Black Duck Action Team

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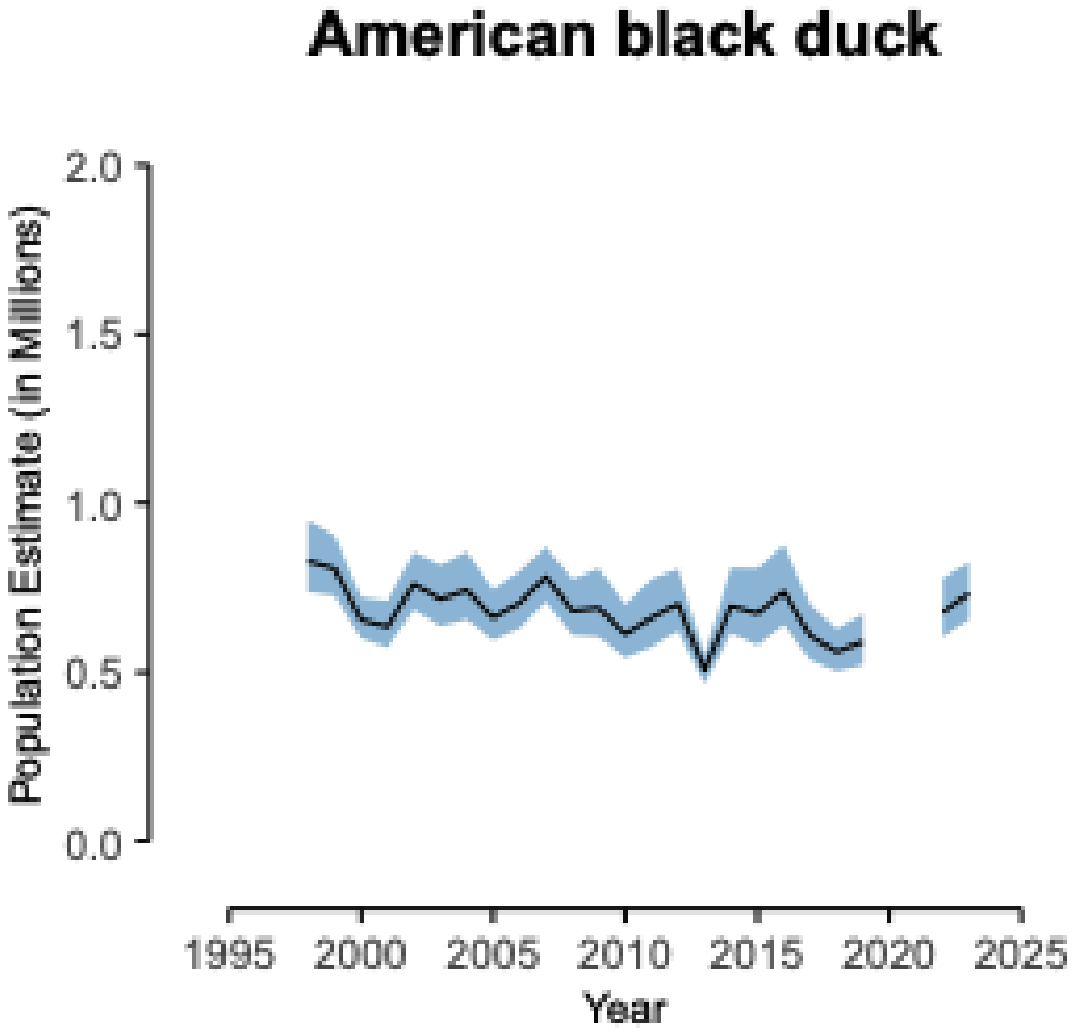
Black Duck Outcome

(Off Course)

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.

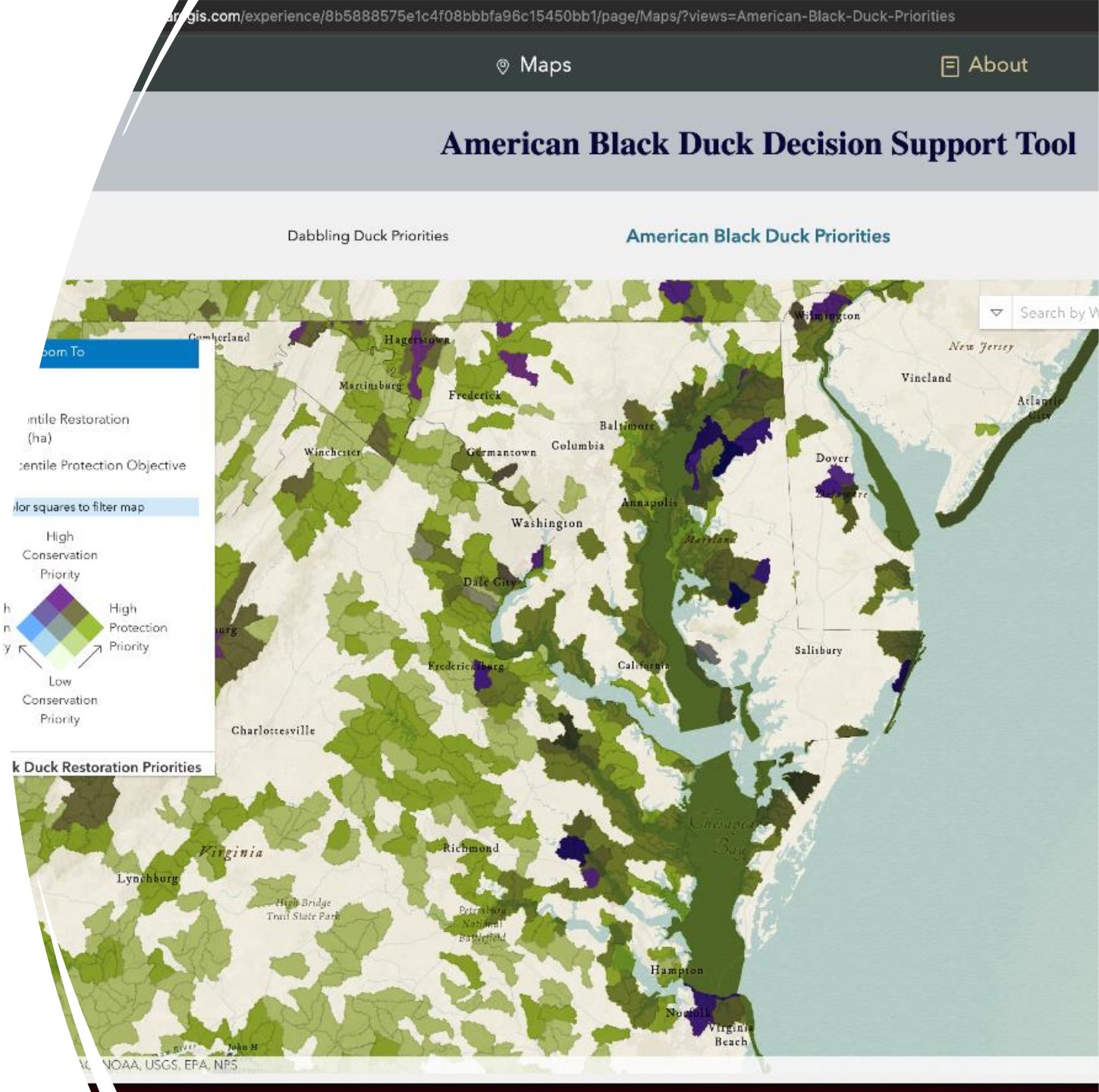
Background

- American black duck has experienced a population decline due to land use change and habitat availability
- Black duck abundance serves as an indicator of wetland health and food availability



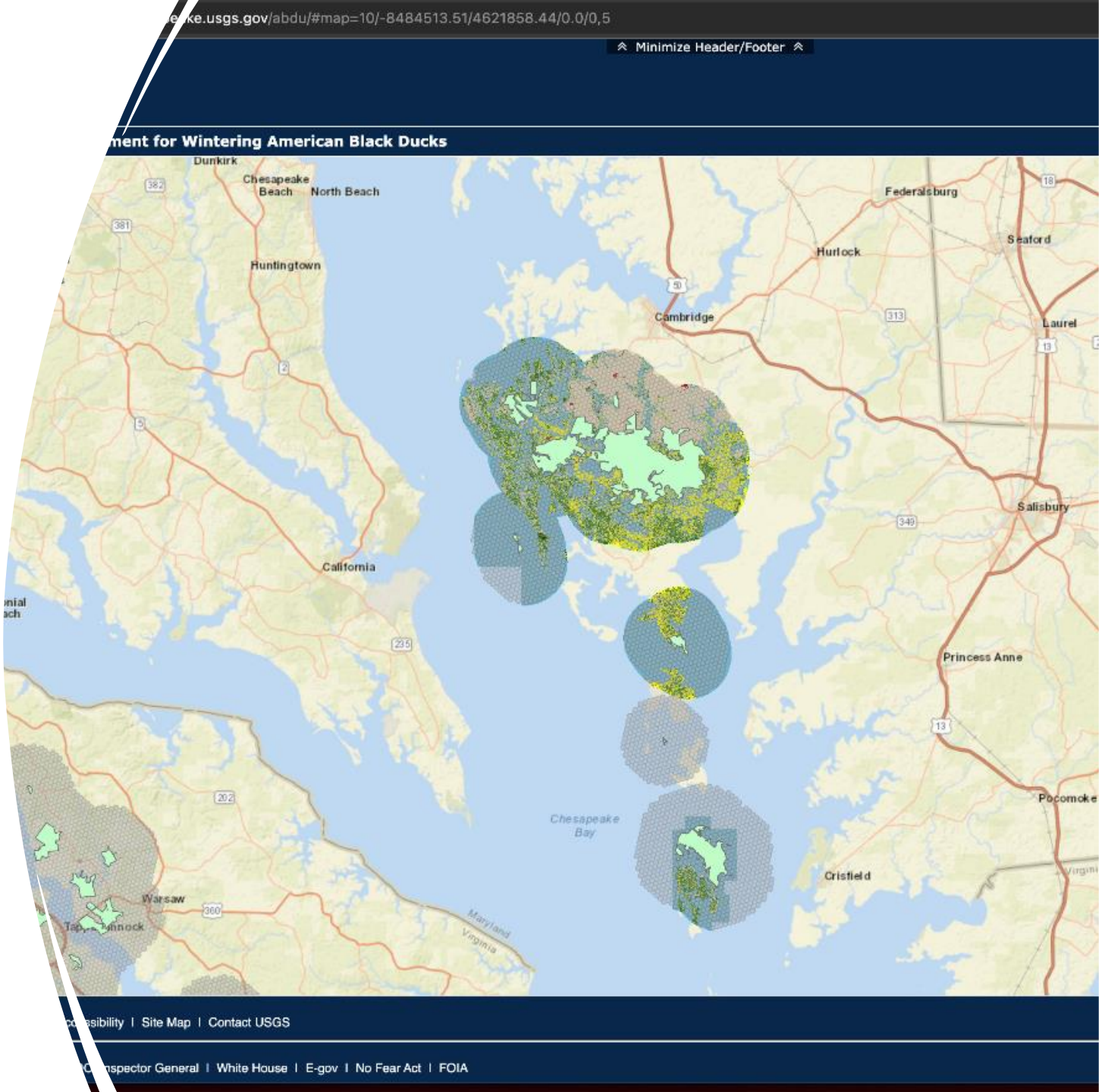
DST

- Uses remotely sensed wetland inventory maps to determine the energetic carrying capacity of HUC12 watersheds and compares this to energy demand.
- The model indicates areas where there is sufficient and insufficient wetland quantity and quality to support the desired number of Black Ducks in each HUC12 watershed.
- Indicates how much of the habitat is in conservation status, to show areas sufficiently protected and areas needing additional land protection, as well as the areas where wetland habitat needs to be restored or enhanced.

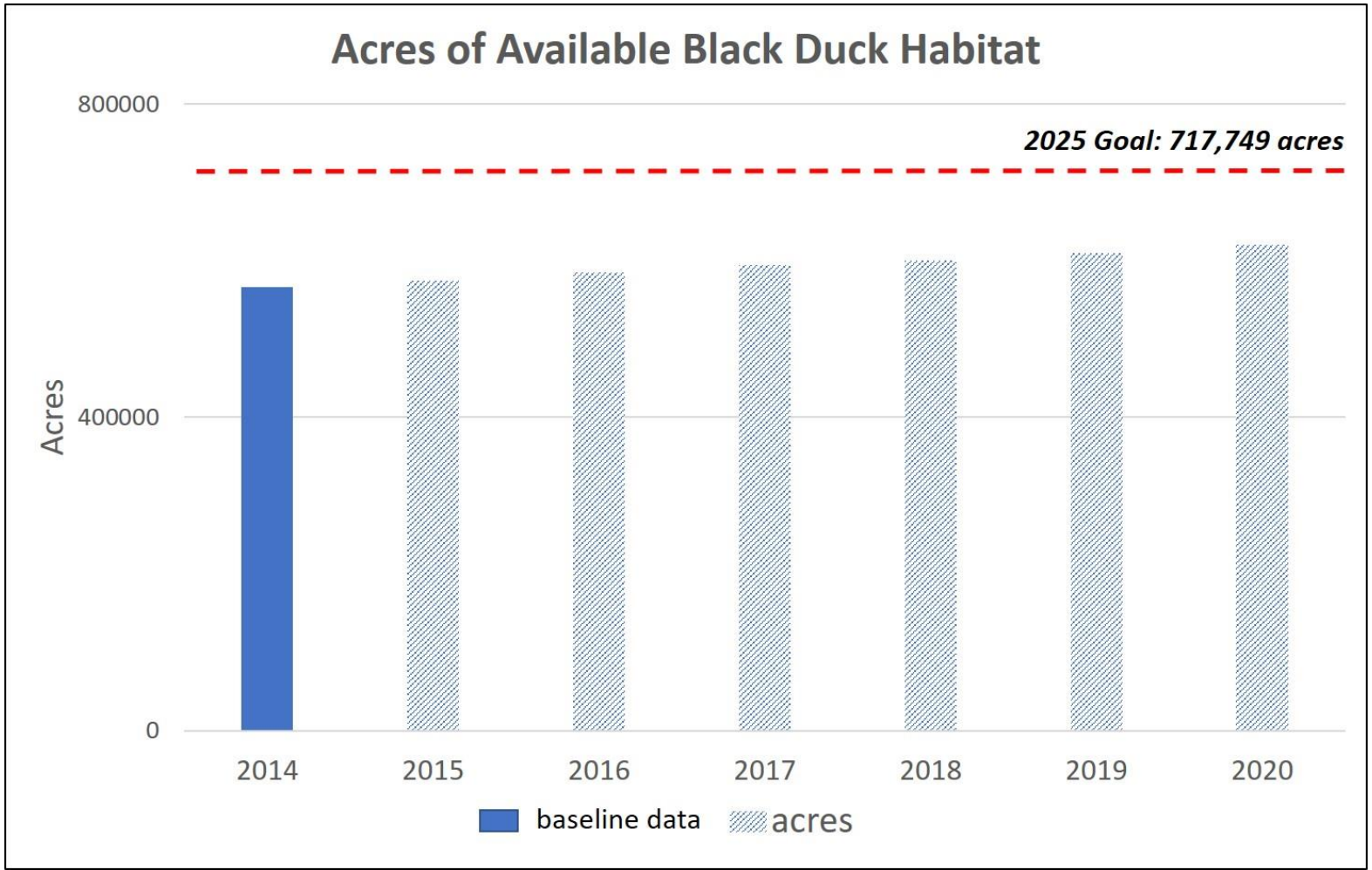


Vulnerability

- We estimated food availability among five main wetland cover types used by overwintering American Black Ducks: subtidal, fresh water, high marsh, low marsh, and mudflat.
- Bioenergetics models used can be simplified into two major components: energetic demand and energetic supply.
- Then modeled how sea-level rise using SLAMM and WARMER and land-use change impact available habitat over time.



What is our Expected and Actual Progress?



2014 Baseline: 566,477 acres
2022 Progress: Still Unknown
2025 Goal: 717,749 acres

Restoration goal: 151,272 additional acres
based on results from the Decision Support Tool (DST)

Challenges

- **Tracking of restoration acres** toward the outcome – present restoration efforts on agricultural lands may not necessarily be viable black duck habitat.
- Reconciling black duck outcome (151,272 acres) of primarily tidal marsh and wetlands outcome (85,000 acres) of primarily restored **agricultural land**.
- Can we use **DST** to guide restoration efforts to align these two outcomes? Will it work given climate change and land change pressures?
- Do we decrease the number of black ducks supported in the black duck outcome or do we increase the acreage of quality wetlands restored in the wetland outcome?

Next Steps

- Revise and broaden the outcome
- Coordinate and align with Wetlands Workgroup