



Recreational Water Quality Protection

Update to Vancouver City Council
May 2, 2017



- Update on activities since January 2016
- Findings
- Next steps
- Recommendations

Work with interested government agencies and departments, non-government organizations and individuals to achieve a goal of zero beach closures

An aerial photograph of a modern waterfront residential complex. The image shows several multi-story apartment buildings with glass facades and balconies. In the foreground, there is a marina with several sailboats docked at a pier. The buildings are surrounded by landscaped areas with trees and walkways. A prominent blue semi-transparent overlay covers the middle portion of the image, containing the text "Recent activities".

Recent activities

- Representatives from City, Park Board, VCH, Metro Vancouver, Transport Canada, MOE
- 2015 “pump, don’t dump” campaign
- 2016 Greenest City Scholar research project to collect, compile, and analyze data
- Extended hours at Burrard Marina
- Boater survey (March 2017) sought input for pump-out facility improvements

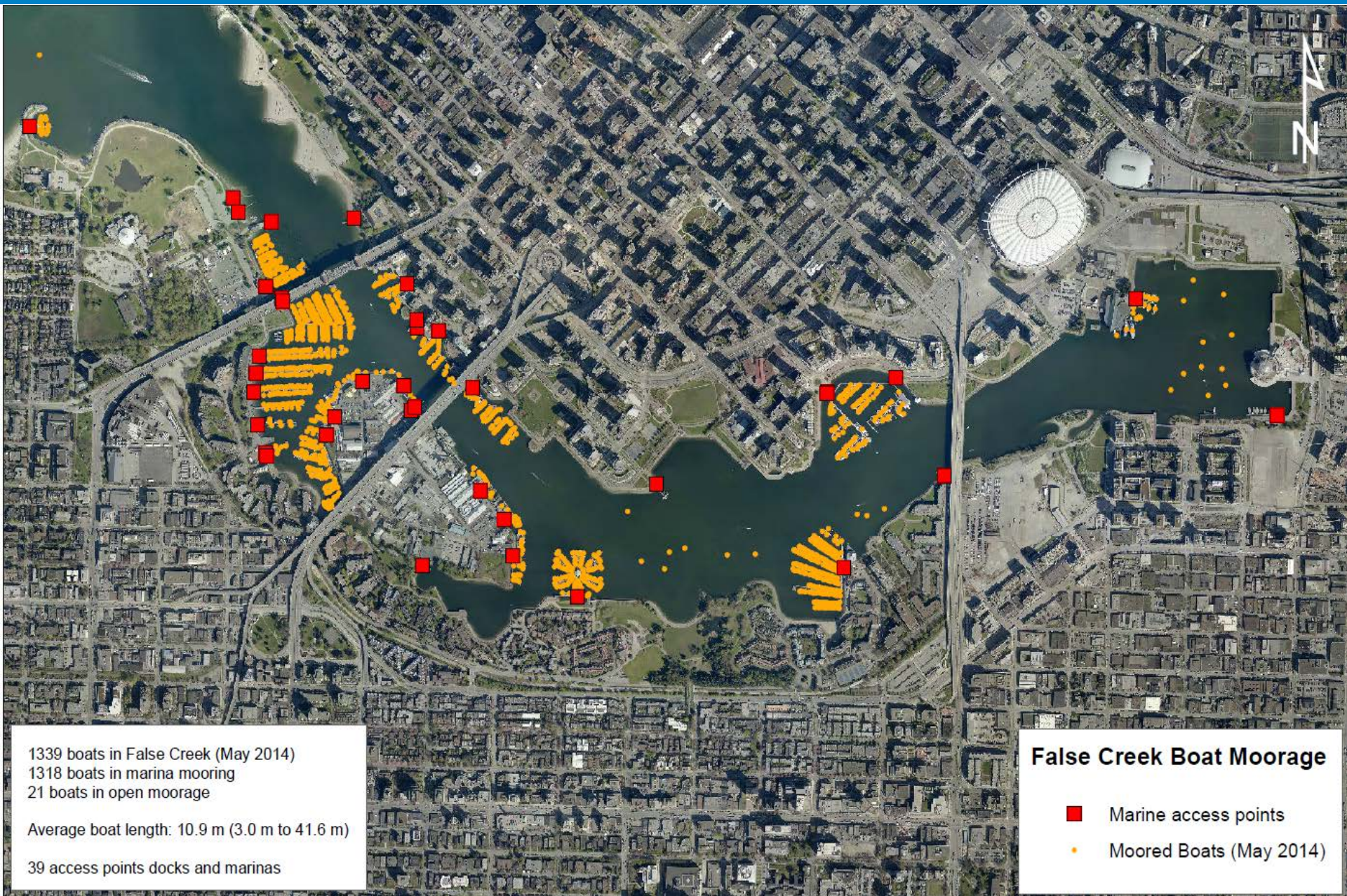


Findings

- Existing pump-out facilities are inadequate
- Anecdotal evidence suggests significantly more liveaboards than permitted
 - Subject of 2017 Metro Vancouver Homeless Count
 - If not permitted, not connected to sanitary sewer
 - Marina owners/operators not enforcing

- GCS compiled data from various sources, collected additional data, and assessed for patterns and correlations
- Research project confirmed majority of *E. coli* contamination in False Creek is from human waste
 - Potential sources: boats, sewer cross-connections, CSOs, land-based outputs to storm sewer

False Creek Boat Moorage (2014)



1339 boats in False Creek (May 2014)
1318 boats in marina moorage
21 boats in open moorage

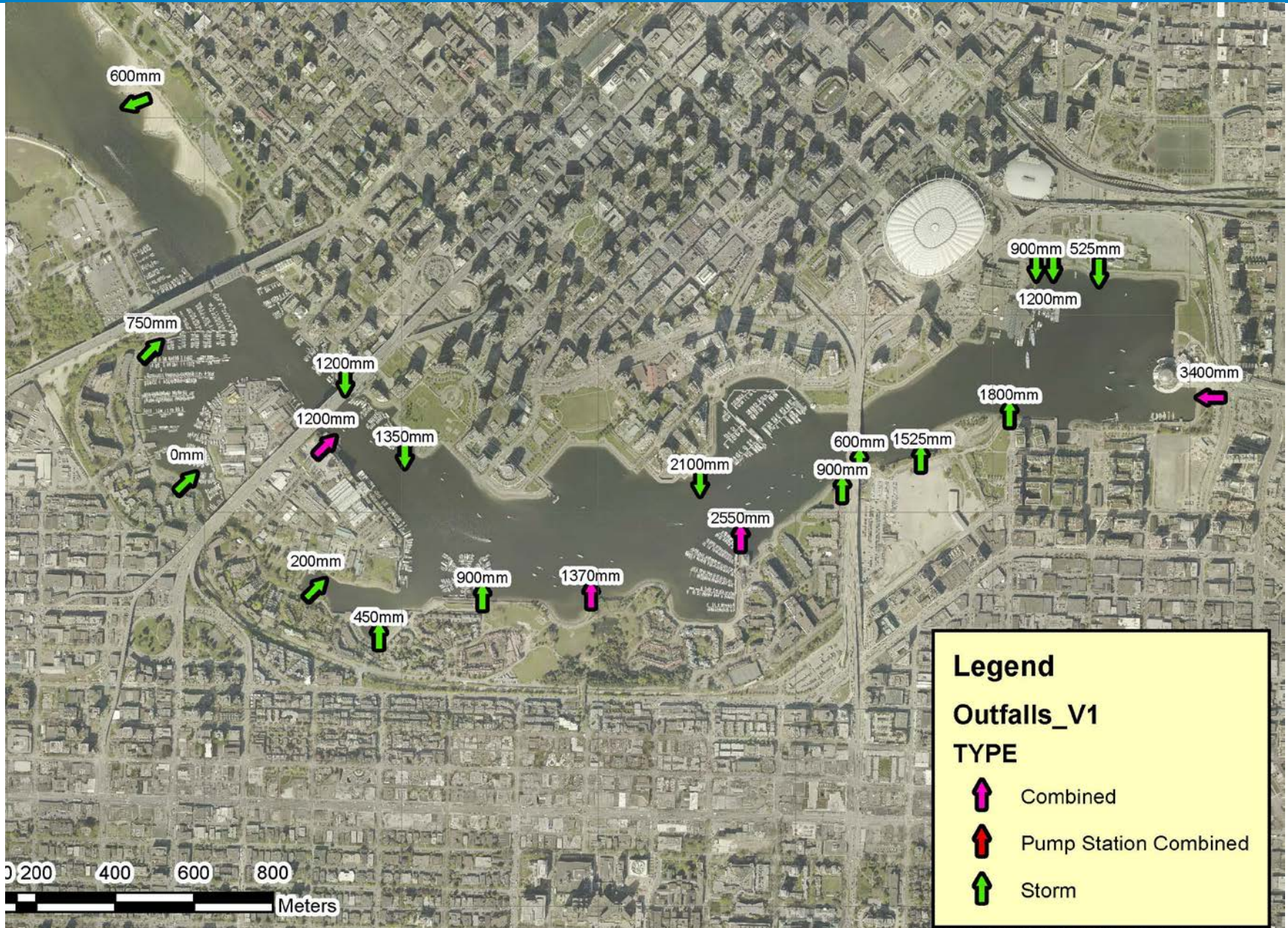
Average boat length: 10.9 m (3.0 m to 41.6 m)

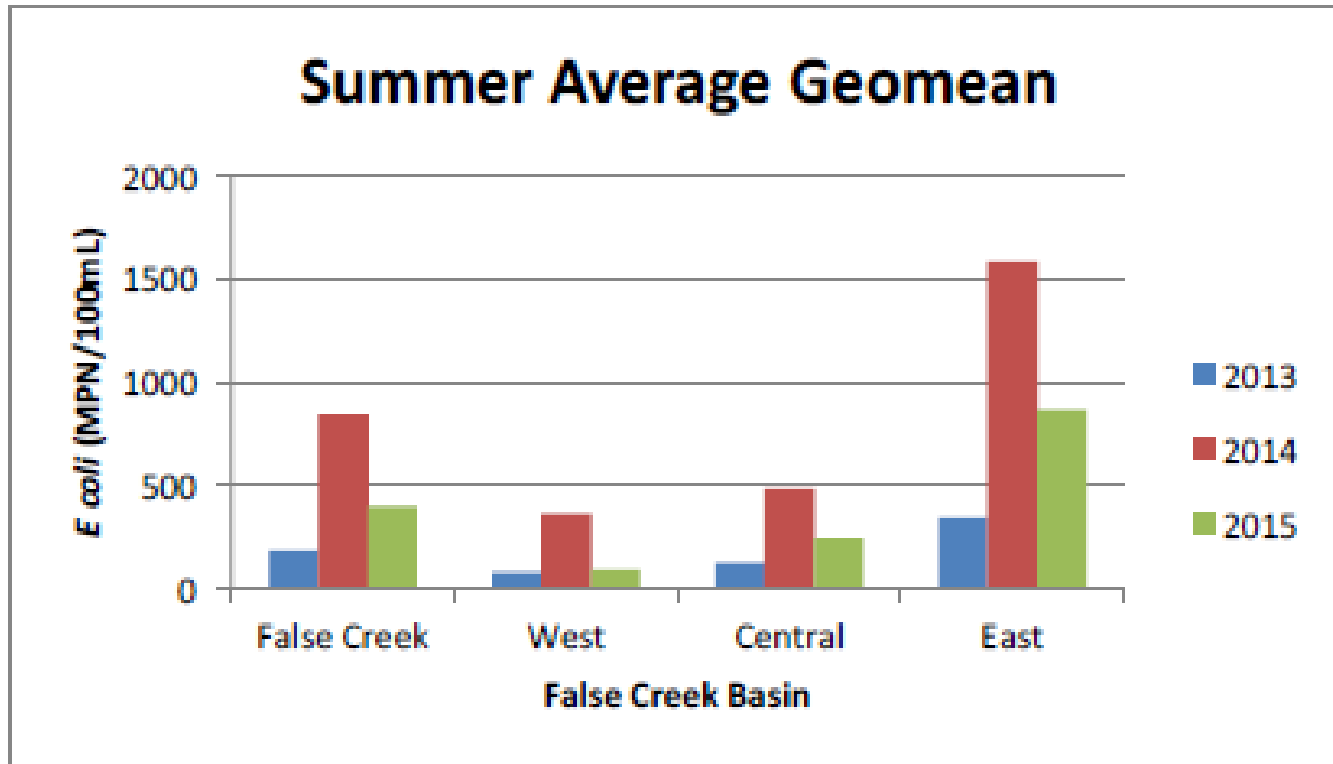
39 access points docks and marinas

False Creek Boat Moorage

- Marine access points
- Moored Boats (May 2014)

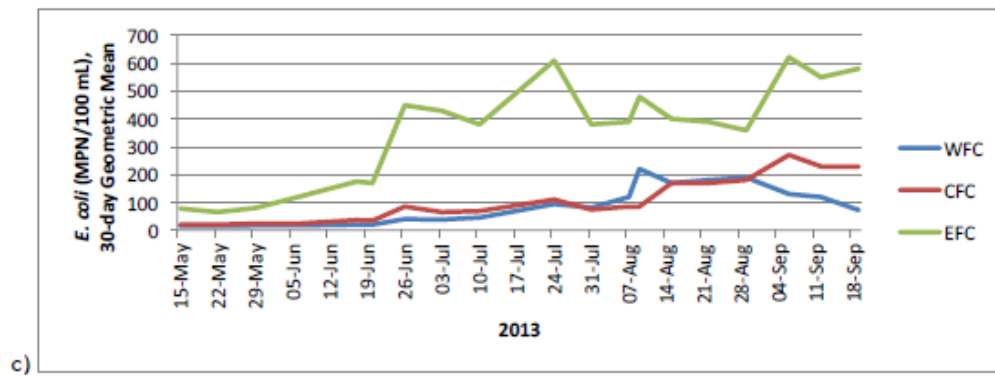
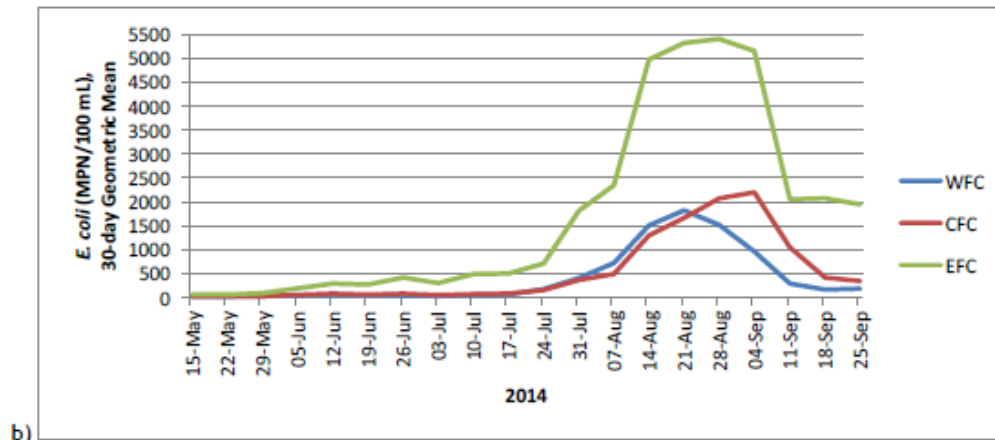
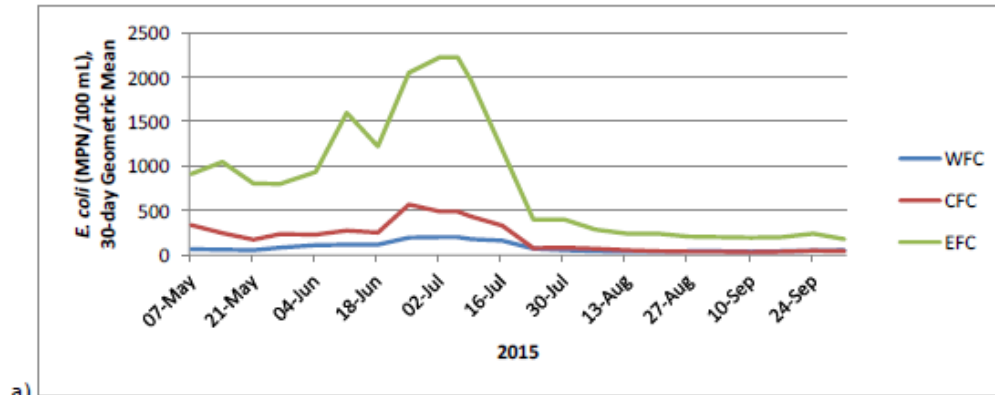
Sewer Outfalls





Average geometric mean of *E. coli* counts in False Creek

Temporal Distribution



- Since the 2015 *MV Marathassa* oil spill in English Bay, the City has been better informed of oil releases into nearby waters
 - Almost weekly releases in False Creek
- Staff participating in Federal (regional), provincial, and local oil spill preparedness and response initiatives

Next steps



- Communications campaign (spring 2017) to improve public awareness and understanding of water quality issues, contributing factors, and associated regulations
- Completion of Federal (regional), Provincial, and City's oil spill preparedness and response plans

- Staff further consult with marina and boat operators on approaches to improve water quality protection
 - Bring forward recommendations for related VBBL amendments
- Conduct pilot project for City-funded, mobile sewage pump-out services in False Creek
 - Report back on success and findings
- Retain service provider to audit boats
- Enhance enforcement through escalation from education and warnings up to commencing prosecutions

Health By-law

- Marinas section removed in 2007
- Recommend immediate enactment of proposed amendments to:
 - reinstate requirements for sewage management, oil discharge, and garbage management
 - require marina owners ensure waste properly managed in their facilities
 - require boaters properly manage their waste

VBBL

- Requires liveaboards have sanitary sewer connection
- Requires new marinas have easily accessible pump-out connection for visitors and non-liveaboard vessels
 - Proposal: all marinas must provide easily accessible pump-out facilities or services
 - Consult with boating community and marina owners/operators prior to enactment
 - Transition period of three months from enactment date
 - Non-compliant marinas will be unable to renew business licenses

- Council support proposed activities and by-law amendments, and direct staff to proceed