

# Hillandale Layer Population

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# November Action items

- 1) Examine potential data collection changes in states
- 2) Add manure to smoother fertilizer and crop need figures
  - 1) Examine projection method for non reporting jurisdictions
- 3) Dig deeper into Delaware fertilizer data behavior
- 4) Supply County Level crop need data
- 5) Compare national and Chesapeake watershed scale fertilizer and crop data trends
- 6) **Compare Hillandale Populations vs CAFO permit numbers**

**Yellow Highlight** = decisional item

# Item 6 Provide Hillandale Populations vs CAFO permit numbers

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Potential  
data  
sources

Hillandale  
supplied  
Populations

Adams County facilities  
1996-1999 interpolated

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York County facilities 1996-  
2000 interpolated

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CAFO permit  
numbers

Four, layer sites in Adams

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One, pullet site in Adams

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Two, layer sites in York

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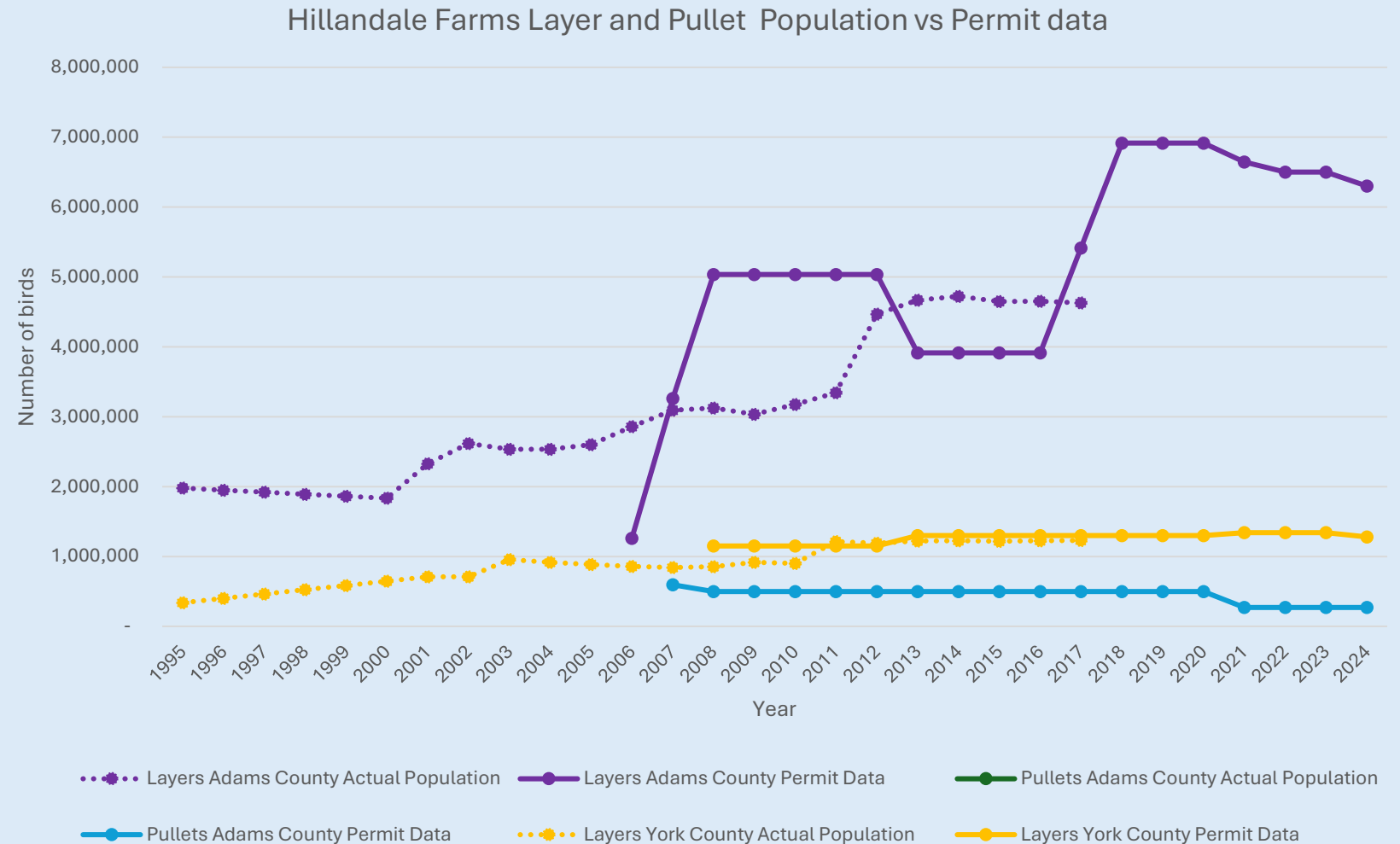
# Item 6 Provide Hillandale Populations vs CAFO permit numbers

- Potential data sources

- Hillandale supplied Populations\*

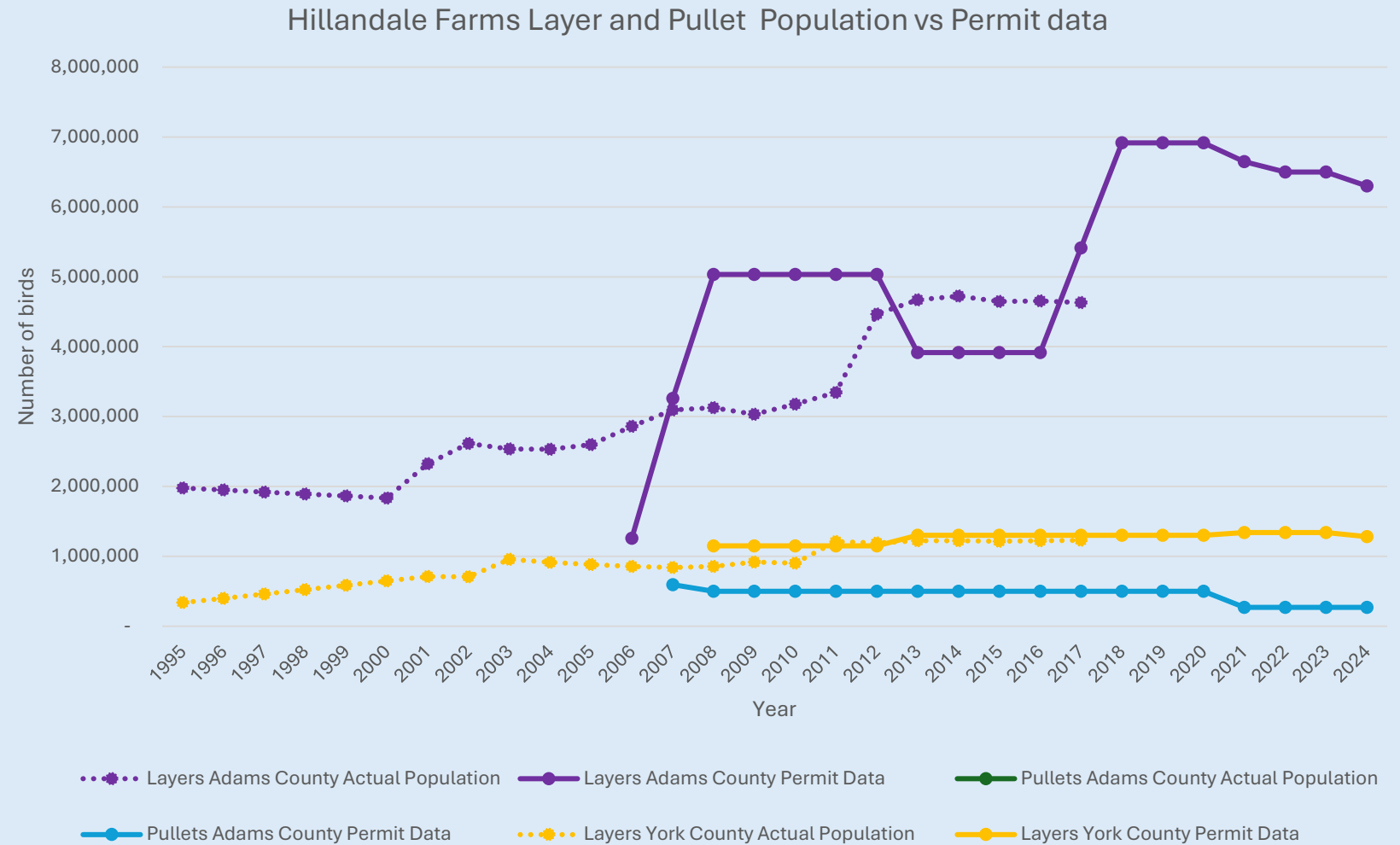
- \*NOTE Adams County facilities 1996-1999 and York County 1996-2000 facilities are interpolated

- CAFO permit numbers



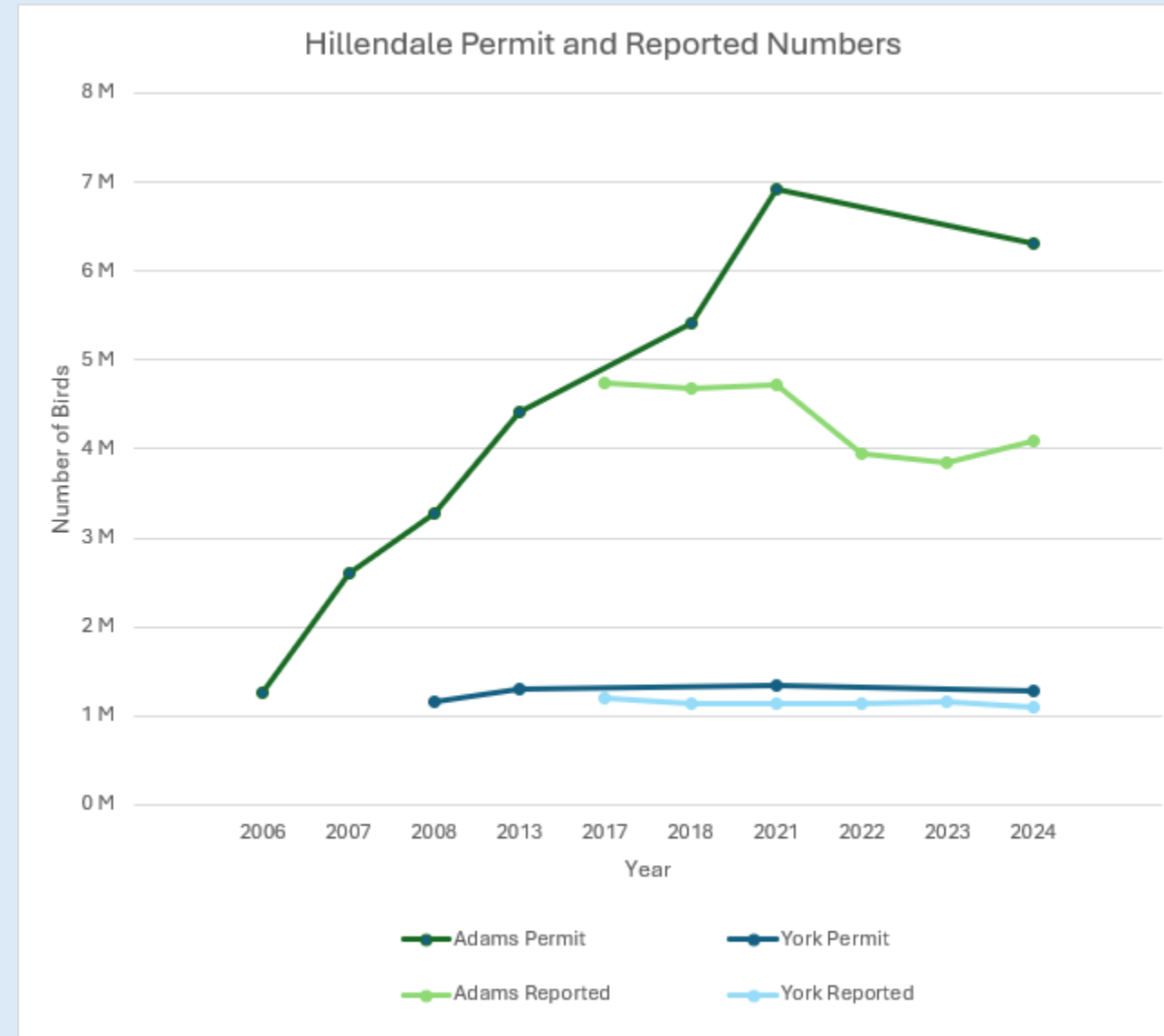
# A few notes

- 2013 CAFO drop In Adams County
  - Two sites rewrote permits with reduced capacity



# Additional data was supplied

- CAFO permit values
  - Inclusive of pullets
- CAFO Populations from compliance-based reporting verified with inspections
- Note\* figure includes pullets within permit numbers



# What is the plan?

- Composite population record
  - 1996-2016 = Hillandale Supplied layer population extrapolating missing points
  - 2017-Present = PA supplied CAFO reported/verified populations
- Additional data to be submitted annually and incorporated during appropriate updates

# Decision Proposal

1) We should incorporate missing Hillandale Layers into the Phase 7 model based on a composite dataset utilizing Hillandale and CAFO reported populations.

## Consensus Continuum





# Next steps:

1. Application algorithm updates
  1. Process of replacing organic nutrients with inorganic
    1. Should we “cap” this?
    2. Base on crop need?