



# 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 2009 in the Chesapeake Bay Watershed*

**Presented by the Chesapeake Stormwater Network**

**<http://chesapeakestormwater.net/the-bubbas/>**

# 1 Objective

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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 more 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 4,000 member network of stormwater professionals throughout the Bay watershed to promote interactivity among the members.

## 2 Steering Committee

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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 work 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

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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, 2009 – December 31, 2013
2. Must be located in the Chesapeake Bay Watershed
3. Must not be a proprietary practice but local reproductions of proprietary technology are allowed

## 4 Award Categories

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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 and promote their application throughout the Chesapeake Bay Watershed and ensure broad participation entries will be accepted in the following seven 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 generally be less than \$5,000. BMPs installed by homeowners, contractors or watershed groups are eligible (the designer and installer should be identified in the 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. 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(s) to promote greater pollutant removal
- Exceeds the standard state design specification for the practice if there is one or modifies an existing state design specification 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 that the 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, and other challenges 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. Projects built for mitigation are not eligible. Example projects include: constructed wetlands. 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.
- The project meets or exceeds the intended hydrologic and geomorphic objectives for which it was designed
- The project has successfully withstood significant flood events without damage
- The project utilizes innovative stream restoration techniques including but not limited to: floodplain reconnection, legacy sediment removal, natural channel design,
- The project maximizes biological uplift within the stream reach
- The project minimizes the intrusion or damage to the stream corridor or floodplain
- The project improvement is substantiated by post-construction monitoring and/or assessment

## 7. *People's Choice Award*

The best of the best. This award will be selected among the top candidates from the above awards. It will be voted on by CSN's 4,000+ member network.

# 5 Process for Submissions

To make things easy on people submitting projects, there will be only a one-stage submission process that takes place entirely online. Application should take a maximum of 15-20 minutes and should consist of completing a one page form online and a minimum of 4 photos including a photo of the site before the BMP was installed. Participants have the option to submit additional photos and design plans that show practice design details that will be helpful for reviewing more detailed elements of the design.

## **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**

Is the same across all categories (which will be through an online form with required fields)

1. Type of practice
2. Category(s) 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, 1,300 words max) that explains:

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

In addition contestants will be asked to respond to the following in their narrative:

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

### **Photographs**

1. A minimum of 4 photographs are required for consideration of an award.
2. This includes one of the site before the BMP was installed.
3. All photograph submittals should be in jpg/png format
4. Each photograph should be labeled with a descriptive file name to explain what they are trying to portray or participants should include an additional document that provides this information
5. All photographs will become property of CSN who has the right to use them as long the authors are attributed with a correct citation.

### **Supporting Materials**

Participants have the option to submit additional photos and design plans that show practice design details that will be 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 Cash Awards and Winner Recognition**

Winners will be announced to CSN's network of 4,000 stormwater professionals within the Bay watershed.

- ❖ The top three finalists in each award category will receive certificates of recognition for placing as a finalists in the award category and be featured on the CSN website
- ❖ Category winners will receive a free registration to the 2014 Bay-wide Partners Stormwater Retreat where they will be recognized at a BUBBAs awards ceremony.
- ❖ Grand prize winner (the people's choice award) will receive an award of \$5,000

## 7 Distinguished Jury

The purpose of the jury is to review the practices and select projects which are on the cutting edge of innovation in an attempt to nominate distinguished innovators. They should represent diverse perspectives in the field of stormwater management and can evaluate the project submissions according to the many objectives of a stormwater BMP. 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.

## 8 Timeline/Competition Calendar:

|                |   |
|----------------|---|
| Dec 1, 2013    | Contest opens                           |
| Feb 28, 2014   | Deadline for submissions                |
| Feb 2014       | Preliminary screening by category leads |
| Apr 2014       | Convene Jury for final review           |
| June 4-6, 2014 | Awards Ceremony at Baywide Retreat      |