

Government & Urban Work Group Agenda Facilitators: Craig Lott & Mark Alling

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- 1. Sign in**
- 2. Review of Work Group purpose and responsibilities**
- 3. Data Needed from Government / Urban Workgroup Participants – please provide as you are able via email**
 - a. Need up-to-date cost estimates and efficiencies for BMPs;**
 - b. Need any recent and pertinent cost/benefit assessment of BMPS within or near James River watershed;**
 - c. Need knowledge of existing BMPs which were implemented since monitoring period used for TMDL development (April 2008) or currently scheduled BMPs.**
- 4. Local Programs in the Watershed Related to the TMDL and Implementation Plan Development (round-robin)**
 - A. Leadership in Energy and Environmental Design (LEED Certification) – any participants? Is there interest?
 - B. SWCD programs
 - C. NRCS programs
 - D. PDC programs
 - E. VDH programs
 - F. County / City Programs

4. Set next meeting / location: _____

Government / Urban Working Group Control Measures

For Your Information

Urban BMP needs will be based on data from the recent James River bacterial TMDL development, spatial analysis of land use and hydrology, and BMP efficiencies documented in scientific literature. Table 1 shows conventional BMPs commonly used to control stormwater runoff from urban areas. Table 2 shows a list of low impact development (LID) BMPs and efficiencies that may be considered for this implementation plan.

Table 1. Possible Urban BMPs for control of stormwater runoff into the James River at Richmond watershed.

BMP
35-ft vegetated buffers
Infiltration Trenches
Retention Ponds

Table 2. Stormwater Low Impact Development (LID) cost and volume efficiencies

BMP	Unit	Cost/Unit	Cost/ft ² -treated	Rainfall Retention/Detention Capacity *	Annual Rainfall Retained/Detained †
Green Roof	ft ²	\$10 - 20	\$10 - 20	1"	49%
Roof Runoff Detention	50-gal barrel	\$100 - 150	\$0.40 - 0.60	0.32"	51%
Bioretention	acre-treated	\$9,000 - 15,000	\$0.21 - 0.34	0.75"	79%
Permeable Pavement	ft ²	\$7 - 15	\$7 - 15	1"	85%

*This depth of rainfall is a function of what the practice is designed to retain/detain with full available storage capacity.

†This percentage is per-unit area, and is a function of precipitation and the practice's ability to recharge its storage capacity.