Quarterly Progress Meeting – December 14th, 2023

Chesapeake Bay Program Management Board

Submerged Aquatic Vegetation Workgroup

Brooke Landry
Maryland DNR and
Chair, SAV Workgroup

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

Goal: ***Vital Habitats***

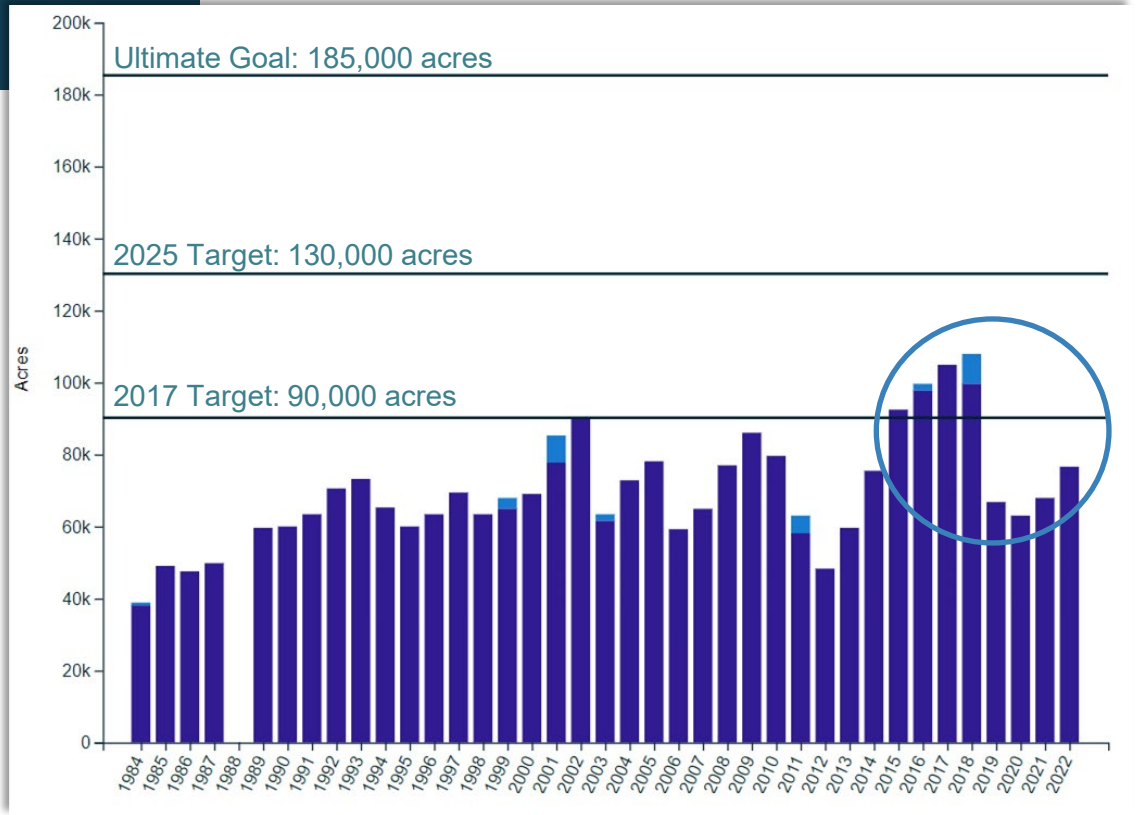
Outcome:

Sustain and increase the habitat benefits of SAV in the Chesapeake Bay. Achieve and sustain the ultimate outcome of 185,000 acres of SAV Bay-wide necessary for a restored Bay. Progress toward this ultimate outcome will be measured against a target of 90,000 acres by 2017 and 130,000 acres by 2025.

What is our Progress?

SAV #s were up in 2022!

- 76,462 acres were mapped in 2022 (+12%)
- 41% of ultimate goal
- 59% of 2025 goal
- The SAV Outcome is Off-Course.

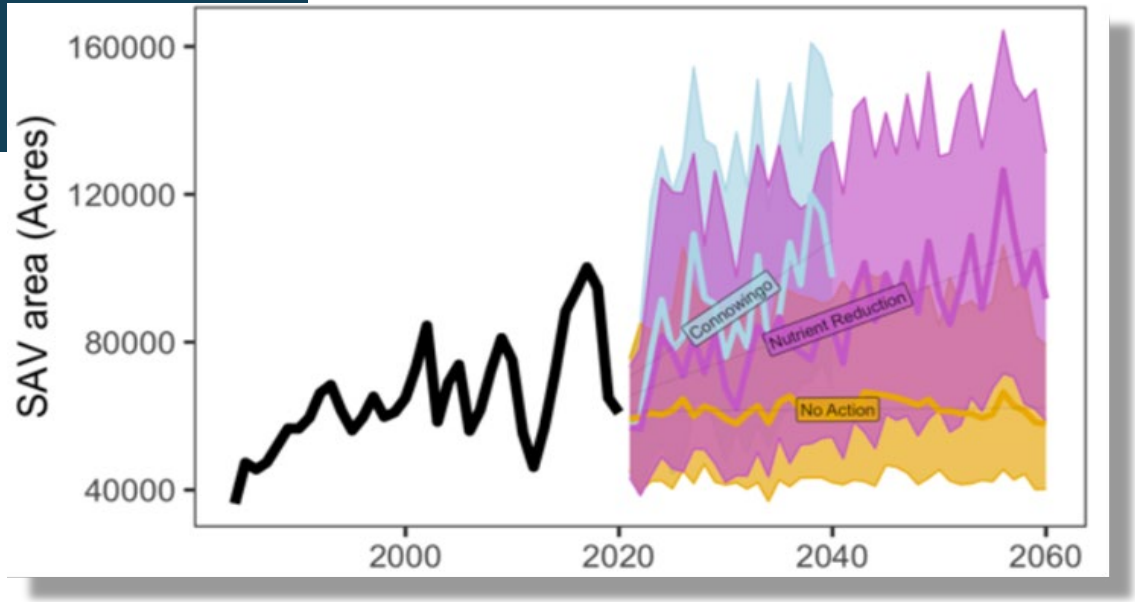


Recently completed GIT project:

Modeling Climate Impacts on SAV in Chesapeake Bay: Complete!

Take home message:
None of the 8,000 simulations resulted in meeting our SAV restoration target

BUT accelerated and expanded nutrient management will get us closer than if we stick to the current allocations dictated in the TMDL.



Conowingo Scenario (blue): If TMDL load allocations are increased beyond their current requirements.
Nutrient Reduction Scenario (pink): If the current TMDL load allocations are continued without change.
No Action Scenario (yellow): If no further action is taken to meet established TMDL load allocations.

Final Report:
https://www.chesapeakebay.net/who/group/submerged-aquatic-vegetation-workgroup

Shiny App:
https://vims-sav.shinyapps.io/testshinyrmd/#section-segments

Recently initiated GIT- funded project, Management Board directive

Protecting Chesapeake Bay SAV Given Changing Hydrologic Conditions: Priority SAV Area Identification and Solutions Development

Project Objectives:

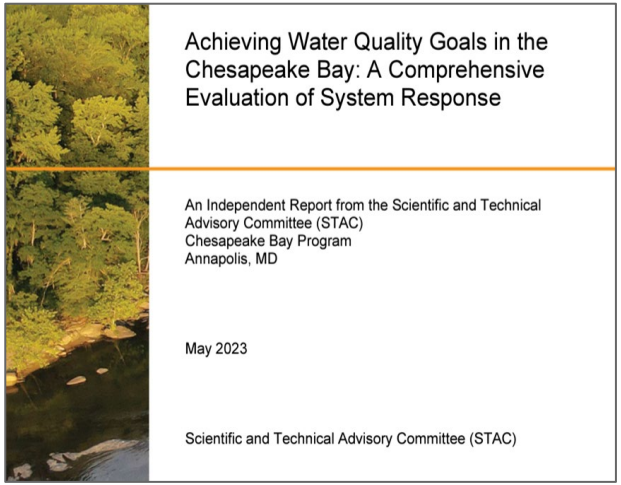
- Identify high-priority SAV areas within the Chesapeake Bay Watershed

- Determine which BMPs could be most effective in protecting those areas from loss during high-flow events/years using GIS spatial analysis/modeling and existing SAV, flow, land-use, and water quality data.

With this information, steps can be taken to target high-priority SAV areas for implementation of BMPs and land management policies that will protect or restore those priority SAV habitats.

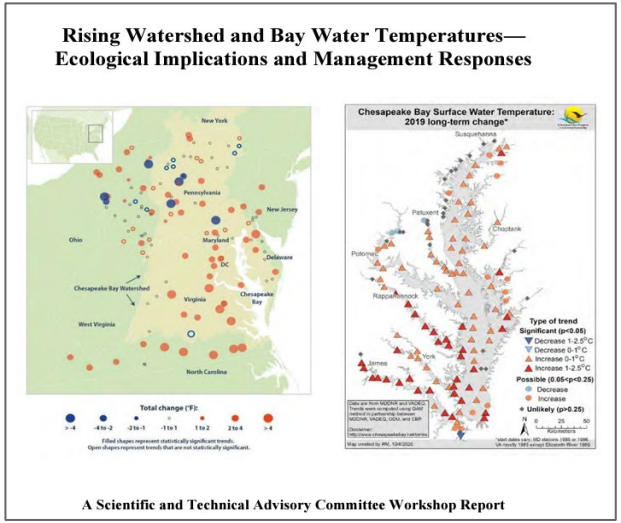
PSC, Temp Report, and CESR

"Sustained and improved monitoring will allow the CBP partners to assess and evaluate progress…, while identifying gaps where more attention is needed in the future" (PSC Monitoring Report)



"Opportunities exist to adjust approaches to prioritize management and actions that improve living resource response" (CESR report)

"Expanded monitoring networks to place more emphasis on tracking and better understanding water temperature change, are necessary enhancements to the partnership's existing watershed monitoring network" (Rising Temps Report)



Chesapeake Bay
SAV Sentinel Site
Monitoring Program

A Chesapeake Bay Program SAV Workgroup Document

Chesapeake Bay
Shallow Water Habitat
Sentinel Site
Monitoring Program

A Chesapeake Bay Program
Habitat Goal Implementation Team
Document

Request

We ask that the MB endorse the necessity of **establishing a Shallow Water Habitat Sentinel Site Program** and guide the CBP to take the necessary steps to do so.

This tier-3 monitoring effort would not only monitor the impacts of climate change on the functional value of shallow water habitats throughout the Bay but also track the effectiveness of measures taken beyond 2025.

Necessary Steps

Step 1: Conduct a STAC Workshop to determine where to place the Sentinel Sites and what parameters to include (ie. toxins, benthos, fish and shellfish, SAV, WQ measurements, etc.). This step would also identify which CBP Workgroups and Goal Teams would be included in this effort.

Step 2: Request GIT or other funding to develop protocols for each parameter to be measured, a QAPP for the program, data portal options, and to identify potential and sustainable funding sources for the program.

Step 3: Secure long-term funding for the Shallow Water Habitat Sentinel Site Program.

Step 4: Implement the Shallow Water Habitat Sentinel Site Program as a CBP and partner effort.

Let’s Discuss!