## Response to Questions on the FY 2009 Advertised Budget Plan

**Request By:** Supervisors Frey and Smyth

Question: Identify how the \$22.8 million for stormwater management projects would have been

allocated in FY 2009. What Stormwater projects proposed in FY 2009 are required to be implemented (e.g., MS4, Chesapeake Bay)? What is the projected balance of Fund 318,

Stormwater Management Program at the end of FY 2008?

**Response:** FY 2009 Project Allocation

The Stormwater program is managed on a pay-as-you-go approach, and funds are not obligated to specific projects until actual work begins. This pay-as-you-go approach provides flexibility that helps to avoid the accumulation of cash that can potentially occur when funds tied to specific projects are delayed due to unforeseen circumstances. With the pay-as-you-go approach other projects that are ready for construction can proceed utilizing the available cash balance. For example, while responding to the 2006 flooding, this flexibility allowed projects to be initiated instead of being held off for 11 months for the next fiscal year. The programmatic annual funding versus project specific funding allows for this flexible approach. The following is a programmatic breakdown of all components of the Fund 318 budget of \$22,800,000 for FY 2009:

Watershed planning remains at 0% because all watershed plans were fully funded in FY 2007.

The Operations component is \$7.6 million or 33% of the Fund 318 budget. This component includes staff and operational support costs for implementation of the Stormwater program. The staff costs represent the internal staff time for positions while working on stormwater projects in Fund 318. Additionally, the project will provide the operational support for the Stormwater program related to Information Technology requirements and computer software support. Other operational support funded under this project will include, but is not limited to, goods and services all required in support of the Stormwater program. These costs were previously supported entirely by the General Fund.

The Dam Safety program component is \$2.7 million or 12% of the Fund 318 budget. This component funds improvements necessary to meet State permit requirements, assessment and monitoring of dams and associated dam repair activities. The Virginia Department of Conservation and Recreation (DCR) regulate some of the dams that are maintained by the Department of Public Works and Environmental Services (DPWES). In order to obtain the required permits, the County must perform enhanced inspections of all dams and address safety requirements. In addition to the Dam Safety program, the County also maintains in excess of 1,000 non-regulated dams that also require assessment and associated repair activities that are funded under this project.

The Regulatory Compliance component is \$3 million or 13% of the Fund 318 funding. The program is responsible for conducting a comprehensive engineering and inspection assessment of the public and private stormwater management infrastructure as required under the County's MS4 permit. This work includes field inspection activities, punch list

development, private owner training, coordination and outreach, enforcement and construction quality control of rehabilitation activities. A reduction in this portion of the budget could potentially result in permit violations.

The Project Implementation component is \$5.2 million or 23% of the program. This component includes storm drainage projects that are identified through inspection programs and citizens requests for assistance that require projects to correct deficiencies to existing storm drainage systems. In addition, this component provides funding for innovative low impact development projects to retrofit existing County owned facilities for environmental stormwater management opportunities. Innovative stormwater management systems such as green roof designs and rain gardens are developed and designed to manage stormwater runoff. This is \$5.0 million or 50% less than FY 2008. The budgeted per watershed amount has been reduced from \$1,000,000 to \$300,000 per adopted watershed plan.

The remaining portion of the budget is anticipated to fund the Infrastructure Reinvestment component at \$4.3 million or 19% of the program. This component utilizes a comprehensive inspection, design and contract administration program to rehabilitate, upgrade and replace dilapidated County storm drainage infrastructure. The County storm drainage network consists of over 1,800 miles of pipe and in excess of 45,000 drainage structures. Much of this drainage system is nearing the end of its useful life. Funds from this project are also being used to build the Geographic Information System (GIS) and computerized project management systems that are used to manage and operate the storm drainage projects. This is a 38% reduction from the FY 2008 budgeted amount for this component of the Fund 318 budget. Program enhancements had been based on a 20 year inspection cycle and a 75 year reinvestment cycle. The reduction to this component will essentially double the anticipated cycle lengths.

## Program Requirements

The Stormwater Penny funds all stormwater efforts that respond to the Municipal Separate Storm Sewer System (MS4) permit and the Dam Safety Permit requirements. All components of the Stormwater program are required by the MS4 permit. However, the permit does not specify specific service levels for these components. The permit language refers to implementing "Best Management Practices" to "the Maximum Extent Practicable." More specifically, the permit requires inspection and maintenance of existing stormwater infrastructure. This requirement is addressed in the Infrastructure Reinvestment component with funding to reinvest in the infrastructure on an estimated 150 year cycle length. The permit requires implementation of water quality improvements and retrofits. The Watershed Planning component and Project Implementation component address these requirements. Stormwater Management has already funded and entered into contracts to complete watershed planning for the entire County, and the Project Implementation component provides funding to implement the recommendations from those plans. In a rough estimation, the proposed rate of funding equates to a 140 year implementation schedule. The MS4 permit requires an extensive outreach and education program and specifies monitoring efforts. Some of these efforts are part of the operating budget, which are included in the Operations Component. The contractual support for these efforts is funded in the Regulatory Compliance component. Essentially, the entire Stormwater program is required to support the permit requirements.

Dams within the County are also regulated by the State. These permits specify levels of inspection and maintenance that vary depending on the dam size and classification.

Several of the County's dams operate with provisional permits because they do not currently comply with all permit conditions. For example, there are new spillway standards that the PL566 dams must meet. The project expenses for bringing the PL566 dams into compliance varies between \$4-\$12 million over the next three years, and the wide variance will depend on the extent of work that will be required and whether or not Federal assistance will be available. The Dam Safety component provides funding for these efforts, as well as dam repairs to the non regulated dams that are part of stormwater management facilities. With regards to the smaller stormwater management facilities, the County maintains about 1,000 impounding structures.

As stated above, the MS4 permit does not identify specific production levels for each component of the Stormwater program. However, the County is operating under an administrative extension of the existing permit, while the state and Federal EPA draft a new five year permit. Based on the preliminary drafts, both the State and EPA are structuring the permits with more performance criteria, and at a higher level of service. Their goals are to ensure local governments construct, inspect and maintain the Stormwater systems in a manner that will reduce the impacts of development and improve water quality. In addition to the regulatory requirements stiffening, third parties are winning court awards by demonstrating communities are not meeting the intent of the MS4 permits. All of these factors lead to an ever increasing need for a strong stormwater program.

In addition to meeting permit requirements there are additional pressures to utilize the Stormwater Penny Fund to support large scale issues throughout the County. One example includes large scale chronic flooding issues such as those in the Belle Haven and Huntington areas. It is anticipated that \$800,000 will be necessary to fund the next phase of Belle Haven.

In addition, several annual Stormwater programs that were previously funded by the General Fund in Fund 308, Public Works Construction were moved to the Stormwater Penny in FY 2007. These additional projects include monitoring efforts, outreach support, dam repairs and some facility inspections. These ongoing efforts are required to meet specific permit conditions, and although not obligated, other funding sources would need to be identified, if they were not funded in the Penny.

Another area that has been neglected and should be addressed is the accumulation of sediments in the County's existing lakes. The required structural improvement to the PL566 dams was previously mentioned, but that does not include the removal of any sediments. These lakes are used for recreational purposes, and there is no program to provide removal of sediments that affect both the aesthetics and use of these lakes. The build up of sediments will eventually impact water quality and storage volume. It is anticipated that the stormwater fund will eventually contribute towards the ongoing maintenance of these valuable assets. The current estimate to remove the existing accumulated sediments from these lakes is \$15 million. Based on preliminary information, it is anticipated that an annual reinvestment in this effort of \$1 million could establish a 20 year program to restore and maintain these facilities.

In part as a result of the lack of investment in the stormwater infrastructure, the technology support for the stormwater system has also significantly lagged behind other utilities. There has been a significant effort, in part using resources from the Penny, to build the Stormwater GIS layers. In addition, the County is in the process of acquiring

and implementing an asset management system for stormwater, as well as a modern work order system that will link to GIS and the asset management system. These efforts are needed to support the proposed permit requirements and emergency response operations, as well as to improve response to customer concerns. Prior to the establishment of the Stormwater Penny, stormwater was the only utility still relying on paper records for asset management and a data base work order system that operates from a single stand alone computer. A more advanced technology support system is necessary to meet the needs of the stormwater program.

## Project balance at Year End

In FY 2008, the Revised Budget Plan for Fund 318 is \$43,378,769. Expenditures to date are \$10,371,493 (as of March 31, 2008) and encumbrances are \$20,591,920, leaving a balance of \$12,415,356. Assuming an average monthly expenditure and new obligation rate of \$2.3 million, experienced so far in FY 2008, an additional \$6.9 million may be required through year end (3 more months). It is projected that approximately \$5.5 million will remain unexpended and be carried forward into FY 2009 in Fund 318, Stormwater Management Fund.