



# Student Outcome

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## Student Environmental Literacy is Essential to Bay Protection & Restoration

- **Building Lifelong Habits:** Instills sustainable habits, behaviors, and values in students, which can reduce their environmental impact over time.
- **Reinforcing Critical Thinking Skills:** Fosters critical thinking skills by encouraging students to analyze complex environmental issues, evaluate evidence, and consider multiple perspectives, empowering them to make informed decisions and engage in constructive dialogue.
- **Empowering Future Leaders:** Cultivates a new generation of leaders and environmentally active community members capable of driving positive change and shaping a more sustainable future.

***Environmental Literacy is playing the long game.  
It is ESSENTIAL to the long-term sustainability of our effort.***

*Through the Chesapeake Bay Watershed Agreement, the Chesapeake Bay Program has committed to...*



## *Environmental Literacy Goal*

### *Student Outcome:*

*Continually increase students' age-appropriate understanding of the watershed through participation in teacher-supported, meaningful watershed educational experiences and rigorous, inquiry-based instruction, with a target of at least one meaningful watershed educational experience in elementary, middle and high school*



## What is a MWEE?



- Hands-on, inquiry based learning
- Four Essential Elements:
  - Issue Definition
  - Outdoor Field Experiences
  - Synthesis and Conclusions
  - Environmental Action Projects
- Underpinned by four supporting practices:
  - Teacher Facilitation
  - Learning Integration
  - Sustained Experience
  - Local Context



## Our “Inputs”: Management Approaches

### Direct

- Increasing and improving teaching resources
- Supporting effective MWEE teacher professional development
- Building school administrator support for MWEEs
- Creating and showcasing model MWEEs

### Indirect

- Launching state networks
- Encouraging district environmental literacy plans
- Knitting together district and nonprofit priorities
- Increasing sustainable school efforts





## Impacts of COVID on Educational System

- COVID-19 impacts are long-lasting and multi-dimensional
  - Teacher and administrator turnover is huge
  - School leadership attention is focused on impacts of COVID (learning loss, behavior issues, mental health, etc)
  - Time and resources for science and social studies reduced, focus on math and english language arts



## District Preparedness: Trend over Time



RECENT PROGRESS  
**DECREASE**

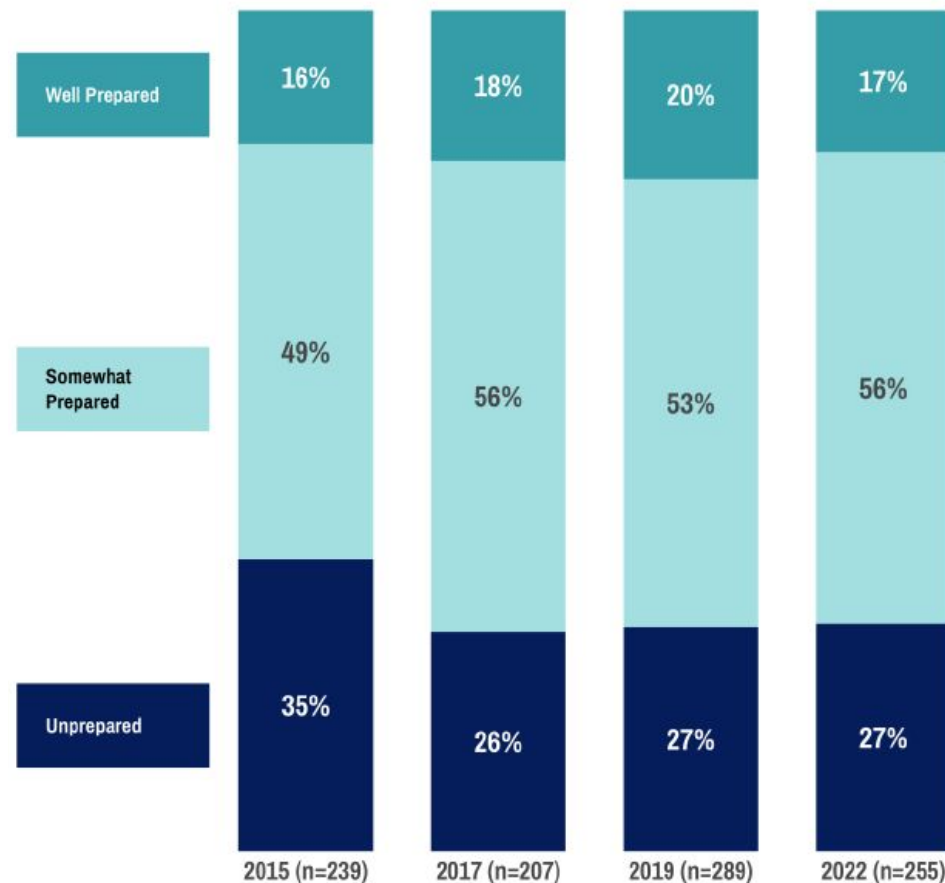


OUTLOOK  
**ON COURSE**

- Categorization changed, but very slight downward shift in total score (avg of 5.49 in 2019 to 5.42 in 2022)*

### Changes in Environmental Literacy Preparedness Over Time (2015-2022)

Region-wide preparedness levels in each of the ELIT years' reporting.



# Sustainable Schools



RECENT PROGRESS

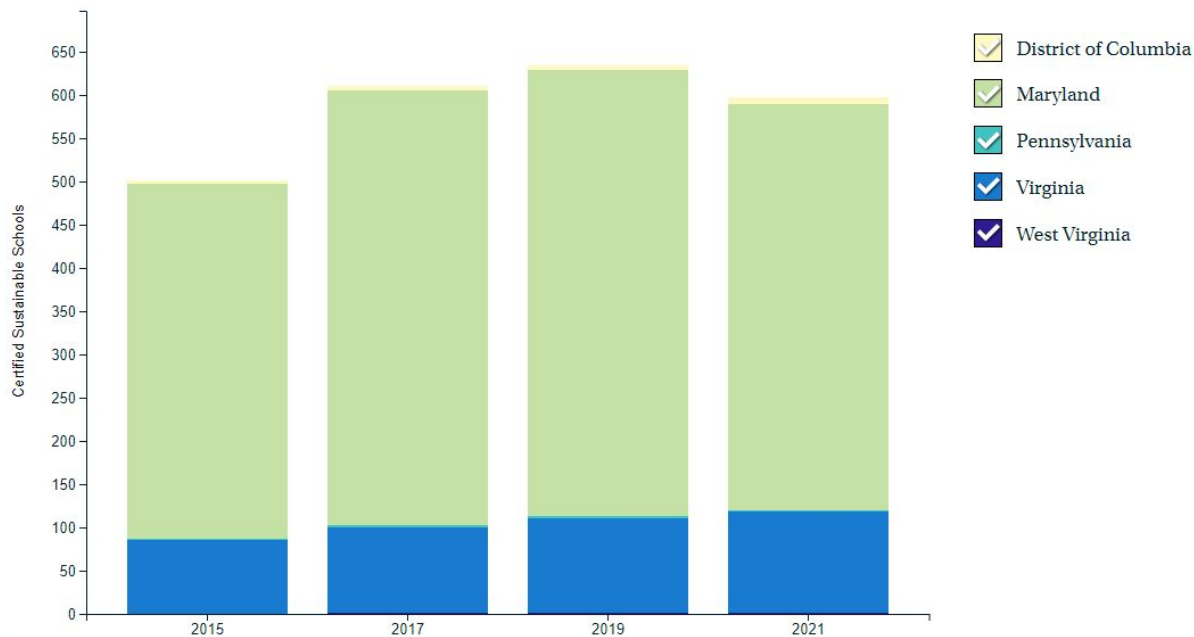
**DECREASE**



OUTLOOK

**ON COURSE**

[VIEW CHART](#) [VIEW TABLE](#)







## Student Indicator Changes: 2017 to 2022



RECENT PROGRESS

**DECREASE**



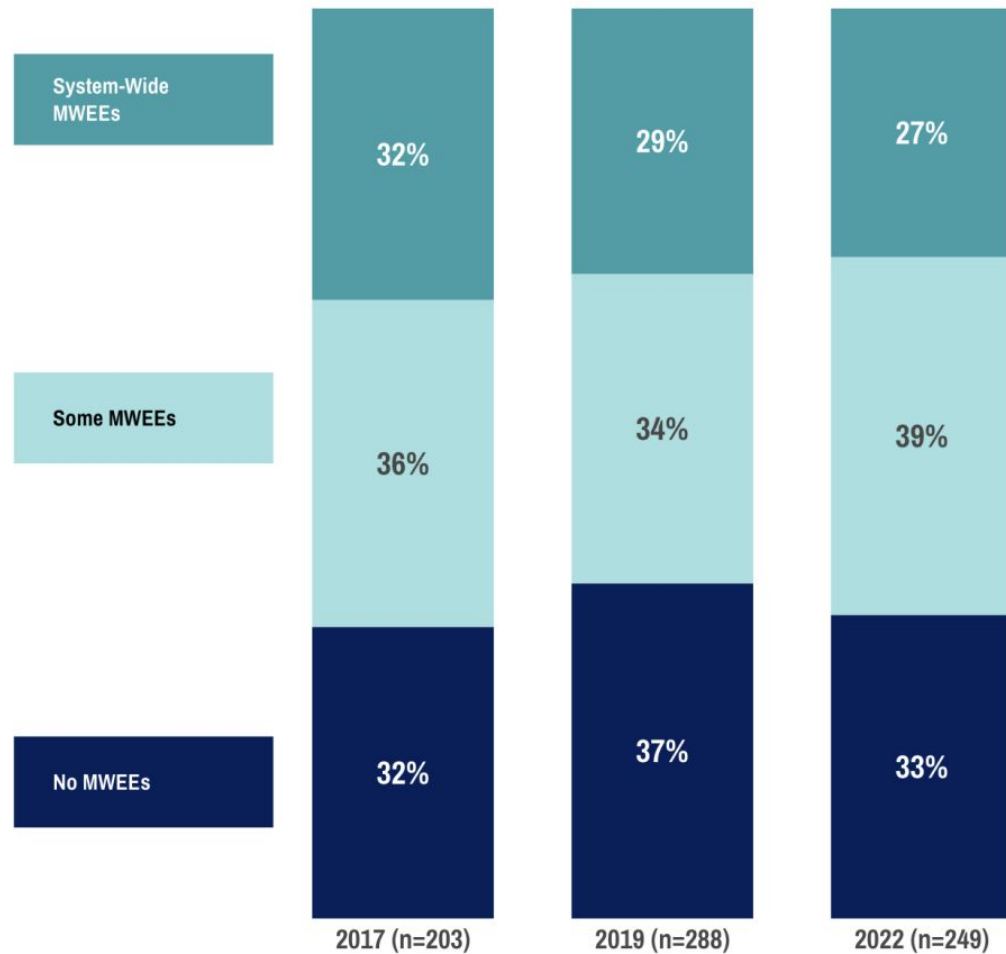
OUTLOOK

**OFF COURSE**

- System-wide MWEEs decreased slightly at elementary and more substantially at middle school levels
- System-wide MWEEs in high school showed the greatest decline
- Suggestions being raised by community to broaden Student indicators to look beyond just MWEE implementation

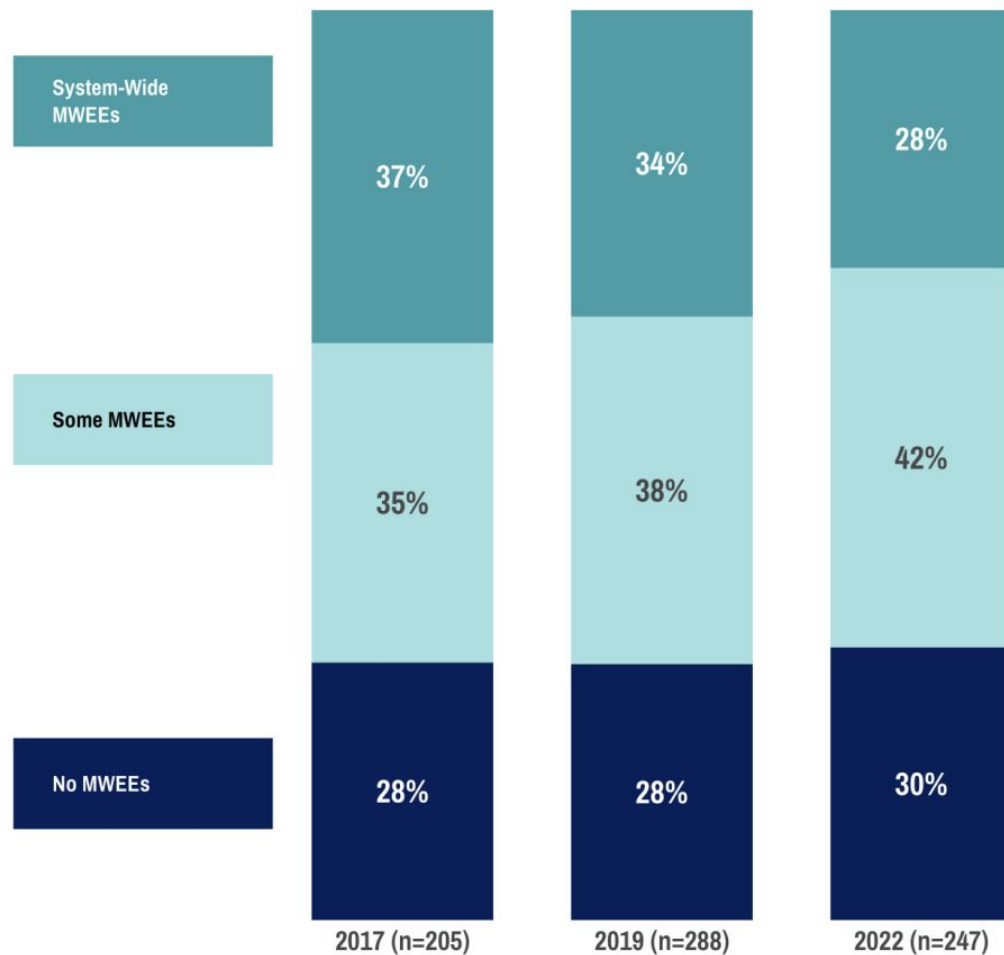


## Elementary MWEEs: Trend Over Time



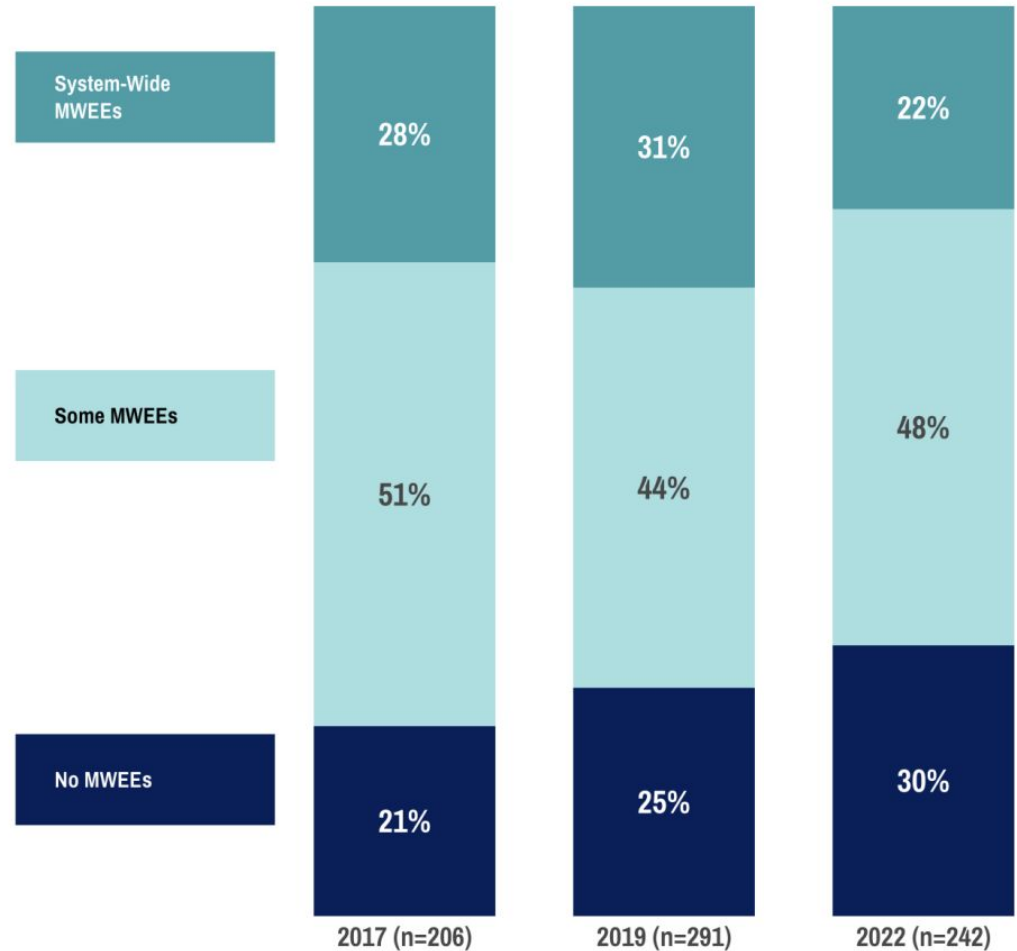


## Middle School MWEEs: Trend Over Time





## High School MWEEs: Trend Over Time





## The Challenges

- COVID-19 impacts are long-lasting and multi-dimensional
- EE not rising to the top of district priorities
  - Math and English are drivers
  - Science and Social Studies are secondary
- Capacity at all levels
- Insufficient State and Federal funding for environmental education



# Adapt

*How are we reorienting to address the challenges?*



## Changes to our “Inputs”

- *COVID* → Increasing connections to workforce development and social-emotional learning
- *District Priorities* → Embedding MWEEs in state standards
  - PA STEELs & MD EL Framework in place
  - VA Science SOL revision in process
- *Capacity* → Supporting state efforts to establish regional hubs
  - Increasing work in areas with no MWEEs or no reporting
  - Identifying leaders in each district
  - Reinforcing community partnerships
  - Ensuring EE providers are implementing programs that are supportive of formal education priorities (Towson GIT project)



# Discussion

