Targeted Outreach to Increase Implementation of Wetland Restoration and Protection on Delmarva.

Update to CBP Habitat GIT
May 21, 2019

Mitch Hartley, U.S. Fish and Wildlife Service

Mike Dryden, The Nature Conservancy

Amy Jacobs, The Nature Conservancy

Wetland Outreach Advisory Group

The Nature Conservancy

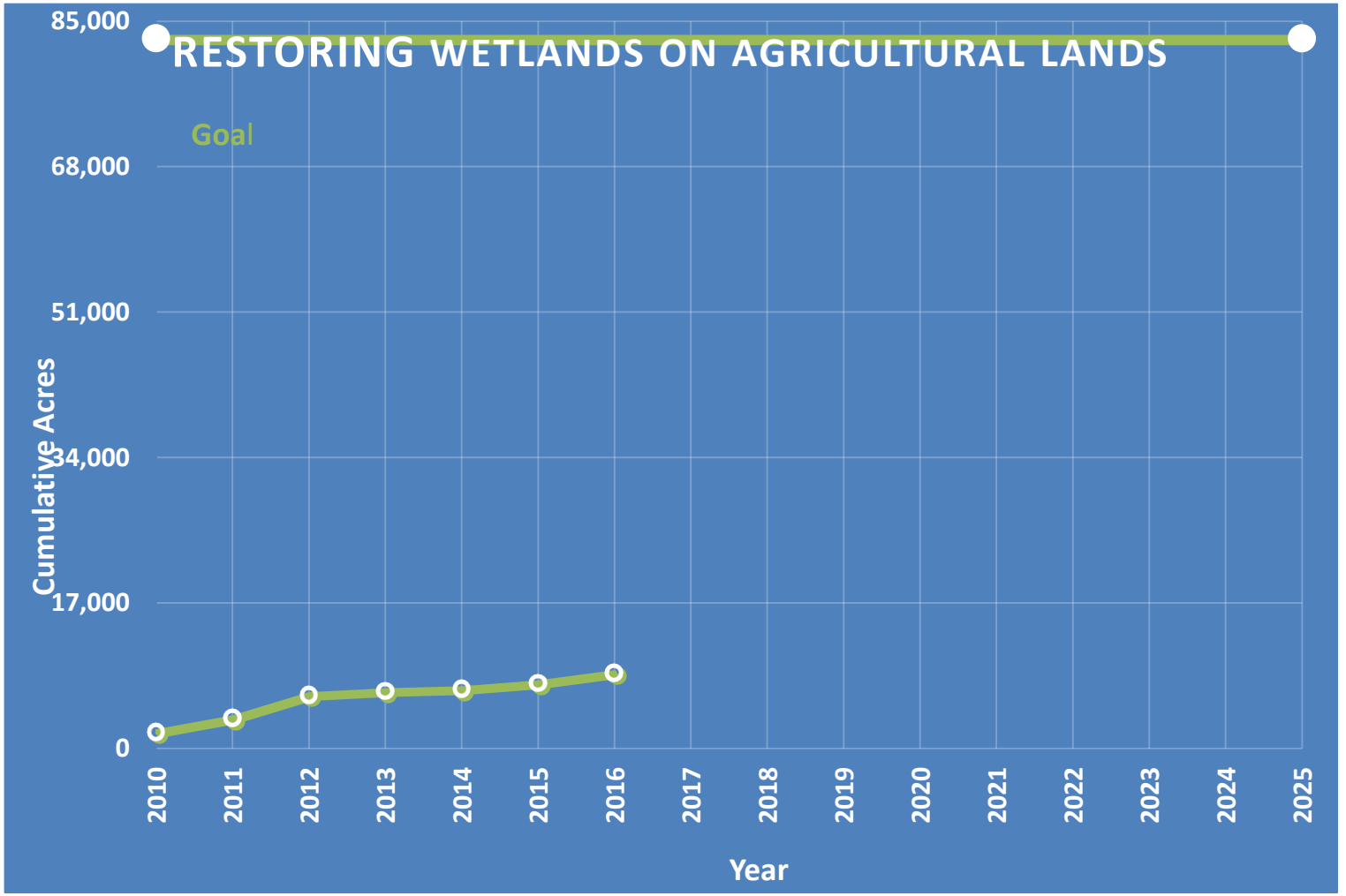
DUCKS UNLIMITED

USDA United States Department of Agriculture

Natural Resources Conservation Service

Wetlands

Create or reestablish **85,000 acres of tidal and non-tidal wetlands and enhance the function of an additional 150,000 acres of degraded wetlands by 2025.** lish These activities may occur in any land use (including urban), but should primarily occur in agricultural or natural landscapes.



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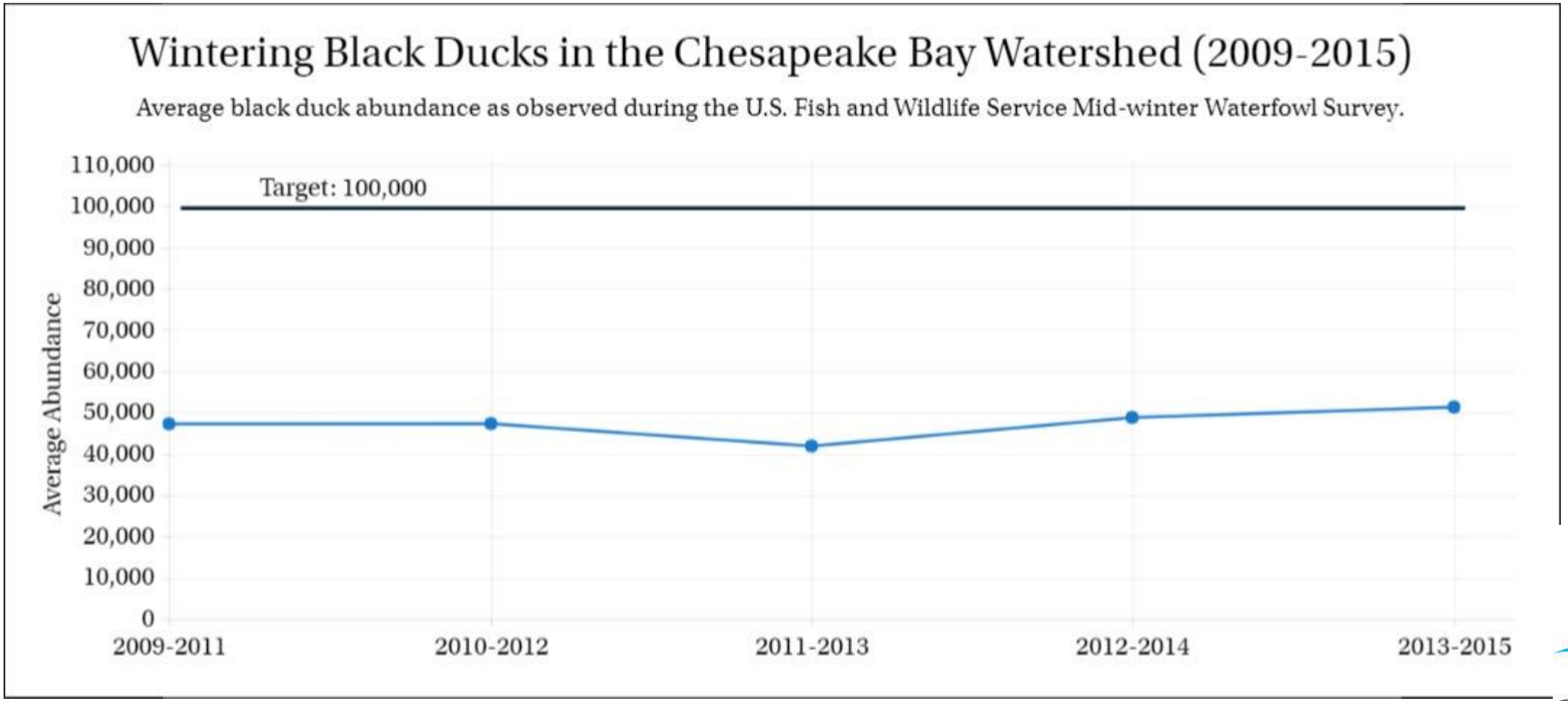
Black Duck

By 2025, restore, **enhance and preserve wetland habitats that support a wintering population of 100,000 black ducks,** a species representative of the health of tidal marshes across the watershed. Refine population targets through 2025 based on best available science.



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Wetland Stakeholder Survey

Interviewed >70 stakeholders involved in wetland restoration in VA, PA, MD, DE

- Report on 5 Categories of Obstacles to Accelerating Wetland Restoration
- Recommend solutions to overcome each obstacle

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Protecting nature. Preserving life.

NATIONAL FISH AND WILDLIFE FOUNDATION NFWF

DUCKS UNLIMITED

Wetland Stakeholder Survey

Obstacles

1. Limited funding
2. Outreach is limited/ not coordinated
3. Programmatic or Institutional
4. Permitting
5. Limited Approaches to Restoring Wetlands

Outreach Solutions

- Focus funding to priority areas
- Designate a local leader for outreach and coordination
- Host annual cross-training for wetland practitioners
- Develop better marketing strategies
- Invest in market research to evaluate the need to change incentive values

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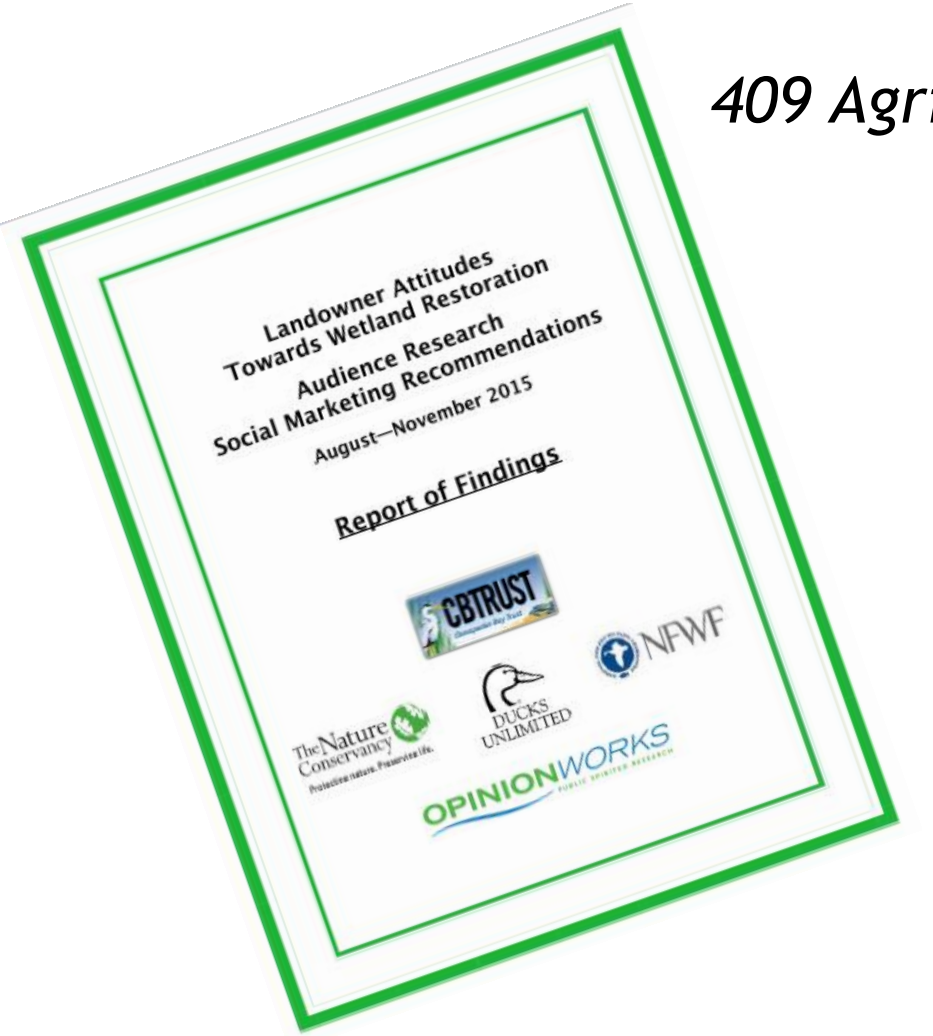
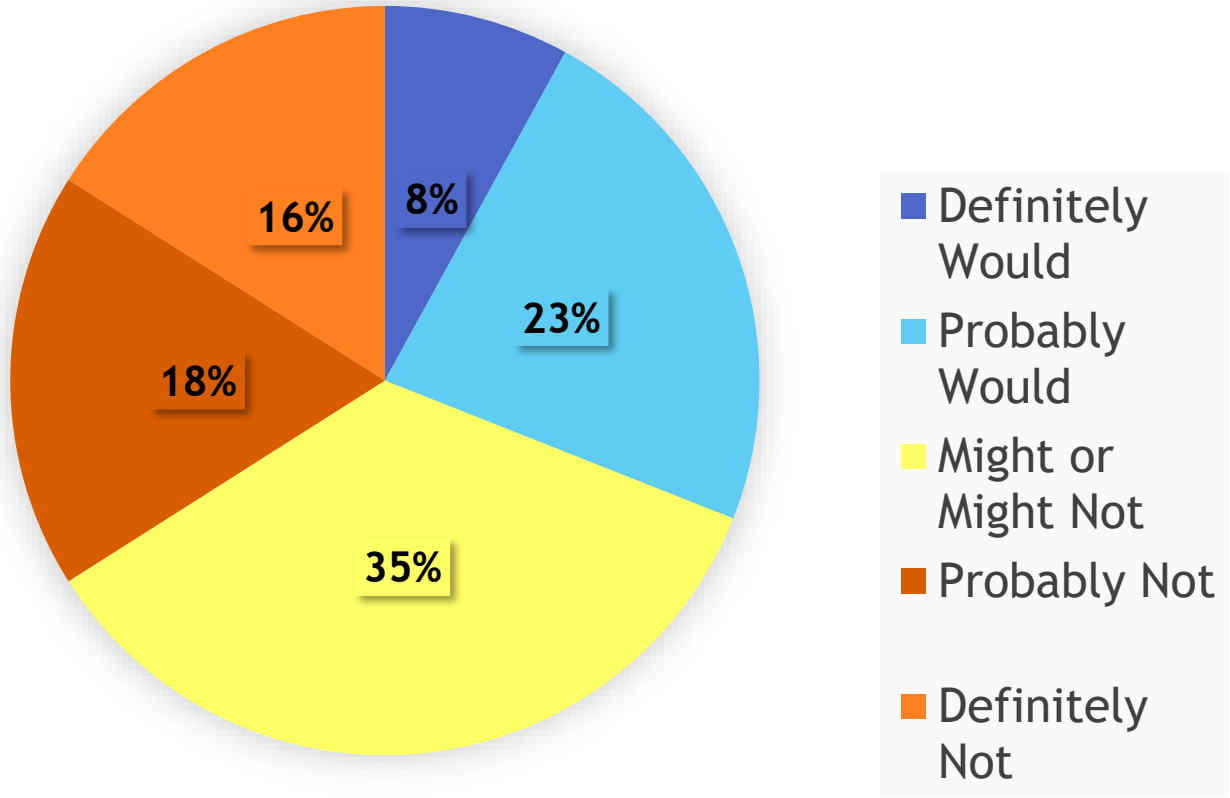
National Fish and Wildlife Foundation NFWF

Ducks Unlimited

Agricultural Landowner Survey

August 2015
409 Agricultural Landowners MD and PA
Parcels >40ac.





OPINIONWORKS PUBLIC SPIRITED RESEARCH

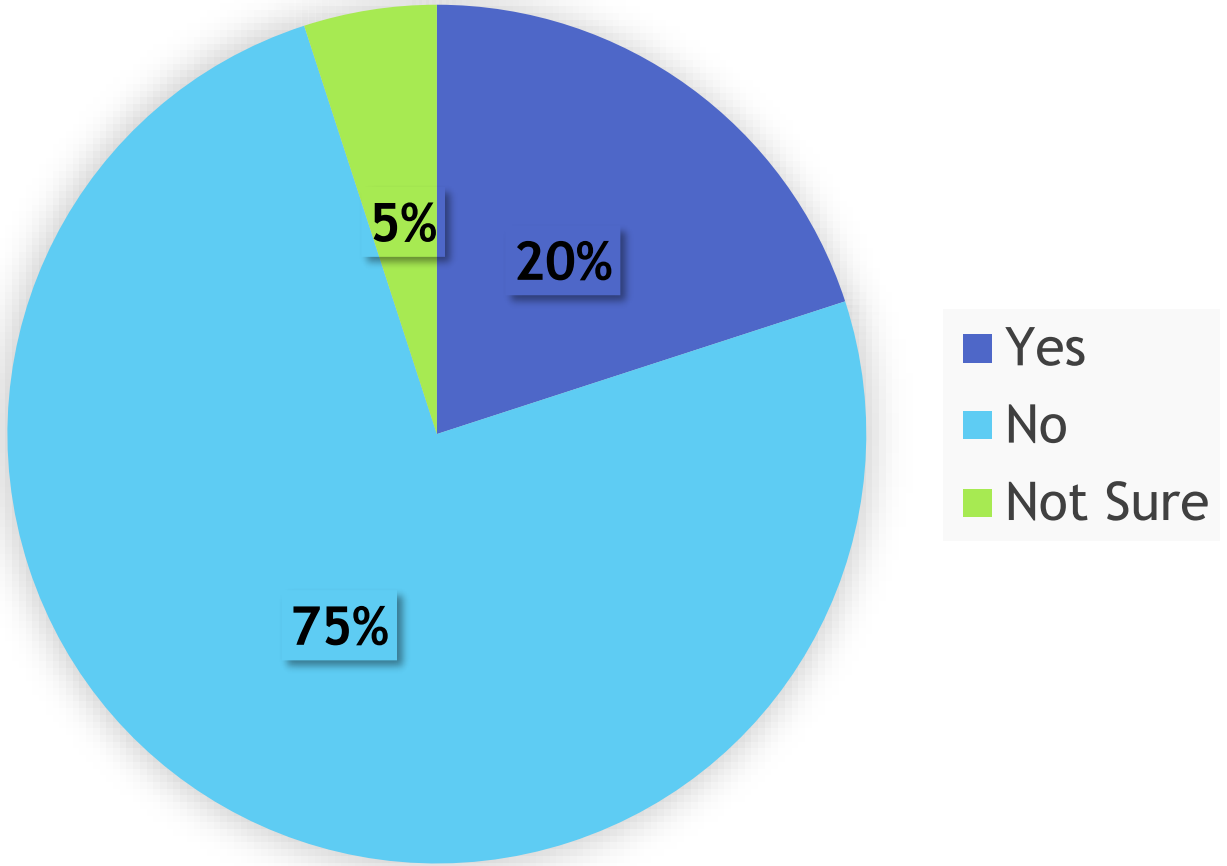
Wetland Workgroup

Agricultural Landowner Survey

- About 40% of landowners were not aware of programs to assist with restoring and/or protecting wet areas or natural habitat.
- Multiple reasons that landowners would be interested in restoring wetlands from financial payments, water quality, habitat, and other.

Agricultural Landowner Survey

Do you have any farm fields where the yield is lower because they are prone to occasional flooding?

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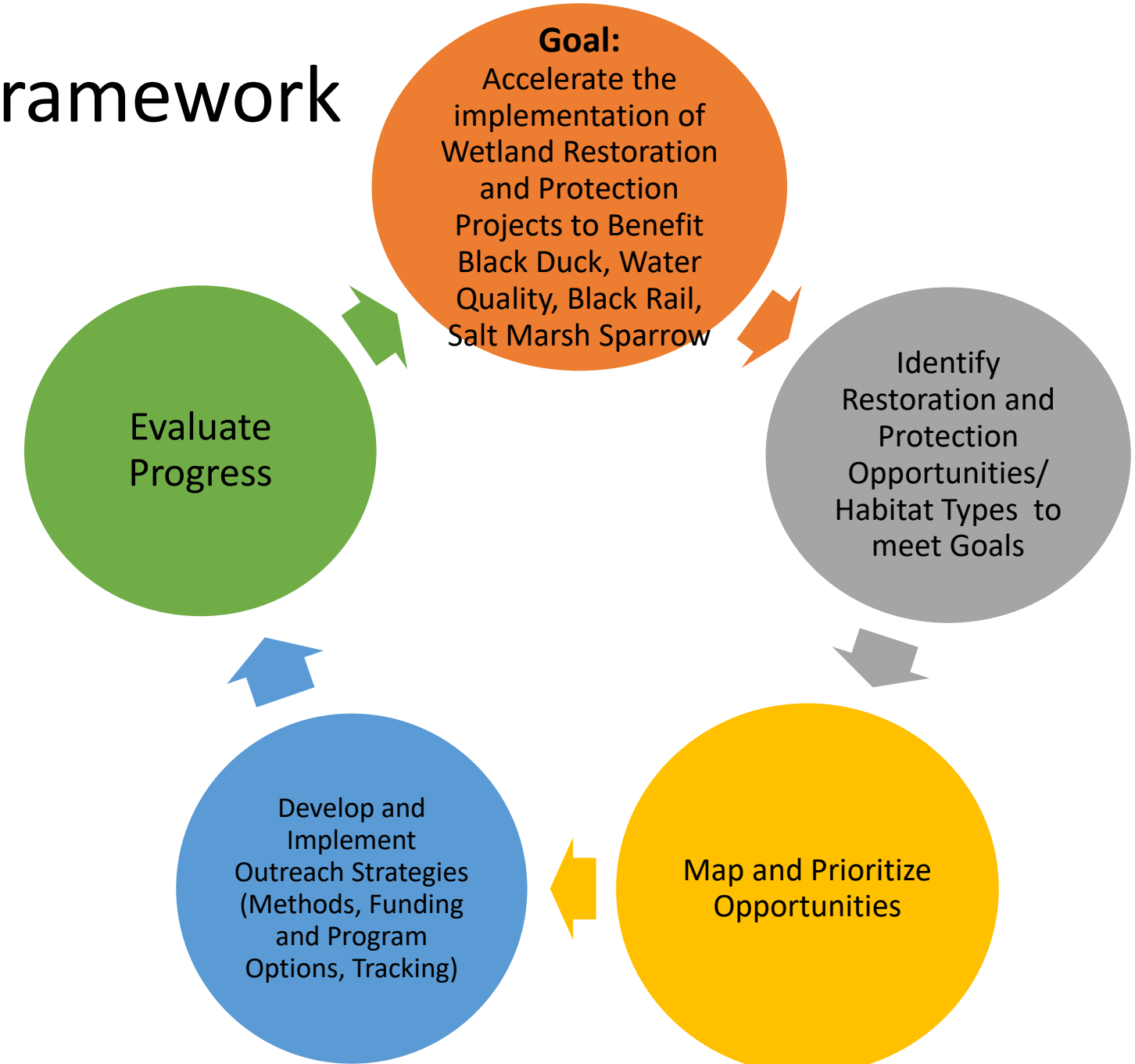
Scope #3: Targeted Outreach for Wetland Protection and Restoration.
CBTRUST
Chesapeake Bay Trust
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
05/15/2013

Project Framework



August 2018 Workshop with Partners to Refine Goals and Strategies

Goals:

- Water Quality
- Black Duck

Co-objectives:

- Black Rail
- Salt Marsh Sparrow

Identified types of wetland restoration to meet our goals and co-objectives and the benefits of these practices for each (green high benefit, yellow- moderate, grey – unknown, white – minimal).

	Water Quality	Non-breeding Black Duck	Black Rail	Salt Marsh Sparrow	
Cropland Emergent Wet	H- landscape position, size, retention time with vegetation	M – water depth, 2ft. Or less, management important to keep annual vegetation, hummocks; vary depths throughout	UK, size, shallow emergent veg, precision depth, high invertebrate populations;	None unless in migration corridor	
Tidal Marsh – ditch plugs					Not clear techniques/ benefits to marsh
Tidal Marsh- phrag control	NC -	M – due to longevity of phrag removal	H/UK - if wide and large enough; landscape position;	H/UK, landscape position, vegetation type, removal of trees more important	Need continuous funding stream; longterm commitment
Tidal Marsh Migration corridor	H -	M/H – size/ scale important	M/H – longterm benefit	M/H - longterm	Need more discussion of

Voted on Priority Restoration and Protection Types to Meet Goals:

Participants voted for top 2 priorities for group to focus, total votes highlighted.

Tidally influenced landscapes:

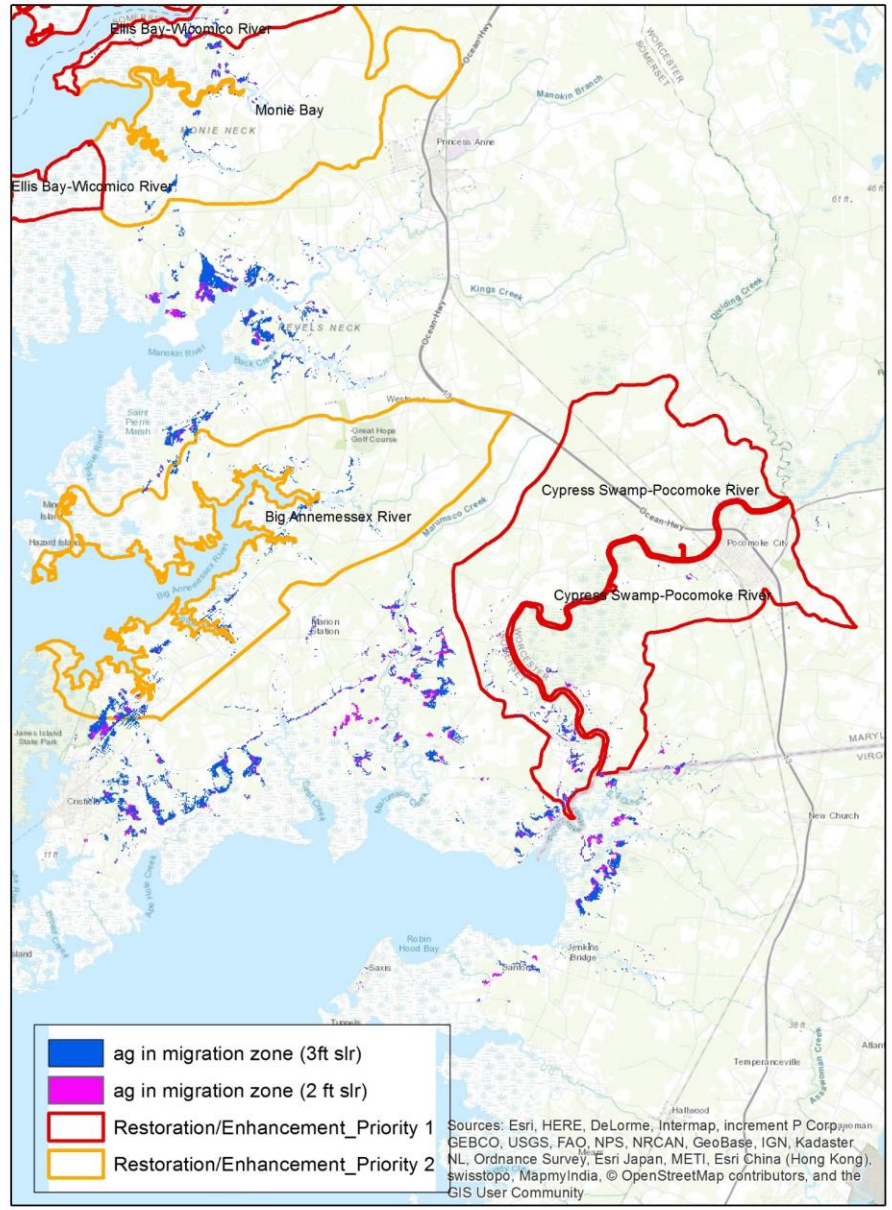
- Tidal marsh restoration (e.g., ditched or filled marshes) - removed from consideration
- Tidal Marsh restoration through Phragmites control to facilitate tidal marsh migration (e.g., in areas with dying loblolly pine) – 3
- Inland tidal marsh migration corridors in tide-affected agricultural lands – 12
- Floodplain reconnection transition zones (combined with floodplain restoration below)

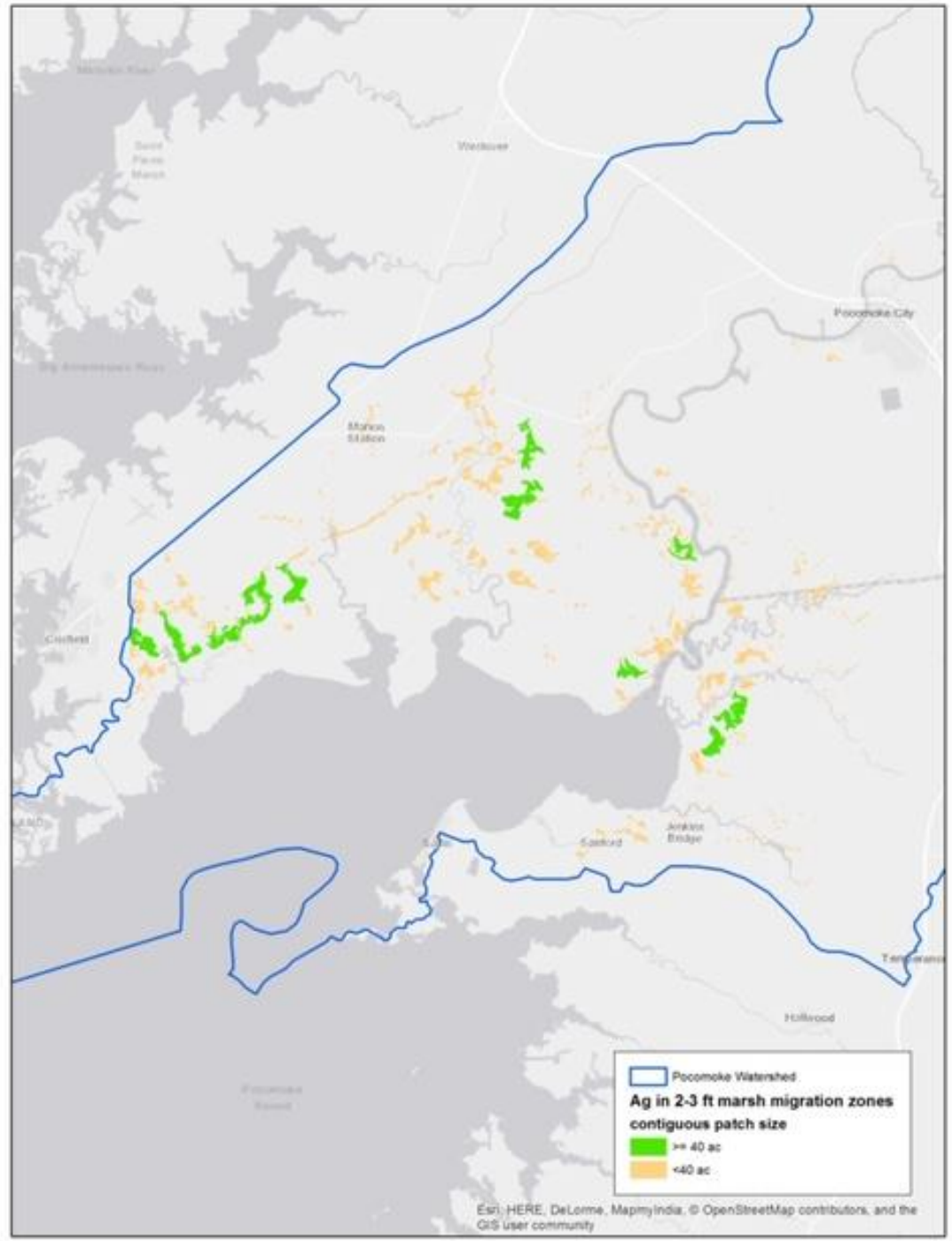
Nontidal landscapes

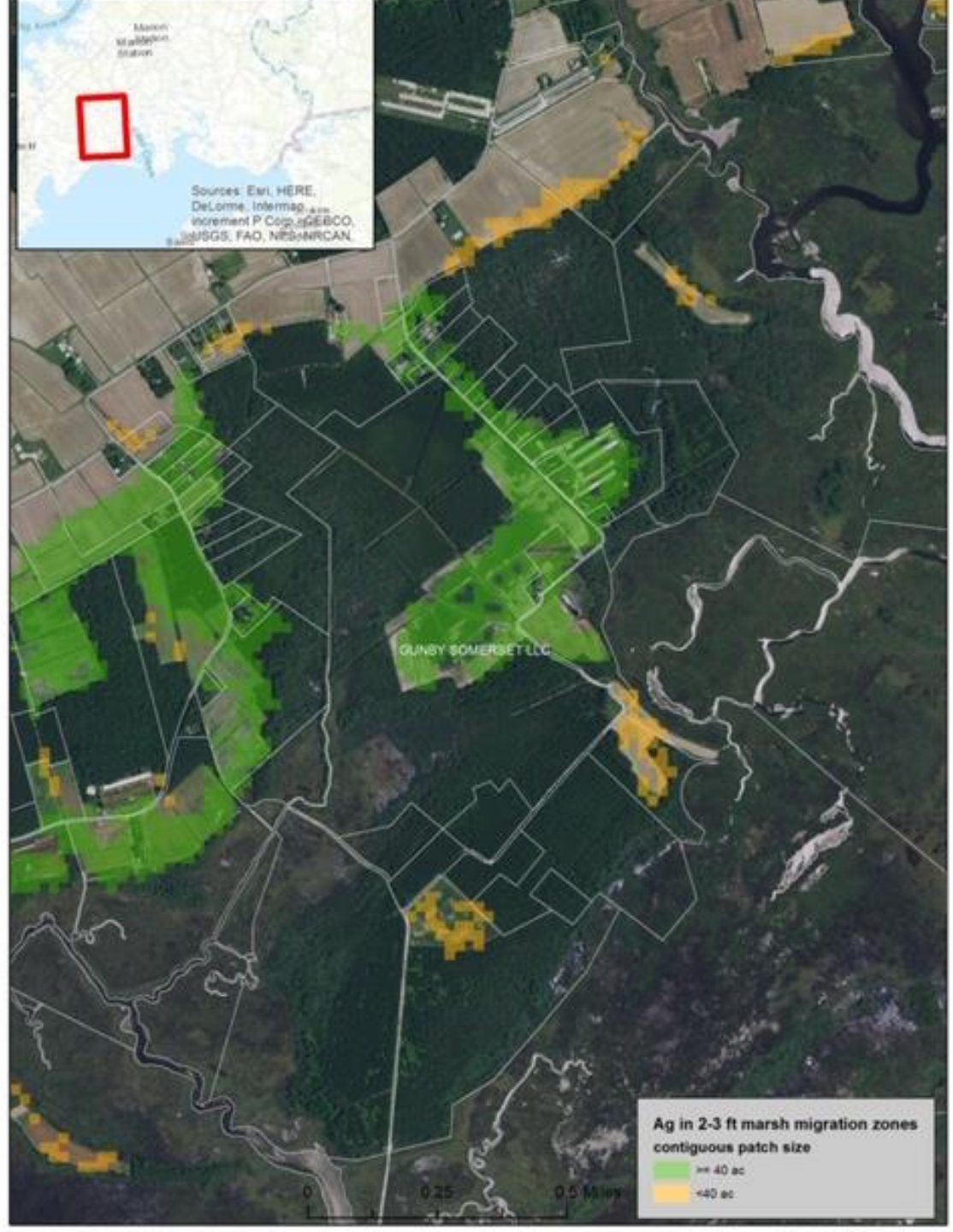
- Emergent nontidal wetlands on croplands - 7
- Forested floodplain restoration - 3
- Headwater forested wetland restoration/ enhancement - 3

Wetland Restoration/Black Duck Focus Area

Big Annemessex & Pocomoke




Pocomoke City
Hollywood
Pocomoke Watershed
Ag in 2-3 ft marsh migration zones
contiguous patch size
>= 40 ac
<40 ac
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

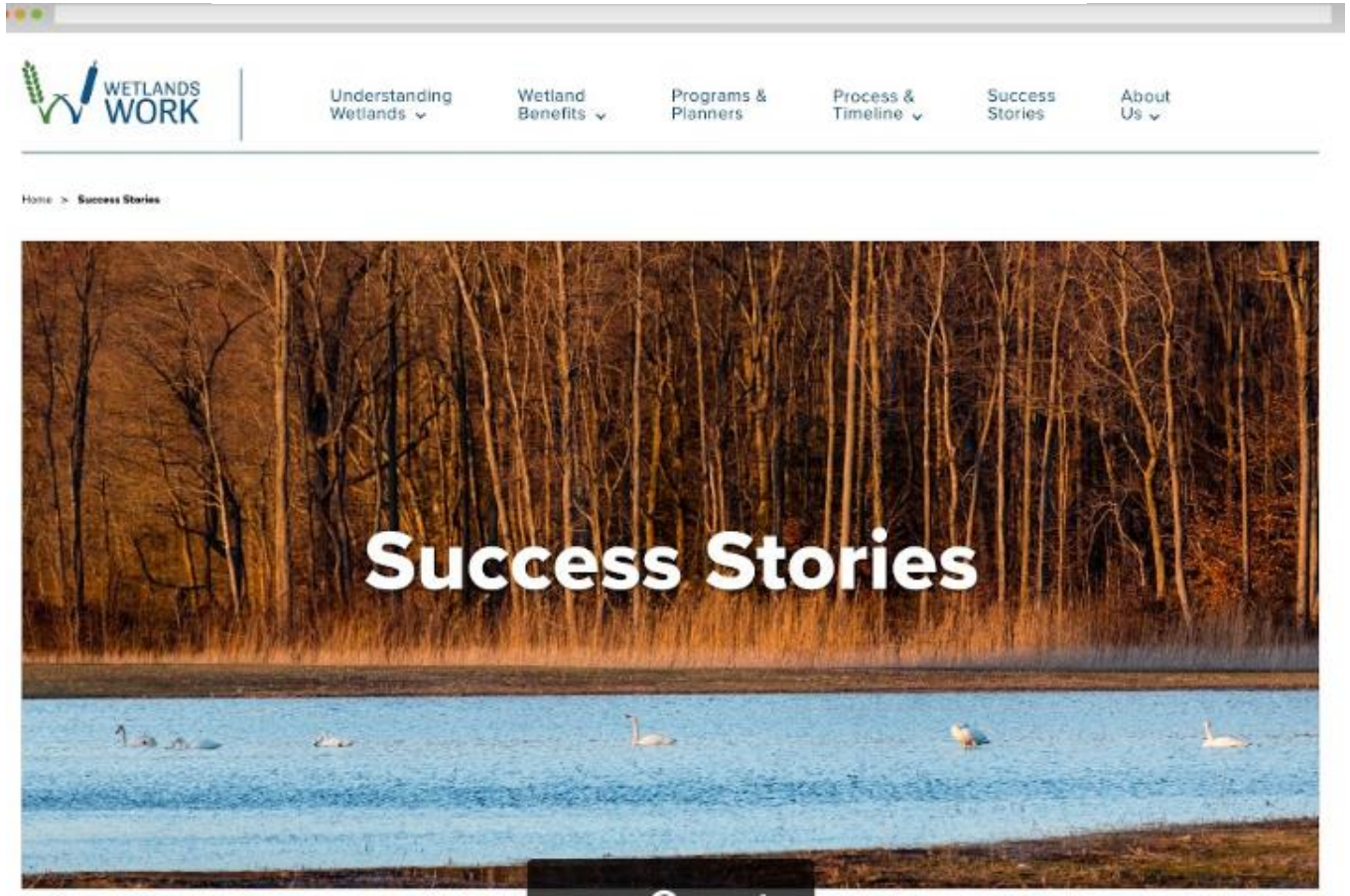

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN,
GUNBY SOMERSET LLC
Ag in 2-3 ft marsh migration zones
contiguous patch size
>= 40 ac
<40 ac
0
0.25
0.5 Miles

Outreach and Landowner Engagement Summary

Pocomoke Sound / Big Annemessex			
Priority Landowners	14		
Contact via mail	12		
Personal contacts	2		
Response to mailings	5	42%	
Conact via mailing interested in projects	4	33%	2 WRE and 2 CREP
Personal contacts interested in projects	0	0%	
No response	7	50%	

Wetlands Work

A resource for agricultural landowners in the Chesapeake Bay watershed. It was developed by the Chesapeake Bay Program's Wetland Workgroup to connect landowners with the people and programs that can support wetland restoration on their land.



Many resources available to help you restore or create a wetland on your property. These resources include technical expertise and financial support to assist landowners. Within the Chesapeake Bay watershed, there are numerous programs that fund wetland restoration as well as wetland planners who are trained to guide you through the restoration process. Use our search tool to find programs and providers near you.

Funding Programs

This page is your gateway to an online directory of programs that fund wetland restoration on agricultural lands. Use our searchable directory to find programs near you.

Wetland Planners

Wetland planners are experts trained to guide landowners through the process of restoring wetlands on their property. Use our searchable directory to find wetland planners near you.