



# Update on Turf Grass Fix

&

# Year 2025 “Historic Trends” Growth Forecast

Peter Claggett, Coordinator, Land Use Workgroup

**CBP WQGIT Call**

**September 11, 2017**

## **Problem:**

**Turf Grass appears to be over-classified in areas that appear to be cropland, pasture, or mixed open.**

## **Causes:**

- 1. Phase 6 land use decision rules on the handling of herbaceous vegetation within federal lands, parks, and residential/commercial land uses.**
- 2. Over-generalized local land use classifications.**

# Results for Chesapeake Bay watershed

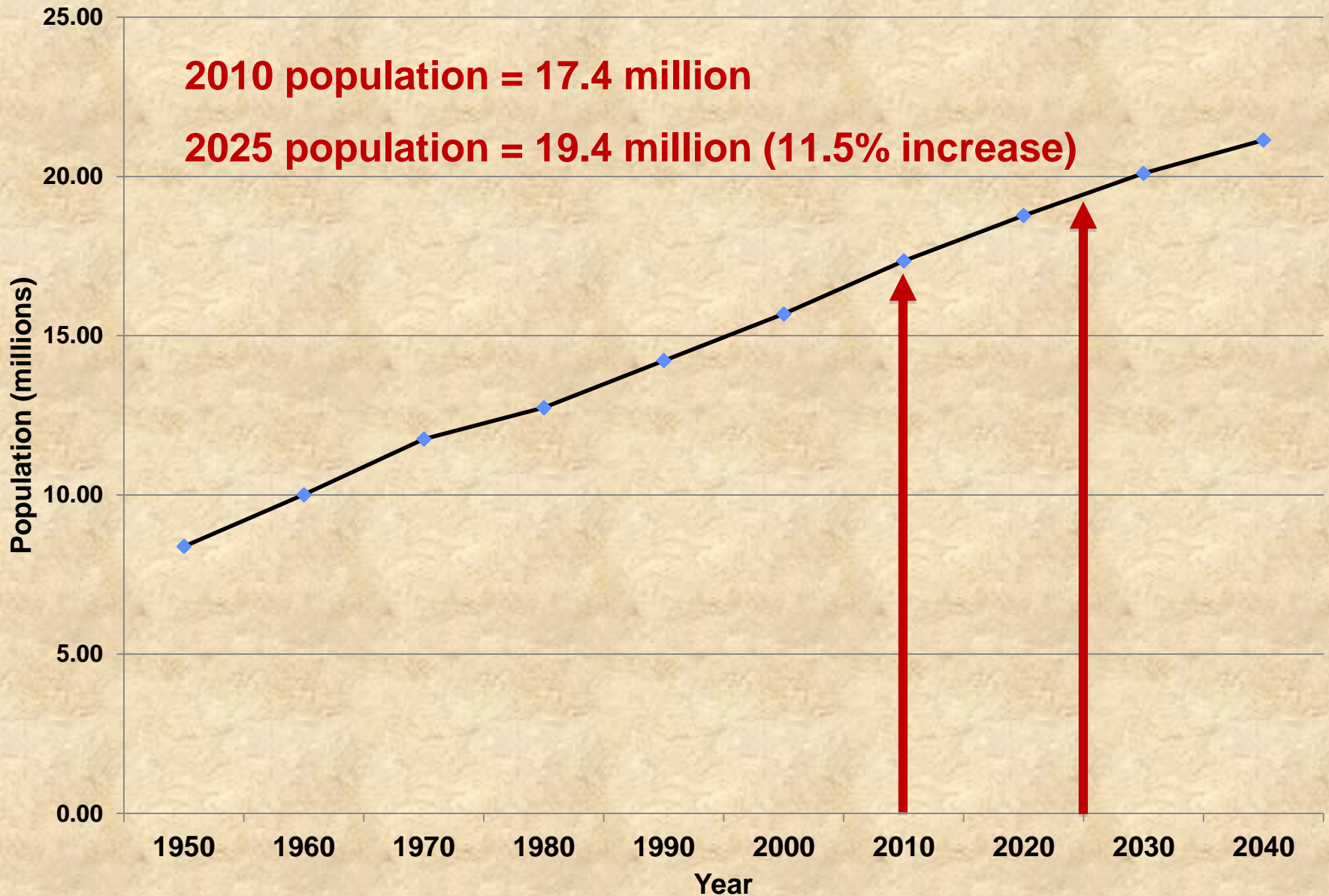
- 116,273 acres of Turf Grass (~ 4% of total)
- + 56,767 acres of Pasture
- + 37,069 acres of Cropland
- + 22,435 acres of Mixed Open

Jurisdiction	Total Turf Change	Jurisdiction's Turf
District of Columbia	0.01%	-0.1%
Delaware	1.2%	-3.3%
Maryland	16.8%	-3.0%
New York	2.1%	-1.4%
Pennsylvania	39.5%	-5.2%
Virginia	33.4%	- 4.3%
West Virginia	7.0%	- 7.8%

# Role of Future Land Use Scenarios:

1. Develop a plausible 2025 land use scenario for consideration as the basis for “accounting for growth” in the Phase III WIPs.
2. Develop a suite of alternative future scenarios to inform CBP Partnership decisions on:
  - crediting land conservation and land use regulatory actions; and
  - identifying forests and farms at risk from development.

## Chesapeake Bay Watershed Population Trends



# Chesapeake Bay Future Scenarios

**“Historical Trends”**: previous patterns of growth replicated into the future.

**“Current Policy”**: growth focused towards local areas zoned or projected to accommodate it.

# Chesapeake Bay Land Change Model

## “Historic Trends” Scenario Update

- Incorporates CBPO protected lands/ easements.
- Incorporates Phase 6 2013 developed footprint.
- Observed satellite change between 2001 – 2011 establishes minimum amount of future decadal change.
- Results computed as changes in land use (e.g., farming vs residential) and land cover (impervious vs turf grass).
- Results summarized by NHDv1, NHDv2, HUC12, Municipalities/Tracts, and Phase 6 model units.

# **“Historic Trends” Scenario Results**

## **District of Columbia 2013 - 2025**

### Demand:

84,060 new housing units

130,379 new jobs

### Impact:

388 acres of greenfield development:

206 acres impervious

52 acres turf grass

0 acres mixed open

131 acres forest

100% change in pop on sewer



# **“Historic Trends” Scenario Results**

## **Delaware 2013 - 2025**

### Demand:

55,339 new housing units

49,133 new jobs

### Impact:

41,709 acres of greenfield development:

- 10,309 acres impervious

- 27,771 acres turf grass

  - 163 acres mixed open

  - 3,466 acres forest

67% change in pop on sewer

# **“Historic Trends” Scenario Results**

## **Maryland 2013 - 2025**

### Demand:

248,547 new housing units

413,789 new jobs

### Impact:

161,135 acres of greenfield development:

- 40,380 acres impervious

- 96,180 acres turf grass

  - 744 acres mixed open

- 23,831 acres forest

66% change in pop on sewer

# **Chesapeake Bay Land Change Model**

## **“Current Policy” Scenario**

- **Incorporates local zoning:**
  - **Conservation / Highly-restricted growth**
  - **Residential**
  - **Commercial**
  - **Mixed**
- **Scheduled for Completion: 09-15-17**
- **LUWG Meeting and Review: 09-20-17**