



Agriculture-related classes in 2024 edition of Chesapeake Bay Land Use/Land Cover Data

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CBP Ag Workgroup | 17 September 2023

1-meter Land Use/Land Cover Data Project

Overall timeline - 2024 edition



Rule Revisions

Meeting with relevant workgroups, final input data decisions, testing major rule revisions



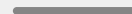
QA Testing/ Draft Production

Tweaking major rule revisions, testing workflow and environments, and initial production run for full geography



Stakeholder Review/ Minor Revisions

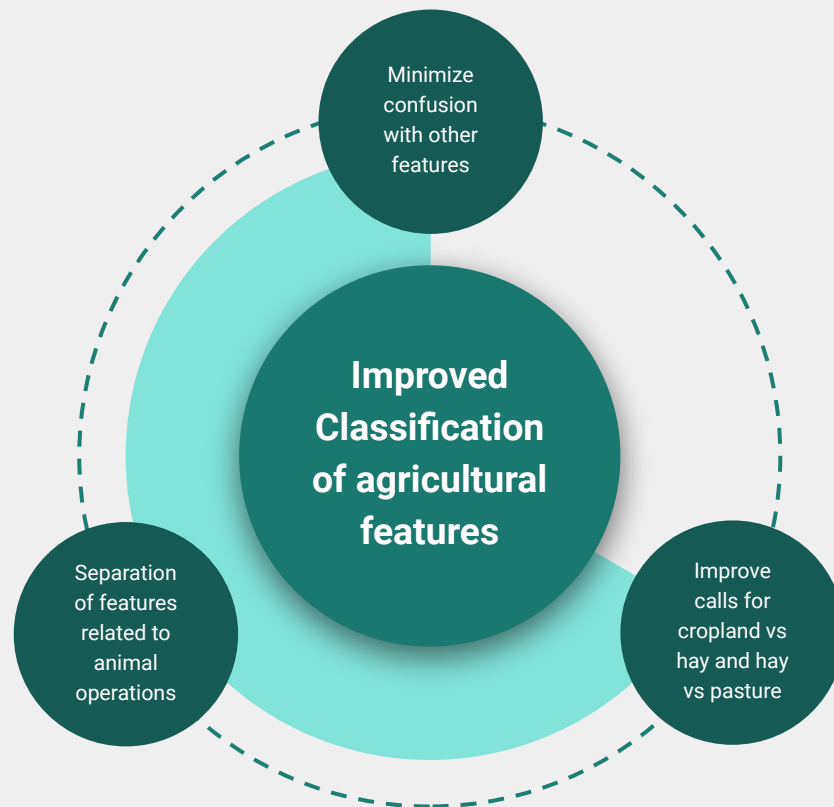
Share preliminary data with stakeholders for review, perform QA checks, revise model based on feedback and internal review



Final Production/ Documentation

Complete final production, compile metadata and complete model documentation, package data for delivery

Ag-related improvements for 2024 edition



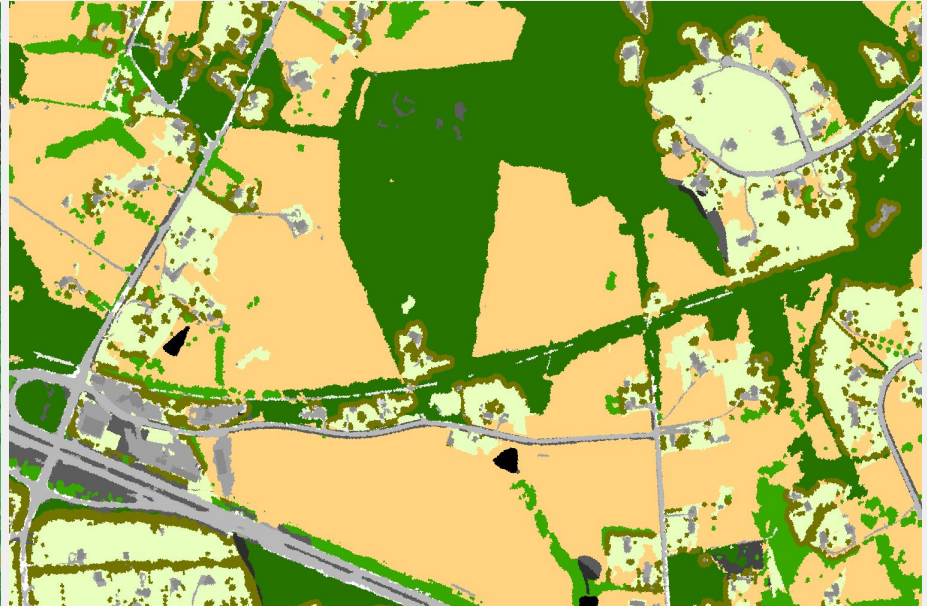
Pasture/Grasslands and Hay

- Mapped classes in 2022 edition:
 - Pasture/Hay Barren
 - Pasture/Hay Herbaceous
- Planned classes for 2024 edition:
 - Pasture Barren
 - Pasture Herbaceous
 - Hay Barren
 - Hay Herbaceous
- Input Data
 - CDL
 - NLCD
 - Spectral attributes for individual objects/segments from NAIP/LiDAR
 - NDVI, Imagery Brightness, Texture
 - Other suggestions?

Reclassification of small grain production from hay to crop classes

Barley
Durum Wheat
Spring Wheat
Winter Wheat
Dbl Crop WinWht/Soybeans
Rye
Oats
Millet
Speltz
Canola

Wheat, Hay and Grassland/Pasture as a single class



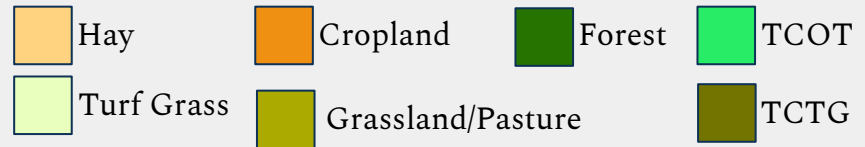
NAIP with CDL overlay



Pasture/Grasslands and Hay as separate classes



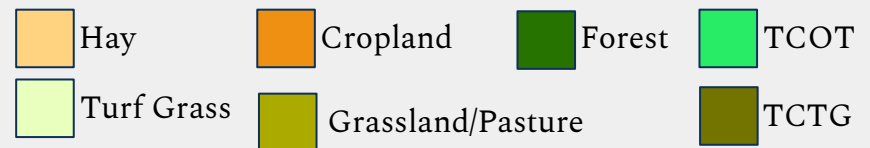
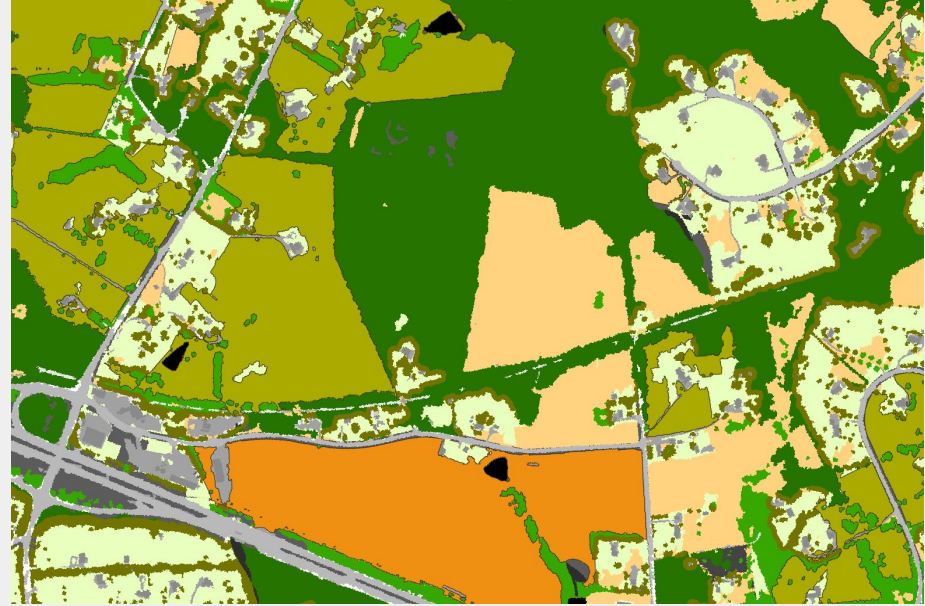
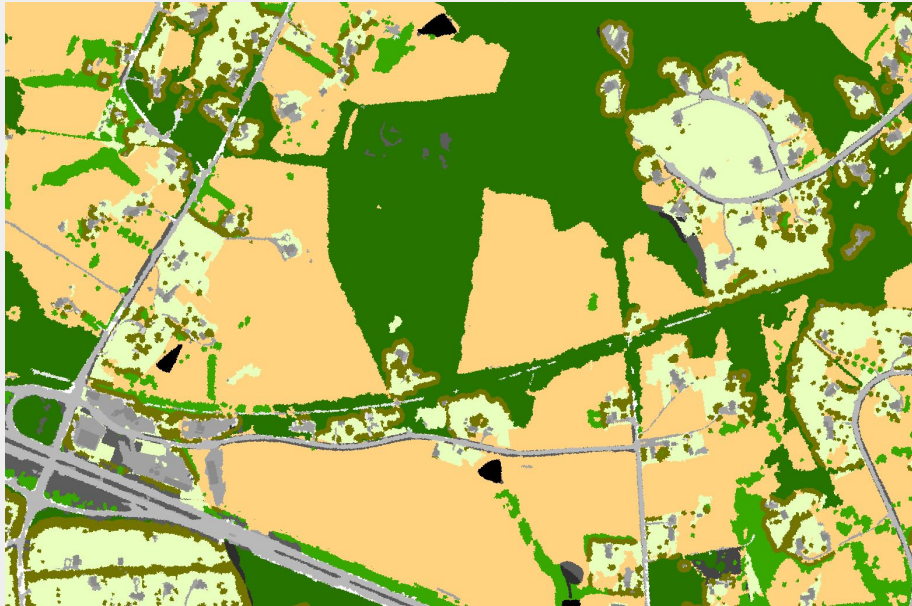
NAIP with CDL overlay



Example Results

2022 ed

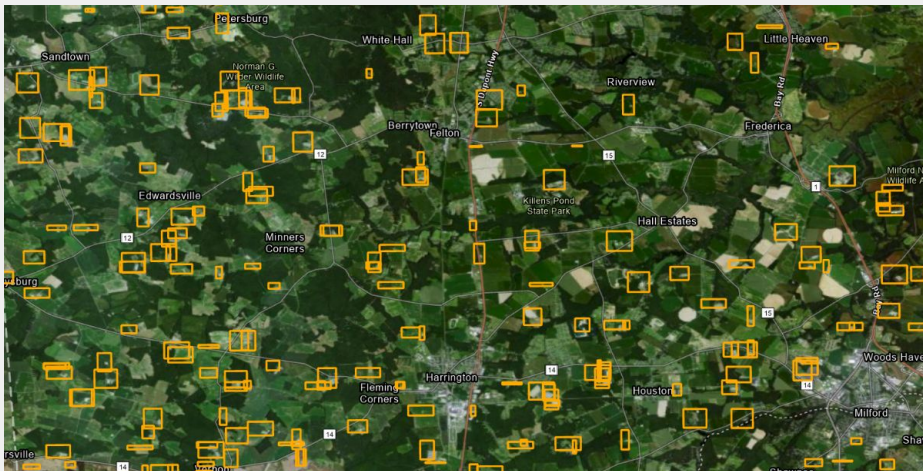
2024 ed

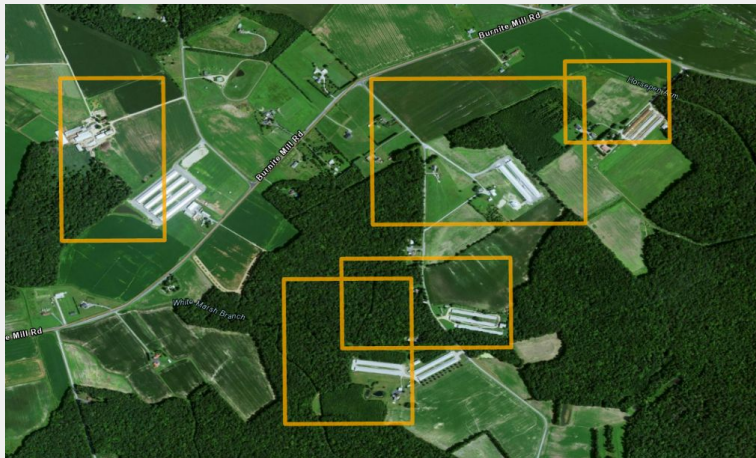


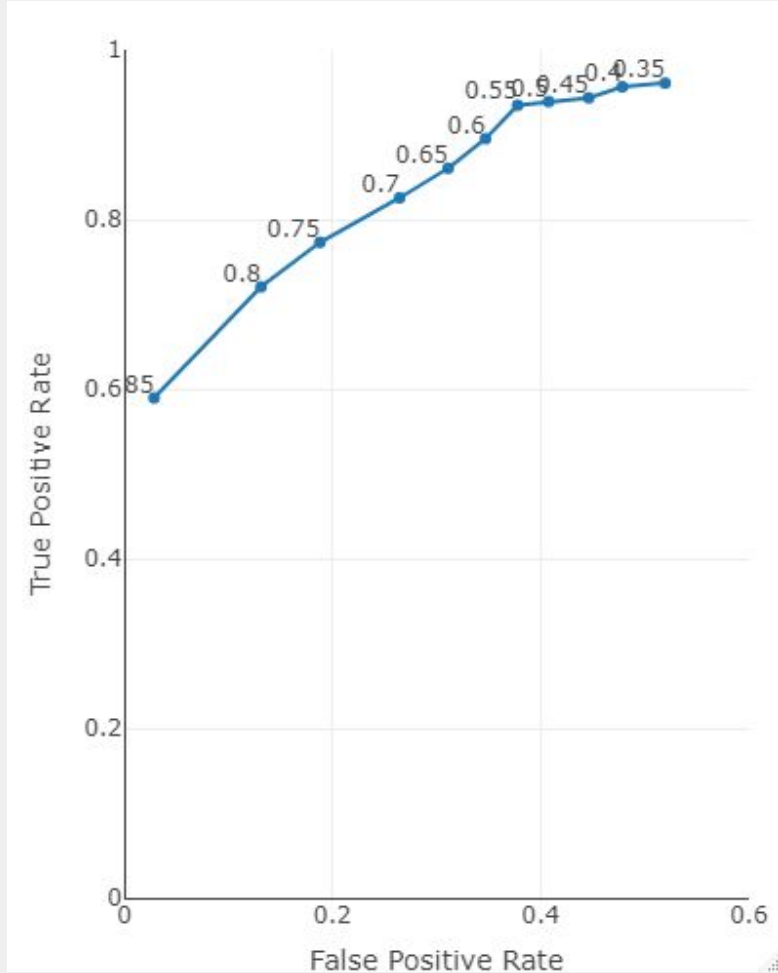
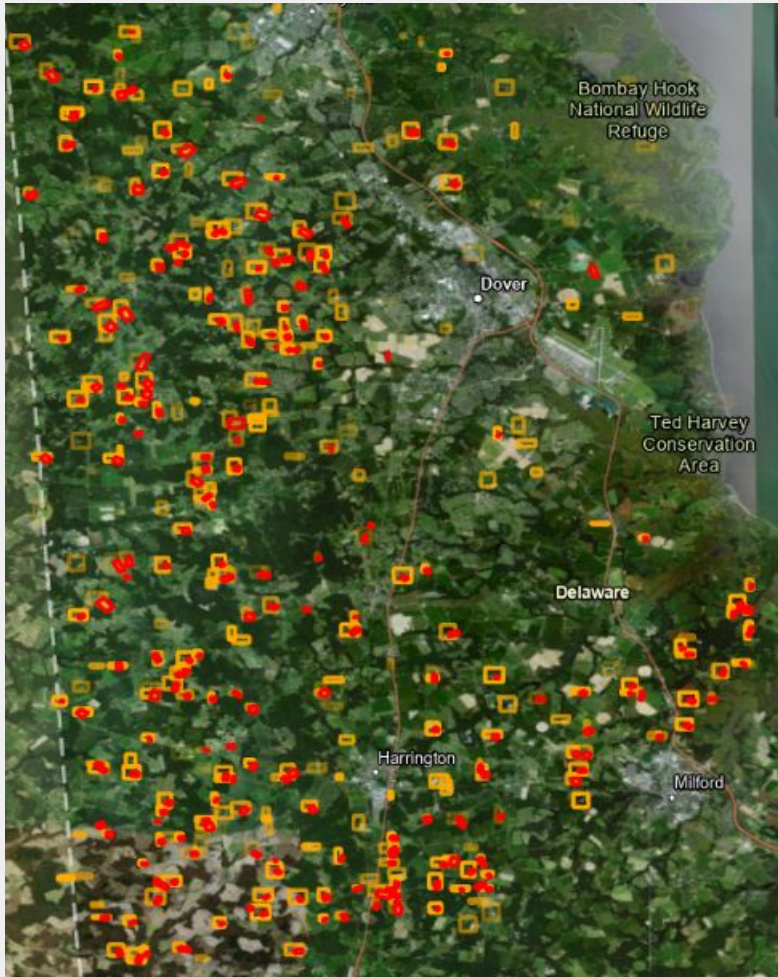
Goal: automate the location of
animal feeding operations using
NAIP imagery

Locating animal operations with AI

Outcome: differentiate and
account land use more accurately







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Questions?
Feedback?

We'll be
back in Sept!