

City of Winchester

Stormwater System Operational and Maintenance Issues

A. New Stormwater Regulations

1. Virginia Stormwater Management Program

The state has recently enacted legislation that will require the City to implement and manage the Virginia Stormwater Management Program beginning on July 1, 2014. Previously, the state administered this program which applies to all new developments over 1 acre in size. Implementing and managing this program will require extensive additional City resources to review proposed new stormwater facilities, inspect these facilities during construction, and ongoing inspections to ensure that the stormwater facilities are operating properly.

To successfully implement and manage all the requirements of the Virginia Stormwater Management Program, the Public Services Department, through the FY15 budget process, is requesting that a Stormwater Engineer position be added on July 1, 2014. In addition to managing the Virginia Stormwater Management Program, this position will also be very involved assisting in the following areas:

- a. Ensuring compliance with the City's Municipal Separate Storm Sewer System Permit (MS4).
- b. Management of the City's participation in the National Flood Insurance Program and efforts related to the participating in the Community Rating System which could help lower premiums for flood insurance policies within the City.
- c. Design and construction of stormwater capital improvement projects.
- d. Maintaining and regularly updating the database of property impervious areas used for billing stormwater utility fee (if stormwater utility is implemented).

The estimated total annual cost to add a Stormwater Engineer position is approximately \$85,000 per year.

2. Quality of Stormwater Runoff

In order to meet more stringent stormwater quality regulations, the City will need to increase its current street sweeping program by approximately 50%. As the City currently

operates two street sweepers on a continual basis, one additional street sweeper will need to be added.

The estimated total annual cost to operate an additional street sweeper is approximately \$75,000 per year (this includes the cost of one additional employee). This proposed additional street sweeper would be added in July 2015.

B. Existing and Operational and Maintenance Activities

1. Public Works Division (Highway Maintenance Fund)

The Public Works Division currently does spend significant resources on the current street sweeping program and maintaining the stormwater drainage system. It is estimated that this expenditure is approximately \$250,000 per year which comes from the maintenance funds the City receives annually from VDOT. Implementing a stormwater utility would provide an alternate funding mechanism for this expenditure and would allow the \$250,000 in annual VDOT funds to be used for street paving and sidewalks, both of which are City Council priorities.

2. Utilities and Engineering

The Utilities and Engineering Division also spends significant resources annually on stormwater related activities. These activities include: ensuring compliance with the City's MS4 permit, participation in the National Flood Insurance Program, administering and enforcing soil erosion and sediment control regulations, and the design and construction of stormwater infrastructure improvements. It is estimated that the annual expenditure for these activities is approximately \$300,000. A stormwater utility would provide an alternate funding mechanism for these expenditures and would allow these utility funds to be used for continued water and sewer infrastructure replacement.

3. General Fund

The General Fund currently expends approximately \$60,000 per year on operational and maintenance activities related to stormwater. These activities include engineering consulting, GIS, and the mowing of some drainage areas completed by the Parks Department.

C. Expanded Operational and Maintenance Activities

While the Public Works Division does spend a considerable amount of time maintaining the stormwater drainage system, their staff resources are limited. Exhibit A shows the current organizational structure of the Public Works Division related to streets and stormwater.

As can be seen, there is only one crew of four employees that is available for maintaining the overall stormwater system. Unfortunately, these employees are also responsible for a multitude of other tasks so they are limited to the amount of time spent maintaining the City's large and complex stormwater system. Due to these limited resources, the current operational mode is one that is reactive in addressing problems that occur.

In order to modify the operational mode to become proactive in maintaining the drainage system to ensure the system operates properly and problems are prevented, additional resources are necessary. The Public Services Department is recommending that three additional employees be added so that there is one crew that is devoted solely to the maintenance of the City's stormwater drainage system.

The estimated cost of adding this additional crew is approximately \$175,000 per year which could be funded by implementing a stormwater utility. This proposed crew would be added in July 2015.

D. Utility Billing

If a stormwater utility fee is approved by City Council, the most cost effective way to bill and collect this fee would be to utilize the current water and sewer utility bills. This would also have the benefit in that the stormwater utility could help pay for a portion of the existing expenditures related to utility billing. Overall, it is estimated that approximately \$100,000 in annual utility billing expenditures could be paid for by a stormwater utility which in turn would allow these water/sewer funds to be used for continuing water and sewer infrastructure replacements.