

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON DECEMBER 4, 2017
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT	PUBLIC EDUCATION AND COMMUNICATION PROGRAM: TOILETS ARE NOT GARBAGE CANS

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services & City Engineer, this report on approaches to educate and communicate to the public on what should and should not go into wastewater treatment plants, **BE RECEIVED** for information.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

“International Water Industry Position Statement on Non-Flushable and ‘Flushable’ Labelled Products”, Civic Works Committee, May 24, 2017.

2015-19 STRATEGIC PLAN

The following report supports the Strategic Plan through a focus on *Building a Sustainable City* by working together to protect all aspects of our natural environment including woodlands, wetlands, river and watercourses and air quality as our city grows.

BACKGROUND

Purpose

The following report has been prepared in response to item b) of the following resolution of Municipal Council at its May 30, 2017 meeting:

- “5. *That the following actions be taken with respect to the International Water Services Flushability Group and Canadian Water and Wastewater Association position statement on ‘non-flushable’ and ‘flushable’ labelled products:*
 - a) *the International Water Services Flushability Group and Canadian Water and Wastewater Association position statements on ‘non-flushable’ and ‘flushable’ labelled products BE ENDORSED; and,*
 - b) *the Civic Administration BE REQUESTED to review and report back with respect to approaches to educate and communicate to the public with respect to what should and should not go into the waste treatment plants.”*

Context

The global use of products marketed as “flushable” wipes has increased dramatically in recent years and has added an estimated \$250 million in operational costs to wastewater utilities across Canada. Many products labelled as “flushable” do not disintegrate and can lead to backups and overflows into homes, businesses and the natural environment. When combined with other sewer discharge problems, such as

fats, oils and grease (FOG), homes are also at risk of experiencing a backup from clogs in their own private drainage systems. The International Water Service Flushability Group (IWSFG) has published draft specifications for public comment and are in the process of considering comments and reissuing the specifications.

DISCUSSION

Improperly labelled wipes flushed into the municipal sewer systems can lead to backups and overflows into homes, businesses and the natural environment. Blockages caused by these wipes lead to increased maintenance and repairs costs as well as property and environmental damage. When combined with other sewer discharge problems, such as fats, oils and grease (FOG), homes are also at risk of experiencing a backup from clogs in their own private drainage systems.

The City of London has long recognized these concerns and has an ongoing community outreach program that communicates how the actions taken by Londoners impact the performance of the sewer system and ultimately impacts the environment. This outreach program is consistent of various educational websites, pamphlets for both home owners and business owners, as well as a series of educational videos that are available for view on the City of London's YouTube channel. These initiatives are described in the following sections.

Web Content

▪ **Your Turn**

Fats, oils and grease (FOG) cause London's sewer system major grief when they are poured down the sink or toilet. Sewers can become blocked when this FOG hardens. Backups can then occur which can lead to basement flooding. The City of London developed the "Your Turn" pollution prevention pilot project which encourages property owners to pour FOG waste into a supplied biodegradable cup, as shown below, to harden and then dispose of in their solid waste collections.



Figure 1: "Your Turn" cups for household cooking oils and fats

The City of London's "Your Turn" initiative has been adopted by other municipalities (i.e., Sarnia, Sudbury, Windsor and Essex County). "Your Turn" Cups have also partnered with the London Fire Department to educate about oil fires. The cups are available at London Public Libraries and EnviroDepots.

Web URL: <http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Pages/Your-turn.aspx>

- **Washing Initiative to Protect Our Environment**

Best practices in restaurants and food preparation sites can protect our environment and reduce costs for businesses by preventing grease blockages within drains. The City of London Wastewater Operations division launched this initiative to help restaurants reduce the amount of fats, oils and grease entering the sanitary sewer system from day-to-day operations by supplying training, education and preventative maintenance regarding proper disposal and preparation methods.

Web URL: <http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Pages/Wipe-program.aspx>

Residential Pamphlets:

The following residential pamphlets are attached in Appendix 'A', Residential Best Practices Pamphlets.

- **Toilets are Not Garbage Cans**

Flushing the wrong things down your toilet can block sewer pipes. It is also extremely important to keep medicines and household wastes out of the toilet.

Web URL: <http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Documents/toilet-08-FINALREVires.pdf>

- **Storm Sewers**

Only rain down the drain. Storm water drains directly into the nearest creek, river or lake. This water is NOT treated.

Web URL: <http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Documents/stormsewer-06-FINALREVires.pdf>

- **Sinks are Not Garbage Cans**

Sewer pipes blocked by grease are an increasingly common cause of sewage back-ups in homes as well as causing raw sewage discharges to our environment.

Web URL: <http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Documents/sinks-not-garbage-cans.pdf>

- **Pools, Spas and Hot Tubs**

The chemicals you put down your storm drain go directly into our rivers and creeks.

Web URL: <http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Documents/pool-spa-06-FINALREVires.pdf>

- **Car Wash**

Why only rain should go down the drain. When you wash your car on your driveway or street, the soapy, dirty water runs into our creeks and river.

Web URL: http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Documents/carwash_14_FINALREV_2013ires.pdf

- **Food Waste Grinders**

Added organic waste to our sewer system means added loads to treat at waste facilities. This directly increases operating costs and in the end, increases homeowner costs.

Web URL: <http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Documents/Grinder-09-FINAL-ires.pdf>

Business Pamphlets:

The following business pamphlets are attached in Appendix 'B', Business Best Practices Pamphlets.

- ***Restaurant Grease***

Why you should dispose of grease properly for the food preparation business includes best practices. Cleaning food wastes and oil out of grease interceptors is required on a regular basis. The cleanout record sheet (provided on the City of London website) should be placed near the grease interceptor. Grease removal devices need to be maintained daily. The grease removal device cleanout record sheet (provided on the City of London website) needs to be filled in daily.

Web URL: <http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Documents/pamphlet-restaurantgrease.pdf>

- ***Outdoor Festivals Good Vendors***

Best practices for proper disposal of liquid wastes.

Web URL: <http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Documents/pamphlet-foodvendors.pdf>

- ***Construction Site Management***

Best practices for drainage, sediment and erosion control during construction.

Web URL: <http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Documents/pamphlet-construction.pdf>

- ***Best Practices for Dental Offices***

Proper waste disposal for dental offices.

Web URL: <http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Documents/pamphlet-dental.pdf>

- ***Best Practices for Automotive Services***

Best practices can be adopted to prevent motor oil, solvents, gasoline, etc. from entering the sewer system. Cleaning of interceptors is required on a regular basis. The oil/ grit cleanout record sheet (provided on the City of London's website) should be kept in the reception area on the wall for easy inspection.

Web URL: <http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Documents/Pamphlet-AUTO-SERVICE-STATIONS.pdf>

- ***Stormwater Oil and Grit Separators***

Best practices for business and multi-residential property owners.

Web URL: <http://www.london.ca/residents/Sewers-Flooding/Sewage-Treatment/Documents/pamphlet-oilandgrit%20separators.pdf>

Residential Web Videos:

A series of public information videos for residents, titled "Protect Our Environment," has been created explaining the consequences of improperly disposing of household wastes. The videos educate the viewers on proper disposal methods. The videos in this series can be found on the City of London's YouTube channel and are highlighted below.

Web URL: <https://www.youtube.com/playlist?list=PL78B8A699ACD347EB>

- **Toilets are Not Garbage Cans**

The first video in the Protect Our Environment series explains why toilets are not the place to dump wipes, personal hygiene products, food, medicine, solvents, etc., and explain the consequences of improper disposal. The video also highlights proper disposal methods.



Figure 2: Public Outreach Information Video "Toilets are Not Garbage Cans"

- **Sinks are Not Garbage Cans**

Similar to the first featured video, the "Sinks are Not Garbage Cans" information video highlights the importance of not disposing of waste (i.e., fats, oils, grease, etc.) down sinks. Proper disposal of these household wastes helps to prevent/ avoid clogging of pipes and sewers.



Figure 3: Public Information Video "Sinks are Not Garbage Cans"

- **Protect our Storm Sewers**

The third video in the Protect Our Environment series explains where unwanted waste (i.e., household wastes, trash, oils, etc.) in our storm sewers ends up and the effects this waste has on our natural environment and wildlife.



Figure 4: Public Information Video "Storm Sewers"

▪ ***Drain Your Pool the Right Way***

The last video in the homeowner series explains the consequences of improperly draining pool and hot tub water and the consequences this chlorinated water has on the natural environment and fish species. Proper disposal methods are discussed.

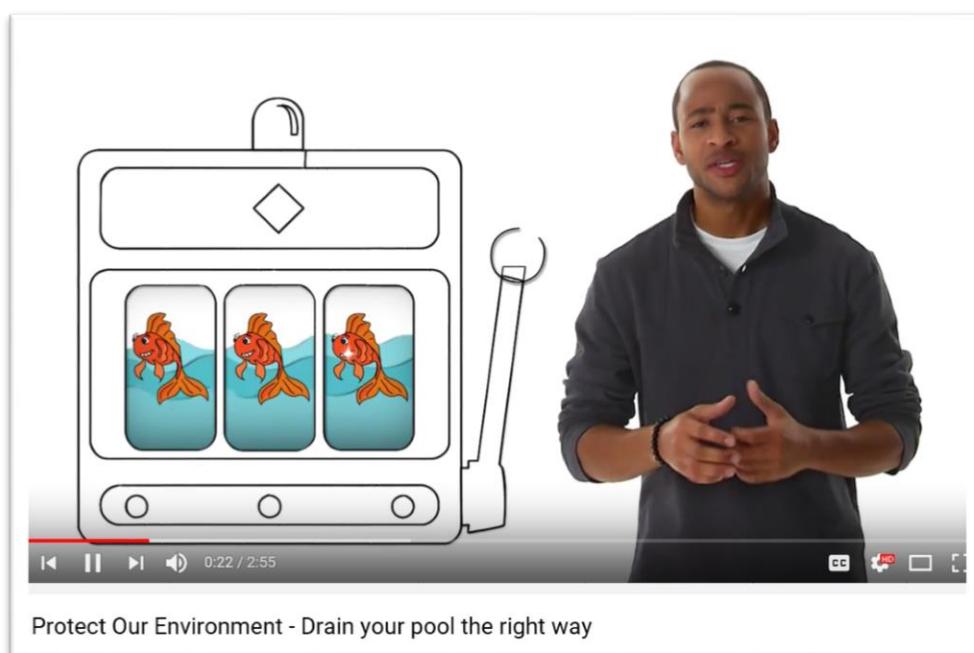


Figure 5: Public Information Video "Drain your Pool the Right Way"

Business Web Videos

Similarly, a series of videos directed at business owners was also created. The videos discuss best practices, waste management techniques and disposal methods for the following waste issues:

- Restaurant Grease;
- Oil and Grit;
- Construction Sites; and
- Auto Service Centres

The four videos within this series can be viewed on the City of London's YouTube channel. The weblink to this playlist is available below.

Web URL: https://www.youtube.com/playlist?list=PL981myVISwVN_f_0Ne-9MxHDAHO_TIZCI

Public Outreach Events

All educational information highlighted in this report is available on the City of London website (weblinks provided) and has been featured in various displays at local community and environmental awareness events (i.e., Home Show, festivals, etc.) and in outreach programs with schools such as Western University and Fanshawe College. A World Environment Day special event on June 5, 2017 featured a special screening of The Water Brothers episode "The Big Leak" featuring City Staff member Barry Orr. The Water Brothers, Tyler and Alex Mifflin, attended the event that also included educational displays and a panel discussion on current and emerging water related issues.

Moving Forward

The International Water Services Flushability Group (IWSFG) is a coalition of water service associations from Australia, Canada, Japan, New Zealand, Spain and United States to develop specifications for what is "flushable" and will not harm wastewater infrastructure. The City of London participates as a water services associate as part of this group and with active involvement by several City staff. The IWSFG has published draft specifications for public comment and are in the process of considering comments and reissuing the specifications. City staff will continue to support the IWSFG in the development of a flushable specification.

Web URL: <http://iwsfg.org/iwsfg-flushability-guidelines/>

CONCLUSION

The City of London is a leader in wastewater related public education and outreach. Helping the public to understand what should and should not be discharged to our wastewater system decreases the risk of backups and reduces maintenance costs.

City staff will continue to support the work of the International Water Services Flushability Group with the goal of a flushable specification. Nationally we would continue to support the Municipal Enforcement Sewer Use Group (MESUG) and the Canadian Water and Wastewater Association (CWWA) so that the specification can be included in legislation for Canada.

Acknowledgements

This report was prepared with the help of Tony Van Rossum, P.Eng. Environmental Services Engineer, Barry Orr, Sewer Outreach and Control Inspector of the Wastewater Treatment Operations Division and Monica McVicar, E.I.T., Wastewater and Drainage Engineering.

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Attach: Appendix 'A' – Residential Best Practices Pamphlets
Appendix 'B' – Business Best Practices Pamphlets