



BEST URBAN BMP

in the Bay Award



Chesapeake Bay Watershed

Recognizing innovators in the field & sharing techniques that face the challenges of urban stormwater management.



Photo courtesy of Chesapeake Bay Program

BEST URBAN BMP in the Bay Award

The BUBBAs

Best Urban BMP in the Bay Award

*to recognize the best BMPs that have been installed
since 2010 in the Chesapeake Bay Watershed*

Presented by the Chesapeake Stormwater Network
<http://chesapeakestormwater.net/the-bubbas/>

1 Objective

The idea behind the Best Urban BMP in the Bay Award contest (BUBBA) is to recognize the best urban BMPs that have been installed in the Bay watershed. Many other organizations have offered LID design competitions to promote the implementation and adoption of LID practices in areas where they have not previously been employed. Here in the Chesapeake Bay watershed, LID practices are commonly employed as a result of stringent stormwater management regulations and the recently implemented Bay TMDL. One of the things we have seen here at CSN is that local implementers tend to lead the way in trying new and innovative approaches to dealing with difficult stormwater problems. For example, a retrofit constructed in an ultra-urban environment faces many more challenges than one in a suburban environment and there are many localities that have come up with effective ways for facing those challenges.

The goal of the BUBBAs is three-fold:

1. Recognize innovators in the field who are using new and innovative techniques for facing the challenges of stormwater management;
2. Provide an avenue for disseminating these techniques to other communities who could benefit from the lessons learned and innovative approaches; and
3. Engage CSN's nearly 7,000 member network of stormwater professionals throughout the Bay watershed to promote interactivity among the members.

2 Steering Committee

The function of the steering committee is to help guide the structure of the contest to ensure feasibility and the achievement of our stated goals. The following four people serve on the BUBBAs steering committee as we believe their professional experience, shared visions and goals uniquely qualifies them for guiding the award contest. The steering committee members are also responsible for serving on the jury that reviews and selects the BUBBA contest winners and the initial screening of projects for their specific categories.

- Anne Guillette, Low Impact Design Studio
- Greg Hoffman, Center for Watershed Protection, Inc.
- Kelly Lindow, RK&K
- Bill Stack, Center for Watershed Protection, Inc.

3 Eligibility

Any project submitted for consideration of a BUBBA award must meet the following criteria:

1. Must have been installed in the ground within the last 5 years: beginning January 1, 2010- December 31, 2014
2. Must be located in the Chesapeake Bay Watershed
3. Must not be a proprietary practice
*However, local reproductions of proprietary technology are allowed.

4 Award Categories

No two urban BMPS are alike! Each one is faced with a unique set of challenges and represents solutions for specific stormwater management goals. In order to recognize those unique solutions, promote their application throughout the Chesapeake Bay Watershed, and ensure broad participation entries will be accepted in six categories:

1. Homeowner BMPs

A BMP or series of practices installed on a residential property. Example projects include: residential properties that utilize one or more of the following stewardship projects: rain gardens, rainwater harvesting, vegetated roofs, conservation landscaping, tree planting, downspout disconnection, soil amendments. Total investment in a homeowner BMP should be less than \$5,000. BMPs installed by homeowners, contractors or watershed groups are eligible. If you are submitting your application as a homeowner, please be sure to identify the individuals or organizations that designed and installed the project on your property on your application.

Homeowner BMPs will be evaluated on their ability to meet one or more of the following criteria:

- Effectively treats a substantial portion of runoff from the property
- Provides aesthetic improvements to property
- Effectively integrates with the built and natural landscape
- Includes design features to promote effective practice function and ease of maintenance
- Provides other non-stormwater benefits (i.e., less basement flooding, reduced heating and cool costs, attracts wildlife etc.)

2. Innovative BMPs

Nontraditional solutions for the management or mitigation of stormwater at a site. For this category, we are seeking projects that utilize cutting-edge management practices or demonstrate creativity through unique/beneficial alterations to traditional BMPs.

Innovative BMPs will be evaluated on their ability to meet one or more of the following criteria:

- Meets or exceeds the minimum stormwater sizing requirements in the jurisdiction in which it was built (for new or redevelopment projects) or demonstrates a unique retrofit solution.
- Uses a novel treatment mechanism to promote greater pollutant removal
- Exceeds the standard state design spec for the practice if there is one or modifies an existing state design spec for enhanced pollutant removal.

- Includes new or multiple design mechanisms to enhance runoff reduction and/or pollutant reduction. If applicable, some testing, monitoring, assessment has been conducted to confirm the successful performance of the practice (water quality monitoring, photo documentation etc.)
- Effectively integrates stormwater management with additional non-stormwater uses or site benefits (i.e. recreational use, pedestrian access, water re-use, multi-space function)

3. Best Combination of BMPs in a Series

Two or more BMPs in a series, for the best possible treatment of stormwater. Example projects include: larger residential or commercial development projects and/or small watershed restoration projects that involve multiple practices working together.

Combination BMPs will be evaluated on their ability to meet one or more of the following criteria:

- Meets or exceeds the minimum stormwater sizing requirements in the jurisdiction in which it was built (for new or redevelopment projects) or demonstrates a unique retrofit solution.
- Utilizes distributed LID practices effectively in a series
- Reduces or eliminates the need for centralized detention ponds for control of large storm events
- Effectively links the built environment to the natural landscape
- Provides evidence that the system of practices can effectively function during the expected range of storm events
- Shows evidence of effective use of better site design, natural resource protection and other nonstructural practices

4. Ultra-urban BMPs

Stormwater practices built in infill or redevelopment projects in urban areas with more than 75% site impervious cover. Example projects include: infill and redevelopment projects, green street retrofits, green roofs etc.

Ultra-urban BMPs will be evaluated on their ability to meet one or more of the following criteria:

- Achieves a high runoff reduction/pollutant removal rate for the site
- Utilizes unique combinations of innovative LID practices to achieve goals
- Creates an attractive site, neighborhood, or street amenity
- Effectively overcomes the infrastructure, utility, traffic, or other challenges characteristic of the ultra-urban environment
- Other innovative approaches

5. Best Habitat Creation in a BMP

BMPs that are greater than 1 acre in size and that provide a unique blend of aquatic or upland wildlife habitat while still providing effective stormwater function. Example projects include: constructed wetlands. Projects built for mitigation and stream restoration projects are **not** eligible under this category (see next category).

Habitat BMPs will be evaluated on their ability to meet one or more of the following criteria:

- Meets or exceeds the water quality requirements for the site if applicable
- Utilizes native plantings that provide multiple habitat zones
- Attracts wildlife that were not there before including pollinators, songbirds, waterfowl and wildlife
- Provides habitat function without excessive inputs of irrigation water, fertilizer and pesticides
- Receives extra points for a habitat project that connects with existing habitats or waterways to create a wildlife corridor

6. Best Stream Restoration

Applies to any project in the stream corridor (including zero order streams) that is explicitly designed to enhance the function, stability and ecosystem services of an urban stream. Example projects include: legacy sediment removal, floodplain reconnection, and natural channel design.

Stream restoration projects will be evaluated on their ability to meet one or more of the following criteria:

- The project was part of an integrated watershed-based approach
- Meets or exceeds the intended hydrologic and geomorphic objectives for which it was designed
- Has successfully withstood significant flood events without damage
- Utilizes innovative stream restoration techniques including but not limited to: floodplain reconnection, legacy sediment removal, natural channel design,
- Maximizes biological uplift within the stream reach
- Minimizes the intrusion or damage to the stream corridor or floodplain
- Improvements resulting from the project are substantiated by post-construction monitoring and/or assessment

5 Process for Submissions

To make things easy, there will be a one-stage submission process that takes place entirely online. An application should take a maximum of 15-20 minutes to complete and will involve filling out a single page, online form and uploading a minimum of four photos (including one showing the site before the BMP was installed). Applicants have the option to submit additional photos and design plans they believe will help our jurors review more detailed elements of the project.

Submission Instructions

All submissions will need to include the following information:

1. Basic Project Data
2. Narrative
3. Photographs (4)
4. Supporting Materials (*optional*)

Basic Project Data

This data will be provided by filling out an online form identical across all categories.

1. Type of practice
2. Category applying for
3. Applicant contact information
4. Practice design team (Designer, Contractor, Installer, Architect etc.)
5. Runoff volume treated by the BMP (cubic feet)
6. Drainage area (acres)
7. % impervious of drainage area
8. Approximate cost

Narrative

Applicants are required to submit a brief narrative (2 pages, 1300 words max) explaining:

1. Why the project is being submitted for a specific award category **and**
2. How the project meets one or more of the category design criteria.

Contestants will also be asked to address the following in their narrative:

- Intent of the project and key objectives accomplished
- Major site, design, or construction challenges that had to be overcome or why the project is unique
- Any education, outreach, or community involvement that occurred as part of or resulted from the project

Photographs

1. A minimum of 4 photographs are required for consideration of an award
2. One photo must be of the site before the practice was installed
3. All photograph submittals must be in .jpg/.png format
4. Each photograph must be labeled with a descriptive file name to explain what they are trying to portray or participants must submit an additional document listing the file name and description of each photo
5. All photographs will become property of CSN. We reserve the right to use the photos however we choose as long as they are attributed to the appropriate parties

Supporting Materials

Participants have the option to submit additional photos and design plans depicting practice design features that could prove helpful for reviewing more detailed elements of the project. All supporting materials will become property of CSN and will not be returned.

Submit Your Project Here: <http://chesapeakestormwater.net/the-bubbas/>

6

Selection Process

Once your project goes through an initial screening, it will be passed on to the jurors assigned to the category to which you have submitted your project. Our jurors will review all of the projects in their assigned category independently before meeting with the other jurors working on that category. Then as a group, the jury will select the first, second, and third place projects within their category. The first place project from each category will move on as a finalist to the public voting portion of our contest.

A photograph and information about all of our finalists along with a voting form will be featured on our website in May. Our network will be invited by email to review the projects and vote for their favorite. The project that receives the most votes from our network members and the general public will be named the Best BMP in the Bay and receive the grand prize!

7

Cash Awards and Winner Recognition

Winners will be announced to CSN's network of 7,000 stormwater professionals through email and on our website.

- Grand prize winner will receive an award of \$5,000
- The top three projects in each category will receive certificates of recognition and will be featured on the CSN website
- Category winners will receive a free registration to the 2015 Bay-wide Partners Stormwater Retreat where they will be recognized at an awards ceremony

8 Distinguished Jury

Our jury is comprised of an array of stormwater professionals who represent diverse perspectives in the field of stormwater management. Their role will be to evaluate the project submissions according to the many objectives of stormwater BMPs.

Each category jury will consist of two steering committee members and two specialists from the list below.

- Kelly Lindow, RK&K
- Anne Guillette, Low Impact Design Studio
- Greg Hoffmann, Center for Watershed Protection
- Bill Stack, Center for Watershed Protection
- Tom Schueler, Chesapeake Stormwater Network
- Laura Grape, Northern Virginia Soil and Water Conservation District
- Norm Goulet, Northern Virginia Regional Commission; Chair, Urban Stormwater Workgroup
- Scott Crafton, Louis Berger Group
- Suzanne Etgen, Watershed Stewards Academy
- Erik Michelsen, South River Federation
- Chris Heyn, Carroll County, MD
- Jennifer Dowdell, Biohabitats, Inc.
- Rebecca Stack, District Department of the Environment
- Theresa Connor, Water Environment Research Foundation
- Jason Papacosma, Arlington, VA
- Martin Covington, Carroll County, MD
- JoAnn Trach Tongson, Mahan Rykiel Associates, Inc.

9 Timeline

Dec 1, 2014	Contest opens
Feb 28, 2015	Deadline for submissions
March 2015	Preliminary screening by category leads
April 2015	Jury convenes for final review of projects
June 4-6, 2015	Awards ceremony at the Bay-wide Stormwater Retreat