

Final Phase 6 Land Use Database Project Plan

May 4, 2016

Peter Claggett, Fred Irani, Quentin Stubbs, Renee Thompson
US Geological Survey
Eastern Geographic Science Center

Overview

USGS Process Development Status

Overall Schedule Completion Estimate



High Resolution LU Process

- Dec '15 May '16 Automate Steps to:
 - Perform Cross Walk to Create 13 Classes at 1 Meter Resolution:
 - Impervious Road, Impervious Non-Road
 - Tree Canopy over Impervious, Tree Canopy over Turf Grass
 - Turf Grass
 - Forest
 - Mixed Open
 - Pasture, Crop
 - Tidal Wetlands, Floodplain Wetlands, Other Wetlands
 - Water



Data Cross walk

Chesapeake Conservancy/ Phase 6 CBP **Worldview Solutions Inc.** <u>UVM</u> Water + NWI + NHD Water Water Impervious Roads Impervious Roads **Impervious** Impervious Non-Roads Impervious Structures Impervious Other Forest Tree Canopy (TC) Forest TC over Turf Grass TC over Roads Trees Harvested/Disturbed TC over Structures TC over Impervious Scrub-shrub Scrub-shrub Open Space Barren Barren **Emergent Wetands** Tidal Wetlands Wetlands + NWI & State data + Modeled occurrence Low vegetation (herbaceous) **Turf Grass Turf Grass** Pasture Pasture Cropland Cropland



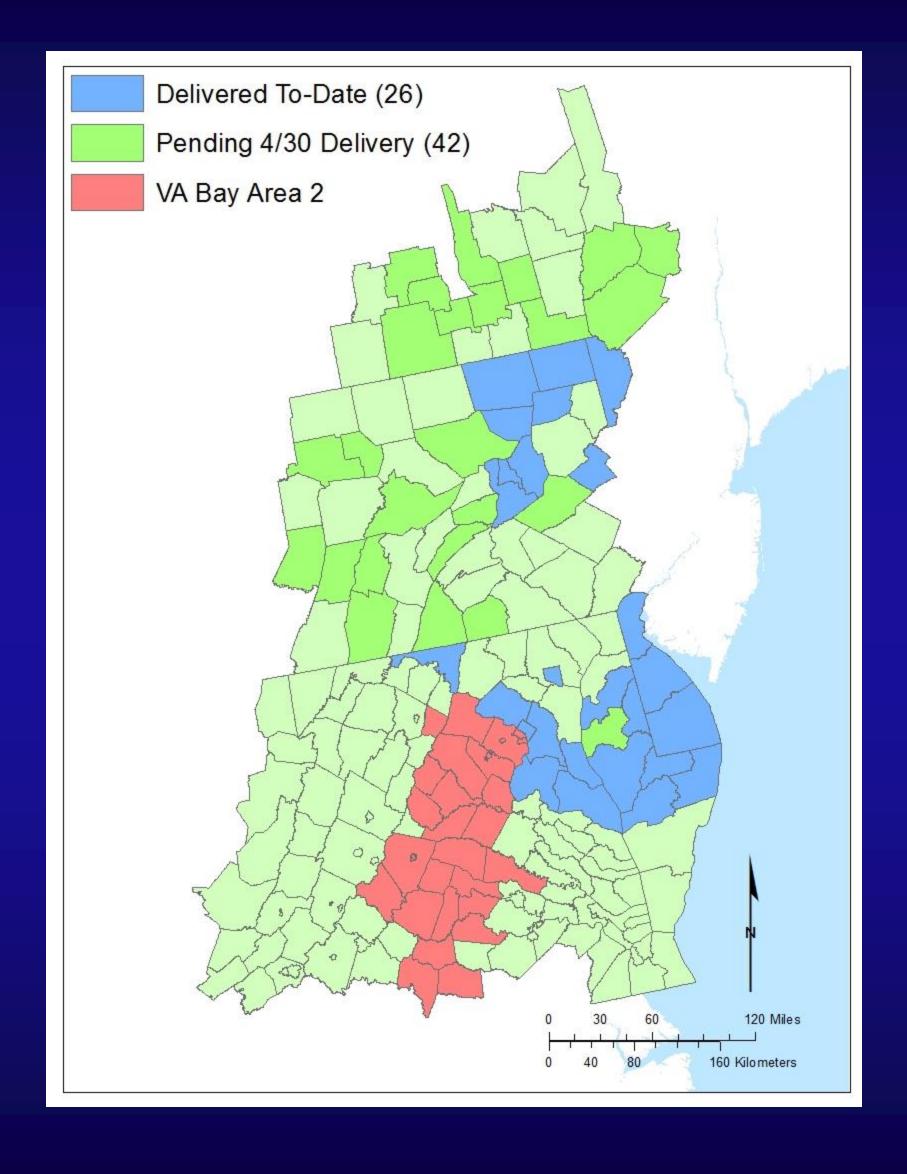
High Resolution LU Process

- Automate Post Processing Steps to:
 - Aggregate Individual Classes to 10m Resolution
 - Add Tree Canopy to Virginia (August)
 - Add PA Wetland Data to PA (August)



May 2016 Data Delivery Status

 All Delivered LC Data has been Separated into Individual Class Masks (1,null) and Configured by County Using a Regional Model





Process Model Status

- Completed Regional Utility Models
 - Extract State Counties
 - Buffer County Shapes
 - Create all Land Cover Masks for Each County
 - Create All County Impervious Non-Roads Class
 - Extract Selected Regional NavTec to Counties

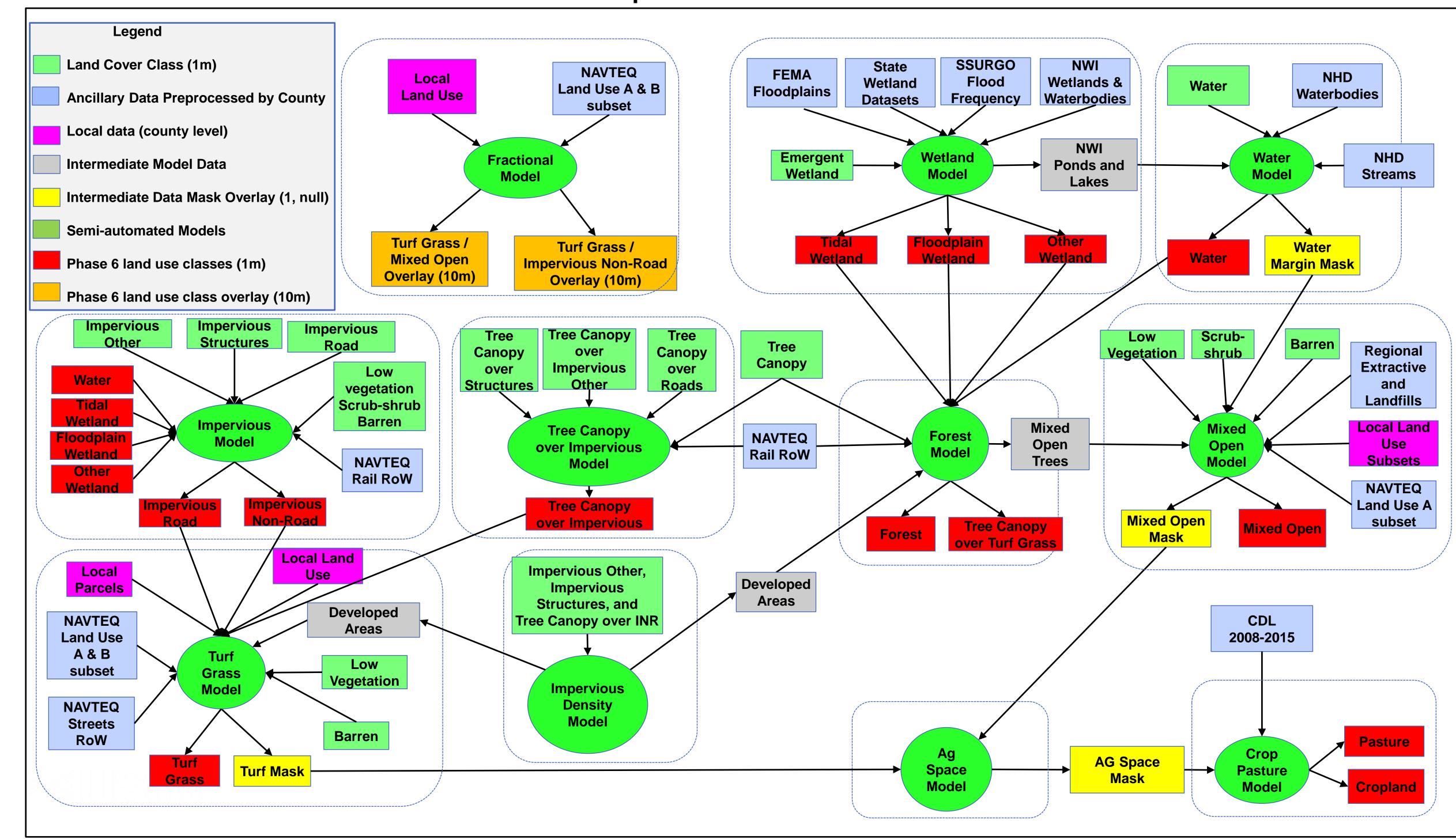


Process Model Status

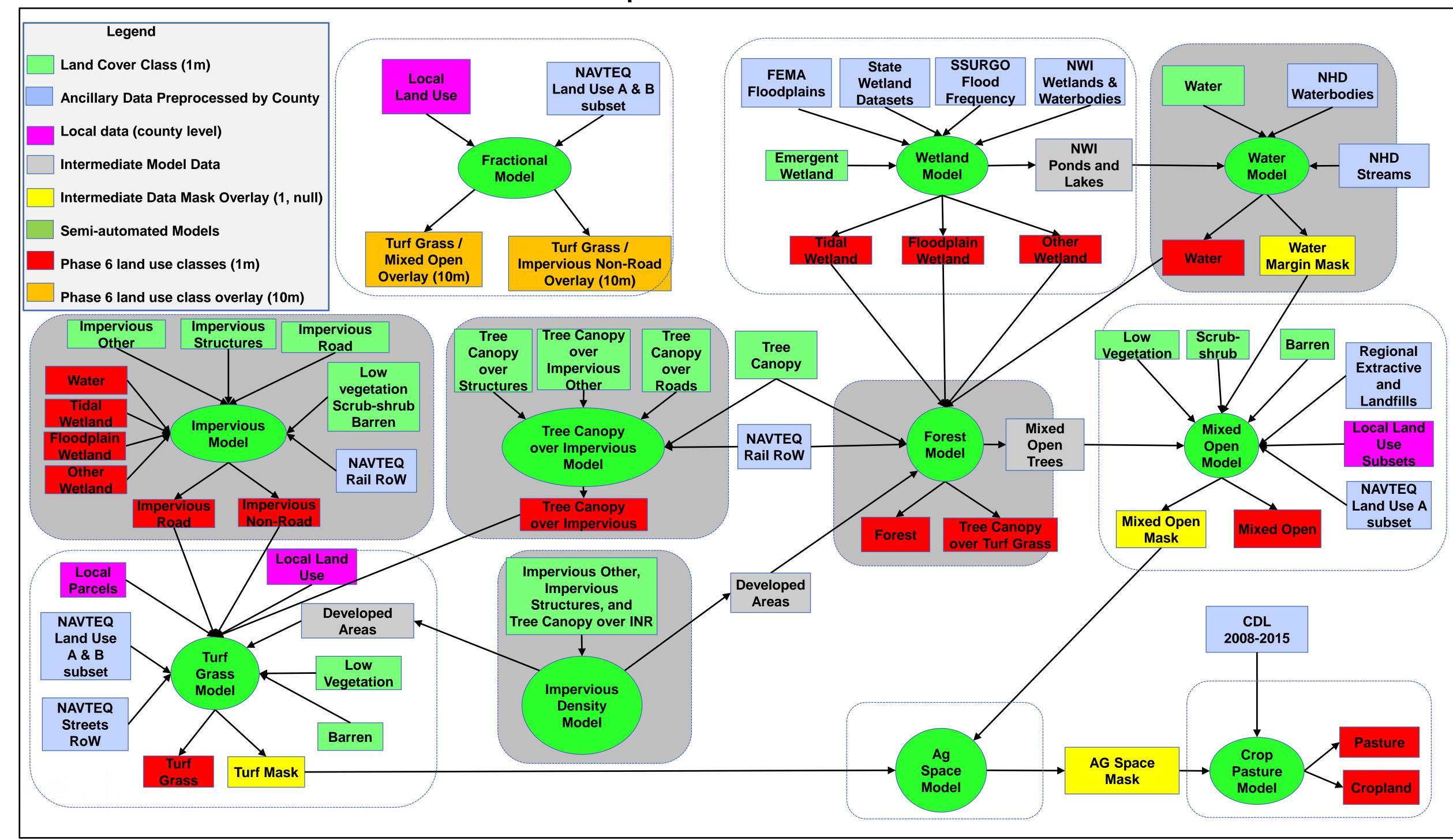
- Regional Utility Models Still Pending
 - Create Regional/Co Street RoWs
 - Create Regional/Co Wetlands
 - With Water Bodies
 - Separate to Counties



Phase 6 Land Use Development Process Last Modified 050416



Phase 6 Land Use Development Process Last Modified 050416



Production Schedule

- Models Still to be Finalized :
 - Mixed Open
 - Turf Grass
 - Wetland
 - Ag Space
 - Crop / Pasture
 - Fractional



Outstanding Production Issues

- In Need of LUWG Guidance:
 - Fractional Model Questions
 - Extractive Land Use
 - Application of Local Land Use Classes and Parcel Data



Current Best "Final Delivery" Estimate

October 2016 To Finish <u>Everything</u>



Contact Information:

Fred Irani, USGS- EGSC
Chesapeake Bay Program Office
410 Severn Ave, Suite 109
Annapolis, MD 21403

410-267-9845
firani@usgs.gov
firani@Chesapeakebay.net

http://www.chesapeakebay.net http://chesapeake.usgs.gov/ http://egsc.usgs.gov/

