND WHEREAS** Council has regulatory authority over sewers and drains and deems it in the public interest to regulate the maintenance, operation and function of private sewer laterals within the sanitary sewer system;

**AND WHEREAS** such regulation supports and advances regional objectives to improve the integrity and efficient operation and function of the sewer system, and to reduce and prevent sewage overflows caused by inflow and infiltration,

**NOW THEREFORE**, the Council of \_\_\_\_, in open meeting assembled, enacts as follows:

**PART 1**

**SHORT TITLE**

1. This bylaw may be cited for all purposes as the Private Sewer Lateral Maintenance Bylaw No. \_\_\_\_, 2009.

**DEFINITIONS**

2. The following definitions apply for the purposes of the bylaw:
  - (a) "Building Inspector" means the municipal officer assigned the responsibility of Chief Building Inspector or Building Inspector or his/her duly authorized designate or representative.
  - (b) "Bylaw Enforcement Officer" means the municipal officer(s) assigned the responsibility of bylaw compliance and/or enforcement or his/her duly authorized designate or representative.
  - (c) "Cleanout" means a device installed on a sewer lateral to provide access for the purposes of routine flushing, rodding, cleaning and other maintenance, inspection and diagnostic purposes.
  - (d) "Combined Sewer" means a sewer or portion thereof designed to function simultaneously as a storm sewer and as a sanitary sewer and its appurtenances.
  - (e) "Council" means the Council of the \_\_\_\_ of \_\_\_\_.
  - (f) "Director of Engineering" means the municipal officer assigned the responsibility of Chief Engineer, Municipal Engineer or City Engineer or his/her duly authorized designate or



representative. The Director of Engineering may delegate some or all of his/her powers and duties under this bylaw.

- (g) “Financial Officer” means the municipal officer assigned the responsibility of financial administration, or his/her duly authorized designate or representative.
- (h) “Infiltration” means Non-Sanitary Water Flow that enters a sanitary sewer system from such means as, but not limited to, defective, cracked or faulty pipes, pipe joints, connections or manhole walls. Infiltration does not include, and is distinguished from, Inflow.
- (i) “Inflow” means Non-Sanitary Water Flow that enters a sanitary sewer system from connections that include, but are not limited to, roof leaders, surface, foundation or other drains, manhole covers, and cross connections with storm or combined sewers.
- (j) “Licenced Plumber” means a plumber who has received accreditation in that trade pursuant to the Interprovincial Standards (Red Seal) Program.
- (k) “Owner” means the registered owner of a real property estate in fee simple.
- (l) “Non-Sanitary Water Flow” means a flow of water that has not been polluted by Sanitary Waste, and includes but is not limited to rainwater, stormwater, groundwater, roof and parking lot runoff.
- (m) “Plumbing Fixture” means any toilet, urinal, wash basin, sink, bath tub, shower, or other plumbing apparatus on private property that connects to the Sanitary Sewer Main via a Private Sewer Lateral and/or Sewer Service Pipe.
- (n) “Private Sewer Lateral” means the privately owned underground pipe connecting a building to the sewer service pipe at the property line.
- (o) “Sanitary Sewer Main” means publicly owned sewer pipe that is located on public property and to which the Private Sewer Lateral is directly connected or connected via a Sewer Service Pipe.
- (p) “Sanitary Waste” means waste and waste water from plumbing fixtures on residential and non-residential property.
- (q) “Sewer Service Pipe” means publicly owned pipe and fittings connecting a property, at or near the private property line, to the Sanitary Sewer Main.
- (r) “Sewer Lateral Certificate” means a certificate issued by the Director of Engineering evidencing the property’s compliance with the bylaw.

#### **APPLICATION**

- 3. This bylaw applies to all properties that receive water or wastewater service from the City of \_\_\_\_.
- 4. This bylaw comes into force and takes effect on the date of its adoption.

## NOTICE

5. For the purposes of this bylaw, any notice delivered to an Owner by mail is deemed to be received on the same day of the week, in the calendar week following mailing, as the day of the week on which the document was mailed or, if that day is a Saturday or holiday, on the next day that is not a Saturday or holiday.

## PART 2

### REQUIRED MAINTENANCE STANDARD

6. An Owner of real property containing a Private Sewer Lateral shall at the Owner's expense maintain the Private Sewer Lateral to the required maintenance standard.
7. The required maintenance standard for a Private Sewer Lateral is:
  - (a) The Private Sewer Lateral shall be clear of all obstructions (including roots, grease deposits, debris and other solids) which may impede the flow or obstruct the transmission of waste;
  - (b) The Private Sewer Lateral shall be free of any structural defects (including cracks, breaks, openings, rodent holes or missing portions), which may allow the introduction of extraneous flow or debris into the sanitary sewer system or allow the discharge of sewage onto the property, and the lateral shall be uniform and without sags;
  - (c) *[\*\*optional]* The Private Sewer Lateral shall have cleanouts installed in accordance with sections 10 through 12 that permit cleaning of the entire lateral. All cleanouts shall be securely sealed with a proper cap at all times.
  - (d) All Non-Sanitary Water Flows or connections shall be disconnected from the Private Sewer Lateral and shall be re-routed or connected in accordance with the City's standards for Non-Sanitary Water Flows.
8. An Owner is responsible for maintaining the Private Sewer Lateral from the private property line to the building.
9. The City is responsible for maintaining the Sewer Service Pipe at the City's expense. If flushing or rodding of a Private Sewer Lateral is required to remove an obstruction caused solely by a structural defect in the Sewer Service Pipe, the City shall be solely responsible for the cost of removing the obstruction.

### CLEANOUTS REQUIRED *[\*\*optional]*

10. Each Private Sewer Lateral shall have a standard two-way cleanout located in the City right-of-way or easement.
11. Each Private Sewer Lateral shall also have a privately maintained cleanout installed in accordance with the Division B, Part 7 of the *BC Building Code*.

12. Installation of cleanouts under this Part may be undertaken at any time with applicable permits, but shall not be required until a Sewer Lateral Certificate is required pursuant to any of Parts 3 or 4 of the bylaw.

#### **UNAUTHORIZED DISCHARGES OR CONNECTIONS**

13. No person shall discharge or permit to be discharged anything other than Sanitary Waste into the public sewer.

#### **ENTRY AND TESTING BY CITY**

14. The Director of Engineering may periodically perform tests or inspections to confirm the integrity and proper function of the sanitary sewer system. Testing and inspection methodology may include smoke testing, dyed water testing, air testing, hydraulic testing, closed circuit television inspection, and other testing or inspection techniques approved by the Director of Engineering.
15. The Director of Engineering may at reasonable times and on giving reasonable notice to the Owner [*\*\*council may wish to define this as 24 hours written notice*], enter upon any property for the purposes of ascertaining whether the regulations of this bylaw are being observed.
16. The Director of Engineering may reasonably shorten the notice period for entry if the Director of Engineering is,
- (a) Conducting an investigation in response to a complaint, or if
  - (b) Sewage is exposed on the property in a manner that creates a potential health hazard.
17. It is an offence under this bylaw to obstruct entry, tests or inspections by the Director of Engineering.

### **PART 3**

#### **CERTIFICATE REQUIRED - IDENTIFIED DEFECT**

18. The Director of Engineering may provide the Owner with written notice of a defect identified in a Private Sewer Lateral as a result of testing or inspection conducted by the City.
19. Subject to section 20, an Owner in receipt of a written notice of a defect shall within 120 days of receipt of the notice obtain a Sewer Lateral Certificate in accordance with Part 4.
20. If the identified defect is such that sewage is exposed on the property or there is a potential health hazard, an Owner must:
- (a) Stop the discharge immediately;
  - (b) Remediate the site not later than 24 hours after the Owner has notice of the exposed sewage; and

- (c) Within 14 days of receipt of the notice obtain a Sewer Lateral Certificate in accordance with Part 4.

**CERTIFICATE REQUIRED – CONSTRUCTION, RENOVATION OR NEW CONNECTION**

21. Subject to section 22, an Owner shall completely replace the existing Private Sewer Lateral with a new Private Sewer Lateral and obtain a Sewer Lateral Certificate in accordance with Part 4 whenever:
- (a) A new house or building is constructed on the property;
  - (b) An existing house or building that is not already connected to a Private Sewer Lateral requires a connection to the sewer system; or
  - (c) An existing house or building is renovated and the estimated construction value is more than:
    - i) 100% of the latest building assessment (from the BC Assessment Authority), or
    - ii) \$95,000and the work involves:
    - iii) Extensive excavation work,
    - iv) Enlargement of the plumbing system by adding two or more fixtures,
    - v) An increase in the number of bedrooms, or
    - vi) A resulting increased demand upon the existing sewer system after renovations are complete.<sup>7</sup>
22. If the existing Private Sewer Lateral was built less than 20 years prior, is not a Combined Sewer and meets the approval of the Director of Engineering, an Owner conducting construction or renovation work described in section 21 shall obtain a Sewer Lateral Certificate in accordance with Part 4.
23. The City may refuse to issue a building or occupancy permit to any Owner who fails to comply with this Part.

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<sup>7</sup> This section, with the exception of sub-sections (b) and (c)(ii), emulates the City of Vancouver's *Sewer and Watercourse Bylaw No. 8093*, section 2.2. We added section 21(b) to address Ecodensity-driven laneway apartments that may get added to existing carriage-house buildings; and in section 21(c)(ii) we *removed* the clause "whichever is the greater" which followed "\$95,000", as this clause appears to be redundant.

**CERTIFICATE REQUIRED - COMMERCIAL, STRATA AND MULTI-FAMILY DWELLINGS**

24. Owners of commercial or industrial use properties, strata, or multi-unit dwellings having four or more units shall obtain a Sewer Lateral Certificate in accordance with Part 4 by December 31, 2011 and every ten years thereafter.
25. The Director of Engineering shall identify the addresses of all such properties, using data available from the City's property files, and shall send Owners reasonable notice of their obligation to comply with the bylaw.
26. Any failure by the City to provide the notice described in section 25 does not relieve an Owner of his/her obligation to comply with the bylaw.

**CERTIFICATE REQUIRED – PROGRAM NOTICE FROM THE CITY**

27. This Part comes into force and effect on January 1, 2015.
28. The Director of Engineering may establish a program requiring Owners of real property in neighbourhoods identified by the Director of Engineering to obtain Sewer Lateral Certificates. The purpose of the program will be to proactively reduce Infiltration and Inflow on a neighbourhood priority basis.
29. Further to such a program, the Director of Engineering may deliver to an Owner a notice [Notice of a Program Requiring a Sewer Lateral Certificate] requiring the Owner to obtain a Sewer Lateral Certificate in accordance with Part 4.
30. An Owner who receives a Notice of a Program Requiring a Sewer Lateral Certificate shall within 120 days of receipt of the Notice obtain a Sewer Lateral Certificate in accordance with Part 4.

**CERTIFICATE REQUIRED - CHANGE OF OWNERSHIP OF RESIDENCE**

31. This Part comes into force and effect on January 1, 2015.
32. This Part applies only to residential use real property containing three or fewer dwelling units.
33. Prior to a Change of Ownership, or within 120 days after a change of name associated with a Change of Ownership is entered in the City's property tax records, an Owner shall obtain a Sewer Lateral Certificate in accordance with Part 4.
34. On becoming aware of any inquiry, information or evidence that suggests a Change of Ownership may be imminent or may have already occurred, the Director of Engineering shall deliver a notice to an Owner advising the Owner of his/her requirement under this Part to obtain a Sewer Lateral Certificate in accordance with Part 4.
35. Any failure on the part of the Director of Engineering to provide a notice pursuant to section 34 does not relieve an existing Owner or a new Owner of the obligation to obtain a Sewer Lateral Certificate.
36. For the purposes of this Part a Change of Ownership means either:

- (a) The property is sold outright pursuant to an “arm’s length agreement”, or
- (b) The property is inherited by someone other than a surviving spouse, who is neither a resident of the property, nor on title.

37. A Change of Ownership is deemed not to have occurred if one of the following criteria applies:

- (a) The Owner on title prior to \*\*[date] remains a resident of the property and there is addition or deletion of a spouse or tenant in common, or
- (b) The Owner on title prior to \*\*[date] dies and leaves his/her estate to another individual who is already on title and a resident of the property, or
- (c) The Owner on title prior to \*\*[date] dies and leaves his/her estate to a surviving spouse, or
- (d) The Owner on title prior to \*\*[date] dies and leaves his/her estate to a son(s) and/or daughter(s) as evidenced by a copy of the probate, will or other documentation deemed reasonable by the Financial Officer or his/her designate, and the beneficiary will reside in the home.

38. An Owner is responsible for disclosing to a prospective new Owner the requirements of this bylaw and the compliance status of the real property in question. Upon a Change of Ownership, the new Owner will be responsible for compliance with this Part, regardless of any disclosure or failure to disclose on the part of the prior Owner.

## PART 4

### PRIVATE SEWER LATERAL – QUALIFIED INSPECTION PROCEDURE

39. An Owner subject to Part 4 is required to obtain a Sewer Lateral Certificate for the property.

40. Unless an Owner is able to produce the evidence described in section 46(c)(ii)[*sewer lateral less than 20 years old or significant repairs within last 10 years*], the Owner must , in accordance with sections 41 through 45 of this Part, first complete an inspection and any necessary repairs and post-repair inspection by a Qualified Inspector.

41. For the purposes of this Part:

- (a) “Qualified Inspector” means a Licensed Plumber who has received a Certificate of Qualification to Inspect Private Sewer Laterals following his/her attendance at a training program authorized for that purpose by the City.
- (b) “Inspection Report” means a report in a form prescribed by the Director of Engineering [*\*\*together with the training program, this gives the Director the power to require reporting further to the use of a stipulated inspection/testing technology such as CCTV or television inspection*], detailing the results of all inspection, repair work and post-repair inspection on the

Private Sewer Lateral, and duly signed by the Qualified Inspector who conducted the inspection and repair work.

42. An Owner subject to this Part shall at his/her own expense arrange to have the Private Sewer Lateral inspected by a Qualified Inspector in accordance with testing procedures prescribed by the Director of Engineering. The Owner shall provide the Director of Engineering with 48 hours written notice of the date and time any inspection or post-repair inspection will take place.

#### **SEWER LATERAL WORK – PERMIT REQUIREMENT**

43. If an Inspection Report or a notice of defect delivered by the Director of Engineering reveals a defect in a Private Sewer Lateral, an Owner shall at his/her own expense repair and/or replace the Private Sewer Lateral as necessary to meet the required maintenance standard described in Part 2.
44. An Owner shall first obtain from the City Engineering or Building Department a permit to conduct the repair or replacement work.
45. An Owner who has inspected, repaired or replaced a defective Private Sewer Lateral in compliance with Part 4 shall obtain from the Qualified Inspector an Inspection Report to be filed with the City as proof of compliance.

#### **SEWER LATERAL CERTIFICATE**

46. The Director of Engineering may issue a Sewer Lateral Certificate to an Owner who provides to the Director of Engineering:
- (a) An Application for Sewer Lateral Certificate in the prescribed form;
  - (b) The required fee; and
  - (c) Either of:
    - i) an Inspection Report, duly signed by the Qualified Inspector who performed the inspection and any repair work in accordance with sections 41 through 45 of this Part, and acceptable to the Director of Engineering; or
    - ii) records of a permit or evidence acceptable to the Director of Engineering, sufficient to prove that the Private Sewer Lateral on the property
      - (1) was installed less than 20 years before the date of the application, or
      - (2) sustained significant repairs less than 10 years before the date of the application. For the purposes of this section, “significant repairs” means repairs that the Director of Engineering at his/her sole discretion deems sufficient to reasonably expect the proper functioning of the Private Sewer Lateral for a period of 10 years after issuance of a Certificate.

47. The Director of Engineering must consider the Inspection Report or other records or evidence pursuant to section 46(c)(ii) and if the Director finds them to be satisfactory evidence of the Owner's compliance, shall issue a Sewer Lateral Certificate.
48. In the event that the Director of Engineer finds the Inspection Report or other records or evidence to not be satisfactory, the Director of Engineering may require City staff to perform an inspection to verify the Private Sewer Lateral's compliance with the required maintenance standard and may require the Owner to carry out repairs or replacement work to bring the Private Sewer Lateral into compliance with the required maintenance standard.
49. The Director of Engineering may waive the requirement for an Owner to effect a repair or replacement to a Private Sewer Lateral if he or she determines that compliance is not feasible.
50. A Sewer Lateral Certificate is effective for the following periods of time:
- (a) A period of 10 years after:
    - i) Acceptance by the Director of Engineering of an Inspection Report, if no repairs were required;
    - ii) Acceptance by the Director of Engineering of an Inspection Report, records or evidence pursuant to section 46(c) in respect of completed alterations (partial repairs) to a Private Sewer Lateral or a connection to a lateral;
    - iii) Acceptance by the Director of Engineering of an Inspection Report in respect of completed repairs to a lateral or cleanout ordered by the Director of Engineering.
  - (b) A period of 20 years after acceptance by the Director of Engineering of an Inspection Report in respect of replacement of the Private Sewer Lateral.

## **PART 5**

### **FEES**

51. The Director of Engineering is authorized to establish and collect fees in respect of:
- (a) Issuance of a permit to conduct work involving repairs and/or replacement of a Private Sewer Lateral;
  - (b) Inspection or re-inspection of a Private Sewer Lateral by City staff;
  - (c) Issuance of a Sewer Lateral Certificate; and
  - (d) Recovery of costs in respect of any other administrative process required to implement this bylaw.



**FINANCIAL ASSISTANCE** [*\*\*N.B. to provide this kind of assistance (lending money) the municipality would need to comply with the notice requirements of the Community Charter, section 24*]

52. The City is hereby authorized to establish a Private Sewer Lateral financial assistance program in the nature of a no-interest loan program, to assist Owners with the costs of repairing or replacing a defective Private Sewer Lateral.
53. Loans may not be granted unless the Owner signs an agreement that includes the Owner's agreement:
- (a) To repay the loan plus the lien registration costs in full, by way of five equal annual installments collected as property taxes;
  - (b) That the loan principal will be secured by a lien registered against the property's title in the Land Title Office;
  - (c) That upon any Change in Ownership of the property, the full balance of the loan will become immediately due and payable to the City and if unpaid, due and collectable as property taxes in arrears.
54. An Owner may apply for assistance from the program by filing an application with the Director of Engineering in the form prescribed by the Director of Engineering.
55. Eligibility for financial assistance will be determined by the Director of Engineering on the basis of financial inability to pay for required repairs.
56. If an Owner complies with the application requirements, the \_\_Director of Engineering may authorize the Owner to receive financial assistance under the program.

**AND/OR**

**MONETARY INCENTIVE FOR VOLUNTARY INSPECTION AND REPAIRS**

57. This Part will remain in force only until September 30, 2014.
58. The City is authorized to offer to Owners a monetary incentive as provided in this Part to encourage eligible Owners to voluntarily comply with the required maintenance standard for Private Sewer Laterals, and to help to offset the cost of inspection and repairs ("Monetary Incentive"). The Monetary Incentive is not available in respect of work performed after September 30, 2014.
59. The City is not required to offer or continue the Monetary Incentive, except as authorized by Council. This incentive is subject to the budgetary limitations as may be established by Council from time to time.
60. Council may grant a Monetary Incentive under this Part only in respect of properties that meet all of the following criteria:

- (a) The Private Sewer Lateral was installed more than 20 years prior to the date of the application for the Monetary Incentive;
  - (b) The property is not subject to any of the requirements set out in Parts 3 and 4 of this bylaw;
  - (c) The property is a residential use property and contains three or fewer residential units.
  - (d) The Owner has voluntarily obtained a Sewer Lateral Certificate in respect of the property, issued not more than 60 days before the date of the application.
61. Monetary Incentives granted to reimburse Owners under this Part will be limited to a maximum amount of \$1000.00 Canadian or 25 per cent of the Eligible Repair Costs, whichever is less.
62. Eligible Repair Costs are defined for the purposes of this Part as:
- (a) the costs of Private Sewer Lateral inspection and testing,
  - (b) costs for pipe or other pipe repair material, and/or
  - (c) costs of excavation or burial of pipe in the soil.
  - (d) All other costs, including but not limited to landscape repairs, sidewalk repairs, driveway repairs, the cost of the Owner's own labour or other incidental costs are ineligible.
63. An Owner must apply for a Monetary Incentive within 60 days of receiving a Sewer Lateral Certificate in respect of the property. To apply, an Owner must submit to the Director of Engineering:
- (a) an application in the form prescribed by the Director of Engineering;
  - (b) a copy of the Sewer Lateral Certificate that was issued no more than 60 days before the date of the application for the Monetary Incentive; and
  - (c) a copy of the Qualified Inspector's invoice, detailing the work performed on the property and listing the cost of the work.

## PART 6

### FAILURE TO COMPLY – OFFENCE AND PENALTIES

64. The Director of Engineering, the Superintendent of Public Works, the Chief Building Inspector, or the Bylaw Enforcement Officer are authorized to enforce the provisions of this bylaw.
65. On becoming aware of an Owner's non-compliance with this bylaw, an authorized enforcement officer may deliver a Notice of Non-Compliance to the Owner advising him/her of the failure to comply and the obligation to comply with the bylaw.

66. Owners shall comply with the bylaw within 30 days of issuance of a Notice of Non-Compliance, or be liable to enforcement action.
67. The Director of Engineering may at his/her discretion extend the time period for compliance.
68. A person who violates or contravenes a provision of this bylaw or who consents, allows or permits any act or thing that violates or contravenes a provision of this bylaw, or who neglects or refrains from doing anything required to be done by this bylaw, commits an offence.
69. A prosecution under this bylaw may be commenced by:
- (a) proceedings under Division 3 of Part 8, of the *Community Charter [ticketing for bylaw offence]*;
  - or
  - (b) prosecution of the offence in accordance with the *Offence Act*.
70. If a prosecution is commenced pursuant to section 74(a), upon summary conviction the offender shall be liable to a maximum fine of \$1000.
71. If a prosecution is commenced pursuant to section 74(b), upon summary conviction the offender shall be liable to a maximum fine of \$10,000, or imprisonment for 6 months, or both. [*\*\*NB The Offence Act default is to provide for a maximum fine of \$2000 or imprisonment for 6 months, or both OR municipalities can specifically provide for a fine in an enactment, in accordance with the Community Charter*].
72. Each day that a violation occurs or continues constitutes a separate offence.
73. In addition to prosecution of the offence, the City may pursue any and all bylaw enforcement or remedial authority available to it pursuant to the *Local Government Act* or *Community Charter [\*\*Vancouver Charter]*. Without limiting that authority, such authority includes the right of the City to pursue any or all of the following enforcement or remedial measures:
- (a) Following non-compliance with the bylaw and on providing the Owner with 30 days written notice, the City may discontinue the service of water supply to the property [*\*\*N.B. The municipality would need to modify the terms of its water service to include the need to comply with this bylaw – see section 18 of the Community Charter*];
  - (b) A civil proceeding in the BC Supreme Court;
  - (c) Reimbursement for the costs of municipal action pursuant to section 17 of the *Community Charter*. Costs incurred by the City to effect repairs required to bring a defaulting Owner's Private Sewer Lateral into compliance with the bylaw will be a debt of the Owner owed to the City [*\*\*optional\*\* and will bear interest at the prime rate of the Bank of Canada plus 2 per cent*]. This debt will be due and payable 30 days after the date on which the expenses were incurred and if unpaid on the due date will be deemed taxes in arrears and may be so entered on the tax roll by the collector. Debts due may be recovered as a lien against the property.

74. Any financial assistance or monetary incentive provided to an Owner by the City, or any repair and/or replacement of a defaulting Owner's Private Sewer Lateral by the City pursuant to section 17 of the *Community Charter*, are at the sole risk and cost of the Owner only. The City assumes no liability for providing financial assistance or a monetary incentive, or for effecting repair or replacement work and shall be immune from any claim by the Owner or any other person that as a result of providing the financial assistance or monetary incentive or effecting the repair or replacement, the City:

- (a) holds any interest in the Private Sewer Lateral,
- (b) bears any liability whatsoever in respect of the Private Sewer Lateral or arising from the work that was effected or financially assisted by the City, or
- (c) has any continuing duty to effect or finance maintenance or repairs to the Private Sewer Lateral.

## PART 7

### MUNICIPAL REPORTING AND REVIEW

75. The Director of Engineering shall gather data and deliver to Council an annual report summarizing the actions that have resulted from the adoption of the bylaw, assessing the effectiveness of those actions, and making recommendations on any other priority actions needed to address Private Sewer Lateral maintenance.

76. Council shall review the need to make amendments to this bylaw by December 31, 2015.

### SEVERABILITY

77. In the event any provision, or part thereof, of this bylaw is found by a court of competent jurisdiction to be invalid, such provision or part thereof shall be determined to be severed and such decision shall not affect the validity of the remaining provisions of this bylaw, which shall remain in full force and effect.

**READ A FIRST TIME** this \_\_ day of \_\_\_\_\_, 2009.

**READ A SECOND TIME** this \_\_ day of \_\_\_\_\_, 2009.

**READ A THIRD TIME** and passed by the Council this \_\_ day of \_\_\_\_\_, 2009.

\_\_\_\_\_  
**MAYOR**

\_\_\_\_\_  
**CITY CLERK**