



# PROPOSED COMPREHENSIVE PLAN AMENDMENT

ITEM: PA 2018-IV-MV2  
July 5, 2018

**GENERAL LOCATION:** North of Richmond Highway, west of Sacramento Center, east of Pole Road Park

**SUPERVISOR DISTRICT:** Mount Vernon

**PLANNING AREA:** Area IV

**PLANNING DISTRICT:** Mount Vernon Planning District

**SUB-DISTRICT DESIGNATION:** Richmond Highway Corridor Area, MV8 Woodlawn Community Planning Sector

**PARCEL LOCATION:** 109-2 ((1)) 18C, 19, and 20

For additional information about this amendment call (703) 324-1380.

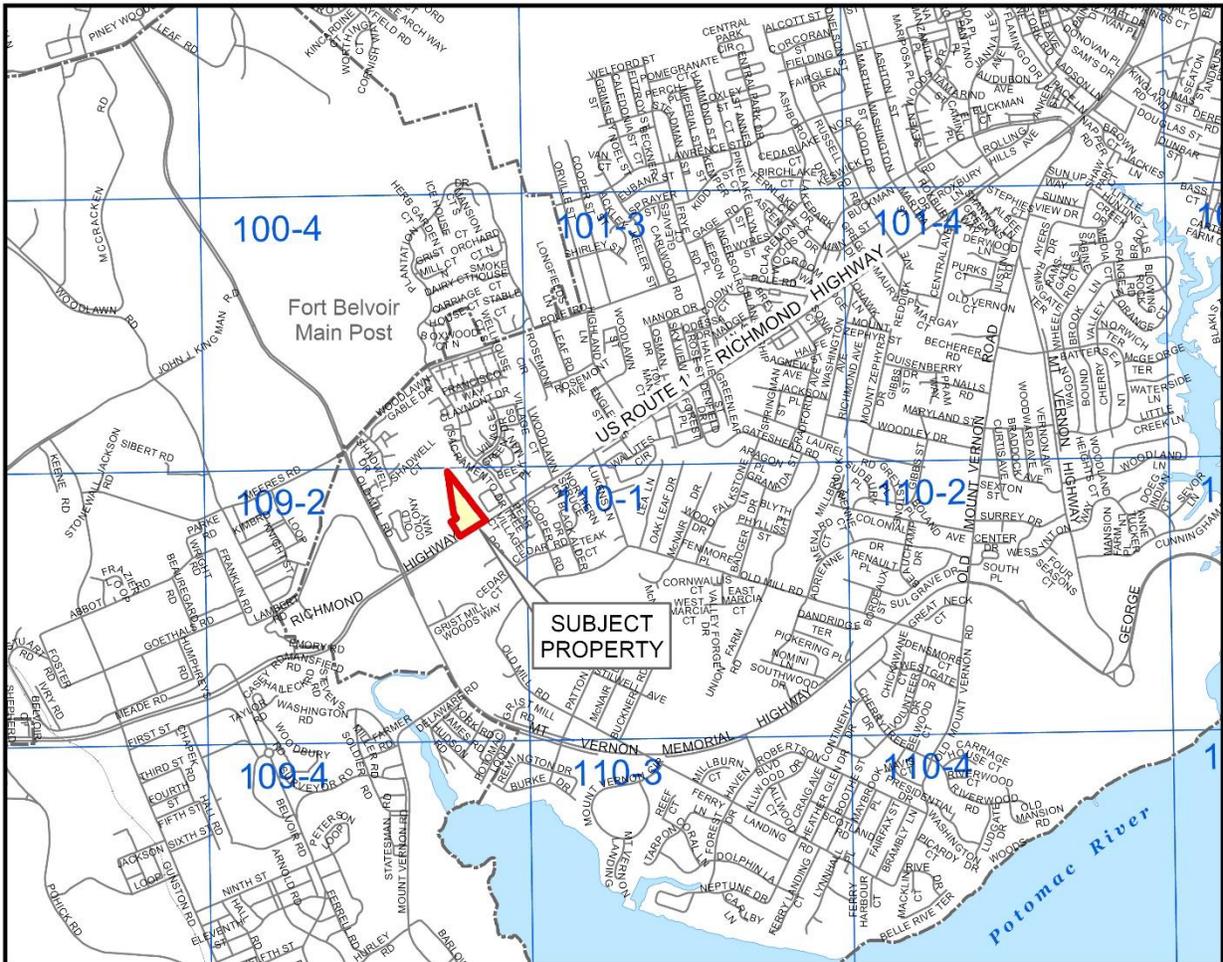
**PLANNING COMMISSION PUBLIC HEARING:** Thursday, July 19, 2018 @ 7:30 PM

**BOARD OF SUPERVISORS PUBLIC HEARING:** Tuesday, September 25, 2018 @ 4:00 PM

**PLANNING STAFF DOES NOT RECOMMEND THIS ITEM FOR PLAN AMENDMENT**



Reasonable accommodation is available upon 48 hours notice. For additional information about accommodation call the Planning Commission office at (703) 324-2865, or the Board of Supervisors office at (703) 324-3151.



3000 FEET

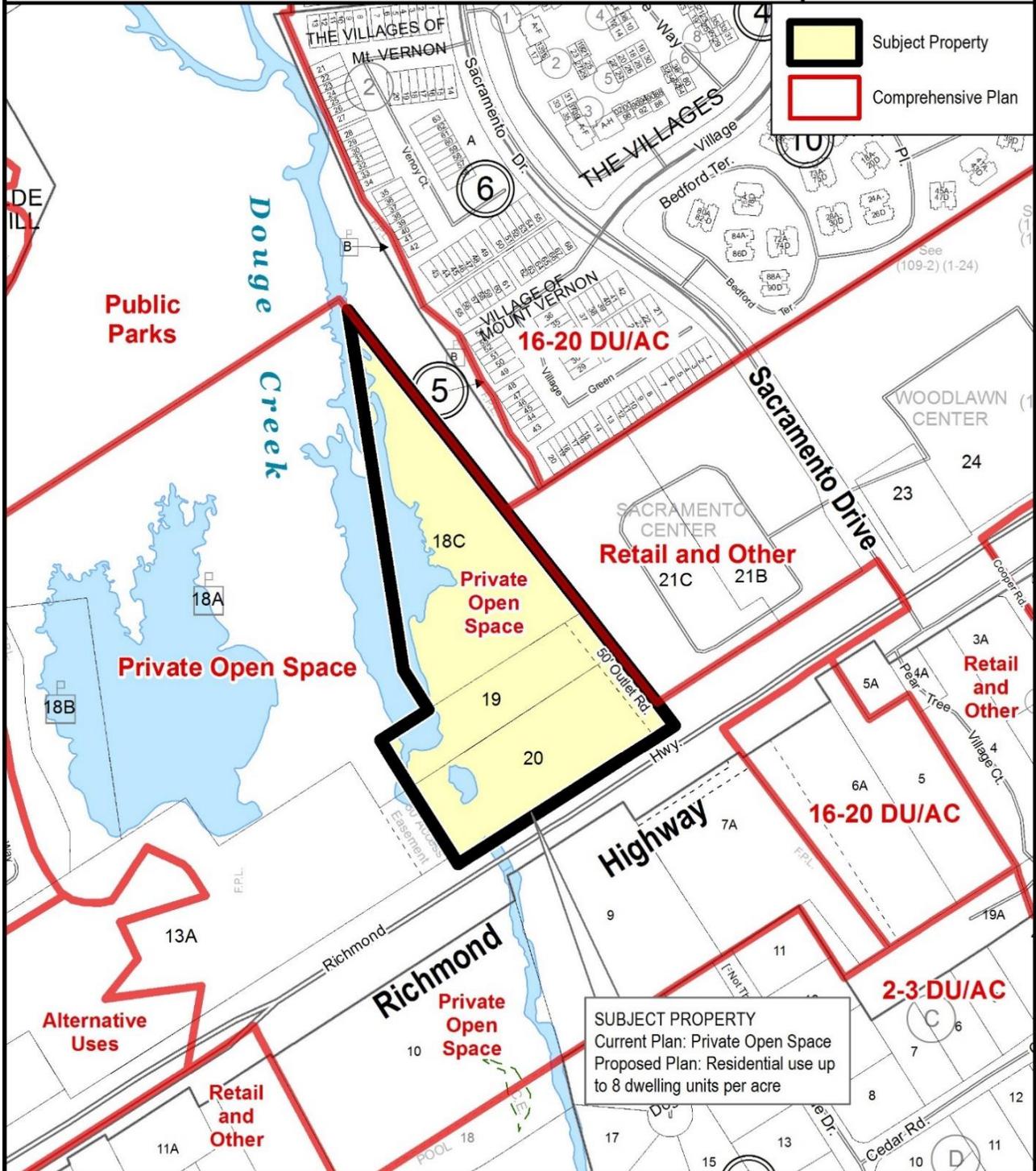
PREPARED BY THE DEPARTMENT OF PLANNING AND ZONING USING FAIRFAX COUNTY GIS  
8800 Richmond Highway



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**CURRENT PLAN AND PROPOSED CHANGE**  
 PARCEL LOCATION MAP SHOWING CURRENT PLAN AND PROPOSED CHANGE FOR  
 SUBJECT PROPERTIES AND CURRENT PLAN MAP FOR ADJACENT AREAS

**ITEM:**  
**PA 2018-IV-MV2**



400 FEET

PREPARED BY THE DEPARTMENT OF PLANNING AND ZONING USING FAIRFAX COUNTY GIS  
 PARCEL INFORMATION CURRENT TO JUNE 2018  
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**STAFF REPORT FOR PLAN AMENDMENT 2018-IV-MV2**  
8800 Richmond Highway

**BACKGROUND**

On March 6, 2018, the Board of Supervisors (Board) authorized a Comprehensive Plan amendment (amendment number 2018-IV-MV2), requesting that staff evaluate residential use at a density up to 8 dwelling units per acre (du/ac) for an approximately eight-acre area located at 8800 Richmond Highway. The subject property is currently planned for private open space. In addition to evaluating residential use, the authorization requested that staff consider full parcel consolidation and the ability for development to conform with Policy Plan guidance on Environmental Quality Corridors (EQCs), including the demonstration of any circumstances that merit disturbance to the EQC, and the provision of mitigation/compensation measures resulting in a net environmental benefit to the parcels and net benefits relating to most, if not all, the objectives of the EQC policy that are applicable to the proposed disturbances. The authorization also identified a need for proposed redevelopment to be consistent with the Virginia Department of Transportation (VDOT) widening of Richmond Highway.

The subject area is comprised of Tax Map Parcels 109-2 ((1)) 18C, 19, and 20. Two related requests are being evaluated concurrently. Rezoning and Final Development Plan application RZ/FDP 2016-MV-018 requests rezoning the property to allow for the development of approximately 43 townhomes (at the time of staff report publication). Special exception application SE 2016-MV-016 requests filling in the floodplain for residential use. A related exception application pursuant to the Chesapeake Bay Preservation Ordinance (Chapter 118 of the Fairfax County Code) is requested to permit proposed disturbances to a Resource Protection Area (RPA).

**CHARACTER OF THE SUBJECT AREA AND SURROUNDING AREA**

The subject area is bounded by Richmond Highway to the south, the Woodlawn Community Business Center (CBC) to the east, and Dogue Creek to the west and north, as shown in Figure 1. Pedestrian and vehicular access is from Richmond Highway. Parcel 20, approximately 2.5 acres in size, fronts Richmond Highway, is zoned C-8 Highway Commercial District, and is partially developed with a welding operation. Parcels 19 and 18C, approximately 1.2 and 4.2 acres in size, respectively, are located north of Parcel 20. These parcels are zoned R-2 Residential District (two du/ac), and are vacant.

Pole Road Park is adjacent to the subject area to the north and west, and Dogue Creek runs along the shared eastern boundary of the park and the subject area. A townhouse community is adjacent to the northern edge of the Woodlawn CBC, near the eastern boundary of the subject area. A portion of the townhouse development's eastern edge is within the Dogue Creek RPA and EQC. This residential development was subject to an approved zoning application that predated the EQC Policy adopted by the Board in 1975.

The subject area abuts the Woodlawn CBC. The Woodlawn CBC was recently re-planned as part of an approximately two and a half year major corridor-wide planning effort known as Embark Richmond Highway that was adopted by the Board in March 2018. The new Comprehensive Plan envisions the creation of coordinated, transit-oriented places that highlight and strengthen the

historical and ecological attributes of the corridor; a new network of parks and open spaces; and pedestrian-scaled mixed-use development to form a series of vibrant, well-connected places that will contribute to the greater Richmond Highway community. As one of the six nodes in the Richmond Highway Corridor, the Woodlawn CBC is envisioned to evolve as a transit-oriented, mixed-use village and tourist hub served by a planned bus rapid transit (BRT) system. As described in the adopted Plan guidance, the Woodlawn CBC is planned for approximately 1,020 dwelling units, envisioned as townhomes and multifamily units, and 887,000 gross square feet of nonresidential uses, or roughly 2,614 jobs based on square feet per job conversion factors for different types of planned non-residential uses (office, retail, and hotel).

### **ADOPTED COMPREHENSIVE PLAN**

Parcels 19 and 20, the rectangular-shaped parcels, are within the Suburban Neighborhood Area adjacent to the Woodlawn CBC as shown in Figure 1, and are exempt from the 2016 Proffer Reform Bill. These parcels are planned for private open space, as they are almost entirely within the 100-year floodplain of Dogue Creek and designated as EQC and RPA, shown in Figure 2. Suburban Neighborhood Areas are part of the Richmond Highway Corridor and comprise the land located between the CBCs, which are planned as transit-oriented mixed-use nodes. Suburban Neighborhood Areas are recommended as primarily residential communities, smaller scale commercial businesses, or open spaces.

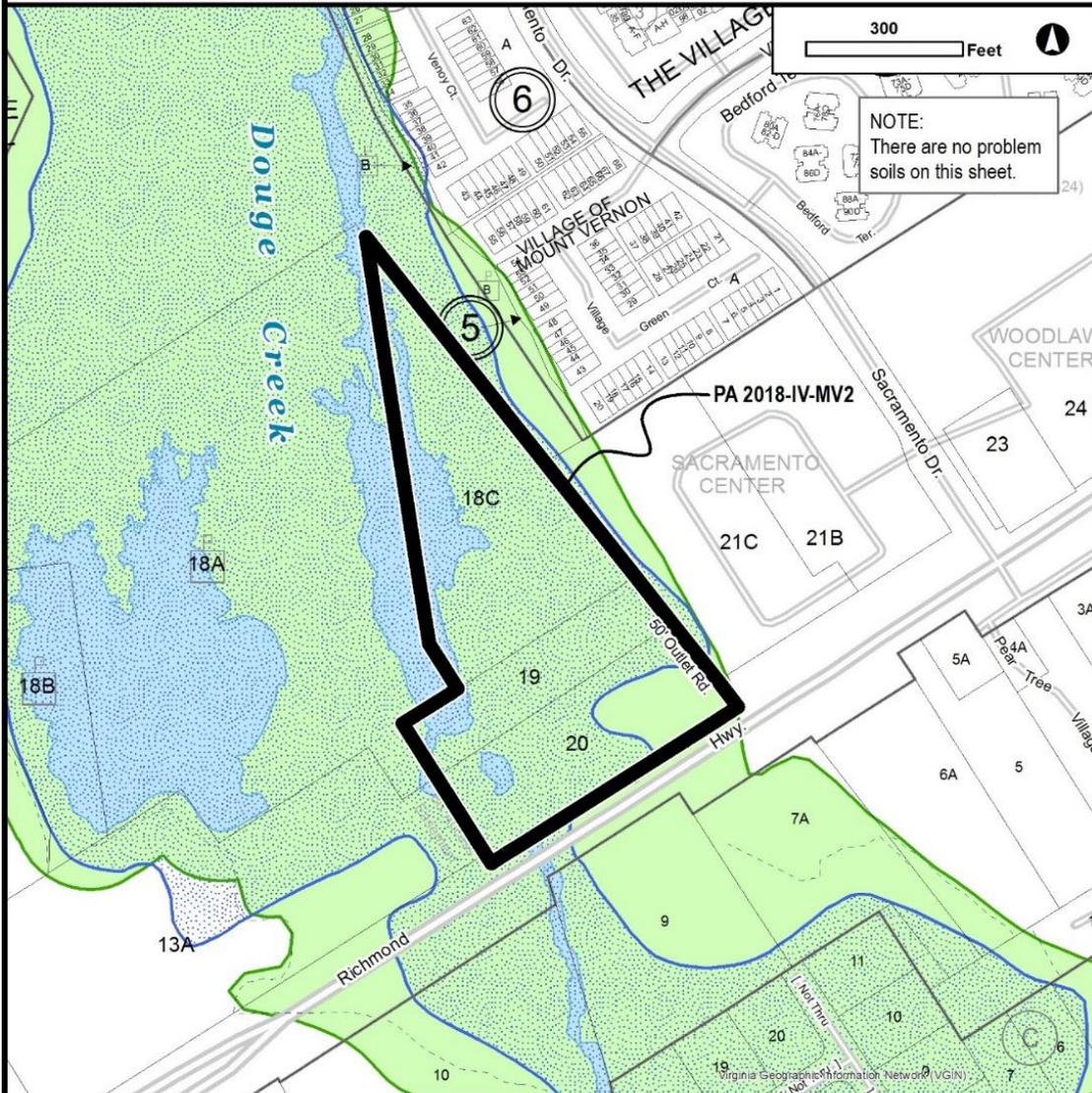
Parcel 18C, the northernmost triangular parcel, is within the MV8 Woodlawn Community Planning Sector as shown in Figure 1. The parcel is subject to the 2016 Proffer Reform Bill. Like Parcels 19 and 20, this parcel is also planned for private open space and designated as EQC and RPA, as it is almost entirely within the 100-year floodplain of Dogue Creek as shown in Figure 2.

### **PROPOSED PLAN AMENDMENT**

As stated previously, the Board authorized staff to consider residential use up to 8 du/ac for the subject area [Tax Map Parcels 109-2 ((1)) 18C, 19, and 20]. In addition to evaluating residential use for the subject area, the authorization requested that staff consider the ability to achieve full parcel consolidation and conform with Policy Plan guidance on EQCs, including the demonstration of any circumstances that merit disturbance to the EQC, and the provision of mitigation/compensation measures resulting in a net environmental benefit to the parcels and net benefits relating to most, if not all, the objectives of the EQC policy that are applicable to the proposed disturbances. The authorization also identified a need for proposed redevelopment to be consistent with the VDOT proposed widening of Richmond Highway.



# 8800 Richmond Highway - Environmental Features ITEM: PA 2018-IV-MV2



## Environmental Features

-  FEMA 100-Year Flood Plain
-  Resource Protection Area (RPA)

## Problem Soils

The highlighted soils exhibit problematic soil characteristics, including but not limited to high shrink-swell potential, low percolation, and asbestos. It should be noted that this layer displays the general location of the problematic soils. Therefore, some areas may not have problem soils even though they fall within the purview of the classification. A geotechnical investigation should be conducted prior to development to ensure proper mitigation.

Prepared by DPZ 2016

Document Path: G:\projects\ocp\pdr\OTPA\_GRAPHICS\18\_items\2018-IV-MV2 8800 Richmond Highway\2018-IV-MV2 8800 Richmond Highway ENVIRONMENTAL FEATURES.mxd

Figure 2 – 100-Year Floodplain and Resource Protection Area (RPA)

Citations of Comprehensive Plan recommendations applicable to the proposed Plan amendment are included below.

Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Environment, Amended through 3-14-2017, page 1:

**“Environmental Protection** - The amount and distribution of population density and land uses in Fairfax County should be consistent with environmental constraints inherent in the need to preserve natural resources and to meet or exceed federal, state and local standards for water quality, ambient air quality and other environmental standards. Development in Fairfax County should be sensitive to the natural setting, in order to prevent degradation of the county’s natural environment.

**Open Space** - Fairfax County should support the conservation of appropriate land areas in a natural state to preserve, protect and enhance stream valleys, meadows, woodlands, wetlands, farmland, and plant and animal life. Small areas of open space should also be preserved in already congested and developed areas for passive neighborhood uses, visual relief, scenic value, and screening and buffering purposes.”

Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Environment, Amended through 3-14-2017, page 13:

**“Objective 7: Minimize the exposure of new development to the potential of flood impacts.**

Policy a: Prohibit new residential structures within flood impact hazard areas.”

Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Environment, Amended through 3-14-2017, pages 14 -17:

**“Objective 9: Identify, protect and enhance an integrated network of ecologically valuable land and surface waters for present and future residents of Fairfax County.**

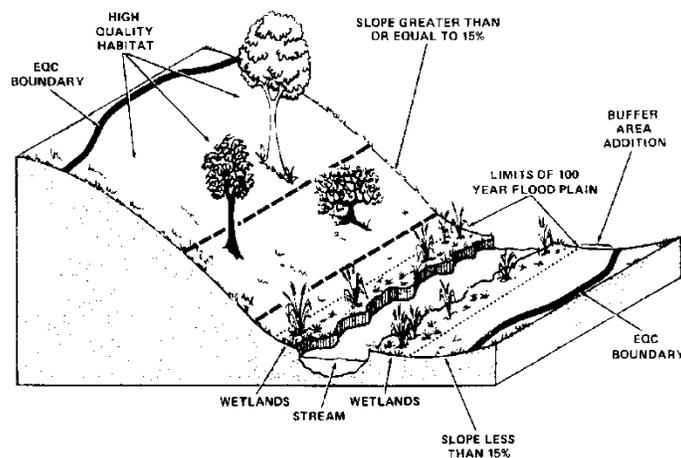
Policy a: Identify, protect and restore an Environmental Quality Corridor system (EQC)...

Lands may be included within the EQC system if they can achieve any of the following purposes:

- **Habitat Quality:** The land has a desirable or scarce habitat type, or one could be readily restored, or the land hosts a species of special interest. This may include: habitat for species that have been identified by state or federal agencies as being rare, threatened or endangered; rare vegetative communities; unfragmented vegetated areas that are large enough to support interior forest dwelling species; and aquatic and wetland breeding habitats (i.e., seeps, vernal pools) that are connected to and in close proximity to other EQC areas.

- **Connectivity:** This segment of open space could become a part of a corridor to facilitate the movement of wildlife and/or conserve biodiversity. This may include natural corridors that are wide enough to facilitate wildlife movement and/or the transfer of genetic material between core habitat areas.
- **Hydrology/Stream Buffering/Stream Protection:** The land provides, or could provide, protection to one or more streams through: the provision of shade; vegetative stabilization of stream banks; moderation of sheet flow stormwater runoff velocities and volumes; trapping of pollutants from stormwater runoff and/or flood waters; flood control through temporary storage of flood waters and dissipation of stream energy; separation of potential pollution sources from streams; accommodation of stream channel evolution/migration; and protection of steeply sloping areas near streams from denudation.
- **Pollution Reduction Capabilities:** Preservation of this land would result in significant pollutant reductions. Water pollution, for example, may be reduced through: trapping of nutrients, sediment and/or other pollutants from runoff from adjacent areas; trapping of nutrients, sediment and/or other pollutants from flood waters; protection of highly erodible soils and/or steeply sloping areas from denudation; and/or separation of potential pollution sources from streams.

The core of the EQC system will be the county's stream valleys. Additions to the stream valleys should be selected to augment the habitats and buffers provided by the stream valleys, and to add representative elements of the landscapes that are not represented within stream valleys. The stream valley component of the EQC system shall include the following elements:



A TYPICAL ENVIRONMENTAL QUALITY CORRIDOR

Source: Fairfax County Office of Comprehensive Planning

- All 100 year flood plains as defined by the Zoning Ordinance;
- All areas of 15% or greater slopes adjacent to the flood plain, or if no flood plain is present, 15% or greater slopes that begin within 50 feet of the stream channel;
- All wetlands connected to the stream valleys; and
- All the land within a corridor defined by a boundary line which is 50 feet plus 4 additional feet for each % slope measured perpendicular to the stream bank. The % slope used in the calculation will be the average slope measured within 110 feet of a stream channel or, if a flood plain is present, between the flood plain boundary and a point fifty feet up slope from the flood plain. This measurement should be taken at fifty foot intervals beginning at the downstream boundary of any stream valley on or adjacent to a property under evaluation.

Modifications to the boundaries so delineated may be appropriate if the area designated does not benefit any of the EQC purposes as described above. In addition, some disturbances that serve a public purpose such as unavoidable public infrastructure easements and rights of way may be appropriate. Disturbances for access roads should not be supported unless there are no viable alternatives to providing access to a buildable portion of a site or adjacent parcel. The above disturbances should be minimized and occur perpendicular to the corridor's alignment, if practical, and disturbed areas should be restored to the greatest extent possible

...

The following efforts within EQCs support the EQC policy and should be encouraged:

- Stream stabilization and restoration efforts where such efforts are needed to improve the ecological conditions of degraded streams. Natural channel design methods should be applied to the greatest extent possible and native species of vegetation should be used.
- Replanting efforts in EQCs that would restore or enhance the environmental values of areas that have been subject to clearing; native species of vegetation should be applied.
- Wetland and floodplain restoration efforts.
- Removal of non-native invasive species of vegetation from EQCs to the extent that such efforts would not be in conflict with county ordinances; such efforts should be pursued in a manner that is least disruptive to the EQCs.

Other disturbances to EQCs should only be considered in extraordinary circumstances and only where mitigation/compensation measures are provided that will result in a clear and substantial net environmental benefit. In addition, there should be net benefits relating to most, if not all, of the EQC purposes listed above that are applicable to the proposed disturbances.

Preservation should be achieved through dedication to the Fairfax County Park Authority, if such dedication is in the public interest. Otherwise, EQC land should remain in private ownership in separate undeveloped lots with appropriate commitments for preservation. The use of protective easements as a means of preservation should be considered.

...”

Fairfax County Comprehensive Plan, 2017 Edition, Richmond Highway Corridor Area, Amended through 5-1-2018, Introduction, Guiding Planning Principles 6 and 7, Pages 8-9:

“ 6.) Maintain the primarily residential nature of stable communities surrounding the CBCs by:

- a. Planning for primarily residential, institutional and open space uses in areas outside and between the CBCs.
- b. Providing a variety of residential housing types within the CBCs to preserve the stability of lower density neighborhoods.
- c. Supporting consolidation of land along Richmond Highway with parcels in the surrounding residential neighborhoods only when this type of consolidation is necessary to provide for site layouts that function in a well-designed, efficient manner to support reasonable and appropriate redevelopment along the corridor and protect unconsolidated parcels.

7.) Preserve, enhance, and restore the environment by:

- a. Minimizing the impact of development on the natural environment, including water quality and the ecological conditions of streams.
- b. Encouraging development approaches that serve to reduce impervious surfaces and achieve improved control over stormwater runoff ...
- c. Restoring streams and riparian areas where possible and practical.

...”

Fairfax County Comprehensive Plan, 2017 Edition, Richmond Highway Corridor Area, Amended through 5-1-2018, Corridor-wide Guidelines, Environment, Page 17:

“Residential and Other Noise-Sensitive Uses

Where residential or other noise sensitive uses are proposed near Richmond Highway, such proposals should only be considered with the provision of a noise study during the review of the development, commitments to noise mitigation measures, and, potentially, commitments to the provision of disclosure statements and a post-development noise study. The noise study during development review should clearly define the noise levels impacting the proposed uses as a measure of DNL dBA; should include noise contours and/or noise impacts at each façade of each affected building with current noise levels and projected noise levels based on a minimum 20-year traffic volume projection for the roadway and for bus rapid transit and/or Metrorail, as may be applicable; and,

should identify differing noise levels that may affect building facades at different elevations.

In areas where projected noise impacts at affected building facades will exceed DNL 75 dBA, design strategies should be pursued where feasible, consistent with other design goals, such that exposures of facades for noise-sensitive areas of residences will be minimized. Where such exposures cannot be avoided, and for dwelling units for which outdoor spaces including balconies are projected to be exposed to noise levels that exceed DNL 65 dBA, disclosure statements should be provided to potentially affected residents and users within the impacted uses or units. The disclosure statements should clearly identify the mitigated and unmitigated noise levels for interior space and the noise levels for any affected balconies, in addition to noise mitigation for interior space and outdoor recreational areas. When feasible, post-development noise studies should be conducted to support evaluations of the effectiveness of noise mitigation measures.”

Fairfax County Comprehensive Plan, 2017 Edition, Richmond Highway Corridor Area, Amended through 5-1-2018, Suburban Neighborhood Areas, Suburban Neighborhood Areas introduction, page 165:

“...As redevelopment occurs in the Richmond Highway Corridor Area, projects should demonstrate compatible and effective transitions from the high intensity CBCs to the lower intensity SNAs; provide appropriately scaled and logical multimodal connections between the CBCs and SNAs; and ensure the character of new development and redevelopment in the SNAs is complementary to the adjacent CBCs and SNAs, where applicable. In addition to the recommendations above, the Guiding Planning Principles and Corridor-wide Guidelines should be consulted in the review of all development proposals in the SNAs. In some cases, site-specific recommendations may differ from and supersede these recommendations.”

Fairfax County Comprehensive Plan, 2017 Edition, Richmond Highway Corridor Area, Amended through 5-1-2018, Suburban Neighborhood Areas, Suburban Neighborhood Areas adjacent to Woodlawn CBC, Recommendation 1, page 181:

“1. Tax Map Parcels 109-2((2))7A and 9 and Tax Map Parcels 109-2((1)) 19 and 20 on both sides of Richmond Highway are predominantly floodplain and planned for open space.”

### **RICHMOND HIGHWAY CORRIDOR IMPROVEMENTS PROJECT**

The subject area is partially within the limits of the VDOT Richmond Highway Corridor Improvements Project as shown in Figure 3. The project will widen Richmond Highway from four to six lanes; add separate bicycle lanes and sidewalks on both sides of the roadway; and reserve a median to accommodate Fairfax County’s proposed BRT system. As part of the project, VDOT is recommending replacement of the existing bridge over Dogue Creek with a higher, multi-span bridge that would accommodate the widened roadway. The bridge is intended to convey the 100-year flood under it without overtopping the road. Existing culverts are proposed to be removed, allowing for the daylighting of Dogue Creek under the bridge. The bridge is just south of subject area.

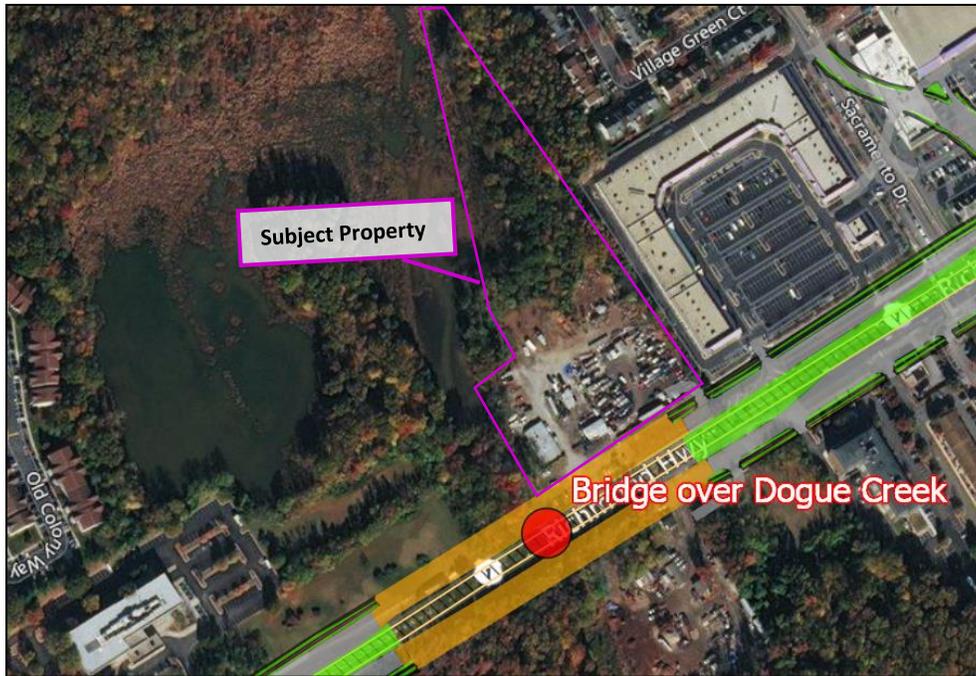


Figure 3 – Proposed VDOT Richmond Highway Corridor Improvements

*NOTE: The Interactive Map was accessed on June 29, 2018. This image does not show all of the proposed improvements. For any future updates, consult [http://www.virginiadot.org/projects/northern\\_virginia/richmond\\_highway\\_interactive\\_map.asp](http://www.virginiadot.org/projects/northern_virginia/richmond_highway_interactive_map.asp)*

Staff has identified a number of items for further information gathering and analysis related to the bridge and existing circumstances of Dogue Creek, to determine how the bridge may be implemented and function as intended by VDOT. Specifically, additional analysis is needed regarding the alignment of Dogue Creek and related erosion concerns. Side-by-side images of the 1955 approved plat for the private recreation club and recent water features on or near the subject property are shown in Figure 4, and offer visualizations to aid in the following creek flow path, road and streambank erosion, and channel stabilization discussion.

Dogue Creek once flowed through a straight, north-south path as generally reflected in the approved plat on the left side of Figure 4. At a later time, an alternative channel was created to the west, which resulted in most of the flow of the creek being diverted to this newer channel. The north-south flow path at one time was impeded by a mechanism near the pond (the pond is shown on the right image) that prevented the north-south flow; more recently, the mechanism was breached and the flow path was restored. The western channel is circuitous and makes an abrupt 90 degree turn along the roadbed of Richmond Highway, which does not align with VDOT's culvert or the stream channel downstream of Richmond Highway. This western channel condition has resulted in the continual erosion of the streambank and roadbed along and in the vicinity of the subject property. Note the figures do not reflect the actual width of the roadway in relation to stream.

There has been a preliminary need identified to re-establish a straightened channel that conveys the flow into the culvert under Richmond Highway, and to stabilize the channel to effectively convey flows and allow for ecosystem functions. Even if the culvert is removed with the proposed bridge project, erosion of the streambank at the base of the bridge from the western channel would

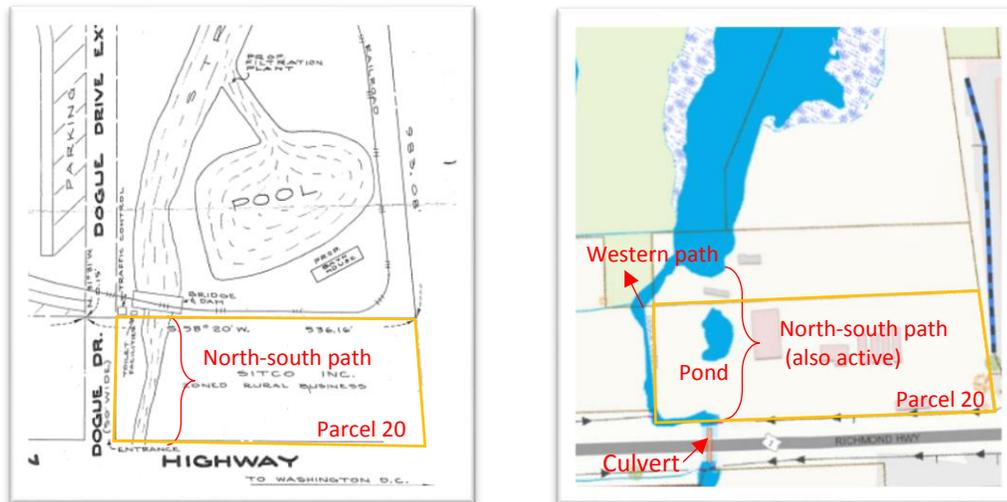


Figure 4 – Part of Approved Plat, 1955 (left) Dogue Creek and related features, researched 06/2018 (right)

continue to be problematic due to the 90 degree turn at Richmond Highway. Compounding concerns about erosion near and along Richmond Highway are concerns about additional erosion of the stream channel a short distance upstream, in an area that until recently had been ponded. Large volumes of sediment were deposited in the formerly ponded area. Any additional destabilization of this area could result in the movement of much of this sediment downstream, and stream channel erosion progressing upstream.

It is staff’s view that more discussions with VDOT about the interface between Dogue Creek and the new bridge are needed to fully address the Board’s request to determine whether redevelopment could be consistent with the VDOT Richmond Highway Corridor Improvements project. Improving the stability of the stream channel is also an important consideration to mitigate existing conditions and protect new infrastructure.

The estimated schedule for the VDOT Corridor Improvements Project includes a design public hearing in the fall of 2018 and design approval in the winter of 2018/19. A number of additional milestones are identified before construction begins in the Spring of 2023. For the most recent information, see the VDOT project website at [http://www.virginiadot.org/projects/northernvirginia/richmond\\_highway.asp](http://www.virginiadot.org/projects/northernvirginia/richmond_highway.asp).

**ANALYSIS**

***Environment***

**Terms and Definitions**

As previously noted, the subject area is almost entirely within the 100-year floodplain of Dogue Creek as well as the associated EQC and RPA. The 100-year floodplain is the flat area adjacent to a main stream channel that has a one percent (1%) chance of being covered by a flood event in any

given year. The majority of the subject property is also a Federal Emergency Management Agency (FEMA) Special Flood Hazard Area. Special Flood Hazard Areas are defined as high risk areas identified by FEMA Flood Insurance Program maps.<sup>1</sup> Floodplain management regulations must be enforced and mandatory purchase of flood insurance applies for Special Flood Hazard Areas.<sup>2</sup>

RPAs are defined and delineated under the Chesapeake Bay Preservation Ordinance, which was adopted by the county per the requirements of Virginia's Chesapeake Bay Preservation Act; this Act is applicable to all "Tidewater" localities in Virginia. These are generally localities that have land east of I-95, but also cities and towns surrounded by such localities (e.g. Fairfax City and the towns of Vienna, Clifton and Herndon). RPAs are corridors of environmentally sensitive land located alongside or near the shorelines of streams, rivers, and other waterways. Most types of new development are prohibited in RPAs. Some disturbances such as infrastructure improvements may be permitted, but most types of land disturbance in RPAs must be granted through an RPA exception. In Fairfax County, exceptions may be approved by the Board if the proposed disturbance is part of a zoning request. Redevelopment is permitted within RPAs if there is no increase in the amount of impervious cover and there is no further encroachment within the RPA.

EQCs are environmentally-sensitive lands that are identified and recommended for protection and restoration through the EQC Policy in the Comprehensive Plan. Areas are recommended for inclusion within EQCs based on the criteria as provided in the policy, and the ability to achieve any of the stated purposes of EQCs including habitat quality, connectivity, hydrology/stream buffering/stream protection, and pollutant reduction. The EQC policy also supports the restoration of degraded areas that would otherwise meet the EQC designation criteria. These networks of the county's natural landscapes can also provide passive recreation opportunities, an important function that protects and enriches the quality of life for residents of Fairfax County. There are no regulatory requirements for the protection of EQCs; however, the preservation of EQCs is long-standing Board-adopted policy typically achieved through the development review process, acquisition of parkland, and the donation of easements.

#### Comparison with EQC Policy

The Board specifically requested that staff evaluate the amendment within the context of the Policy Plan guidance addressing EQCs, which includes guidance for considering disturbances to EQCs. The policy recommends that, with some specific exceptions, disturbances to EQCs should only be considered in ***“extraordinary circumstances and only where mitigation/compensation measures are provided that will result in a clear and substantial net environmental benefit. In addition, there should be net benefits related to most, if not all, of the EQC purposes that are applicable to the proposed disturbances.”*** In staff's view, there is not the presence of such an "extraordinary circumstance" which warrants re-planning land that is floodplain, RPA, and EQC for residential use. Further, at the time of staff report publication, there was not sufficient evidence that most of the applicable purposes of the EQC (in this case, habitat quality, connectivity, hydrology/stream buffering/stream protection, and pollution reduction capabilities) would receive a net benefit, or

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<sup>1</sup> National Flood Insurance Program, Fairfax County Public Works and Environmental Services. Accessed June 7, 2018. <https://www.fairfaxcounty.gov/publicworks/stormwater/flood-information>.

<sup>2</sup> National Flood Insurance Program, Fairfax County Public Works and Environmental Services. Accessed June 7, 2018. <https://www.fairfaxcounty.gov/publicworks/stormwater/flood-information>.

that mitigation/compensation measures demonstrating a clear and substantial net environmental benefit would be provided to offset a residential development at a density up to 8 du/ac.

#### *History of EQC Policy Including EQC Disturbance Considerations*

Given the proposed disturbance to the EQC, a summary of the history and purpose of the adopted EQC policy is provided in this section.

The guidance recommending the protection of EQCs was initially adopted in the 1975 Edition of the Comprehensive Plan and has been refined since that time. The guidance regarding proposed disturbances to EQCs was adopted by the Board in 2010 in response to questions raised in 2009 in conjunction with the approval of a zoning application for the Aerospace Corporation. The application identified the filling of two headwater stream valleys along with a comprehensive EQC restoration effort. At that time, Policy Plan guidance did not account for the consideration of such trade-offs. Therefore, after approving the application, the Board requested a thorough review of the EQC policy as it relates to proposals for disturbance to EQCs. The issue was referred by the Planning Commission to its Environment Committee.

In contemplating circumstances under which such EQC trade-offs should be considered, the Planning Commission's Environment Committee stressed that EQC disturbances should only be supported in extraordinary circumstances; i.e., the consideration of EQC disturbances and possible trade-offs should not be routinely or typically applied. The Planning Commission supported the Environment Committee's proposal to establish the "extraordinary circumstance" benchmark, and the Board adopted this guidance. The term "extraordinary circumstance" was not defined, recognizing the different circumstances could arise among applications, and this guidance would be considered on a case-by-case basis.

Since the 2010 adoption of the Policy Plan guidance addressing disturbances to EQCs, there have been two instances where such disturbances were approved when applying the guidance. In 2015, the Board of Supervisors and BZA approved zoning applications from Fairfax Water and Vulcan Quarry. The ability to reconfigure and convert a portion of the quarry was approved in order to support the long term water supply storage needs of Fairfax County and the region. The quarry would ultimately be able to store approximately 17 billion gallons of water upon completion of the quarry expansion around the year 2085. A small stream valley on the Vulcan Quarry property was proposed to be incorporated within the expanded quarry, and as part of the review of the zoning applications, significant analysis was conducted to understand the impacts of diverting the stream's flow and compensating for its loss. A development condition was included that resulted in Vulcan Quarry preparing and submitting an EQC compensation plan.

The other instance was a Proffered Condition Amendment for Circle Towers in 2011 that included a request for new vehicular access that would result in crossing the RPA and EQC at the western edge of the site. In this case, consideration of the EQC crossing was considered an extraordinary circumstance because of external limitations to proposed improvements for the two existing access points to Circle Towers. Additionally, the applicant had made extensive efforts to provide improved accessibility and circulation through other alternatives. In order to mitigate impacts for the proposed EQC crossing, the applicant both designed a wetland area and habitat to be restored in the existing EQC, and also designed the crossing in an environmentally sensitive manner as a

bridge spanning the EQC rather than a road built on a culvert or filled area. These efforts offset and mitigated the encroachment and impact of the EQC/RPA crossing, and were ultimately determined to provide a net environmental benefit. At the time of staff report publication, the applicant had not pursued redevelopment and the associated mitigations that were part of the approved Proffered Condition Amendment.

#### New Residential Lots and Other Development in Floodplains

As stated previously, the Board's authorization directs staff to consider the effect of development within the EQC, which is mostly coterminous with the 100-year floodplain and RPA. The Policy Plan recommends that new residential structures within flood impact hazard areas be prohibited. Staff is not aware of circumstances where new residential lots have been approved within 100-year floodplains, and the approval of this amendment could be regarded as an example for similar proposals elsewhere requesting new residential lots within floodplains. Further, unless there is a clear demonstration that the circumstances warranting consideration of this amendment are truly extraordinary and not something that could be routinely applied to degraded EQCs elsewhere in the county, the approval of this amendment could have the effect of generating increased development pressure for land use activities that propose disturbances to EQCs.

Another consideration is the potential for impacts to Fairfax County's rating in the FEMA National Flood Insurance Community Rating System. The Community Rating System is a voluntary program that encourages communities to enact floodplain management activities that exceed the minimum National Flood Insurance Program (NFIP) standards. Under the Community Rating System, communities may benefit from discounted flood insurance premium rates as a result of community activities that reduce flood losses, facilitate accurate insurance ratings, and promote awareness of flood insurance. Each year, Fairfax County submits an annual recertification. Adjustments could be made to the rating based on a community's mitigation and floodplain management activities.<sup>3</sup> Fairfax County has participated in the program since 1993, and is one of two jurisdictions in Virginia with a rating of Class 6, meaning that property owners can obtain flood insurance at a discount.<sup>4</sup> Comprehensive Plan guidance recommending new development in floodplains, that may be looked to as an example when considering future land disturbance in floodplains, may negatively impact to the county's rating.

#### Noise Considerations

The subject area will continue to be affected by high noise levels generated by traffic on Richmond Highway. VDOT's proposed replacement of the bridge over Dogue Creek with a higher structure may complicate the consideration of available noise mitigation strategies for residential development.

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<sup>3</sup> FEMA Community Rating System Fact Sheet, June 2017. Accessed June 7, 2018. [https://www.fema.gov/media-library-data/1507029324530-082938e6607d4d9eba4004890dbad39c/NFIP\\_CRS\\_Fact\\_Sheet\\_2017\\_508OK.pdf](https://www.fema.gov/media-library-data/1507029324530-082938e6607d4d9eba4004890dbad39c/NFIP_CRS_Fact_Sheet_2017_508OK.pdf)

<sup>4</sup> National Flood Insurance Program, Fairfax County Public Works and Environmental Services. Accessed June 7, 2018. <https://www.fairfaxcounty.gov/publicworks/stormwater/flood-information>.

## *Land Use*

### Embark Plan Amendment and Revitalization Considerations

The Embark Richmond Highway planning process resulted in the adoption of corridor-wide guidance that was the outcome of extensive community and stakeholder engagement and refinement based on collective input. One of the overarching principles of the Plan guidance is focusing revitalization and redevelopment in the corridor's nodes (the CBCs), an idea that is also conveyed in the Comprehensive Plan's Concept for Future Development. The corridor-wide guidelines for the Richmond Highway Corridor recommend preserving, enhancing, and restoring the environment by minimizing the impact of development on the natural environment including impacts to water quality and the ecological conditions of streams. The Suburban Neighborhood Areas were recommended to retain their adopted land uses and intensities. Parcel 18C falls outside of the Richmond Highway Corridor and was not included in the Embark planning study.

Specific to the Woodlawn area, the possibility of using the environmental features of Dogue Creek as an amenity for future development was recommended as early as the 1984 Edition of the Comprehensive Plan, which states that "the environmental characteristics of the area [the Dogue Creek EQC] should serve not only as a tool for shaping growth into nodes, but should provide an amenity to all future development in the corridor." The Embark planning effort was able to, more broadly, bring this guidance to the forefront and recognize that highlighting environmental features could also support revitalization efforts through a new "ecological spine" environmental concept in certain CBCs. As redevelopment occurs, previously impacted streams and waterways are recommended to be improved by removing conveyance pipes and impervious surfaces, restoring environmental functions, and creating passive recreation uses that would not negatively impact the newly daylighted streams. The proposed Plan amendment is counter to the spirit of ecological spines as development that could occur under the proposed amendment would preclude the ability to restore environmental functions within the EQC areas that would be developed. The potential for future restoration of these areas would remain under the current recommendation for private open space. One purpose of the EQC system is to preserve its pollution reduction capabilities. Residential use could result in the introduction of a new level of activity that generates pollutants that would not likely be produced to the same degree through an open space use (e.g., runoff of fertilizers and pesticides used for lawn management).

The subject property was subject to extensive disturbance in the past. In 1955, an outdoor amusement center was approved by the Board of Zoning Appeals (BZA) for Parcel 20, and a private recreation club was approved several months later by the BZA for the remainder of the subject area and the adjoining property to the west. Light industrial uses and related businesses replaced the amusement center beginning in the 1960s and continued for approximately five decades, primarily on Parcels 19 and 20. The uses included vehicle repair; a storage yard for inoperable vehicles, trailers, tires, boats, and construction equipment; and landscaping services. A majority of the uses required the submission and approval of special exception applications, site plans, and/or permits which are not on record with the county. In 2015-2016, the Fairfax County Department of Code Compliance (DCC) conducted inspections that revealed ongoing violations of Zoning Ordinance provisions. The Notice of Violations issued in September 2016 was appealed by the property owner. On June 14, 2017, the BZA upheld the Zoning Administrator regarding the Notice of Violations. Subsequently, the violations were addressed by removing the structures and

the storage yard that were in violation of the Zoning Ordinance provisions. One permitted use, a welding operation, remains on a portion of Parcel 20.

Staff recognizes that the history of uses may generate interest in accommodating some redevelopment. Where appropriate, the county supports redevelopment of uses that could be viewed as inconsistent with revitalization goals. On this site, revitalization considerations are secondary to the many environmental concerns, including the inability to achieve adopted Plan policies for EQCs, EQC disturbances, and recently adopted Richmond Highway Corridor guidance, and the potential consequences of recommending residential use in a floodplain.

#### Parcel Consolidation

The subject property is comprised of an eight-acre consolidated area. One of the benefits of parcel consolidation is the ability to configure development in a manner that minimizes negative impacts, such as environmental disturbance.

#### ***Transportation***

An evaluation of trip generation was conducted based on the rezoning applicant's proposal for 43 townhomes (5-6 du/ac) and the site design at the time of staff report publication. The Comprehensive Plan guidance for the Richmond Highway Corridor recommends multimodal connections between the CBCs and SNAs, where appropriate. A grid network to accommodate vehicles, pedestrians, and bicyclists is recommended in the Woodlawn CBC, adjacent to the subject area. The applicant's rezoning application proposes a new road through their site. If the Plan amendment is adopted and the subject area is developed, consideration should be given to configuring the new road in a manner that could connect with the other half of the roadway that would be provided when the Sacramento Center Shopping Center redevelops, provided that analysis is done that weighs the benefits and disadvantages of encroaching into the RPA between the Woodlawn CBC and the subject property with the transportation connectivity goals for the corridor.

An estimated 104 daily vehicular trips are generated by existing uses, and this would increase to 309 trips. This results in an increase of 205 daily trips when compared to the existing uses. A total of 26 morning peak hour trips and 72 afternoon peak hour trips are estimated under a townhouse scenario, this is 27 less vehicular trips during the morning peak hours and 7 less trips during the afternoon peak hours compared with the existing uses. There are currently no trips generated by the planned private open space use; therefore the net increase compared to the adopted Comprehensive Plan is 309 daily trips, 53 morning peak hour trips, and 72 afternoon peak hour trips. The increased number of vehicular trips is not anticipated to cause significant impacts to the transportation network provided that appropriate mitigation is addressed as part of the rezoning review process.

The Board authorization indicates the need for potential development to be consistent with the VDOT Richmond Highway Corridor Improvements Project. The transit, roadway, bicycle, and pedestrian improvements on Richmond Highway will require right-of-way from the subject area. The right-of-way needs, timing of any proposed land development activities, and relevant site design considerations should be coordinated with VDOT to avert potential conflicts with the corridor improvements project.

**Public Schools**

The schools analysis evaluated the potential impact to the public schools serving the subject area under the maximum residential density under consideration (8 du/ac). Based on 64 single-family attached residential units, a total of 30 students are estimated using the most current countywide student yield ratio at the time of the analysis, as shown in Figure 5. The schools that serve the study area are Mount Vernon High School, Whitman Middle School, and Washington Mill Elementary School. Based on school capacity as of January 2018, Mount Vernon and Whitman schools are under capacity (at 84% and 79% of their capacity, respectively) and Washington Mill is over capacity (at 116% percent).The capacity and projected enrolled is based on the adopted Fiscal Year 2019-2023 Capital Improvements Program (CIP). The CIP identifies a number of potential solutions to alleviate current and projected school capacity deficits, including program changes, capacity enhancement through a modular or building addition, and boundary adjustment with schools having a capacity surplus. Any options chosen to address school capacity would be discussed through a public process with stakeholder and community engagement, in accordance with School Board Policies and Regulations.

School Level	Proposed Student Yield
High	9
Middle	4
Elementary	17

Figure 5: Student Yield by School Level

**Parks & Recreation**

The parks analysis evaluated 64 single-family attached residential units to estimate the greatest potential impact to the parks serving the subject area under the maximum residential density under consideration (8 du/ac). The additional residents from this level of development would generate the need for an additional 0.92 acres of local park space and 2.39 acres of district/countywide park space, using the average household size of a single-family attached unit for the Mount Vernon Planning District (2.93 people/single-family attached unit). Residential projects are recommended to offset impacts to parkland and park facilities for which there are adopted service level standards through monetary or “in-kind” contributions to serve the corridor.

As mentioned previously, Dogue Creek runs along the shared eastern boundary of Pole Road Park and the subject area. If the amendment is approved and development occurs, any development should provide for the treatment of invasive species and use only native plants for landscaping, seed mixes, and erosion control. Due to the extent of the floodplain on the subject area and adjoining park, seeds could be more easily transported and spread to the adjoining parkland, therefore the use of native species and treatment of invasive species is of particular importance.

Due to the previous disturbance on Parcels 19 and 20, there is a low probability of significant cultural resources on this portion of the site and additional archaeological study is not warranted. Parcel 18C has less disturbance, therefore a Phase I archaeological survey, followed by Phase II archaeological testing and Phase III archaeological data recovery, as appropriate, should be considered.

### ***Heritage Resources***

The Comprehensive Plan guidance for the Richmond Highway Corridor notes the importance of considering a development's potential impacts to resources in two historic overlay districts (HOD) proximate to the corridor, Woodlawn and Huntley. A portion of the subject area is within the Woodlawn Historic Overlay District (HOD). Should the amendment be approved and development pursued, the design of the proposed development should be sensitive to the heritage resources within the Woodlawn HOD, including historic roadways. If potential impacts to the viewsheds from Huntley or Woodlawn are identified, mitigation should be pursued through modified building height, the use of non-reflective building materials, and/or other approaches.

### **CONCLUSION**

The proposed amendment generates considerable concerns when evaluated within the context of three main considerations expressed in the Board's authorization: residential use; Policy Plan guidance for EQCs and disturbances to EQCs; and consistency with VDOT's Richmond Highway project.

In terms of the appropriateness of residential use on the subject property, new residential development that significantly encroaches into a floodplain and EQC and would require filling in a floodplain is contrary to long-established county policy and newly adopted Plan recommendations for the Richmond Highway Corridor. There is also concern about the potential for precedent with countywide implications; unless there is a clear demonstration that the circumstances warranting consideration of this amendment are truly extraordinary and not something that could be routinely applied elsewhere in the county, the approval of this amendment could have the effect of generating increased development pressure for land use activities that propose disturbances to EQCs.

As for the EQC policy, all of the stated purposes of EQCs are applicable to this site (habitat quality, connectivity, hydrology/stream buffering/stream protection, and pollution reduction capabilities). Under the recommendation for private open space, there is potential to restore those EQC functions. The current Plan reflects the inherent environmental value of the subject area (EQC, RPA, and floodplain). Staff recognizes that the history of uses and extent of previous disturbance may generate interest in accommodating some redevelopment. However, establishing new residential lots within the floodplain is not the appropriate course of action to achieve the desired outcome. A clear and net substantial environmental benefit and a net benefit to the applicable purposes of the EQC would not be gained from re-planning the subject property from open space to residential use at density up to 8 du/ac, and is also of concern.

Lastly, in terms of consistency with the Richmond Highway Corridor Improvements Project, Dogue Creek on and near the subject area has ongoing streambank erosion and channel stability issues. The potential for the release of accumulated sediment furthers concerns about the unstable stream condition. Additional discussions about these outstanding concerns and an identification of a preferred course of action are critical in order to assess whether redevelopment could be consistent with the bridge and related aspects of VDOT's efforts.

**RECOMMENDATION**

It is staff's view that the amendment creates conflicts with established Comprehensive Plan policy and would create adverse precedent relating to new residential development within floodplains. Adequately addressing the concerns regarding the stability of the Dogue Creek channel, erosion, and VDOT's Richmond Highway project requires further coordination and discussion. Staff does not support this amendment.