



## ADMINISTRATIVE REPORT

Report Date: January 26, 2018  
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Meeting Date: February 21, 2018

TO: Standing Committee on Policy and Strategic Priorities

FROM: General Manager of Real Estate and Facilities Management in consultation with the General Managers of Engineering Services, Parks Board and Planning, Urban Design and Sustainability

SUBJECT: False Creek Water Quality Improvement Initiative: Update and Recommended Next Steps

### RECOMMENDATION

- A. THAT Council direct the General Manager of Real Estate and Facilities Management to extend the pilot mobile sewage pump-out service in False Creek for the 2018 boating season, and report back on the success and findings of the project.
- B. THAT Council support proposed changes to the *Health By-law* to strengthen requirements for the provision and use of sanitary pump-out facilities at marinas, and direct the Director of Legal Services to bring forward for enactment the amendments generally set out in Appendix 1.
- C. THAT Council support proposed changes to the *Ticket Offences By-law* to enable the City to issue tickets for offences under the *Health By-law*, and direct the Director of Legal Services to bring forward for enactment the amendments generally set out in Appendix 2.
- D. THAT Council support proposed changes to the *License By-law* to remove parallel provisions regarding marina operations, and direct the Director of Legal Services to bring forward for enactment the amendments generally set out in Appendix 3.

## *REPORT SUMMARY*

The purpose of this report is to respond to Council resolutions pertaining to marine water quality improvements and provide Council with an update on the suite of key initiatives underway to improve water quality in False Creek.

## *COUNCIL AUTHORITY/PREVIOUS DECISIONS*

On May 2, 2017, Council adopted<sup>1</sup> the following recommendations:

- A. THAT Council direct the General Manager of Real Estate and Facilities Management to further consult with marina and boat operators on approaches to improve water quality protection.
- B. THAT Council direct the General Manager of Real Estate and Facilities Management to conduct a pilot project in summer 2017 for mobile sewage pump-out services in False Creek and report back on the success and findings of the pilot project.
- C. THAT Council direct the General Manager of Real Estate and Facilities Management to retain a service provider to support audit operations.
- D. THAT Council support proposed amendments to the Vancouver Building By-Law (VBBL) to strengthen requirements for the provision and use of sanitary pump-out facilities at marinas, and direct the Director of Legal Services to bring forward for enactment the amendments generally as set out in Appendix A of the Administrative Report dated February 6, 2017, entitled “Update on Protecting Vancouver’s Recreational Water Quality”.
- E. THAT Council support proposed amendments to the Health By-law to reinstate previous requirements related to water quality protection, and direct the Director of Legal Services to bring forward for enactment the amendments generally as set out in Appendix B of the Administrative Report dated February 6, 2017, entitled “Update on Protecting Vancouver’s Recreational Water Quality”.
- F. THAT Council support proposed enhancements for the enforcement of sewage management regulations.

This report responds to the above resolutions.

In addition to the above resolutions, on May 30, 2017, Council passed the following resolution establishing the Waterfront Initiative:<sup>2</sup>

THEREFORE BE IT RESOLVED THAT the City of Vancouver establish a Waterfront Initiative for major natural waterways including the Burrard Inlet, False Creek, Lost Lagoon, the Fraser River and Trout Lake that engages First Nations,

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<sup>1</sup> <http://council.vancouver.ca/20170502/documents/regu20170502min.pdf>

<sup>2</sup> <http://council.vancouver.ca/20170530/documents/motionb1.pdf>

industry, senior levels of government and adjacent municipalities, and the community to support three goals:

1. A Thriving Working Waterfront
2. Safe, Accessible Waterfront Recreation
3. Restoring Aquatic and Riparian Ecology and Traditional First Nation's Food Sources

AND BE IT FURTHER RESOLVED THAT, as a first step, the Waterfront Initiative focus on establishing and implementing a series of Quick Starts including those focused on measures to make high use waterways in Trout Lake and False Creek safely accessible by swimmers in advance of Summer 2018.

On July 25, 2017, Council adopted the following additional resolutions:<sup>3</sup>

- A. THAT Council direct staff to complete a hydraulic model and water quality performance model of the False Creek basin to better understand the complex nature of the basin and opportunities for water quality improvement.
- B. THAT Council direct staff to explore a floating swimming pool in False Creek.
- C. THAT Council direct staff to explore a swimming beach at North East False Creek park in the current design process.

#### *CITY MANAGER'S/GENERAL MANAGER'S COMMENTS*

The City Manager and General Manager of Real Estate and Facilities Management support the recommendations of this report as they respond to Council direction and continue to support actions to improve Vancouver's marine water quality for the use and enjoyment of the community, and for ecological health.

#### *REPORT*

##### *Background/Context*

City Council and the Park Board have been advancing efforts for some time to improve water quality in marine waters surrounding Vancouver. Highlights of efforts include:

- Continuing sewer separation in the catchments that discharge into False Creek.
- Investigating and remedying sewer system issues, including the cross-connection of sanitary and storm service pipes.
- Launching the City's Green Infrastructure Rain City Strategy to advance sustainable urban rainwater management.
- Providing publicly available stationary pump-out facilities at both civic marinas in False Creek.
- Delivering the "Pump Don't Dump" public education campaigns.

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<sup>3</sup> <http://council.vancouver.ca/20170725/documents/a5.pdf>

- Convening and leading the False Creek Water Quality Working Group (FCWQWG) to foster interagency learning and support coordinated efforts among federal, provincial, regional, and local governments.

With ‘Clean Water’ and ‘Access to Nature’ being key components of Vancouver’s *Greenest City Action Plan*, Council has provided direction for further targeted actions and, in 2017, established the Waterfront Initiative.

Improving water quality in False Creek is a focus area under the Waterfront Initiative. Various departments, including Real Estate and Facilities Management, Engineering Services, and Parks Board have and continue to be involved in advancing efforts to improve water quality in False Creek.

To support a coordinated and comprehensive approach that considers the suite of actions being advanced across the City, an interdepartmental action framework – the False Creek Water Quality Improvement Initiative (FCWQII) – has been developed (see Appendix 4). This framework organizes the key action initiatives being advanced throughout the various departments according to five priority action areas:

1. Partnerships and Interagency Coordination
2. Strategic Planning
3. Research and Assessment
4. Source Control
5. Ecosystem Health Improvement

The framework endeavours to capture all key actions pertaining to False Creek water quality improvement, including those arising from Council resolutions from the May 2, 2017 meeting which are the subject of this report.

Recognizing that water quality improvement in False Creek is a long-term, multi-department endeavour, it is envisioned that the FCWQII framework will serve as an organizing tool to support the City in advancing actions in a systematic and coordinated manner over time. In this respect, the framework is intended to be a living tool that evolves as priorities and action initiatives develop and change. Moreover, by having one centralized place that captures all of the key initiatives pertaining to False Creek water quality improvement, it will be easier to track progress and to consider individual initiatives and new opportunities in the context of actions already underway. How the actions arising from the May 2, 2017 resolutions (the subject of this report) fit with the overall suite of initiatives being advanced to improve False Creek water quality is highlighted in the FCWQII framework.

## *Strategic Analysis*

### 1. Progress Overview

The May 2, 2017 resolutions arose as a result of previous assessment work that identified improper sewage disposal from boats as a source of pollution in False Creek. While regulating sewage disposal from boats is primarily a federal responsibility, the City is seeking to support improved sewage management by boaters through its available tools. Key focus areas to date include education and engagement, and

strengthened bylaws and enforcement of activities at marinas. In 2017, the City also piloted a mobile pump-out service for boaters.

A summary of the progress made in fulfilling the Council resolutions from the May 2, 2017 meeting, along with recommended next steps, is provided in the following table. Details, including rationale for the recommended next steps, are provided in the following section.

Council Resolution	Status	Recommended Next Steps
A. Further consult with marina and boat operators on approaches to improve water quality.	Complete	No further formal consultation recommended. Staff to continue engagement as part of regular activities.
B. Conduct pilot project in summer 2017 for mobile sewage pump-out service and report back on success and findings.	Complete	Recommend that mobile service pilot be extended to encompass 2018 boating season.
C. Retain a service provider to support audit operations.	Complete	No further action recommended at this time.
D. Make amendments to strengthen requirements for provision and use of pump-out facilities at marinas.	In Progress	Recommend Council endorse amendments proposed in this report and that staff bring forward for enactment.
E. Make amendments to <i>Health By-law</i> to reinstate previous requirements related to water quality protection.	Complete	Previous requirements have been reinstated. Recommend Council endorse additional proposed amendments to broaden prohibition to include all potential polluting substances.
F. Enhance enforcement of sewage management regulations.	In Progress	Staff to continue greater presence at marinas and recommend Council endorse proposed amendments to enable ticketing for specific bylaw offences.

## 2. Progress Details

### Audits

Audits, consisting of underwater visual inspections using dive surveys, were conducted at all major marinas in False Creek during the summer in 2017. The audits found evidence of sewage over extensive areas of the seabed under some marinas, consistent with previous assessment work that identified the need for better sewage management by boaters. The audits in 2017 will serve as a means for the City to evaluate progress over time. Staff recommend that audits be considered again at a later date, once other actions being advanced have time to take effect.

### Mobile Pump-out Boat Pilot

In accordance with Council direction, the City launched a pilot mobile pump-out service in False Creek in the summer of 2017. The no-cost service ran from August 11 to October 14, 2017 and targeted recreational and live-aboard boaters in False Creek. The service was available 6 hours per day, 4 days a week. The pump-out boat serviced 169 vessels, resulting in a total volume of 20,000 L being pumped.

While it is difficult to predict the fate of this sewage in the absence of the service, user feedback suggests that the pump-out boat service may have prevented the discharge into local marine waters of between one third and one half of this volume. Further details on the service provided are attached in Appendix 5.

A full 100% of surveyed users of the service indicated they were satisfied with the service and recommended that it be provided again. Boaters provided feedback that the mobile service was a convenient option, particularly for those who have challenges using existing pump-out facilities. For example, it was able to service vessels that are too large to access pump-out berths, live-aboard and anchored vessels that are unable to travel to pump-out stations, as well as boaters who have difficulty using pump-out equipment. It was further reported that the presence of the pump-out boat on the water served to increase general awareness of marine water quality issues and the importance of proper boater sewage management. Further details on the feedback received from boaters who used the mobile pump-out service, including specific comments, is provided in Appendix 6.

There was also strong support for continuing the mobile pump-out services from marina operators in False Creek with 92% of surveyed marina operators responding in favour of the service (with the remaining 8% responding that they were unsure). Further detail on feedback received from marinas is provided in Appendix 7.

Based on the success of the 2017 pilot period, staff recommend that the City proceed with extending the pilot to cover the 2018 boating season. A second year pilot would mean that the City could evaluate effectiveness of the service over the entire core boating season (e.g., May - August). A second pilot year would also leverage investment made to date in engagement and enable the City to better evaluate service efficacy based on a more normalized awareness of the service. The cost of the program would be \$75,000 and would be funded through existing budgets.

### Additional Consultation

In addition to soliciting input on the mobile pump-out service from users and marinas, further input was also sought from 20 Vancouver marinas on transition timelines to support meeting the proposed requirement to have a pump-out facility as well as suggestions that marinas have for improving water quality in False Creek.

Findings from the marina survey include:

- Most marinas (90%) reported already having pump-out facilities.
- Many marinas provided feedback that they supported mandatory pump-out facilities.

- Marinas currently without pump-out facilities expressed concern about the potential cost of new infrastructure, but generally favour a transition period of six months to one year to meet the new requirement.
- In addition to renewing the mobile pump-out service, marina operators also identified the following five approaches as being most effective for improving marine water quality in Vancouver:
  - Continue to reduce sewer system overflows into marine waters (82%)
  - Increase public engagement for boaters and other water users (71%)
  - Enhance shorelines and use ecological processes to remove pollution (71%)
  - Strengthen regulations and increase enforcement (65%)
  - Use green infrastructure to reduce stormwater pollutants (65%)

Further details on input received from marinas, including examples of individual marina operator comments, are included in Appendix 7.

### Bylaw Amendments and Enforcement

The City's enforcement efforts are being directed at marinas as they are within the City's jurisdiction, provide moorage for approximately 2,800 vessels, are stationary and easily accessible, and provide an opportunity to increase awareness across the boating community. Amendments were brought forward to reinstate previous marina requirements in the *Health By-law* related to the management of sewage, oil, and garbage. These amendments were enacted by Council on May 16, 2017 (*By-Law No. 11788 - A By-law to amend Health By-law No. 9535 regarding marinas*<sup>4</sup>).

On May 2, 2017, Council endorsed further bylaw amendments to fulfill the objective of requiring all marinas to provide pump-out facilities. Initially it was proposed that this provision be incorporated into the *Vancouver Building By-Law (VBBL)*. Upon further review, it is recommended that the requirement to provide pump-out facilities be incorporated into the *Health By-law* rather than the *VBBL*. Adding the provision to the *Health By-law* enables the City to have the requirement apply to both new and existing marinas, whereas including the requirement in the *VBBL* would limit its application to new marinas and those undergoing renovations. Incorporating the provisions into the *Health By-Law* also enables the City to centralize all of its provisions pertaining to marinas and water quality. The proposed *Health By-law* amendments are provided in Appendix 1 and are consistent with those previously endorsed by Council.

As noted, most marinas in Vancouver already provide pump-out facilities and as such, will not be impacted by the new requirement. To support the few marinas that will be impacted, staff propose that the requirement to have a pump-out facility become enforceable as of January 1, 2019 to provide an opportunity for affected marinas to install services and be in compliance. The amendments also consider concerns pertaining to cost and provide flexibility on the type of pump-out facility used. Options vary from relatively low-cost alternatives such as a portable pump-out cart at less than \$10,000, to more costly options such as fully connected servicing.<sup>5</sup> Marinas would have complete discretion of the specific type of pump-out facility.

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<sup>4</sup> <http://bylaws.vancouver.ca/consolidated/11788.PDF>

<sup>5</sup> Pump-out facility options include, but are not limited to, stationary pump-outs, direct sewer lines to individual vessels, portable pump-out carts, and mobile pump-out boats operated by the marina.

Additional changes which extend beyond adding the requirement for pump-out facilities are also proposed. Specifically, these are:

- Broadening the prohibition of discharges from boats beyond the oil, sewage and waste which are currently prohibited to encompass any substance that could impair the environment.
- Strengthening provisions for City staff to enter and inspect marinas to further support compliance promotion and enforcement.
- Housekeeping changes to streamline language.<sup>6</sup>

Enforcement presence and compliance promotion was increased at marinas during the 2017 boating season, and will continue to be a focus area for the 2018 boating season. City staff are working to increase awareness of the need and legislative requirement for proper sewage management by boaters. Based on feedback received from marina operators, City staff are also working to support by-law compliance by clarifying expectations, including developing guidelines for required marina signage.

In order to further strengthen enforcement, staff recommend that Council amend the *Ticket Offences By-law* to authorize City staff to issue tickets for specific offences under the *Health By-Law*. The proposed amendments are set out in Table 2 of Appendix 2.

To remove duplication and further streamline City regulations, staff also propose removing provisions in the *License By-law No. 4450* that parallel those in the *Health By-law* dealing with marina operations. These proposed deletions are provided in Appendix 3.

### **3. Additional Water Quality Initiatives and 2018 Planned Action**

In addition to the above actions related to Council resolutions from May 2, 2017, a number of other initiatives are planned or underway by various departments to improve water quality in False Creek and respond to additional Council resolutions. Key initiatives for 2018 include:

- Undertaking a hydraulic model and water quality performance study for False Creek. Staff will report back on this initiative in the fall of this year.
- Continuing to foster interagency partnerships through the False Creek Water Quality Working Group (FCWQWG), including working with Metro Vancouver to monitor water quality conditions and further understand strategic opportunities for water quality improvement.

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<sup>6</sup> Minor housekeeping amendments include:

- Incorporating the term “pump-out facility”, rather than the previous term “pump-out connection”, to clarify that requirements for marinas are flexible and encompass a range of pump-out facility options;
- Changing the word “watercraft” to “vessel” for better consistency;
- Adding a definition for “visiting vessel” to further clarify the requirements around pump-out facilities; and,
- Clarifying that marina pump-out facilities must be operational, as local facilities have frequently been out of order.



- Integrating water quality considerations into key strategic plans, including *Northeast False Creek Area Plan* and *One Water: Vancouver's Waterway Recreation Strategy*.
- Continuing the “Pump Don’t Dump” public education campaign with the addition of a large banner on the abutment of the Granville Street Bridge during boating season.
- Continuing to provide stationary pump-out services at civic marinas in False Creek
- Exploring options for ecosystem health improvement in False Creek.

#### *Public/Civic Agency Input (if applicable)*

The proposed amendments to the *Health By-law* and the proposal to extend the pilot mobile pump-out service for the 2018 boating season were considered and supported by the FCWQWG. All boaters who were surveyed about the mobile pump-out service were in favour of extending the pilot. Support for extending the pilot was also expressed by the majority (92%) of surveyed marina owners/operators in False Creek.

#### *Implications/Related Issues/Risk (if applicable)*

##### *Financial*

The cost to extend the pilot mobile pump-out service for the 2018 boating season is estimated to be \$75,000. The financial resources required will be funded from within the approved REFM 2018 capital budget for Environmental Services.

##### *Environmental*

The recommendations of this report are directed towards improving marine water quality and environmental health, as well as the waterway use experiences of the community.

##### *Legal*

The Vancouver Charter authorizes Council to adopt by-laws regarding health, sewage and businesses such as marinas, and to authorize enforcement of by-laws.

##### *Other*

The proposed by-law amendments are intended to support responsible sewage management for the improved health of boaters, the broader community, and the environment.

Other action in support of the Waterfront Initiative, including undertaking feasibility assessments for a floating pool and beach at NE False Creek, are also underway and a progress update of these recreational initiatives will be provided to Council later this year.

## *CONCLUSION*

Improving water quality in False Creek is a long-term endeavour involving multiple stakeholders and jurisdictions, and dependent upon systematic effort across a suite of key action areas. One key area is improving sewage management by boaters. To continue to advance progress in this important area, this report recommends that the City extend its mobile pump-out service for the 2018 boating season and make regulatory amendments to require all marinas to have pump-out facilities. This report also recommends that the City introduce ticketing provisions to provide additional bylaw enforcement options.

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BY-LAW NO. \_\_\_\_\_

A By-law to amend Health By-law No. 9535  
regarding marinas

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This by-law amends the indicated provisions of the Health By-law No. 9535.
2. Council strikes Sections 3.1 to 3.11, and replaces them as follows:

**“SECTION 3  
MARINAS**

**Definitions**

3.1 In this section:

“discharge” means any spilling, leaking, pumping, pouring, emitting, emptying, throwing or dumping;

“Environmental Protection Officer” means a person employed by the City or appointed by the Council to enforce all or part of section 3 of this By-law;

“garbage” means solid waste that is not food waste or recyclable material;

“marina” means any installation operated under public or private ownership, which provides moorage space for vessels;

“marine toilet” means any toilet on or within a vessel;

“oil” means oil of any kind or in any form and, without limiting the generality of the foregoing, includes petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes;

“polluting substance” means any substance, whether liquid or solid, that is capable of damaging marine waters or the environment and includes but is not limited to oil, sewage and solid waste;

“potable water” means water which meets the Guidelines for Canadian Drinking Water Quality;

“pump-out facility” means a device or method designed for the removal of sewage from a holding tank connected to a marine toilet or from a self-contained marine toilet, and includes a portable pumping system;

“recyclable material” means solid waste that has been designated as recyclable by the City Engineer;

“vessel” means any boat, hull barge or houseboat which is afloat, whether self-propelled or not, and includes pleasure, live-aboard, and commercial craft; and

“visiting vessel” means a transient or guest vessel docked at a marina without a moorage agreement, and includes vessels operated by persons seeking day use, overnight use, or other marina services on a space-as-available basis.

### Marina Supervision

3.2 Every owner or operator of a marina shall supervise the operation of the marina and maintain the operation in conformance with this By-law.

### Potable Water

3.3 Potable water supplied to a vessel moored in a marina must be conveyed in such a manner as to maintain the quality and safety of the water.

### No Vessel to Discharge Polluting Substance

3.4 No person, including an owner of a vessel, shall cause, permit or allow the discharge of a polluting substance from a vessel into a watercourse or other body of water.

### No Marina to Discharge Polluting Substance

3.5 No owner or operator of a marina shall cause, permit or allow the discharge of a polluting substance from marina operations or from any vessel moored at the marina into a watercourse or other body of water.

### Post Signs

3.6 Every marina owner or operator shall post and maintain at least four (4) signs no larger than 0.2 meters squared in conspicuous locations prohibiting the discharge of sewage, oil, and other polluting substances from a vessel.

### Vessel Waste Management

3.7 No person, including an owner of a vessel, shall cause, permit or allow the discharge or removal of garbage, food waste or recyclable material from any vessel other than into a garbage, food waste or recycling container.

### Marina Waste Management

3.8 No owner or operator of a marina shall cause, permit or allow the discharge or removal of garbage, food waste or recyclable material from marina operations or from any vessel moored at the marina other than into a garbage, food waste or recycling container.

## Marina Maintenance

### 3.9 Every marina owner or operator shall:

- (a) provide containers designed for the collection and disposal of waste oil and empty oil containers;
- (b) provide an adequate number of covered containers for the collection of garbage, food waste and recyclable material, and locate the containers conveniently where they can be readily seen and used;
- (c) make provisions for regular servicing and emptying of waste oil, garbage, food waste and recycling containers so as to prevent the overflowing of container contents, foul odors and generation of insects or other pests;
- (d) post and maintain signage in conspicuous locations within the marina identifying the location of waste oil, garbage, food waste, and recycling containers;
- (e) maintain the marina property and buildings free of pests and of conditions which attract, provide shelter for or promote the propagation of pests; and
- (f) ensure that all infrastructure, including buildings, docks, floats, gangways, piers and ramps, is kept in good repair.

## Sewage Pump-out Facilities

3.10 Every marina owner or operator providing services to any vessel with a marine toilet shall provide an easily accessible and operational pump-out facility for visiting vessels and every other vessel moored at the marina.”

### 3. Council inserts a new section 4 as follows:

#### “SECTION 4 INSPECTIONS

### 4.1 Inspections

- (1) Any employee of the City employed or appointed to enforce all or part of this By-law is authorized to inspect, at a reasonable time and in a reasonable manner, real property and personal property in the City in order to determine compliance with this By-law.
- (2) No person shall hinder or prevent any authorized person from entering and making reasonable inspection of any real or personal property whenever necessary to secure or determine compliance with or prevent a violation of any provision of this By-law.

- (3) Any person who interferes with or obstructs the entry into any premises or real property of any person authorized to enforce this By-law after that person has identified himself or herself, is guilty of an offence under this By-law.”
4. Council renumbers the previous sections 4.1 to 4.5 as sections 5.1 to 5.5 respectively.
5. Council strikes the renumbered sections 5.1 and 5.2 and replaces them as follows:

**“SECTION 5  
OFFENCES AND PENALTIES AND ENFORCEMENT**

**Order to Comply**

5.1 Any person appointed or employed to enforce this By-law may issue an Order to Comply to any person considered to be violating this By-law, ordering or directing that person to:

- (a) discontinue or refrain from any action which contravenes this By-law, or
  - (b) take any action necessary to comply with this By-law;
- within such period of time as specified in the Order to Comply.

**Service of Order**

- 5.2 An Order to Comply may be served:
- (a) by mailing it by registered post to the owner of the applicable site at the address shown on the real property tax assessment roll;
  - (b) by mailing it by registered post to the person who is the addressee of the Order to Comply;
  - (c) by handing it to the person who is the addressee of the Order to Comply; or
  - (d) if the Order to Comply refers to property, by posting it on the property.”
6. Council strikes and replaces “this Section 3” at the end of section 5.3 with “this Section 5”.
  7. Council strikes and replaces “or 4.3(c)” in section 5.4 with “or 5.3(c)”.
  8. Council renumbers sections 5.1 and 5.2 as Section 6.1 and 6.2 respectively.
  9. Council replaces the Table of Contents of the Health By-law with the Table of Contents attached as Schedule “A” to the By-law.



BY-LAW NO. \_\_\_\_\_

**A By-law to amend Ticket Offences By-law No. 9360  
regarding offences pursuant to the Health By-law**

The Council of the City of Vancouver, in public meeting, enacts as follows:

1. This By-law amends the indicated provisions and schedules of By-law No. 9360.
2. Council inserts in section 1.2, the following definition in correct alphabetical order:  
  
“Environmental Protection Officer” means a person employed by the City in that role, or otherwise appointed to that role by Council.”
3. Council strikes Table 2 and replaces it as follows:

“Table 2  
Health By-law

<u>Column 1</u>	<u>Column 2</u>	<u>Column 3</u>	<u>Column 4</u>
Chief License Officer	Urinating/defecating/ expectorating	Section 2.1	\$250.00
Police Officer	Smoke in building	Section 2.2(a)	\$250.00
	Smoke in vehicle for hire	Section 2.2(b)	\$250.00
	Smoke in public transit	Section 2.2(c)	\$250.00
	Smoke in transit shelter	Section 2.2(d)	\$250.00
	Smoke close to building	Section 2.2(e)	\$250.00
	Smoke in customer service area	Section 2.2(f)	\$250.00
	Smoke in plaza	Section 2.2(g)	\$250.00
	Smoke close to customer area	Section 2.2(h)	\$250.00
	Allow smoking in building	Section 2.3(a)	\$250.00
	Allow smoking in common area	Section 2.3(b)	\$250.00
	Allow smoking in unlawful area	Section 2.3(c)	\$250.00
	Allow smoking in vehicle for hire	Section 2.3(d)	\$250.00





BY-LAW NO. \_\_\_\_\_

A By-law to Amend License By-law No. 4450  
regarding marinas

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

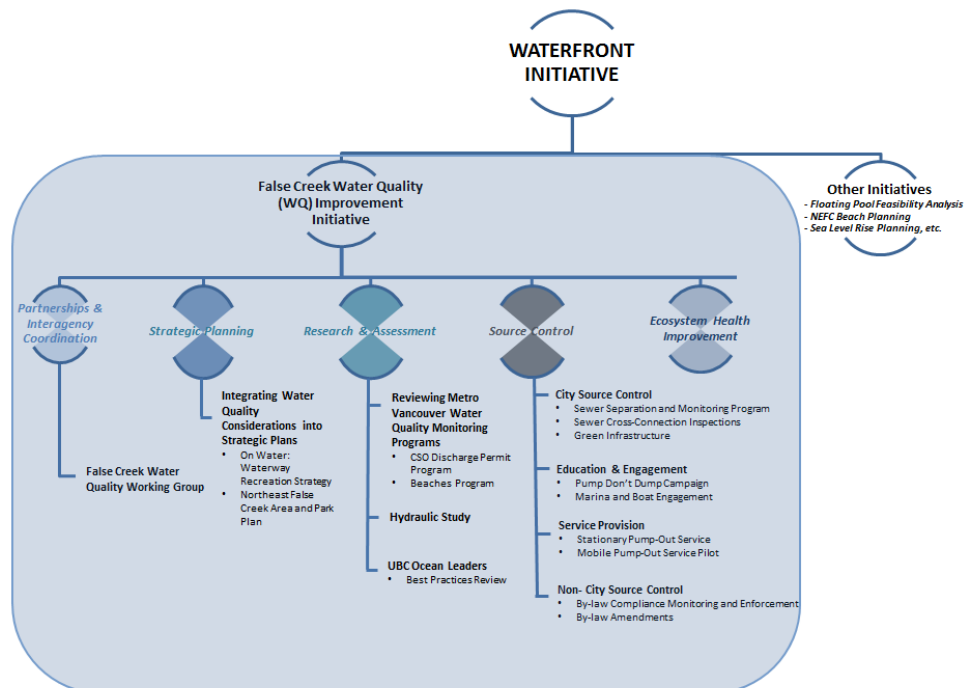
1. This By-law amends the indicated provisions of the License By-law.
2. Council strikes subsections 20.1 (10), and replaces it with:  
  
“(10) A marina operator must ensure that separate sanitary facilities are available for use 24 hours each day that the marina is operating.”
3. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.
4. This By-law is to come into force and take effect on the date of its enactment.

ENACTED by Council this      day of                                      , 2018

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Mayor

\_\_\_\_\_  
City Clerk

## False Creek Water Quality Improvement Initiative



False Creek Water Quality (WQ) Improvement Initiative			
Focus Area	Activity	Lead Department	Supporting Departments
Partnership & Interagency Coordination	<ul style="list-style-type: none"> <li>False Creek WQ Working Group</li> </ul>	Environmental Services	Engineering Services Parks and Recreation
Strategic Planning	<ul style="list-style-type: none"> <li>Integrating Water Quality Considerations into Strategic Plans               <ul style="list-style-type: none"> <li>Vancouver's Waterway Recreation Strategy</li> <li>Northeast False Creek Area and Park Plan</li> </ul> </li> </ul>	Parks and Recreation Planning, Urban Design, and Sustainability	Environmental Services Engineering Services
Research & Assessment	<ul style="list-style-type: none"> <li>Metro Vancouver WQ Monitoring Results Review</li> </ul>	—	Engineering Services Parks and Recreation Environmental Services
	<ul style="list-style-type: none"> <li>Hydraulic Study</li> </ul>	Environmental Services	Engineering Services Parks and Recreation
	<ul style="list-style-type: none"> <li>UBC Ocean Leaders Program</li> </ul>	Environmental Services	Engineering Services Parks and Recreation
City Source Control	<ul style="list-style-type: none"> <li>Combined Sewer Overflow Separation and Monitoring Program</li> <li>Sewer Cross-Connection Program</li> <li>Green Infrastructure Initiative</li> </ul>	Engineering Services	Environmental Services
Education & Engagement	<ul style="list-style-type: none"> <li>'Pump Don't Dump' Campaign</li> <li>Marina and Boater Targeted Surveys</li> </ul>	Parks and Recreation Environmental Services	Communications - Park Board Communications - City
Service Provision	<ul style="list-style-type: none"> <li>Stationary Pump-out Service</li> <li>Mobile Pump-Out Service Pilot</li> </ul>	Parks and Recreation Environmental Services	—
City Regulation & Enforcement	<ul style="list-style-type: none"> <li>By-law Compliance Promotion, Monitoring &amp; Enforcement</li> <li>By-law Amendments</li> </ul>	Environmental Services	Legal Services
Ecosystem Health Improvement	<i>To be explored in 2018</i>		

BOLD = subject of this report

2017 Pilot Mobile Pump-out Service in False Creek

2017 Pilot Mobile Pump-out Service in False Creek	
<i>Service Provision</i>	
Target User Groups	<ul style="list-style-type: none"> <li>Recreational and live-aboard boaters in False Creek</li> </ul>
Operating Period	<ul style="list-style-type: none"> <li>August 11, 2017 - October 14, 2017</li> </ul>
Operating Times	<ul style="list-style-type: none"> <li>6 hours a day, 4 days per week</li> </ul>
Number of Days in Service	<ul style="list-style-type: none"> <li>37 days</li> </ul>
Scheduling	<ul style="list-style-type: none"> <li>Pre-booking or on-demand via phone, text, email or in-person; boat owner choice if they would like to be present</li> </ul>
User Cost	<ul style="list-style-type: none"> <li>No cost</li> </ul>
Communications	<ul style="list-style-type: none"> <li>Media event, social media posts, email notifications to marina operators, meetings with marina operators, pump-out boat signage, word-of-mouth</li> </ul>
<i>Service Utilization</i>	
Total Number of Pump-outs Performed	<ul style="list-style-type: none"> <li>169 (of which 112 were unique vessels)</li> </ul>
Total Volume of Sewage Pumped	<ul style="list-style-type: none"> <li>approximately 20,000 L</li> </ul>
Average Volume Pumped per Day	<ul style="list-style-type: none"> <li>approximately 535 L</li> </ul>
Peak Daily Usage	<ul style="list-style-type: none"> <li>11 boats</li> </ul>
Pump-out Service Times (excluding travel)	<ul style="list-style-type: none"> <li>10-30 mins, depending on size of the holding tank</li> </ul>
<i>Service Quality</i>	
Service Satisfaction	<ul style="list-style-type: none"> <li>100% of surveyed users reported that they were satisfied or very satisfied with the service</li> </ul>
Top Service Attributes	<ul style="list-style-type: none"> <li>Convenience, ease of booking, and cost</li> </ul>
Service Recommendation	<ul style="list-style-type: none"> <li>100% of surveyed users reported that they felt it was important for the service to be provided in 2018</li> </ul>

## 2017 Pilot Mobile Pump-out Service User Survey Results

In October 2017, 66 boaters representing approximately 60% of total users of the pilot mobile pump-out service completed a service feedback survey.

A summary of findings and boater comments is provided below.

### Mobile Pump-out Service Pilot

- 100% of users reported that they were satisfied or very satisfied with the service.
- 100% felt the service should be provided again in 2018.
- Comments about why boaters used the service included:
  - *"Convenient, free, saves time"*
  - *"I don't want to dump at sea. Also the service coming to boat was excellent"*
  - *"Convenient. Easy. Fast and clean and environmentally friendly"*
  - *"To save time and fuel when not planning to go to sea for other reasons"*
  - *"It is convenient and much better than dumping in the ocean"*
  - *"Our boat is large and awkward to get into the pump stations"*
  - *"Convenience and it can be done while owner is absent"*
  - *"I was blown away how efficient it was and even thrilled I was able to book via text! Very progressive!"*
  - *"This service was impressive and I really hope it continues"*
- 58% found out about the service through an email from their marina, 33% via word of mouth, 27% saw the pump-out boat on the water, and 12% heard about it through the news media. (Note, more than one selection was permitted).
- Convenience, ease of booking, and no cost were cited as the top attributes boaters liked about the service. Comments included:
  - *"We would always use it if it was available on an ongoing basis"*
  - *"The attitude of the crew that was doing it - what a pleasure"*
  - *"I see boats that have not been known to pump out using the service - excellent!"*
- Suggestions for improving the service included:
  - *"Make it permanent"*
  - *"Longer season"*
  - *"More hours"*
  - *"Have it available year round"*
  - *"Provide service seven days a week"*
  - *"Better and more advertising so more boaters are aware of the service"*

### Suggestions for Improving False Creek Water Quality

- Suggestions for other actions to improve water quality included:
  - Increasing enforcement to deter boaters from illegally discharging sewage, including fines and a tip line for reporting violators.
  - Reducing sewage from anchored and live-aboard vessels.
  - Providing additional free pump-out options, and also advertising them

## Marina Survey Results

The City consulted 20 Vancouver-based marinas with a self-reported total of 2,807 moorage slips through an online survey in November and December 2017. Participants were asked about their current sewage management initiatives, as well as for feedback on the pilot mobile pump-out service, proposed by-law changes regarding marina pump-out facilities, and suggestions on how to improve marine water quality.

A summary of findings and marina operator comments is provided below.

### Marina Pump-out Facilities

- 90% of marinas reported having pump-out facilities.
- Many marina operators that already have pump-out facilities expressed strong support for the proposed requirement that all marinas have them. Comments included:
  - *"The sooner, the better"*
  - *"Every facility in Vancouver should have a pump-out station and offer it free of charge to all of their annual users"*
  - *"This should be strongly enforced by every marina in BC"*
  - *"Every facility in the area [should] have/install a pump-out station"*
  - *"I agree with the proposed idea. It's unfortunate that this plan didn't happen sooner but am grateful that the City recognizes that there is a problem and is committed to find a solution"*
- The few marinas that don't have pump-outs expressed some concern, but generally favoured a transition period of between 6 months to one 1 year to come into compliance. Comments included:
  - *"We agree that all marinas should have pump out facilities, but it may be financially prohibitive for small marinas with aging infrastructure to install a system"*
  - *"As the manager of a small marina I am very concerned about the costs associated with this. To dedicate a slip to a docking station or re-plumb our entire marina would be financially prohibitive for us"*

### Mobile Pump-out Service Pilot

- 92% of marina operators in False Creek would like to see the pilot mobile pump-out boat operating again in the future. Comments included:
  - *"Mobile, free to use, convenient. It removes the excuse that [boaters] were not able to access any local options or that the cost was too high"*
  - *"This should be a year-round service"*
  - *"No fees, ease of use and accessibility are important to encourage all boaters to use the service"*
  - *"Infrequent users of pump-out stations find the process difficult if there is no staff at a pump-out station; mobile service solves the problem"*
  - *"Different boats, different adaptors... Mobile service had them all"*
  - *"Year round operation with extended hours during peak season"*
  - *"It was used by many boaters, many [of which] would not have used any pump-out facilities"*
  - *"Every boat that doesn't dump their sewage is a step in the right direction"*

### Suggestions for Improving False Creek Water Quality

- 79% of respondents are concerned about pollution in local waters, including in False Creek East. Comments included:
  - *"I'm very happy that the city is moving towards cleaning up the False Creek waterway. It's an important step for both the marine life and for city dwellers/visitors who appreciate the water"*
  - *"This program should be conducted not only by the city but all BC municipalities"*
  - *"We want to be proactive in improving our water quality in False Creek"*
- 71% would like to see more public engagement initiatives for boaters and other water users.
- 65% of marina operators would like to see strengthened regulations and increased enforcement. Comments included:
  - *"Until there [are] ENFORCEABLE LAWS and CONSISTENT ENFORCEMENT combined with significant FINES, sadly boaters will continue to take the easy route to discharging sewage inappropriately. Our American neighbours to the south seemed to have instilled a real sense of caring but they used tough tactics to make it work"*
  - *"Illegally moored and derelict boats must be removed from anchorages with poor natural flushing such as False Creek. Sewage discharge is likely a common occurrence for these vessels if occupied"*
- Some marina operators would like to see improved pump-out facilities in Vancouver. Comments included:
  - *"There should be more, easily accessible, well-advertised stations"*
  - *"It has to be easy or some boaters won't go out of their way to find them"*
  - *"Many pump-out facilities have long periods of not functioning properly"*
  - *"They need to be in good working condition at all times for them to be properly used"*
- Several marina operators felt that pump-outs should be free. Comments included:
  - *"I believe that most people want to do the right thing but it must be easy for them to access/use and [be a] free service"*
  - *"I'm certain that more people would use [our pump-out] if it was free"*
  - *"In Washington state, pump out facilities are very available, easily found in marinas and free"*
  - *"[The cost] discourages boaters from using them"*
  - *"Pump out should be a free service"*
- A few marina operators commented on stormwater and combined sewer overflows (CSOs) as sources of water pollution, and recommended the City increase efforts to address them. Comments included:
  - *"Fix storm sewers that overflow when it rains, and it does rain here"*
  - *"I can't speak to the impact of boaters using this brand new [mobile pump-out] service vs. the three pipes that flow into False Creek"*
  - *"A common remark I hear from offending boaters is 'Well, when the City cleans up its act with discharging into the Creek, so will I.' An ill-informed, self-serving remark at best, but one that the City should pro-actively respond to by publicizing what it has done and continues to do in this regard"*