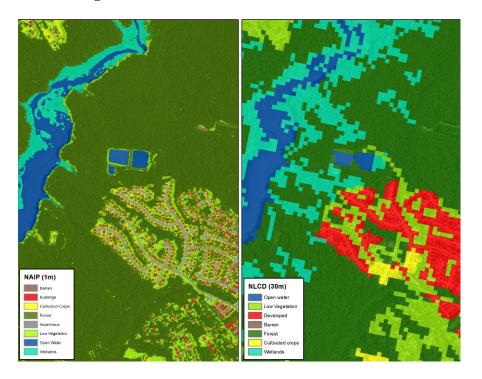
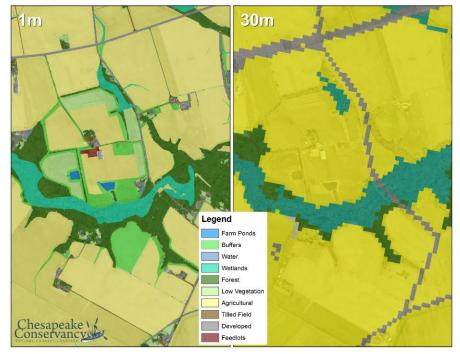
## Supporting Local Decision Making: Why the Partnership's Phase 6 Chesapeake Bay Watershed Model Can Now Do This

## **Built on High Resolution Land Cover Data**



The left hand side image illustrates the 1 meter resolution land cover data for a suburban neighborhood, being mapped for the entire watershed for use in the Phase 6 watershed model. The right hand side image is the 30 meter resolution land cover data used in the Phase 5 watershed model.



The left side image is 1 meter resolution of agricultural lands being used in the Phase 6 watershed model contrasted with 30 meter resolution used in the prior Phase 5 version of the model.

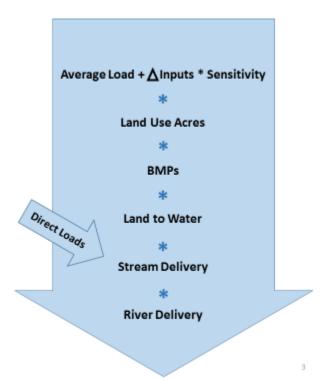
## **Incorporates Local Land Use Data Acquired from Local Jurisdictions**

- The Chesapeake Bay Program Office's Land Data Team, headed by Peter Claggett, USGS, contacted every single county and municipality in the watershed over a two year period.
- They were successful in acquiring local land cover, land use, zoning or parcel data from over 85 percent of the counties and municipalities across the six states and the District.

## Calibrated Using Three Decades Worth of Monitoring Data at Hundreds of Stations Across the Six State Watershed

• Water quality and stream flow data from over 300 stations located across the six states and the District were used to ensure the Phase 6 watershed model was accurately simulated water quality conditions since 1985.

A Greatly Simplified Approach to Modeling the Bay's Watershed Allowed for the Incorporation of State-Specific, Even Local Oriented Input Data AND to be Run by Local Partners



- A much simplified approach to modeling means A LOT more partners can look at the results and understand them because the basis of their calculation is limited to the above <u>six</u> component parts!
- As a direct result of this simplification of the model, this version of the Partnership's watershed model now contains local input data reflecting:
  - Hundreds of cropping patterns reflective of the diverse nature of agricultural production areas within and across the six states supported by each state's respective land grant university's nutrient application recommendations
  - o County specific agricultural animal population estimates
  - o Locations of hundreds of managed impoundments and reservoirs
  - o Locations of thousands of septic system and on-site waste treatment systems
  - And the list goes on and on and on...the on-line version of the Phase 6 Watershed Model documentation contains that entire listing.
- And the Phase 6 watershed model will be available in an on-line version available to all of us so county conservation districts, cities, townships, federal facilities, watershed organizations and others can use this wealth of information to plan, cost out, and see the local benefits of their pollution reduction actions.