

REPORT

REPORT TO: Chair and Members of the Planning, Public Works and Transportation Committee

REPORT FROM: Steve Grace, Program Manager, Water Resources

DATE: August 6, 2019

REPORT NO.: TPW-2019-0025

RE: Stormwater Management Strategy

RECOMMENDATION:

THAT Report No. TPW-2019-0025, dated August 6, 2019, regarding the Stormwater Management Strategy, be received;

AND FURTHER THAT Council approve the Stormwater Management Strategy Final Report prepared by Amec Foster Wheeler Environment & Infrastructure and Watson & Associates Economists Ltd., dated May 2019, (Appendix A);

AND FURTHER THAT Council approve the Work Plan on page 4 of Report No. TPW-2019-0025 for the preparation of the Terms of Reference for the Stormwater Master Plan.

BACKGROUND:

Through Report No. P&I-2017-0010, Council approved the award of contract for the development of a Stormwater Management Strategy to Amec Foster Wheeler Environment & Infrastructure.

Through Report No. TPW-2018-0027 Council was provided an interim update of the Draft Stormwater Management Strategy in June 2018.

The Stormwater Management Strategy Study is the first comprehensive review of the Town's stormwater management system. This represents the first phase of a multi-phase project to support the Town's Stormwater Management Program and to align the program with other corporate initiatives relating to sustainability and asset management.

COMMENTS:

The Stormwater Management Strategy includes an assessment of the Town's current Stormwater Management Program and expenditures, identifying life cycle analysis costs, funding and data gaps, including benchmarking against programs of similar municipalities. The assignment also includes the development of alternative stormwater management programs and associated costs, including funding gaps based on varying levels of service that will meet the Town's current and future needs.

The study recommends an approach to support the preferred Stormwater Management Program based on a sustainable level of service.

The final Stormwater Management Strategy includes the following sections:

Current Services

The operation and maintenance of the existing stormwater management system is managed by the Town's Public Works Department. The current systems that are mapped in GIS were reviewed with gaps filled by the Consultant (where possible). Creeks and streams within the urban area also form part of the stormwater conveyance system. Public Works is responsible for managing the system to ensure safe conveyance of stormwater runoff.

Drivers for Consideration of New Funding Strategy

The drivers are the Town's current goals to maintain competitive property taxes, to improve reserve funds, and to develop and implement a more predictable infrastructure investment approach.

The first step is to better understand and quantify the size of the gap and the financial resources necessary to address asset management needs for the existing stormwater management infrastructure (current asset value \$155,000,000.00).

The Climate Change Adaptation plan currently being developed by the Town will produce data to enable the Town to assess potential impacts to infrastructure, public safety from the potential increase in storm intensity, and be prepared to fund additional infrastructure upgrades and emergency support functions to meet the changing climate conditions including more frequent severe weather events.

Program Priorities

Several key themes have been identified with regard to setting program priorities including, but not limited to:

- Preparation of a Stormwater Master Plan to comprehensively establish the prioritization scheme that will provide an objective approach to planning and implementing projects. The Stormwater Master Plan process will allow stakeholders to be involved in setting appropriate levels of service expected by the community and would provide transparent forum to set program goals, funding targets, and preferred funding alternatives.
- Creek erosion control

- Maintenance backlogs
- Green infrastructure projects
- Asset management
- Emergency service support.
- Local flooding issues
- Water quality protection

Potential Program Enhancements

Preliminary program enhancements include:

- Increased annual preventative maintenance
- Implementation of select Capital projects
- Update Development Standards

Funding Options

The Town of Halton Hills, like many other Ontario Municipalities, is facing financial challenges due to the need to continue to provide quality services as costs are rising faster than revenues. Several options for cost recovery of stormwater services were identified and assessed against a range of criteria. The cost recovery options include the following:

- Property Taxes
- Dedicated Levy
- Flat rate
- Land area based charge
- Utility rate
- Runoff coefficient based charge
- Measured impervious area based charge

Potential Challenges to Implementing a Stormwater Funding Mechanism

Discusses in detail what are the major hurdles, the tools, and data necessary to choose an appropriate and sustainable funding option.

Immediate Next Steps

In reviewing information gathered to-date on the Town's stormwater management program, it is clear that challenges to effectively manage and finance a comprehensive stormwater program will escalate as the system ages, storm intensity increases, and capacity and quality issues become more critical. Key policy issues that need to be further assessed include:

- Program priorities for the next 5 to 10 years
- Desired levels of service and associated annual costs
- Preferred funding model
- Methods and opportunities to educate the community on services and needs

Conclusions and Recommendations

The Town's existing stormwater management services are primarily managed and provided by Transportation and Public Works Department. The current services are funded by general tax revenues and the annual (2017) cost of these services is estimated at \$1.34M.

The additional annual costs to increase the current levels of service to meet the expected needs for each of the key potential program enhancements based on a moderate level of service has been estimated at \$1.39M bringing the estimated annual costs to \$2.73M . These enhancements would focus on preventative maintenance including, SWM pond inspection and maintenance, catch-basin cleaning, implementation of an annual CCTV program, Stormwater Plan review and inspection, Stormwater Master Plan, implement green infrastructure, training, and capital improvements.

Recommendations

It is recommended that the Town establish a sustainable stormwater funding strategy. The next step towards the establishment of a new sustainable funding mechanism is to develop a recommended program approach and evaluate the financial options and impacts of implementing the recommended program. Once a funding mechanism has been selected by the Town, and approved by Council, the existing SWM fund can be adapted to be part of the new sustainable funding mechanism.

Work Plan

Staff will prepare a Terms of Reference for the development of a Stormwater Master Plan (approved in the 2019 Capital Budget). The first phase of the Stormwater Master Plan will identify:

1. Existing issues with respect to the structural condition, flow capacity, and maintenance requirement of the Town's stormwater system.
2. The location and extent of these issues.
3. Opportunities and recommendations to address and mitigate identified issues.
4. Timelines for implementation of the recommendations.
5. Costs to implement long term maintenance of the stormwater system.
6. Preferred financial and funding mechanisms.

The Stormwater Master Plan process will allow stakeholders to be involved in setting appropriate levels of service expected by the community and would provide transparent forum to establish program goals and funding targets.

RELATIONSHIP TO STRATEGIC PLAN:

- H.1 To provide infrastructure and services that meet the needs of our community in an efficient, effective and environmentally sustainable manner.
- B.1 To protect and conserve the quantity and quality of our ground and surface water resources, and ensure the integrity of our watersheds and aquatic ecosystems through integrated watershed planning and management.

FINANCIAL IMPACT:

As the funding for the Stormwater Master Plan was approved in the 2019 Capital budget, there are no current financial requirements. The recommended funding strategy will be considered as part of a future year Budget Committee.

CONSULTATION:

The Chief Administrative Officer and Senior Management Team were consulted on the Draft Stormwater Management Strategy. Council was provided an interim update in June 2018 through Report No. TPW 2018-0027. Staff from Transportation and Public Works, Planning and Sustainability, Recreation and Parks (Asset Management), and Corporate Services have reviewed the Stormwater Management Strategy.

PUBLIC ENGAGEMENT:

Public Engagement is not applicable at this time.

SUSTAINABILITY IMPLICATIONS:

The Town is committed to implementing our Community Sustainability Strategy, Imagine Halton Hills. Doing so will lead to a higher quality of life.

The recommendation outlined in this report advances the Strategy's implementation.

This Report supports the Environmental Health pillar of Sustainability and in summary the alignment of this Report with the Community Sustainability Strategy is excellent.

COMMUNICATIONS:

Following Council's approval of the Stormwater Management Strategy and finalization of the Terms of Reference for the Stormwater Master Plan there will be processes that will allow stakeholders to be involved in setting appropriate levels of service expected by the community. This would provide a transparent forum to establish program goals, funding targets and a new sustainable funding mechanism.

CONCLUSION:

The consultant has presented several options of cost recovery for stormwater services for consideration as part of the Stormwater Management Strategy. The project team has examined all of the options presented by the Consultant and developed an appropriate Work Plan for the Stormwater Master Plan, which will include additional annual operational and implementation costs for Council's consideration.

Reviewed and Approved by,

A handwritten signature in black ink, appearing to read "W. Andrews".

Bill Andrews, Director of Engineering

A handwritten signature in black ink, appearing to read "C. Mills".

Chris Mills, Commissioner of Transportation and Public Works

A handwritten signature in black ink, appearing to read "Brent Marshall".

Brent Marshall, Chief Administrative Officer