CDM

Memorandum

To: *Stormwater Advisory Committee*

From: *CDM*

Date: *October 5, 2010*

Subject: *Stormwater Advisory Committee Meeting #4*

On September 16, 2010, the CDM team facilitated the fourth meeting of the Stormwater Advisory Committee (SWAC) for the City of Lynchburg (City). The session was held at 6:00 pm at the James River Conference Center.

CDM provided each member of the group with meeting materials including a set of PowerPoint slides. The following is a list of agenda items covered during the session:

- Summary of Last Meeting
- Costs for Alternative Levels of Service and Regulatory Compliance
- Stormwater Program Funding

Summary of Last Meeting

Jeff Scarano with the City of Lynchburg briefly discussed a field trip conducted by the City for interested members of the SWAC. The group visited several locations throughout the City that demonstrated current City stormwater needs and projects completed by the City to address these needs. For those that were not able to attend, a link to a video on the City's website is provided here: http://www.lynchburgva.gov/Index.aspx?page=5004.

Next, David Mason of CDM reviewed the City's Level of Service evaluation and discussed the cost of service provided at the last meeting. Mr. Mason noted a change in the cost numbers. A sum of approximately $177K was previously shown in the Regulatory category for planning. This number was incorrect as it was a carry-over from a previous evaluation and should have been removed. In addition, CDM has been discussing these figures with City Finance, who determined that it would be appropriate to include Vehicle Depreciation within the Public Works line-items for Operation and Maintenance. The Vehicle Depreciation cost related to stormwater service is approximately $189K. Therefore, the net change in cost is approximately $12K, bringing the total annual cost of the program to approximately $2,332,000.

Costs for Alternative Levels of Service and Regulatory Compliance

David Mason continued the presentation with a discussion about alternative levels of service and costs. Mr. Mason noted that the consultant's evaluation identified the following items as areas of improvement for the City: 1) increase knowledge base of the system, 2) implement a routine and preventative maintenance system, and 3) prioritize capital improvement projects. These items may be implemented across the four categories of stormwater management, each at varying levels of service. Mr. Mason discussed each of the four categories of stormwater management and the suggested improvements that could be made within each category. Each level of service included a total annual cost.

Program Management Improvements

For Program Management, the highlighted activities included Master Planning and Condition Assessment/Inventory. Each of these activities may be completed on a more aggressive schedule to move up the Level of Service ladder. The benefit of an aggressive schedule for these activities would mean that more information would be available to the City to implement important capital projects on a priority basis. Also, a complete understanding of the City's system would provide a better understanding of the current maintenance needs and long-term service needs city-wide.

Regulatory Program Improvements

The regulatory program improvements focused on implementation of current and projected NPDES Phase II permit requirements. It has been anticipated that future phases of the permit will emphasize a higher level of inspection and enforcement of private BMP devices. In addition, the City may have additional responsibilities related to such items as illicit discharge detection and elimination. Lastly, the City will likely need to enhance its education program to support all areas of the permit.

An annual cost for each of the Level of Service options was developed. The recommendations for a higher level of service include an additional one-half FTE or full FTE to provide a higher level of inspection and enforcement for the NPDES Phase II regulatory programs. In addition, the recommendations consider varying options for the level of maintenance on private BMPs. It was noted that these costs do not consider potential costs related to the Chesapeake Bay TMDL implementation, which are considered separately in a later section.

Operations and Maintenance Improvements

Improvements for the operations and maintenance program focused on the development of a fully preventative and routine maintenance schedule for all portions of the City's infrastructure. This program includes the inspection and maintenance of inlets, storm sewers, culverts, ditches and BMPs. The program also includes a fully routine street sweeping program. A full preventative maintenance program would be considered a Level of Service 5.

Subsequent levels below that would replace routine maintenance activities with more routine inspection to identify potential problems before the become threats to property owners or the City's infrastructure.

Costs within the O&M category include a re-establishment of the City's three, one-man crews for street sweeping, annual allocations for additional labor/equipment to perform the routine maintenance activities, and annual dollars to fund point repairs in the system should they be identified.

Capital Improvements Program Enhancements

The primary focus for improvements to the CIP program are additional funds to implement important capital projects, a prioritization for completing the projects and an annual allocation for small, point repairs in the system. The Level of Service alternatives also include consideration for annual costs for the City participation in a public/private cost-share program for specific, beneficial projects.

Summary of Annual, Planning Level Costs

The costs provided in this section are planning-level, annual costs (2010 dollars) that must further be refined for budgeting purposes. Also, these costs are provided by category only to show the relative difference in level of effort within each category. As the program matures, the costs may shift between categories and are not inherently capped. Below is a summary of costs provided at the meeting:

Level of Service	*Program Management*	*Regulatory Compliance*	*Operation and Maintenance*	*Capital Improvement Projects*	*Total Program Cost*
5	$1,137,000	$828,000	$1,712,000	$854,000	$4,531,000
	Comprehensive Planning & Full Implementation Capabilities	Exemplary Permit Compliance	Fully Preventative/ 100% Routine	Prioritized / Fully-Funded	
4	$790,000	$530,000	$1,487,000	$754,000	$3,561,000
	Pro-Active Planning & Systematic CIP Implementation Capabilities	Pro-Active Permit Compliance	Mixture of Routine and Inspection Based	Phased Implementation / Allocated Budgets	
3	$551,000	$384,000	$1,262,000	$654,000	$2,851,000
	Priority Planning & Partial CIP Implementation Capabilities	Full Permit Compliance	Mixture of Inspection and Responsive Based	Complaint, Inspection-Based / Moderate Budget	
Existing LOS (2.5)	$342,000	$290,000	$1,146,000	$554,000	$2,332,000
	Well-Trained, In-House Staff Minimal Long Range Planning	Minimum Permit Compliance Resources At Capacity	Limited Routine Activities Lack of Dedicated Resources	Critical Needs Only / Minimum Budget	

Chesapeake Bay TMDL Implications

At the time of the meeting, the State of Virginia had released its draft Watershed Implementation Plan (WIP) to formally document how the State expects to achieve the water quality targets assigned by the State. The State has been working very closely with cities such as Lynchburg to develop a plan that everyone thinks is reasonable considering the costs and benefits. The State's proposed plan focuses on an expansion of the statewide Nutrient Trading Program so that cities can have flexibility in the options they chose to reduce nutrients. However, the ultimate target for nutrient reductions that EPA has set is burdensome. CDM estimated the potential cost for nutrient reduction for the City of Lynchburg. Using a variety of cost methods, the range of potential total capital cost was $300 million to $900 million.

Discussion Session #1

At this point in the meeting, the committee split into multiple groups to discuss a few questions regarding the City's existing and future levels of service and the cost information they had received. The following is a summary of comments received regarding the two questions:

What is the most appropriate level of service for the City of Lynchburg?

The following table is a summary of each groups voting on their recommended level of service for each of the four program categories.

	Existing LOS	Group 1	Group 2	Group 3	Group 4	Average
Program Management	**2**	**4.5**	**4**	**5**	**4**	**4.4**
Regulatory Compliance	**3**	**3**	**3**	**3**	**3**	**3.0**
O&M	**3**	**4**	**3**	**3.5**	**3**	**3.4**
CIP	**2**	**3.9**	**2**	**3**	**4**	**3.2**
						3.5

In general, the groups voted for an increase in the level of service for Program Management and O&M, but voted to keep regulatory compliance at current levels and not raise capital improvements until more planning work is performed.

How would you prioritize the areas of the City's stormwater management program?

The following table is a summary of each groups voting on their prioritization of the four areas of stormwater management.

	Group 1	Group 2	Group 3	Group 4	Rank
Program Management	**3**	**1**	**1**	**1**	**1**
Regulatory Compliance	**4**	**4**	**4**	**4**	**4**
O&M	**1**	**2**	**3**	**3**	**2**
CIP	**2**	**3**	**3**	**3**	**3**

In general, the group voted Program Management as the number one priority portion of the program. The reasons given included the need to provide more pro-active planning in the face of the Chesapeake Bay regulations. The groups felt that the City should understand all of their needs and be prepared to spend what limited dollars they have on the highest priority projects.

The second highest priority program was O&M. The groups recognized the aging condition of the system and the need to properly maintain the system to extend its performance and useful life.

The lowest priority element of the program was regulatory compliance. The group noted that regulations are certainly important, but that the City should not do anything more than the minimum required.

Stormwater Program Funding Options

Next, Steve Sedgwick of CDM presented a summary of the available funding options for stormwater management in Virginia. Mr. Sedgwick noted that the City's current budget is approximately $314 million compared to the current stormwater budget of $2.3 million. That comparison suggests that the City is not prioritizing stormwater needs ahead of the pending regulatory changes. Mr. Sedgwick noted that over half of the revenue that supports the City's stormwater program comes from the General Fund. The remainder comes from VDOT reimbursements and reimbursements from the utility program. Moving forward, it is not likely that funds from VDOT or Public Utilities will increase from current levels. Therefore, any additional revenue needed to support a higher level of service would need to come from the general fund or others sources.

Mr. Sedgwick provided a summary of the primary and secondary funding options. The primary options are continued use of the general fund (which is supported primarily by property taxes) or a user fee based system. Each of these has the capability of funding the entire program. Secondary sources include grants, loans, impact fees, etc. While these sources are important, they cannot support all elements of the program and are generally suitable for only capital needs.

Mr. Sedgwick provided the pros and cons of each of the primary funding options/alternative. In general, tax-based funding mechanisms are easy to collect since the system is in place, are stable sources of funding, and can provide additional revenue. The cons are that only taxable properties pay into the system, the need for funding is not linked to the property, and the system is generally inequitable when comparing residential and non-residential properties.

Mr. Sedgwick next explained the concept of a user fee system since that system is unfamiliar to many people. A user fee system is an enterprise fund that is very similar to water, sewer and solid waste utilities. All funding for the program is fully dedicated through a user fee and the fee is related to the services provided. The advantage of this system is primarily equity related. The charge to a payer is in direct proportion to the runoff burden of the property. This funding source is stable and dedicated solely to stormwater management.

The disadvantages of the user fee system are that it's a completely new source of funding, which may be unpopular and that it creates a financial impact to citizens, particularly those that are tax-exempt and do not contribute to funding today's program.

Mr. Sedgwick continued with a more detailed discussion of the user fee methodology. Stormwater services are linked to a property in proportion to the properties amount of impervious surface, which is directly related to the runoff created from a site. Therefore, it can be used to justify a charge scale to residential and non-residential properties. The charge system is generally based on a base unit, which is typically equivalent to the average impervious area on a residential property within the City (called an Equivalent Residential Unit or ERU). Once the ERU is establish (typically through measurement of a sample of residential properties), it can be divided into the total impervious area of a non-residential property to determine the number of equivalent units for that property. So, if a property has three times as much impervious surface as the average residential property, then the property is assigned 3 ERUs and pays three times the amount of the typical resident.

Finally, Mr. Sedgwick provided information on how other stormwater programs in the State and the country fund their programs. While most continue to fund their program with tax revenue, a growing number of City's have converted to a user fee system. A recent study estimates that there are over 1,000 stormwater user fee programs in the country. The growth in the number of stormwater user fees has been driven by the increase in stormwater regulations. In Virginia, there are 13 user fee programs and two programs that have

dedicated taxes to provide funding support. A few others cities are currently evaluating options.

Summary of Stormwater Advisory Committee Questions and Comments

The following is a list of questions and comments made by the Advisory Committee over the course of the presentation and in the final comment period:

Q – How are current CIP projects funded?

A- There are currently no funds set aside in the CIP program for specific stormwater projects. The city maintains an allocation of funds annually for small repairs/replacements but it is typically not sufficient. As an example, the City has already spent the entire allocation for this year through the month of August. The small repair fund in place is typically funded through VDOT reimbursement funds.

Q – If Lynchburg decided to declare itself a Town rather than a City, could we avoid these requirements?

A – No, the requirements are assigned to areas that reach a certain population density. It is not contingent upon the designation of your city.

Q – Will EPA provide funding for cities to deal with the Chesapeake Bay rules?

A – EPA has some funding set aside but it's not likely enough to support the needs across the bay.

Comment – *Up to this point, the developers, citizens and the City have all be doing their part to reduce pollutant loads to the James River. However, the new regulations were not part of the original plan which must now be revised to meet the new pollutant load reductions required by EPA.*

Q – If the bacteria loading is "1" now and we need to reduce it to "0.9", as an example, is it worth it?

A – The City must do what is necessary to comply with the permits issued. However, the question for the committee is whether meeting the regulations is enough or should the City go further to improve water quality in Lynchburg.

Comment – *When comparing funding options, you need to consider that property tax revenues will be falling because of the economy and therefore, less funding overall will be available.*

Q – How many regulatory violations has the City had related to their NPDES Permit?

A – None.

Q – Why can't we just at a fee in proportion to some percentage of a water bill?

A – That is possible and can be done, but that does not provide any equity in the system which can open up the City to legal challenges.

Q – Why would the City want to go through all of this?

A – It's not necessary, but it is an option that many are considering. There are other options on the table.

Comment – *Just increase taxes to cover the difference. It's easy and already in place.*

Comment – *There are pros and cons to both systems. But, it seems that a fee based system is more fair since all customers pay in proportion to what they generate.*

Comment – *The user fee system seems like a fair approach.*

Comment – *The City already charges twice the amount of taxes as others in the area. I fear that any more fees/taxes will drive businesses elsewhere.*

Comment – *There appears to be a need to generate more revenue simply to keep up with regulations, but also to perform essential planning and maintenance.*

Comment – *One member noted that there are issues with just raising taxes. The money is not dedicated and can be raided for other purposes. He would like to see a dedicated funding system and the user fee seems like the best approach.*

Comment – *It was noted that a dedicated fee system likely helps when pursuing grants and loans.*

Comment – *Impact fees should be taken off the table.*

Q – Are governments charged a fee?

A – Yes, all property owners with impervious area are charged a fee.

Next Meeting

The next meeting of the Stormwater Advisory Committee will be held on October 21, 2010 at 6:00pm at the James River Conference Center. Once again, snacks and drinks will be available. Attendees were thanked for their time and encouraged to attend the subsequent meetings.