



Maryland Wetland Program Update

Mid-Atlantic Wetland Work Group

Presented by:

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**Wetlands and Waterways Protection
Program**

**Maryland Department of the
Environment**

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Photo: MDE



Highlights - Grant Projects

- **Focusing on education and outreach for Maryland Shoreline Stabilization Mapper**
- **Migration of application screening system to web-based platform**
- **Development of management recommendations for high-quality resources. Field work planning underway by DNR.**
 - **Tier II watersheds**
 - **Coldwater resources**
 - **Nontidal wetlands of special State concern**
 - **Other nontidal wetlands with rare species**
- **Benefits calculator (nutrients, sediment, wave attenuation) by VIMS**
- **Coastal design manual with VIMS. Stakeholder meeting held.**
- **Restoration Mapper**
- **Additional engineering model training**



Highlights - Other Projects

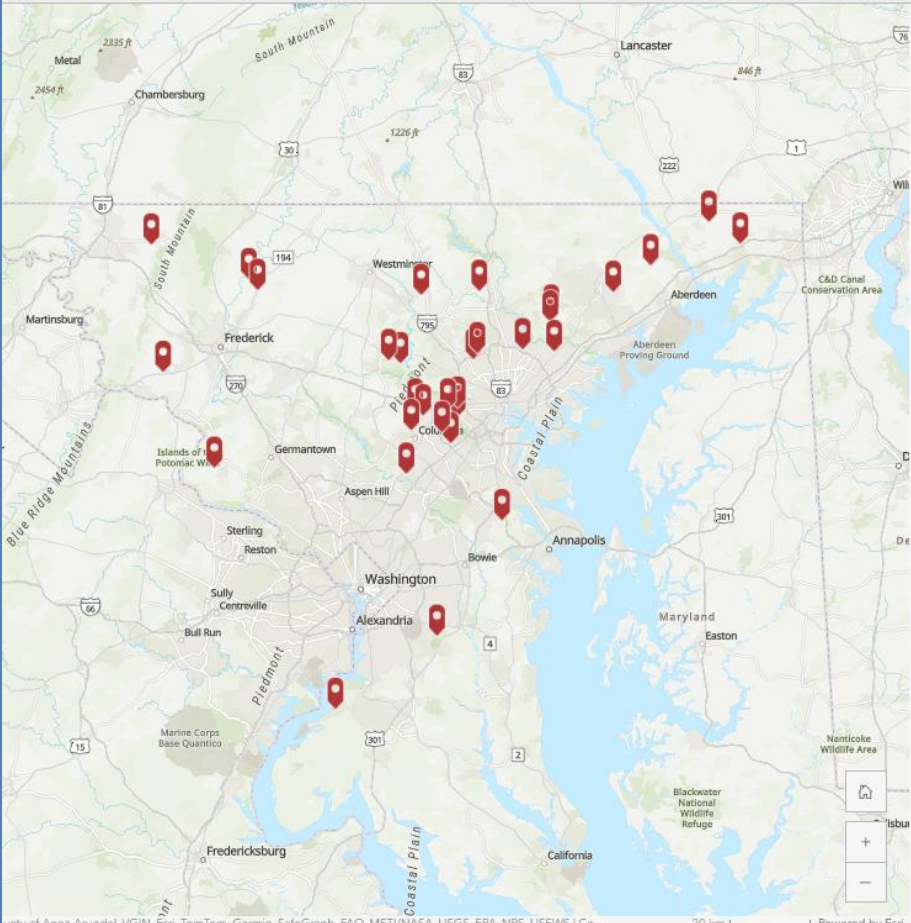
- **Summer interns continued work to acquire living shoreline monitoring reports and add to database**
- **Chesapeake Conservation and Climate Corps Member**
 - **Created tracking system and SOP for stream restoration monitoring reports**
 - **Story map with reports of previous summer student work to visit stream restoration projects**
 - **Follow up with MDE staff to determine no net loss of wetlands after rectification or relocation from temporary impacts from stream restoration projects**
 - **Updated Tidal Emergent Wetland Mitigation Performance Standards**



Highlights - CCCC Story Map – Stream Restoration


MD Wetland Restoration Monitoring Project

Overview Selected Sites Map Observations Map Recommendations




20 km


Powered by Esri




Slaughterhouse Run
This site, built and maintained by WSP USA Inc., was developed by the Baltimore County Department of Environmental Protection and...




Columbia Association
The Maryland State Highway Administration (SHA) funded this project to achieve administrative objectives under the Full Delivery Stream...




Bay View Interceptor Project
The Cecil County DPW contracted RK&K to construct and maintain this site, with the goals of stabilizing infrastructure associated with the Bay...




Willow Bend Stream
The Willow Bend Stream Restoration site is located at Gray Rock Drive, Ellicott City, Howard County. The goal of this project was to restore 1,19...



Heatherland Stream
The Howard County Department of Public Works was authorized to work on Heatherland Stream in order to restore approximately 2,000 linear f...



Timbers at Troy
This restoration site is of an unnamed tributary to Deep Run, attempting to reduce erosion and nutrient runoff. A site visit by MDE was conduct...



Little Catoctin Creek
The Maryland Department of Transportation (MDOT) conducted stream restoration work on Little Catoctin Creek in May of 2017, including...



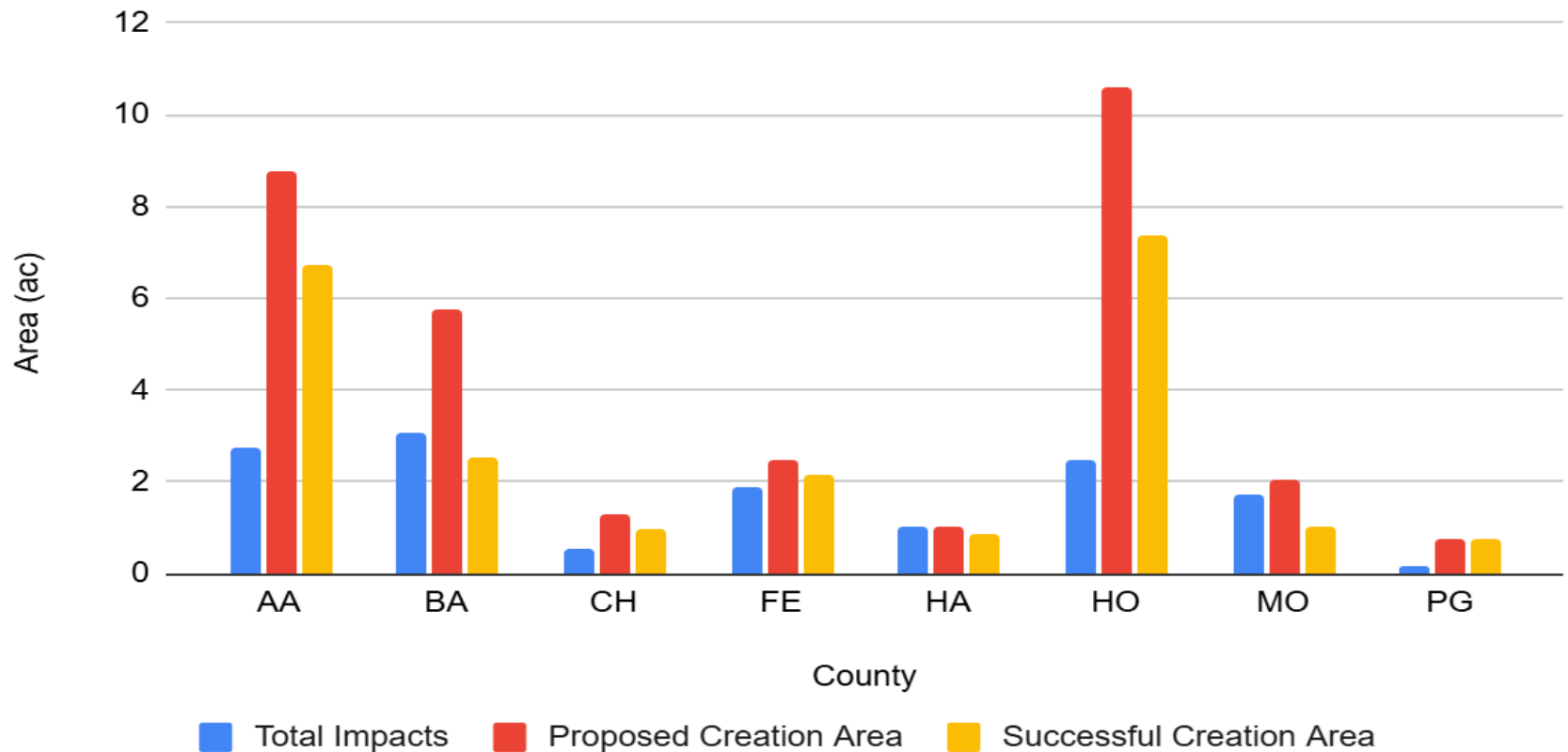
Highlights - CCCC Stream Restoration and Wetlands

- Goal was to determine if there was no net loss of wetland acreage and function
- Modified wetland delineation method (emergent and woody species as strata)
- Ultimately did not determine trajectory (primarily for forested wetland return)
- Approximately 90 plots in 19 sites
- 2/3 of sites had wetlands return post-construction
- Results potentially affected by drought conditions



Highlights - CCCC Stream Restoration and Wetlands

Wetland Impacts vs Creation Area by County

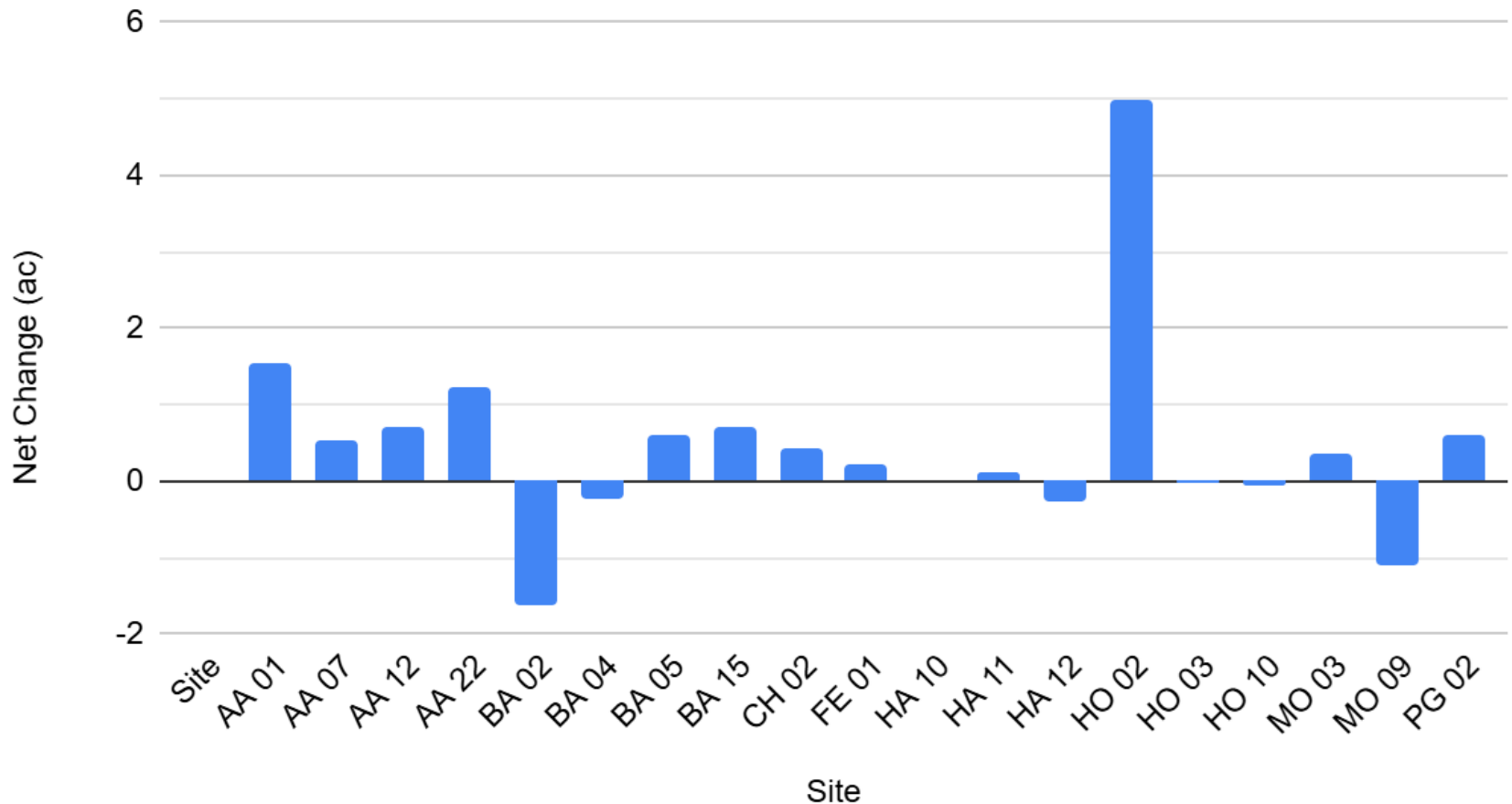


19 Sites visited with MDE staff



Highlights - Net Change in Wetlands after Stream Restoration

Net Change in Wetland Acreage





Highlights - Education and Outreach

- Continue to Promote Maryland Shoreline Stabilization Mapper at public events
- Completed 21 postcards on wildlife at Living Shorelines
- Updating Living Shorelines webpage

<https://mde.maryland.gov/programs/water/WetlandsandWaterways/Pages/ProtectingShorelines.aspx>

- New web page with actions landowners can take to improve water quality and stream health

<https://mde.maryland.gov/programs/water/WetlandsandWaterways/Pages/StreamHealthCitizenResources.aspx>



Highlights/Challenges - Other Projects cont.

- Released Advanced Notice of Proposed Rulemaking for Nontidal Wetland Mitigation Regulations

<https://mde.maryland.gov/programs/Water/WetlandsandWaterways/AboutWetlands/Pages/ANPRM-Nontidal-Wetland-Mitigation.aspx>

- Consistent with 2008 Mitigation Rule
- Allows for Updates to In-lieu Fee Structure
- Receiving comments and holding public meetings through October
- Pending comments, plan to formally propose regulations spring 2026



Recent Legislative Topic – Vernal Pools

2024: Definition of vernal pool

- **Worked with DNR and other experts/stakeholders**
- **Focus on vernal pools which would provide important habitat**



Photo: Richard Orr, DNR



Photo: JMcCann, DNR

- **Does not replace definition of vernal pools that are nontidal wetlands**



Recent Legislative Topic – Vernal Pools cont.

“Vernal pool” means a confined depression that:

- a) Has surface water for at least two consecutive months between November and May in a typical year*;*
- b) Experiences a drawdown to 6 inches or less of water within the depression between June and September in a typical year;*



Photo: MDE



Recent Legislative Topic – Vernal Pools cont.

c) Provides persistent or breeding habitat for certain species, particularly native amphibians, and invertebrates that are:

i) Obligate animal species requiring vernal pools as an essential part of their life cycle; or

ii) Facultative animal species that at least occasionally use vernal pools;

d) Contains less than 30% aerial cover of emergent vegetation within the basin when full;

e) Is predominantly or partially shaded by woody vegetation;

f) Is less than 5 acres in size; and

g) May have intermittent, non-permanent connections to other water bodies



Recent Legislative Topic – Vernal Pools cont.

**"Typical year" means a year in which rainfall totals meet or exceed average yearly rainfall from the previous 30 years for the county where the vernal pool is located.*



Photo: J. Harrison, DNR



Recent Legislation – Ecological Restoration

- **2025: Recommendation from 2024 Ecological Restoration Permitting Study**

“Ecological Restoration” means an activity undertaken with the goal of recovering, re-establishing, or enhancing a degraded, damaged, or destroyed ecosystem through:

- (1) Improvements to physical, chemical, or biological characteristics or processes;**
- (2) Returning natural or historical functions or services; or**
- (3) Protecting or improving resiliency.**



Recent Legislation – Whole Watershed Act

2024: Effective 2025

Added certain requirements for stream and floodplain restoration:

- **Assess degradation of physical or biological parameters**
- **Assess for incorporation of co-benefits:**
 - **Wildlife habitat, riparian buffers, wetland restoration**
 - **Restoration of aquatic resources e.g. freshwater mussels, fish passage**
 - **Carbon sequestration and resiliency**
 - **Public health and recreation**



Recent Legislation – Whole Watershed Act cont.

Assess:

- Practices to maximize ecological uplift
- Minimize:
 - Impacts to wildlife habitat
 - Tree loss and removal
 - Earth disturbance
 - Disturbance to native vegetation



Photo: MDE

**Additional 5 year monitoring
requirements**

**Expanded pre-application notice
to public**



Photo: MDE

**Ongoing: Updates to checklists and guidance to
applicants**



Questions?

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