



# Community Based Restoration Monitoring

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Nontidal Network Workgroup

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NFWF

CMC  
Chesapeake Monitoring  
Cooperative

# Chesapeake Monitoring Cooperative

Aims to provide **technical, logistical, and outreach support** for the integration of volunteer-based and nontraditional water quality and benthic macroinvertebrate monitoring data into the Chesapeake Bay Program (CBP) partnership.

## Cooperative Agreement

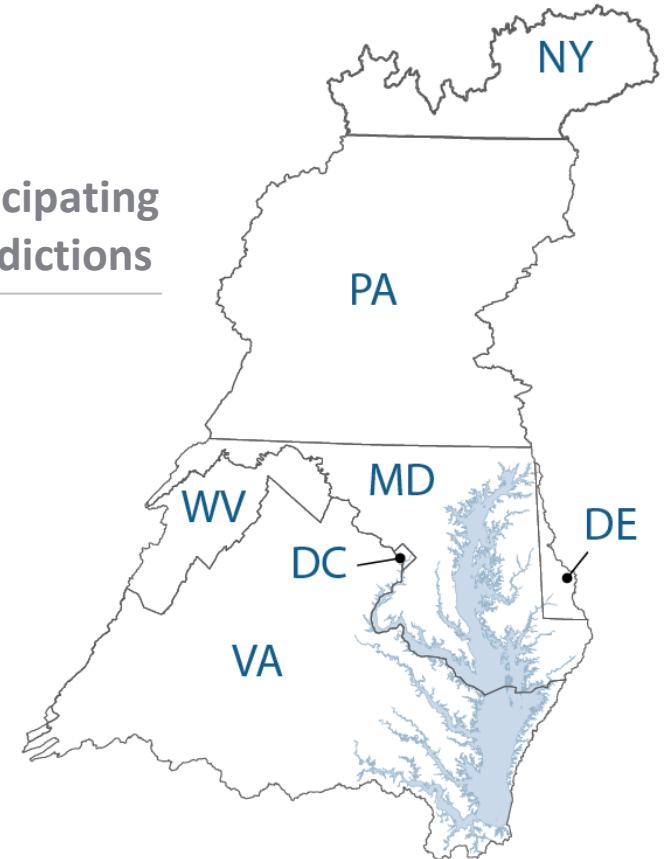


## CMC development team partners & service providers



University of Maryland  
CENTER FOR ENVIRONMENTAL SCIENCE

## Participating Jurisdictions





# CBT Benthic Sampling Protocol





# Project Partners



# Best Management Practices

## Dirt and Gravel Road Erosion & Sediment Control



Photo Credit: Lori Glace, Cumberland County Conservation District

## Forest Buffer



Photo Credit: Ryan Davis, Alliance for the Chesapeake Bay

## Stream Restoration



Photo Credit: Underwood and Associates



# Project steps

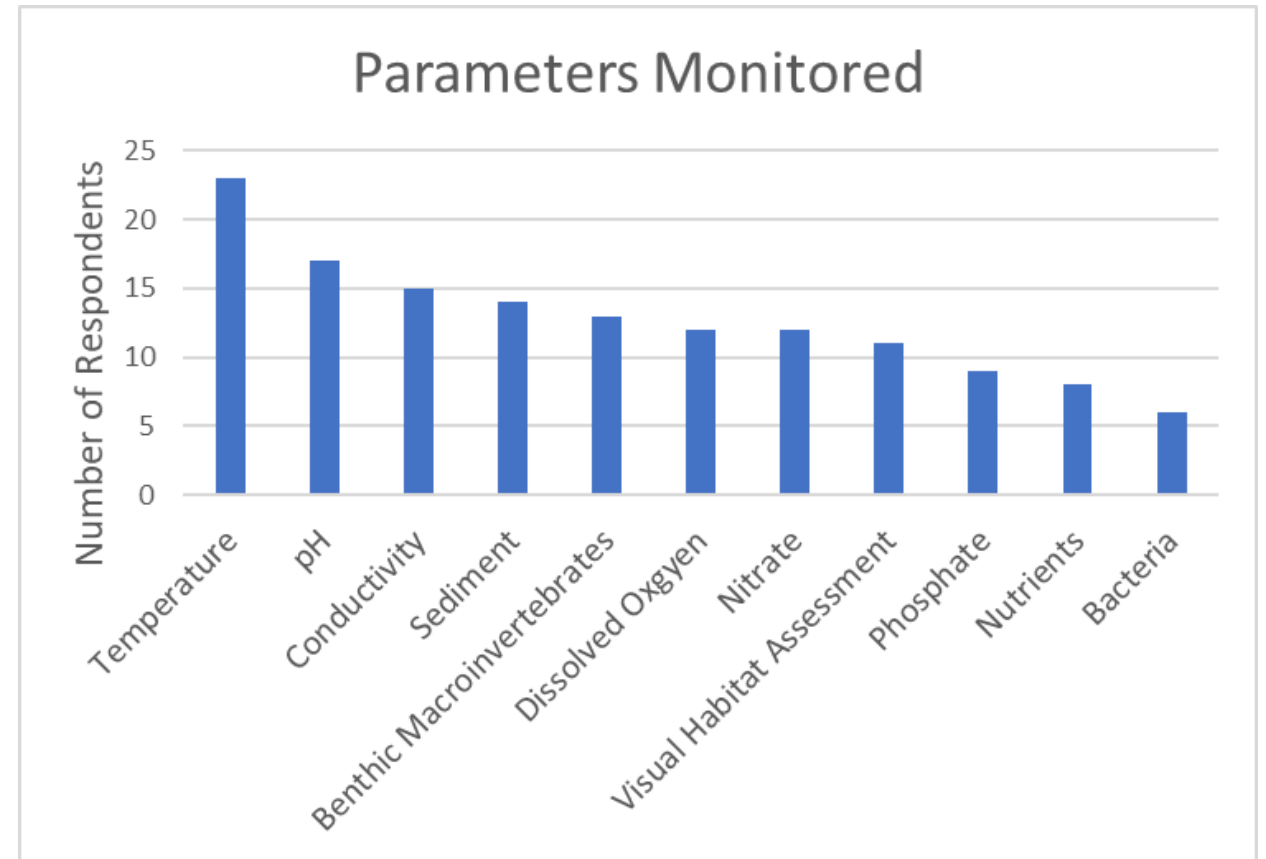
1. Background research
2. Stakeholder Survey
3. Study Design
  - Project team, NFWF, Chesapeake Bay Program
4. Protocol & QAPP development



# Stakeholder Survey

## Key findings (44 respondents)

- Sporadic monitoring ~50%
- No common approach
- Requested technical assistance
- Need resources, both capacity and equipment



# Goals of protocol

- Assess the status of the intervention
  - Document pre, during, post restoration site status
- Help NFWF document visual/physical impact of practices on streams
  - Develop case studies that highlight the impacts
- Alert project managers to potential issues that need to be addressed
- Community accessible protocol

[Report EPA, NRCS, USGS highlighting the need for a WQ restoration protocol](#)





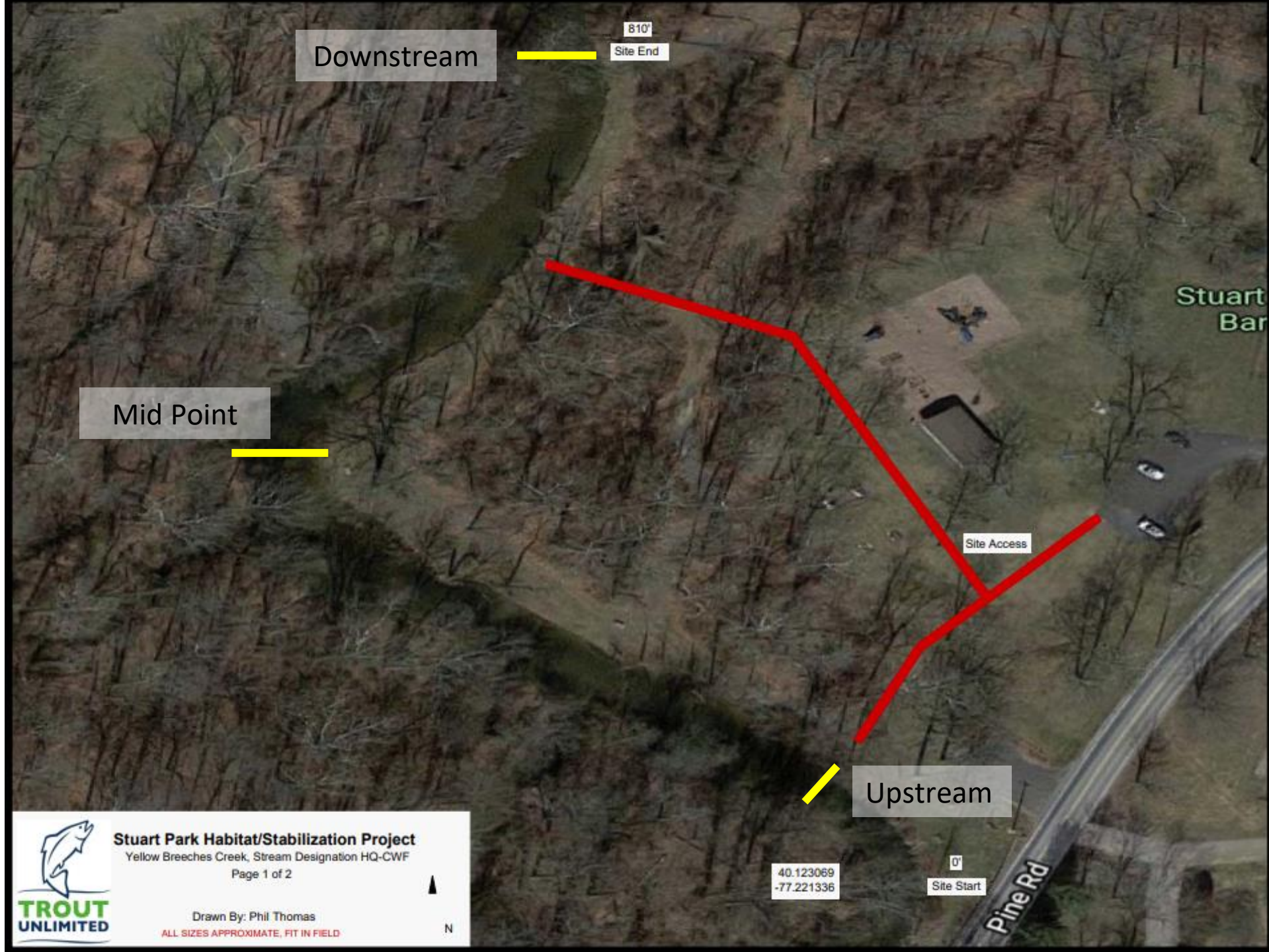
Primary question: What is the status of BMPs?					
	Pre (up to 2 years prior)	During	1-2 years	3-5 years	5+ years
<b>Visual Assessment</b> <ul style="list-style-type: none"> <li>• Temp</li> <li>• Water clarity</li> <li>• Water level</li> <li>• Pictures</li> </ul>	Spring and fall in year prior. Minimum, 1 survey.	Use photos as surrogate	Spring/fall annually	Annual	Biennial
<b>Pictures</b>	Take at time of Visual Assessment	Immediately before and after intervention	Take at time of Visual Assessment	Take at time of Visual Assessment	Take at time of Visual Assessment
<b>Macroinvertebrates</b>	Spring (ideally two springs before)	N/A	Fall or Spring immediately following intervention, then spring annually.	Biennial	Once/5 years

# Stuart Park, PA





# Stuart Park, PA



# Thank you!

Alliance for the Chesapeake Bay

[Allianceforthebay.org](http://Allianceforthebay.org)

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