

Clause 1 in Report No. 1 of the Commissioner of Environmental Services was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on October 20, 2016.

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Clean Water and Wastewater Fund

Committee of the Whole recommends adoption of the following recommendation contained in the report dated October 18, 2016 from the Commissioner of Environmental Services:

1. Council endorse the following Regional projects for submission under the Clean Water and Wastewater Fund:
 - Environmental Services
 - York-Durham Sewage System Sewer Rehabilitation
 - Water Transmission Main Replacement
 - Upper York Sewage Solutions: Phosphorus Offset Program & Membrane Filtration Pilot
 - Erosion Monitoring and Maintenance Program
 - Duffin Creek Plant Field Testing for Phosphorus Removal Study
 - Monitoring and Targeting Program – Submetering Installation
 - Technical Feasibility Study – Innovative Technologies for Pumping and Treatment Operations
 - Transportation Asset Management
 - Culvert Inspection and Rehabilitation
 - Embankment Washout Repair
 - Condition Assessment Data for Stormwater Infrastructure

Report dated October 18, 2016 from the Commissioner of Environmental Services now follows:

1. Recommendation

It is recommended that:

1. Council endorse the following Regional projects for submission under the Clean Water and Wastewater Fund:
 - Environmental Services
 - York-Durham Sewage System Sewer Rehabilitation
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 - Upper York Sewage Solutions: Phosphorus Offset Program & Membrane Filtration Pilot
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2. Purpose

This report updates Council on details of the federal government's Clean Water and Wastewater Fund (CWWF), and seeks Council's endorsement to submit a list of projects eligible for funding by October 31, 2016.

3. Background and Previous Council Direction

Clean Water and Wastewater Fund is part of Phase I of the federal government's \$120 billion infrastructure strategy

The 2016 Federal Budget announced the establishment of a Clean Water and Wastewater Fund that proposes to invest up to \$569.6 million in Ontario for immediate improvements to water distribution and treatment infrastructure, including:

- Rehabilitation projects;
- New construction projects;
- Optimization initiatives; and
- Planning and design work.

CWWF funding is governed by a bilateral agreement between Canada and Ontario. The cost-sharing program consists of a 50-25-25 per cent contribution by federal, provincial, and municipal governments. The funding is retroactive to April 1, 2016.

York Region is eligible to receive a total federal/provincial maximum allocation of \$34.8 million

On September 14, 2016, the governments of Canada and Ontario announced the intake of the CWWF projects and released program guidelines and municipal allocations based on the amount of water, wastewater and stormwater assets owned by municipalities and their economic conditions. York Region is eligible to receive a maximum federal allocation of \$23.2 million and a maximum provincial allocation of \$11.6 million for a total federal/provincial maximum allocation of \$34.8 million.

Projects must meet an incrementality condition to be considered eligible for funding

The federal requirement for projects to be "incremental" is consistent with past infrastructure funding practices. However, the precise definition and application of incrementality has varied over the last 15 years.

As per recently released CWWF program guidelines, projects must meet the following incrementality criterion to be considered eligible:

- the project would not otherwise have taken place in 2016/17 or 2017/18; and/or
- the project would not have been undertaken without federal funding.

Clean Water and Wastewater Fund

Projects must also be completed by March 31, 2018. Where need is demonstrated, up to 25 per cent of costs can extend beyond March 31, 2018, if pre-approval is received by the provincial and federal governments.

Project eligibility for funding under Phase I of the Clean Water and Wastewater Fund refined since initial announcement

Conditions outlined with the 2016 Federal Budget for projects eligible for funding under Phase I of the Clean Water and Wastewater Fund were preliminary and have since been refined. In [June 2016](#), Council endorsed the following Regional projects for submission under the Clean Water and Wastewater Fund in anticipation a summer project intake:

- Upper York Sewage Solutions: Stormwater management and Microfiltration pilot
- York-Durham Sewage System rehabilitation
- Islington Avenue watermain rehabilitation
- Groundwater treatment strategy study and initiatives
- Feasibility study to reduce infiltration in large sewers
- Lake Simcoe mussel monitoring

The federal government intends to flow Phase I funding over the next two years with few details presently available on Phase II

The federal government plans to flow approximately 72 per cent (\$8.5 billion) of the Phase I funding in fiscal years 2016 to 2018. However, there are few details available on Phase II of the federal government's infrastructure commitment. It is understood that Phase II will deliver on the remaining 8 years of the federal government's long-term infrastructure plan. The federal government has been engaging with provincial, territorial, municipal and indigenous partners over the past few months on program design and will announce Phase II of the long-term plan in the next year.

4. Analysis and Implications

Leveraging federal and provincial funding to accelerate priority projects

The federal/provincial maximum allocation of up to \$34.8 million combined with the municipal contribution of up to \$11.6 million, advances \$46.4 million of York Region capital projects that will improve the reliability of the Region's drinking water, wastewater and stormwater systems. The CWWF provides an opportunity to accelerate water and wastewater projects within the Region.

Regional staff have identified a revised prioritized list of projects for Council's consideration for funding under the Clean Water and Wastewater Fund

Following the September release of program details and the Region's specific maximum allocation under the CWWF, staff have re-evaluated and revised the Regional project list for submission to the CWWF that was submitted to Council in June 2016. The revised prioritized project list, as outlined in Table 1, adheres to the program's eligibility requirements, specifically the incrementality conditions, and maximizes the federal and provincial contributions.

Table 1
Projects for Submission under the
Clean Water and Wastewater Fund – October 2016

Project	Estimated Project Cost (in millions)
York-Durham Sewage System Sewer Rehabilitation	\$22.5
Water Transmission Main Replacement	\$10.9
Upper York Sewage Solutions: Phosphorus Offset Program and Membrane Filtration Pilot	\$4.8
Erosion Monitoring and Maintenance Program	\$4.1
Duffin Creek Plant Field Testing for Phosphorus Removal Study	\$1.0
Monitoring and Targeting Program (Installation of Sub-Meters)	\$0.4
Technical Feasibility Study – Innovative Technologies for Pumping and Treatment Operations	\$0.2
Culvert Inspection and Rehabilitation	\$0.8
Embankment Washout Repair	\$0.1
Condition Assessment Data for Stormwater Infrastructure	\$1.6
Total	\$46.4

*For more detailed project descriptions see Attachment 1.

Project lists are to be submitted to Infrastructure Ontario by October 31, 2016. Successful projects will be identified by early January 2017.

The projects selected for the CWWF program focus on reinvestment in water, wastewater and stormwater infrastructure as part of a sound asset management program. Projects include innovative technology opportunities in nutrient removal, new construction methods and infrastructure protection. The recommended efforts support sustainability, reliability and optimization for current and future servicing needs.

Federal infrastructure funding programs support priorities identified in Vision 2051 and 2015 to 2019 Strategic Plan

Federal infrastructure funding programs support the “Livable Cities and Complete Communities” theme areas in Vision 2051. They also support the objective to “Manage Environmentally Sustainable Growth” priority area in the 2015 to 2019 Strategic Plan.

5. Financial Considerations

Federal and provincial funding received by the Region relieves future pressures on capital asset replacement reserves, development charge funded debt and tax levy for those projects identified in Table 1. Approximately, \$30 million in reserves, \$4 million development charge funded debt and \$2 million in tax levy pressure would be reduced if all projects are approved and the maximum allocation is received.

6. Local Municipal Impact

Advancing capital projects through third party funding benefits local municipalities through continued provision of reliable Regional water and wastewater services.

7. Conclusion

The proposed Regional projects for submission under the CWWF will help to improve reliability of drinking water, wastewater and stormwater systems while accelerating short-term community infrastructure investments across the Region.

For more information on this report, please contact Mike Rabeau, Director of Capital Program Delivery at 1-877-464-9675 ext. 75157.

Clean Water and Wastewater Fund

The Senior Management Group has reviewed this report. October 18, 2016

Attachment

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Accessible formats or communication supports are available upon request

Clean Water and Wastewater Fund - Project Descriptions

Potential Projects (In Priority)	Description	Estimated Project Cost (in millions)
York-Durham Sewage System Rehabilitation	Repair of infiltration points in sanitary sewer, including structural rehabilitation in Markham and Vaughan and Richmond Hill.	\$22.5
Water Transmission Main Replacement	Design and construction for the rehabilitation of aged ductile iron watermain to reduce the occurrence of breaks and extend the life of the watermain.	\$10.9
Upper York Sewage Solutions: Phosphorus Offset Program and Membrane Filtration Pilot	Retrofit and monitor stormwater management pond to improve total phosphorus removal in support of a total phosphorus off-setting program. Pilot study and design of microfiltration facility to provide tertiary treatment at the Upper York Water Reclamation Center.	\$4.8
Erosion Monitoring and Maintenance Program	Monitoring impact to Region's linear infrastructure from streambank degradation due to storms and related remediation work such as streambank stabilization.	\$4.1
Duffin Creek Plant Field Testing for Phosphorus Removal Study	Stage 3 field testing at Duffin Creek Plant to confirm model parameters for assessing phosphorous reduction strategies.	\$1.0
Monitoring and Targeting Program (Installation of Sub-Meters)	Provides benchmarking to give users an overview of energy use at a particular facility and enables the user to monitor specific energy consuming assets of a single facility.	\$0.4

Technical Feasibility Study – Innovative Technologies for Pumping and Treatment Operations	A study to determine the technical feasibility of innovative technologies to supplement emergency back-up power for facilities currently utilizing diesel back-up generators or facilities that do not currently have emergency back-up power but would benefit as it creates more system resiliency.	\$0.2
Culvert Inspection and Rehabilitation	Culvert relining, rehabilitation and embankment repair in the City of Vaughan.	\$0.8
Embankment Washout Repair	Washout repair and embankment stabilization around box culvert in the Town of Richmond Hill.	\$0.1
Condition Assessment Data for Stormwater Infrastructure	CCTV condition inspection and data collection of various storm sewers across the Region. This data collection will form the basis for asset management planning for the storm infrastructure.	\$1.6