Chesapeake Bay Program
Science. Restoration. Partnership.

May 9, 2024

Habitat Tracker

Management Board

Speakers

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Environmental Scientist

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Watershed Data Analyst

Wetlands Outcome

Wetlands

Healthy wetlands are vital to a healthy Chesapeake Bay. Wetlands trap polluted runoff and slow the flow of nutrients, sediment and chemical contaminants into rivers, streams and the Bay. By soaking up stormwater and dampening storm surges, wetlands slow the erosion of shorelines and protect properties from floods. Wetlands also provide critical habitat for fish, birds, mammals and invertebrates, and support recreational fishing and hunting across the watershed.

Outcome: Continually increase the capacity of wetlands to provide water quality and habitat benefits throughout the watershed. Create or reestablish 85,000 acres of tidal and non-tidal wetlands and enhance function of an additional 150,000 acres of degraded wetlands by 2025. These activities may occur in any land use (including urban), but primarily occur in agricultural or natural landscapes.

Lead Goal Implementation Team: Habitat Goal Implementation Team (GIT 2)

Lead Workgroup: Wetland Workgroup

Contact: Katlyn Fuentes

Management Strategy: 2020 2021 wetlands management strategy [PDF, 450.1 KB]

Strategy Review System Update: Narrative | Presentation

Archived Strategy Review System Documents: View Archived Strategy Review System Documents

Track Progress

The Wetlands Outcome is related to tidal and nontidal wetlands.

- CAST is only capturing nontidal

The Wetlands Outcome is to enhance the function of wetlands.

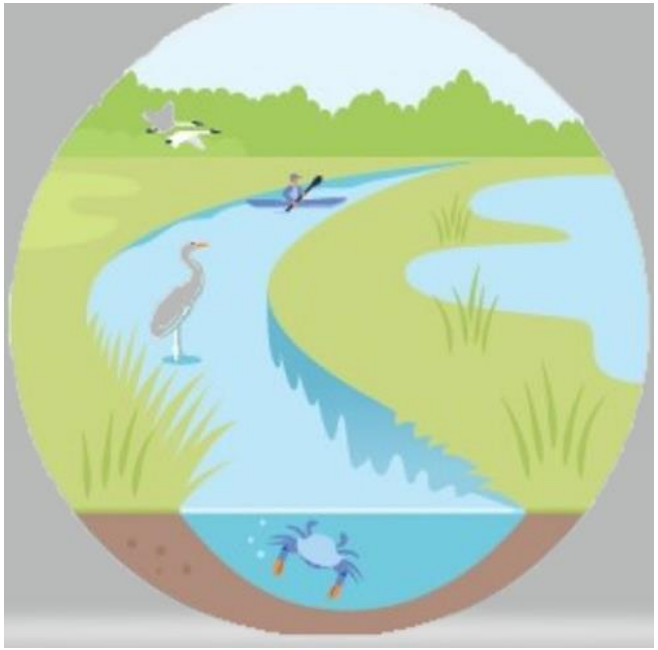
- This does not relate to new acres of wetlands as required to be captured in CAST.

https://www.chesapeakebay.net/what/goals/vital-habitats

Habitat Tracker Purpose

- Collect data to be able to evaluate functional benefits of wetlands and for indicator species in the Watershed Agreement
- Develop a tracking tool to assess progress towards the 2014 Chesapeake Bay Agreement's Vital Habitats Goal for the Wetland and Black Duck Outcome
  - Brook Trout Outcome in development
- Include both tidal and nontidal areas of the Chesapeake Bay watershed
- Projects that include impacts on new and existing wetlands and habitat appropriate for indicator species in natural, urban, and agricultural areas
- Data provided by direct communication with entities such as:
  - Ducks Unlimited and The Nature Conservancy
  - Chesapeake Bay watershed jurisdictions
  - Federal partners

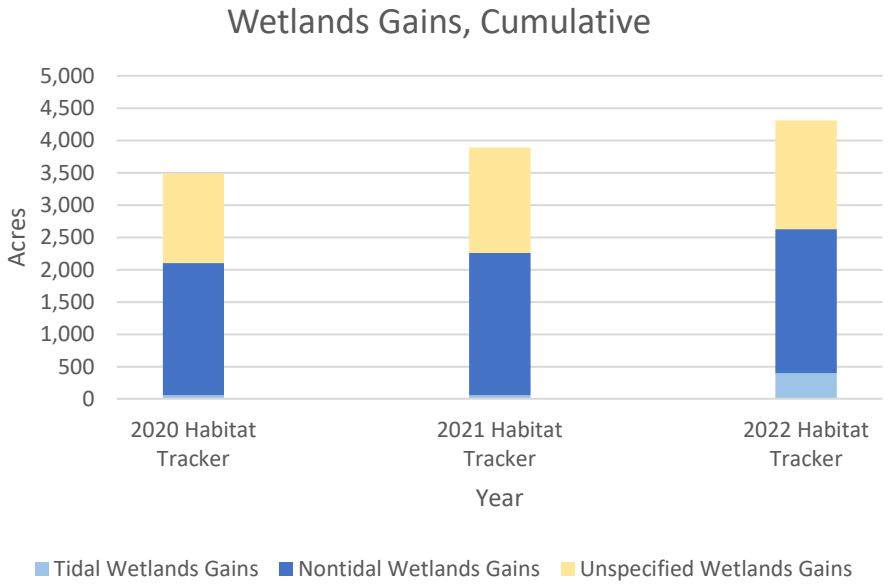
Ecosystem Services and Data Analysis



The Habitat Tracker can be used for more than Outcome tracking.

- People access and environmental education
- Proximity of communities of various races, genders, ethnicities, sexual identities, socioeconomic statuses, and ages
- Rate of wetland loss
- Wetland areas at risk of development and climate change effects
- Type of land adjacent, e.g.: farmland, percent imperviousness, pasture
- Recurrence of flooding on adjacent lands
- Tidal vs. Nontidal

Habitat Tracker Wetland Gains

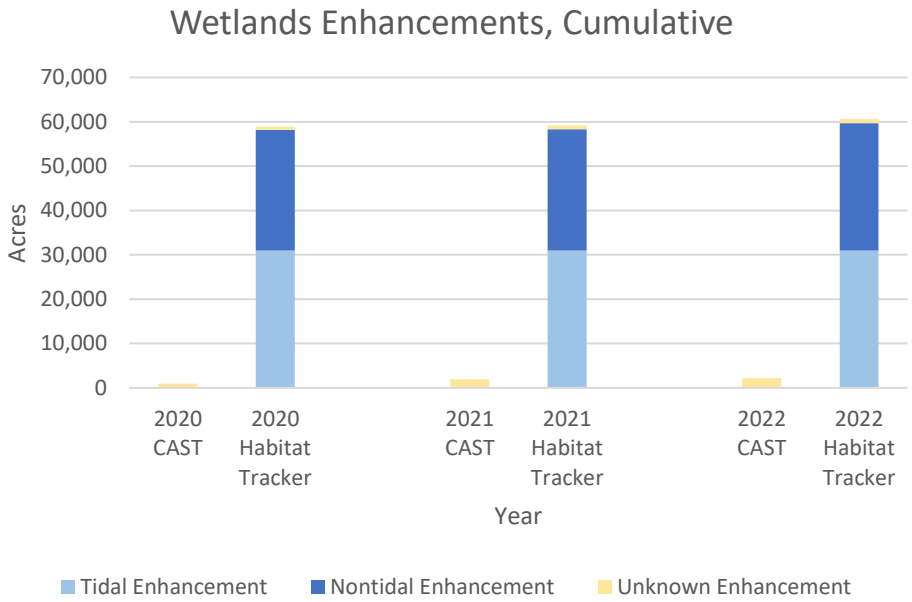


https://www.chesapeakeprogress.com/abundant-life/wetlands

Wetland Gains = Wetland Creation + Wetland Restoration in CAST terms

- **Wetland Creation – CAST Definition**
  - Establish or create wetlands in a floodplain by manipulation of the physical, chemical, or biological characteristics to develop a wetland where one did not previously exist.
- **Wetland Restoration – CAST Definition**
  - Re-establish wetlands in a floodplain by manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former wetland.

CAST vs. Habitat Tracker Wetland Enhancements



https://www.chesapeakeprogress.com/abundant-life/wetlands

Wetland Enhancements = Wetland Enhancement + Wetland Rehabilitation in CAST terms

- **Wetland Enhancement – CAST Definition**
  - Enhance wetlands by manipulation of the physical, chemical, or biological characteristics of a site with the goal of heightening, intensifying or improving functions of a wetland.
- **Wetland Rehabilitation – CAST Definition**
  - Rehabilitate wetlands by manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a degraded wetland.
- These practices are no longer credited in CAST

Data Submission Due Date

- Data requests from Helen will go out annually in the winter, during the 12/1 to 2/7 water quality reporting timeline, as requested by the HGIT members.
- We will work closely with the data reporters to fit their data into the reporting template.
- A database manager is on staff at the Bay Program to manage and analyse this data.
- **These data are used to update Chesapeake Progress**

What people are saying about Habitat Tracker

- “It will be nice to see all the co-benefits that come out of this database.”
- The user interface will be very helpful to users who just have a few annual projects.
- It is great that there is a place to track and report voluntary wetland projects.

Conclusions

- CAST does what it was designed to do for WQ, but does not track progress for other outcomes
- The Habitat Tracker is a data collection system for evaluating progress toward the Watershed Agreement Vital Habitat's Goals and Outcomes.
    - The wetlands projects are occurring - this is simply accounting for them to the Wetlands Outcome.
- Tracking and analyses can help incentivize goals and show the impact of habitat preservation and restoration
- Persistent effort is required to elicit data and there is support in place.
- Flexibility of data collection and tracking allows for multiple data analyses to be conducted to assess an array of wetland and living resource functions
- Ultimately, the Partnership will see more credit toward this outcome