



# Chesapeake Bay Communications Project: Non-Tidal Wetland Communication Strategy

April 10th, 2025

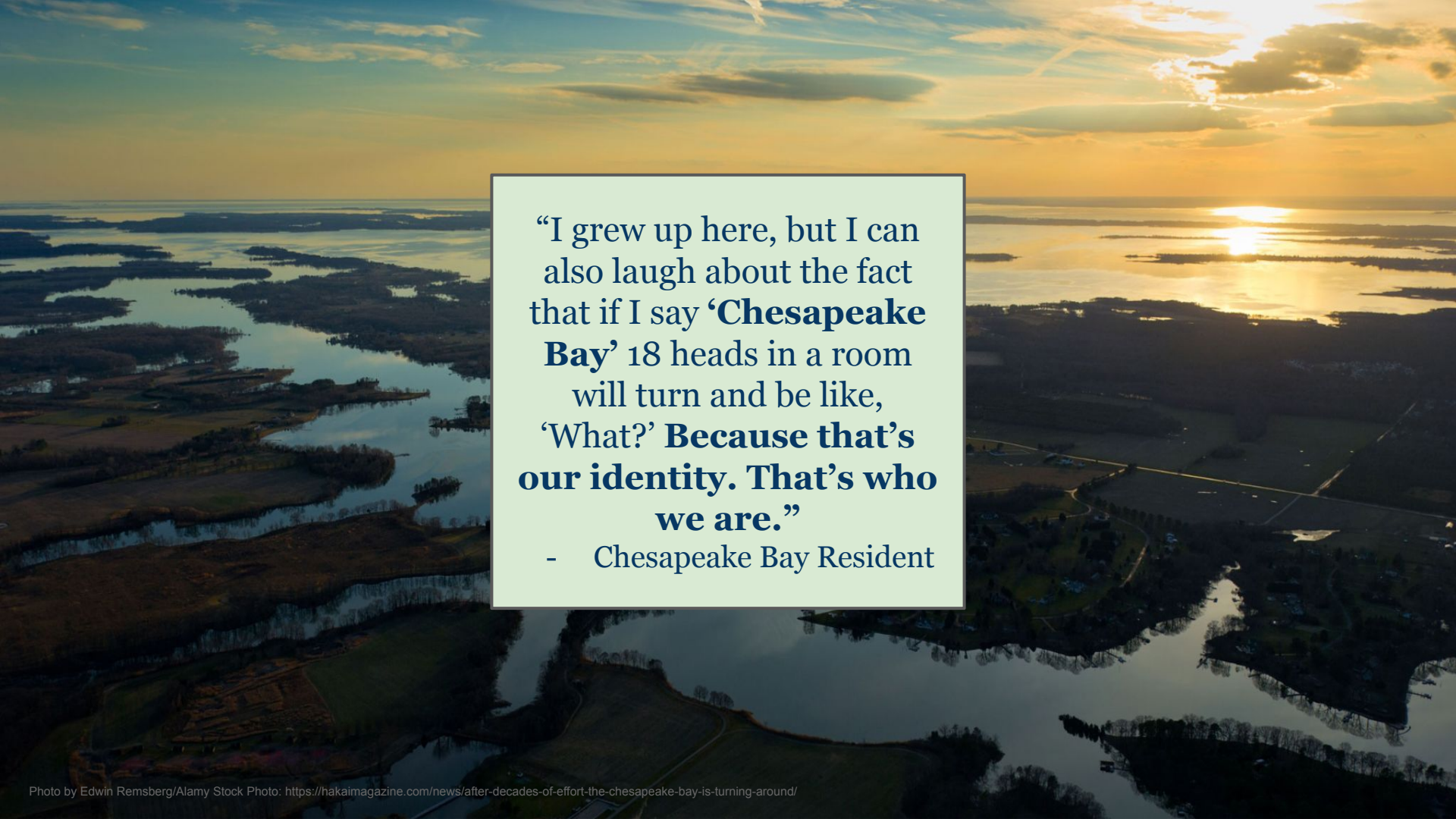
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Clients: Chesapeake Bay Program  
Wetlands Workgroup

Advisor: Dr. Kim Diver

# Presentation Outline

1. Introduction, Background, and Purpose
2. Site Visit
3. Research Methods and Interview Demographics
4. Results, Discussion, and Recommendations
5. Conclusions
6. Next Steps
7. Acknowledgements

An aerial photograph of the Chesapeake Bay at sunset. The sun is low on the horizon, casting a golden glow over the water and the surrounding landscape. The water is dark, reflecting the sky, and the land is a mix of green fields and dark trees. The sky is filled with soft, golden clouds.

“I grew up here, but I can also laugh about the fact that if I say ‘**Chesapeake Bay**’ 18 heads in a room will turn and be like, ‘What?’ **Because that’s our identity. That’s who we are.**”

- Chesapeake Bay Resident



# Wetlands Workgroup Goals

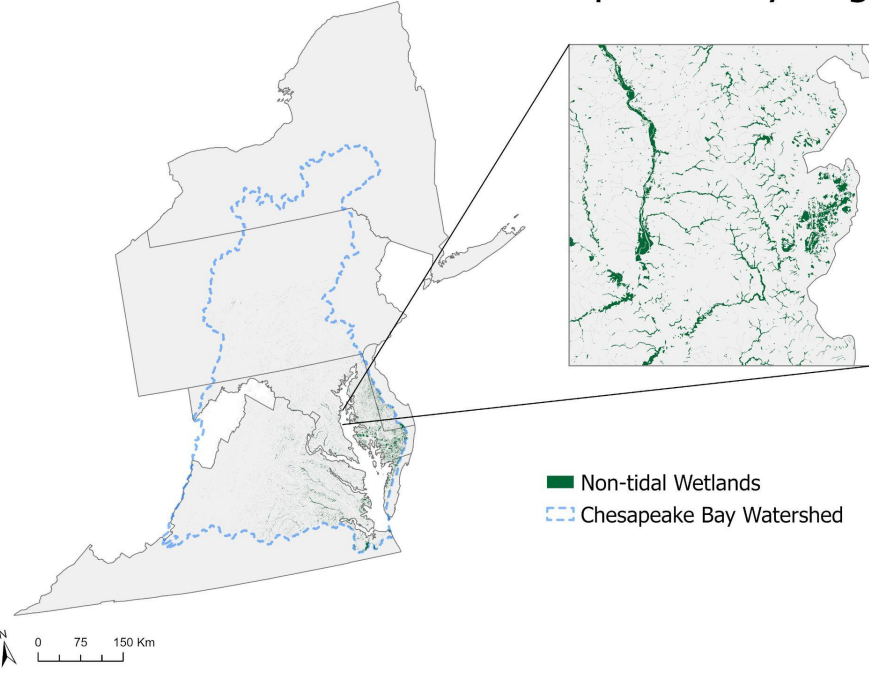
- Improve wetland mapping, and the wetland restoration reporting and tracking process
- Address barriers to wetland restoration
- Increase our technical understanding of what influences successful restoration
- Prioritize areas for wetland restoration
- Promote funding for wetlands projects
- **Expand the involvement of local stakeholders**





# Why Non-Tidal?

## Non-tidal Wetlands in the Chesapeake Bay Region



Tidal Wetlands



Non-Tidal Wetlands

Cartographer: Mariam Aziz

Data sources: U.S. Fish and Wildlife Service National Wetlands Inventory (NWI), U.S. Geological Survey 3DEP DEMs via EarthExplorer, U.S. Census Bureau TIGER/Line Shapefiles, and Chesapeake Bay Program watershed boundary.

Photo by Will Parson/Chesapeake Bay Program: <https://www.wetlandswork.org/understanding-wetlands/types-of-wetlands>

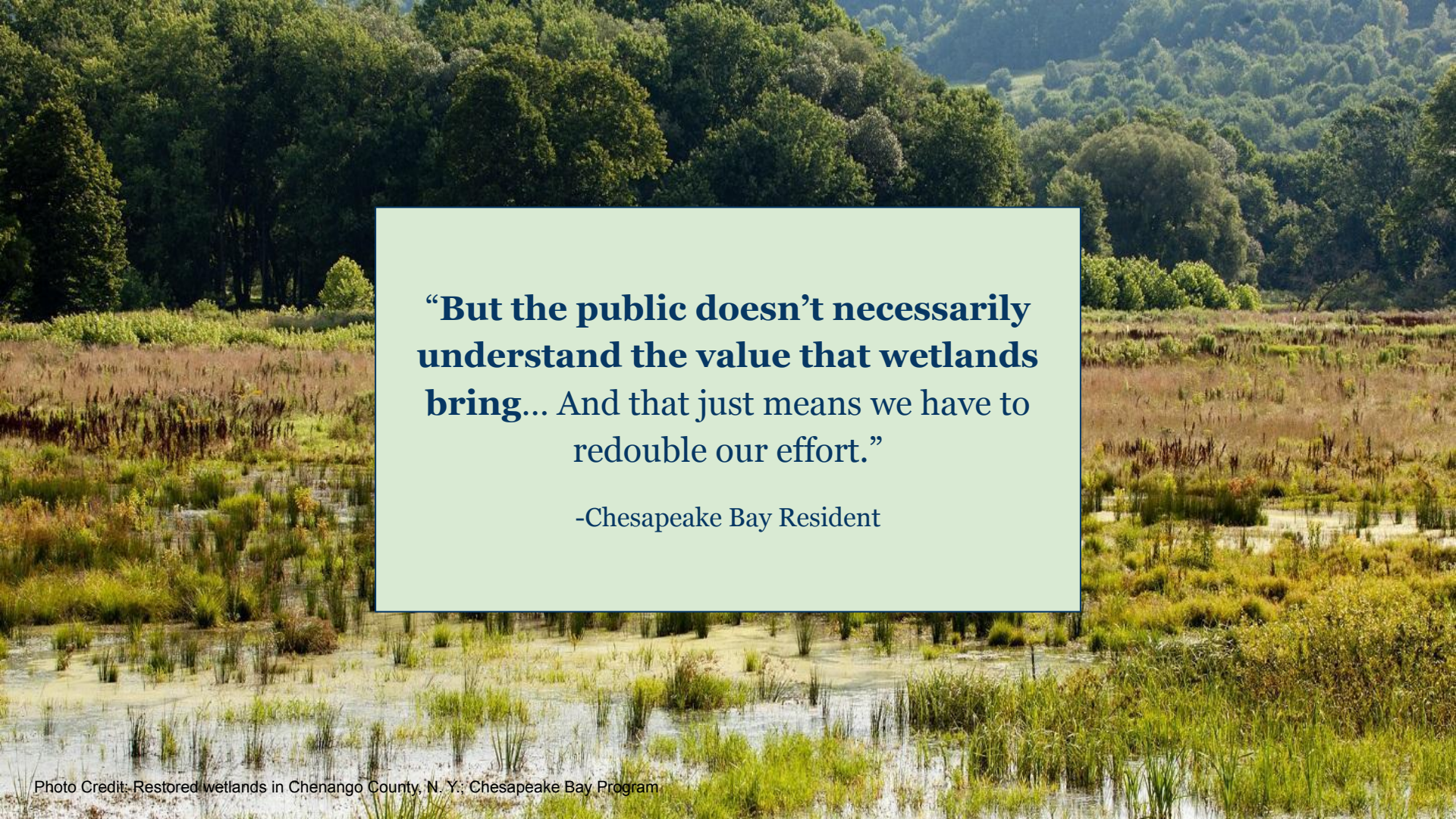


# Purpose

- Communication around non-tidal wetlands is limited and fragmented.
- The Chesapeake Bay Program's Wetlands Workgroup tasked us with:
  - Understanding the current perceptions of non-tidal wetlands
  - Identifying barriers to communication and participation
  - Developing targeted strategies to better engage communities and local governments
- Our work helps the CBP advance goals related to stewardship, public access, environmental literacy and climate resilience.







**“But the public doesn’t necessarily understand the value that wetlands bring... And that just means we have to redouble our effort.”**

**-Chesapeake Bay Resident**





## Site Visit

In June 2024, we traveled to Annapolis, Maryland to tour the Chesapeake Bay and gained firsthand experience with the Bay and its wetlands.

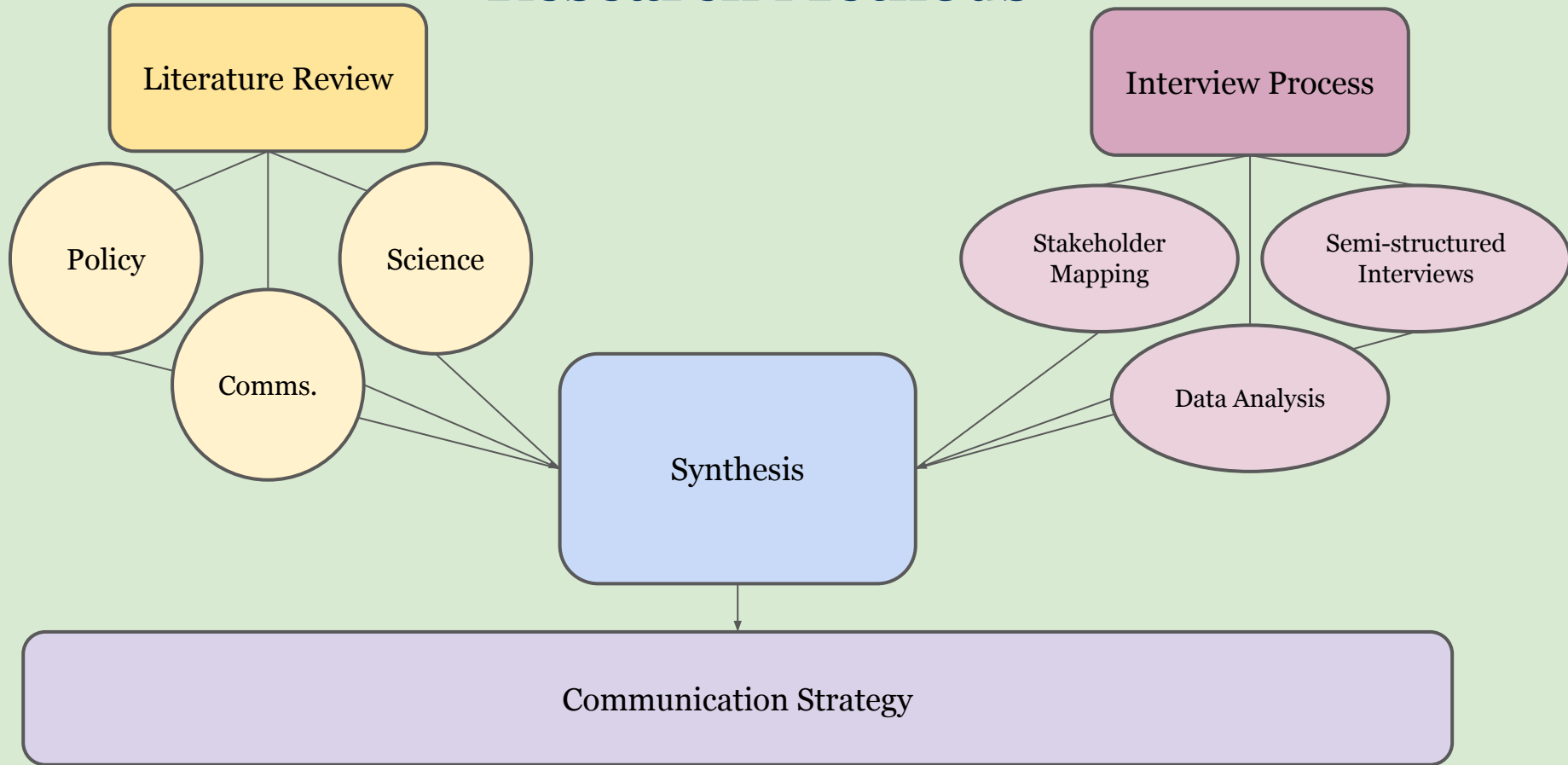
Attended a Non-Tidal Wetlands Workgroup meeting to understand Workgroup processes, met with members, and discussed our project.

# Site Visit

Toured Blackwater Wildlife Refuge where we discussed key issues facing the refuge and their current educational and outreach strategies.



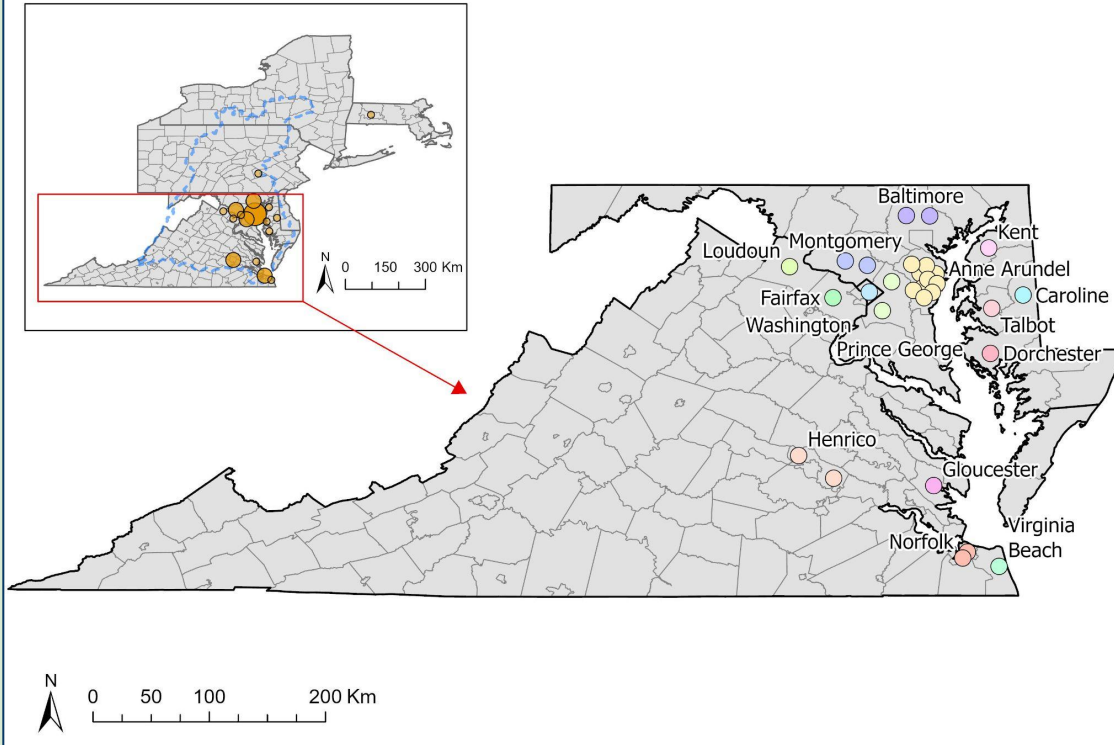
# Research Methods





# Interview Demographics

## Distribution of Stakeholders by County in the DMV Area

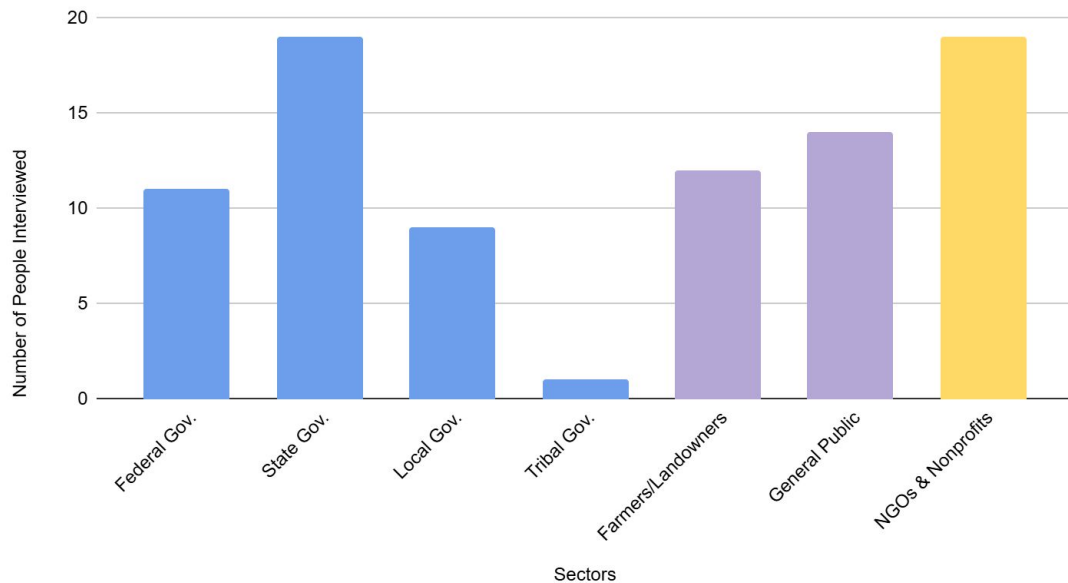


Cartographer: Mariam Aziz

Data sources: U.S. Fish and Wildlife Service National Wetlands Inventory (NWI), U.S. Geological Survey 3DEP DEMs via EarthExplorer, U.S. Census Bureau TIGER/Line Shapefiles, and Chesapeake Bay Program watershed boundary

# Stakeholder Breakdown

Engagement Groups





# Results, Discussion, and Recommendations

Current State of the Bay

Communication Channels

Legislative and Regulatory Background

Engagement Strategies

Barriers and Challenges

Messaging Content

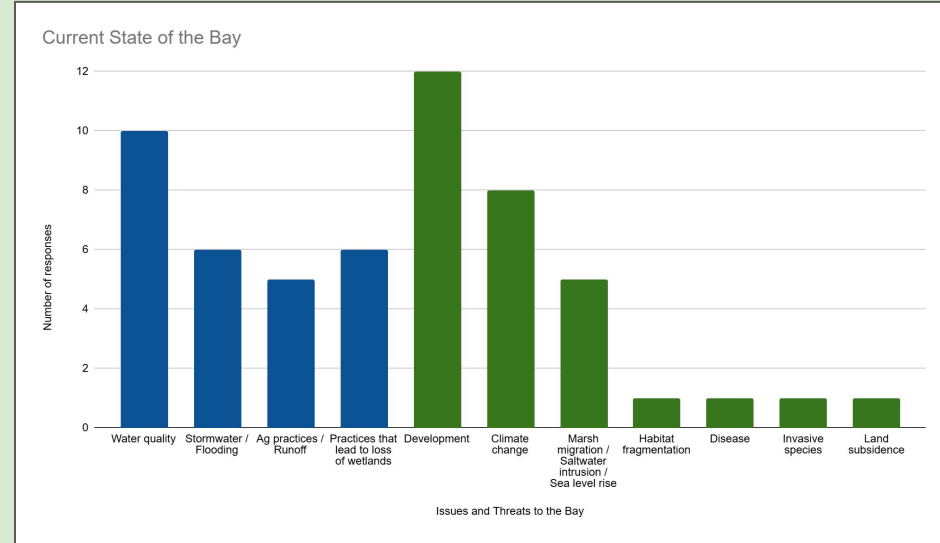
Current Public Perceptions

Ideal Future



# Current State of the Bay

- Biggest Issue: Water Quality
- Loss of Wetlands
  - Biggest Threat to Wetlands: Development
- Wide range of invaluable ecosystem services
- Restoration Commentary
  - Tackle upstream ecosystems before approaching wetlands
  - Financial incentives often essential to stakeholders



# Legislative and Regulatory Background

## Federal Policy

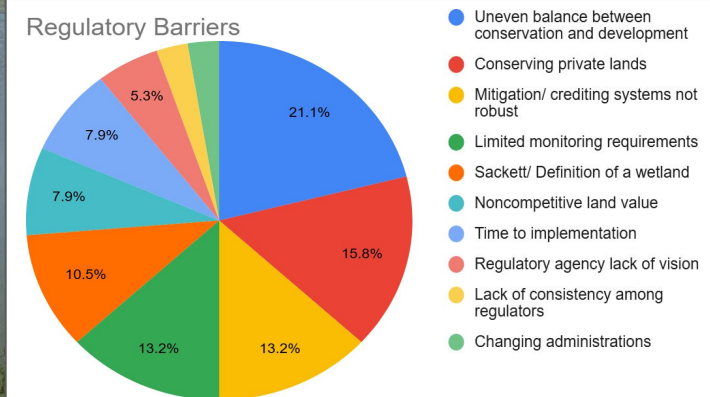
- Statutes: Clean Water Act, Endangered Species Act, Magnuson-Stevens Fishery Conservation and Management Act
- Funding: Inflation Reduction Act, Infrastructure Investment and Jobs Act, Farm Bill
- Court Cases: Sackett v. EPA, American Farm Bureau Foundation v. EPA

## State and Local Policy

- Dillon Rule or Home Rule state

“In light of some of the recent Supreme Court decisions, this is a dialogue that’s occurring nationally, and there is a thought that is out there that maybe a regulatory construct really isn’t the way to protect wetlands.” -Wetland Manager

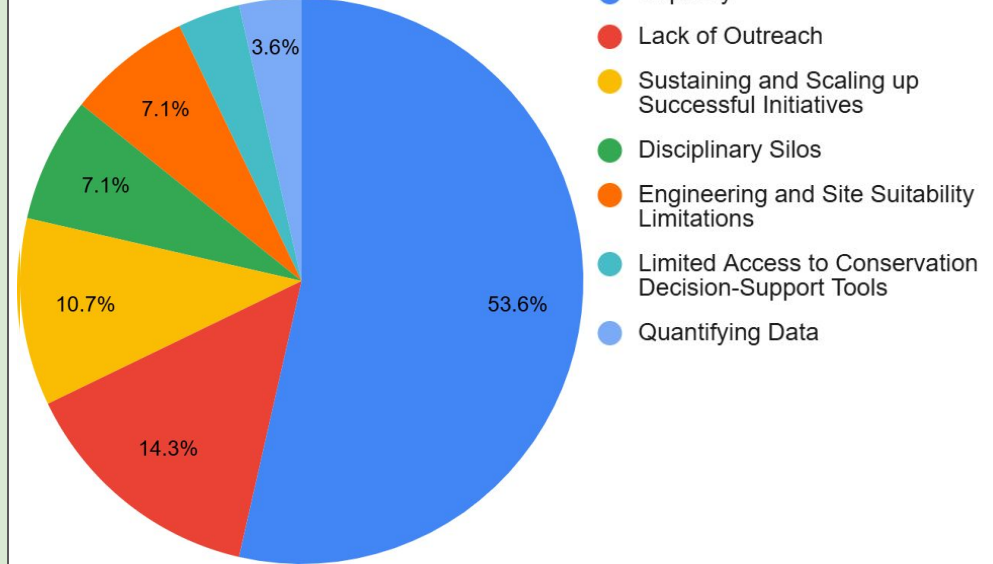
Regulatory Barriers



# Barriers and Challenges

- Establish a set data-metric standard for long-term monitoring of completed projects.
- Provide a step-by-step guide to all relevant funding sources and programs within each jurisdiction.
- Create a designated channel for organizations to communicate about their current projects, procedures, and strategies, increasing coordination and communication.

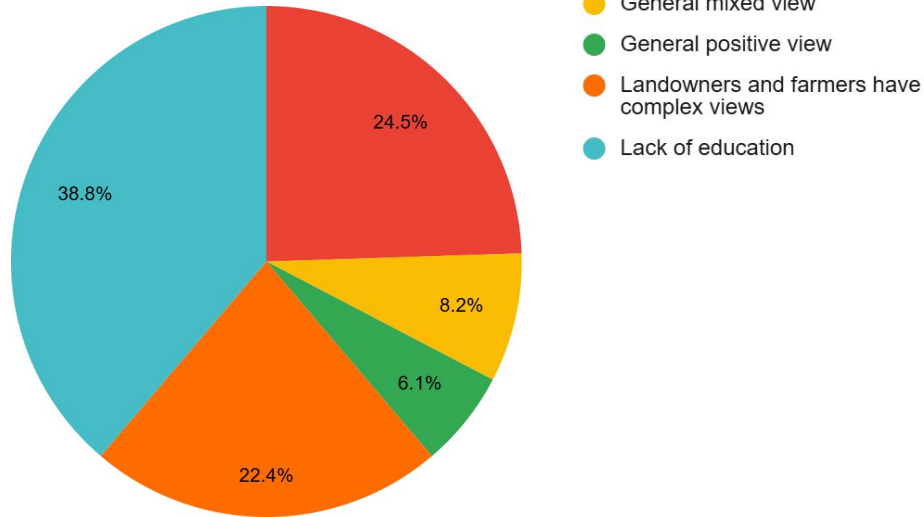
Organizational Issues





# Current Public Perceptions

Public Perception of Wetlands



- Draw on shared identity of the Bay watershed to better connect complex and often conflicting issues in an effective and universal way.
- Expand education on the benefits and realities of wetland ecosystems to increase the public's knowledge base of non-tidal wetlands.

“Some people don’t even know what a wetland is, but they know if you say **‘oh, this protects the Chesapeake Bay’, you’re probably going to get a positive reaction to that.**”

–Terry Acker-Carter, Community Engagement Specialist

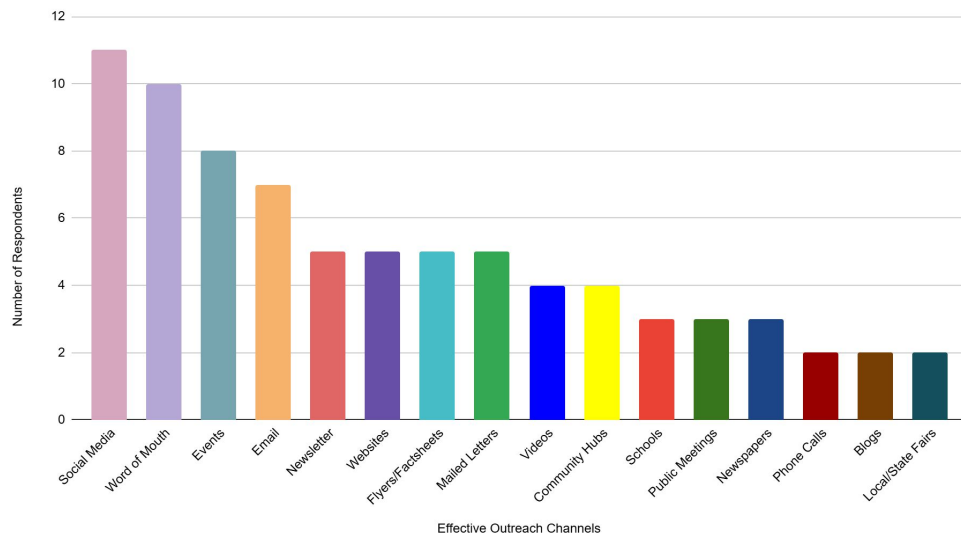




# Current Communication Channels

- Utilize as many communication channels as possible
- Connect to different audiences through key community hubs
- Long-term relationship building is essential
- Collect feedback from the community on the medium of communication

Current Communication Channels







# Engagement Strategies

- Understand what is most important to the community
- Get community members involved early and often; make sure that all parties are represented
- Collaborate with partner organizations to share support and resources
- Train community stewards who can spread your message
- “Walk the land” with community members

# Messaging Content

- Keep your message simple, local, and personal to the audience
- Emphasize the co-benefits of restoration
- Empower the community to take action through the inclusion of procedural knowledge
- Celebrate community-led efforts and local knowledge
- Share success stories
- Align your organization's goal with community goals







# Ideal Future

- Strong policies and consistent funding support long-term restoration goals
- Local communities lead and maintain restoration projects through education and stewardship
- Landowners are supported and incentivized to participate in restoration
- Environmental literacy and public awareness help drive long-term change
- Green infrastructure is built into communities to reduce pollution and increase co-benefits
- Better data and monitoring guide adaptive management strategies

# Next Steps

- Future research should collect data from communities that we were unable to reach:
  - Pennsylvania, West Virginia, Delaware, New York
  - Farmers and Private Sector
- CBP and other Bay organizations should incorporate these communication guidelines and develop long-term relationships with communities.
- Future projects could focus on creating informational materials based on our recommendations or could focus on collecting more insight and new perspectives from other residents of the Bay








## Acknowledgements

### Chesapeake Bay Program

- **Dede Lawal**
  - Habitat Goal Implementation Team Staffer, Chesapeake Research Consortium
- **Pam Mason**
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- **Tess Danielson**
  - Wetlands Workgroup Vice Chair, D.C. Department of Energy & Environment (DOEE)
- **Chris Guy**
  - Habitat Goal Implementation Team Coordinator, US Fish and Wildlife Service

### University of Michigan-SEAS

- **Kim Diver**
    - Faculty Advisor, Lecturer III in Geospatial Data Sciences, Conservation and Restoration
- 
- **All of our interview participants**

The background of the slide is a photograph of a vast, flat green field, possibly a prairie or meadow, stretching to a distant horizon under a clear blue sky with a few wispy clouds. In the center of the image is a light green rounded rectangle with a dark blue border. Inside this rectangle, the text "Thank you! Questions?" is written in a dark blue, serif font.

Thank you!  
Questions?