CDM

Memorandum

To: *Stormwater Advisory Committee*

From: *CDM*

Date: *July 13, 2010*

Subject: *Stormwater Advisory Committee Meeting #2*

On June 24, 2010, the CDM team facilitated the second 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, a Level of Service matrix, and a copy of the City's 2009 NPDES MS4 Permit Annual Report. The following is a list of agenda items covered during the session:

- NPDES Phase II Stormwater Requirements
- Stormwater Services in Lynchburg
- Cost of Service Analysis
- Questions and Answer Session

NPDES Phase II Stormwater Requirements

Following a brief summary of last meeting, David Mason with CDM presented information regarding the City's National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Phase II permit. The federal government mandates that all communities greater than 10,000 people must have a stormwater permit through the NPDES program (note: communities with greater than 100,000 people were issued a Phase I permit in the early 90s). The goal of the program is to reduce the discharge of pollutants to the "maximum extent practicable (MEP)", which generally means to the limits of technology and also economically feasible.

The NPDES Phase II program requires the City to implement the following six minimum measures for stormwater management:

- Public Education and Outreach

- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Controls
- Post-Construction Site Runoff Controls
- Pollution Prevention for Municipal Operations

The Phase II stormwater rules apply to over 100 communities in Virginia. The City is currently on their second five-year cycle of the permit, which requires the implementation of many discrete stormwater program activities within the six measures stated above. All activities identified in the permit must be implemented by the end of every five-year permit cycle. A copy of the City's most recent annual report (2009) with requirements and activities completed was provided at the meeting.

Mr. Mason continued with a description of the key activities that the City must implement for each of the six minimum measures. These activities are listed on the PowerPoint slides presented at the meeting. Mr. Mason concluded the discussion by providing information regarding potential fines for non-compliance with the NPDES Permit.

Stormwater Services in Lynchburg

Mr. Mason continued the presentation with a discussion of the types of services the City provides to comply with existing regulations and to meet basic customer expectations. Stormwater services are a city-wide function for Lynchburg, with many departments serving a key role. In particular, Public Utilities, Public Works, Community Development and Parks and Recreation provide the primary stormwater services with support from the IT department, Communications & Marketing, and Finance. In order to better understand the types of services provided by the City, the CDM team generally organizes the services into the four basic functional areas of stormwater management, which include Program Management, Regulatory Compliance, Operations and Maintenance (O&M) and Capital Improvements Project (CIP). Categorizing the services provided in this manner will allow the SWAC to understand and evaluate the level of service Lynchburg is providing in each category.

Program Management Services

In general, the Program Management category includes such services as management and oversight, complaint response, budget/CIP development, plan review and other like services. On an annual basis, the City reviews approximately 50 stormwater plans for new development as well as approximately 70 agreements in lieu. Related to these projects, the City annually performs approximately 2,400 site inspections to enforce compliance with the

City's rules and regulations. In addition to these inspections, staff receives approximately 250 to 300 calls annually from customers requesting stormwater services. The City promptly responds to these calls/complaints and performs a field investigation if necessary. Nearly 80 percent of these calls are related to clogged inlets and ditch maintenance.

Regulatory Compliance Services

A majority of the items discussed above in the NPDES section fall into the Regulatory Compliance category. These items generally include erosion and sedimentation control, post construction site runoff control, public education/involvement and illicit discharge detection/elimination. This category also includes internal City programs, such as pollution prevention/good housekeeping for municipal facilities/properties. Related to illicit discharge detection, the City has identified approximately 150 stormwater outfalls city-wide which require annual inspection. City staff performs routine field investigations of these sites annually to identify potential pollutants entering the City's natural drainage system at the outfall locations. If a substance is identified, staff is required to investigate and remove the possible source of contamination.

Related to Post Construction Runoff control, the City is required to implement a program to reduce the impacts of new development on the stormwater system. By ordinance, the City requires new development and redevelopment projects to design and implement runoff reduction measures, which include detention ponds, constructed wetlands and other stormwater best management practices (BMPs). Ultimately, the City is required to ensure that maintenance is performed on these devices (approximately 125 BMPs are located in the City) through maintenance agreements and periodic inspections.

Operations and Maintenance (O&M) Services

O&M services include such items as the cleaning and repair of the stormwater system, ditch cleaning/maintenance, city-owned BMP maintenance, street sweeping, and pipe/inlet flushing. The City's stormwater management system serves most of the 50 square mile land area and includes over 900+ lane miles of roadway, over 30 miles of storm sewer, over 10 miles of culvert and over 4,200 storm inlets. In general, the City's Public Works and Public Utilities departments provide the maintenance services.

Approximately 45 inlet/grates that have been identified as critical or problematic are maintained by the City weekly and after any major storm event. All other inlets/grates are generally maintained on a reactive basis (approximately 366 tons of debris removed last year from inlets). The City also installs approximately 30 driveway pipes annually and cleans more than 20,000 linear feet of ditch line. Finally, the City has a routine street sweeping program that cleans downtown streets weekly and remaining streets at least three times per year. In total, approximately 1,800 miles of roadway are cleaned annually, which removes an additional 400 tons of debris from the system.

Capital Improvement Program (CIP) Services

The fourth program area is CIP. This category generally includes the planning, design and management of the City's large capital projects related to stormwater. On an annual basis, the City designates approximately $550,000 towards storm drainage system repairs/replacement and culvert improvements. These dollars are generally used for emergency repairs throughout the year as there is no identified backlog of CIP projects at this time. However, there are additional dollars used to construct new stormwater infrastructure as a part of both roadway and CSO projects. Once these projects are constructed, however, the maintenance of the infrastructure is generally a stormwater function (rather than Streets or CSO).

Cost of Service Analysis

In gathering information on the stormwater program, CDM interviewed City staff and reviewed City documents to determine how the services were being provided and what resources were available to provide the services. Since discrete stormwater tasks are not defined in the City's budget, CDM used information gathered by staff to estimate the total City funds expended to provide stormwater services. Generally, the estimates were based on an estimate by staff of department budgets and personnel devoted to stormwater. CDM performed a similar analysis for every department providing stormwater services to develop a total estimate of the average annual cost of stormwater service in the City of Lynchburg.

On an annual basis, the cost to provide basic stormwater services for the City of Lynchburg is approximately $2.3 million. However, the review did investigate some additional cost items that may or may not be considered stormwater-related services by review of other local governments in the State. These items include loose leaf collection, vehicle depreciation and transportation-related capital project costs. These items could add an additional $1.8 million to the annual cost for stormwater services.

For the next meeting, the CDM team will provide an independent assessment of the City's level of service for stormwater management in Lynchburg as well as potential focus areas for overall improvement. The assessment will be performed using a matrix developed by CDM for many other projects in the Southeast.

Summary of Stormwater Advisory Committee Questions and Comments

Before the close of the meeting, Steve Sedgwick of CDM facilitated a general question and answer session with the Committee. The following is a list of questions and comments made by the Advisory Committee over the course of the presentation and during the facilitated question and answer session:

Q – What is the anticipated schedule for the Chesapeake Bay rules?

A- The State expects to receive the total pollutant allocations by July 1, 2010 from EPA. There will be a public comment period and the States will then be required to submit a Watershed Implementation Plan (WIP) to EPA by December 31, 2010. By July 2011, individual localities should receive their "pollution diet" and then the localities will develop WIPs by December 2011 to meet the pollution limits prescribed by EPA.

Q – What happens if the City can't afford to comply?

A – The Chesapeake Bay rules will be implemented by the State through the City's existing NPDES permit. If the City does not remain in compliance with their permit, fines and penalties may be imposed up to $38K per day. Also, the Federal Government may withhold funding to City's out of compliance. Finally, Cities out of compliance may open themselves up to third-party lawsuits.

Q – For the City's illicit discharge program, does the City just rely on city forces to enforce the program or is there citizen involvement?

A – The City is ultimately responsible for the inspection and enforcement of the program but there is a hotline set up for citizens to call about possible pollutant sources. There are also a few other groups that volunteer to walk the creeks and can report back issues to the City.

Q – If maintenance of required stormwater BMPs is not being done, what can the City do to enforce the regulations?

A – The City has the ability to put a lien on a property to fund the maintenance of a failed BMP if necessary. However, the City prefers that private property owners perform the maintenance. Ultimately, the City is responsible to ensure the maintenance is being done and can be subject to fines if maintenance is not done.

Q – Has the City received any fines or violations for their NPDES permit?

A – The City has never been found to be in violation of their permit.

Q – Why are customers who call with a stormwater complaint "bounced around"?

A – The City recognizes that this is an issue due to the fact that the stormwater services are not a consolidated program. However, as part of this study, the City will be reviewing the organization to determine if there is a more effective way to provide customer service and improve system operation.

Comment – A private citizen suggested that the current level of service is not enough to meet the citizen's needs. There is confusion about who to talk to when there is a call and some of the CSO separation projects have exacerbated stormwater issues in their neighborhood.

Comment – A private citizen noted that she lives at the end of a cul-de-sac and she feels her neighborhood receives excellent service.

Comment – A citizen representing non-residential development recognized that there are stormwater issues in the City that need to be addressed. However, this citizen felt that new development was already being treated and that the focus should be on retrofitting existing development (which is historically untreated).

Comment – A citizen representing non-residential development suggested that current erosion and sedimentation rules were not unreasonable.

Comment – A citizen was concerned that this program was headed towards a new fee or tax.

Q – How have stormwater costs been trending?

A – Since there have been no significant changes in the past two years with the regulations, recent stormwater costs have stayed relatively flat. However, additional costs are expected to keep up with new regulations rolling out this year.

Q – How did you arrive at the annual cost number? Is it accurate?

A – The annual cost was developed through close coordination with staff in all departments and through work with the City's finance department. We do believe this to be an accurate estimate of the cost of the existing stormwater program.

Q – Who dictates to the cities what they need to do?

A – It is a trickle-down effect. The EPA directs the States and the States pass rules onto the local governments.

Comment – Ultimately, the program should focus on water quality. If water quality is not addressed, the City may be subject to a Consent Order which may be much more stringent than the current rules.

Parking Lot

The following items were noted on the parking lot and will remain on this list until addressed at a future meeting:

1. What is a reasonable timeline for implementing improved services?
2. How will the City deal with private property maintenance?
3. What funding options will we discuss?

Next Meeting

The next meeting of the Stormwater Advisory Committee will be held on July 15, 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.