

City of Alexandria, Virginia

MEMORANDUM

DATE: APRIL 23, 2010
TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL
FROM: JAMES K. HARTMAN, CITY MANAGER 
SUBJECT: BUDGET MEMO # 85: STORMWATER UTILITY PROJECTS

This memorandum is in response to questions raised by members of City Council regarding the projects that staff would recommend advancing using revenues from a stormwater utility or dedicated tax.

The stormwater utility is estimated to generate \$1.25 million in FY 2011 and \$2.25 million annually thereafter based on the proposed rate of \$48 per equivalent residential unit. A dedicated tax of 1-cent would generate approximately \$4.5 million in FY 2011 (including \$1.5 million produced in FY 2010 from the June FY 2010 real estate tax payment) and \$3 million annually thereafter. Therefore, implementing a dedicated real estate tax of one-cent in lieu of a storm water utility fee of \$48 ERUs would produce an additional \$3.25 million in FY 2011 and an additional \$0.75 million in future years. As another possible funding strategy, Council could fund storm water projects with a dedicated real estate tax rate of some level in FY 2011, but plan on considering switching to a storm water utility fee in FY 2012 after more implementation details are worked out (i.e. how credits would work). The project prioritization as described to the community and during the budget work sessions consist of: resolution of in-structure flooding from public drainage ways, impacts to private property, and nuisance flooding. In addition to the regulatory stormwater requirements from the federal and state governments tightening in the coming years, the cost to comply with these regulations will dramatically increase. (See attached article)

The FY 2011-2020 Proposed CIP includes \$2.0 million in FY 2011 for storm water capital projects funded by the proposed storm water utility fee. The amount of funding that would be available for capital projects in FY 2011 would be \$5.25 million. Staff recommends the following projects as potential candidates for implementation in FY2011. They total \$6.43 million combined.

Description Location	Estimated Cost
Street and basement flooding from right-of-way Commonwealth Ave & Glebe Rd (Auburn Village)	\$650,000
Basement flooding adjacent to Hooff's Run Park 60 - 120 blocks Commonwealth Ave	\$500,000
Basement flooding from stream overflow 300 block Beverly Drive	\$500,000
Basement flooding from City right-of-way and properties 900 block N. Paxton, 500 - 600 block N. Pegram	\$500,000
Property flooding due to stormwater management pond overflow Templeton Place	\$500,000
Alley and basement flooding due to storm drain surcharging E. Monroe & E. Nelson, 10 - 110 blocks	\$100,000
Ponding due to undersized curb inlet N. Henry at Montgomery	\$50,000
Ft. Ward Drainage Design	\$30,000
Edsall Rd Culvert Reconstruction Edsall Rd near Pickett St	\$200,000
Flooding and runoff George Mason School	\$400,000
Frequent tidal flooding King St from Strand to Union	\$1,500,000
Ponding in roadway and yards N. Rosser St, Fillmore Ave, Dawes Ave, Colfax Ave, Calhoun Ave	\$1,000,000
Ponding in roadway and yards N. Frazier St, N. Frost St, Lawrence Ave	\$500,000
Total	\$6,430,000

The list of recommended projects would not change substantially as a result of the decision to adopt a stormwater utility or a dedicated tax.

In addition to projects which have already been identified, T&ES is conducting a capacity analysis of the stormwater drainage system, which will identify and prioritize drainage improvement projects. It is also anticipated that the Environmental Protection Agency and the Virginia Department of Environmental Quality will issue regulations requiring water-quality improvement retrofits to existing infrastructure. These regulations will likely add an unfunded or underfunded burden on municipalities.

BAY JOURNAL

Local governments concerned about funding as TMDLs move forward

The EPA faces difficult options if localities cannot afford to meet nutrient, sediment goals

By Karl Blankenship

As with many other local governments in the Bay watershed, budget cuts are rippling through Virginia's Accomack County. About 100 teachers, the economic development director and two people in the planning department will lose their jobs, while the child pregnancy, health and tourism programs each take significant budget hits.

"It just goes on and on and on," said Stephen Mallette as he rattled off the toll taken by tough economic conditions on his county. "It is going to take us a while to get through the shell shock to be able to figure out how we are going to put Humpty Dumpty back together again."

So, what's going to happen when state and federal agencies add steep nutrient and sediment reductions to the county's to-do list?

"I think people are just going to throw up their hands," said Mallette, a member of the county board of supervisors.

Indeed, across the watershed many local government officials are watching warily as the EPA moves forward in writing a new pollution reduction program, known as a Total Maximum Daily Load.

The EPA this year will establish the maximum nitrogen, phosphorus and sediment loads that can enter the Bay from each state and from each major tributary. By the end of the year, states must have Watershed Implementation Plans approved by the EPA showing how they will achieve those nutrient and sediment reductions. By summer 2011, states have to go a step further and allocate nutrient reduction goals to counties or small watersheds.

Past cleanup plans have never required that level of detail or local involvement. But EPA officials say their demand for local-level nutrient allocations reflects the reality that many of the decisions that affect nutrient pollution are made at the local level: planning and zoning actions; stormwater management; erosion and sediment control programs; septic system regulations; even ordinances regulating lawn fertilizer and cleaning up pet waste.

"Without these local activities, we are not going to achieve clean water," said Katherine Antos, of the EPA's Bay Program Office.

Although nutrient and sediment goals set for local governments are mainly advisory, the EPA has threatened to impose potentially severe consequences on states that fail to show adequate cleanup progress.

Those consequences could include further reductions in nutrient discharges from wastewater;

expanded permit programs to cover smaller stormwater systems and animal feedlots; new nutrient and sediment reductions that would more than offset the impact of new development; and tougher water quality standards for local streams.

States expect to get their new nutrient reduction goals at the end of April, when the EPA finishes updating its computer models. But local governments will have to wait to get their goals. The states will first subdivide their nutrient allocations among various sectors such as wastewater treatment plants, agriculture, stormwater, septic, suburban runoff and others.

Then the states will write plans showing how they will achieve the goals set by those allocations, including the use of "enforceable or otherwise binding commitments."

Next year, the states will further subdivide allocations, by sector, down to the county or "small watershed" scale.

Tanya Spano, principal environmental engineer with the Metropolitan Washington Council of Governments who has been active with Bay Program activities related to TMDL water quality issues, said many local officials are worried that the time frame for their input is being limited to "at the end of the pipe. Yet who implements [the plan?]" she asked. "Our members continue to commit major funding toward projects and programs that improve local and Bay water quality."

There's a historical reason for Spano's skepticism. When Maryland and Virginia developed tributary strategies in 2004 and 2005 to achieve goals that had been set in 2003, they attempted to involve local governments. Ultimately, though, the strategies were written mostly by the states to meet time constraints.

This time, time lines for developing cleanup plans are even tighter. "We are dealing with a more complex animal in less time," said Russ Perkinson, assistant division director for Virginia's nonpoint source control programs with the Department of Conservation and Recreation. "And, there is more at stake. We are hearing concerns from local governments."

Some areas are moving ahead. In York County, PA, officials representing townships, the county government, the county conservation district and other stakeholder groups recently formed a TMDL workgroup.

The goal was to begin identifying local-level actions "rather than wait for some hodgepodge of a watershed implementation plan," said Jake Romig, the county "circuit rider" who works with local governments on water quality issues and helped to organize the workgroup.

Such regional initiatives may be necessary in Pennsylvania, which faces special challenges because its county governments are weak, with many programs administered by townships. Counties can have dozens of townships within an individual county, and programs may vary widely among them.

"If we have targets we need to achieve, it is virtually impossible for us to break those down to the 1,200 municipalities within the Chesapeake Bay basin of the commonwealth," said John Hines, deputy secretary for water with the Pennsylvania Department of Environmental Protection. "We have to take a different approach."

So, rather than rely on individual local government actions, Hines said the state may work with individual sectors across municipal and county borders to achieve the most effective-and cost effective-nutrient reductions.

For example, in areas with lots of animal farms, that could mean promoting regional manure digesters. Or, in areas where multiple local government-managed stormwater systems drain to the same stream, the state might promote a program in which municipalities with less of an impact would help fund controls in other municipalities where the controls would be more effective.

All states are beginning to map out plans to involve stakeholder groups including local governments. And the EPA in March named pilot communities in Maryland, Pennsylvania, Virginia, New York and West Virginia where it would provide assistance to state and local governments, conservation districts, watershed groups, federal agencies and other stakeholders to work together on watershed implementation plans, hoping to learn lessons that others can use.

But across the watershed, local governments' overriding concern is whether additional money will come with the expected additional responsibilities. "The assumption is that it's going to be the local government," Romig said. "The reality is, who is going to pay for it? We can't afford to plow the snow."

All of the states in the watershed are slashing assistance to local governments to balance their own budgets. Local governments are left with increased burdens, less state funding, and often a declining tax base as property values fall.

"The resource problems that local governments are experiencing right now are extremely serious," said Larry Land, director of policy development with the Virginia Association of Counties. "They are the most serious that I have ever seen, and I've worked here for 22 years."

Budget items, such as police, fire and public health, typically get priority, leaving programs such as planning vulnerable to cuts. And in today's budget climate, local governments are particularly loath to discourage growth.

One thing the new allocations will do, officials say, is provide a better estimate of what Bay cleanup measures will cost at the local level. Past figures have put the watershedwide estimate anywhere from \$15 billion to \$30 billion.

But the cost to individual communities could vary widely. Older urban areas, with stormwater systems that predate modern regulations-and sometimes with systems that combine stormwater and sewer systems-could face huge costs relative to other areas.

Spano said that projects with large infrastructure costs, such as stormwater retrofits, may be too expensive for some communities unless they are spread out over more years than are available. "If you don't have a realistic time frame or the necessary funding, then what might be possible becomes impossible."

But some say better information about costs may help attract funding. Gary Waugh of the Virginia Department of Conservation and Recreation said that the cost of nutrient control programs was a major issue when the first tributary strategies were written for the Potomac and Shenandoah rivers in the late 1990s, and when the most recent tributary strategies were completed in 2005. In both instances, more state and federal money became available after plans were written.

"Was it enough to do everything? No," Waugh said. "But part of the answer was that we needed to develop a plan" to show what needed to be done.

Similarly, many local officials expressed hope that Congress would provide funding assistance for local governments in the Bay watershed, as it has for agriculture. Several pieces of legislation

have been introduced to help communities, but their outlook is uncertain.

If the Bay cleanup cost is too high, especially for poorer jurisdictions, it could force the EPA to do something it has sought to avoid—a use attainability analysis.

When attainment of water quality standards is so costly it could cause "substantial and widespread economic and social impact," EPA regulations allow the standards to be changed. In such a case, Bay water quality standards could be lowered to require fewer nutrient reductions.

Several local government officials interviewed said they were reluctant to call for a use attainability analysis. "If you agree to a UAA, now it is almost like conceding defeat up front," Spano said.

But if costs are high and funding low, several said a UAA should be on the table. "Anything is feasible if you have endless money," said Ted Graham, Water Resources Program director with the Metropolitan Washington Council of Governments. "There has to be a little bit of logic when we get down to the details of implementation."

One thing that could push costs higher are the consequences threatened by the EPA which, among other things, has said it could require further reductions from wastewater treatment plants if nutrient reduction goals from other sources fall short.

Across the watershed, municipalities have already spent billions of dollars upgrading their treatment plants.

Requiring further upgrades would have "catastrophic" impacts, said Megan Lehman, an environmental planner in Pennsylvania's Lycoming County. Six of seven large wastewater treatment plants in the county of 120,000 people are either getting, or in need of, upgrades that will cost about \$220 million.

"How much more blood can you squeeze from a stone?" Lehman asked. "You are going to get diminishing returns for ever-increasing costs if you keep squeezing the point sources."

Some doubt the EPA would take such an action, as the increased costs could run counter to its Bay cleanup goals by triggering the need for a UAA.

"I don't fault EPA for a lot of the tough talk we see right now," said Chris Pomeroy, an attorney who represents Virginia wastewater treatment plants. "I think it is probably the EPA's job to challenge people to do as much as reasonably possible here."

But, he added, "EPA's tools aren't all that great. They need to strike the right balance. I think they are on the verge, if they haven't already, of offending some of their traditional partners."

If costs start to appear impractical, Pomeroy said, political support for Bay cleanup efforts could dissolve. "EPA doesn't want to go there, either."

Ideally, the cleanup actions needed for the Bay will help local water quality as well.

"Lycoming County has fantastic, beautiful, natural resources," Lehman said. "People live here mostly because they value that. That is where we see the potential to turn the basket of lemons of regulations into some lemonade, which would be long-term benefits for our county's environment."

But some local governments are worried about TMDL requirements competing with local

environmental priorities.

Accomack County is just south of the Maryland border on the Delmarva Peninsula, and about half of the county drains into the Bay, with the rest going to the Atlantic. Recently, the commission made decisions to clean up pollution problems in the Atlantic drainage.

Those efforts, which involve cleaning sewage lagoons, cost money-and the county gets no credit toward meeting any Bay pollution goals.

"A lot of political capital was spent on doing that, but that was an initiative that we thought would help that community," Mallette said. "I am personally fearful that we are going to reallocate our resources to deal with the Bay TMDL and not deal with some of these chronic local problems."

Even within the Bay watershed, local water priorities may not mesh with Bay priorities. In York County, PA, Mark Kimmel, who heads the county conservation district, said, "If we are going to make a difference here, it is going to be in stream improvements" such as reforestation and stream and floodplain restoration.

But those types of activities are often considered costly. Some think they produce fewer nutrient reduction benefits than other practices, and Kimmel noted, "we haven't had much luck" funding such projects.

Whether the TMDL and the EPA's threat of consequences is enough to have local officials put the Bay higher on their agendas is unclear.

The consequences are a concern, Mallette said. "But if you're up to your waist in alligators, having another one jumping into the pond is probably not that big of a deal."

Karl is the Editor of the Bay Journal.

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