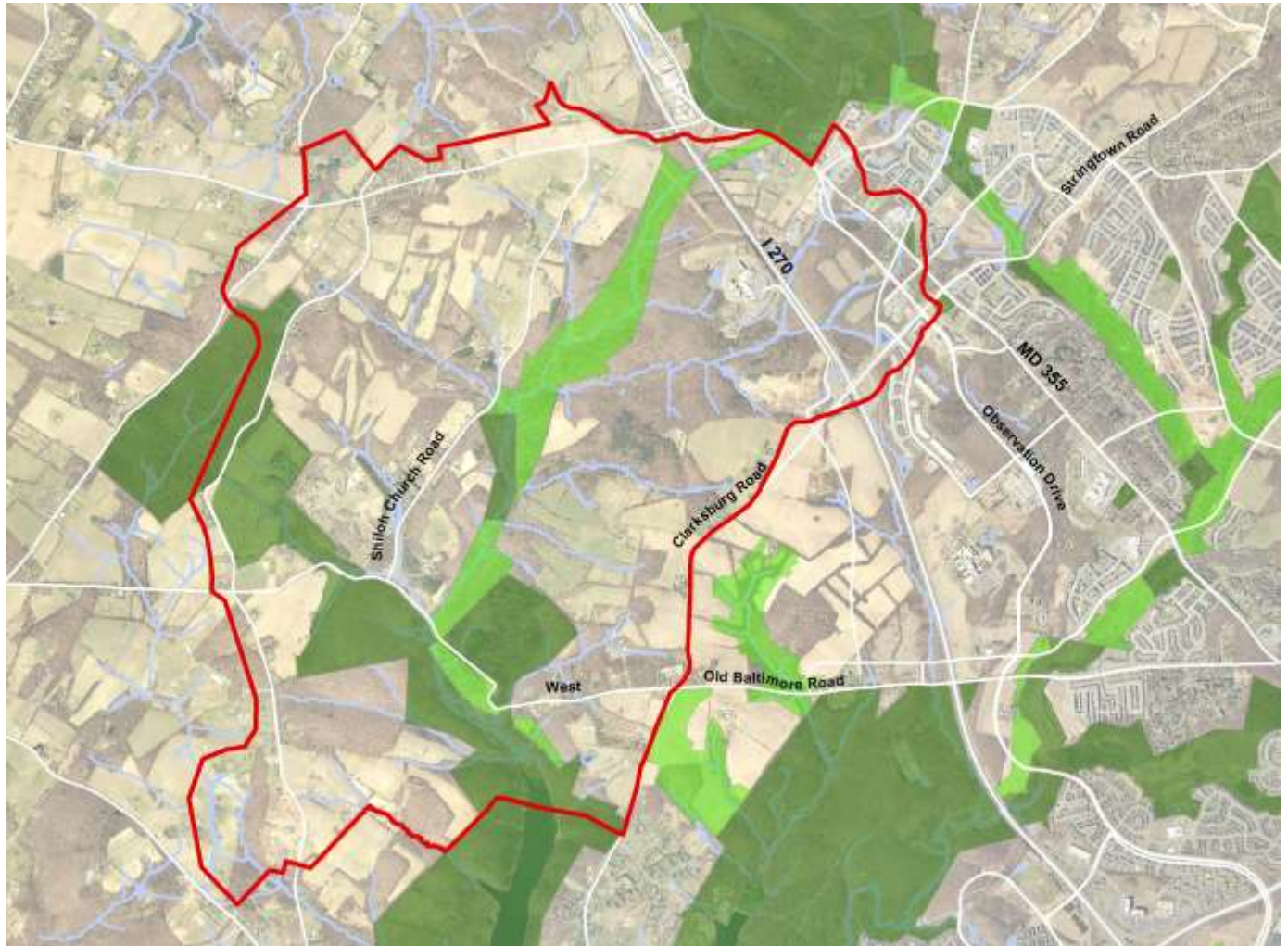


Clarkeburg Limited Master Plan  
Community Meeting  
July 22, 2013 Staff Draft

# Schedule

- 7/22- Planning Board Tour
- 7/22 Community Meeting to review Staff Draft Recommendations
- 7/25 – Planning Board review of Staff Draft Plan/Set Public Hearing Date
- 9/10 Tuesday evening – Public Hearing
- September and October – Planning Board Worksessions on Public Hearing Draft
- October 11 Transmit Planning Board draft to County Executive and County Council

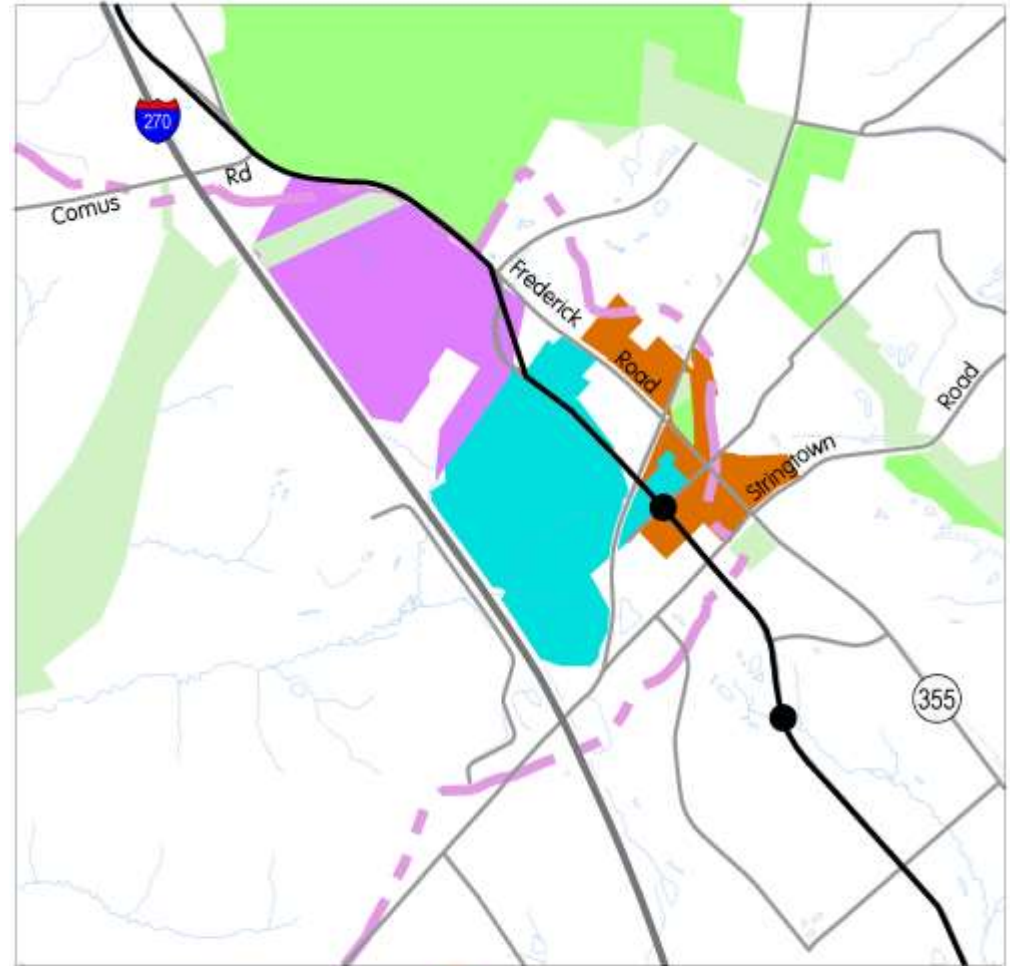




# Sub Watersheds

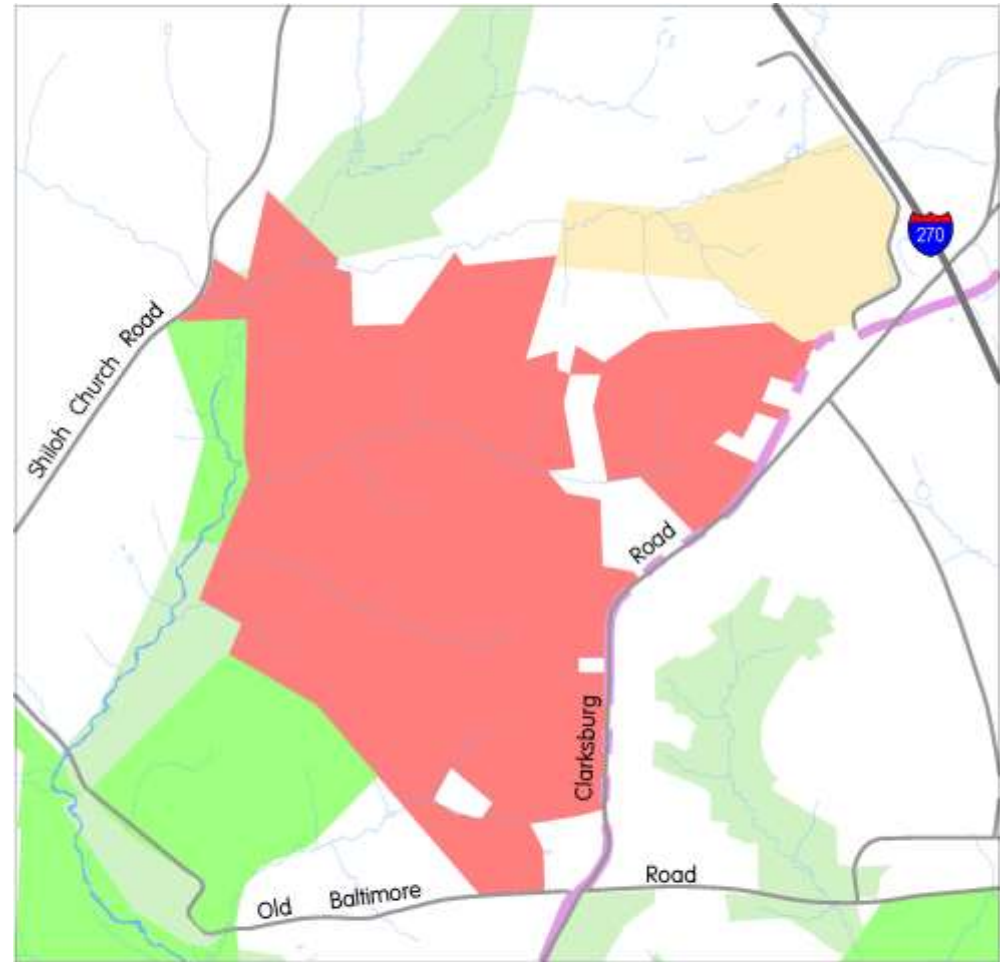


# Property Locations



- |   |  |
|---|--|
|  Master Plan Boundary              |  Mikes-Coppola Properties |
|  CCT                               |  Mallyn Egan Property     |
|  CCT Station                       |  Historic District        |
|  Existing Parks                    |  |
|  Proposed Parks (1994 Master Plan) |  |

# Property Locations



- Master Plan Boundary
- Existing Parks
- Proposed Parks
- Pulte Property
- Montgomery County Property

# Results of Environmental Analysis

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## **Pollutant Loadings**

- In general, the amount of nutrients and sediments are approximately the same from agricultural and residential uses
- Loss of forest in the upper headwaters will result in an increase in pollutants
- Highest potential for sediment in streams during construction

## **Spatial Analysis**

- Greatest potential for forest loss on Pulte and Miles/Coppola properties
- Environmental buffers protect steep slopes, floodplains and wetlands



## **Hydrologic Analysis**

- All the scenarios studied would produce changes to the total stream flow and the peak flow volumes
- No significant differences between the reduced footprint scenarios

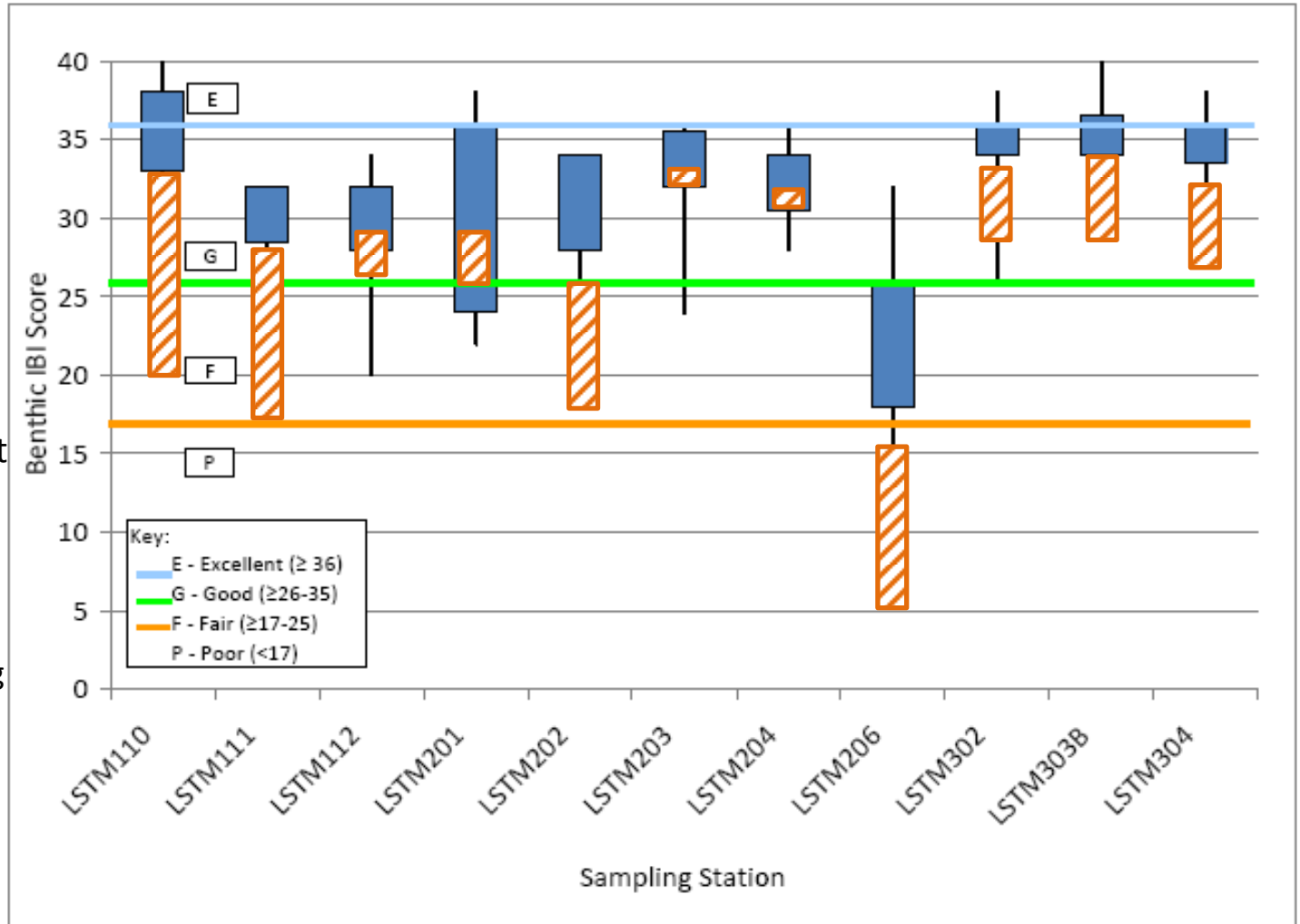


# Comparison: Existing Benthic IBI with Estimated Post-Development IBI

Based on statistics from existing traditional stormwater practices

 1994 Benthic IBI Average  
 Estimated range of Benthic IBI Post Development\*

\*The top of the striped bar indicates the best potential outcome for imperviousness resulting from Scenario 5 (7% overall watershed imperviousness), while the bottom is the lowest likely outcome for Scenario 2 (1994 Plan).





# Environmental Analysis Conclusions

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- East of I270 has highest levels of existing impervious cover and fair stream conditions
- West of I270 dominated by small, high quality tributaries, forest cover and rural land uses
- Increases in stormwater runoff in all development scenarios despite application of ESD practices
- ESD represents the state of the practice
- Rigorous and comprehensive implementation across or within watersheds has not occurred nor been monitored
- It may not be prudent to gain watershed-based knowledge on the efficacy of ESD in high quality watersheds



# Environmental Analysis Conclusions

## Measures Needed to Reduce Impacts to Ten Mile Creek

- Minimize disturbance of natural resources
- Reduce development west of I-270
  - Reduce impacts to upland forested areas and steep slopes.
  - Preserve existing conditions in high quality headwater subwatersheds LSTM110 (King Spring) and LSTM111
  - In LSTM 202, reduce the extent of development on County-owned property to retain existing forest
- If development occurs in LSTM110 and LSTM111, apply reduced limits of disturbance
- Focus and prioritize development east of I-270
- Establish buffers around ephemeral streams not currently regulated
- Minimize impacts to natural resources associated with new infrastructure (MD 355 Bypass and sanitary sewer extension)



# Environmental Analysis Conclusions

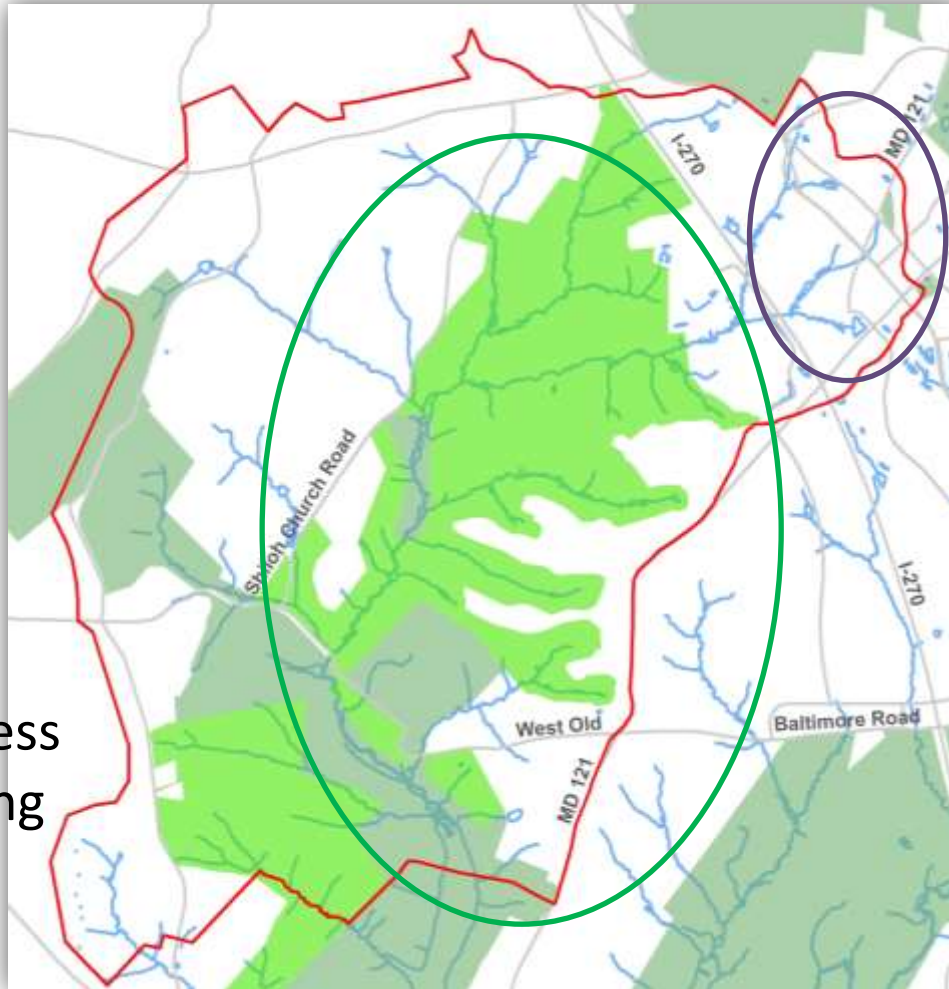
## Measures Needed to Reduce Impacts to Ten Mile Creek

- Reduce impervious levels in the headwater areas
- Employ site planning techniques as the first measure of Environmental Site Design
  - prioritize preservation and protection of natural resources
  - conserve natural drainage patterns
  - minimize impervious areas
  - cluster of development
  - limit soil disturbance, mass grading and compaction
- Design outfalls to reduce impacts associated with large flows

# Recommended Concept

## *Emphasize Environmental Protection*

- Preserve Natural Resources
- Maximize undeveloped open space
- Minimize Imperviousness
- Retain Housing Resource



## *Emphasize Community Building*

- Complement approved Town Center
- Strengthen Historic District
- Balance Mixed Use
- Improve Transportation



# Staff Draft Master Plan Recommendations

## ***Protect Ten Mile Creek***

- Retain the Special Protection Area for the Stage 4 area of Ten Mile Creek
- Establish an environmental overlay zone to limit imperviousness
  - 25% in LSTM206 and LSTM201
  - 8% in LSTM202, LSTM110, LSTM111, and LSTM112
- Reduce the development footprint and impervious cover west of I-270,
- Require a conservation management plan for areas outside the LOD
- Require at least 175-foot wide buffers on both sides of streams.
- Maintain 50 feet buffer for “zero order” or ephemeral streams
- Establish a forest banking program for extra credit
- All off-site forest planting within the Ten Mile Creek watershed as a first priority.
- Provide stormwater retrofits for any expansion or modification of I-270.

# Staff Draft Master Plan Recommendations

## ***Protect Ten Mile Creek***

- Water Quality Plans already require:
  - avoiding overflow discharges onto steep slopes
  - managing discharges from stormwater outfalls
  - minimizing environmental buffer impacts
  - minimizing disturbance of forested areas.
- We would add requirements to:
  - Minimize direct impacts associated with new infrastructure,
  - Minimize grading
  - Decompact and amend soils beyond current requirements

# Staff Draft Master Plan Recommendations

## ***Protect Ten Mile Creek***

- New development should
  - cluster development with smaller building footprints on smaller lots with shorter driveways
  - place houses near the front of a building envelope, and provide shared driveways
  - design narrower streets with limited sidewalks
  - preserve land with a high infiltration capacity to be used for storm water infiltration or natural recharge area.
  - Restore streams and wetlands adversely affected by existing uses.



# Staff Draft Master Plan Recommendations

## ***Protect Ten Mile Creek***

- Environmental Site Design (ESD)
  - As a first step, apply appropriate ESD site planning techniques within proposed development areas to maximize environmental benefits.
  - Site planning and design should be guided by and integrated with the selection and appropriate location of ESD facilities



# Staff Draft Master Plan Recommendations

## *Legacy Open Space*

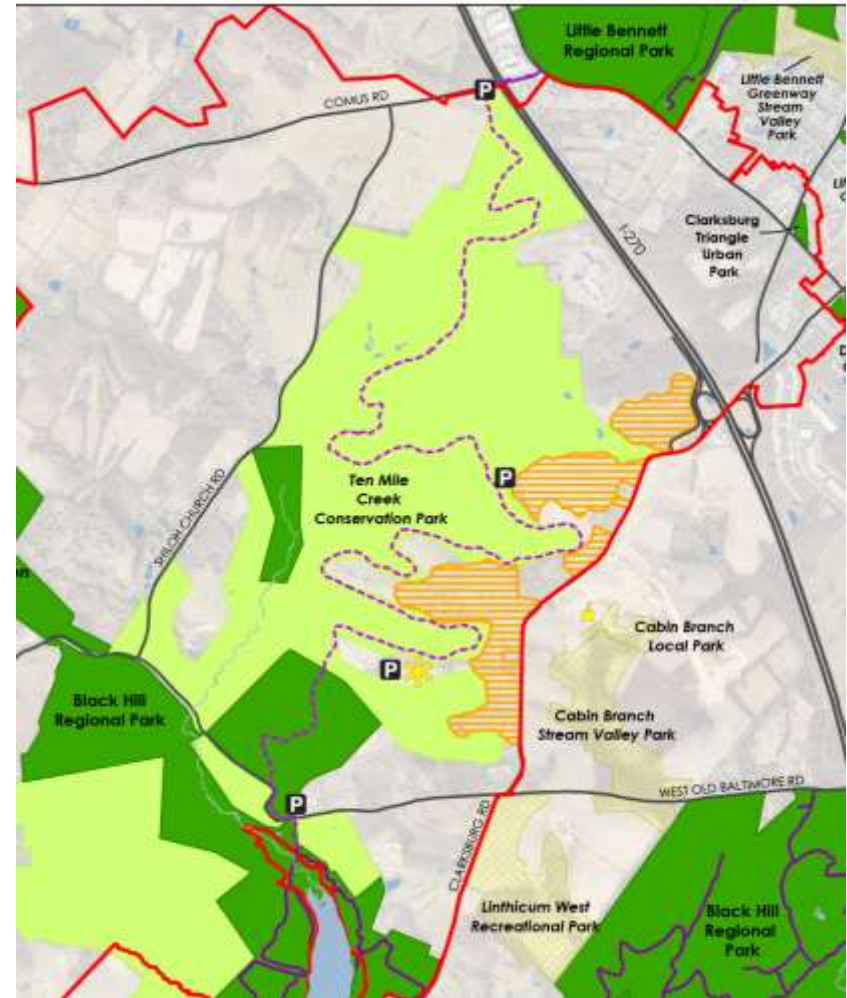
- Designate the high quality, critical forest and open habitats as a Legacy Open Space Natural Resource site
- Protect the designated Natural Resource on an individual property basis using a variety of tools



# Staff Draft Master Plan Recommendations

## ***Parks and Trails***

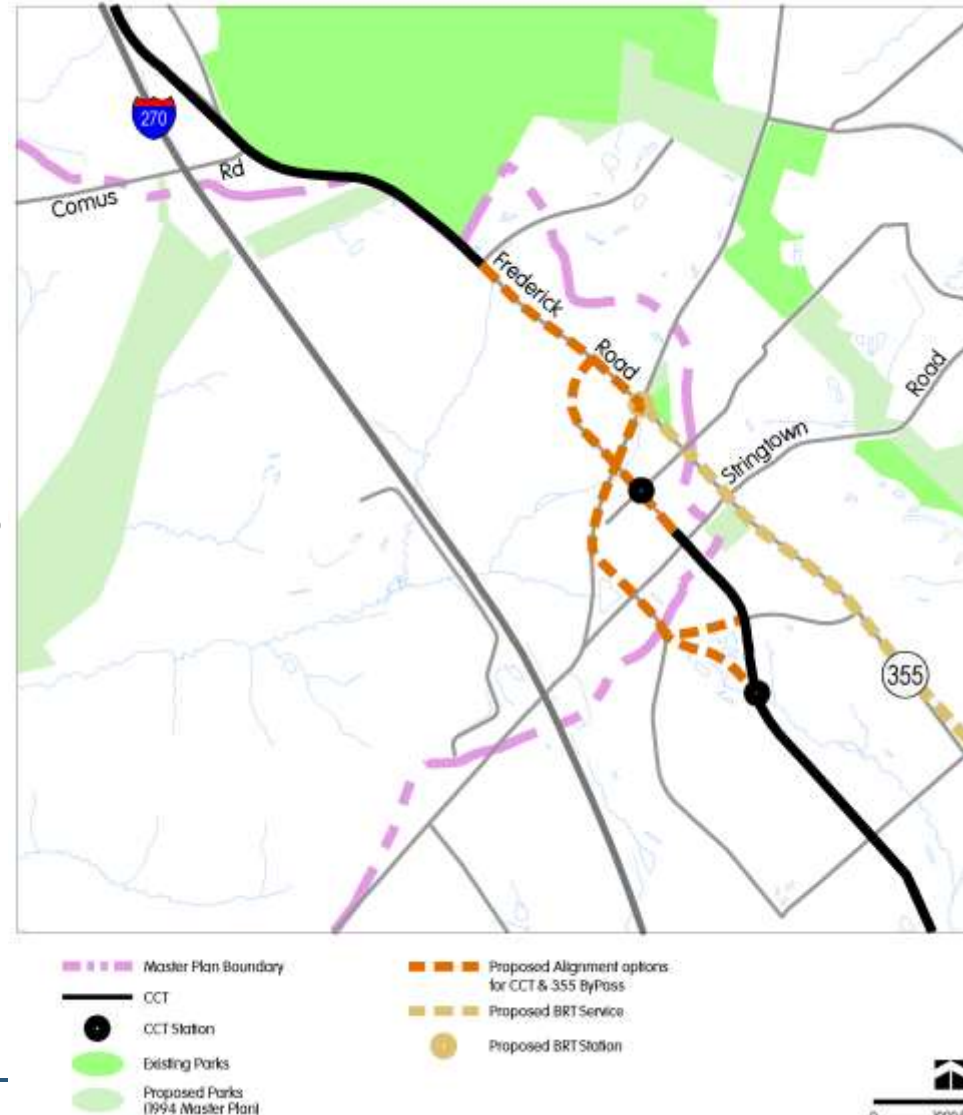
- Provide a countywide natural surface trail linking Little Bennett Regional Park and Black Hill Regional Park
- Provide five trailheads for access to the Ten Mile Creek trail
- Provide a new natural resource-based Neighborhood Park of at least 10 acres



# Staff Draft Master Plan Recommendations

## Transportation

- Retain the 355 Bypass, but realign to connect via a T intersection with MD 355 close to the proposed location of the fire station.
- Provide additional turn lanes to achieve acceptable conditions
- Retain the CCT and study alternate alignments
- Consider relocation of the transit station to 121/355 intersection



# Staff Draft Master Plan Recommendations

## ***Transportation***

Future MCDOT operational planning might consider the feasibility of enhanced transit service comprised of one or more of the following components:

- Express non-stop service from Clarksburg to:
  - Shady Grove Red Line Metrorail Station
  - Germantown Town Center/Germantown MARC
- Limited stop Ride-On service Clarksburg to:
  - Milestone (and planned CCT stop)
  - Lakeforest/Gaithersburg MARC
- Internal Clarksburg circulator service to connect activity centers east and west of I-270 with the Town Center



# Staff Draft Master Plan Recommendations

## Transportation

- A comprehensive series of bikeways is included
- Bikeway connections added on Comus Road
- Local bikeway added on Clarksburg Road



# Staff Draft Master Plan Recommendations

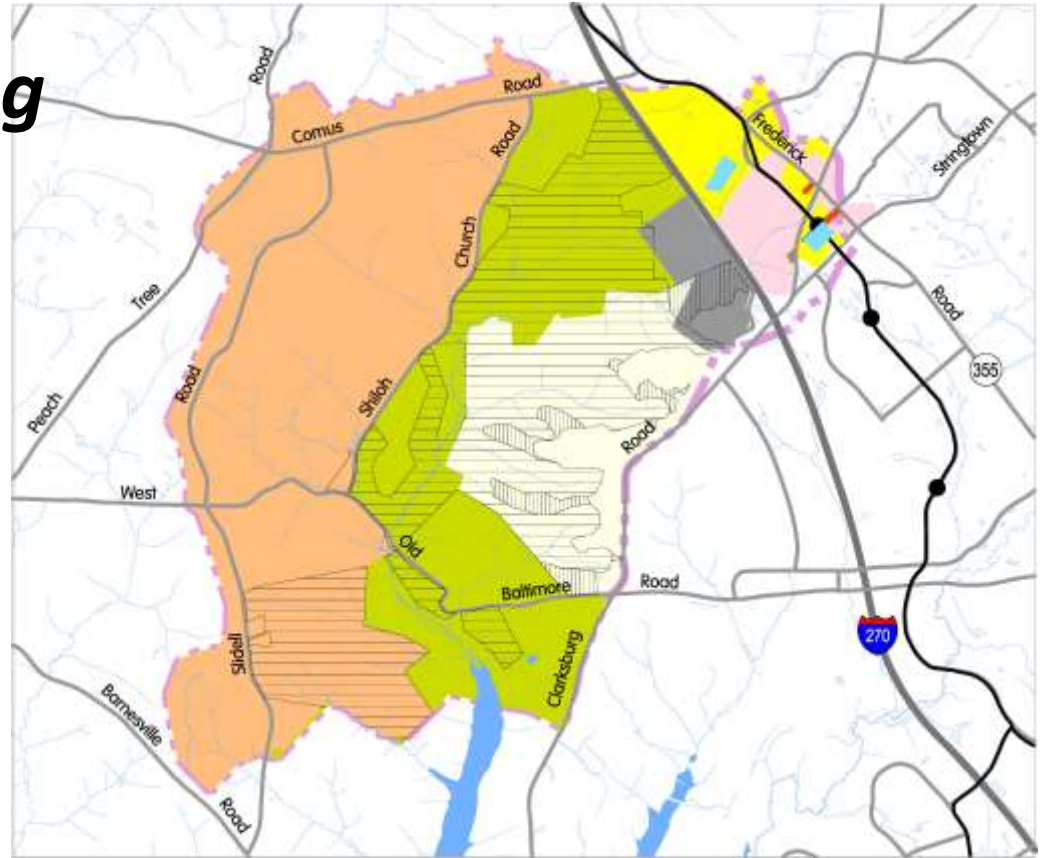
## ***Policy Approach***

### Amendment Objectives

- East of I-270, land uses should make significant contribution to 1994 Plan’s policy goals—town scale of development with transit supporting densities between I-270 and existing MD 355; focused neighborhood commercial uses east of historic district in Town Center
- West of I-270, maximizing undeveloped open space to reduce imperviousness and limit environmental damage, while continuing to provide housing and accommodate TDRs

# Staff Draft Master Plan Recommendations

## Land Use and Zoning

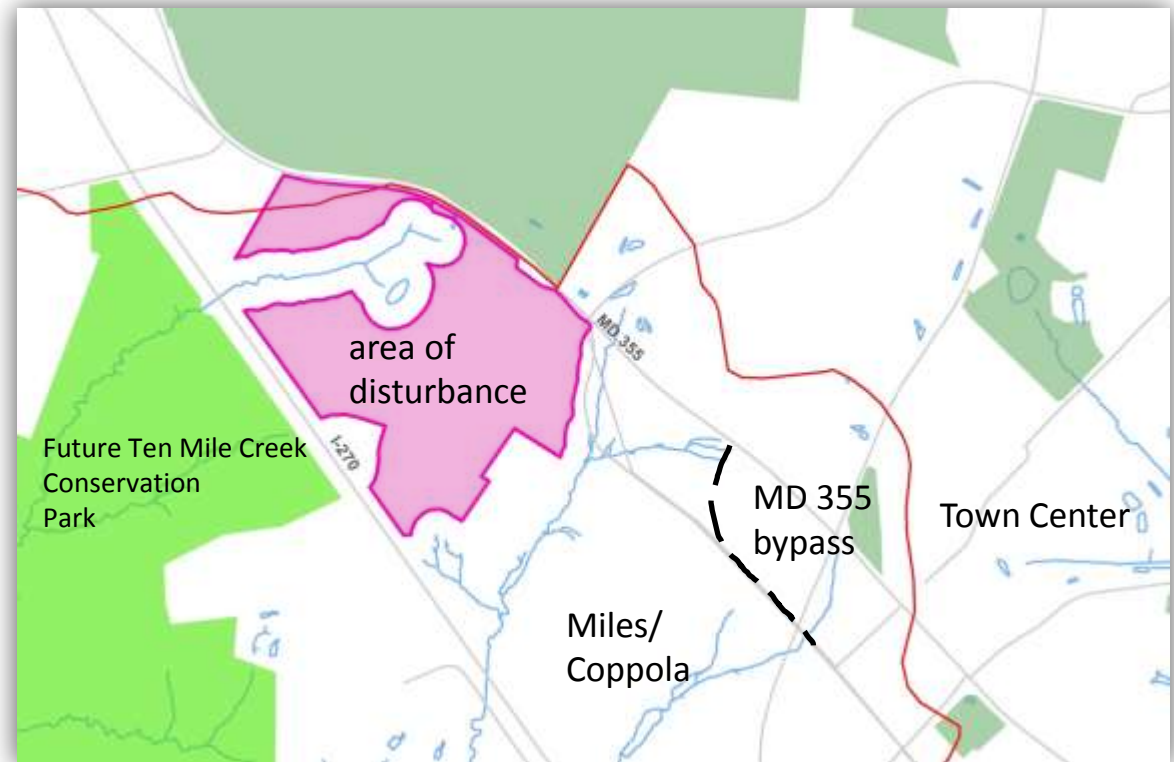


# Master Plan Policies and Recommendations

## *Land Use and Zoning*

### Egan-Mattlyn

- Retain residential recommendation, using cluster development; 25% imperviousness cap
- Existing R-200 zone or floating zone
- Restore stream buffers





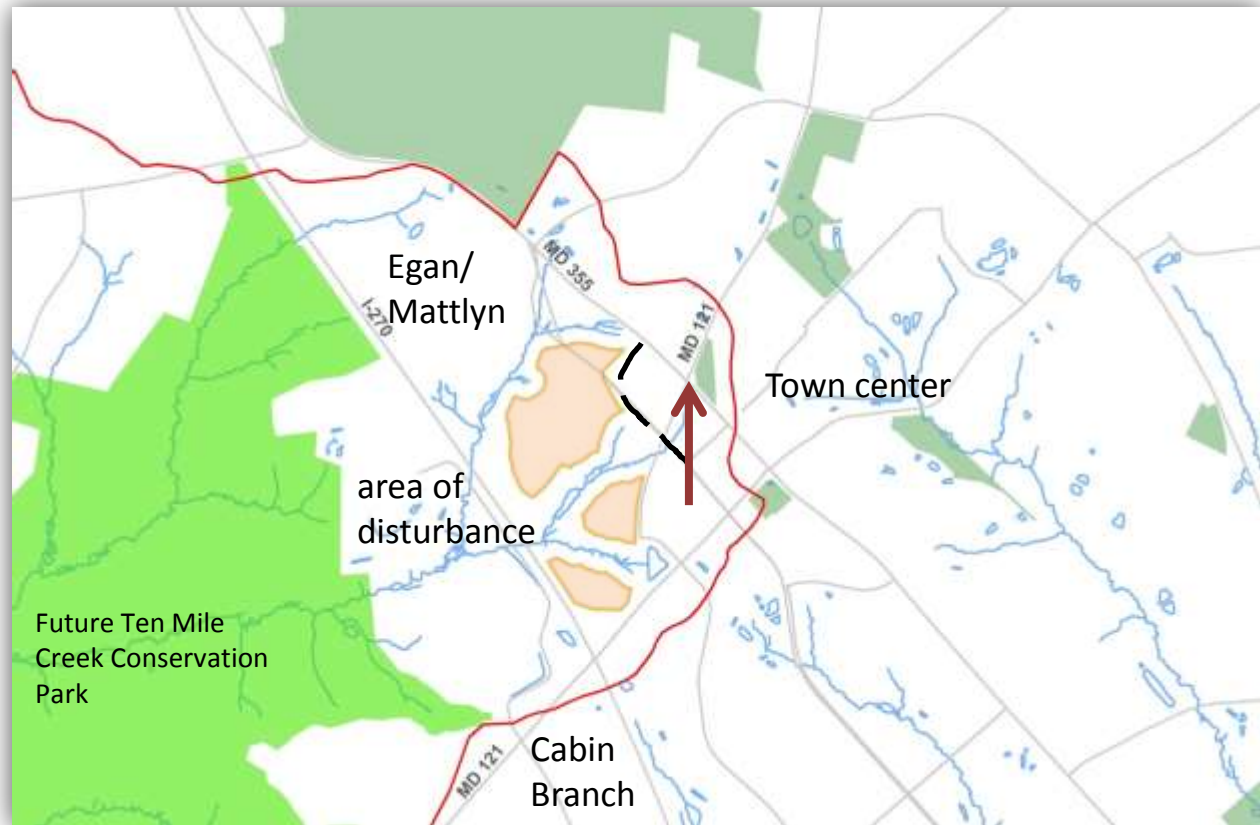
# Staff Draft Master Plan Recommendations

## *Land Use and Zoning*

### Miles/Coppola

#### *Option 1*

- Integrated mix of retail, office, housing that complements, but does not compete with Town Center
- CR zones allow evaluation in detail
- 25% imperviousness cap



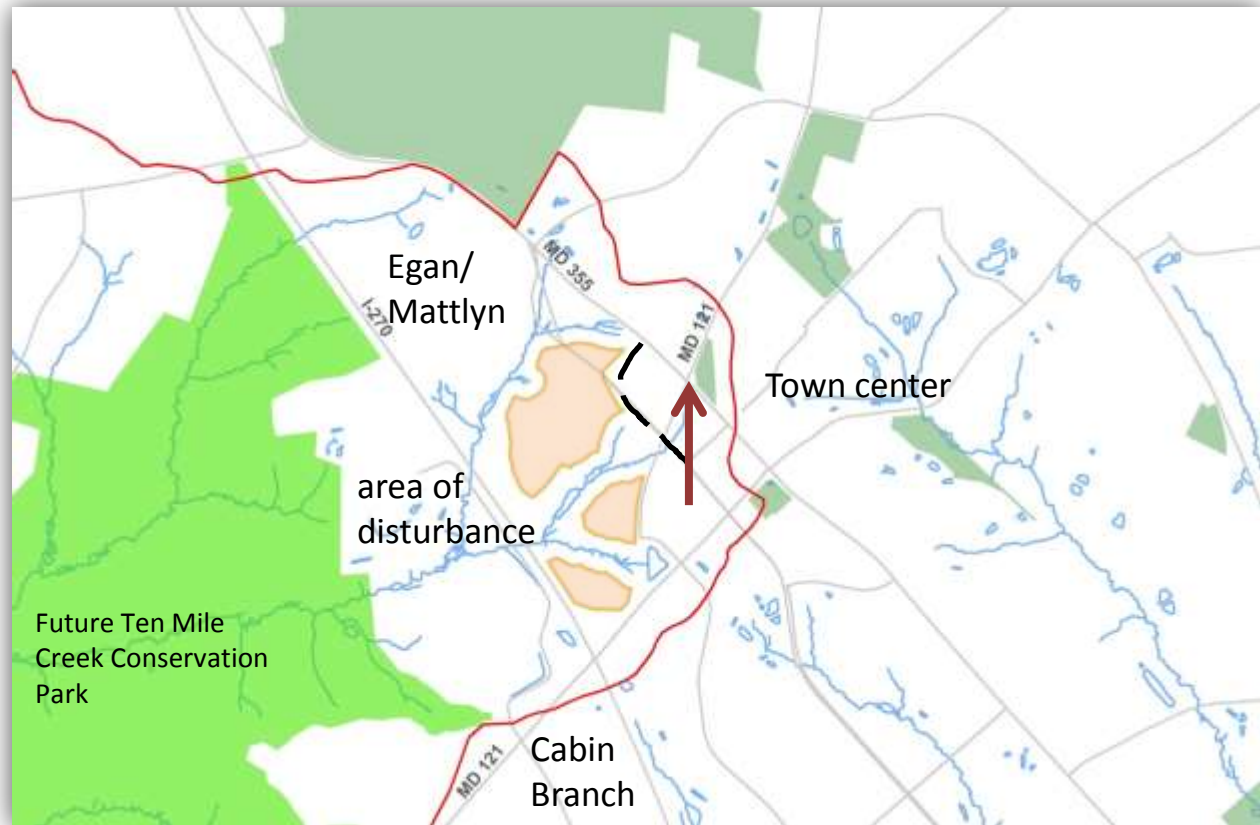
# Staff Draft Master Plan Recommendations

## *Land Use and Zoning*

### Miles/Coppola

#### *Option 2*

- Mixed-use with residential focus would bring more households to support Town Center
- Floating zones allow 25 percent commercial space
- 25% imperviousness cap



# Preliminary Master Plan Recommendations

## *Land Use and Zoning*

### Historic District

- Existing zones inadequate to accomplish historic preservation goals
- CRN Zone allows rehabilitation for varied uses
- Retain 94 Plan guidelines

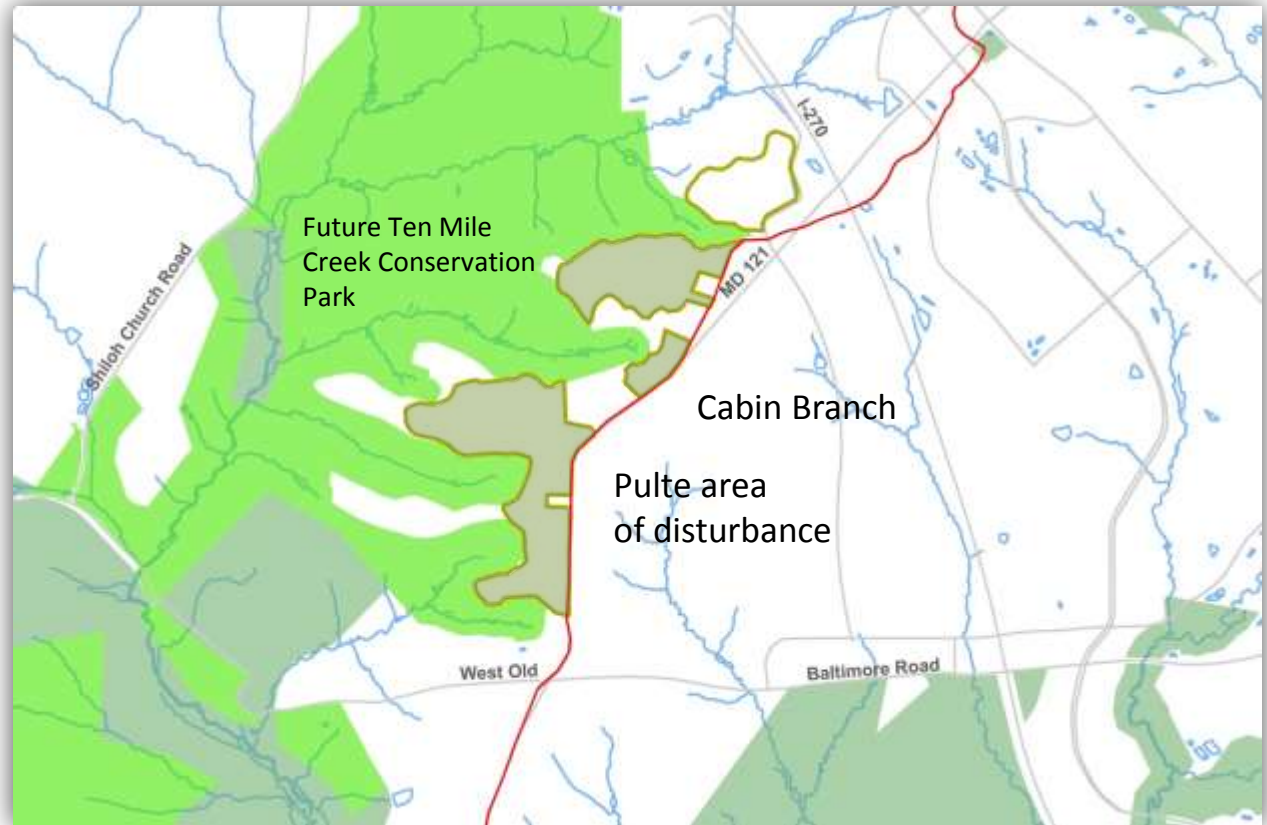


# Staff Draft Master Plan Recommendations

## *Land Use and Zoning*

### Pulte and King

- Reduce densities and cluster development to increase open space
- RNC at 0.4 du/acre with TDRs; up to 85 percent open space with design guidelines, 8% imperviousness cap



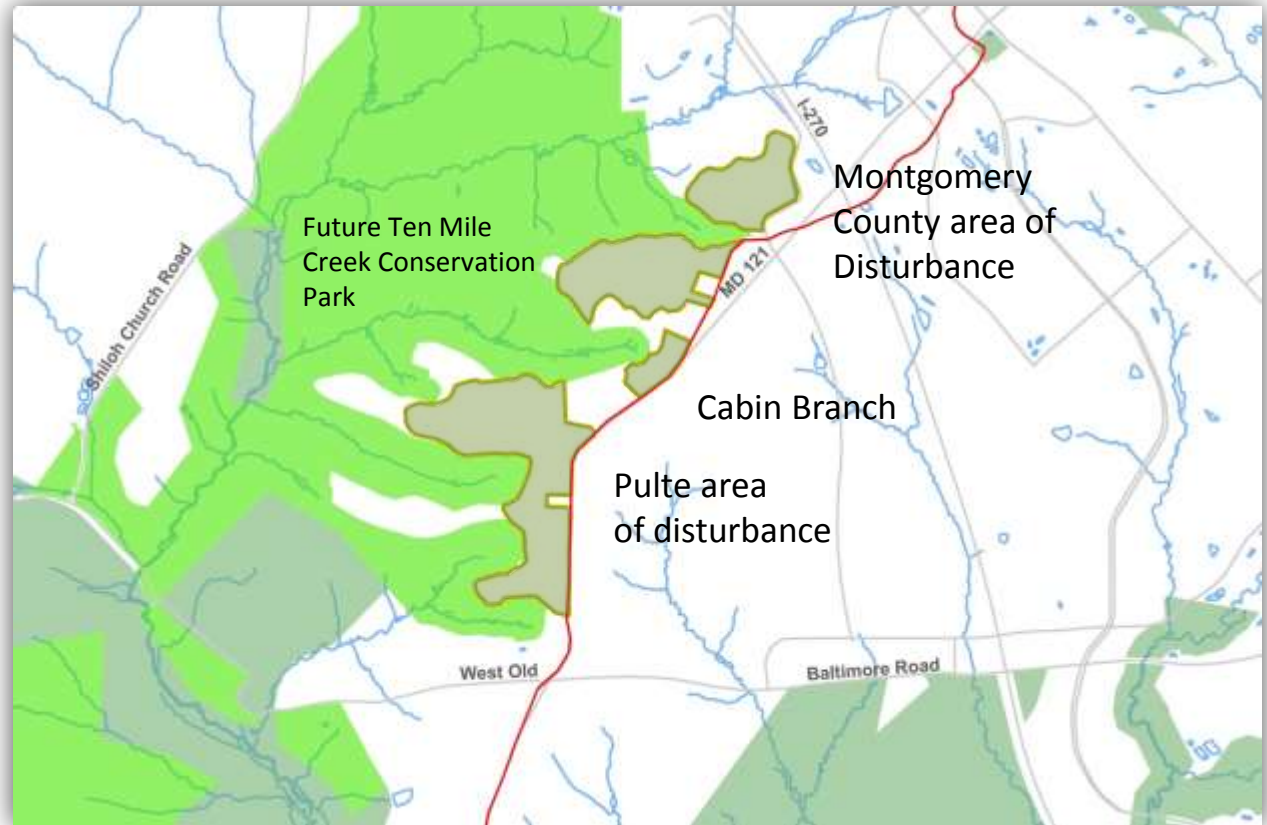


# Staff Draft Master Plan Recommendations

## *Land Use and Zoning*

### Montgomery County

- Protect forest through Legacy Open Space
- Minimal development preferred outcome
- 8% impervious cap on 94 acres at MD 121/I-270





# Staff Draft Master Plan Recommendations

