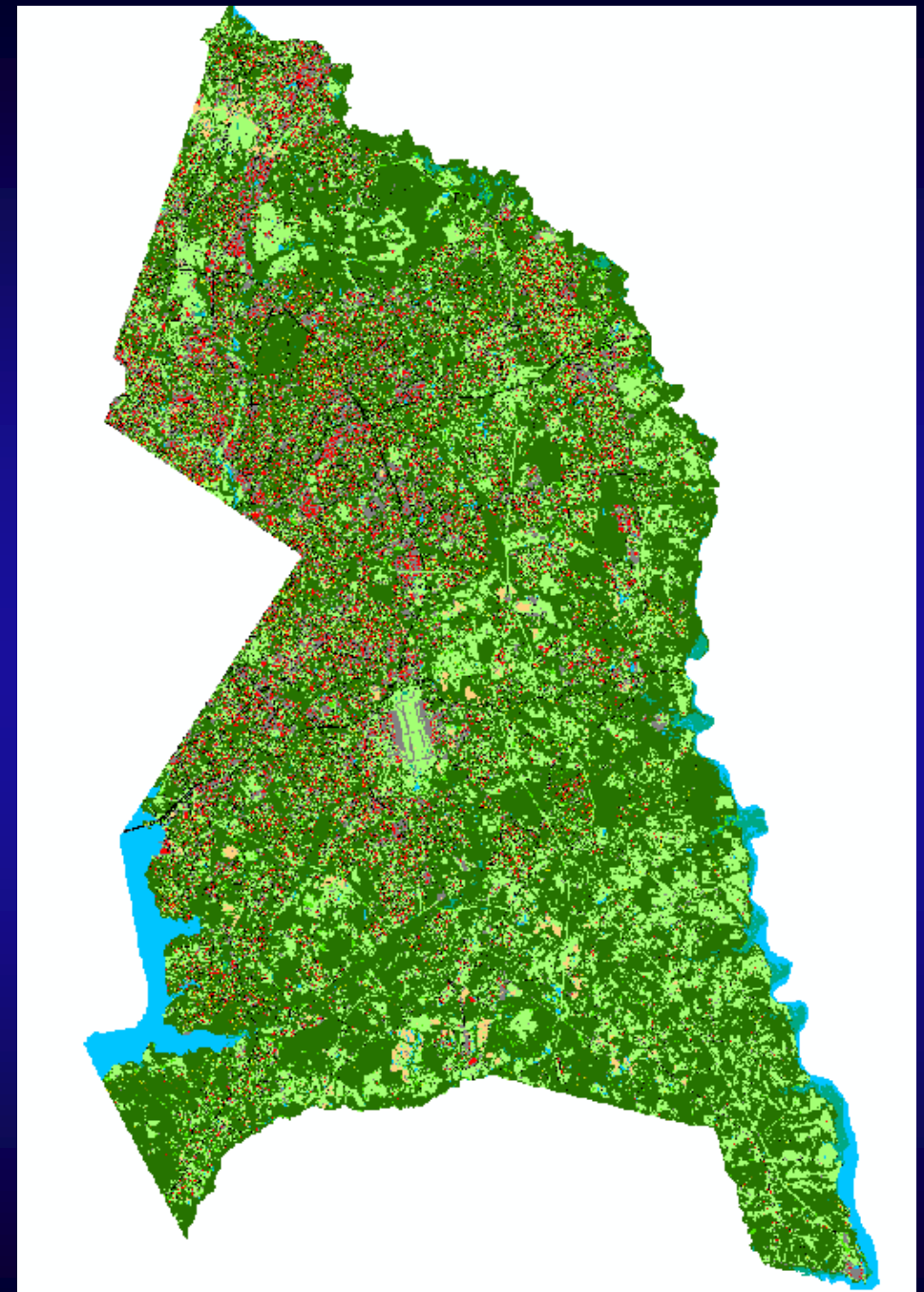
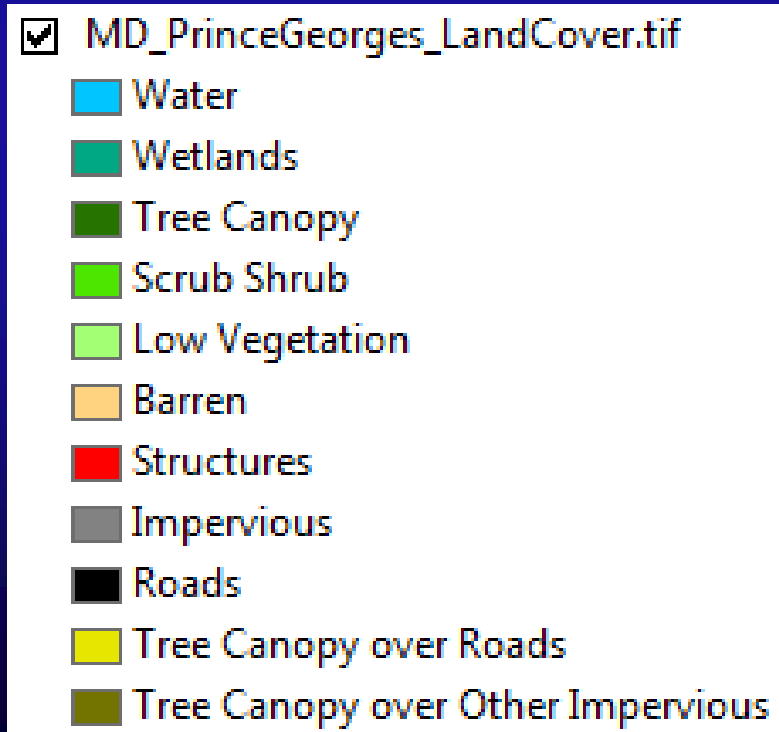


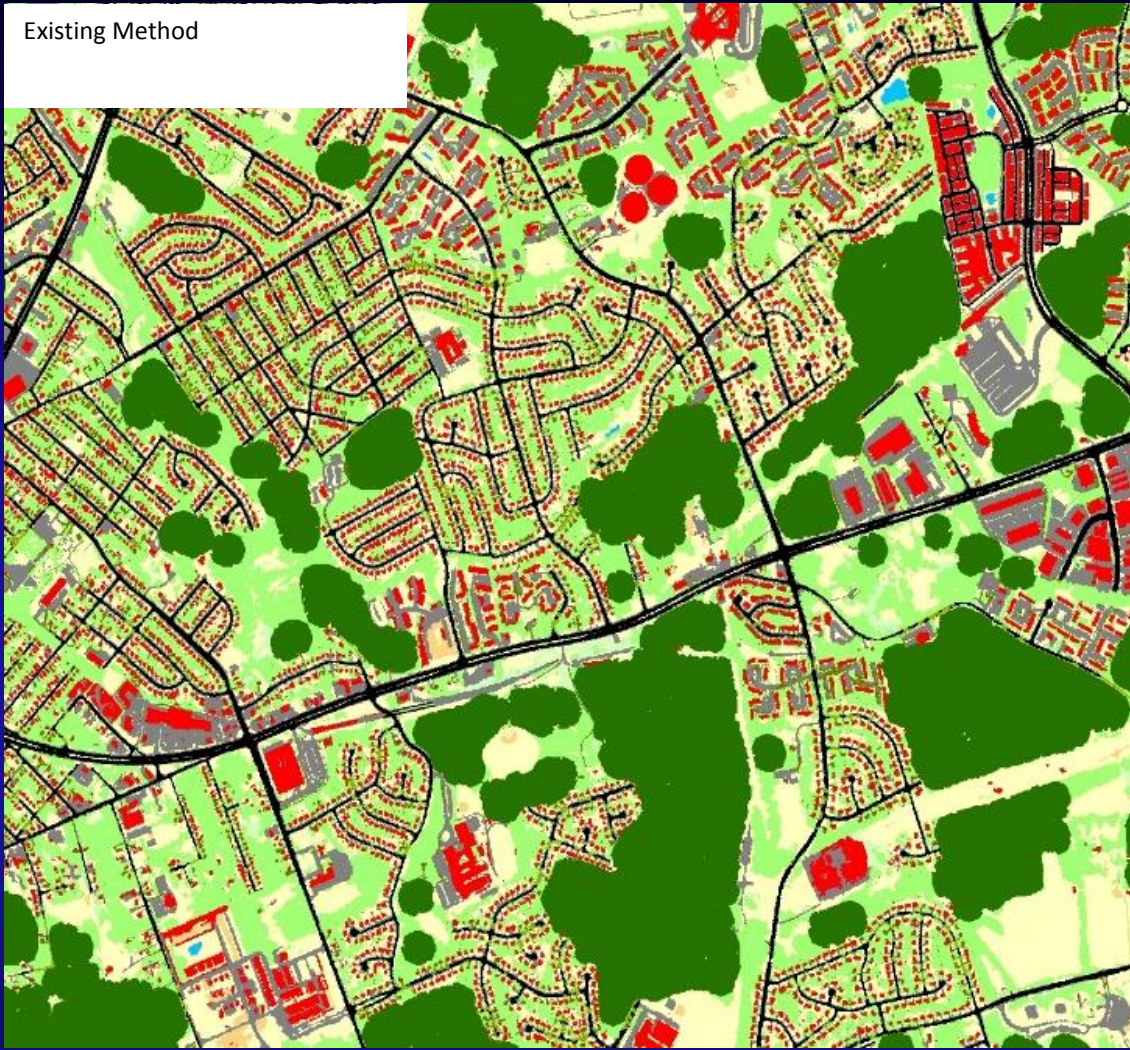
## P 5.3.2 Vs. Proposed “P 6 Final v3” Forest and Tree Canopy Methodology

- All Phase 6.0 methods create greater tree cover
- Previous areas classed as *turf grass* or *impervious* will be classed as:
  - “Tree Canopy over Turf” or “Tree Canopy over Impervious”
- P 5.3.2 left large, unexplainable, contiguous gaps that should have been forest
- New method works to identify what should be “tree canopy” and what is left is “forest”
- Allows for more nuance, a home in the woods will allow the “forest” to go right up to the edge, but a subdivision with adjacent trees will become “trees over turf”

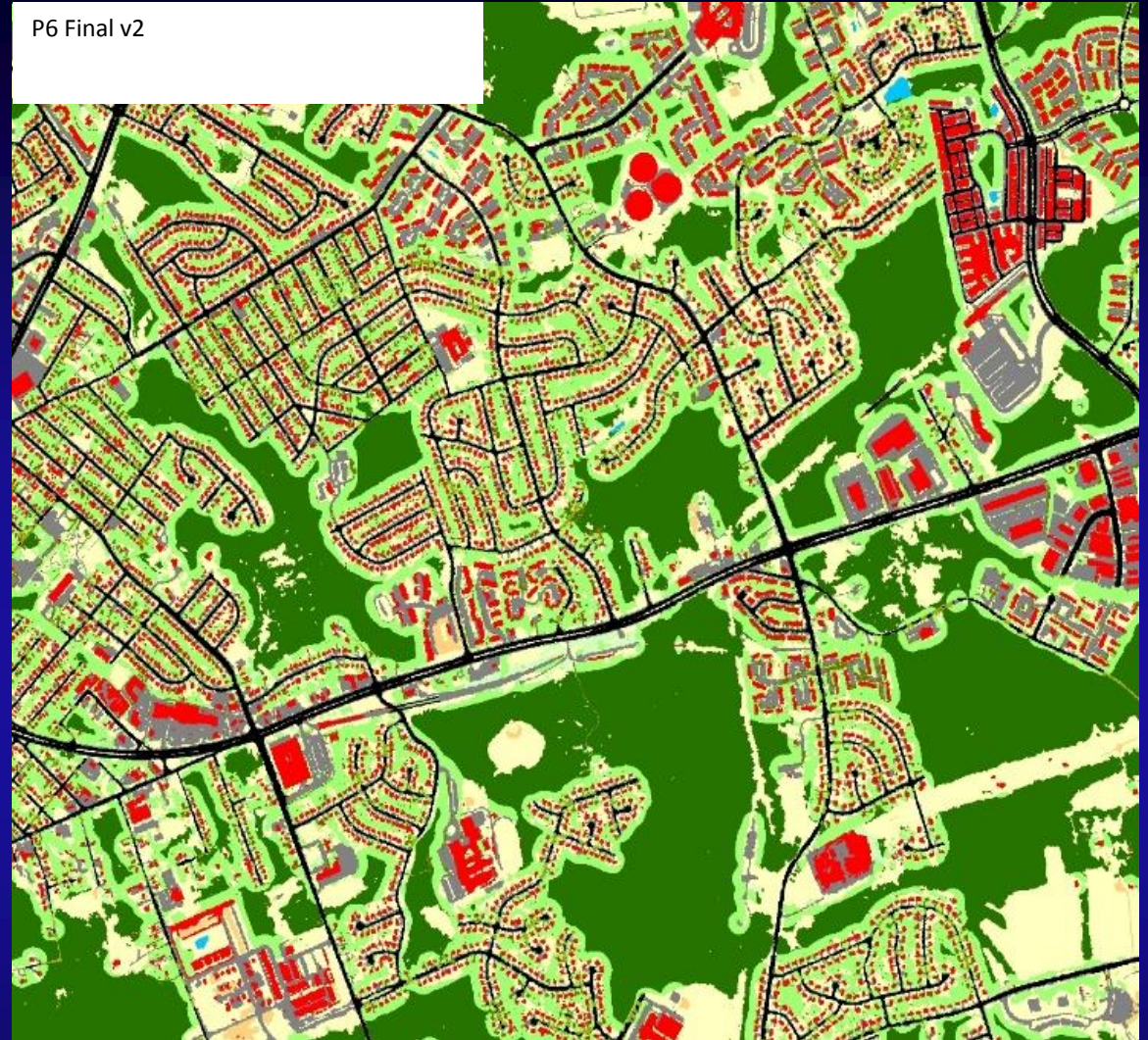




Existing Method

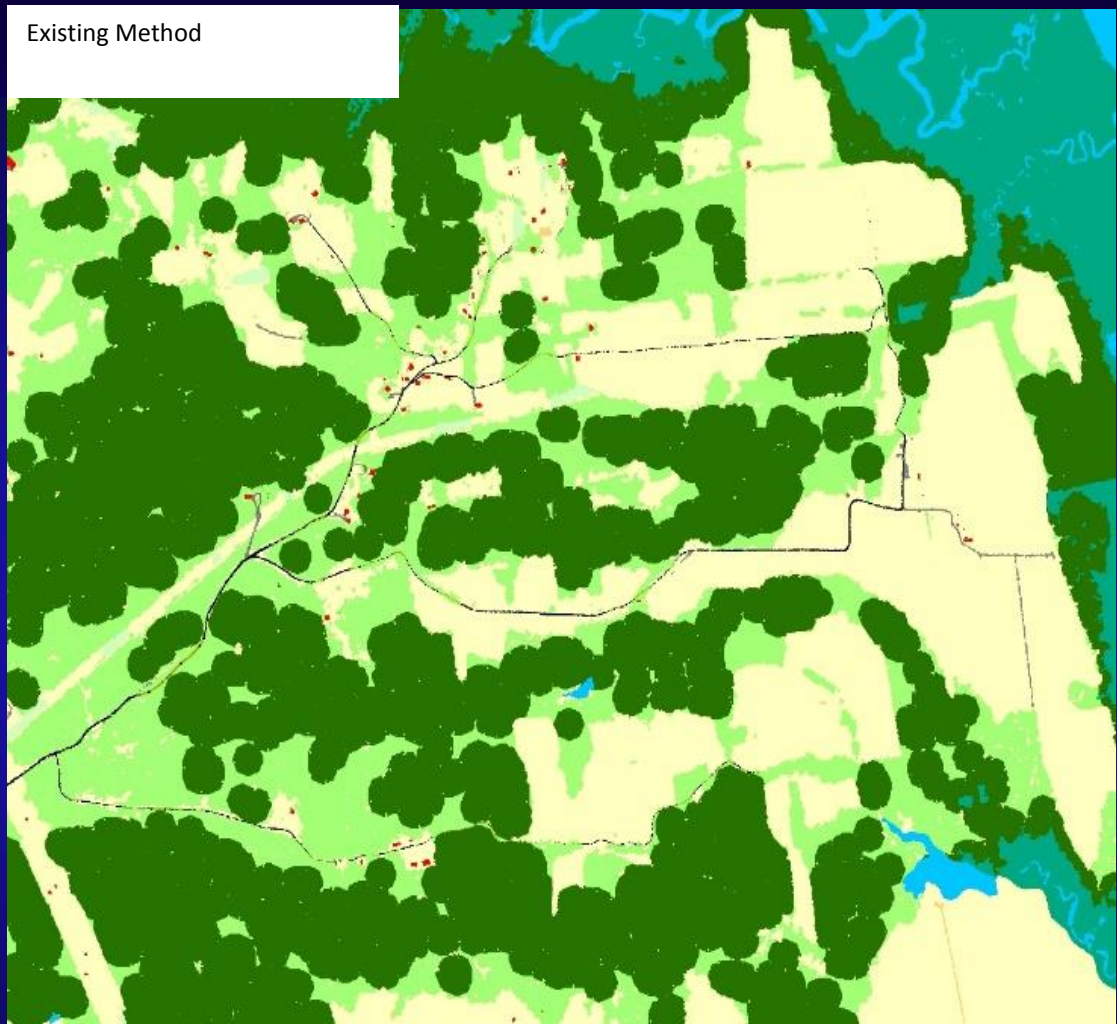


P6 Final v2



**Figure 1.** Existing (P6 Final v1) vs P6 Final v2 methodology for mapping forests (dark green) and tree canopy over turf grass (light green) in a densely developed area.





**Figure 2.** Existing vs P6 Final v2 methodology for mapping forests (dark green) and tree canopy over turf grass (light green) in a rural area.

# **“P6 Final v3” Forest and Tree Canopy Overview**

- **Identify more densely developed areas vs. less developed areas as apply different moving windows to delineate trees and forest.**
  - **Dense areas - 1 acre window**
  - **Less Dense areas - ½ acre window (1 acre is too big)**
  - **A third “edge” area was created to allow the forest to “bleed” right up to rural roads, farms and subdivisions.**

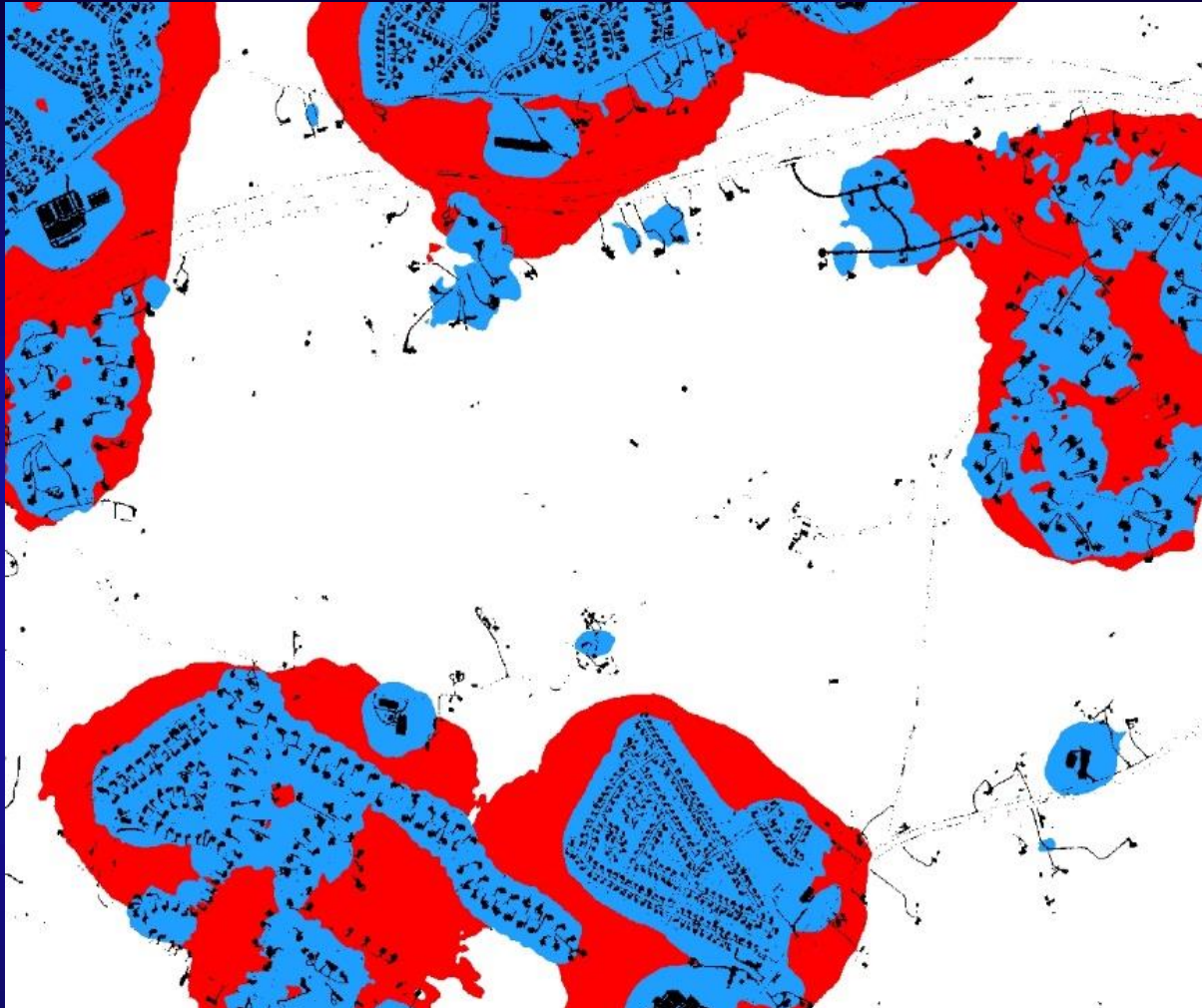




**Figure 3b.** Overlay of a 1-acre focal window with values representing the total area of impervious surfaces not associated with roads.

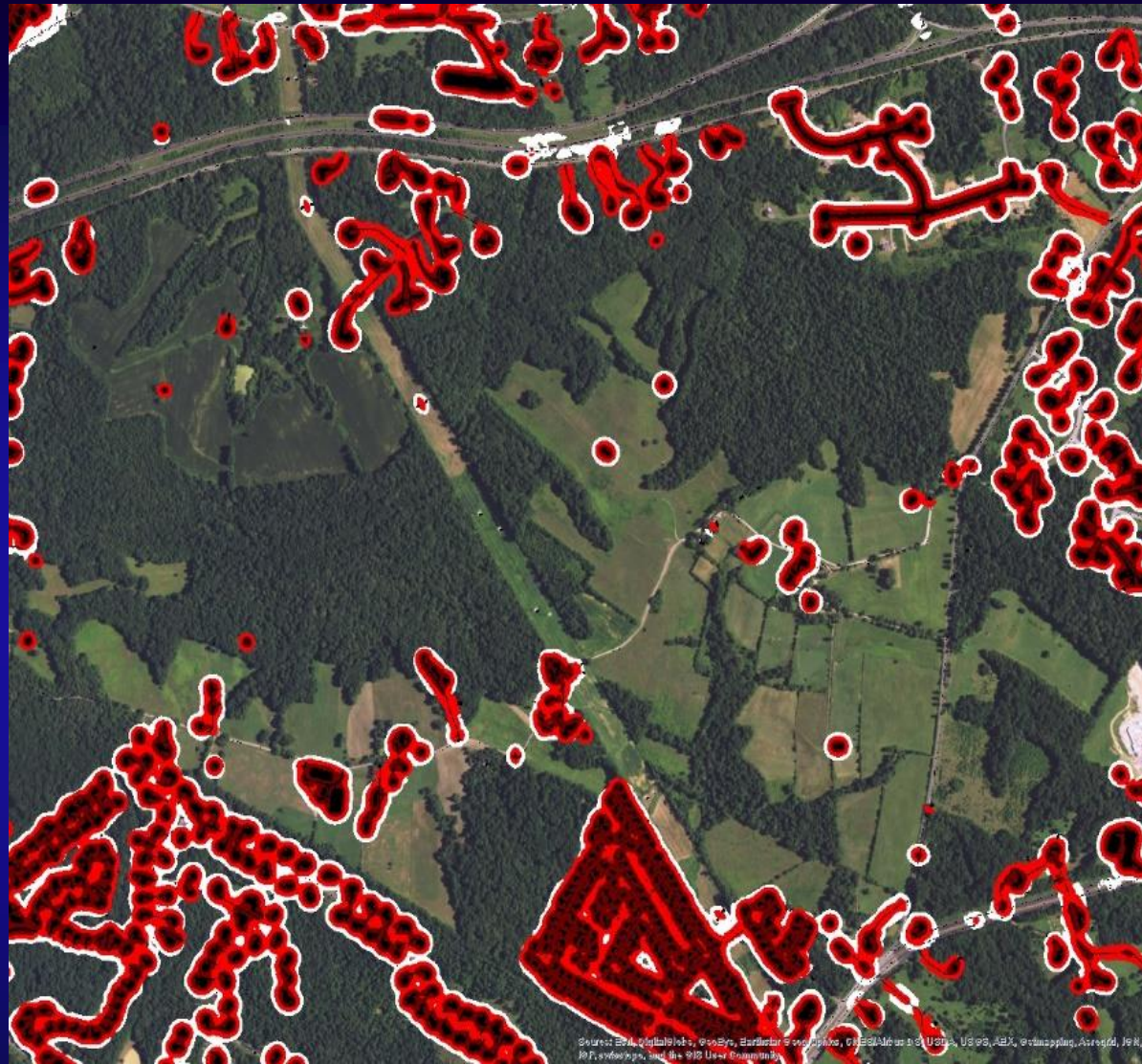
**Figure 4a.** Overlay of a half-acre focal window with values representing the total area of impervious surfaces not associated with roads.

**Figure 4b.** Overlay of half-acre focal window on the 1-acre focal window.



**Figure 6.** Overlay of a 10-acre focal window with  $> 3000\text{m}^2$  impervious surfaces (blue) on a 100-acre focal window with  $> 18,000\text{m}^2$  of impervious surfaces (red). Both were thresholded to maximize separation between densely developed and non-densely developed areas.





**Figure 5.** Overlay of the  $\frac{1}{2}$ -acre focal window (dark red),  $\frac{3}{4}$ -acre window (bright red), and 1-acre window (white).





**Figure 7.** Example result from the final proposed method, P6 Final v3, for mapping forests (dark green) and tree canopy over turf grass (light green).



**Peter Claggett, USGS**

**[pclaggett@chesapeakebay.net](mailto:pclaggett@chesapeakebay.net)**

**410-267-5771**

**Renee Thompson, USGS**

**[rthompson@chesapeakebay.net](mailto:rthompson@chesapeakebay.net)**

**420-267-5749**