



The Runoff Rendezvous

A Virtual Bay-Wide Stormwater Partner's Retreat



New Paradigms to Manage Future Urban Floods in the Bay Watershed

Agenda and Reminders

Today's Agenda:

- Quick Introduction
- 4 Mini-presentations from our panelists
- Panel Discussion
- Audience Q&A – Through the Chat/Q&A Features

- We are recording today's session – slides and recording will be posted here:
 - <https://chesapeakestormwater.net/events/new-paradigms-to-manage-future-urban-floods-in-the-bay-watershed/>

Cast your vote for the BUBBAs!

Best Education and Outreach Project: Clear Creeks Bay-wise Project at Mirimar Landing

Best Habitat Creation: JBLE-Langley Marina Shoreline Restoration

Most Innovative Stormwater Permit Implementation: MDOT MPA Innovative Stormwater Permit Implementation

Best Residential Project: A Different Approach to “Fixing” Drainage

Best BMP Retrofit: Herrity Fountain Retrofit

Best Stream Restoration: Davis Branch Restoration

Best Ultra Urban Project: Brandon Avenue Green Street

Small But Mighty (Education and Outreach): Water Wonders

Small But Mighty (Residential): Wild At Heart in Accotink Creek Watershed

Small But Mighty (Retrofit): Penrose Green Street



<https://chesapeakestormwater.net/2021-bubbas-cast-your-vote/>

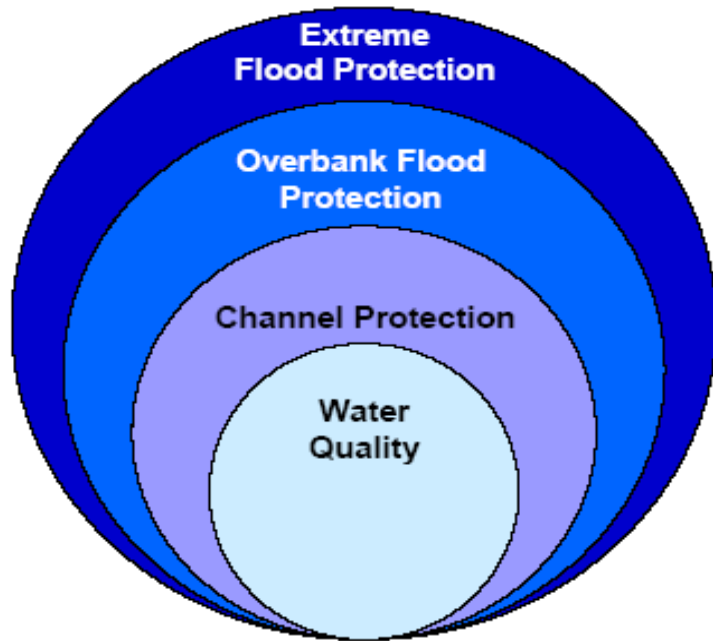
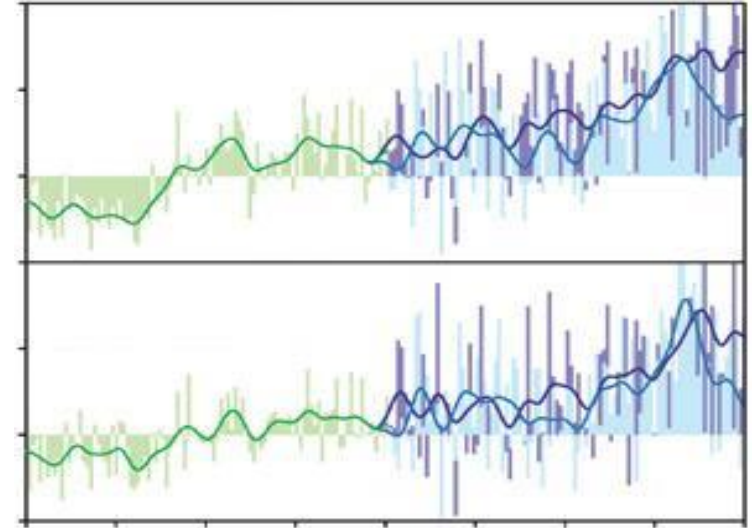
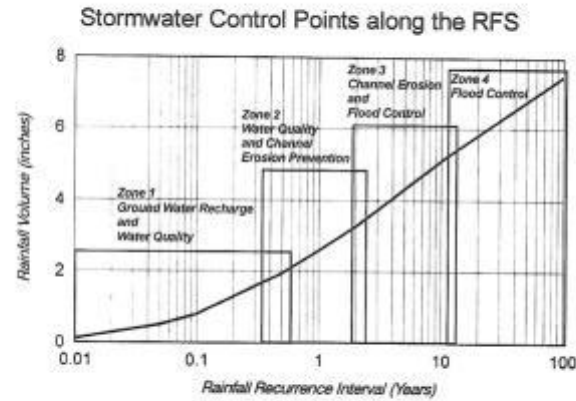
Runoff Rendezvous Poll Question

- Which of the following statements best describes your relationship with urban flooding?
 - I design/install stormwater practices
 - I map, model or review urban floodplain boundaries
 - I manage and maintain public infrastructure
 - It is an increasing problem in my community
 - Flooding complaints drive my job these days
 - Just interested in the topic
 - Other (just type in the chat box)

Confessions of a Quality Guy



FIGURE 2.5: FOUR CLASSES OF RAINFALL DISTRIBUTION



STANDARD POND SYSTEM DESIGN CROSS-SECTION VIEW

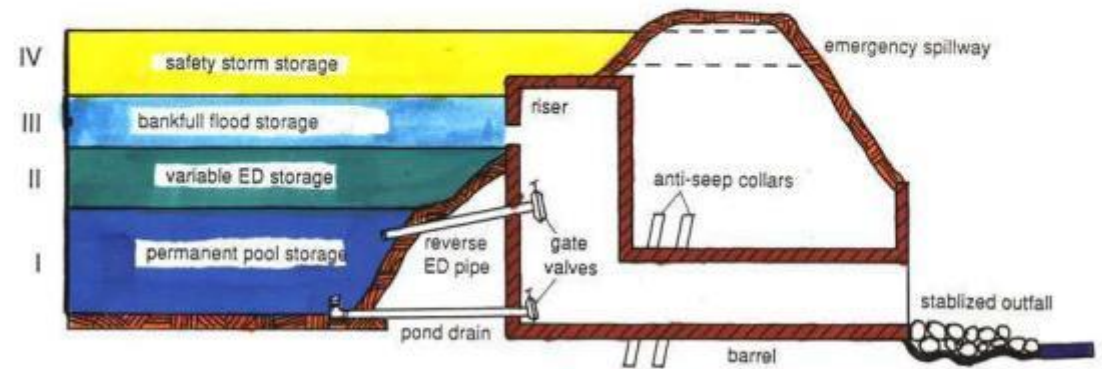


Figure 4.4-1 Representation of the Unified Stormwater Sizing Criteria



Four flooding challenges that cannot be solved by our current stormwater practice and technology (yet).

- **Expanding Urban Floodplain Boundaries:** more extreme rainfall, “harder” urban watersheds, legacy conveyance systems, vulnerable public infrastructure
- **Rising Coastal Waters:** sea level rise, higher storm surge, blue sky flooding, shoreline retreat, higher water tables/slat water intrusion
- **Decrepit and Failing Stormwater Plumbing:** aging patchwork of stormwater conveyance, detention and flood control infrastructure built over the last century fails to provide much real flood protection
- **Fixed Boundaries for Private Property and Regulatory Floodplains:** We are about three decades behind in drawing the new lines, which creates a lawyer’s dream and a municipal nightmare

What's at risk in our community?

Public Infrastructure

- Sewer pipe network
- Roads, streets and storm drains
- Bridges, culverts and crossings
- Water pipe distribution system
- Dams, embankments and flood control practices
- Public stream restoration projects
- Urban waterfront and stream corridors
- Wastewater treatment plants and public works yards (floodplain)

Private Property

- Expansion of 100-year floodplain insurance boundaries
- Residential flood damage
- Shoreline engineering to prevent erosion
- Bank erosion/tree canopy loss
- Failure of privately- owned stormwater practices

Our Distinguished Panel



Jason Papacosma
Arlington, VA



**Elaine Webb &
Randell Greer**
State of Delaware



Whitney Katchmark
HRPDC



Bob Bathurst
Century Engineering



Victor Hlas
Opti-Rtc
Boston, MA



**Un-distinguished
Facilitator**

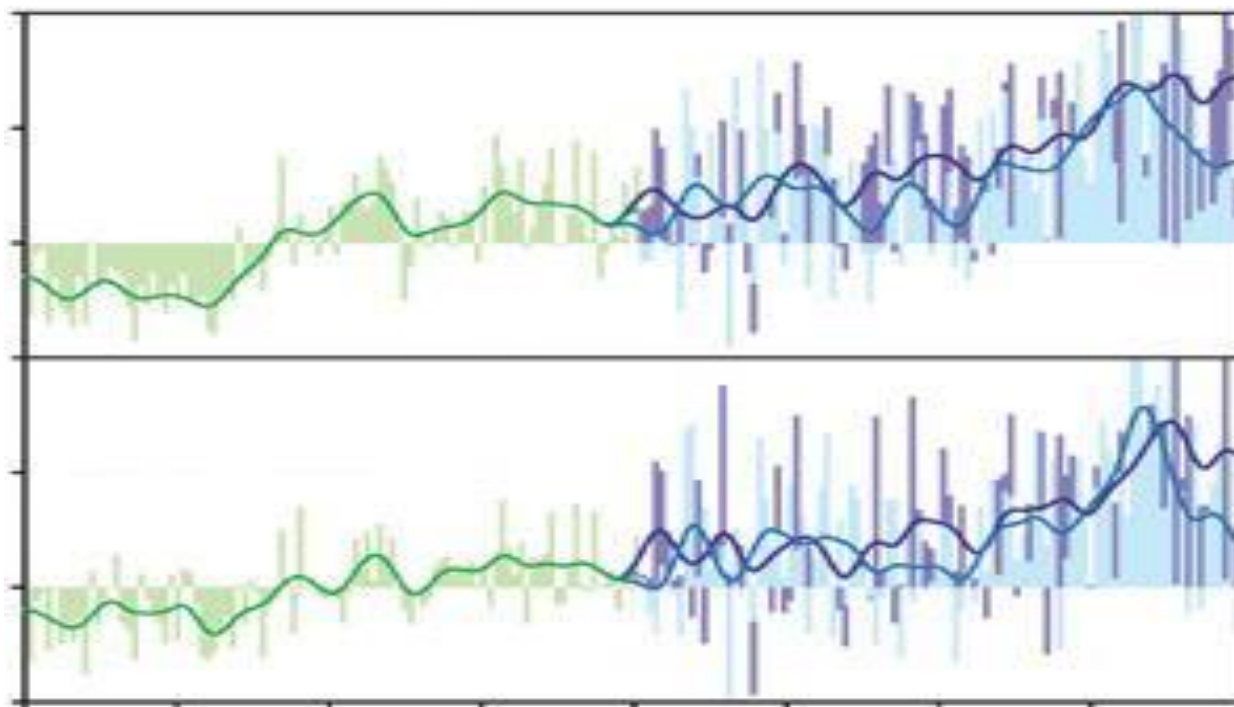
Tom Schueler
CSN

Runoff Rendezvous Poll Question

Which of the following would you rate as your top priority in managing future flooding in your community?

- Better projections of extreme rainfall to use in engineering design
- New tools to communicate the risk to the public as flood boundaries change over time
- How to adapt smart BMP technology to legacy detention ponds to provide better flood control
- More stormwater BMP design guidance for coastal areas to overcome the impacts of rising waters
- How to better integrate stormwater quality and quantity in our designs
- Other (please type in the chatbox)

Questions and Answers



Please take our survey!

https://www.surveymonkey.com/r/RR_floods

What's Next at the Runoff Rendezvous?

MONDAY (3/22) at 11AM:

Developing the Next Generation of Stormwater Design Criteria