




## 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 West; Rezoning Case 21SN0676

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 11 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 and cultural resources to be considered during the plan of development include:

1. The project area (1727.5 acres) contains portions of four watersheds; Blackman Creek, Horsepen Creek, Otterdale Branch, and Skinquarter Creek. Blackman Creek (~3.2 river miles distant), Horsepen Creek (~2.9 river miles distant) and Otterdale Branch (~1.5 river miles distant) flow toward the Swift Creek Reservoir. Skinquarter Creek drains west toward the Appomattox River (~4.3 river miles distant).
2. Resource Protection Areas (231.8 acres; 13% site total) are present throughout the project area, generally following the mainstems and perennial tributaries of Blackman Creek, Horsepen Creek, Otterdale Branch, Skinquarter Creek, 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 nine additional parcels is presently under review by RPAD 1122. Once all parcels encompassed by the Upper Magnolia West 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 field located non-tidal wetlands to include 93.6 acres of Palustrine Forested (PFO), 0.2 acres of Palustrine Emergent (PEM), and 0.7 acres of Palustrine Scrub-Shrub (PSS) wetlands. An additional 65.2± acres of 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 multiple interior roadbeds, the remnants of the c1888 Powhatan & Farmville Railroad grade, and along the sides of topographic draws throughout the project site.

6. Hydrologic Soil Group "D" soils (Creedmoor and Worsham Series) are present throughout the project area (914.7 acres) and comprise 52.9 % of the project site. Hydric soils (Fluvaquents) associated with the mainstems of Blackman and Horsepen Creeks, Otterdale Branch, and Skinquarter Creek contribute an additional 122.1 acres (7.1%) 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.

7. Two architectural resource sites are present onsite, both associated with existing or previously existing homesites. These have been identified as Virginia Department of Historical Resources IDs: 020-0547 (Richardson-Purdie House ruins c1832), and 020-0581(Chalkley House c1870). The remnants of the c1888 Powhatan & Farmville Railroad grade are present in the western area of the project site running generally north to south.

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

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