Virginia Conservation Assistance Program (VCAP)



Hosted by the Virginia Association of Soil and Water Conservation Districts

Welcome!

- A history of VCAP
- Overview of the program and BMP's
- Outreach and involvement
- Resources and questions



2011 - How to engage residential property owners?

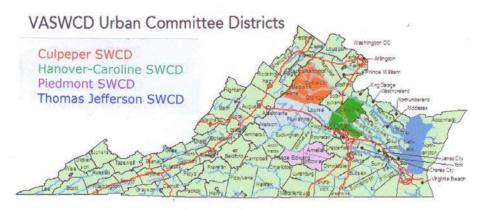


Virginia's Chesapeake Bay WIP: "THE GAP"

- Partner with SWCDs and DCR to reduce residential fertilizer use
- Rain gardens, cisterns, downspout disconnection ... demonstrate effectiveness to the public & homeowners
- Implement urban forest buffers
- Consider developing a cost-share program to encourage private property owners

2012 - Four Central Virginia SWCDs

- 1. Develop programmatic template policies, procedures, small scale BMP specifications
- 2. Implement pilot "community-residential BMP cost share program" across four soil and water conservation districts with a total of 15 localities (Thomas Jefferson, Culpeper, Piedmont, and Hanover-Caroline Soil and Water Conservation Districts).
- 3. Establish support (financial and legislative) for statewide program based on lessons learned from the pilot project.

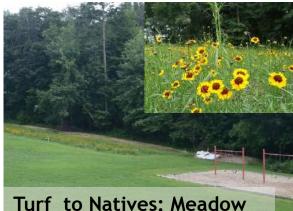


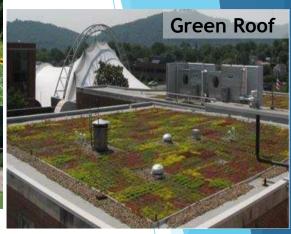
The Work Begins ...

- Staff from four SWCD applied for 10 Grants
 And received 10 grants
 - → And ... received 10 grants.
- **\$188,825**
- Funds used to accomplish Goals 1 & 2
 - Programmatic template completed
 - Pilot program implemented for over 3 years
- Successful beyond expectations

VCAP Pilot Program

- Impervious Surface Removal
- Conservation Landscaping
- Rain Gardens
- Bioretention
- Dry Well
- **▶** Infiltration Basin
- ► Rainwater Harvesting
- Vegetated Stormwater Conveyances
- Constructed Wetlands
- Permeable Pavement
- Urban Nutrient Management
- Pet Waste Stations





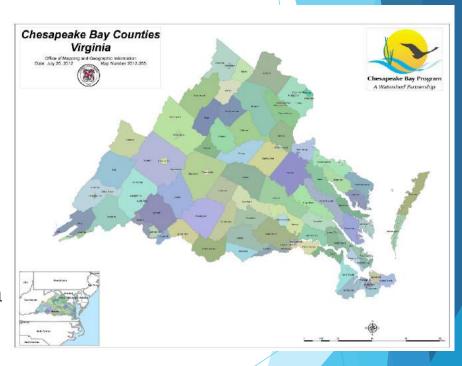






Chesapeake Bay Implementation Grant (CBIG)

- 30 Soil and Water Conservation Districts
- > \$250,000 available to landowners in 2016, increasing to \$500,00 during first half of 2017
- Applications ranked on environmental criteria
- Approvals made each month
- Some BMPs require engineer certification
- All BMPs are provided cost-share on a reimbursement basis
- ▶ 10 year maintenance contract on all BMPs



VCAP Manual BMPs



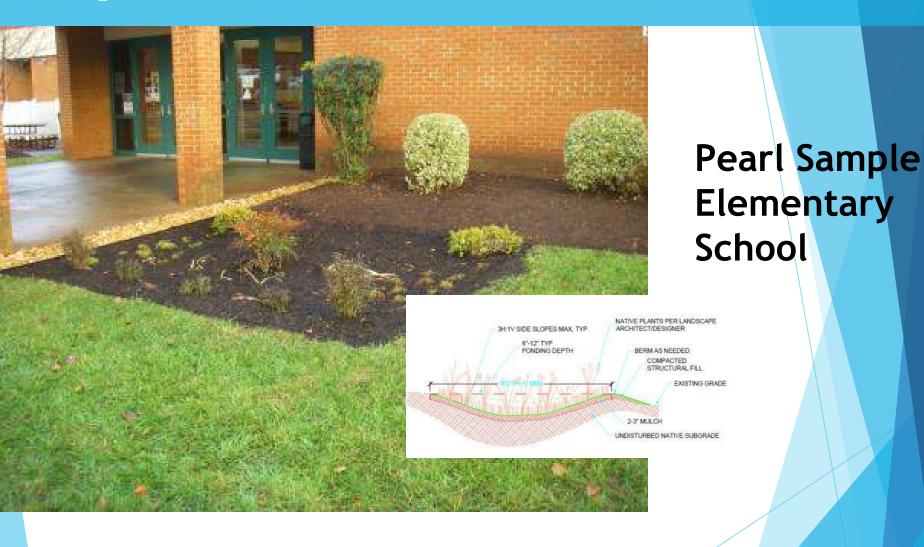
- Impervious Surface Removal
- Conservation Landscaping
- Rain Gardens
- Bioretention
- Dry Well
- Infiltration Basin
- Rainwater Harvesting
- Vegetated Conveyance Systems
- Constructed Wetlands
- Permeable Pavement
- Green Roofs
- Urban Nutrient Management
- Pet Waste Stations





Raingarden: TJSWCD

Raingarden: CSWCD



- Size 708 ft²
- Edging material between gravel and mulch

Technical Advisory Committee (TAC)

- Consists of engineering professionals, landscape designers, and others from districts and private industries
- Will continue to provide input on BMP specifications and engineering approvals

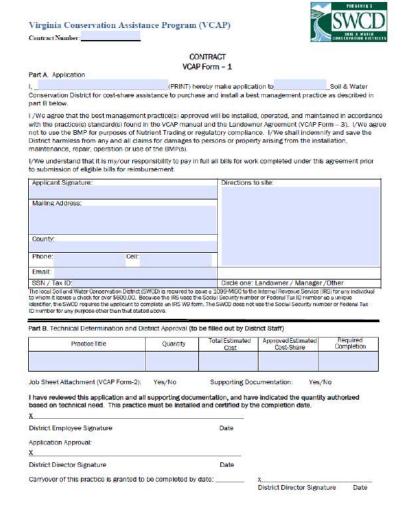
- VCAP Manual and Specifications available at http://vaswcd.org/vcap
- Will continue to evolve as more practices are installed

BMP Ranking System Activity

| VCAP Urban Practice Ranking Sheet (VCAP Form - 6) | | | | |
|---|-------------|----------------------|---------------------|------|
| | | Contract # | | |
| This form is to be filled out by District Staff for each application submitted for funding | | Practice | | |
| approval to the VCAP Steering Committee. Include the Contract Number (District#-FY-###), Practice Code (abreviation), Estimated Cost (If applicable) and Cost Share Requested | | Estimated Cost | | |
| | | Cost Share Requested | | |
| | | • | | |
| RANKING CRITERIA | Input (1/0) | POINT VALUE | TOTAL POINTS EARNED | NOTE |
| Site Specific Criteria | | | | |
| Existing BMPs | | | | |
| There are no existing BMPs to treat the contributing drainage area of the practice. | 0 | 10 | 0 | |
| | | | | |
| Ownership | | | | |
| Public (The practice is for a public owned space or building); or | 0 | 10 | 0 | |
| HOA (The practice is for private community owned or managed land); or | 0 | 7 | 0 | |
| Private (The practice is for an individual owner) | 0 | 5 | 0 | |
| | | | | |
| Proximity to Waterway or Storm Drain | | | | |
| Less than 100 feet | 0 | 10 | 0 | |
| | | | | |
| Type of Problem | 0 | | | |
| Erosion Impact Area (visible erosion and/or deposition); and/or | | 10 | 0 | |
| Poor Vegetative Cover (Density <=75%) | 0 | 10 | 0 | |
| | | | | |
| TMDL Watershed | | | - | |
| Is the Site located within a Local TMDL Watershed with an approved Implementation Plan | 0 | 5 | 0 | |
| | | | | |
| BMP Specific Criteria | | | | |
| BMP Type | | | - | |
| Is the proposed BMP structural (e.g. RG, DW, CW, VSC, RH, BR, IF, PP, GR)? | 0 | 10 | 0 | |
| is the proposed BMP Nonstructural (e.g. PWS, UNMP, ISR, CL)? | 0 | 0 | 0 | |
| | | | | |
| TMDL Considerations | _ | | | |
| Practice addresses a local TMDL impairment (see instructions) | 0 | 5 | 0 | |
| | | | | |
| Buffer | | | | |

Eligibility and Examples

- Practices are not intended to meet regulatory requirements
- Sites must be released from existing erosion and sediment control permits or other regulatory programs and construction completed prior to applying
- If an applicant's project qualifies for the State Ag BMP Cost-share Program, they are not eligible for VCAP on that project
- The applicant is responsible for ensuring that all local, state and federal permits, policies and ordinances are met
- All practices will be subject to spot checks during the lifespan of the practice
- The landowner must accept maintenance responsibilities per and Operations and Maintenance plan specific to each BMP



VCAP Process

Districts promote VCAP



Potential applicants contact district for TA



 District inspects site and assists with application process



District submits application to VCAP Steering Committee for approval, followed by board approval Applicant installs practice



District inspects and approves BMP



 VCAP SC and board approve payment, district makes payment and submits invoice to VASWCD



District conducts
 occasional spot checks
 and homeowner maintains
 BMP for 10 years

Cost Share Guidance

VCAP Reference Sheet

| | | | Max | per |
|--|----------|---------------------------------------|-------------|-----------|
| Practice | Lifespan | Reimbursement Rate | application | |
| Impervious Surface Removal (ISR) | 10 years | \$2.50 per square foot | \$ | 10,000.00 |
| Conservation Landscaping (CL) - all others | 10 years | \$250.00 per 1000 sq. ft. | \$ | 3,500.00 |
| Conservation Landscaping (CL) - trees | 10 years | \$9.00 per tree | \$ | 3,500.00 |
| Rain Gardens (RG) | 10 years | 75% of costs | \$ | 2,000.00 |
| Bioretention Basins and Areas (BB and BA) | 10 years | 75% of costs | \$ | 10,000.00 |
| Dry Well (DW) | 10 years | 75% of costs | \$ | 2,000.00 |
| Infiltration Basin (IB) | 10 years | 75% of costs | \$ | 10,000.00 |
| Rainwater Harvesting (RH) | 10 years | \$2.00 per gallon of storage volume | \$ | 10,000.00 |
| Vegetated Stormwater Conveyance (VSC) | 10 years | | | |
| * Dry Swales (DS) | 10 years | 75% of costs | \$ | 5,000.00 |
| * Step Pools (SP) | 10 years | 75% of costs | \$ | 5,000.00 |
| * Wet Swales (WS) | 10 years | 75% of costs | \$ | 3,000.00 |
| Constructed Wetlands (CW) | 10 years | 75% of costs | \$ | 5,000.00 |
| Permeable Pavement (PP) | 10 years | 50% of costs up to \$3.00 per sq. ft. | \$ | 12,000.00 |
| Green Roof (GR) | 10 years | \$10 per square foot | \$ | 10,000.00 |

Outreach Potential

- Most early adopters are already connected to the soil and water world
- Master Gardeners,Master Naturalists,Landscape Designers
- Public installations and signage may help to widen reach

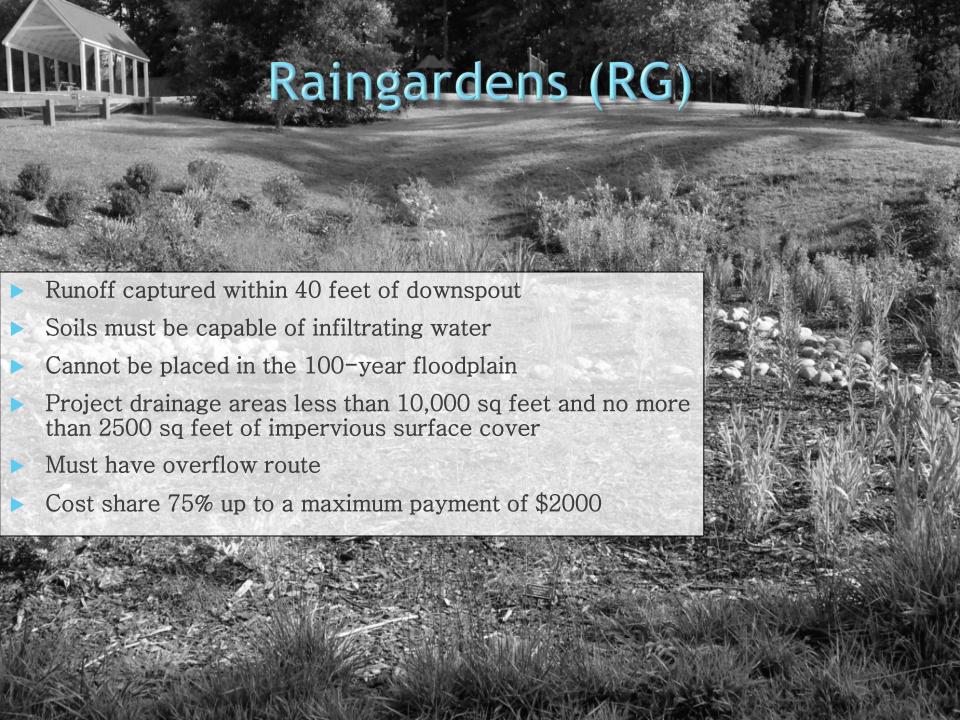


Resources for Districts

- > Kevin McLean, VCAP Coordinator:
 - kevin.mclean@vaswcd.org
- > VCAP Brochure available, website
- > Technical trainings
- > One on one outreach
- > Speaking engagements
- > A grassroots effort!

To see the VCAP BMP Manual: www.vaswcd.org/vcap





Dry Wells (DW)

- Project drainage areas less than 10,000 sq. ft. - no more than 2,500 sq. ft. of impervious surface cover
- Project drainage areas over 10,000 sq. ft. no more than 25% impervious cover
- Runoff captured within 40 ft. of downspout/impervious surface
- Soils must be capable of infiltrating water
- Should retain water for less than 48 hours after a storm event
- Not be placed in wetland soil or within the 100-year flood plain







Bioretention (BR)



- Shall not be placed on wetland soils or in the 100 year flood plain
- Depth to water table and bedrock shall be greater than 2 feet from bottom of excavation
- Sites must have soils capable of infiltrating. Ponded water should be retained no longer than 48 hours.

Vegetated Stormwater Conveyances (VSC)

- Maximum contributing drainage area should be 5 acres or less
- Riprap lining and concrete hardening are not eligible activities
- The practice shall not convey flows from an intermittent or perennial stream
- Should be designed with enough capacity to convey runoff from the 10-year design storm event within the channel banks and be non-erosive during the 10-year design storm events

Green Roofs (GR)

mat system

