



The BUBBAs

Recognizing innovators and showcasing techniques to solve the challenges of protecting and restoring urban watersheds.



BEST URBAN BMP

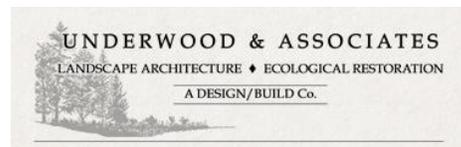
in the Bay Award 

The 2019 BUBBAs

Best Urban BMP in the Bay Award

*to recognize the best management practices that have been installed
in the Chesapeake Bay Watershed*

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Presented by the Chesapeake Stormwater Network

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

1 Contest Objective

The Best Urban BMP in the Bay Awards contest (BUBBAs) recognizes the best practices and programs being implemented in the urban environment across the Chesapeake Bay watershed. Now in its fourth year, the BUBBAs shine a light on local innovators using creative approaches to protect and restore local watersheds. While other low impact development (LID) competitions focus on the design of new stormwater practices, CSN wants to also recognize on-the-ground techniques being used to tackle difficult stormwater problems. Put simply, the goal of the BUBBAs is three-fold:

- 1 Recognize innovators in the field who are using new and creative techniques to treat runoff and protect streams;
- 2 Share these innovative techniques with other communities who could benefit from the lessons learned; and
- 3 Inspire interaction among our 11,000+ member network of stormwater professionals throughout the Bay watershed and beyond.

2 Eligibility

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

1. Must have been installed in the ground (or implemented) within the last 5 years: beginning January 1, 2014 – December 31, 2018
2. Must be located in the Chesapeake Bay Watershed
3. Must not be a proprietary practice. However, local reproductions of proprietary technology may be submitted
4. Projects that were submitted for consideration in previous years are not eligible for consideration unless they have been significantly changed

3 Cash Awards and Winner Recognition

Winners will be announced to CSN’s network of 11,000 stormwater professionals within the Bay watershed.

- ❖ The top three finalists in each award category will receive certificates of recognition and will be prominently featured on the CSN website
- ❖ Category winners will receive a free registration to the 2019 Bay-wide Partners Stormwater Retreat where they will be recognized at the exclusive BUBBAs awards ceremony.
- ❖ Grand prize winner (the people’s choice award) will receive a cash award of \$5,000

4 Timeline/Competition Calendar:

January 22, 2019	Contest opens
April 5, 2019	Deadline for submissions
April 2019	Design Jury begins project review
April 29, 2019	Popular voting opens
May 10, 2019	Awards Ceremony at Bay-wide Retreat

5 Distinguished Jury

BUBBAs category winners are selected by a distinguished jury of stormwater professionals who represent diverse perspectives in the field of stormwater and watershed management. Each category will be reviewed by a jury of 5-6 members from the list below, who will evaluate project submissions based upon the criteria outlined in Section 6 of this guide using their own professional judgment.

Name	Affiliation
Kate Austin	City of Lancaster, Pennsylvania
Chip Boyles	Thomas Jefferson Planning District Commission
Ted Brown	Biohabitats
Jim Caldwell	Howard County, Maryland
Martin Covington	Carroll County, Maryland

Scott Crafton	Virginia Dept. of Transportation
Sarah Diebel	U.S. Department of Defense
Jenn Dowdell	Biohabitats
Sadie Drescher	Chesapeake Bay Trust
Suzanne Etgen	Anne Arundel Co. Watershed Stewards Academy
Lou Etgen	
Rachel Felver	Alliance for the Chesapeake Bay
Dan Frisbee	City of Charlottesville, Virginia
Andy Gavin	Susquehanna River Basin Commission
Heather Gewandter	City of Rockville, Maryland
Beth Ginter	Chesapeake Bay Landscape Professionals
Norm Goulet	Northern Virginia Regional Commission
Laura Grape	Northern Virginia Soil and Water Conservation District
Anne Guillette	City of Arlington, Virginia
Alana Hartman	West Virginia Dept. of Environmental Protection
Greg Hoffman	Center for Watershed Protection
Cecilia Lane	District Dept. of Energy and Environment
Sarah Lane	Maryland Dept. of Natural Resources
Scott Lowe	McCormick Taylor, Inc.
Erik Michelsen	Anne Arundel County, Maryland
Jennifer Missett	Biohabitats
Jenna Mitchell	Alliance for the Chesapeake Bay
Matthew Pennington	Eastern Panhandle Regional Planning and Development Council
Amanda Rockler	Maryland Sea Grant
Steve Saari	District Dept. of Energy and Environment
Tim Schueler	Hazen and Sawyer
Rebecca Stack	Design Green LLC
Bill Stack	Center for Watershed Protection
Jill Sunderland	Hampton Roads Planning District Commission
JoAnn Trach Tongson	Mahan Rykiel Associates
Ashley Traut	Blue Water Baltimore
Michelle Williams	Chesapeake Research Consortium
Rebecca Winer-Skonovd	Biohabitats

6 Award Categories

Entries will be accepted in seven categories this year. Each category has its own relevant criteria that should be addressed within your project narrative. Remember that to really stand out, tell us how your project goes above and beyond any applicable stormwater or restoration requirements to represent something unique or innovative. If you are unsure what category to submit your project under, please contact David Wood (Wood.CSN@outlook.com).

Applications submitted to each category should describe how the BMP meets any or all of the relevant criteria in that category.



Best Habitat Creation in an Urban Watershed

- a) Any restoration project that creates or restores a high-quality blend of wetland or upland wildlife habitats in the urban landscape are eligible in this category.
- b) Separate awards will be made for projects that are:
 - i. primarily forest creation, such as riparian or urban forest planting that achieve a minimum 75% tree canopy, or
 - ii. primarily meadow enhancement or conservation landscaping (max 25% tree canopy).
- c) All projects will receive extra points if they:
 - i. connect with other habitat areas or the stream corridor
 - ii. treat the quality of stormwater runoff from upland development or
 - iii. attract pollinators, amphibians, songbirds, waterfowl and other wildlife to the project site.

NARRATIVE SHOULD INCLUDE:

- Size of planting site (acres)
- Species of tree or meadow planted
- Site conditions prior to planting
- Description of any biological monitoring conducted

- d) Projects that primarily involve restoration of the urban stream channel or floodplain should be submitted in the “best stream restoration” category. Any project primarily built for environmental mitigation purposes is not eligible under this category.

Your project narrative should describe how the habitat you create:

- i. Utilizes native plantings suitable to the soil and water conditions at the site to create diverse habitat zones
- ii. Results in at least 20,000 square feet of habitat that is protected from future disturbance
- iii. Has a responsible authority that can maintain the habitat over time and help control invasive plants
- iv. Encourages access for the public to explore and learn about the habitat



Best Residential Stewardship Practice in the Bay

- a) This category recognizes exceptional stormwater practices installed on a residential property. Example projects include: rain gardens, rainwater harvesting systems, vegetated roofs, conservation landscaping, tree planting, downspout disconnection or soil amendments.
- b) Special consideration is given to projects subsidized under local government incentive programs.
- c) Total investment in residential practices should be generally limited to less than \$5,000. They can be installed by homeowners, contractors or watershed groups (if possible, please identify the designer/installer in your application).
- d) Your project narrative should describe how your residential stewardship practice(s) meet the following criteria. The best projects should:
 - i. Effectively treat a substantial portion of runoff from the property

NARRATIVE SHOULD INCLUDE:

- Runoff volume treated
- Practices used
- Landscaping objectives
- Other homeowner benefits (besides water quality improvement)

- ii. Provide aesthetic improvements to the property
- iii. Include unique or creative design features to improve practice function
- iv. Provide other benefits to the homeowner such as reduced basement flooding, reduced heating or cooling costs or ‘backyard’ habitat for songbirds and pollinators



Best Stream Restoration Project in the Bay

- a) The category recognizes outstanding projects in the stream corridor that are explicitly designed to enhance the function, stability and ecosystem services of an urban stream.
- b) Your project narrative should describe how your project meets the following criteria. In general, the best restoration projects should:

- i. Be part of an integrated watershed-based restoration approach.
- ii. Meets or exceed clearly stated objectives to improve stream habitat and reduce pollutant delivery to the Bay (some quantitative documentation is helpful here)
- iii. Successfully withstand significant floods without failing
- iv. Utilize an innovative and comprehensive approach to stream restoration such as floodplain reconnection, legacy sediment removal or natural channel design techniques.
- v. Improve biological uplift in the stream reach, enhance potential fishery habitat or restore the floodplain plant community.
- vi. Promote public access, watershed education or neighborhood outreach along the stream corridor.

NARRATIVE SHOULD INCLUDE:

- Length of restored reach
- Estimate of pollutant load removed
- Description of any monitoring efforts
- Benefits achieved beyond better water quality



Best Green Infrastructure Practice in Ultra-Urban Areas

- a) This category recognizes the best application of green infrastructure (GI) practices that are built in highly urban areas to reduce flooding and pollutant delivery. Sites in this category will typically have more than 75% impervious cover.
- b) Some examples include: green streets, walls, roofs or parking lots, rainwater harvesting systems, urban forestry practices, and permeable hardscapes.
- c) Any private or public sector redevelopment projects that creatively integrate green infrastructure practices into their site plans are encouraged to apply.
- d) Your project narrative should describe how your GI project meets the criteria below. In general, the best projects:
 - i. Utilize an innovative design to achieve a high reduction of runoff and pollutants from the site
 - ii. Link green infrastructure practices together into an effective treatment train
 - iii. Create an attractive site, neighborhood or street amenity
 - iv. Effectively overcome the challenges encountered in the ultra-urban environment such as traffic, utilities and other underground infrastructure
 - v. Contribute to one or more of the following:
 - (a) increased urban tree canopy
 - (b) building sustainability (e.g., energy savings, green building certification, etc.)
 - (c) easier and safer pedestrian movement
 - (d) public art

NARRATIVE SHOULD INCLUDE:

- Runoff volume treated
- Approximate drainage area and amount of impervious cover
- Description of urban site constraints



Best Retrofit in the Bay

- a) This category recognizes the best stormwater projects constructed in the last five years to improve runoff quality from areas that were developed in the past without effective stormwater treatment.

The retrofit can involve either modifications to an existing stormwater BMP or construction of new BMP.

- b) Your project narrative should demonstrate how your stormwater retrofit meets the criteria below. The best contenders in this category will:
- i. Sharply reduce pollutants and flooding from the existing developed area (pollutant reduction estimates using the retrofit curves are suggested)
 - ii. Incorporate new or innovative engineering approaches to maximize pollutant removal (e.g., floating wetlands, smart BMPs, media enhancements, etc.)
 - iii. Solve difficult design challenges or site constraints that might be transferable to retrofit projects in other communities
 - iv. Be reasonably cost-effective in treating runoff generated from its impervious acreage (some general cost documentation is requested)
 - v. Enhance local habitat, create attractive green space or serve as a neighborhood or community amenity.

NARRATIVE SHOULD INCLUDE:

- Runoff volume treated
- Estimate of pollutant load removed
- Approximate drainage area and amount of impervious cover
- Total cost of the retrofit



Best Outreach Campaign in the Bay Watershed

- a) This category recognizes effective stormwater education and outreach campaigns that seek to change behaviors that tangibly reduce stormwater pollution in a community.
- b) The program can be offered by a municipal stormwater agency or nonprofit organization that goes well beyond the minimum required by their local stormwater permits.
- c) Your project narrative should describe how your campaign or program met the criteria below. In general, the best campaigns will:
 - i. Focus on specific behaviors or actions by residents or businesses that generate pollutants of concern in the Chesapeake Bay watershed (e.g., nutrients, bacteria, plastics or toxics)
 - ii. Transmit a clear, simple and possibly humorous message that helps the public understand how the behavior change can improve water quality
 - iii. Use a mix of social marketing, new media and traditional outreach methods to capture the eyeballs of the desired audience
 - iv. Target specific demographic populations or under-served audiences
 - v. Measure or estimate how the campaign actually changes behaviors that influence water quality

NARRATIVE SHOULD INCLUDE:

- Water quality problem targeted
- Stewardship behavior targeted
- Description of outreach techniques used
- How success or progress was tracked



Most Sustainable Stormwater Facility in the Bay

- a) This category recognizes the best industrial, federal, municipal or institutional facility in the watershed that takes practical steps to prevent stormwater pollutants from washing off their site and into local streams.
- i. In most cases, these facilities are operating under pollution prevention and spill response plans required under state or federal stormwater permits, but go well beyond the minimum needed to produce clean runoff from their site.
 - ii. While most facilities will possess existing stormwater BMPs, this award focuses more on outstanding training efforts to motivate staff to manage facility operations to prevent pollution discharges in stormwater runoff and dry weather flows.
- b) The strongest contenders in this category should be able to describe in their narrative how their facility meets the following criteria:
- i. Facility operates under an updated stormwater pollution prevention plan to identify and prevent any pollutants from discharging from the property
 - ii. Site is frequently and systematically inspected to keep pollutants from contact with rain, treat stormwater hotspots and prevent spills, leaks or illicit pollutant discharges
 - iii. Employees are actively engaged and empowered on how to take actions on a daily or seasonal basis to protect water quality
 - iv. Parking areas and stormwater infrastructure (storm drains, catch basins and BMPs) are routinely cleaned and maintained to remove trapped litter and pollutants.
 - v. Turf and landscaping are managed to use the least amount of irrigation water, fertilizer and pesticides.
 - vi. Site is generally a cool place to work at or live next to.

NARRATIVE SHOULD INCLUDE:

- Type of facility and key runoff risks
- Description of staff training efforts
- Description of ongoing site inspection efforts
- Site map showing key practices

7 Process for Submissions

All applications are submitted online in a single step. Once the project narrative is written, an application should take a maximum of 15-20 minutes to complete and will involve filling out a one-page online form and uploading a minimum of four photos (including one photo depicting the site before the BMP was installed). Participants have the option to submit additional photos and design plans if they believe these materials will help our jurors understand the project.

Submission Form: <http://chesapeakestormwater.net/the-bubbas/bmp-contest/>

Submission Instructions

All submissions will need to include the following information:

1. Basic Project Data
2. Project Narrative
3. Photographs (4 – including one “before” – preferably as .jpg)
4. Supporting Materials *optional*

Basic Project Data

The following project data are required to support your submission:

1. Type of practice
2. Category applying for
3. Applicant contact information
4. Practice design team (Designer, Contractor, Installer, Architect, etc.)
5. Approximate cost
6. Geographic location information (latitudinal/longitudinal info or physical address)
7. A 3-sentence description of the project to be displayed on our website if the project is chosen as one of our finalists

Narrative

Applicants are required to submit a brief narrative (2 pages, 1,300 words **maximum**). To read an exemplary project narrative from last year’s contest, please visit the “register your project” page on our website.

Your narrative should address:

1. Why the project is being submitted for a specific award category
2. How their project meets one or more of the category design criteria
3. Category specific information included in Section 6

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

Narratives that specifically spell out how the project meets the above, will have a better chance in the contest.

Photographs

All photographs will become property of CSN who has the right to use them as long the authors are attributed with a correct citation.

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

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/2019-bubbas>