

## Dietrich, Andrew

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**From:** Virginia Field Office, FW5 <virginiafieldoffice@fws.gov>  
**Sent:** Tuesday, June 15, 2021 10:44 AM  
**To:** Dietrich, Andrew  
**Subject:** Automatic reply: [EXTERNAL] Self Certification Letter for Van Buren Rd North Extension Preliminary Investigations

[CAUTION] External Email. DO NOT click links or open attachments unless expected. Please use the "Phish Alert" button to report all suspicious emails.

Thank you for submitting your online project package. If you have submitted a Review Request Letter, we will respond within 60 days of receipt. If you have submitted a Self-Certification Letter, you will typically not receive a response from us since the Self-Certification Letter is our official response. However, if we have additional questions or do not concur with your determinations, we will contact you during the 60 day review period.

If your project may disturb bald eagles, please

visit: <https://www.fws.gov/northeast/ecologicalservices/eagle.html>

**Note:** Consultation Package Builder (CPB) went live in IPaC on December 29, 2020. CPB is a tool that guides you through evaluating and documenting your project's potential effects on species protected by the Endangered Species Act. At this time, our office is not requiring the use of CPB by any individual seeking review or approval of their project in Virginia by the U.S. Fish and Wildlife Service. You can exit the IPaC review process after completing steps 1&2 to avoid the use of CPB in step 3. After exiting the IPaC review process, please continue using our online review process to complete building your project package.

Our office is working to develop guidance on when it is appropriate to use CPB to evaluate and document your project's potential effects on listed species. We will post this guidance to our website when it becomes available. In the interim, CPB can be used as a learning tool for individuals new to Endangered Species Act consultations or those looking to enhance their understanding of the consultation process. If you have any questions, please feel free to contact our office via email at [VirginiaFieldOffice@fws.gov](mailto:VirginiaFieldOffice@fws.gov).

**Note:** Surveyor lists are updated on a semi-annual basis on January 15 and June 15. If you would like to be added to a list or lists, you must submit your information at least 60 days in advance of either January 15 or June 15. Additional information is available in the [How to be a surveyor](#) document. If you are an existing approved surveyor and need to update your information, please email the requested changes to [Katie Whitfield](#). Updates will be completed within 10 days of receipt.

## Dietrich, Andrew

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**From:** Dietrich, Andrew  
**Sent:** Tuesday, June 15, 2021 10:40 AM  
**To:** 'VirginiaFieldOffice@fws.gov'  
**Cc:** Moyer, Beth; Stith, Justin  
**Subject:** Self Certification Letter for Van Buren Rd North Extension Preliminary Investigations  
**Attachments:** Van Buren Road Threatened & Endangered Species Review.pdf

To whom it may concern,

Please find attached the self-certification letter and project review package for the Van Buren Road North Extension project located in Prince William County, Virginia. This review specifically concerns preliminary field investigations required for development and design of the roadway project, including geotechnical surveys.

Based on our review, the project will not impact any critical habitat and is not anticipated to affect any threatened or endangered species. For these reasons, we have completed the online Self-Certification letter for the proposed work for your review and concurrence.

Should you have any questions or need any additional information feel free to email or call me at [adietrich@dewberry.com](mailto:adietrich@dewberry.com) or at 703-849-0351.

Thank you!

Best,

Andrew Dietrich

Environmental Scientist  
Environmental Services  
8401 Arlington Boulevard  
Fairfax, VA 22031-4619  
D 703.849.0351



[www.dewberry.com](http://www.dewberry.com)



8401 Arlington Boulevard  
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From: Andrew Dietrich  
Dewberry Engineers Inc.  
8401 Arlington Boulevard  
Fairfax, VA 22031  
703-849-0351  
adietrich@dewberry.com

To: US Department of the Interior Fish and Wildlife Service  
Virginia Field Office  
6669 Short Lane  
Gloucester, VA, 23061

June 15, 2021

RE: Project Review Request, Van Buren Road North Extension, Prince William County,  
Virginia, Project #50132497

To whom it may concern,

We have reviewed the above-referenced project using the Virginia Field Office's online project review process and have followed all guidance and instructions in completing the review. We completed our review on June 15, 2021 and are submitting our project review package in accordance with instructions for further review. Dewberry Engineers, Inc. is requesting the US Fish and Wildlife Service concur with our species effect determinations based on the enclosed documentation.

The Prince William County Department of Transportation is proposing to extend Van Buren Road on new alignment from its existing termini at the intersection with Dumfries Road (Route 234) north for approximately 2.5 miles to a portion of existing Van Buren Road directly south of Cardinal Drive. This review is concerned with the preliminary site investigations, including a geotechnical survey. The project area is located in the southeastern region of Prince William County, Virginia.

Please find attached the self-certification letter and project review package for the proposed Van Buren Road North Extension Project. The enclosed project review package provides information about the species and critical habitat considered in our review, and the species conclusions table included in the package identifies our determinations for the resources that may be affected by the project. Based on our review, the project will not impact any critical habitat, will not disturb any nesting bald eagles, and does not intersect with an eagle concentration area. We have determined that there is no Northern long-eared bat hibernacula or roosting areas within or near the project parcel and our analysis for this project fulfills all Section 7 responsibilities regarding the NLEB. A species survey for small whorled pogonia and Harperella will be conducted in July 2021. A

Van Buren Road North Extension  
T&E Project Review Request  
Project #50132497  
June 15, 2021

habitat assessment for small whorled pogonia and Harperella was conducted March 9, 2021 and has been attached

To fulfill the requested environmental scoping work for this project, and in anticipation of future permitting requirements, we are submitting the enclosed online Self-Certification letter and additional documentation for your review, comment and concurrence.

Should you have any questions or need any additional information, feel free to email me at [adietrich@dewberry.com](mailto:adietrich@dewberry.com) or call me at 703-849-0351.

Sincerely,

Andrew Dietrich  
Environmental Scientist  
Dewberry Engineers Inc.

Enclosed:

- 1) Self-Certification Letter
- 2) Project Review Package



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Virginia Field Office  
6669 Short Lane  
Gloucester, VA 23061

Date:

### **Self-Certification Letter**

Project Name:

Dear Applicant:

Thank you for using the U.S. Fish and Wildlife Service (Service) Virginia Ecological Services online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the project named above in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

The species conclusions table in the enclosed project review package summarizes your ESA conclusions. These conclusions resulted in:

- “no effect” determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
- Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR § 17.40(o) [as determined through the Information, Planning, and Consultation System (IPaC) northern long-eared bat assisted determination key]; and/or
- “may affect, not likely to adversely affect” determinations for proposed/listed species and/or proposed/designated critical habitat.

We certify that use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with the determinations described above for proposed and listed species and proposed and designated critical habitat. Additional coordination with this office is not needed.

Candidate species are not legally protected pursuant to the ESA. However, the Service encourages consideration of these species by avoiding adverse impacts to them. Please contact this office for additional coordination if your project action area contains candidate species.

Should project plans change or if additional information on the distribution of proposed or listed species, proposed or designated critical habitat becomes available, this determination may be reconsidered. This certification letter is valid for 1 year.

Information about the online project review process including instructions and use, species information, and other information regarding project reviews within Virginia is available at our website [http://www.fws.gov/northeast/virginiafield/endspecies/project\\_reviews.html](http://www.fws.gov/northeast/virginiafield/endspecies/project_reviews.html). If you have any questions, please contact Troy Andersen of this office at (804) 824-2428.

Sincerely,

A handwritten signature in blue ink that reads "Cynthia A. Schulz". The signature is written in a cursive style and is placed on a light blue rectangular background.

Cindy Schulz  
Field Supervisor  
Virginia Ecological Services

Enclosures - project review package

## Endangered Species Act (ESA) Section 7 Determination Table

Project Name: Van Buren Road North Extension

Date: 5/18/2021

Consultation Code: 05E2VA00-2021-SLI-3772

Species / Resource Name	Habitat/Species Presence in Action Area	Sources of Info	ESA Section 7 Determination	Project Elements that Support Determination
<p>Northern Long-eared Bat (<i>Myotis Septentrionalis</i>)</p>	<p>No known/documented habitat or hibernacula within 1 mile of project area; suitable area present</p>	<p>ECOS, VAFO CH Map Tool  <i>VDWR Fish and Wildlife Information Service (VaFWIS); VDWR NLEB Winter Habitat and Roost Trees Map Tool</i></p>	<p>May affect</p>	<p>This project will be relying on the USFWS's January 5, 2016 Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA)(87Stat.884, as amended; 16 U.S.C. 1531 <i>et seq.</i>).</p> <p>A determination and consistency letter have been obtained via the Determination Key available through the USFWS Information for Planning and Consultation tool (IPaC). Incidental take from tree removal activities is not prohibited unless it results in the removal of a known occupied maternity roost tree or from tree removal activities within 150 feet of a known occupied maternity roost tree or within 0.25 miles of hibernacula during the period between June 1<sup>st</sup> and July 31<sup>st</sup>. According to the VDGIF NLEB Winter Habitat and Roost Trees Map tool, there are no known hibernacula or roosting trees within the project area. Based on these findings, the project will not need to adhere to a TOYR. Based on</p>

				current preliminary boring plants, it is anticipated the project will require approximately 2.3 acres of tree clearing for a geotechnical survey.
Small Whorled Pogonia <i>Isotria Mefeoloides</i>	Suitable habitat present	ECOS, VAFO CH Map Tool	Not likely to adversely affect	Habitat Assessment conducted and potential habitat was found. A species survey will be completed in July 2021. The work to be conducted for geotechnical borings will not disturb potential habitat.
Critical Habitat	No critical habitat present	<b>Source:</b> USFWS Virginia Field Office Critical Habitat Map Tool	No effect	There is no critical habitat within or adjacent to the project area.





## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Virginia Ecological Services Field Office  
6669 Short Lane  
Gloucester, VA 23061-4410  
Phone: (804) 693-6694 Fax: (804) 693-9032  
<http://www.fws.gov/northeast/virginiafield/>

In Reply Refer To:

May 18, 2021

Consultation Code: 05E2VA00-2021-SLI-3772

Event Code: 05E2VA00-2021-E-10925

Project Name: Van Buren North Extension Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered

species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
  - USFWS National Wildlife Refuges and Fish Hatcheries
-

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Virginia Ecological Services Field Office**

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

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## Project Summary

Consultation Code: 05E2VA00-2021-SLI-3772

Event Code: 05E2VA00-2021-E-10925

Project Name: Van Buren North Extension Project

Project Type: TRANSPORTATION

Project Description: The Prince William County Department of Transportation is proposing to extend Van Buren Road on new alignment from its existing termini at the intersection with Dumfries Road (Route 234) north for approximately 2.5 miles to a portion of existing Van Buren Road directly south of Cardinal Drive. The project area is located in the southeastern region of Prince William County, Virginia.

### Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.59906515,-77.31634196881359,14z>



Counties: Prince William County, Virginia

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## Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

### Flowering Plants

NAME	STATUS
Small Whorled Pogonia <i>Isotria medeoloides</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1890">https://ecos.fws.gov/ecp/species/1890</a>	Threatened

### Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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# USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

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## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Virginia Ecological Services Field Office  
6669 Short Lane  
Gloucester, VA 23061-4410  
Phone: (804) 693-6694 Fax: (804) 693-9032  
<http://www.fws.gov/northeast/virginiafield/>

In Reply Refer To:

June 15, 2021

Consultation code: 05E2VA00-2021-TA-3772

Event Code: 05E2VA00-2021-E-12233

Project Name: Van Buren North Extension Project

Subject: Verification letter for the 'Van Buren North Extension Project' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Justin Stith:

The U.S. Fish and Wildlife Service (Service) received on June 15, 2021 your effects determination for the 'Van Buren North Extension Project' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"<sup>[1]</sup> prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Small Whorled Pogonia *Isotria medeoloides* Threatened

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

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[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

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**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

Van Buren North Extension Project

**2. Description**

The following description was provided for the project 'Van Buren North Extension Project':

The Prince William County Department of Transportation is proposing to extend Van Buren Road on new alignment from its existing termini at the intersection with Dumfries Road (Route 234) north for approximately 2.5 miles to a portion of existing Van Buren Road directly south of Cardinal Drive. The project area is located in the southeastern region of Prince William County, Virginia.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.59906515,-77.31634196881359,14z>

**Determination Key Result**

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

**Determination Key Description: Northern Long-eared Bat 4(d) Rule**

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

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The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

## Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

## Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?  
Yes
2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")  
No
3. Will your activity purposefully **Take** northern long-eared bats?  
No
4. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?  
**Automatically answered**  
No
5. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at [www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html](http://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html).

Yes

6. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?  
No
  7. Will the action involve Tree Removal?  
Yes
-

8. Will the action only remove hazardous trees for the protection of human life or property?

*No*

9. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

*No*

10. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

*No*

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## Project Questionnaire

**If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.**

1. Estimated total acres of forest conversion:

2.3

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

2.3

**If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.**

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

**If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.**

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

**If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.**

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

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**VaFWIS - Department of Game and Inland Fisheries**

38,36,15.9 -77,19,26.6

is the Search Point

**Search Point**

- Change to "clicked" map point
- Fixed at 38,36,15.9 -77,19,26.6

**Show Position Rings**

- Yes  No
- 1 mile and 1/4 mile at the Search Point

**Show Search Area**

- Yes  No
- 2 Search distance miles radius

Search Point is at map center

**Base Map Choices**

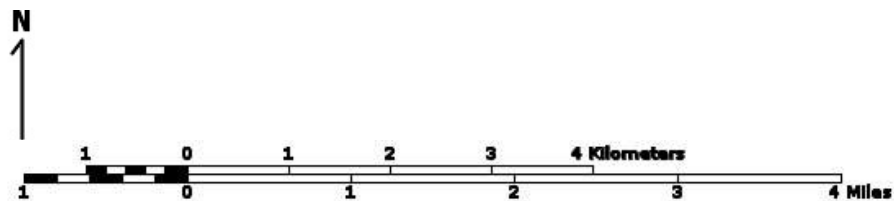
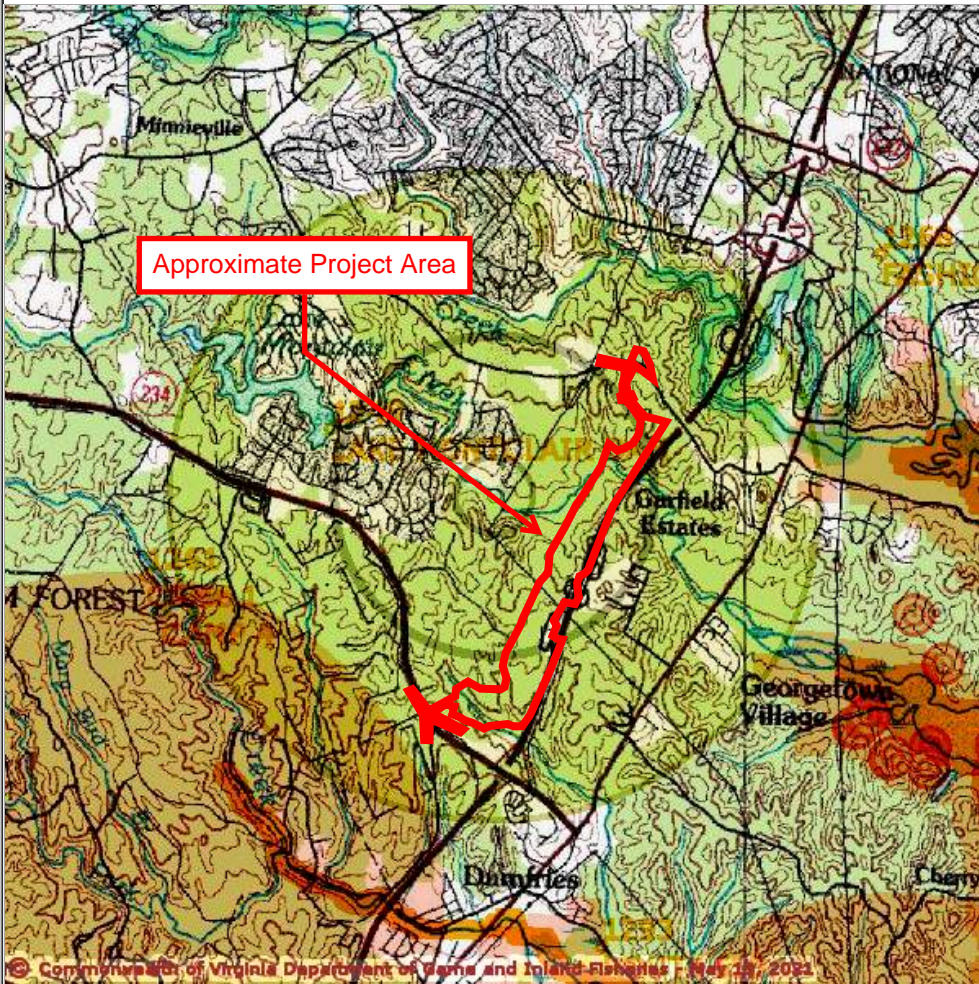
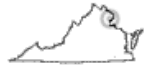
Topography

**Map Overlay Choices**

Current List: Anadromous, TEWaters, BAEANests, BECAR, TierII, Habitat, Position, Search

**Map Overlay Legend**

[back](#) 38,35,29.0 -77,20,02.1 [Refresh Browser Page](#)  
 Map Click    Screen Size    [Help](#)



Point of Search 38,36,15.9 -77,19,26.6


Map Location 38,36,15.9 -77,19,26.6

- Select **Coordinate System**:
- Degrees,Minutes,Seconds Latitude - Longitude
  - Decimal Degrees Latitude - Longitude
  - Meters UTM NAD83 East North Zone
  - Meters UTM NAD27 East North Zone



Base Map source: USGS 1:100,000 topographic maps (see [Microsoft terraserver-usa.com](http://Microsoft terraserver-usa.com) for details)

Map projection is UTM Zone 18 NAD 1983 with left 292828 and top 4280244. Pixel size is 16 meters . Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 600 columns by 600 rows for a total of 360000 pixles. The map display represents 9600 meters east to west by 9600 meters north to south for a total of 92.1 square kilometers. The map display represents 31501 feet east to west by 31501 feet north to south for a total of 35.5

**T & E Waters**

-  **Federal**
-  **State**

**Predicted Habitat  
WAP Tier I & II**

-  **Aquatic**
-  **Terrestrial**

**Anadromous Fish Reach**

-  **Confirmed**
-  **Potential**

 **Impediment**

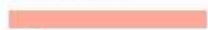



**Position Rings  
at the Search  
Point**



**2 mile radius  
Search Area**

**Bald Eagle  
Concentration Areas  
and Roosts**



 **Bald Eagle nests  
660 and 330 foot  
management zones**

 **Data  
Observation Site  
2 Mile WAP Tier I+II**

square miles.

Topographic maps and Black and white aerial photography for year 1990+ are from the United States Department of the Interior, United States Geological Survey. Color aerial photography aquired 2002 is from Virginia Base Mapping Program, Virginia Geographic Information Network.

Shaded topographic maps are from TOPO! ©2006 National Geographic

<http://www.national.geographic.com/topo>

All other map products are from the Commonwealth of Virginia Department of Game and Inland Fisheries.

map assembled 2021-05-19 10:52:37 (qa/qc March 21, 2016 12:20 - tn=1095921 dist=3218 I )  
\$poi=38.6044400 -77.3240800

Known or likely to occur within a **2 mile radius around point 38,36,15.9 -77,19,26.6**  
in **153 Prince William County, VA**

[View Map of Site Location](#)

553 Known or Likely Species ordered by Status Concern for Conservation  
(displaying first 24) (24 species with Status\* or Tier I\*\* or Tier II\*\* )

<a href="#">BOVA Code</a>	<a href="#">Status*</a>	<a href="#">Tier**</a>	<a href="#">Common Name</a>	<a href="#">Scientific Name</a>	<a href="#">Confirmed</a>	<a href="#">Database(s)</a>
010032	FESE	Ib	<a href="#">Sturgeon, Atlantic</a>	Acipenser oxyrinchus		BOVA
050022	FTST	Ia	<a href="#">Bat, northern long-eared</a>	Myotis septentrionalis		BOVA
060029	FTST	IIa	<a href="#">Lance, yellow</a>	Elliptio lanceolata		BOVA
050020	SE	Ia	<a href="#">Bat, little brown</a>	Myotis lucifugus		BOVA
050027	SE	Ia	<a href="#">Bat, tri-colored</a>	Perimyotis subflavus		BOVA
060006	SE	Ib	<a href="#">Floater, brook</a>	Alasmidonta varicosa		BOVA
030062	ST	Ia	<a href="#">Turtle, wood</a>	Glyptemys insculpta	<a href="#">Potential</a>	Habitat,HU6
040096	ST	Ia	<a href="#">Falcon, peregrine</a>	Falco peregrinus		BOVA
040293	ST	Ia	<a href="#">Shrike, loggerhead</a>	Lanius ludovicianus		BOVA
040379	ST	Ia	<a href="#">Sparrow, Henslow's</a>	Centronyx henslowii		BOVA
040292	ST		<a href="#">Shrike, migrant loggerhead</a>	Lanius ludovicianus migrans		BOVA
030063	CC	IIIa	<a href="#">Turtle, spotted</a>	Clemmys guttata		BOVA
030012	CC	IVa	<a href="#">Rattlesnake, timber</a>	Crotalus horridus		BOVA,HU6
010077		Ia	<a href="#">Shiner, bridle</a>	Notropis bifrenatus		BOVA
040306		Ia	<a href="#">Warbler, golden-winged</a>	Vermivora chrysoptera		BOVA
100248		Ia	<a href="#">Fritillary, regal</a>	Speyeria idalia idalia		BOVA,HU6
040213		Ic	<a href="#">Owl, northern saw-whet</a>	Aegolius acadicus		BOVA,HU6
040052		IIa	<a href="#">Duck, American black</a>	Anas rubripes	<a href="#">Potential</a>	BOVA,BBA,HU6
040036		IIa	<a href="#">Night-heron, yellow-crowned</a>	Nyctanassa violacea violacea		BOVA
040181		IIa	<a href="#">Tern, common</a>	Sterna hirundo		BOVA,HU6
040320		IIa	<a href="#">Warbler, cerulean</a>	Setophaga cerulea		BOVA,HU6
040140		IIa	<a href="#">Woodcock, American</a>	Scolopax minor		BOVA,HU6
040203		IIb	<a href="#">Cuckoo, black-billed</a>	Coccyzus erythrophthalmus		BOVA
040105		IIb	<a href="#">Rail, king</a>	Rallus elegans		BOVA,HU6



To view **All 553 species** [View 553](#)

\*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

\*\*I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need; III=VA Wildlife Action Plan - Tier III - High Conservation Need; IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need

Virginia Wildlife Action Plan Conservation Opportunity Ranking:

- a - On the ground management strategies/actions exist and can be feasibly implemented.;
- b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;
- c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

[View Map of All Query Results from All Observation Tables](#)

Bat Colonies or Hibernacula: **Not Known**

### **Anadromous Fish Use Streams**

N/A

**Impediments to Fish Passage** ( 1 records )

[View Map of All Fish Impediments](#)

<b>ID</b>	<b>Name</b>	<b>River</b>	<b>View Map</b>
1248	<a href="#">LAKE MONTCLAIR DAM</a>	POWELLS CREEK	<a href="#">Yes</a>

### **Colonial Water Bird Survey**

N/A

### **Threatened and Endangered Waters**

N/A

### **Managed Trout Streams**

N/A

### **Bald Eagle Concentration Areas and Roosts**

N/A

### **Bald Eagle Nests**

N/A

**Species Observations** ( 29 records - displaying first 20 )[View Map of All Query Results  
Species Observations](#)

obsID	class	Date Observed	Observer	N Species			View Map
				Different Species	Highest TE*	Highest Tier**	
<a href="#">60572</a>	SppObs	Jul 8 1988	UNKNOWN	1		III	<a href="#">Yes</a>
<a href="#">425428</a>	SppObs	May 22 1984	VCU - INSTAR	9		III	<a href="#">Yes</a>
<a href="#">10045</a>	SppObs	May 22 1984	S. P. McIninch	9		III	<a href="#">Yes</a>
<a href="#">425439</a>	SppObs	May 21 1984	VCU - INSTAR	9		III	<a href="#">Yes</a>
<a href="#">10070</a>	SppObs	May 21 1984	S. P. McIninch	9		III	<a href="#">Yes</a>
<a href="#">337957</a>	SppObs	Jan 1 1984	SPM-B-MCINICH	9		III	<a href="#">Yes</a>
<a href="#">337956</a>	SppObs	Jan 1 1984	SPM-B-MCINICH	9		III	<a href="#">Yes</a>
<a href="#">624336</a>	SppObs	Jul 2 2014	Andrew; Dietrich  Tasha; Foreman	1			<a href="#">Yes</a>
<a href="#">622762</a>	SppObs	Jul 2 2014	Andrew; Dietrich  Tasha; Foreman	2			<a href="#">Yes</a>
<a href="#">618988</a>	SppObs	Jul 24 2013	Andrew; Dietrich  Eric; Dallalio	1			<a href="#">Yes</a>
<a href="#">618989</a>	SppObs	Jul 24 2013	Andrew; Dietrich  Eric; Dallalio	3			<a href="#">Yes</a>
<a href="#">617619</a>	SppObs	Jul 24 2012	Eric; Dallalio  Adrienne; Brand	1			<a href="#">Yes</a>
<a href="#">617620</a>	SppObs	Jul 24 2012	Eric; Dallalio  Adrienne; Brand	3			<a href="#">Yes</a>
<a href="#">607654</a>	SppObs	Nov 4 2008	SMV-Maurakis & Schultz	2			<a href="#">Yes</a>
<a href="#">317907</a>	SppObs	Jun 22 2006	Evan Grant	1			<a href="#">Yes</a>
<a href="#">317909</a>	SppObs	Jun 21 2006	Evan Grant	3			<a href="#">Yes</a>
<a href="#">305274</a>	SppObs	Jun 21 1999	Kelso, Donald P.	4			<a href="#">Yes</a>
<a href="#">305261</a>	SppObs	Jun 23 1998	Kelso, Donald P.	8			<a href="#">Yes</a>
<a href="#">60518</a>	SppObs	Oct 3 1988	PAGUE, C A ET AL	1			<a href="#">Yes</a>
<a href="#">60214</a>	SppObs	Oct 3 1988	PAGUE, C A ET AL	1			<a href="#">Yes</a>

Displayed 20 Species Observations

Selected 29 Observations [View all 29 Species Observations](#)

## Habitat Predicted for Aquatic WAP Tier I & II Species ( 2 Reaches )

[View Map Combined Reaches from Below of Habitat Predicted for WAP Tier I & II Aquatic Species](#)

Stream Name	Tier Species						View Map
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name					
Neabsco Creek (20700102)	ST	030062	ST	Ia	<a href="#">Turtle, wood</a>	Glyptemys insculpta	<a href="#">Yes</a>
tributary (20700102)	ST	030062	ST	Ia	<a href="#">Turtle, wood</a>	Glyptemys insculpta	<a href="#">Yes</a>
tributary (20700102)	ST	030062	ST	Ia	<a href="#">Turtle, wood</a>	Glyptemys insculpta	<a href="#">Yes</a>

## Habitat Predicted for Terrestrial WAP Tier I & II Species

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
040038			<a href="#">Bittern, American</a>	Botaurus lentiginosus	<a href="#">Yes</a>

## Virginia Breeding Bird Atlas Blocks ( 6 records )

[View Map of All Query Results Virginia Breeding Bird Atlas Blocks](#)

BBA ID	Atlas Quadrangle Block Name	Breeding Bird Atlas Species			View Map
		Different Species	Highest TE*	Highest Tier**	
52186	<a href="#">Occoquan, SE</a>	84		II	<a href="#">Yes</a>
52185	<a href="#">Occoquan, SW</a>	41		IV	<a href="#">Yes</a>
52174	<a href="#">Quantico, CE</a>	28		III	<a href="#">Yes</a>
52173	<a href="#">Quantico, CW</a>	34		III	<a href="#">Yes</a>
52172	<a href="#">Quantico, NE</a>	65		III	<a href="#">Yes</a>
52171	<a href="#">Quantico, NW</a>	15		IV	<a href="#">Yes</a>

## Public Holdings: ( 1 names )

Name	Agency	Level
Prince William Forest National Park	National Park Service	Federal

## Summary of BOVA Species Associated with Cities and Counties of the Commonwealth of Virginia:

FIPS Code	City and County Name	Different Species	Highest TE	Highest Tier
153	<a href="#">Prince William</a>	483	FESE	I

## USGS 7.5' Quadrangles:

Quantico  
Occoquan

## USGS NRCS Watersheds in Virginia:

N/A

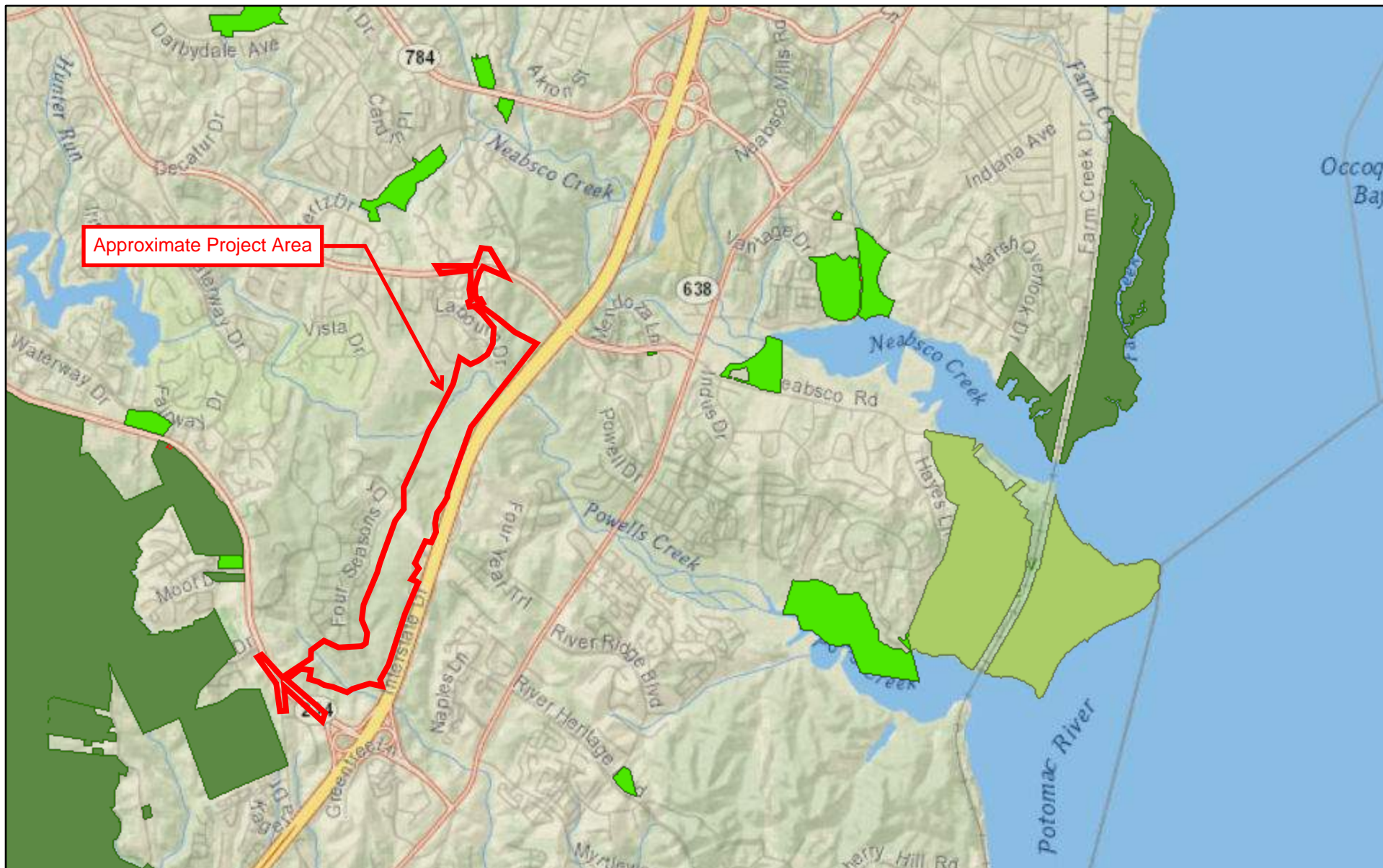
## USGS National 6th Order Watersheds Summary of Wildlife Action Plan Tier I, II, III, and IV Species:

HU6 Code	USGS 6th Order Hydrologic Unit	Different Species	Highest TE	Highest Tier
PL49	<a href="#">Neabsco Creek</a>	57	ST	I
PL51	<a href="#">Powells Creek</a>	56	SS	I
PL52	<a href="#">Quantico Creek</a>	61	SS	I

Compiled on 5/19/2021, 10:55:35 AM 11095921.0 report=all searchType=R dist= 3218 poi= 38,36,15.9 -77,19,26.6




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# 90% UHQ5DGRUWK/VHQLRQ5





Approximate Project Area

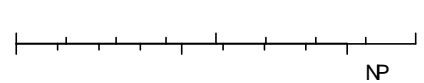
D

-  SMDRQV @VDVH/
-  DDDHG&QVUYDVLRLQDDG/
-  HLJQDVLRLQ

-  &KHGQVFRQV
-  &QVUYDVLRLQVFRQV

-  JGHUDDG/
-  FFDG/

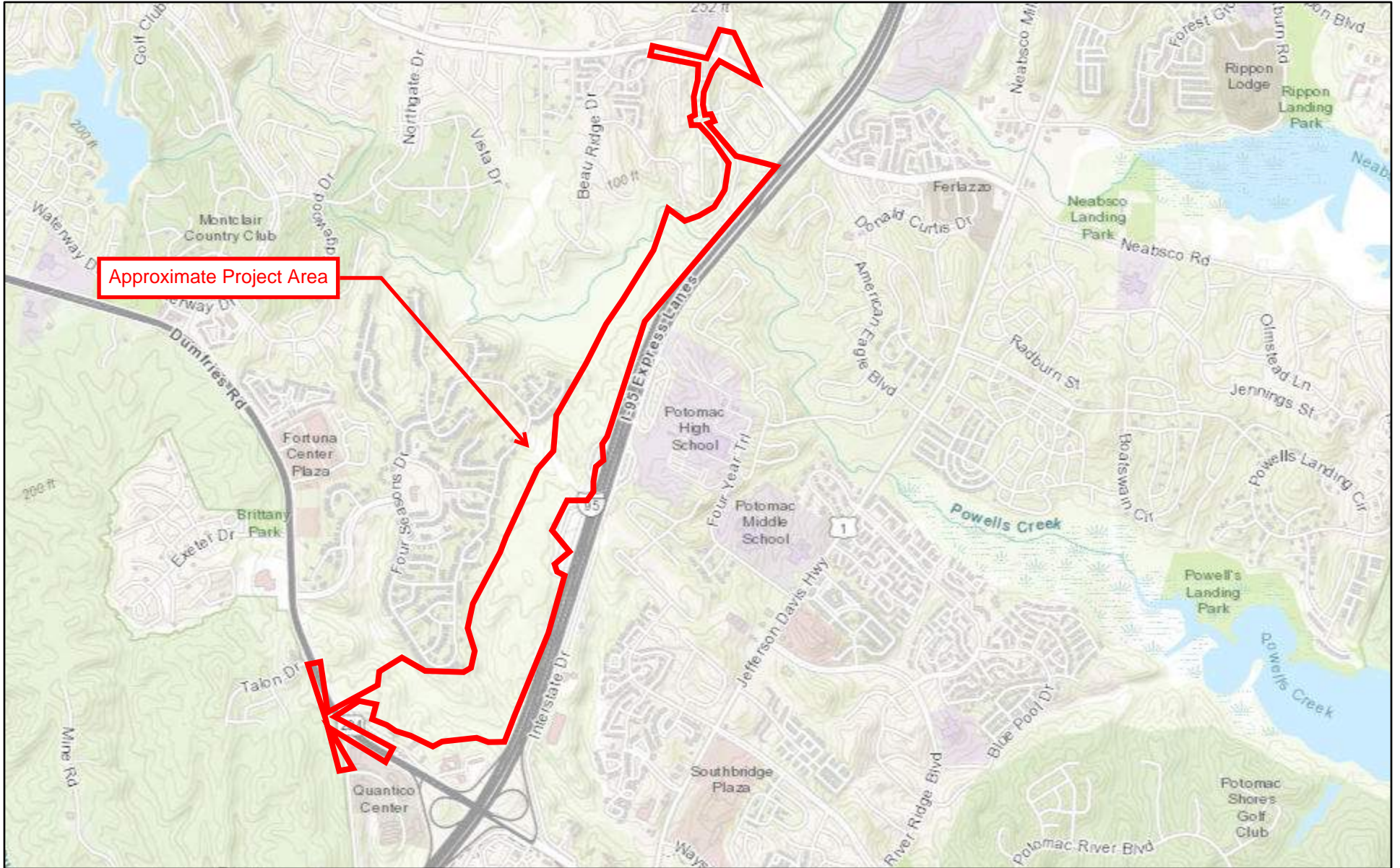
-  RQ&RLW DGG/
-  @VDVHDDG/



DVLRDD PRUDKLF YUL DUEQ 5 8 8  
6D 5725 LQUHFRV 3RUS

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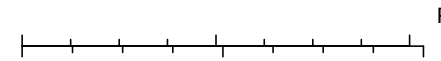


Approximate Project Area

0 D \

Map provided by:  
U.S Fish And  
Wildlife Service

Virginia Critical Habitat  
(published)

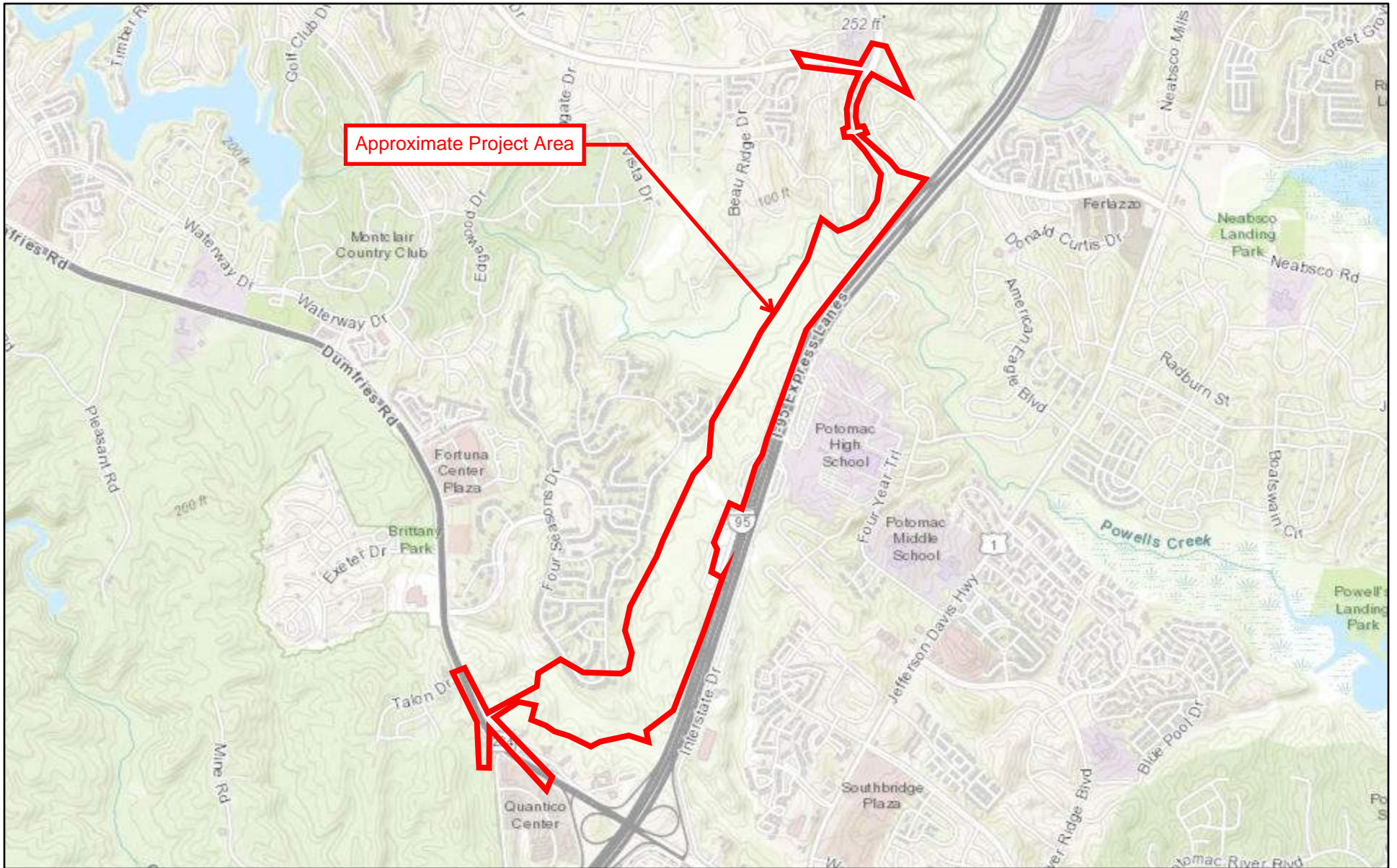


PL

NP

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# Van Buren 1 / (% / RFDWLRQV DQG 5RRVW 7UHHV



Approximate Project Area

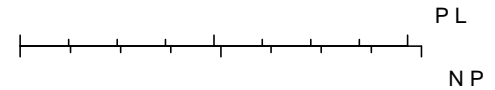
NLEB Hibernaculum 5.5 Mile Buffer



NLEB Hibernaculum Half Mile Buffer



NLEB Known Occupied Maternity Roost (Summer Habitat)

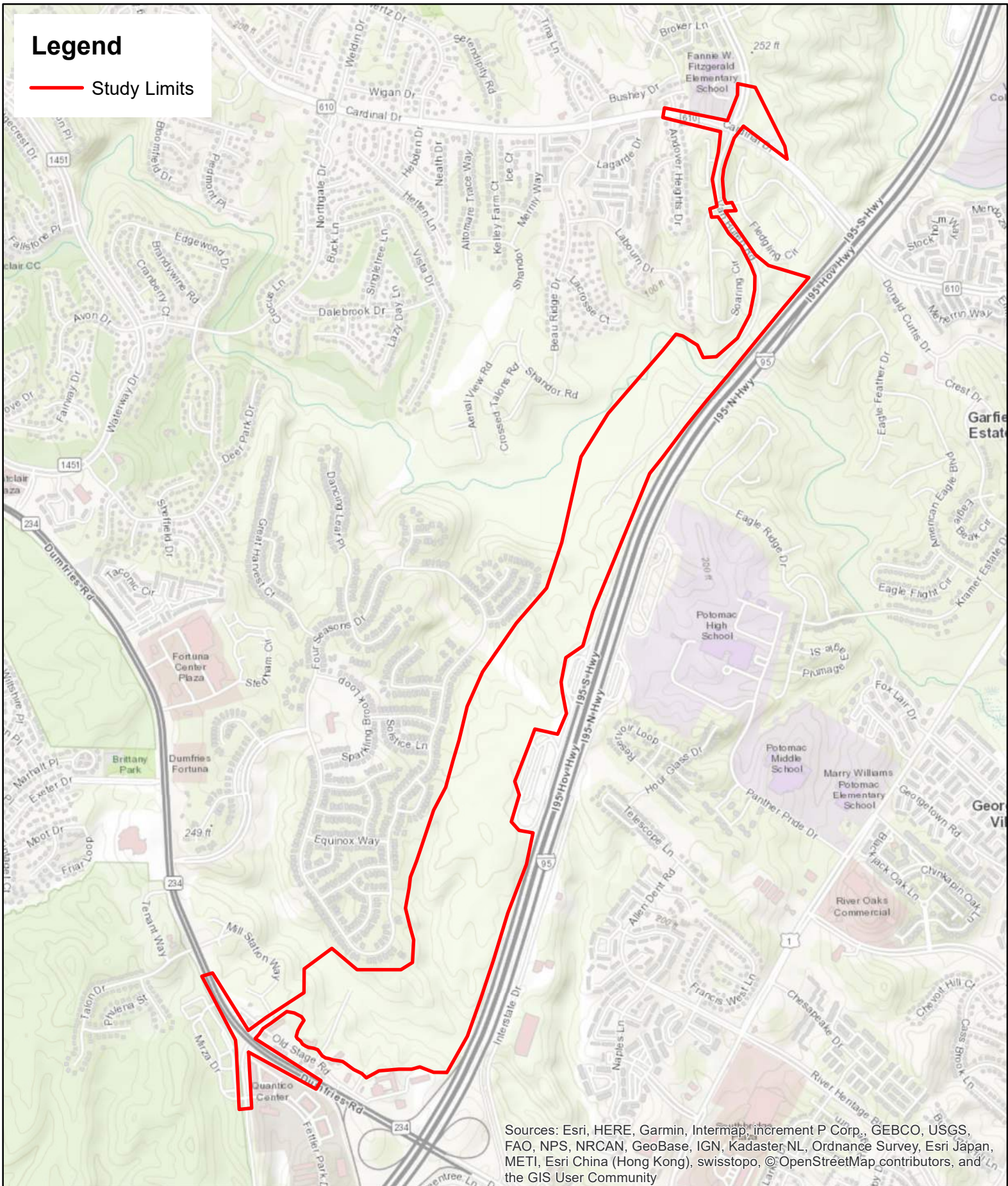


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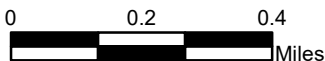
9\$ 'HSW \*DPH ,QODQG )LVK  
&RXQW\ RI 3ULQFH :LOOLDP 9,7\$ (VUL +( \*DUPLQ ,1&5(0(17 3 86

# Legend

— Study Limits



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community



DATE  
May 2021  
PROJ. NO.  
50132497

TITLE  
USGS Topographic Map  
PROJECT  
Van Buren Road North Extension



# Rouse Environmental Services

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*Botanical/Ecological Surveys & Natural Resource Mapping*

March 9, 2021

Dewberry Engineers, Inc.  
8401 Arlington Boulevard  
Fairfax, Virginia 22031

Attn: Ms. Beth Moyer

Subject: Project R20027a, Habitat Suitability Assessment for *Isotria medeoloides* (Small Whorled Pogonia) and *Ptilimnium nodosum* (Harperella), Van Buren Road Extension, Prince William County, Virginia.

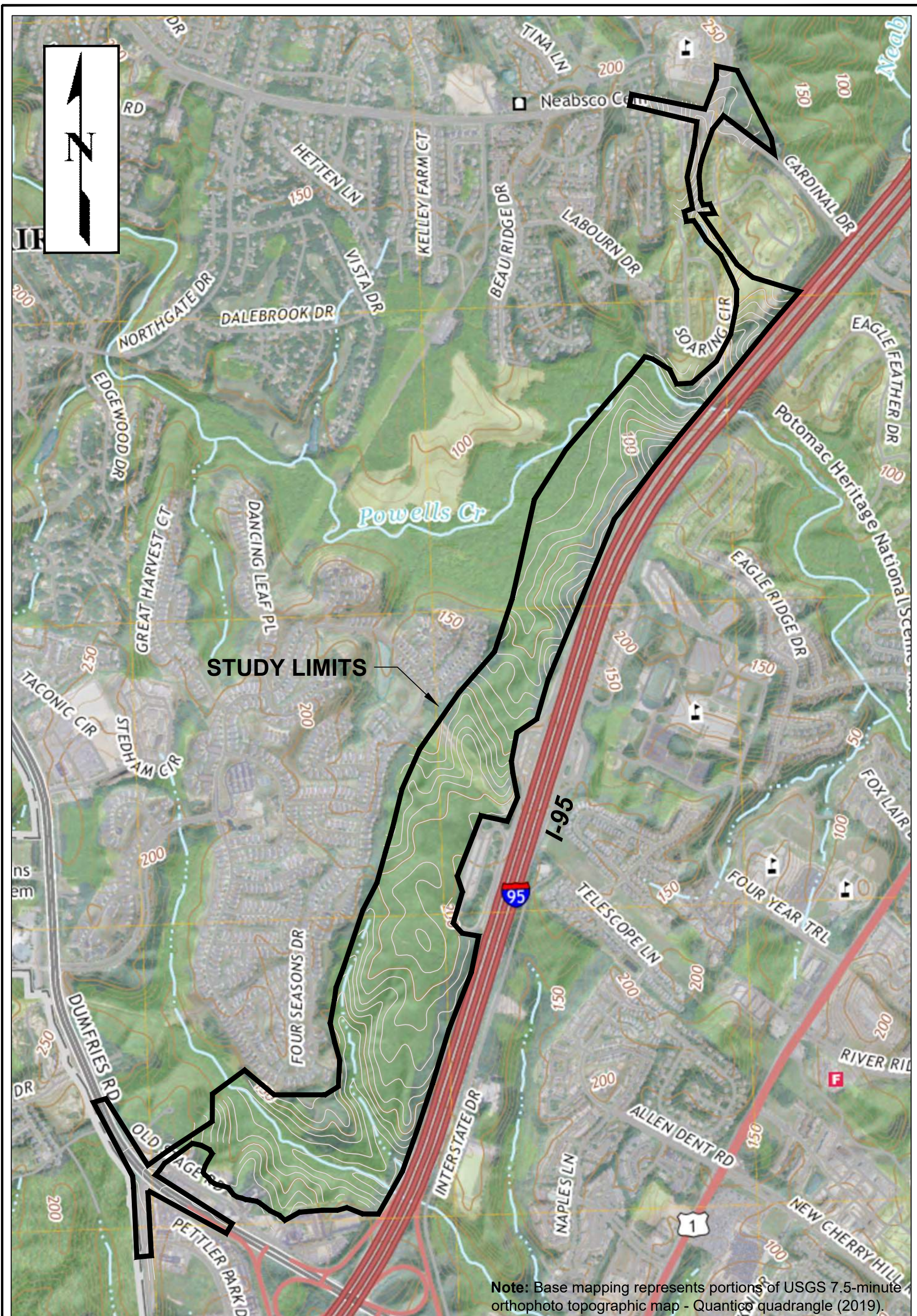
Gentlemen:

Provided here are our findings from our habitat suitability assessment for *Isotria medeoloides* and *Ptilimnium nodosum* in connection with the above referenced project. This report represents the completion of the first task our services rendered per our proposal dated August 11, 2020.

## **1. BACKGROUND**

An extension of Van Buren Road is being planned, between Cardinal Drive and Dumfries Road, Prince William County, Virginia. The extent of the “environmental limits” of the project were originally provided to us in electronic format (*Van Buren NEPA\_KMZ.kmz*) as an attachment to an email sent by Dewberry on August 7, 2020. Revised limits of the area of the study were later provided to us in CAD file format (*Van Buren\_WetlandsandWOUSwithTOPO.dwg*) provided to us by Dewberry on February 26, 2021. The general limits of the project, in relation to surrounding area features, is shown on our *Project Location Map* included as Figure 1.

Dewberry has been tasked with the development of a NEPA document in connection with the project. As a part of that document, Dewberry has identified the need for the



**Rouse  
Environmental  
Services**

**Project Location Map**  
Habitat Suitability Assesment,  
Van Buren Road Extension,  
Prince William County, Virginia

**Figure 1**  
SCALE: 1" = 1000'  
DRAWN BY: G. Rouse      DATE: 3/9/21

assessment of potential populations of Small Whorled Pogonia (*Isotria medeoloides*) and Harperella (*Ptilimnium nodosum*) within the environmental limits of the project.

*Isotria medeoloides* is a globally rare plant generally found growing within relatively mature, hardwood dominated forests on nearly level to moderate slopes. Due to its rarity and loss of potential habitat from development, *I. medeoloides* has been formally listed as *Threatened* by the US Fish & Wildlife Service (USFWS). The plant has also received formal recognition as *Endangered* by the Virginia Department of Agriculture & Consumer Services under the Commonwealth of Virginia's Endangered Plant & Insect Act. Populations of *I. medeoloides* have been documented from several locations in Prince William County and nearby Stafford and Spotsylvania Counties.

*Ptilimnium nodosum* is a rare herb of the Parsley family generally found growing within rocky or gravelly shoals at the margins of swift flowing streams. It is currently known in Virginia only from Aquia Creek in Stafford County. Due to its rarity and loss of potential habitat from development, *P. nodosum* has been formally listed as *Endangered* by the USFWS. As with *Isotria medeoloides* this plant has also received formal recognition as *Endangered* by the Virginia Department of Agriculture & Consumer Services under the Commonwealth of Virginia's Endangered Plant & Insect Act.

The objective of our proposed study was to 1) perform a habitat suitability assessment for *Isotria medeoloides* and *Ptilimnium nodosum* within the "environmental limits" of the project as specified by Dewberry, and 2) to conduct actual surveys for potential populations of both plant species during the appropriate period of the growing season, within areas identified as potential habitat from our earlier assessment. This interim report represents the findings from the first portion of this study.

## **2. DATA REVIEW AND FIELD INVESTIGATIONS**

A desktop review was conducted to help preliminarily identify areas of potential habitat for *Isotria medeoloides* and *Ptilimnium nodosum* within the designated survey area. Our review included the following sources of information:

- Digital Raster Graphic (DRG) USGS topographic quadrangles covering the areas of study,
- Aerial infrared imagery available on US Geological Survey Digital Orthographic Quarter Quadrangles (DOQQs),
- USDA National Agricultural Imagery Program (NAIP) digital orthophotographs (visible spectrum) flown in 2011 and 2018, and
- Topographic, wetland and other waters information provided on a CAD file (*Van Buren\_WetlandsandWOUSwithTOPO.dwg*) by Dewberry on February 26, 2021.

Information from the above listed sources was incorporated onto working base maps and used to prioritize subsequent ground-truthing efforts and mark-up of field observations within the identified study limits. The project limits were also uploaded to a handheld GPS receiver for better location and orientation while in the field.

Field reconnaissances were conducted between December 21 and 23, 2020 to canvass the study area, with particular emphasis being given to those areas preliminarily identified as potential habitat from our desktop review. Field studies were conducted by myself, a botanist recognized by the USFWS as qualified to conduct surveys for both *Isotria medeoloides* and *Ptilimnium nodosum*.

Areas at the site were evaluated with regard to their potential to support populations of *Isotria medeoloides* on the basis of the following criteria:

- 1) Potentially Suitable Habitat** - Areas supporting mesic, medium-aged to mature stands of predominantly mixed hardwoods, with relatively open understories, on nearly level to gentle slopes with colluvial soils.
- 2) Marginally Suitable Habitat** - Areas supporting forest stands that are characterized by either being too xeric, support a preponderance of pine or other evergreens, are located on moderate to steep slopes, have heavy vegetation in the understory, or a combination of the above.
- 3) Unsuitable Habitat** - Areas represented by either impervious cover, open fields or other forms of heavy disturbance/aggressive maintenance, open water, seasonally to permanently saturated or flooded wetlands, pine plantations, or a combination of the above.

Drainages targeted for field survey for *Ptilimnium nodosum* from our desktop review were more specifically evaluated during the course of our field investigations using the following criteria:

- 1) Potential Habitat** - Areas supporting a relatively open stream bed, experiencing at least a moderately high energy environment of periodic flooding/scour, with gravel/cobble bars or bedrock ledges present at an elevation that would allow continual saturation of the root zone without extended inundation.
- 2) Marginal Habitat** - Areas that are diminished somewhat in one or more of the above features, such as too heavy a canopy, a somewhat lower energy environment, the accumulation of silts and/or decomposed organics, or limited structure within the stream bed, thereby reducing opportunities where the plant could meet its specific hydrologic

requirements or, alternatively, potentially suitable habitat that has been significantly degraded by human activity in some way (direct physical impacts, siltation etc.).

**3) Unsuitable Habitat** - Areas that lack one or more of the above features, such as little to no opening in the canopy, a low energy environment with large amounts of accumulated silts and/or organics, the absence of structure within the fallway where plants would either be in a position of too much extended inundation or, conversely, extended dryness, etc.

### 3. SUMMARY OF FINDINGS

The study area largely follows along the western boundary of the interstate I-95 corridor in a north to south direction (see Figure 1). The property consists of nearly level to moderately steep topography with overall drainage to the southeast towards either Powells Creek (on the northern half) or unnamed tributaries of Quantico Creek (on the southern half), themselves tributaries of the Potomac River. Powells Creek drains across the site in a west to east direction near the northern end of the study area. Some areas of extensive, non-tidal wetlands were observed in association with the floodplain of this river.

The lower, approximate three-quarters of the site supported mostly medium to mature mixed hardwoods with some areas of pine. The northern approximate quarter of the study area was in a developed state with an existing access road, several stormwater management basins and associated grassed areas. The far northern and southern limits of the site supported existing, paved roadways to which the planned Van Buren Road Extension will be connected. A large power line right of way bisected the approximate middle of the site in an east-west direction.

The limits of study encompassed a range of habitats considered both conducive and non-conducive for harboring potential populations of *Isotria medeoloides* and *Ptilimnium nodosum*. A summary of our findings for each of the two target plant species follows.

***Isotria medeoloides*** - The developed areas at the far northern and southern ends of the study area, as well as along the access road and associated improvements on the northern quarter of the site, would be considered as unsuitable habitat for *Isotria medeoloides*. Likewise, the open areas under the power line easement that bisects the site near the middle of the study area would also be considered as unsuitable habitat for the plant. Wetlands largely associated with the floodplain of Powells Creek and the beds of stream channels located throughout the study area would have little to no potential to support populations of *I. medeoloides*. High ridges and steep side slopes within forested areas of the site would be considered only as marginal habitat for the plant due to the xeric nature of the soils at these locations.

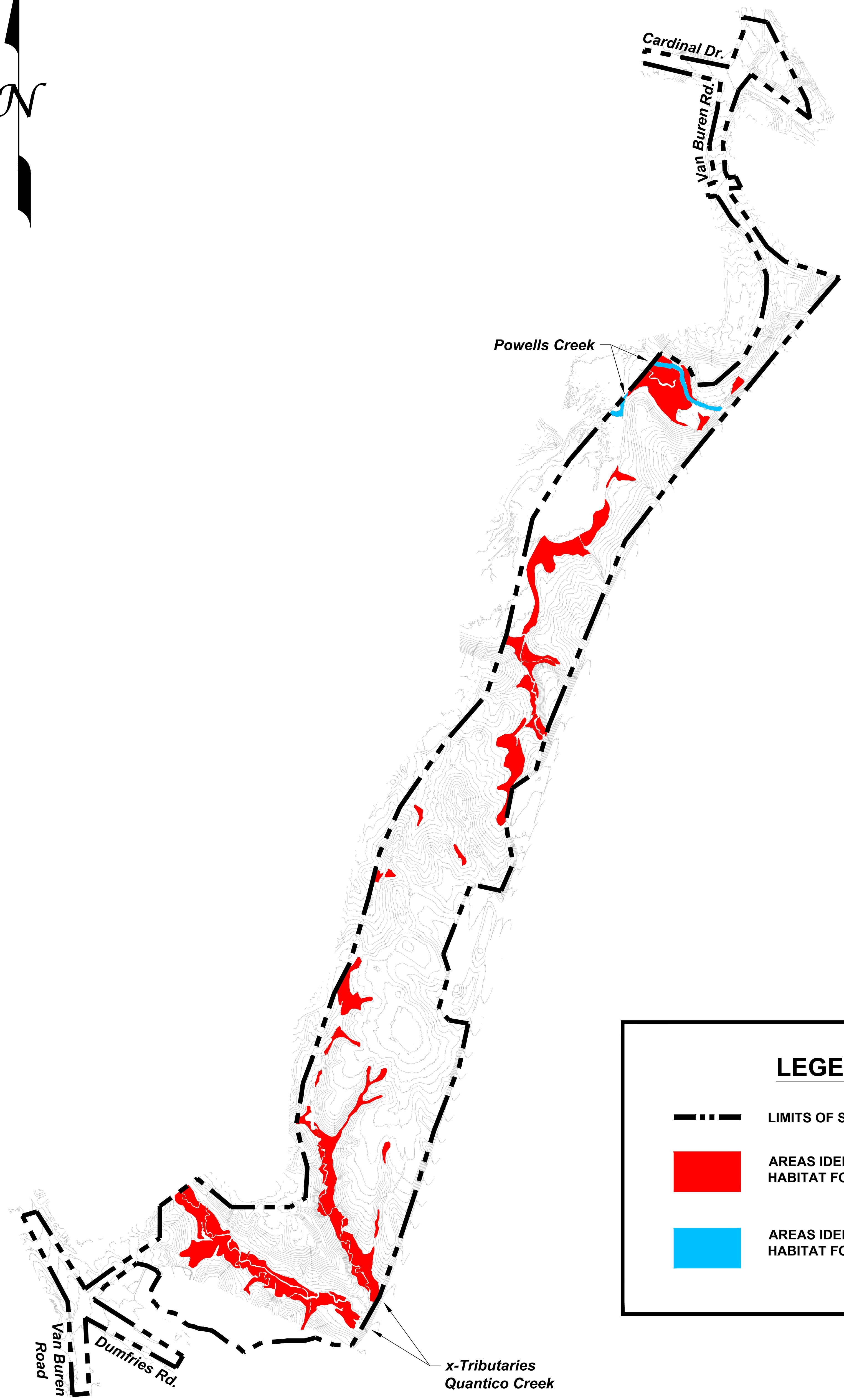
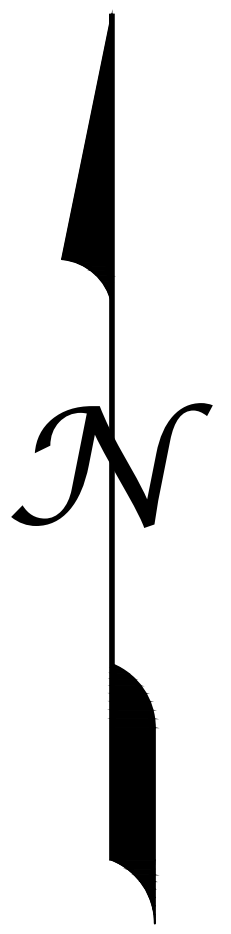
Forty-seven localized areas were ultimately identified within the study limits as having the parameters for potentially suitable habitat for *Isotria medeoloides*. They generally occurred on stream terraces or within colluvial soils formed near the toe of slopes throughout drainages at the site. The combined areas of potentially suitable habitat within the study limits are estimated to total approximately 30 acres in extent. The approximate locations of potentially suitable habitat within the study area are depicted on our *Habitat Suitability Map* included as Figure 2 to this report.

***Ptilimnium nodosum*** - Within the northern part of its range (including North Carolina and Virginia), *Ptilimnium nodosum* is generally found growing on rocky or gravelly shoals, or in crevices of bedrock exposures where sediments have collected, at the margins of clear, swift-flowing, larger streams and small rivers. The plant apparently prefers seasonally fluctuating water levels sufficient to produce scour and maintain openings within a stream's fallway but, at the same time, may have a very narrow range of water depths that it can actually tolerate. For this reason, our assessment of habitat for *Ptilimnium nodosum* was confined to the larger drainages at the site, including the two unnamed tributaries to Quantico Creek on the southern third of the study area, an unnamed tributary to Powells Creek near the center of the study area, and Powells Creek itself, draining across the site on the northern third of the study area.

Although some good stream structure was observed, all unnamed tributaries at the site supported too small a drainage area to produce the type of openings in the canopy that *Ptilimnium nodosum* prefers. Powell Creek itself, however, did have sufficient drainage area behind it to produce the type of hydrodynamics sufficient to create intermittently good structure and openings along its reaches at the site. We therefore determined that potential habitat existed within the bed of Powells Creek, where it crosses the study area in two segments. The total length of stream channel with potential for supporting populations of *P. nodosum* is estimated to be 1130 linear feet. The approximate limits of potentially suitable habitat within the study area are depicted on our *Habitat Suitability Map* included as Figure 2 to this report.

#### **4. LIMITATIONS AND RECCOMENDATIONS**

This study was limited to an evaluation of potential habitat for *Isotria medeoloides* and *Ptilimnium nodosum* and did not include actual searches for potential populations of either plant, nor surveys for other rare, Threatened or Endangered species which may occur within the study area. In addition, our study did not include the identification or delineation of wetlands, processing of permits, meetings with local, state or federal officials, land surveying services and environmental concerns or services that were not specifically described herein. Ecological conditions and species distributions represent dynamic processes. The findings of this survey, therefore, are valid only for the time at which this study was performed.



**LEGEND**

- LIMITS OF STUDY
- AREAS IDENTIFIED AS POTENTIAL HABITAT FOR *Isonychia medeoloides*
- AREAS IDENTIFIED AS POTENTIAL HABITAT FOR *Ptilimnium nodosum*

**Notes:** 1) Topographic details and study limits taken from CAD file (*Van Buren\_ WetlandsandWOUSwithTOPO.dwg*) provided by Dewberry on February 26, 2021. 2) Extents of potential habitat are approximately drawn.

**Rouse  
Environmental  
Services**

**Potential Habitat Map**  
Habitat Suitability Assesment,  
Van Buren Road Extension,  
Prince William County, Virginia


**Figure 2**  
SCALE: 1"= 500'  
DRAWN BY: G. Rouse      DATE: 3/4/21

Project R20027a  
Page 6  
March 9, 2021

Should any disturbances be planned within areas identified as potential habitat for either *Isotria medeoloides* or *Ptilimnium nodosum*, we advise that a survey for the presence/absence of those species be conducted during the search windows of the upcoming field season as prescribed by the USFWS (June 1<sup>st</sup> through July 20<sup>th</sup> for *I. medeoloides* and July 1<sup>st</sup> through September 30<sup>th</sup> for *P. nodosum*) to determine that no populations of either plant would be impacted.

We appreciate the opportunity to have been of service to you on this project. Please do not hesitate to contact us should you have any questions regarding the contents of this report.

Sincerely,



Garrie D. Rouse  
Consulting Scientist



Updated  
Database  
Searches  
February 2022



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Virginia Ecological Services Field Office  
6669 Short Lane  
Gloucester, VA 23061-4410  
Phone: (804) 693-6694 Fax: (804) 693-9032  
<http://www.fws.gov/northeast/virginiafield/>

In Reply Refer To:  
Project Code: 2022-0004649  
Project Name: Van Buren Road Extension

February 08, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries

## **Official Species List**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Virginia Ecological Services Field Office**

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

---

## Project Summary

Project Code: 2022-0004649

Event Code: None

Project Name: Van Buren Road Extension

Project Type: Road/Hwy - New Construction

Project Description: This project proposes to extend Van Buren Road from its intersection with Dumfries Road northeast to its intersection with Fledgling Circle/Soaring Circle.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.59877041400006,-77.31667961351798,14z>



Counties: Prince William County, Virginia

---

## Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

### Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

### Flowering Plants

NAME	STATUS
Small Whorled Pogonia <i>Isotria medeoloides</i> Population: No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1890">https://ecos.fws.gov/ecp/species/1890</a>	Threatened

### Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

---

# **USFWS National Wildlife Refuge Lands And Fish Hatcheries**

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

---

## **IPaC User Contact Information**

Name: Andrew Dietrich  
Address: 8403 Arlington Boulevard  
City: Fairfax  
State: VA  
Zip: 22031  
Email: [adietrich@dewberry.com](mailto:adietrich@dewberry.com)  
Phone: 7038490351

---

**VaFWIS Initial Project Assessment Report** Compiled on 2/4/2022,[Help](#)

3:40:58 PM

Known or likely to occur within a **2 mile radius around point 38.6026660 -77.3145786**  
in **153 Prince William County, VA**

[View Map of  
Site Location](#)

550 Known or Likely Species ordered by Status Concern for Conservation  
(displaying first 24) (24 species with Status\* or Tier I\*\* or Tier II\*\* )

<a href="#">BOVA Code</a>	<a href="#">Status*</a>	<a href="#">Tier**</a>	<a href="#">Common Name</a>	<a href="#">Scientific Name</a>	Confirmed	Database(s)
010032	FESE	Ib	<a href="#">Sturgeon, Atlantic</a>	Acipenser oxyrinchus		BOVA
050022	FTST	Ia	<a href="#">Bat, northern long-eared</a>	Myotis septentrionalis		BOVA
060029	FTST	IIa	<a href="#">Lance, yellow</a>	Elliptio lanceolata		BOVA
050020	SE	Ia	<a href="#">Bat, little brown</a>	Myotis lucifugus		BOVA
050027	SE	Ia	<a href="#">Bat, tri-colored</a>	Perimyotis subflavus		BOVA
060006	SE	Ib	<a href="#">Floater, brook</a>	Alasmidonta varicosa		BOVA
030062	ST	Ia	<a href="#">Turtle, wood</a>	Glyptemys insculpta		Habitat
040096	ST	Ia	<a href="#">Falcon, peregrine</a>	Falco peregrinus		BOVA
040293	ST	Ia	<a href="#">Shrike, loggerhead</a>	Lanius ludovicianus		BOVA
040379	ST	Ia	<a href="#">Sparrow, Henslow's</a>	Centronyx henslowii		BOVA
040292	ST		<a href="#">Shrike, migrant loggerhead</a>	Lanius ludovicianus migrans		BOVA
030063	CC	IIIa	<a href="#">Turtle, spotted</a>	Clemmys guttata		BOVA
030012	CC	IVa	<a href="#">Rattlesnake, timber</a>	Crotalus horridus		BOVA
010077		Ia	<a href="#">Shiner, bridge</a>	Notropis bifrenatus		BOVA
040306		Ia	<a href="#">Warbler, golden-winged</a>	Vermivora chrysoptera		BOVA
100248		Ia	<a href="#">Fritillary, regal</a>	Speyeria idalia idalia		BOVA
040213		Ic	<a href="#">Owl, northern saw-whet</a>	Aegolius acadicus		BOVA
040052		IIa	<a href="#">Duck, American black</a>	Anas rubripes		BOVA
040036		IIa	<a href="#">Night-heron, yellow-crowned</a>	Nyctanassa violacea violacea		BOVA
040181		IIa	<a href="#">Tern, common</a>	Sterna hirundo		BOVA
040320		IIa	<a href="#">Warbler, cerulean</a>	Setophaga cerulea		BOVA
040140		IIa	<a href="#">Woodcock, American</a>	Scolopax minor		BOVA
040203		IIb	<a href="#">Cuckoo, black-billed</a>	Coccyzus erythrophthalmus		BOVA
040105		IIb	<a href="#">Rail, king</a>	Rallus elegans		BOVA,Habitat

To view **All 550 species** [View 550](#)

\*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern



\*\*I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need;  
 III=VA Wildlife Action Plan - Tier III - High Conservation Need;  
 IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need  
 Virginia Wildlife Action Plan Conservation Opportunity Ranking:  
 a - On the ground management strategies/actions exist and can be feasibly implemented.;  
 b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;  
 c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

### Bat Colonies or Hibernacula: **Not Known**

### Anadromous Fish Use Streams ( 1 records )

[View Map of All Anadromous Fish Use Streams](#)

Stream ID	Stream Name	Reach Status	Anadromous Fish Species			View Map
			Different Species	Highest TE *	Highest Tier **	
C83	<a href="#">Powells creek</a>	Confirmed	2			<a href="#">Yes</a>

### Impediments to Fish Passage ( 1 records )

[View Map of All Fish Impediments](#)

ID	Name	River	View Map
1248	<a href="#">LAKE MONTCLAIR DAM</a>	POWELLS CREEK	<a href="#">Yes</a>

### Colonial Water Bird Survey

N/A

### Threatened and Endangered Waters

N/A

### Managed Trout Streams

N/A

### Bald Eagle Concentration Areas and Roosts

N/A

### Bald Eagle Nests ( 3 records )

[View Map of All Query Results Bald Eagle Nests](#)

Nest	N Obs	Latest Date	DGIF Nest Status	View Map
<a href="#">PW8201</a>	2	Jan 1 1985	HISTORIC	<a href="#">Yes</a>
<a href="#">PW9702</a>	7	Apr 27 2000	HISTORIC	<a href="#">Yes</a>
<a href="#">PW9901</a>	16	Apr 24 2008	UNKNOWN	<a href="#">Yes</a>

Displayed 3 Bald Eagle Nests

**Habitat Predicted for Aquatic WAP Tier I & II Species** ( 2 Reaches )[View Map Combined Reaches from Below of Habitat Predicted for WAP Tier I & II Aquatic Species](#)

Stream Name	Tier Species						View Map
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name					
Neabsco Creek (20700102)	ST	030062	ST	Ia	<a href="#">Turtle, wood</a>	Glyptemys insculpta	<a href="#">Yes</a>
tributary (20700102)	ST	030062	ST	Ia	<a href="#">Turtle, wood</a>	Glyptemys insculpta	<a href="#">Yes</a>
tributary (20700102)	ST	030062	ST	Ia	<a href="#">Turtle, wood</a>	Glyptemys insculpta	<a href="#">Yes</a>

**Habitat Predicted for Terrestrial WAP Tier I & II Species** ( 3 Species )[View Map of Combined Terrestrial Habitat Predicted for 3 WAP Tier I & II Species Listed Below](#)

ordered by Status Concern for Conservation

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
040105		Iib	<a href="#">Rail, king</a>	Rallus elegans	<a href="#">Yes</a>
040038			<a href="#">Bittern, American</a>	Botaurus lentiginosus	<a href="#">Yes</a>
040093			<a href="#">Eagle, bald</a>	Haliaeetus leucocephalus	<a href="#">Yes</a>

**Public Holdings:** ( 1 names )

Name	Agency	Level
Prince William Forest National Park	National Park Service	Federal

Compiled on 2/4/2022, 3:40:58 PM 11162180.0 report=IPA searchType= R dist= 3218 poi= 38.6026660 -77.3145786

PixelSize=64; Anadromous=0.021683; BECAR=0.018984; Bats=0.017861; Buffer=0.061847; County=0.047627; Impediments=0.019469; Init=0.089233; PublicLands=0.024739; SppObs=0.242465; TEWaters=0.021757; TierReaches=0.047002; TierTerrestrial=0.036647; Total=0.841339; Tracking\_BOVA=0.230485; Trout=0.020052

Site Location

38,36,09.6 -77,18,52.4  
is the Search Point

Show Position Rings

Yes  No  
1 mile and 1/4 mile at the Search Point

Show Search Area

Yes  No  
2 Search distance miles radius

Search Point is at map center

Base Map Choices

Topography

Map Overlay Choices

Current List: Position, Search, BECAR, BAEANests, TEWaters, TierII, Habitat, Trout, Anadromous

Map Overlay Legend



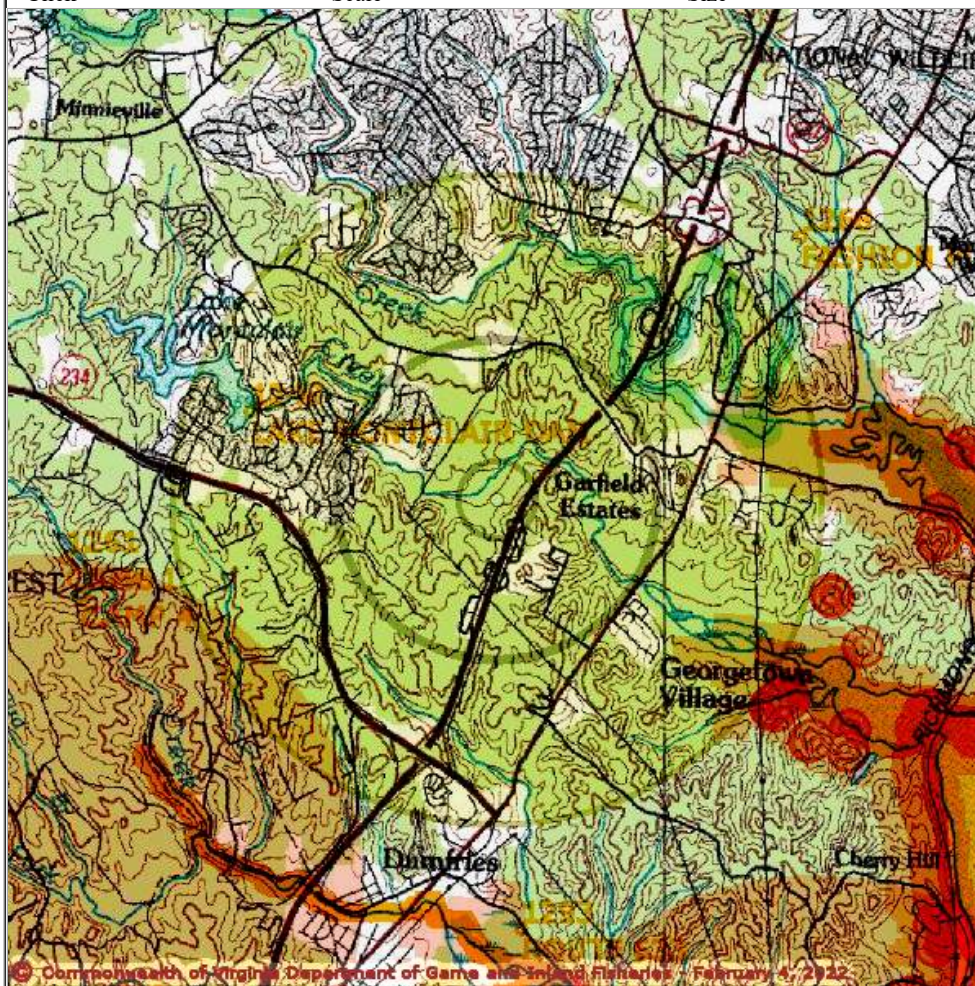
[Refresh Browser Page](#)

Map Click **Pan** **Go** **M**

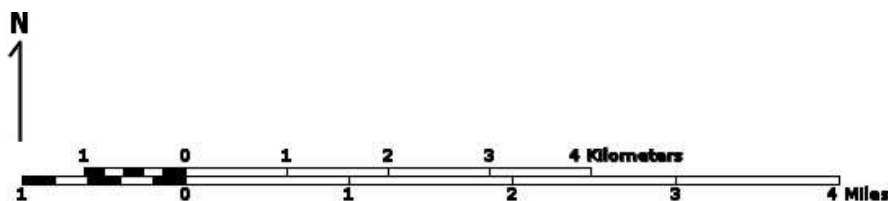
Map Scale **In** **Zoom** **Out**

Screen Size **Small** **Size** **Big**

[Help](#)



© Commonwealth of Virginia Department of Game and Inland Fisheries - February 4, 2022



Point of Search 38,36,09.6 -77,18,52.4



Map Location 38,36,09.6 -77,18,52.4

- Select **Coordinate System**:
- Degrees, Minutes, Seconds Latitude - Longitude
  - Decimal Degrees Latitude - Longitude
  - Meters UTM NAD83 East North Zone
  - Meters UTM NAD27 East North Zone


Base Map source: USGS 1:100,000 topographic maps (see [Microsoft terraserver-usa.com](http://Microsoft.terraserver-usa.com) for details)

Map projection is UTM Zone 18 NAD 1983 with left 293650 and top 4280026. Pixel size is 16 meters. Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 600 columns by 600 rows for a total of 360000 pixels. The map display represents 9600 meters east to west by 9600 meters north to south for a total of 92.1 square kilometers. The map display represents 31501 feet east to west by 31501 feet north to south for a total of 35.5



**T & E Waters**

-  **Federal**
-  **State**

**Predicted Habitat  
WAP Tier I & II**

-  **Aquatic**
-  **Terrestrial**

**Trout Waters**

-  **Class I - IV**
-  **Class V - VI**

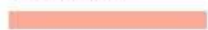
**Anadromous Fish Reach**

-  **Confirmed**
-  **Potential**

 **Impediment**



**Bald Eagle  
Concentration Areas  
and Roosts**



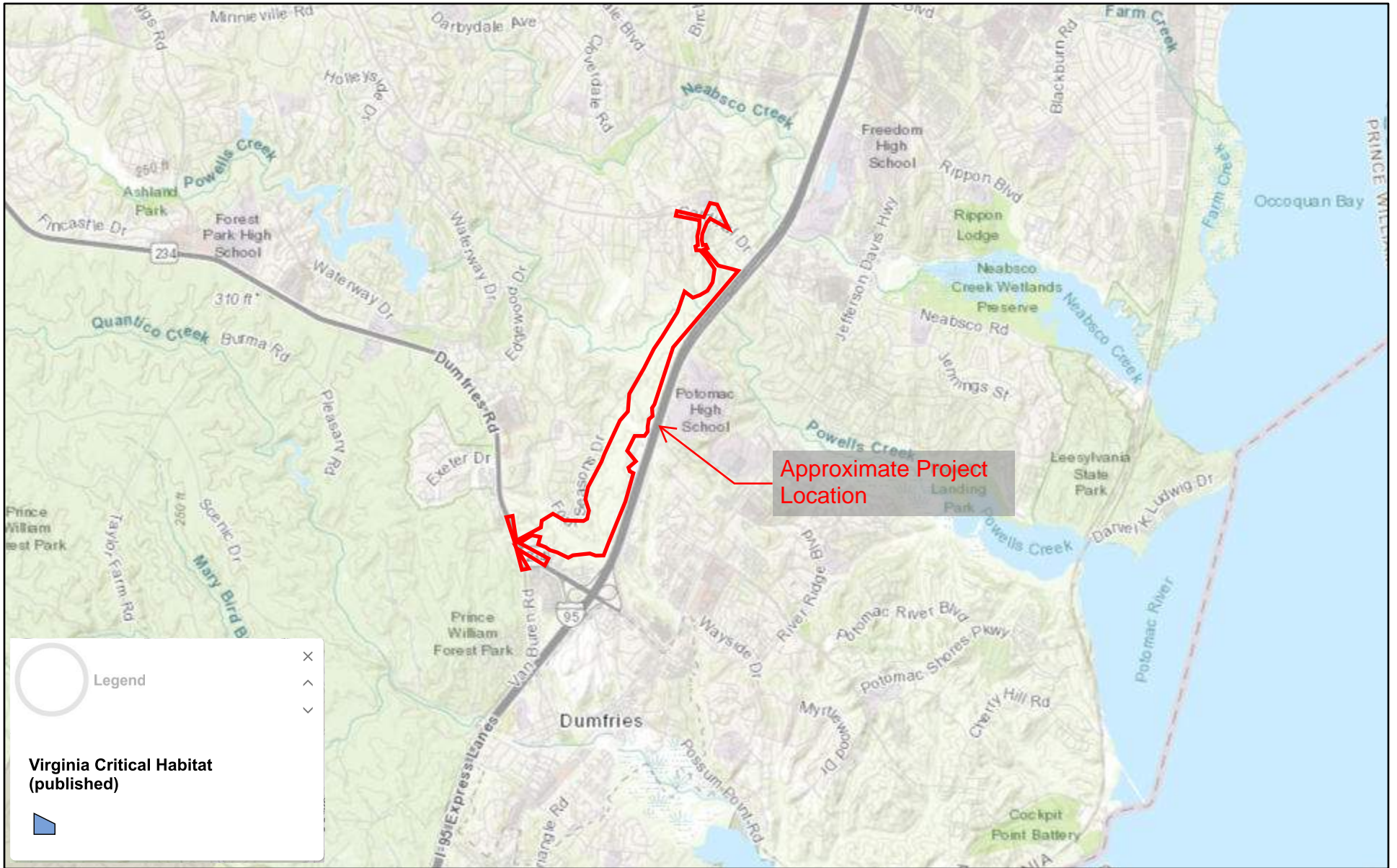
square miles.

Topographic maps and Black and white aerial photography for year 1990+ are from the United States Department of the Interior, United States Geological Survey. Color aerial photography aquired 2002 is from Virginia Base Mapping Program, Virginia Geographic Information Network.

Shaded topographic maps are from TOPO! ©2006 National Geographic  
<http://www.national.geographic.com/topo>

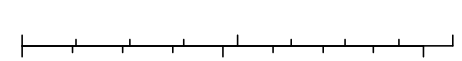
All other map products are from the Commonwealth of Virginia Department of Game and Inland Fisheries.

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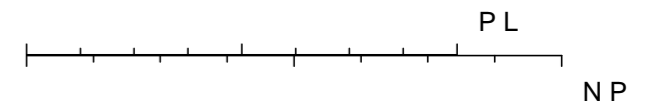
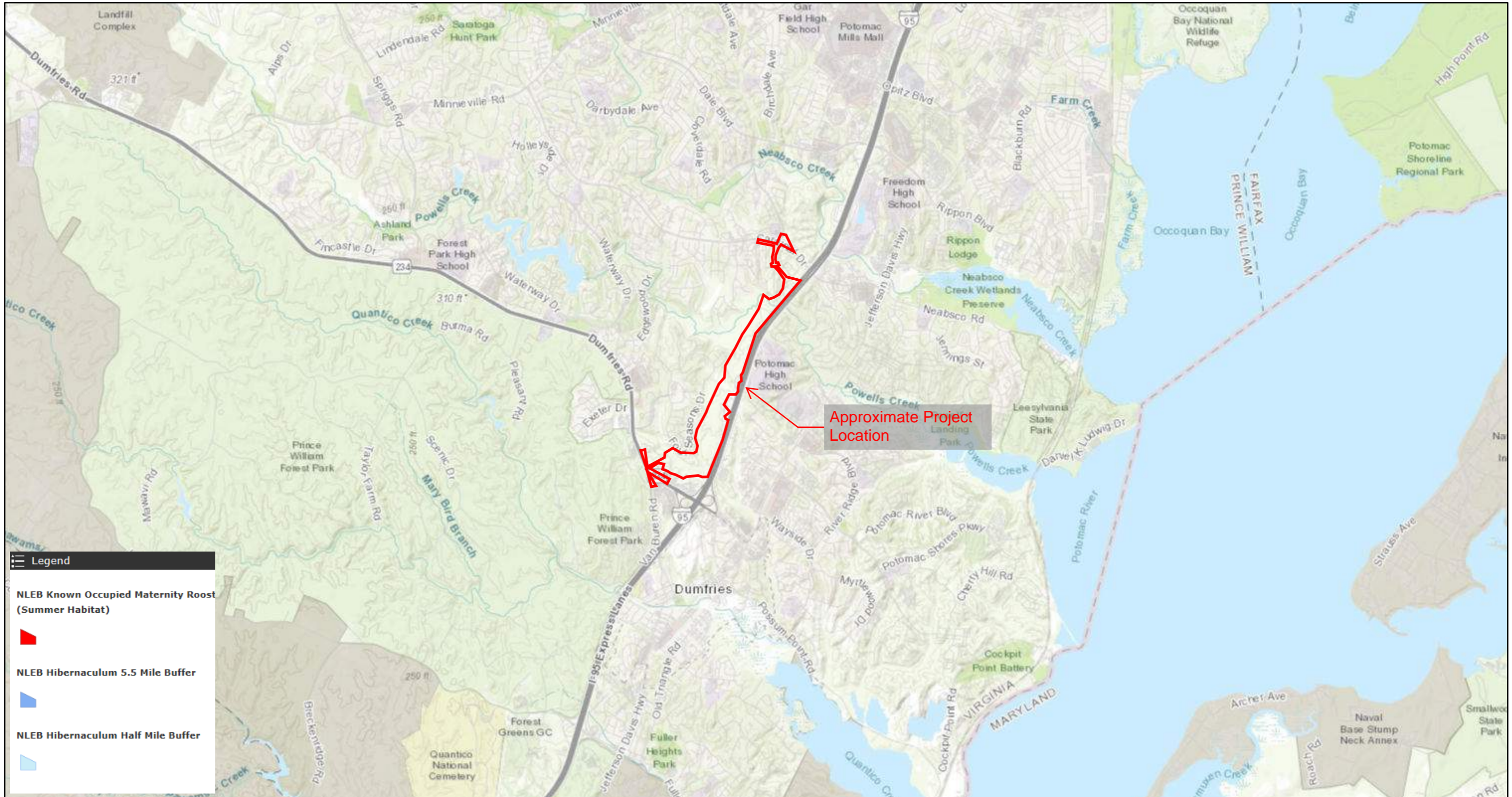
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U.S. Fish & Wildlife Service - Virginia Field Office  
 Critical Habitat Online Mapper  
<http://fws.maps.arcgis.com/apps/Viewer/index.html?appid=f6e84e675ba1461b8ae6a351adea1429>



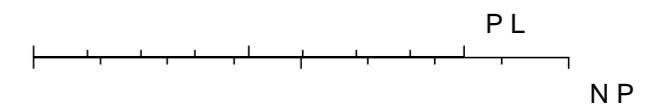
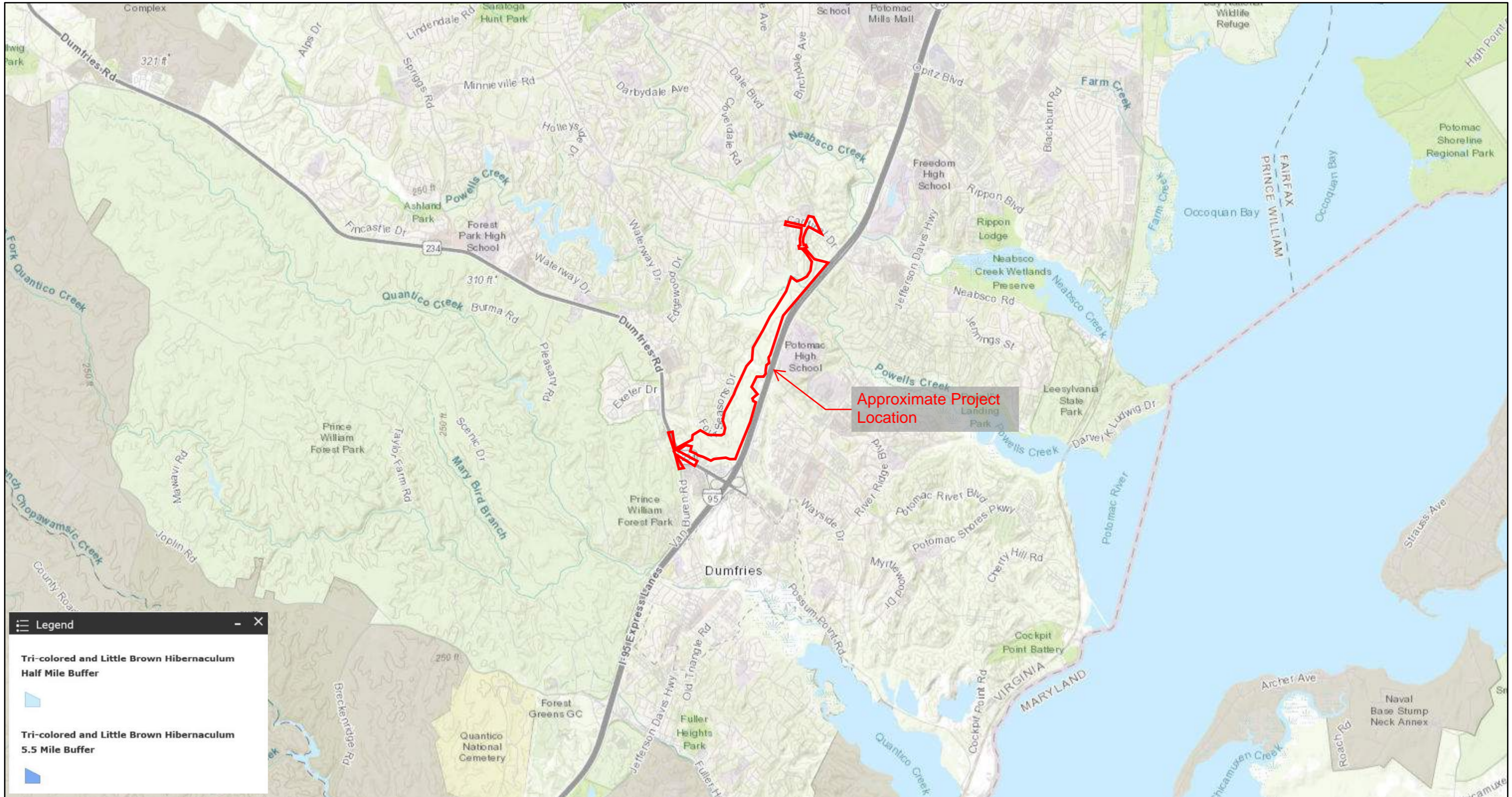
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# CCB Mapping Portal



**Layers:** Eagle Roosts, VA Eagle Nest Locator, VA Eagle Nest Buffers, Eagle Roost Buffers

**Map Center [longitude, latitude]:** [-77.30358123779297, 38.5937971957727]

**Map Link:**

[https://ccbbirds.org/maps/#layer=Eagle+Roosts&layer=VA+Eagle+Nest+Locator&layer=VA+Eagle+Nest+Buffers&layer=Eagle+Roost+Buffers&zoom=13&lat=38.5937971957727&lng=-77.30358123779297&legend=legend\\_tab\\_7c321b7e-e523-11e4-aaa0-0e0c41326911&base=Street+Map+%28OSM%2FCarto%29](https://ccbbirds.org/maps/#layer=Eagle+Roosts&layer=VA+Eagle+Nest+Locator&layer=VA+Eagle+Nest+Buffers&layer=Eagle+Roost+Buffers&zoom=13&lat=38.5937971957727&lng=-77.30358123779297&legend=legend_tab_7c321b7e-e523-11e4-aaa0-0e0c41326911&base=Street+Map+%28OSM%2FCarto%29)

**Report Generated On:** 02/01/2022

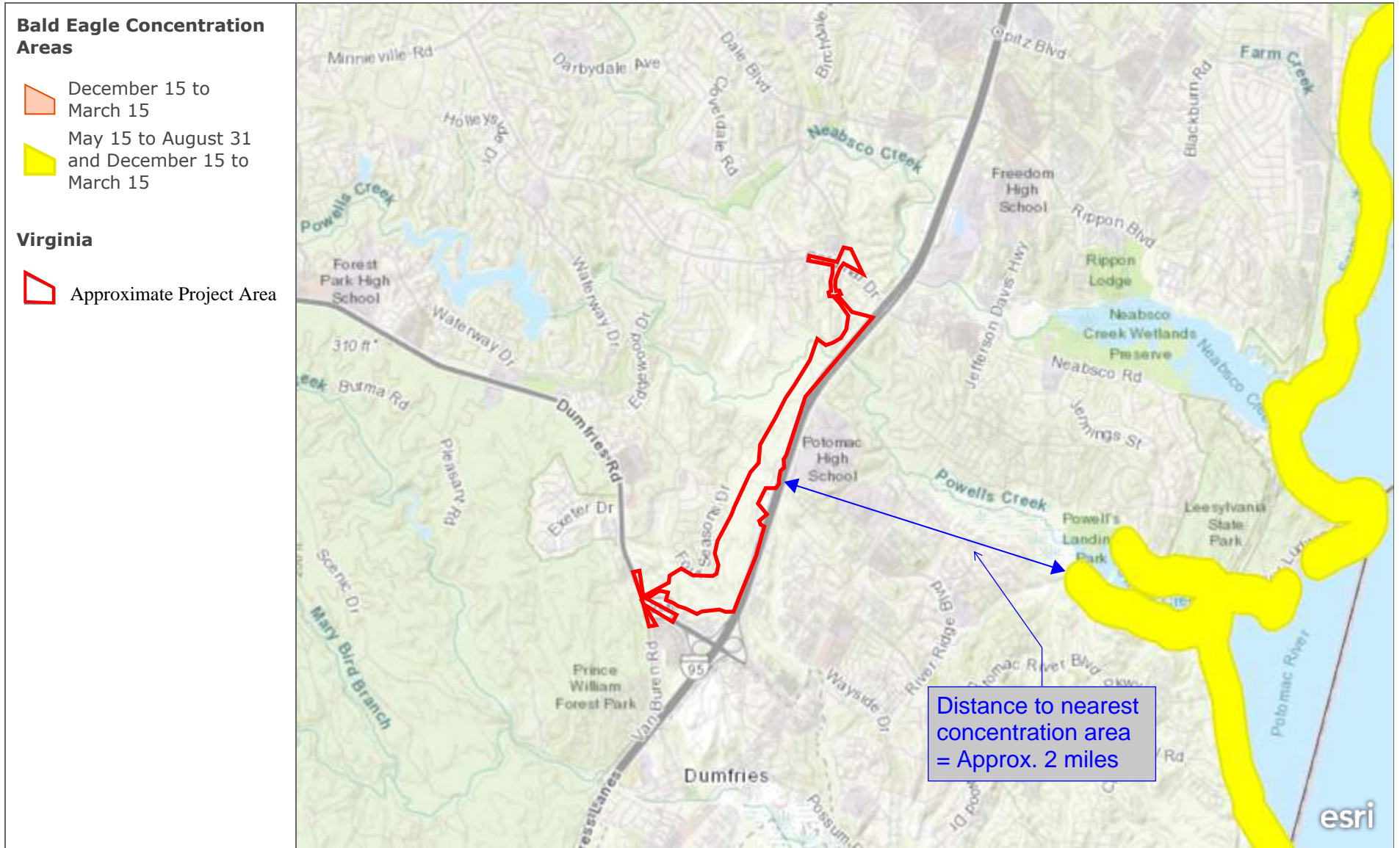
The Center for Conservation Biology (CCB) provides certain data online as a free service to the public and the regulatory sector. CCB encourages the use of its data sets in wildlife conservation and management applications. These data are protected by intellectual property laws. All users are reminded to view the [Data Use Agreement](#), to ensure compliance with our data use policies. For additional data access questions, view our [Data Distribution Policy](#), or contact our Data Manager, Marie Pitts, at [mlpitts@wm.edu](mailto:mlpitts@wm.edu) or 757-221-7503.

Report generated by [The Center for Conservation Biology Mapping Portal](#).

To learn more about CCB visit [ccbbirds.org](http://ccbbirds.org) or contact us at [info@ccbbirds.org](mailto:info@ccbbirds.org)



# USFWS Bald Eagle Concentration Areas - Virginia



This map depicts designated Bald Eagle Concentration Areas in the State of Virginia. The Intent of this map is to provide information to the public about shoreline areas that ar ...

1mi

County of Prince William, Fairfax County, VA, VITA, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA

Updated  
Database  
Searches  
June 2023



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Virginia Ecological Services Field Office  
6669 Short Lane  
Gloucester, VA 23061-4410  
Phone: (804) 693-6694 Fax: (804) 693-9032

In Reply Refer To:  
Project Code: 2023-0097517  
Project Name: Van Buren Road North Extension

June 26, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Project Code in the header of this

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letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
  - USFWS National Wildlife Refuges and Fish Hatcheries
  - Migratory Birds
-

## **OFFICIAL SPECIES LIST**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Virginia Ecological Services Field Office**

6669 Short Lane

Gloucester, VA 23061-4410

(804) 693-6694

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## PROJECT SUMMARY

Project Code: 2023-0097517

Project Name: Van Buren Road North Extension

Project Type: New Constr - Above Ground

Project Description: The Prince William County Department of Transportation is proposing to extend Van Buren Road on new alignment from its existing termini at the intersection with Dumfries Road (Route 234) north for approximately 2.5 miles to a portion of existing Van Buren Road directly south of Cardinal Drive. The project area is located in the southeastern region of Prince William County, Virginia.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.59906515,-77.31634196881359,14z>



Counties: Prince William County, Virginia

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## ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

### INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

### FLOWERING PLANTS

NAME	STATUS
Small Whorled Pogonia <i>Isotria medeoloides</i> Population: No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1890">https://ecos.fws.gov/ecp/species/1890</a>	Threatened

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## **CRITICAL HABITATS**

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

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# **USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES**

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

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## MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

- 
1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

**The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location.** To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20

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NAME	BREEDING SEASON
<b>Kentucky Warbler <i>Oporornis formosus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
<b>Prairie Warbler <i>Dendroica discolor</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
<b>Prothonotary Warbler <i>Protonotaria citrea</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
<b>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
<b>Rusty Blackbird <i>Euphagus carolinus</i></b> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
<b>Wood Thrush <i>Hylocichla mustelina</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

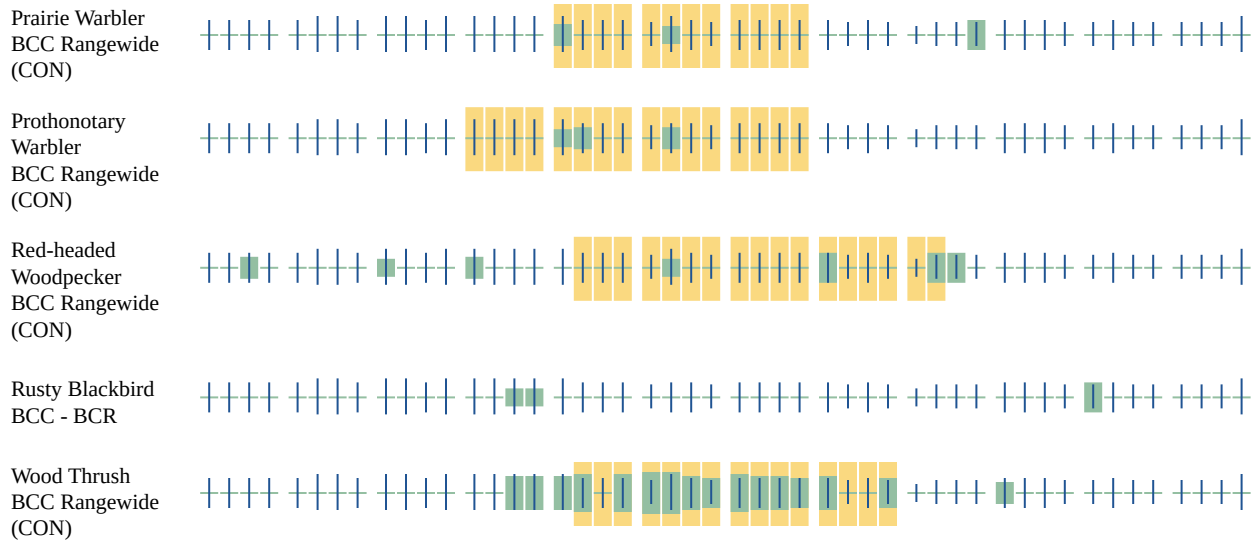
### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.





Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

## MIGRATORY BIRDS FAQ

**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as

warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

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### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity  
Name: Anum Khan  
Address: 8403 Arlington Blvd  
City: Fairfax  
State: VA  
Zip: 22031  
Email: ankhan@dewberry.com  
Phone: 7038490583

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Federal Highway Administration

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Known or likely to occur within a **2 mile radius around point 38,36,09.6 -77,18,52.4**  
in **153 Prince William County, VA**

[View Map of Site Location](#)

553 Known or Likely Species ordered by Status Concern for Conservation  
(displaying first 25) (25 species with Status\* or Tier I\*\* or Tier II\*\* )

<a href="#">BOVA Code</a>	<a href="#">Status*</a>	<a href="#">Tier**</a>	<a href="#">Common Name</a>	<a href="#">Scientific Name</a>	<a href="#">Confirmed</a>	<a href="#">Database(s)</a>
050022	FEST	Ia	<a href="#">Bat, northern long-eared</a>	Myotis septentrionalis		BOVA
010032	FESE	Ib	<a href="#">Sturgeon, Atlantic</a>	Acipenser oxyrinchus		BOVA
060029	FTST	IIa	<a href="#">Lance, yellow</a>	Elliptio lanceolata		BOVA
050020	SE	Ia	<a href="#">Bat, little brown</a>	Myotis lucifugus		BOVA
050027	FPSE	Ia	<a href="#">Bat, tri-colored</a>	Perimyotis subflavus		BOVA
060006	SE	Ib	<a href="#">Floater, brook</a>	Alasmidonta varicosa		BOVA
030062	ST	Ia	<a href="#">Turtle, wood</a>	Glyptemys insculpta	<a href="#">Potential</a>	Habitat,HU6
040096	ST	Ia	<a href="#">Falcon, peregrine</a>	Falco peregrinus		BOVA
040293	ST	Ia	<a href="#">Shrike, loggerhead</a>	Lanius ludovicianus		BOVA
040379	ST	Ia	<a href="#">Sparrow, Henslow's</a>	Centronyx henslowii		BOVA
040292	ST		<a href="#">Shrike, migrant loggerhead</a>	Lanius ludovicianus migrans		BOVA
100079	FC	IIIa	<a href="#">Butterfly, monarch</a>	Danaus plexippus		BOVA
030063	CC	IIIa	<a href="#">Turtle, spotted</a>	Clemmys guttata		BOVA
030012	CC	IVa	<a href="#">Rattlesnake, timber</a>	Crotalus horridus		BOVA,HU6
010077		Ia	<a href="#">Shiner, bridle</a>	Notropis bifrenatus		BOVA
040306		Ia	<a href="#">Warbler, golden-winged</a>	Vermivora chrysoptera		BOVA
100248		Ia	<a href="#">Fritillary, regal</a>	Speyeria idalia idalia		BOVA,HU6
040213		Ic	<a href="#">Owl, northern saw-whet</a>	Aegolius acadicus		BOVA,HU6
040052		IIa	<a href="#">Duck, American black</a>	Anas rubripes	<a href="#">Potential</a>	BOVA,BBA,HU6
040036		IIa	<a href="#">Night-heron, yellow-crowned</a>	Nyctanassa violacea violacea		BOVA
040181		IIa	<a href="#">Tern, common</a>	Sterna hirundo		BOVA,HU6
040320		IIa	<a href="#">Warbler, cerulean</a>	Setophaga cerulea		BOVA,HU6
040140		IIa	<a href="#">Woodcock, American</a>	Scolopax minor		BOVA,HU6
040203		IIb	<a href="#">Cuckoo, black-billed</a>	Coccyzus erythrophthalmus		BOVA

040105		I Ib	<a href="#">Rail, king.</a>	Rallus elegans	<a href="#">Potential</a>	BOVA,Habitat,HU6
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To view **All 553 species** [View 553](#)

\*FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; CC=Collection Concern

\*\*I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need; III=VA Wildlife Action Plan - Tier III - High Conservation Need; IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need

Virginia Wildlife Action Plan Conservation Opportunity Ranking:

- a - On the ground management strategies/actions exist and can be feasibly implemented.;
- b - On the ground actions or research needs have been identified but cannot feasibly be implemented at this time.;
- c - No on the ground actions or research needs have been identified or all identified conservation opportunities have been exhausted.

[View Map of All Query Results from All Observation Tables](#)

Bat Colonies or Hibernacula: **Not Known**

**Anadromous Fish Use Streams** ( 1 records )

[View Map of All Anadromous Fish Use Streams](#)

Stream ID	Stream Name	Reach Status	Anadromous Fish Species			View Map
			Different Species	Highest TE *	Highest Tier **	
C83	<a href="#">Powells creek</a>	Confirmed	2			<a href="#">Yes</a>

**Impediments to Fish Passage** ( 1 records )

[View Map of All Fish Impediments](#)

ID	Name	River	View Map
1248	<a href="#">LAKE MONTCLAIR DAM</a>	POWELLS CREEK	<a href="#">Yes</a>

**Colonial Water Bird Survey**

N/A

**Threatened and Endangered Waters**

N/A

**Managed Trout Streams**

N/A

**Bald Eagle Concentration Areas and Roosts**

N/A

**Bald Eagle Nests** ( 3 records )

[View Map of All Query Results  
Bald Eagle Nests](#)

Nest	N Obs	Latest Date	DGIF Nest Status	View Map
<a href="#">PW8201</a>	2	Jan 1 1985	HISTORIC	<a href="#">Yes</a>
<a href="#">PW9702</a>	7	Apr 27 2000	HISTORIC	<a href="#">Yes</a>
<a href="#">PW9901</a>	16	Apr 24 2008	UNKNOWN	<a href="#">Yes</a>

Displayed 3 Bald Eagle Nests

**Species Observations** ( 17 records )

[View Map of All Query Results  
Species Observations](#)

obsID	class	Date Observed	Observer	N Species			View Map
				Different Species	Highest TE <sup>*</sup>	Highest Tier <sup>**</sup>	
<a href="#">305275</a>	SppObs	Jun 8 1999	Kelso, Donald P.	16		III	<a href="#">Yes</a>
<a href="#">305262</a>	SppObs	Jul 1 1998	Kelso, Donald P.	16		III	<a href="#">Yes</a>
<a href="#">10045</a>	SppObs	May 22 1984	S. P. McIninch	9		III	<a href="#">Yes</a>
<a href="#">425428</a>	SppObs	May 22 1984	VCU - INSTAR	9		III	<a href="#">Yes</a>
<a href="#">10070</a>	SppObs	May 21 1984	S. P. McIninch	9		III	<a href="#">Yes</a>
<a href="#">425439</a>	SppObs	May 21 1984	VCU - INSTAR	9		III	<a href="#">Yes</a>
<a href="#">337956</a>	SppObs	Jan 1 1984	SPM-B-MCINICH	9		III	<a href="#">Yes</a>
<a href="#">337957</a>	SppObs	Jan 1 1984	SPM-B-MCINICH	9		III	<a href="#">Yes</a>
<a href="#">305274</a>	SppObs	Jun 21 1999	Kelso, Donald P.	4			<a href="#">Yes</a>
<a href="#">305261</a>	SppObs	Jun 23 1998	Kelso, Donald P.	8			<a href="#">Yes</a>
<a href="#">16307</a>	SppObs	Sep 26 1982	R. E. WATSON	1			<a href="#">Yes</a>
<a href="#">337446</a>	SppObs	Jan 1 1982	REW-B-WATSON	1			<a href="#">Yes</a>
<a href="#">10073</a>	SppObs	Jul 12 1969	Sheridan	12			<a href="#">Yes</a>
<a href="#">364462</a>	SppObs	Jan 1 1900		1			<a href="#">Yes</a>
<a href="#">364416</a>	SppObs	Jan 1 1900		1			<a href="#">Yes</a>
<a href="#">28596</a>	SppObs	Jan 1 1900	Mitchell, J. C.	1			<a href="#">Yes</a>
<a href="#">364436</a>	SppObs	Jan 1 1900		1			<a href="#">Yes</a>

Displayed 17 Species Observations

**Habitat Predicted for Aquatic WAP Tier I & II Species** ( 2 Reaches )

[View Map Combined Reaches from Below of Habitat Predicted for WAP Tier I & II Aquatic Species](#)

Stream Name	Tier Species						View Map
	Highest TE*	BOVA Code, Status*, Tier**, Common & Scientific Name					
Neabsco Creek (20700102)	ST	030062	ST	Ia	<a href="#">Turtle, wood</a>	Glyptemys insculpta	<a href="#">Yes</a>
tributary (20700102)	ST	030062	ST	Ia	<a href="#">Turtle, wood</a>	Glyptemys insculpta	<a href="#">Yes</a>
tributary (20700102)	ST	030062	ST	Ia	<a href="#">Turtle, wood</a>	Glyptemys insculpta	<a href="#">Yes</a>

**Habitat Predicted for Terrestrial WAP Tier I & II Species** ( 3 Species )

[View Map of Combined Terrestrial Habitat Predicted for 3 WAP Tier I & II Species Listed Below](#)

ordered by Status Concern for Conservation

BOVA Code	Status*	Tier**	Common Name	Scientific Name	View Map
040105		Iib	<a href="#">Rail, king</a>	Rallus elegans	<a href="#">Yes</a>
040038			<a href="#">Bittern, American</a>	Botaurus lentiginosus	<a href="#">Yes</a>
040093			<a href="#">Eagle, bald</a>	Haliaeetus leucocephalus	<a href="#">Yes</a>

**Virginia Breeding Bird Atlas Blocks** ( 6 records )

[View Map of All Query Results Virginia Breeding Bird Atlas Blocks](#)

BBA ID	Atlas Quadrangle Block Name	Breeding Bird Atlas Species			View Map
		Different Species	Highest TE*	Highest Tier**	
52186	<a href="#">Occoquan, SE</a>	84		II	<a href="#">Yes</a>
52185	<a href="#">Occoquan, SW</a>	41		IV	<a href="#">Yes</a>
52174	<a href="#">Quantico, CE</a>	28		III	<a href="#">Yes</a>
52173	<a href="#">Quantico, CW</a>	34		III	<a href="#">Yes</a>
52172	<a href="#">Quantico, NE</a>	65		III	<a href="#">Yes</a>
52171	<a href="#">Quantico, NW</a>	15		IV	<a href="#">Yes</a>

**Public Holdings:** ( 1 names )

Name	Agency	Level
Prince William Forest National Park	National Park Service	Federal

**Summary of BOVA Species Associated with Cities and Counties of the Commonwealth of Virginia:**

FIPS Code	City and County Name	Different Species	Highest TE	Highest Tier
153	<a href="#">Prince William</a>	483	FESE	I

**USGS 7.5' Quadrangles:**

Quantico  
Occoquan

## USGS NRCS Watersheds in Virginia:

N/A

## USGS National 6th Order Watersheds Summary of Wildlife Action Plan Tier I, II, III, and IV Species:

HU6 Code	USGS 6th Order Hydrologic Unit	Different Species	Highest TE	Highest Tier
PL49	<a href="#">Neabsco Creek</a>	57	ST	I
PL51	<a href="#">Powells Creek</a>	56	SS	I
PL52	<a href="#">Quantico Creek</a>	61	SS	I

Compiled on 6/26/2023, 11:26:02 AM 11507981.0 report=all searchType=R dist= 3218 poi= 38,36,09.6 -77,18,52.4

PixelSize=64; Anadromous=0.01903; BBA=0.029165; BECAR=0.016991; Bats=0.015935; Buffer=0.064649; County=0.045961; HU6=0.048594; Impediments=0.017169; Init=0.097856; PublicLands=0.021791; Quad=0.024166; SppObs=0.155025; TEWaters=0.01845; TierReaches=0.031831; TierTerrestrial=0.031387; Total=0.830118; Tracking\_BOVA=0.209579; Trout=0.018666; huva=0.024969

**VaFWIS - Department of Game and Inland Fisheries**

38,36,09.6 -77,18,52.4

**is the Search Point**

**Search Point**

- Change to "clicked" map point**
- Fixed at 38,36,09.6 -77,18,52.4**

**Show Position Rings**

- Yes  No

1 mile and 1/4 mile at the Search Point

**Show Search Area**

- Yes  No

2 Search distance miles radius

Search Point is at map center

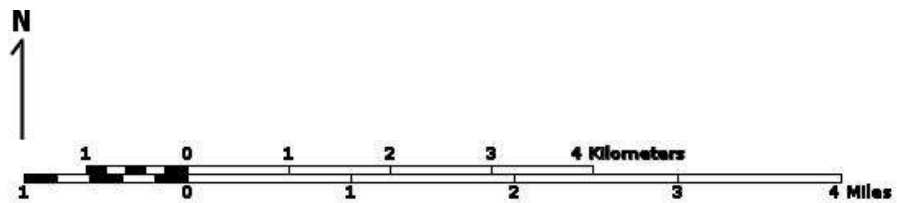
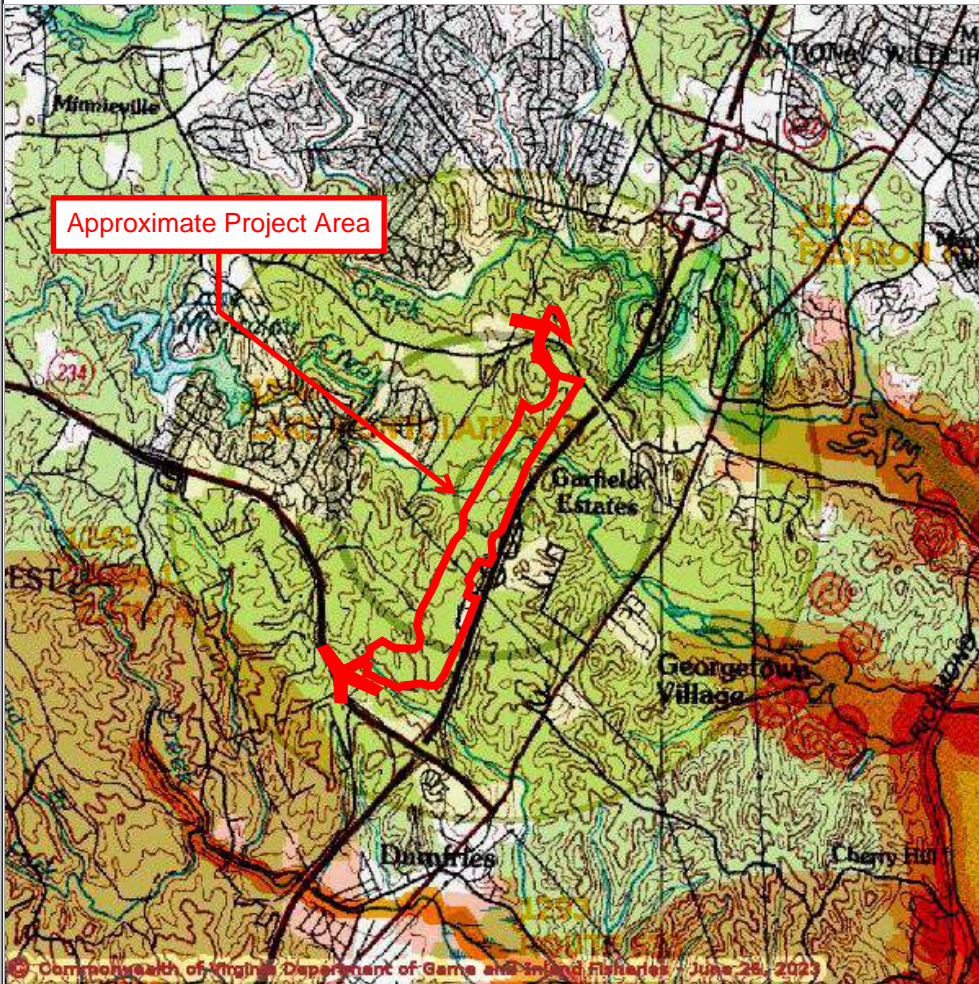
**Base Map Choices**

Topography

**Map Overlay Choices**

Current List: Anadromous, TEWaters, BAEANests, BECAR, Trout, TierII, Habitat, Position, Search

[back](#)             [Help](#)



Point of Search 38,36,09.6 -77,18,52.4

Map Location 38,36,09.6 -77,18,52.4

- Select **Coordinate System**:
- Degrees, Minutes, Seconds Latitude - Longitude
  - Decimal Degrees Latitude - Longitude
  - Meters UTM NAD83 East North Zone
  - Meters UTM NAD27 East North Zone

Base Map source: USGS 1:100,000 topographic maps (see [Microsoft terraserver-usa.com](http://Microsoft terraserver-usa.com) for details)

Map projection is UTM Zone 18 NAD 1983 with left 293652 and top 4280026. Pixel size is 16 meters. Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 600 columns by 600 rows for a total of 360000 pixels. The map display represents 9600 meters east to west by 9600 meters north to south for a total of 92.1 square kilometers. The map display represents 31501 feet east to west by 31501 feet north to south for a total of 35.5

## Map Overlay Legend

### T & E Waters

Federal

State

### Predicted Habitat WAP Tier I & II

Aquatic

Terrestrial

### Trout Waters

Class I - IV

Class V - VI

### Anadromous Fish Reach

Confirmed

Potential

### Impediment



Position Rings  
at the Search  
Point



2 mile radius  
Search Area

### Bald Eagle Concentration Areas and Roosts

square miles.

Topographic maps and Black and white aerial photography for year 1990+ are from the United States Department of the Interior, United States Geological Survey. Color aerial photography aquired 2002 is from Virginia Base Mapping Program, Virginia Geographic Information Network.

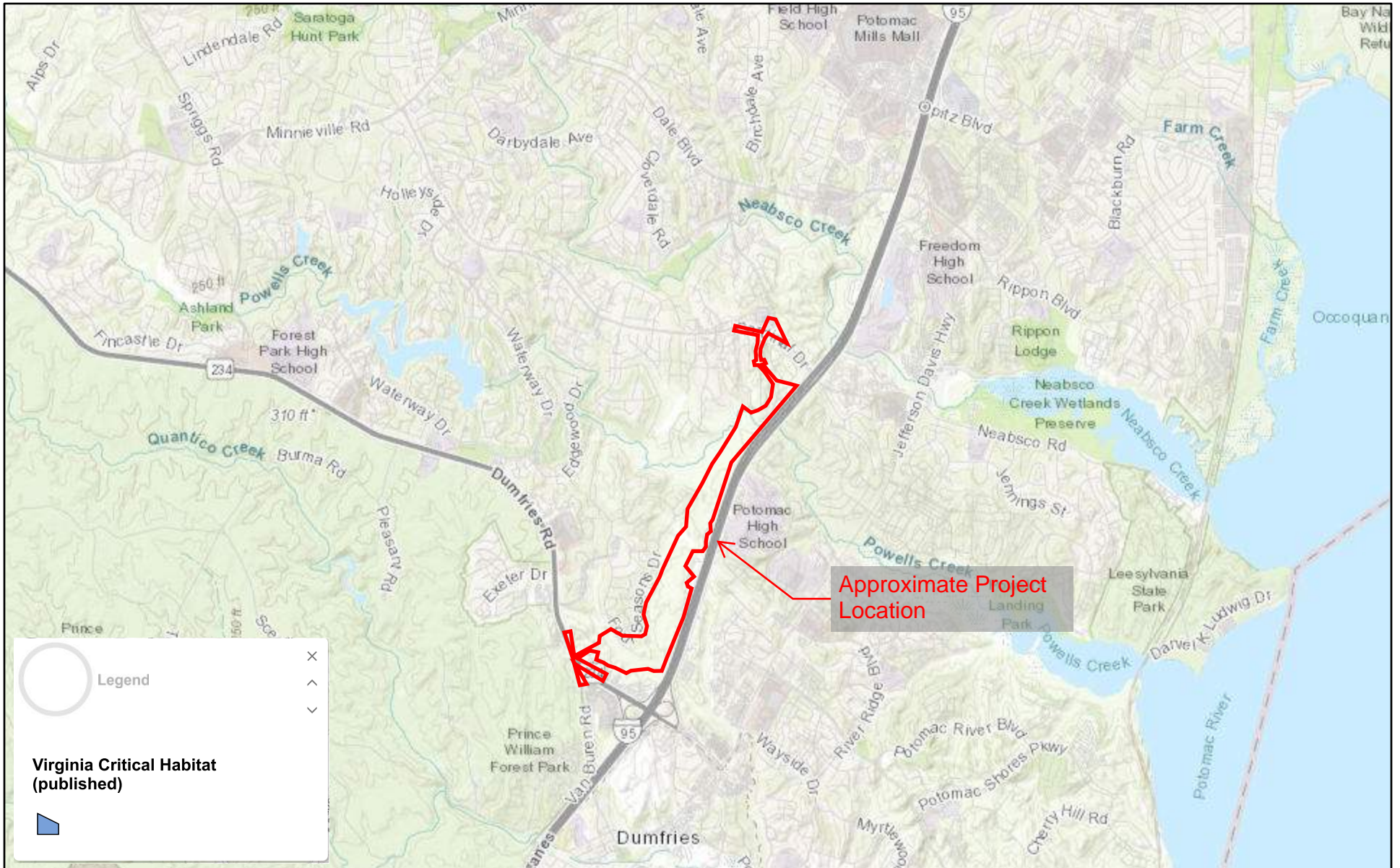
Shaded topographic maps are from TOPO! ©2006 National Geographic  
<http://www.national.geographic.com/topo>

All other map products are from the Commonwealth of Virginia Department of Game and Inland Fisheries.

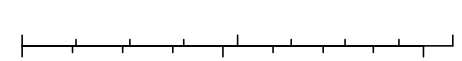
map assembled 2023-06-26 11:20:27 (qa/qc March 21, 2016 12:20 - tn=1507956 dist=3218 I )  
\$poi=38.6026666 -77.3145555



# 9DQ %XUHQ & ULWLFDO +DELWDW ODS



-XQH

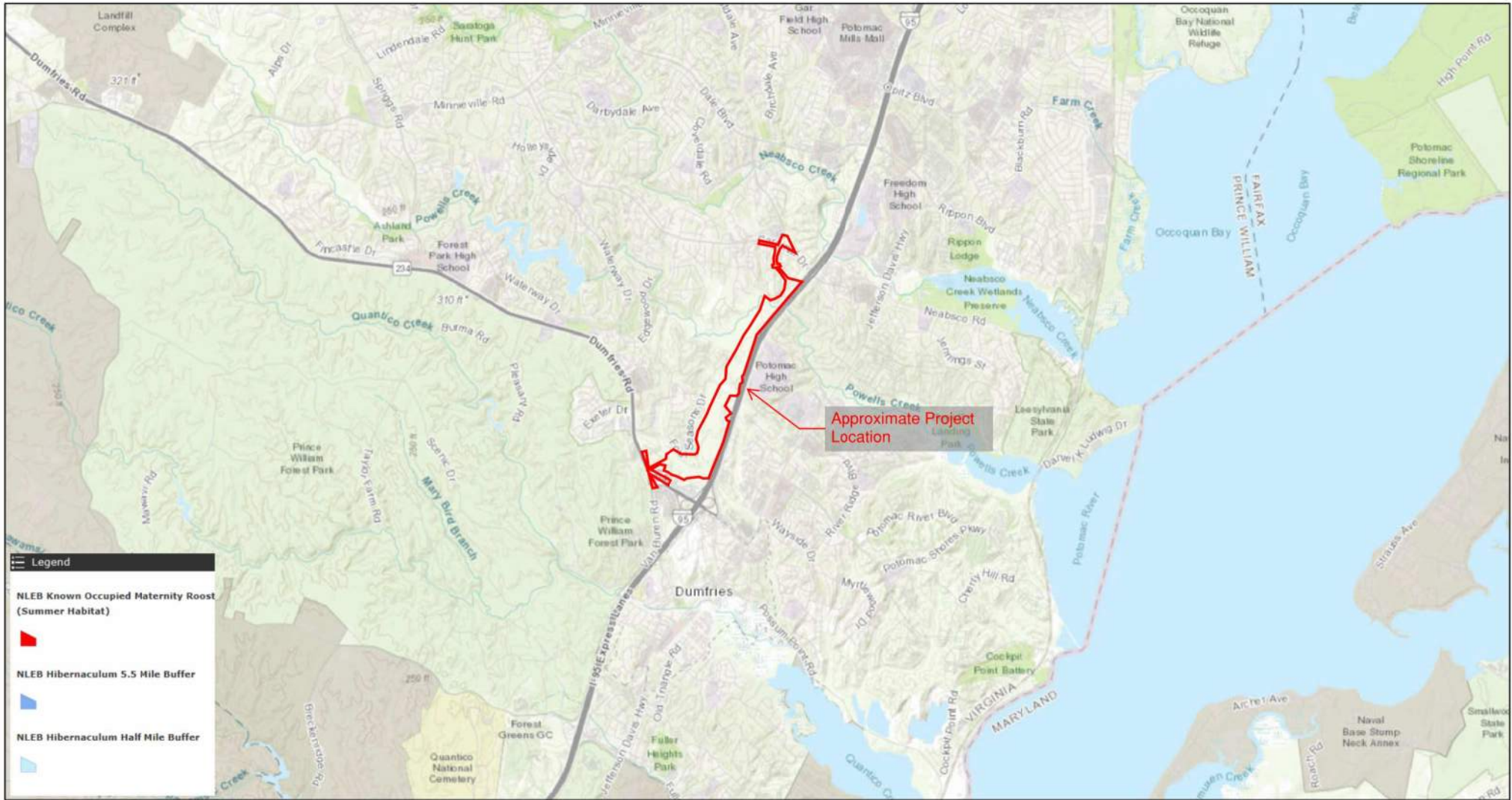


PL

NP

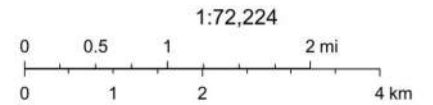
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# Van Buren NLEB Habitat Map

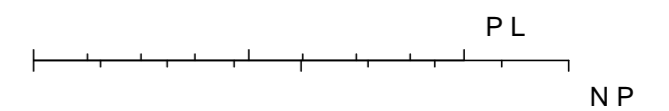
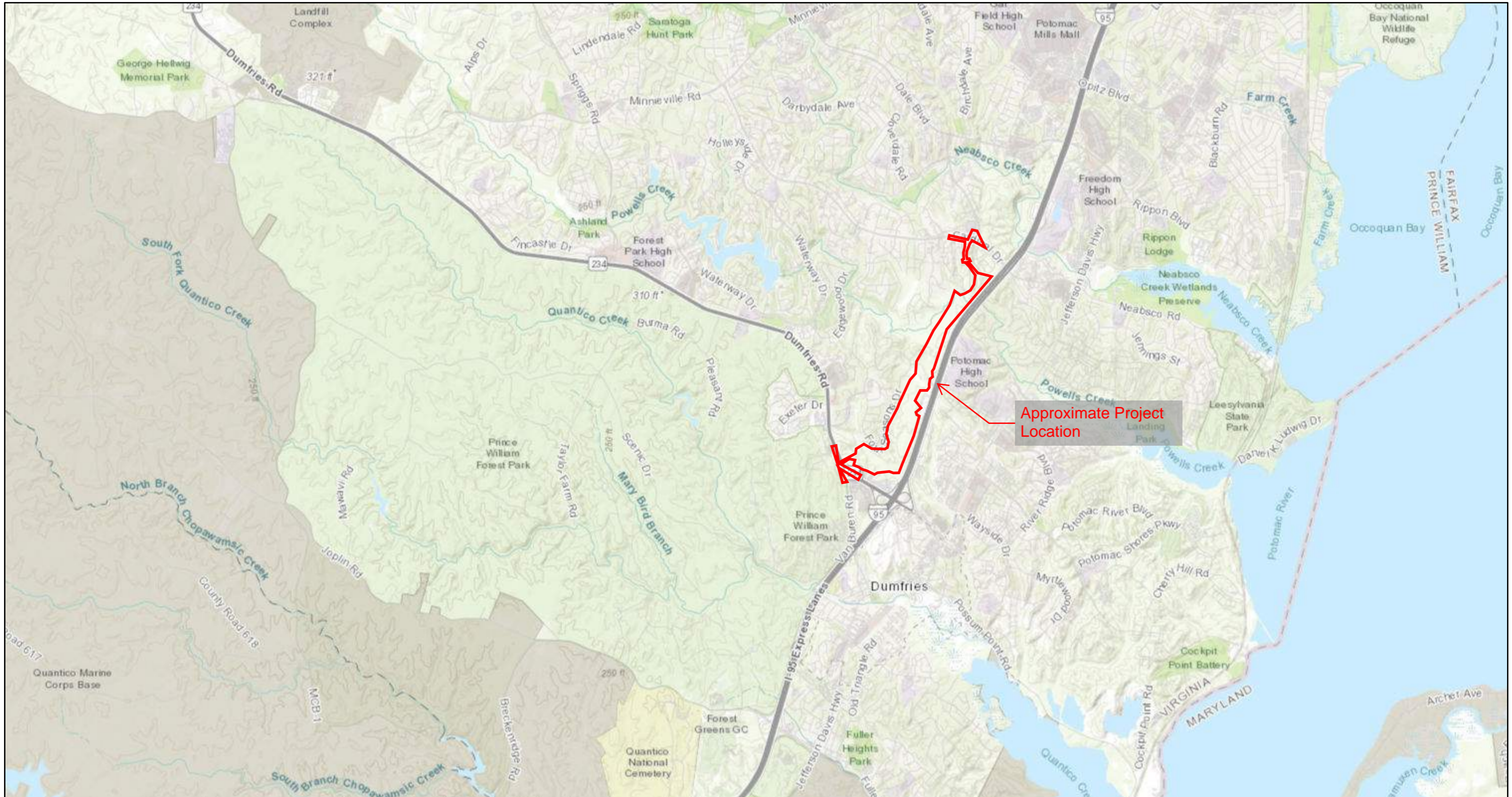


6/26/2023, 12:08:40 PM

Virginia Department of Game and Inland Fisheries  
 NLEB Winter Habitat and Roost Tree Mapping Tool  
<http://dgif-virginia.maps.arcgis.com/apps/webappviewer/index.html?id=32ea4ee4935942c092e41ddcd19e5ec5>



County of Prince William, VITA, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA



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# CCB Mapping Portal



**Layers:** VA Eagle Nest Locator, VA Eagle Nest Buffers, Eagle Roosts, Eagle Roost Buffers

**Map Center [longitude, latitude]:** [-77.32117652893066, 38.59473636894571]

**Map Link:**

[https://ccbbirds.org/maps/#layer=VA+Eagle+Nest+Locator&layer=VA+Eagle+Nest+Buffers&layer=Eagle+Roosts&layer=Eagle+Roost+Buffers&zoom=13&lat=38.59473636894571&lng=-77.32117652893066&legend=legend\\_tab\\_59557df6-c07b-11e5-a485-0e31c9be1b51&base=Street+Map+%28OSM%2FCarto%29](https://ccbbirds.org/maps/#layer=VA+Eagle+Nest+Locator&layer=VA+Eagle+Nest+Buffers&layer=Eagle+Roosts&layer=Eagle+Roost+Buffers&zoom=13&lat=38.59473636894571&lng=-77.32117652893066&legend=legend_tab_59557df6-c07b-11e5-a485-0e31c9be1b51&base=Street+Map+%28OSM%2FCarto%29)

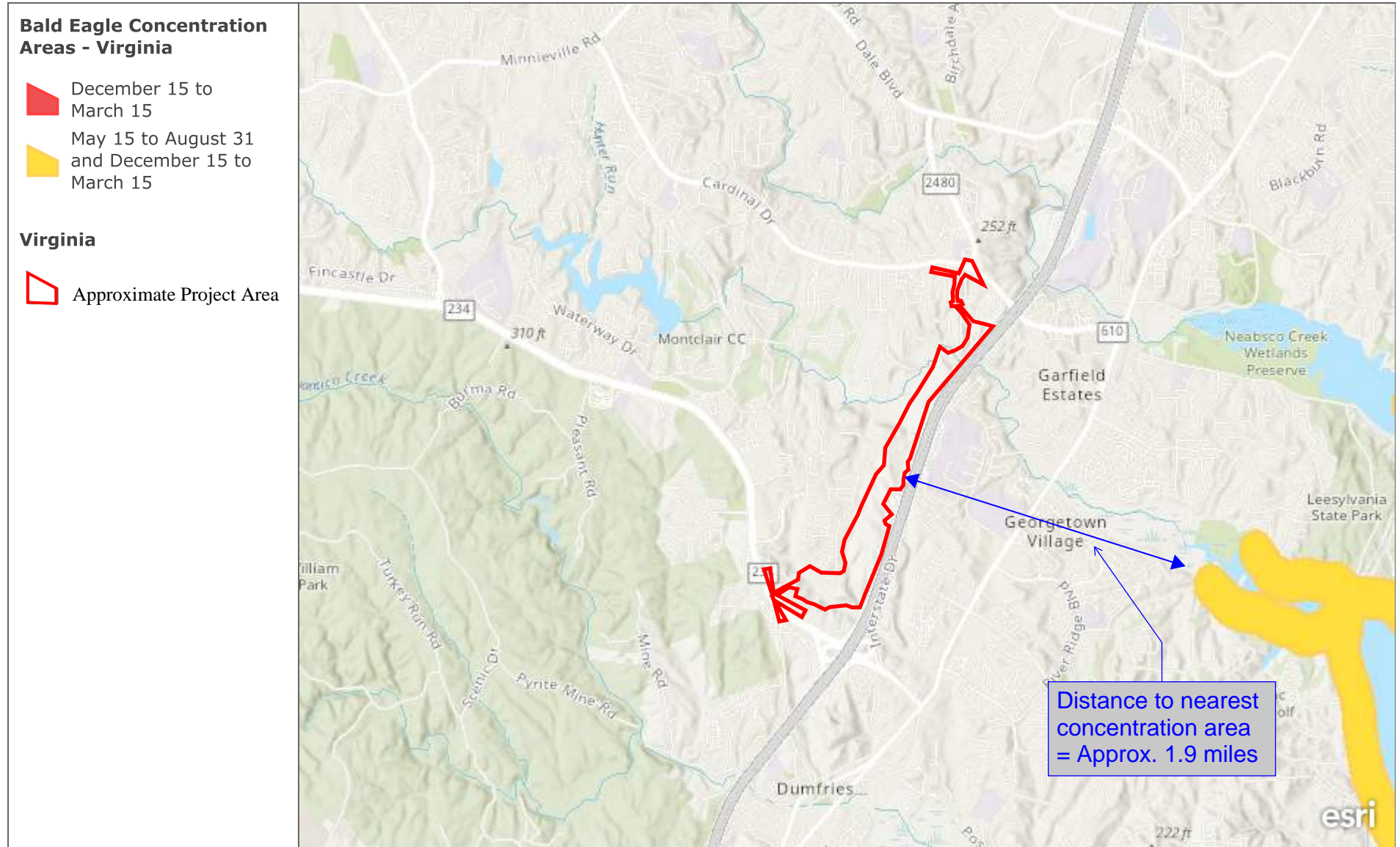
**Report Generated On:** 06/26/2023

The Center for Conservation Biology (CCB) provides certain data online as a free service to the public and the regulatory sector. CCB encourages the use of its data sets in wildlife conservation and management applications. These data are protected by intellectual property laws. All users are reminded to view the [Data Use Agreement](#) to ensure compliance with our data use policies. For additional data access questions, view our [Data Distribution Policy](#), or contact our Data Manager, Marie Pitts, at [mlpitts@wm.edu](mailto:mlpitts@wm.edu) or 757-221-7503.

Report generated by [The Center for Conservation Biology Mapping Portal](#).

To learn more about CCB visit [ccbbirds.org](http://ccbbirds.org) or contact us at [info@ccbbirds.org](mailto:info@ccbbirds.org)

# USFWS Bald Eagle Concentration Areas - Virginia



This map depicts designated Bald Eagle Concentration Areas in the State of Virginia. The Intent of this map is to provide information to the public about shoreline areas that are used by bald eagles during both the summer and winter periods.