



# Protected Lands Data Update

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LUWG/FWG Joint Meeting





Photo: Chesapeake Bay Program

# Protected Lands

*“**Protected lands**” means lands permanently protected from development, whether by purchase or donation, through a perpetual conservation or open space easement or fee ownership for their cultural, historical, ecological, or agricultural value.*



CHESAPEAKE

PROGRESS

## Protected Lands



RECENT PROGRESS  
**INCREASE**



OUTLOOK  
**ON COURSE**

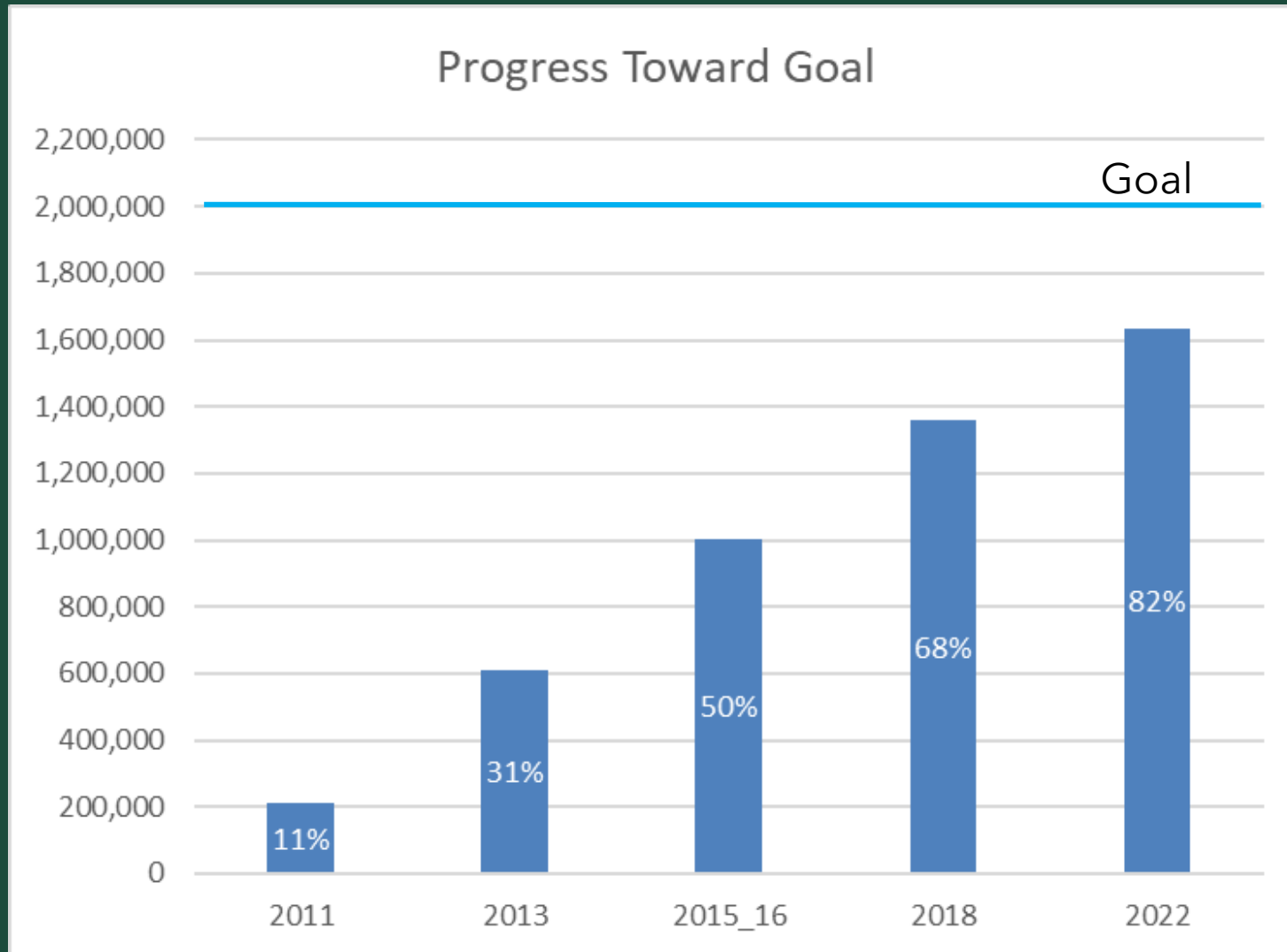
By 2025, protect an additional two million acres of lands throughout the watershed—currently identified as high-conservation priorities at the federal, state or local level—including 225,000 acres of wetlands and 695,000 acres of forest land of highest value for maintaining water quality.

## Progress

### Recent Progress: Increase

According to data collected through 2022, nearly 1.64 million acres of land in the Chesapeake Bay watershed have been permanently protected since 2010. This marks an achievement of 82% of the land conservation goal adopted in the *Chesapeake Bay Watershed Agreement* and brings the total amount of protected land in the watershed to 9.1 million acres.

# Protected Lands Progress towards 2M Acre Goal



2010 Baseline:  
**7,474,811 acres**

2022 Progress:  
**9,109,278 acres**

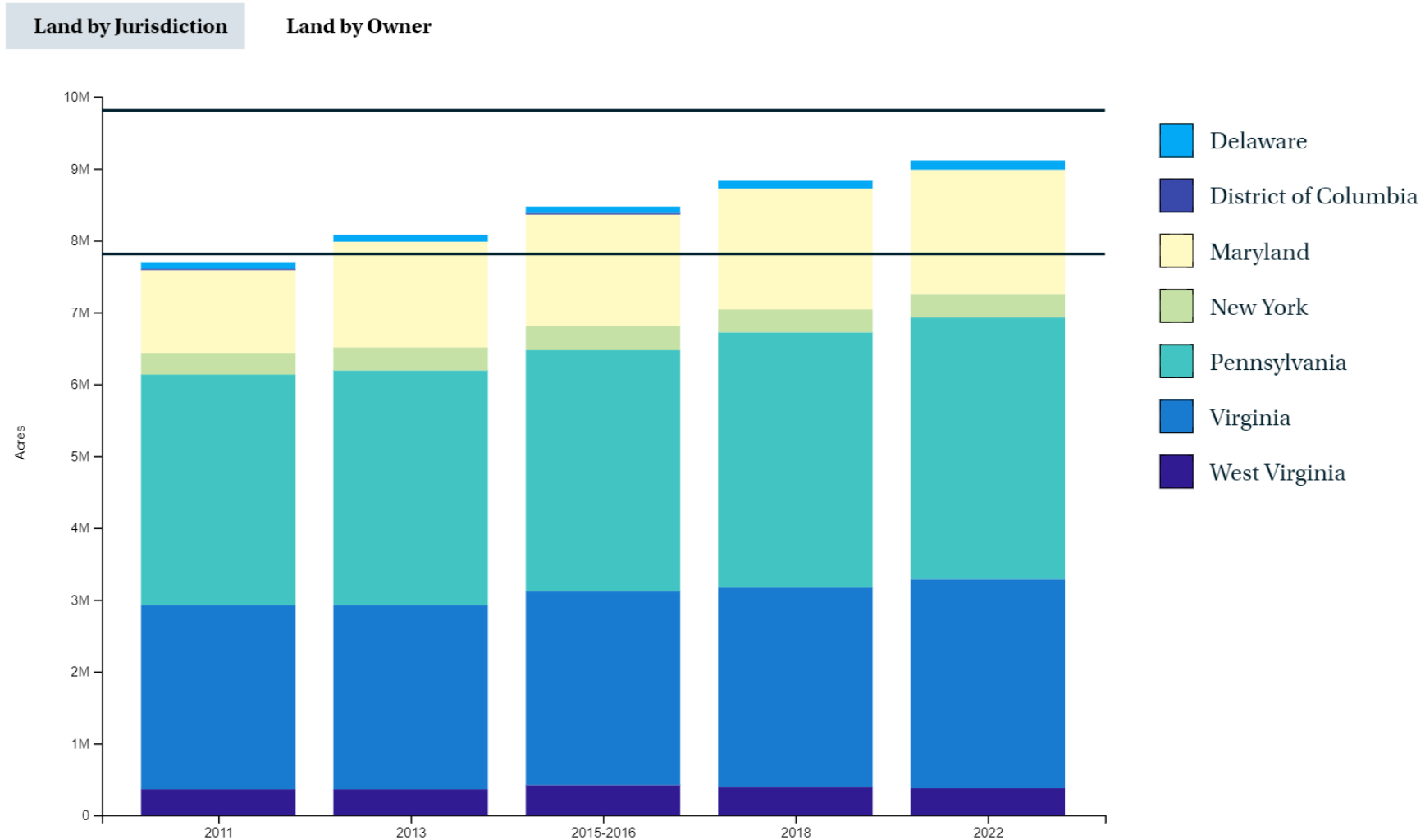
Acres Protected since 2010  
**1,634,467**

Remaining:  
**365,533 acres**

## Protected Lands (Cumulative) (2011-2022) ▾

Some increases in acreage can be attributed to newly protected parcels of land. Other increases can be attributed to the addition of previously protected but newly digitized, corrected or refined parcels.

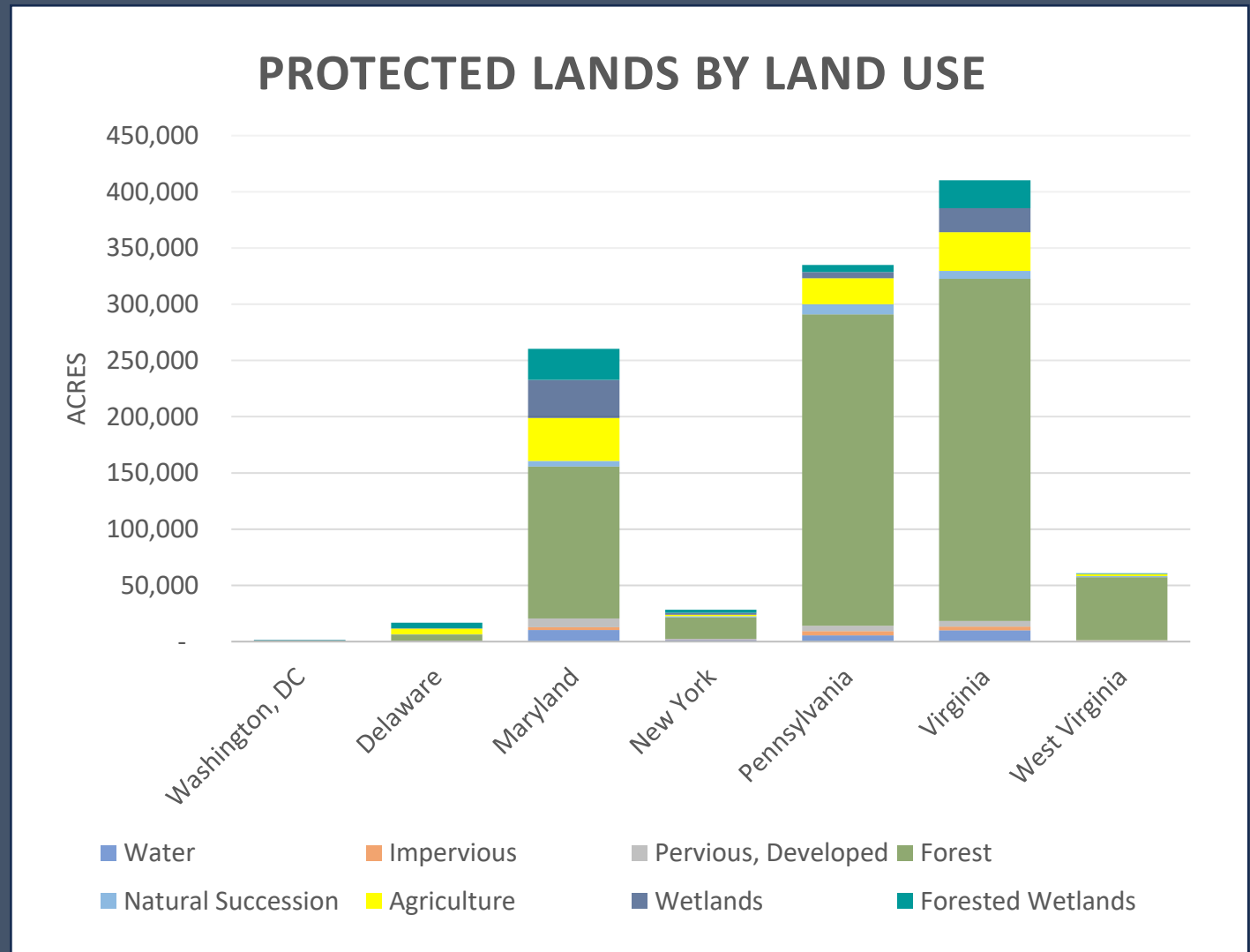
[VIEW CHART](#) [VIEW TABLE](#)





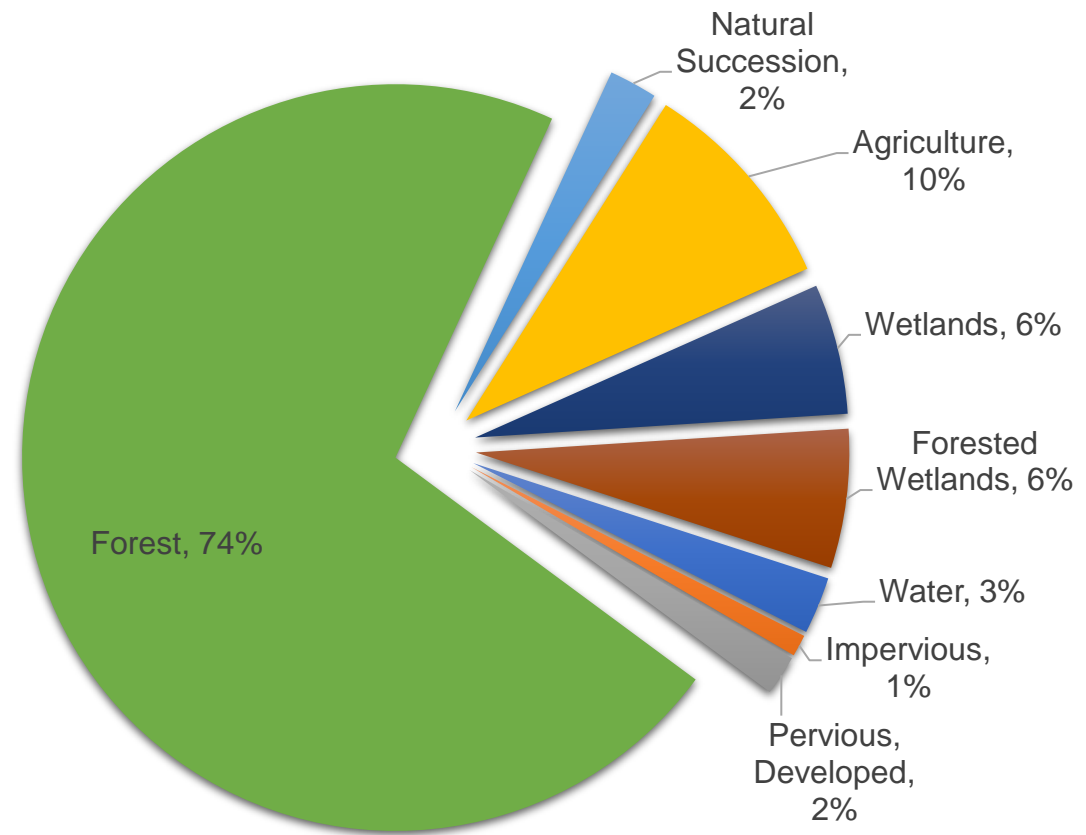


# Land Use





# Riparian Land Use





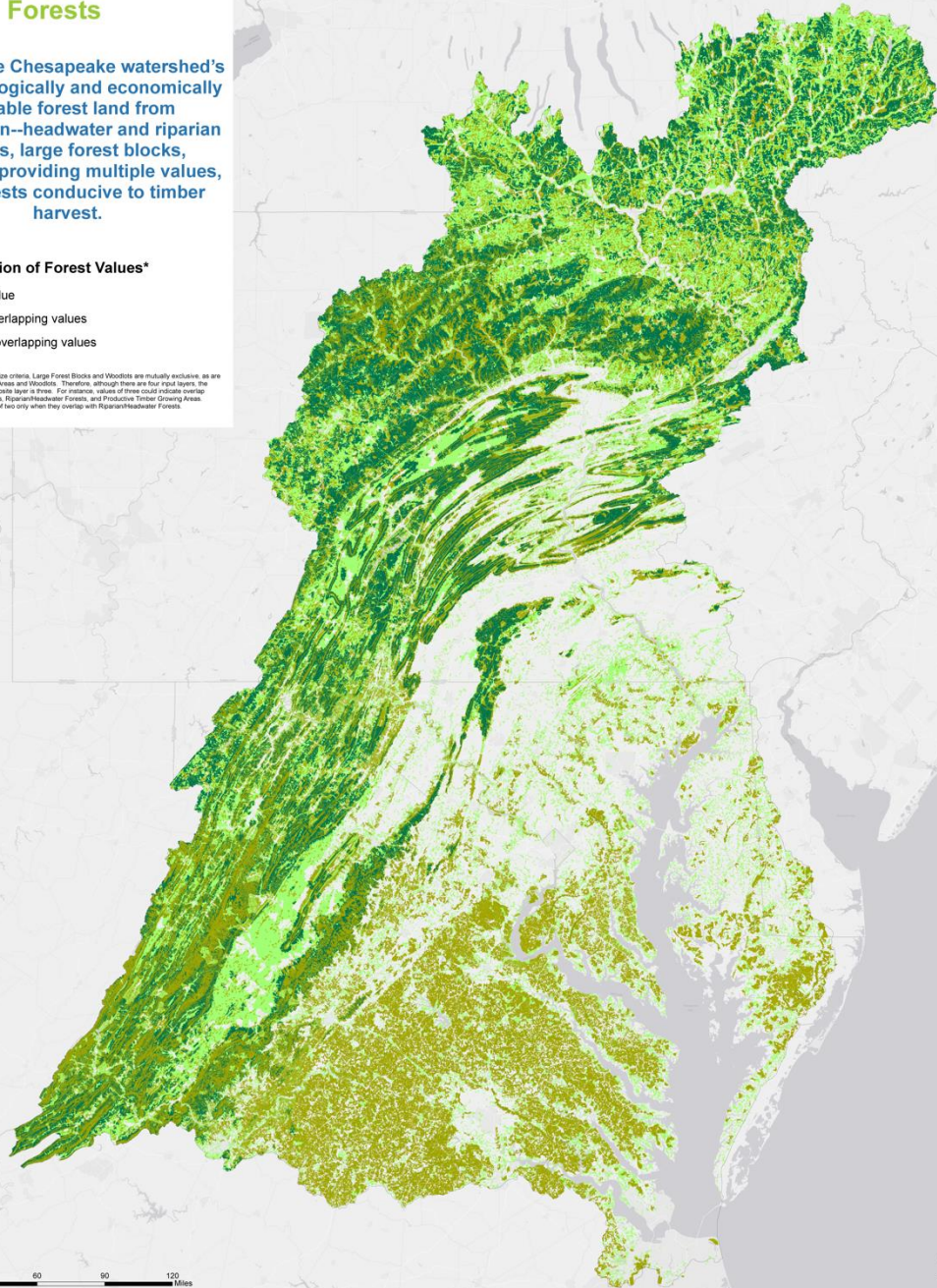
## Forests

Protect the Chesapeake watershed's most ecologically and economically valuable forest land from conversion--headwater and riparian forests, large forest blocks, woodlots providing multiple values, and forests conducive to timber harvest.

### Concentration of Forest Values\*

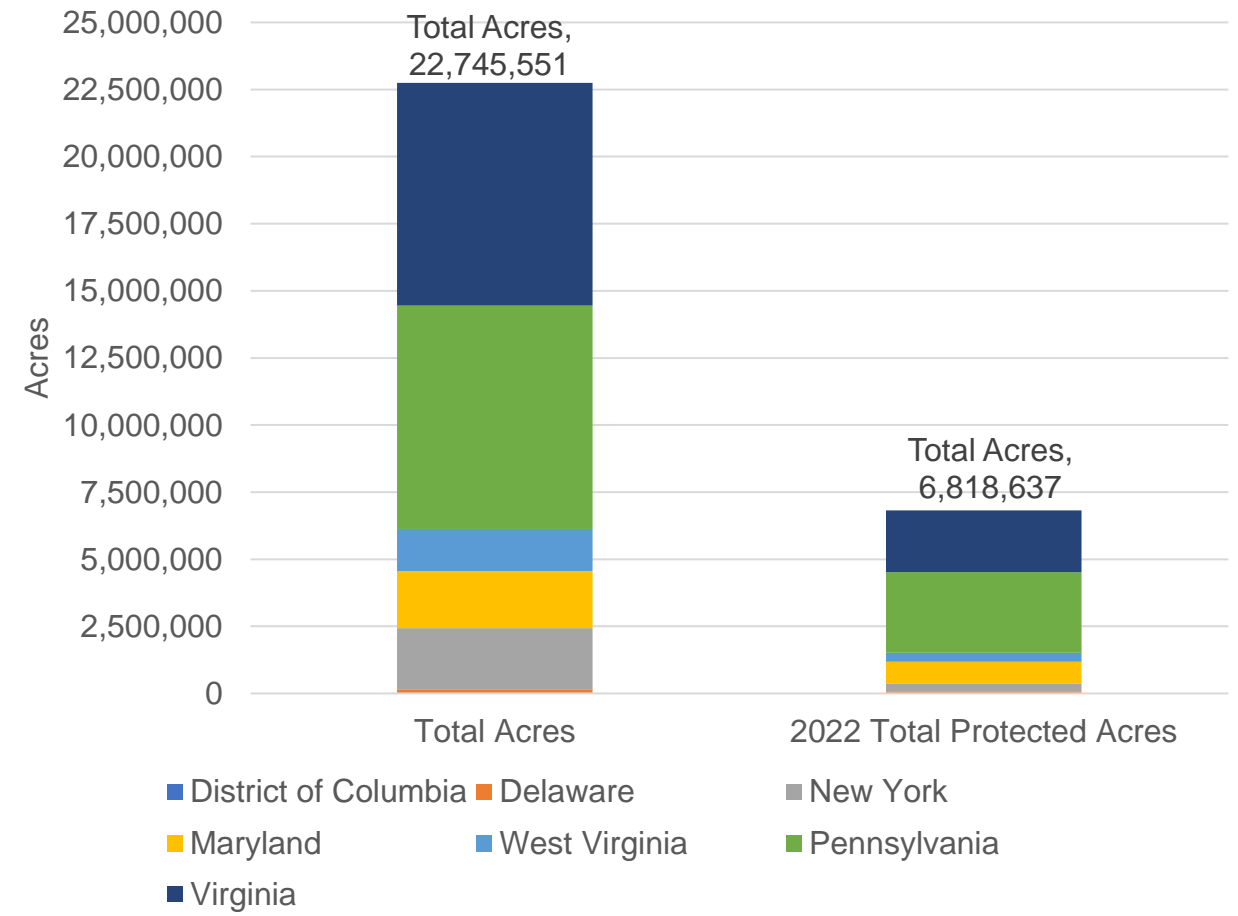
- One value
- Two overlapping values
- Three overlapping values

\*Note: Due to forest patch size criteria, Large Forest Blocks and Woodlots are mutually exclusive, as are Productive Timber Growing Areas and Woodlots. Therefore, although there are four input layers, the maximum value in the composite layer is three. For instance, values of three could indicate overlap between Large Forest Blocks, Riparian/Headwater Forests, and Productive Timber Growing Areas. Woodlots can have a value of two only when they overlap with Riparian/Headwater Forests.



# High Value Forests

## Protected vs Unprotected

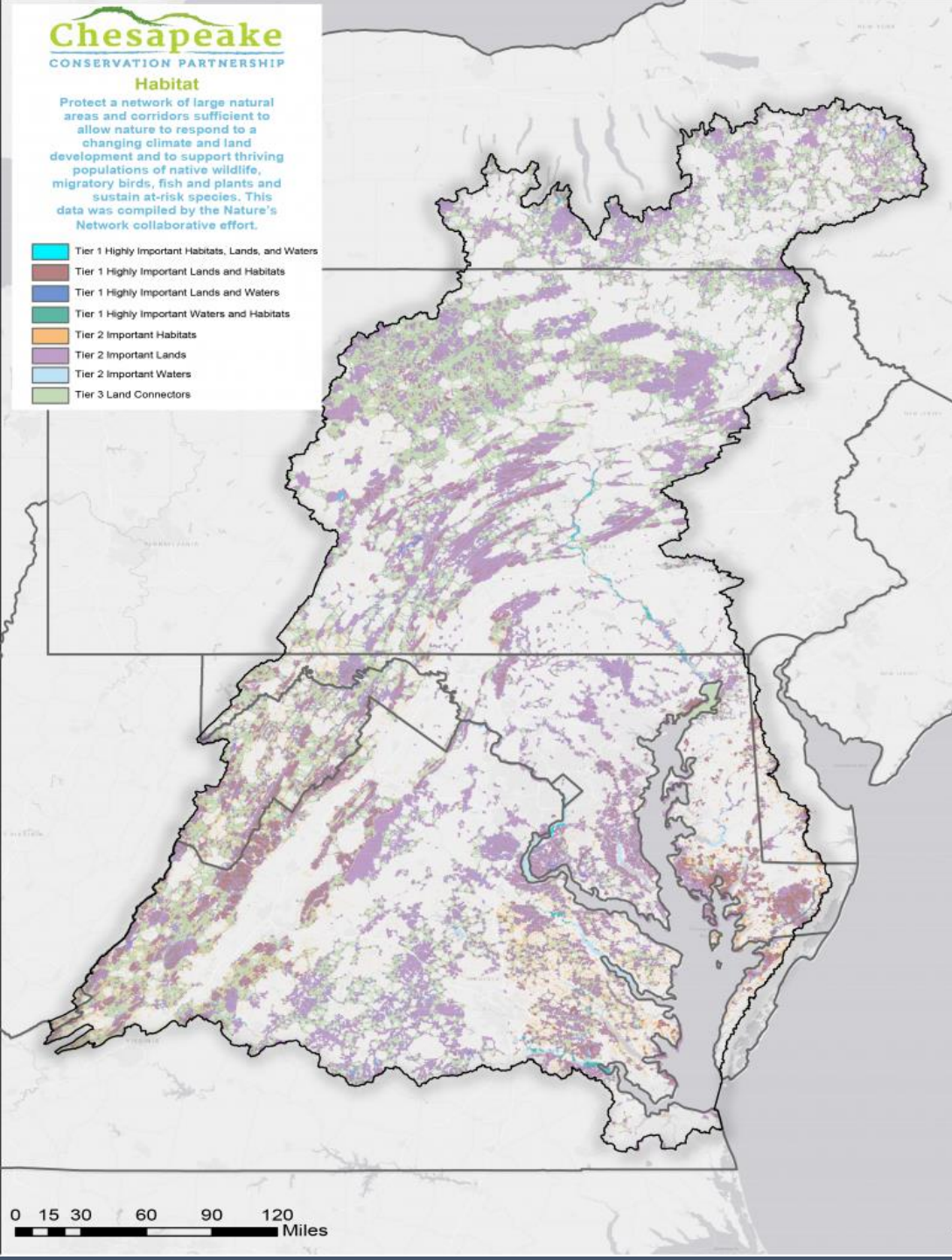




**Habitat**

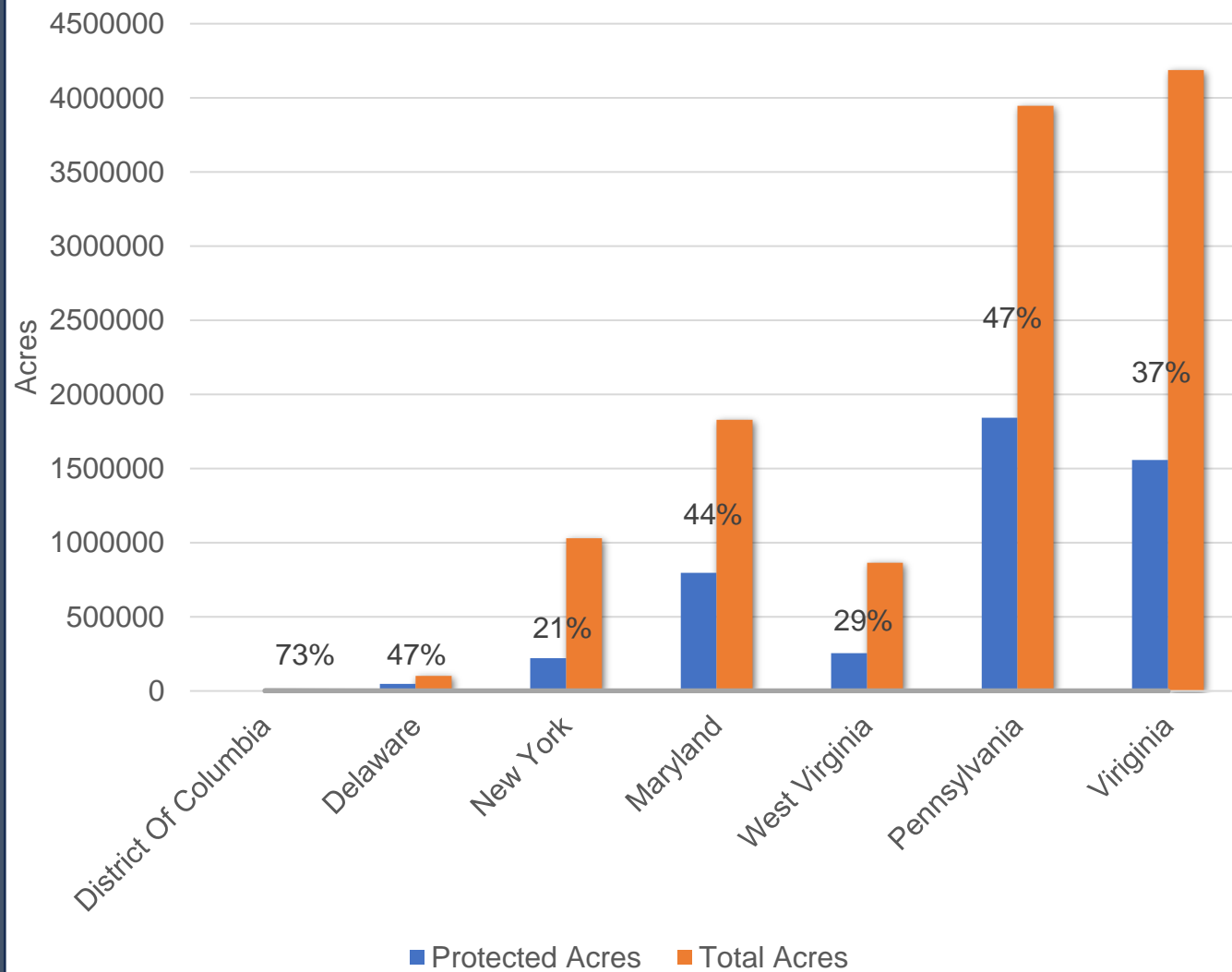
Protect a network of large natural areas and corridors sufficient to allow nature to respond to a changing climate and land development and to support thriving populations of native wildlife, migratory birds, fish and plants and sustain at-risk species. This data was compiled by the Nature's Network collaborative effort.

- Tier 1 Highly Important Habitats, Lands, and Waters
- Tier 1 Highly Important Lands and Habitats
- Tier 1 Highly Important Lands and Waters
- Tier 1 Highly Important Waters and Habitats
- Tier 2 Important Habitats
- Tier 2 Important Lands
- Tier 2 Important Waters
- Tier 3 Land Connectors



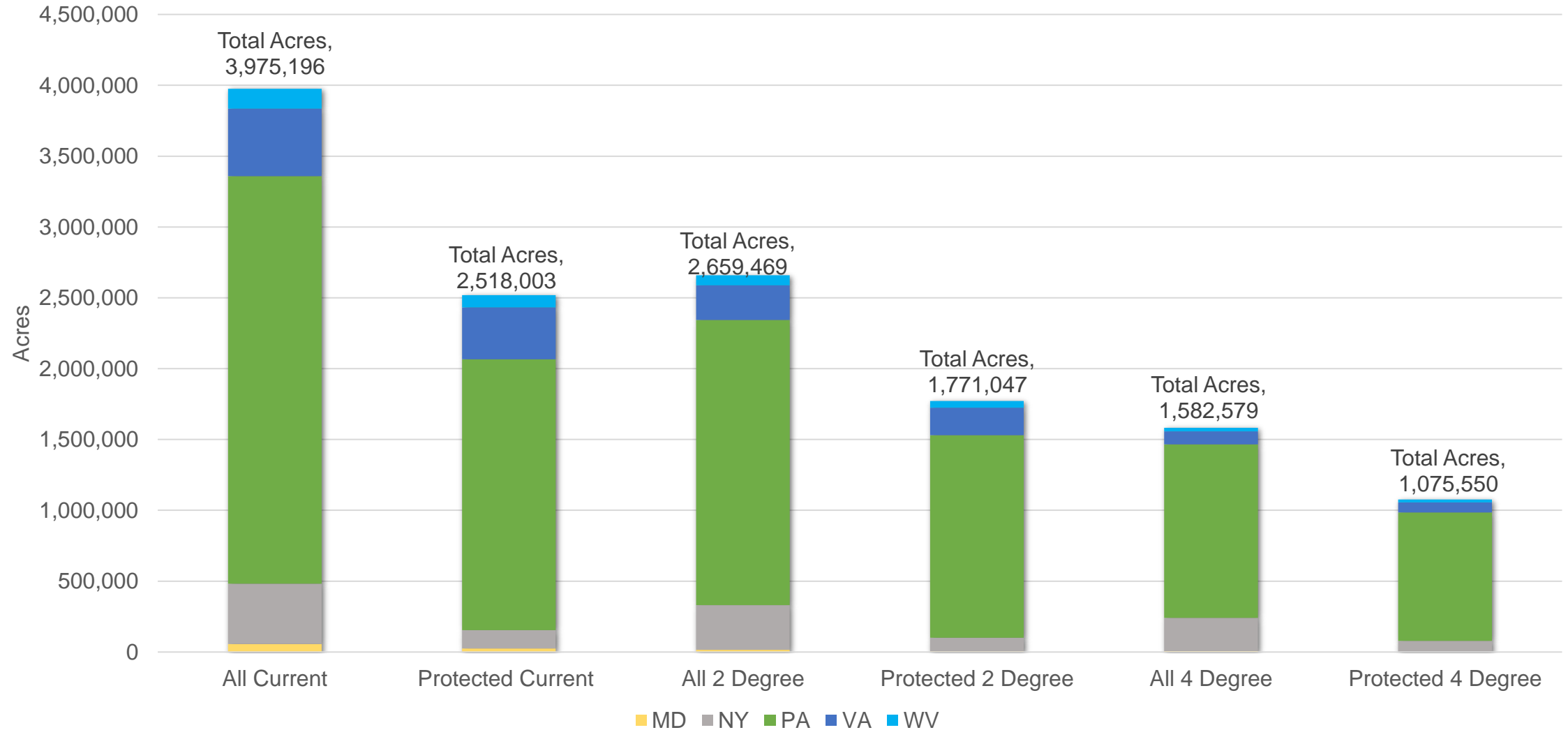
# High Value Habitat

## Important Habitats - Protected vs Unprotected



# Brook Trout

## State Acres with 90% or Greater Probability of Brook Trout Occurrence





# Changes with Tracking Land Protection

Change over time can reflect...

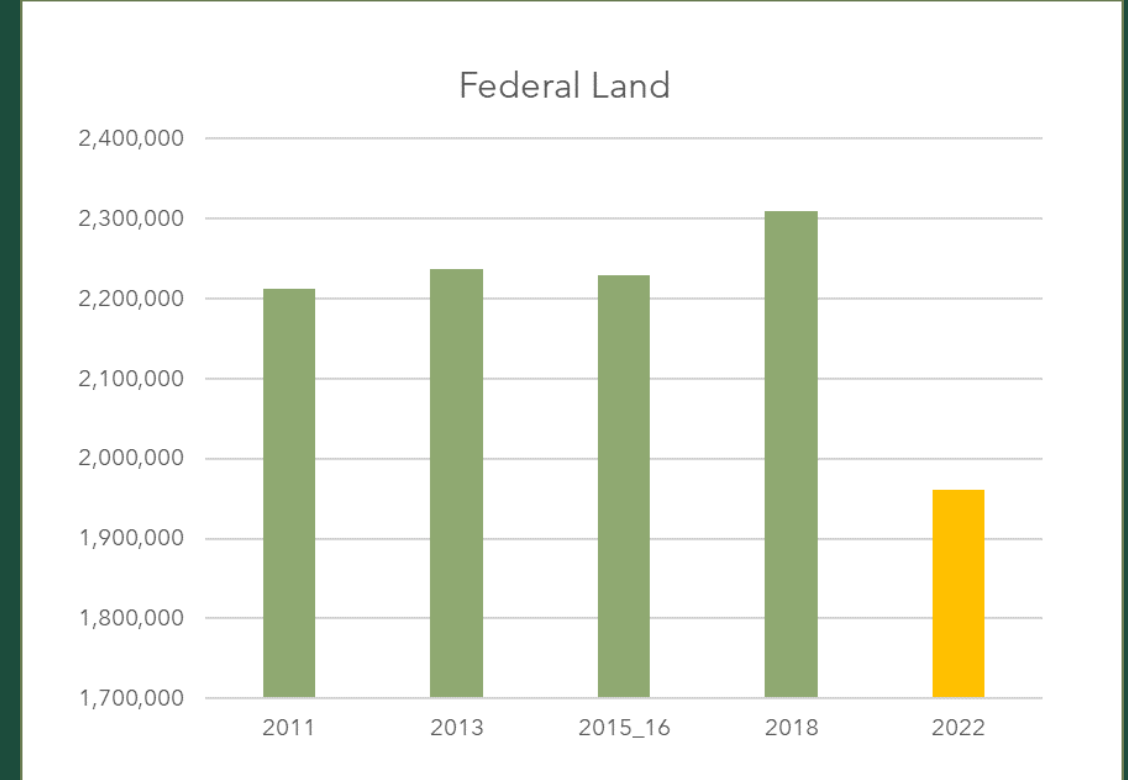
- *Land protection accomplishments*
  - e.g., State purchases x acres for conservation purposes
- *Changes in data sources*
  - e.g., a new data resource is identified that is more comprehensive than what has been used in the past
- *Changes in methods or definitions*
  - e.g., PAD-US changes criteria for what is considered "protected"



# Federally Protected Lands and Improvements in Data

Improvements to the Federal land extent based on changes to PAD-US

- Removal of DoD lands not permanently protected or managed for conservation purposes
- Removal of inholdings
- Mapping federal ownership or protection as opposed to proclamation boundaries
- Removal of reservoirs

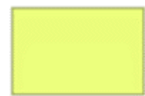


# Comparing 2018 and 2022

## Protected Lands



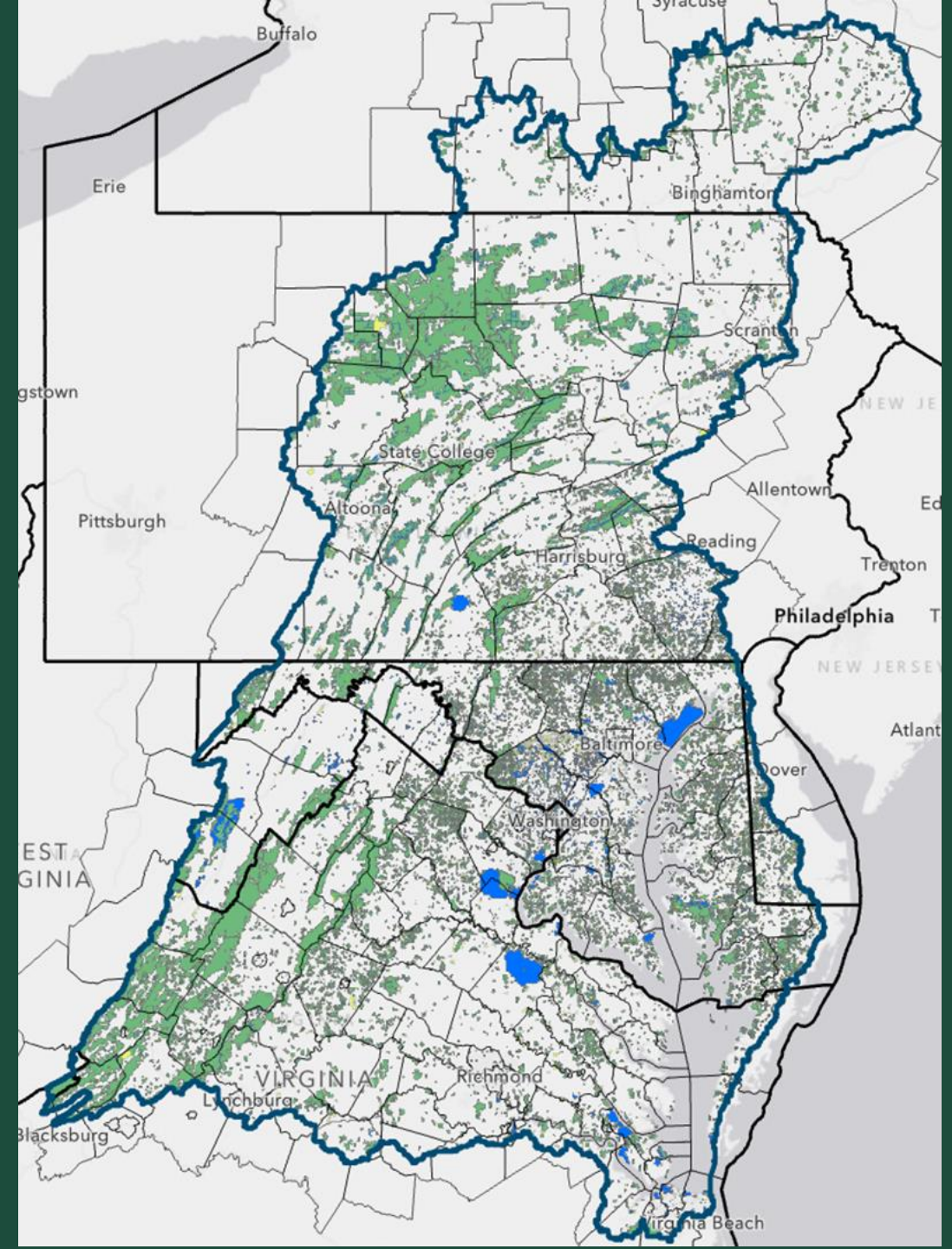
2018

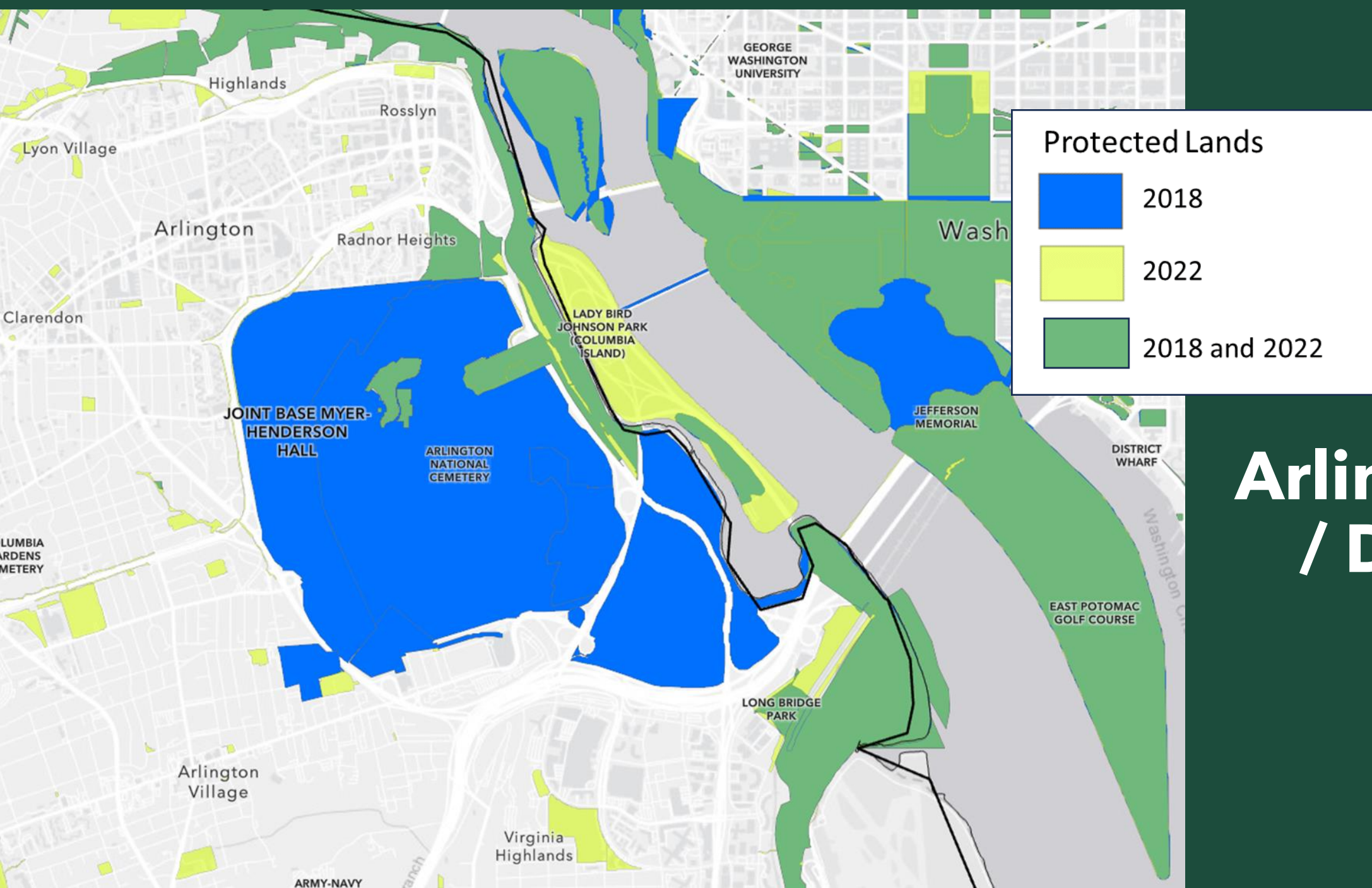


2022



2018 and 2022





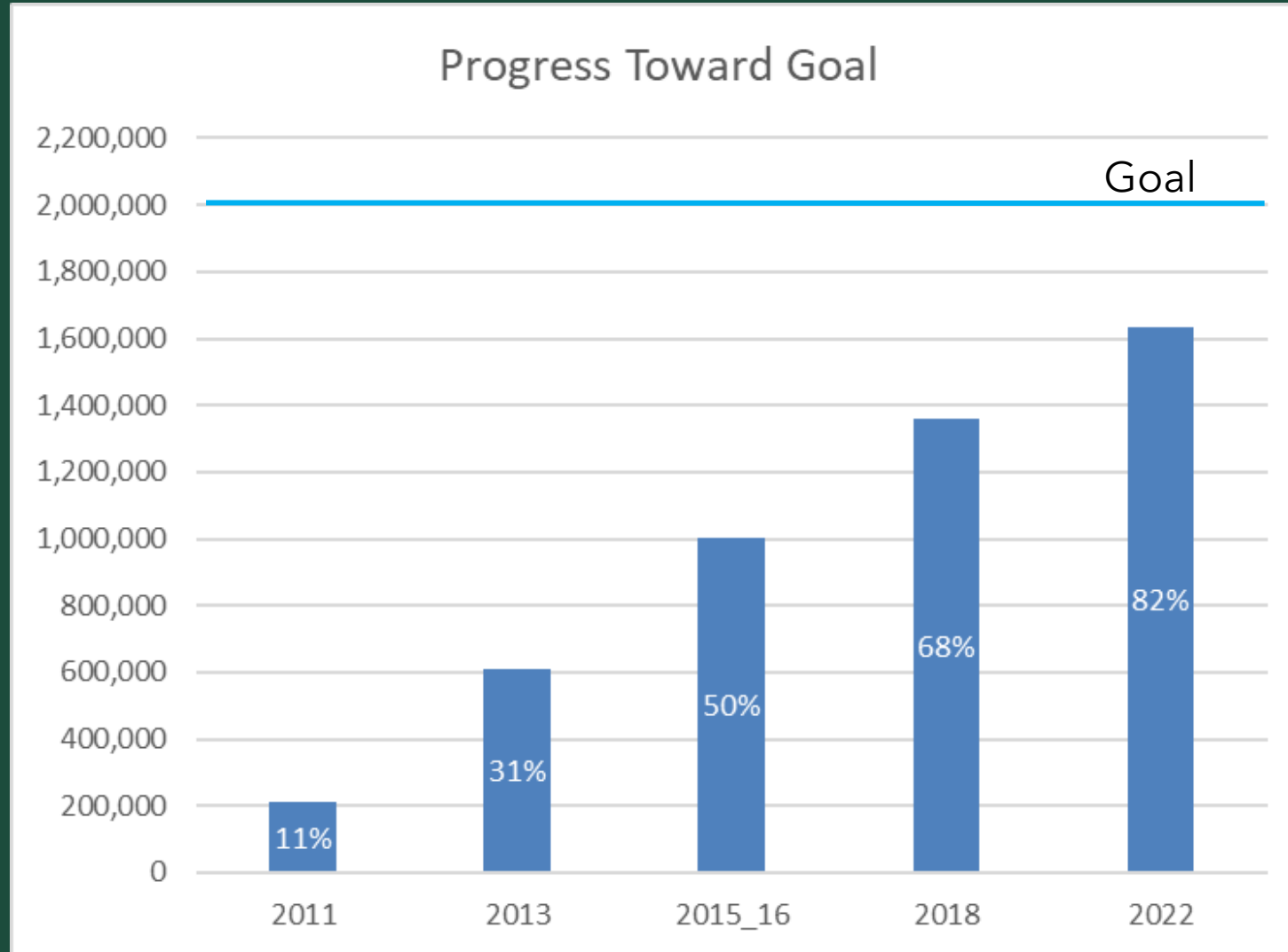
# Arlington / D.C.



# Applied Analysis and Adjustments

- Identify Federal lands that, in 2022, are no longer counted as per PAD-US
- For 2018 and earlier years, remove those same federal lands so they are treated consistently throughout entire period of record

# Post-Retroactive Adjustment



# 2022 Update - Lessons Learned

## What is working well with current method?

Continue to improve methodology for more accurate accounting.

## What are some current obstacles?

- Increased accuracy can lead to counterintuitive results
- Attempts to streamline information collection process only partly successful
- Perceived duplication of effort with PAD-US

## Potential to address obstacles or improve efficiency

- GIS Community of Practice to address consistency and reporting needs
- State data stewards take ownership of state land protection reporting
- Strategic plan to address improvements and integration, with input from jurisdictions, Community of Practice and PLWG
- Potential for improved efficiency in reporting through PAD-US collaboration
- Rely on existing published workflows for easements, other protected lands



# Actions for Future Progress

- Creation of a new Logic and Action Plan (Winter)
  - Identify actions and priorities to further advance land protection
- Creation of a new GIS Community of Practice (Winter)
  - Contacts pulled from the PAD-US System and contacts suggested by State representatives and the Chesapeake Conservation Partnership

