




## Chesterfield County, Virginia

### Memorandum

**DATE:** 04/05/2022

**TO:** Rebecca W. Rochet, P.E. – Engineering Supervisor

**FROM:** W. Weedon Cloe III, PWS – Water Quality Manager 

**SUBJECT:** Natural Resource Inventory – Upper Magnolia Green East; Rezoning Case 21SN0675

A review of the Natural Resource Inventory, revised and submitted by Timmons Group on March 30, 2022, for proposed development on 18100 Duval Road (GPIN: 697-680-2507) and four adjacent and/or associated project parcels indicates compliance with the requirements specified by Section 19.1-542 of Chesterfield County's Upper Swift Creek Watershed Ordinance.

Onsite natural resources to be considered during the plan of development include:

1. The project area (699.7 acres) contains portions of three watersheds draining to the Swift Creek Reservoir; Blackman Creek (~3.2 river miles distant), Horsepen Creek (~2.9 river miles distant) and Otterdale Branch (~1.5 river miles distant).
2. Resource Protection Areas (84.3 acres; 12% site total) are present throughout the project area, generally following the mainstems and perennial tributaries of Blackman Creek, Horsepen Creek, Otterdale Branch, and their connected/contiguous wetlands. Within the project area, RPAs associated with these stream systems have largely been designated by RPAD 610. The extent of RPA on the project area portions of additional parcels 4361/4355 Moseley Road is presently under review by RPAD 1122. Preliminary connected/contiguous wetland refinements of RPAs within the project area, based on the March 3, 2022 US Army Corps of Engineers confirmation, are depicted in the March 30, 2022 NRI exhibits. Once all parcels encompassed by the Upper Magnolia East project boundaries have USACOE confirmations of onsite wetlands, an amendment to RPAD 610 and finalization of RPAD 1122 will be required to confirm the extent of RPA related to connected/contiguous wetlands. Until then, RPA limits should be considered preliminary.
3. The presence of non-tidal wetlands to include 19.20 acres of Palustrine Forested (PFO), 0.10 acres of Palustrine Emergent (PEM), and 0.14 acres of Palustrine Open Waters (POW) wetlands confirmed by the USACOE on March 3, 2022. An additional 31.50± acres of non-confirmed and/or approximated wetlands are present within the project area. Wetland features are distributed throughout the project area largely following the drainage patterns of the onsite stream resources.
4. 100-year FEMA floodplains are present along the mainstems of Blackman and Horsepen Creeks.

5. Steep slopes are present along the main channels of onsite perennial and intermittent drainages that dissect the project site. Additional isolated areas of steep slopes exist along the sides of topographic draws and onsite interior roadbeds.

6. Hydrologic Soil Group "D" soils (Creedmoor and Worsham Series) are present throughout the project area (378.5 acres) and comprise 54.1 % of the project site. Hydric soils (Fluvaquents) associated with the mainstems of Blackman and Horsepen Creeks contribute an additional 58.6 acres (8.4%) of B/D soils to the project site. Fluvaquents are largely contained within the RPAs of the associated stream systems. Overall, the soil types present onsite exhibit moderate to high erodibility.

Thank you and should you have any questions, please feel free to call or email me at the below contact information.

W. Weedon Cloe III, PWS  
Water Quality Manager  
Chesterfield County Department of Environmental Engineering  
9800 Government Center Parkway  
Chesterfield, VA 23832  
804-768-7797 (Office)  
[cloew@chesterfield.gov](mailto:cloew@chesterfield.gov)