Town of Agawam, MA
Stormwater System Assessment and Utility/Fee Planning

Citizen Advisory Task Force Meeting #3
June 28, 2017

Meeting Summary

Meeting Date:	Wednesday June 28, 2017
Time:	6:00 to 8:00 p.m.
Location:	Agawam Public Library, 750 Cooper St, Agawam, MA
Prepared by:	Rich Niles (Amec Foster Wheeler) Carrie McCrea (Amec Foster Wheeler)

Attached for reference are the attendee sign-in sheet and meeting agenda and below are the next steps, followed by a summary of key discussion and information related to the project.

Next Steps:

- Update funding analysis and outline policies
- Update information on web site
- Continue to engage public through press releases and future meetings
- Plan for Task Force Meeting #4 in September

Summary:

1. Review of Task Force Meeting #2

Rich Niles presented a summary of Task Force Meeting #2. The second meeting focused primarily on the Town's stormwater management needs and projected future costs. Various levels of service (minimal to exceptional) were presented to have an initial discussion around the level of funding and associated services that are appropriate for Agawam. An introduction to some of the primary funding options for the stormwater program were introduced. The Task Force expressed the need for more information regarding the financial impacts of different levels of service so they could better understand the impacts of funding the stormwater program through the general fund versus a stormwater utility fee. During Meeting #2, the Task Force provided valuable input for the Public Engagement Plan regarding the groups of people to reach, ways to reach those groups, the concerns they may have, and responses to the concerns.

2. Stormwater Utilities (introduction and funding approach)

The concept of stormwater utilities was discussed with an emphasis on the key benefits and how they typically work. Similar to water or sewer fees, stormwater fees are assigned to all developed parcels based on an estimate of their stormwater runoff contribution or "use" of the public system. This funding approach is often seen as a more appropriate method for generating revenue for stormwater activities versus the general fund that is based on property value and does not recognize good or poor stormwater management.

The estimate of "use" is typically based on impervious surfaces, which result in excess stormwater flows and associated pollutants when not properly managed. Research has shown that when the percentage of impervious surfaces in a watershed exceeds 10%, stream quality becomes impacted. Streams can no longer support habitat beyond 25% impervious. In Agawam, the drainage sub-basins range from ~2.5% to 28.5% impervious. This is often why the measurement of impervious surfaces is seen as a reasonable basis to measure stormwater impacts and associate fees.

National trends for stormwater utilities and examples in Massachusetts were discussed. It was noted that each program varies in terms of services provided and the fees and revenues vary widely due to rate structures and makeup of rate payers (e.g., residential versus non-residential). Enabling legislation for stormwater utilities in Massachusetts was discussed to highlight the key components that need to be addressed when implementing a stormwater utility. Emphasis was placed on the need to perform due diligence across several key areas to establish a successful, legally-defensible stormwater utility.

3. Agawam Data Analysis

Carrie McCrea discussed the data analysis that was performed for Agawam using GIS data and Assessor's records for each parcel in Town. The data consists of parcel and land use data from the Town and GIS data from MassGIS that includes parcel boundaries and impervious surfaces. It was noted that the Pioneer Valley Planning Commission recently completed an update to the MassGIS impervious surface GIS data layer to clean up significant over and under-capture areas.

The initial data analysis shows that there are 9,179 developed parcels (at least 200 sf of impervious area) that total of 78,678,230 sf or 1,806 acres of impervious area. It is important to note that the total number of single family residential parcels represents 84% of the parcels in Town while those parcels have only 39% of the total impervious area.

Amec Foster Wheeler developed preliminary stormwater rate structure options using an equivalent residential unit (ERU) and a flat billing unit of 1,000 sf of impervious area (IA). The ERU was calculated to be 3,250 sf of IA, which is the median value of IA (house, driveway, patio, etc.) for a single family residential (SFR) property in Agawam. Both the ERU and the 1,000 sf flat billing unit show a better distribution of stormwater program costs that more closely matches the distribution of IA by property type (SFR versus all others) than the current approach of using tax funding

Using these two basic rate structure options, the total number of billing units were calculated for every parcel and resulted in 22,725 billing units using the ERU approach and 78,702 billing units using the Flat Fee approach. The total number of billing units serves as the basis for setting the fee under each option. It was noted that there are multiple rate structure options and these will be discussed further in subsequent meetings with the Task Force.

4. Preliminary Funding Analysis

Amec Foster Wheeler completed a preliminary funding analysis based on the feedback from Task Force members during Meeting #2. The presentation of this analysis was originally scheduled for Meeting #4, but Task Force members wanted an understanding of costs and potential fees. They also requested examples for specific properties so they could provide additional feedback on the Level of Service and financial impacts. The funding analysis, therefore, was accelerated to provide preliminary rates for the two rate structures discussed above using two different Levels of Service. It was noted that these rates are preliminary and there are still multiple funding policies that need to be discussed with the Task Force prior to setting a final recommended rate.

Level of Service Update

Rich Niles presented an update to the future stormwater program costs and Level of Service (LOS) analysis presented during Meeting #2. As a point of comparison, Amec Foster Wheeler estimated the replacement value for Agawam's existing stormwater infrastructure at approximately $150M. Using best practice guidelines from the American Water Works Association, the Town should be investing 1-2% of the value of these assets in annual maintenance, as well as capital replacement or capital reserves. This means that sustainable management of the stormwater infrastructure should be close to a $3M investment annually. This investment may need to be even higher based on the condition of the stormwater infrastructure, once fully assessed.

The future projected stormwater costs for a moderate level of service for Agawam is ~$1.93M annually (over the five-year planning period) and includes a doubling of the current LOS to:

- Provide more proactive maintenance;
- Provide regular system inspections;
- Meet regulatory mandates; and
- Address the backlog of infrastructure repair and replacement needs with a consistent set-aside of $250,000 per year.

The future projected stormwater costs for a higher level of service for Agawam is ~$2.16M annually and represents an average increase of 2.5 times the current LOS to:

- Provide the same as the moderate LOS, but with an accelerated schedule for system inspections and capital improvements;
- Provide a new engineer in year 2 to support inspections and capital contracts; and
- Provide $250K more for capital improvements ($500K total) starting in year 3.

It is important to note that the LOS estimates are well below the $3M target based on infrastructure value, but the projected stormwater costs are for the next 5 years only. It is reasonable to assume that the LOS and costs could continue to grow to a more sustainable level as the program matures and needs are better quantified with new inspection data.

Revenue Estimate and Preliminary Rates

Using the future projected stormwater costs for the LOS estimates, a preliminary estimate of revenue needs was developed to incorporate the additional operating costs for a stormwater utility that include credits (3%), bad debt (2%) and the costs for database management, billing, collection and other activities. This results in annual costs of $2.05M to $2.30M for the moderate and higher LOS using a 5-year average.

The preliminary stormwater rates were calculated for each program LOS by dividing the annual revenue needs by the number of billing units for each rate structure (ERU versus 1,000 sf IA). A summary of the preliminary rates is provided below.

Program	ERU (3,250 SF IA)		Flat rate (1,000 SF IA)*	
Moderate LOS ($2,052,519)	$7.53/ month/ ERU	$90.36/ year/ ERU	$2.17/ month/ 1,000 SF IA	$26.04/ year/ 1,000 SF IA
Higher LOS ($2,297,790)	$8.42/ month/ ERU	$101.04/ year/ ERU	$2.43/ month/ 1,000 SF IA	$29.16/ year/ 1,000 SF IA

**Note: the flat rate is for every 1,000 SF of IA; therefore, using a flat rate approach the fee for a property with 3,000 SF IA or 3 billing units (approx. 1 ERU) is $6.51/ month or $78.12/ year for a moderate LOS and $7.29/ month or $87.48/ year for a higher LOS. See discussion of sample properties below.*

The above stormwater fees were compared to the tax increase needed to fund the program through the general fund. For the moderate LOS, a tax increase of ~1.8% would be needed to fund the average *increase* in program costs ($1,926,209-$892,571). For the higher LOS, a tax increase of ~2.2% would be needed to fund the *increase* in program costs ($2,159,800-$892,571). It is important to note that a potential tax savings of ~1.5% may be realized if a stormwater fee is implemented due to the current program costs ($892,571) no longer being funded through taxes.

Sample Properties

Information on numerous local sample properties were presented to illustrate the stormwater fee calculations using two rate approaches and the moderate versus higher LOS. In general, the 1,000 sf IA rate structure recognizes smaller differences in properties, which results in varying costs for SFR properties. Under an ERU rate structure, all SFR properties would be treated the same. The ERU approach results in fewer billing units and a higher cost per billing unit (which typically impacts non-residential properties the most due to more impervious area and a greater number of billing units). Examples were also provided to illustrate the difference between funding the stormwater program through the taxes versus a fee. The examples demonstrated that costs and potential savings can vary significantly depending on the value of the property and its impervious area.

Task Force Feedback

The Task Force was asked to provide feedback on the preliminary funding analysis and sample properties. Members of the Task Force felt that the future costs are a significant increase overall (up to 2.2% tax increase), especially when considering that tax increases do not exceed 2.5% annually. Members of the Task Force, however, agreed that there are stormwater needs that are not met and the current level of funding is not adequate. In general, members of the Task Force felt that a stormwater fee was a better way to distribute costs and the costs for sample residential properties seemed reasonable for both LOS and rate scenarios. Members of the Task Force that are business and tax-exempt property owners commented that the annual fees for a stormwater utility appeared to be reasonable and noted that the increase for a higher LOS would advance the program for little added cost. Feeding Hills Church commented that charging all properties for stormwater services is a way for everyone to contribute to the needs of the community.

Additional comments from the Task Force emphasized the need to effectively engage the public and inform them of the needs and costs related to stormwater management.

5. Public Engagement Update

A brief update on public engagement activities was provided. Specifically it was mentioned that the web page has been updated to provide the past meeting materials and summaries, as well as the link to the interactive map. Another press release is anticipated in the coming weeks and the PVPC will continue to work on materials to support the Public Engagement Plan.