# Establishing an Urban BMP Cost Database



# Urban BMP Cost Database

- Creation of an Urban BMP Cost Database is part of CSN's long term work plan
  - Most of the work will occur in 2012
- Cost information about BMPs is critical for WIP development
- Information will be solicited from both private and public sectors
- Need a consistent method to determine preconstruction costs
  - Survey Monkey Poll



# Collaboration

Are any members of the USWG willing to help out in an advisory capacity, or can identify a non-USWG member that would be helpful?



# Collaboration

CSN is collaborating with the following partners to get accurate cost estimates on urban BMPs

- Kevin DeBell, EPA
- Walter Caldwell, DC DOE
- Dave Sample, Virginia Polytechnic Institute
- Kurt Stevenson, Virginia Polytechnic Institute
- Karl Berger, MWOG
- Patrick Hagan, UMD Center for Environmental Science
- Dave Hirschman, Center for Watershed Protection
- Chad Crawford, Fairfax County

# Anyone else?



#### Which BMPs to Research in 2012?

- 1. Bioretention
- 2. BMP Conversion Retrofits
- 3. Green Roof
- 4. Green Street Retrofits
- 5. On-site Retrofits
- 6. Permeable Pavement
- 7. Reforestation
- 8. Stream Restoration
- 9. Street Sweeping
- 10. Urban Nutrient Management



# Prioritization Criteria

- Adequate Sample Size (n ≥ 50)
- Widely Considered by Bay States
- Major Component of Urban WIP Implementation
- Easily Defined



### Which BMPs match this criteria?



#### Which BMPs to Research in 2012?

- Bioretention
- Reforestation
- Street Sweeping
- Urban NutrientManagement



#### Question:

# Of the remaining categories, which is your #1 priority? Why?

- BMP Conversion Retrofits
- Green Roof
- Green Street Retrofits
- On-site Retrofits
- Permeable Pavement
- Stream Restoration



#### Plan of Attack

Who would be good candidates to share their BMP project cost information?

What is the minimum information needed on each individual BMP to make it simpler and easier to report?



#### Bioretention

- Where we will get the information?
  - Private engineering firms, cost estimators, municipalities
- What information will we collect?
  - Drainage Area
  - Impervious Cover Area
  - Treatment Volume
  - State
  - Year Installed
  - Construction Costs



#### Reforestation

- Where we will get the information?
  - Send out to private sector to receive confidential cost estimates (bid approach)
- What information will we collect?
  - Site preparation
  - Reforestation Technique
  - Unit Cost/acre



# **Street Sweeping**

- Where we will get the information?
  - Municipalities
  - Update Center for Watershed Protection's 2006
    Municipal Practices Survey
- What information will we collect?
  - Qualifying lane miles swept x 25
  - Capital cost of buying, maintaining and operating a sweeper

# **Urban Nutrient Management**

- Where we will get the information?
  - Municipalities
- What information will we collect?
  - Outreach staff time
  - Outreach delivery costs
  - Outreach assessment costs



### Questions?

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