

TAB D
Project Owner Authorizations

SPECIAL LIMITED POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that we, Bernard R. Arthur and Barbara D. Arthur, are the owners in fee (the "Owner") of that certain real property located in the County of Lunenburg, Virginia (the "County") identified as Tax Map No. 047-04-0-6 (the "Property"). On or about November 10, 2021, Owner executed an Option to lease agreement (the "Option Agreement"), with Virginia Electric and Power Company, a Virginia public service corporation ("VEPCO"), whereby Owner granted VEPCO the option to lease the Property upon terms and conditions set forth in the Option Agreement. VEPCO proposes to develop and operate a utility-scale solar facility (the "Solar Facility") on a portion of the Property. VEPCO is required to obtain a conditional use permit ("CUP") from the County Board of Supervisors in order to develop, construct and operate the Solar Facility, and/or related facilities on the Property.

Owner of the Property, having full right and authority to do so, do hereby makes, constitutes, and appoints Robin L. Lucey, Business Development Manager, VEPCO, and M. Ann Neil Cosby, Esq., McGuireWoods, LLP, (collectively, the "Appointees"), either of whom may act, as the true and lawful attorneys in fact for the Owner in connection with the filing and approval of the CUP. The Appointees shall have full power and authority to do and perform as may be necessary to prepare and file zoning application documents (the "Application") and such other supporting information (including but not limited to conditions of development) on behalf of the Owner, to seek and obtain approval of the CUP and to agree to any and all terms and conditions as necessary for the use of the Property as requested in the Application.

IN WITNESS WHEREOF, Owner has hereunto signed Special Limited Power of Attorney as of the date(s) set forth below.

By:

Bernard R. Arthur
Name: Bernard R. Arthur
Title: Owner

STATE OF Virginia

COUNTY OF Lunenburg, to-wit:

The foregoing instrument was acknowledged before me this 17th day of February, 2022, by Bernard R. Arthur, as owner



Courtney Brame Bender
Notary Public

My Commission Expires: 8/31/2024

Notary Registration Number: 7067613

IN WITNESS WHEREOF, Owner has hereunto signed Special Limited Power of Attorney as of the date(s) set forth below.

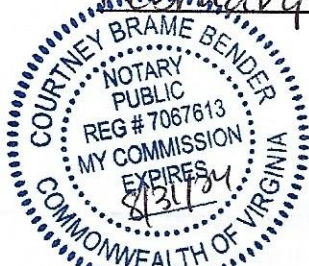
By:

Barbara D. Arthur
Name: Barbara D. Arthur
Title: owner

STATE OF Virginia

COUNTY OF Lunenburg, to-wit:

The foregoing instrument was acknowledged before me this 17th day of February, 2022, by Barbara D. Arthur, as owner



Courtney Brame Bender
Notary Public

My Commission Expires: 8/31/2024

Notary Registration Number: 7007613

SPECIAL LIMITED POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Robin Gunn Wrenn, am the President of Dixie Lee Farms, Inc., a Virginia corporation (the "Owner"). Owner owns in fee that certain real property located in the County of Lunenburg, Virginia (the "County") identified as Tax Map Nos. 046-0A-0-20, 058-0A-0-54, 058-0A-0-63, 058-0A-0-68, 058-0A-0-69, 059-0A-0-27 and 059-0A-0-56B (the "Property"). On or about February 26, 2021, Owner executed an Option to lease agreement (the "Option Agreement"), with Virginia Electric and Power Company, a Virginia public service corporation ("VEPCO"), whereby Owner granted VEPCO the option to lease the Property upon terms and conditions set forth in the Option Agreement. VEPCO proposes to develop and operate a utility-scale solar facility (the "Solar Facility") on a portion of the Property. VEPCO is required to obtain a conditional use permit ("CUP") from the County Board of Supervisors in order to develop, construct and operate the Solar Facility, and/or related facilities on the Property.

Owner of the Property, having full right and authority to do so, do hereby makes, constitutes, and appoints Robin L. Lucey, Business Development Manager, VEPCO, and M. Ann Neil Cosby, Esq., McGuireWoods, LLP, (collectively, the "Appointees"), either of whom may act, as the true and lawful attorneys in fact for the Owner in connection with the filing and approval of the CUP. The Appointees shall have full power and authority to do and perform as may be necessary to prepare and file zoning application documents (the "Application") and such other supporting information (including but not limited to conditions of development) on behalf of the Owner, to seek and obtain approval of the CUP and to agree to any and all terms and conditions as necessary for the use of the Property as requested in the Application.

IN WITNESS WHEREOF, I have hereunto set my hand this 28th day of February, 2022

By:

Robin Gunn Wrenn, Pres

Name:

Title:

STATE OF Virginia

COUNTY OF Lunenburg, to-wit:

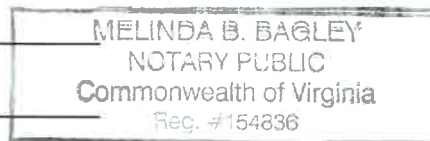
The foregoing instrument was acknowledged before me this 28th day of February, 2022, by Robin Gunn Wrenn as President of
Dixie Lee Farms Inc.

Melinda B Bagley

Notary Public

My Commission Expires: 09/30/2023

Notary Registration Number: 154836



SPECIAL LIMITED POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that we, Richard T. Hite and Richard T. Hite Jr., are the owners in fee (the "Owner") of that certain real property located in the County of Lunenburg, Virginia (the "County") identified as Tax Map No. 047-04-0-13 (the "Property"). On or about 2/14/2022, Owner executed an Option to lease agreement (the "Option Agreement"), with Virginia Electric and Power Company, a Virginia public service corporation ("VEPCO"), whereby Owner granted VEPCO the option to lease the Property upon terms and conditions set forth in the Option Agreement. VEPCO proposes to develop and operate a utility-scale solar facility (the "Solar Facility") on a portion of the Property. VEPCO is required to obtain a conditional use permit ("CUP") from the County Board of Supervisors in order to develop, construct and operate the Solar Facility, and/or related facilities on the Property.

Owner of the Property, having full right and authority to do so, do hereby makes, constitutes, and appoints Robin L. Lucey, Business Development Manager, VEPCO, and M. Ann Neil Cosby, Esq., McGuireWoods, LLP, (collectively, the "Appointees"), either of whom may act, as the true and lawful attorneys in fact for the Owner in connection with the filing and approval of the CUP. The Appointees shall have full power and authority to do and perform as may be necessary to prepare and file zoning application documents (the "Application") and such other supporting information (including but not limited to conditions of development) on behalf of the Owner, to seek and obtain approval of the CUP and to agree to any and all terms and conditions as necessary for the use of the Property as requested in the Application.

IN WITNESS WHEREOF, Owner has hereunto signed Special Limited Power of Attorney as of the date(s) set forth below.

By:


Name:
Title:

STATE OF Virginia

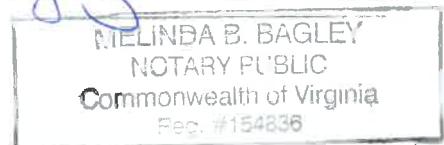
COUNTY OF Lunenburg, to-wit:

The foregoing instrument was acknowledged before me this 14th day of February, 2022, by Richard T. Hite Jr., as _____


Notary Public

My Commission Expires: 09/30/2023

Notary Registration Number: 154836



By:

Richard T. Hite

Name:

Title:

STATE OF Virginia

COUNTY OF Lunenburg, to-wit:

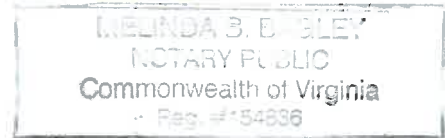
The foregoing instrument was acknowledged before me this 14th day of February, 2022, by Richard T. Hite, as _____

Melinda B. Bagley

Notary Public

My Commission Expires: 09/30/2023

Notary Registration Number: 154836



SPECIAL LIMITED POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Johnny K. Long, am the owner in fee (the "Owner") of that certain real property located in the County of Lunenburg, Virginia (the "County") identified as Tax Map Nos. 047-0A-0-38, 047-04-0-B1, 047-04-0-B1B, 058-0A-0-66A, and 058-0A-0-67 (the "Property"). On or about October 26, 2021, Owner executed an Option to lease agreement (the "Option Agreement"), with Virginia Electric and Power Company, a Virginia public service corporation ("VEPCO"), whereby Owner granted VEPCO the option to lease the Property upon terms and conditions set forth in the Option Agreement. VEPCO proposes to develop and operate a utility-scale solar facility (the "Solar Facility") on a portion of the Property. VEPCO is required to obtain a conditional use permit ("CUP") from the County Board of Supervisors in order to develop, construct and operate the Solar Facility, and/or related facilities on the Property.

Owner of the Property, having full right and authority to do so, do hereby makes, constitutes, and appoints Robin L. Lucey, Business Development Manager, VEPCO, and M. Ann Neil Cosby, Esq., McGuireWoods, LLP, (collectively, the "Appointees"), either of whom may act, as the true and lawful attorneys in fact for the Owner in connection with the filing and approval of the CUP. The Appointees shall have full power and authority to do and perform as may be necessary to prepare and file zoning application documents (the "Application") and such other supporting information (including but not limited to conditions of development) on behalf of the Owner, to seek and obtain approval of the CUP and to agree to any and all terms and conditions as necessary for the use of the Property as requested in the Application.

IN WITNESS WHEREOF, I have hereunto set my hand this 23 day of Feb.

By:

Johnny K. Long
Name: _____
Title: _____

STATE OF Virginia

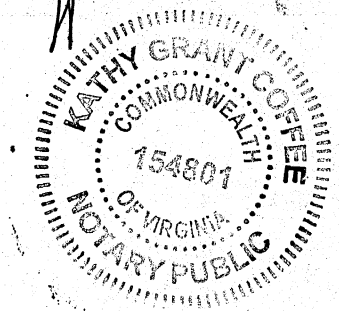
COUNTY OF Lunenburg, to-wit:

The foregoing instrument was acknowledged before me this 23 day of February, 2022, by Johnny K Long, as _____

Kathy Grant Coffey
Notary Public

My Commission Expires: March 31, 2023

Notary Registration Number: 154801



SPECIAL LIMITED POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that we, Stephen P. Lindberg and Wendy A. Lindberg, are the owners in fee (the "Owner") of that certain real property located in the County of Lunenburg, Virginia (the "County") identified as Tax Map No. 059-0A-0-1A (the "Property"). On or about December 16, 2021, Owner executed an Option to lease agreement (the "Option Agreement"), with Virginia Electric and Power Company, a Virginia public service corporation ("VEPCO"), whereby Owner granted VEPCO the option to lease the Property upon terms and conditions set forth in the Option Agreement. VEPCO proposes to develop and operate a utility-scale solar facility (the "Solar Facility") on a portion of the Property. VEPCO is required to obtain a conditional use permit ("CUP") from the County Board of Supervisors in order to develop, construct and operate the Solar Facility, and/or related facilities on the Property.

Owner of the Property, having full right and authority to do so, do hereby makes, constitutes, and appoints Robin L. Lucey, Business Development Manager, VEPCO, and M. Ann Neil Cosby, Esq., McGuireWoods, LLP, (collectively, the "Appointees"), either of whom may act, as the true and lawful attorneys in fact for the Owner in connection with the filing and approval of the CUP. The Appointees shall have full power and authority to do and perform as may be necessary to prepare and file zoning application documents (the "Application") and such other supporting information (including but not limited to conditions of development) on behalf of the Owner, to seek and obtain approval of the CUP and to agree to any and all terms and conditions as necessary for the use of the Property as requested in the Application.

IN WITNESS WHEREOF, Owner has hereunto signed Special Limited Power of Attorney as of the date(s) set forth below.



By:

Wendy Albiston Lindberg

Wendy Albiston Lindberg

Name:

Title:

OWNER

STATE OF VA

COUNTY OF Charlottesville, to-wit:

The foregoing instrument was acknowledged before me this 23rd day of February, 2022, by Wendy Albiston Lindberg as OWNER

Notary Public

[Signature]

My Commission Expires: 9-30-2022

Notary Registration Number: 292000



By: Stephen P. Lindberg

STEPHEN P. LINDBERG

Name:

Title: OWNER

STATE OF VA

COUNTY OF Chesapeake, to-wit:

The foregoing instrument was acknowledged before me this 23rd day of February, 2022, by Stephen P. Lindberg as Owner

Notary Public

My Commission Expires: 9-30-2022

Notary Registration Number: 292000

SPECIAL LIMITED POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Ronald E. Long, am the owner in fee (the "Owner") of that certain real property located in the County of Lunenburg, Virginia (the "County") identified as Tax Map Nos. 059-0A-0-1, 058-0A-0-66B, and 058-0A-0-66C (the "Property"). On or about January 31, 2022, Owner executed an Option to lease agreement (the "Option Agreement"), with Virginia Electric and Power Company, a Virginia public service corporation ("VEPCO"), whereby Owner granted VEPCO the option to lease the Property upon terms and conditions set forth in the Option Agreement. VEPCO proposes to develop and operate a utility-scale solar facility (the "Solar Facility") on a portion of the Property. VEPCO is required to obtain a conditional use permit ("CUP") from the County Board of Supervisors in order to develop, construct and operate the Solar Facility, and/or related facilities on the Property.

Owner of the Property, having full right and authority to do so, do hereby makes, constitutes, and appoints Robin L. Lucey, Business Development Manager, VEPCO, and M. Ann Neil Cosby, Esq., McGuireWoods, LLP, (collectively, the "Appointees"), either of whom may act, as the true and lawful attorneys in fact for the Owner in connection with the filing and approval of the CUP. The Appointees shall have full power and authority to do and perform as may be necessary to prepare and file zoning application documents (the "Application") and such other supporting information (including but not limited to conditions of development) on behalf of the Owner, to seek and obtain approval of the CUP and to agree to any and all terms and conditions as necessary for the use of the Property as requested in the Application.

IN WITNESS WHEREOF, I have hereunto set my hand this 23 day of February

By:

Ronald E. Long
Name: Ronald E. Long
Title: owner

STATE OF VA

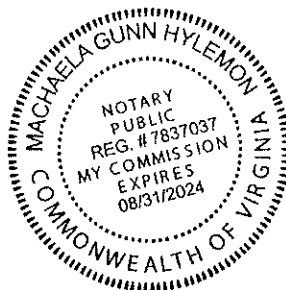
COUNTY OF Lee County, to-wit:

The foregoing instrument was acknowledged before me this 23 day of February, 2022, by Ronald E. Long, as owner

Michaela L. Hylemon
Notary Public

My Commission Expires: 8/31/2024

Notary Registration Number: 7837037



SPECIAL LIMITED POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that we, Robin Gunn Wrenn and Mark Edwin Wrenn, are the owners in fee (the "Owner") of that certain real property located in the County of Lunenburg, Virginia (the "County") identified as Tax Map Nos. 046-06-0-1 and 046-06-0-2 (the "Property"). On or about January 31, 2022, Owner executed an Option to lease agreement (the "Option Agreement"), with Virginia Electric and Power Company, a Virginia public service corporation ("VEPCO"), whereby Owner granted VEPCO the option to lease the Property upon terms and conditions set forth in the Option Agreement. VEPCO proposes to develop and operate a utility-scale solar facility (the "Solar Facility") on a portion of the Property. VEPCO is required to obtain a conditional use permit ("CUP") from the County Board of Supervisors in order to develop, construct and operate the Solar Facility, and/or related facilities on the Property.

Owner of the Property, having full right and authority to do so, do hereby makes, constitutes, and appoints Robin L. Lucey, Business Development Manager, VEPCO, and M. Ann Neil Cosby, Esq., McGuireWoods, LLP, (collectively, the "Appointees"), either of whom may act, as the true and lawful attorneys in fact for the Owner in connection with the filing and approval of the CUP. The Appointees shall have full power and authority to do and perform as may be necessary to prepare and file zoning application documents (the "Application") and such other supporting information (including but not limited to conditions of development) on behalf of the Owner, to seek and obtain approval of the CUP and to agree to any and all terms and conditions as necessary for the use of the Property as requested in the Application.

IN WITNESS WHEREOF, Owner has hereunto signed Special Limited Power of Attorney as of the date(s) set forth below.

By:

Robert Gunn Wrenn
Name:
Title:

STATE OF Virginia

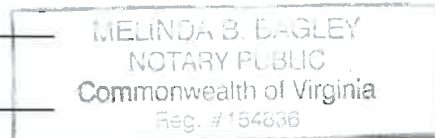
COUNTY OF Lunenburg, to-wit:

The foregoing instrument was acknowledged before me this 28th day of February, 2022, by Robert Gunn Wrenn as

Melinda B. Bagley
Notary Public

My Commission Expires: 09/30/2023

Notary Registration Number: 154836



By:

Mark Edwin Wren

Name:

Title: Owner

STATE OF North Carolina

COUNTY OF Wake, to-wit:

The foregoing instrument was acknowledged before me this 2 day of March, 2022, by Mark Edwin Wren, as owner

Sallie Winter

Notary Public

My Commission Expires: 3/19/2022

Notary Registration Number: 201708300151



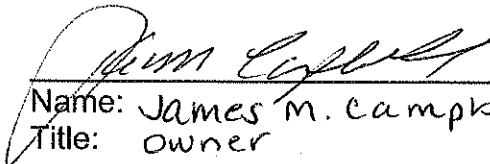
SPECIAL LIMITED POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that we, James M. Campbell and Wanda S. Campbell, are the owners in fee (the "Owner") of that certain real property located in the County of Lunenburg, Virginia (the "County") identified as Tax Map No. 058-0A-0-5A (the "Property"). On or about November 29, 2021, Owner executed an Option to lease agreement (the "Option Agreement"), with Virginia Electric and Power Company, a Virginia public service corporation ("VEPCO"), whereby Owner granted VEPCO the option to lease the Property upon terms and conditions set forth in the Option Agreement. VEPCO proposes to develop and operate a utility-scale solar facility (the "Solar Facility") on a portion of the Property. VEPCO is required to obtain a conditional use permit ("CUP") from the County Board of Supervisors in order to develop, construct and operate the Solar Facility, and/or related facilities on the Property.

Owner of the Property, having full right and authority to do so, do hereby makes, constitutes, and appoints Robin L. Lucey, Business Development Manager, VEPCO, and M. Ann Neil Cosby, Esq., McGuireWoods, LLP, (collectively, the "Appointees"), either of whom may act, as the true and lawful attorneys in fact for the Owner in connection with the filing and approval of the CUP. The Appointees shall have full power and authority to do and perform as may be necessary to prepare and file zoning application documents (the "Application") and such other supporting information (including but not limited to conditions of development) on behalf of the Owner, to seek and obtain approval of the CUP and to agree to any and all terms and conditions as necessary for the use of the Property as requested in the Application.

IN WITNESS WHEREOF, Owner has hereunto signed Special Limited Power of Attorney as of the date(s) set forth below.

By:


Name: James M. Campbell
Title: Owner

STATE OF Virginia

COUNTY OF Lunenburg, to-wit:

The foregoing instrument was acknowledged before me this 18th day of February, 2022, by James M. Campbell, as Property owner



Courtney Brame Bender
Notary Public

My Commission Expires: 8/31/2024

Notary Registration Number: 7067613

By:

Wanda S. Campbell
Name: Wanda S. Campbell
Title: owner

STATE OF Virginia

COUNTY OF Henningburg, to-wit:

The foregoing instrument was acknowledged before me this 18th day of February, 2022, by Wanda S. Campbell, as Property Owner



Courtney Brame Bender
Notary Public

My Commission Expires: 8/31/2024

Notary Registration Number: 7067613

SPECIAL LIMITED POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that I, Teresa L. Dicks, as trustee of the Teresa L. Dicks Revocable Trust, own in fee (the "Owner") that certain real property located in the County of Lunenburg, Virginia (the "County") identified as Parcel ID No(s). 058-0A-0-65; 047-04-0-5; 047-04-0-12; and 047-0A-0-25 (the "Property"). On or about March 30, 2022, the Owner executed an Option agreement (the "Option Agreement") with Virginia Electric and Power Company, a Virginia public service corporation ("VEPCO"), whereby Owner granted VEPCO the option to purchase any of Owner's interest the Property upon the terms and conditions set forth in the Option Agreement. VEPCO proposes to develop and operate a utility-scale solar facility (the "Solar Facility") on a portion of the Property. VEPCO is required to obtain a conditional use permit ("CUP") from the County Board of Supervisors in order to develop, construct and operate the Solar Facility and/or related facilities on the Property.

The Owner of the Property, having full right and authority to do so, hereby makes, constitutes and appoints Robin L. Lucey, Business Development Manager, Virginia Electric and Power Company (d/b/a Dominion Energy Virginia) and D. Brennen Keene, Esq., Esq., McGuireWoods, LLP (collectively, the "Appointees"), either of whom may act, as the true and lawful attorneys-in-fact for the Owner in connection with the filing and approval of the CUP. The Appointees shall have full power and authority to do and perform as may be necessary to prepare and file zoning application documents (the "Application") and such other supporting information (including but not limited to conditions of development) on behalf of the Owner, to seek and obtain approval of the CUP and to agree to any and all terms and conditions as necessary for the use of the Property as requested in the Application.

IN WITNESS WHEREOF, I have hereunto set my hand this 22nd day of April 2022.

By:

Teresa L. Dicks

Name: Teresa L. Dicks

STATE OF Virginia

COUNTY OF Mecklenburg, to-wit:

The foregoing instrument was acknowledged before me this 22nd day of April, 2022, by Teresa L. Dicks, as Trustee.

Katie M. Piercy

Notary Public

My Commission Expires: 07/31/2024

Notary Registration Number: 7892236



TAB E
Project Narrative

PROJECT NARRATIVE¹

A. Applicant & Owner/Operator Information

Virginia Electric and Power Company (d/b/a Dominion Energy Virginia) (“Dominion”) is proposing an 80 MWac utility-scale solar facility known as “Laurel Branch Solar” (the “Project”) in Lunenburg County, Virginia (the “County”). The Project will be located on twenty-five (25) parcels which comprise approximately 2,189 acres in total (the “Property”) of which approximately 791 acres will be disturbed and approximately 165 acres will be used for solar panels.² The Project site is generally identified on the “Laurel Branch Solar Project Conditional Use Permit Site Plan” (the “Preliminary Site Plan”) attached as TAB G. The Project will interconnect to an existing transmission line via a Project substation and a switchyard that Dominion will own and operate in perpetuity. Dominion will own and operate the proposed Project as part of its energy generation system.

B. Dominion’s Renewable Energy Goals

Over the next 15 years, Dominion plans to add about 16,000 MWs of solar generating capacity as part of Virginia’s plan for 100% zero-carbon electricity by 2045 and the company’s goal to achieve net zero emissions from its electric and gas infrastructure by 2050.

In order to meet these ambitious renewable energy and sustainability targets, Dominion is exploring all types of renewable energy opportunities. One such project is the proposed Laurel Branch Solar Facility, which will be up to an 80 MW solar facility in the County.

In addition to supporting a clean and sustainable energy future in Virginia, solar projects like Laurel Branch provide many benefits to the local community. Projects often use Virginia and locally based suppliers and labor, help create clean energy jobs, and increase local tax revenues.

C. Project Description

The Property is located to the southwest of the Town of Kenbridge.³ The Property is currently used for timber and agricultural tracts. The majority of the Property is located between Plank Road and Sneads Store Road as well as along Oral Oaks Road and Laurel Branch Road. Where parcels are not immediately adjacent to the other, overhead electric lines will provide connections between the parcels.

Approximately 750 acres will be within the Project fence line (i.e., the areas utilized as module array locations). Existing vegetation and topography on the site will be utilized for visual screening and to maintain the rural character of the area. Two existing transmission lines run through the Property, joining on the north side of Plank Road near Oral Oaks Road. The Property is zoned A-1 (Agricultural) and all the parcels surrounding the Project site are generally zoned Agricultural. Large-scale solar facilities and major utilities are permitted in the Agricultural district by CUP. The Comprehensive Plan identifies the area for Agricultural uses.

The Project will consist of arrays of solar modules mounted on single-axis tracker or fixed tilt racking that collect sunlight and convert it to electricity. The number of modules will vary based on final design and procurement, but the maximum number of solar panels are approximated at 176,094. Low voltage electrical cables link the modules and collect the electricity before sending it to the inverters

¹ This Project Narrative includes applicable information required in Sections 4 & 5 of the Ordinance for Solar Energy Facilities, adopted September 9, 2021 (the “Solar Ordinance”).

² The disturbed acreage and solar panel acreage may be increased based on agreements with the landowners allowing reduced setbacks. Even if the acreage is increased it shall remain below the maximums established in the Solar Ordinance, Section 6, item 13.

³ Portions of the Property are located within a mile of the Town of Kenbridge.

where the direct current (DC) energy is converted to alternating current (AC) energy. The electricity is then directed to transformers which step up the voltage so the electricity can be delivered to a new utility owned switchyard (the "Switchyard") to be built on the Property. Virginia Electric and Power Company (d/b/a Dominion Energy Virginia) will own and operate the Switchyard as a separate authorized use, in perpetuity.

Multiple points of access to the Project are anticipated. Many of the proposed entrances will use existing farm roads or timber roads. The access locations are detailed in the Traffic Study in TAB H. The general array layout, points of access, and the location of related facilities are shown on the Preliminary Site Plan in TAB G.

In addition, the Project will be developed in accordance with the conditions set forth in the siting agreement.

D. Project Design & Operation

The Project has been carefully sited and designed to ensure compatibility and harmony with the neighboring agricultural, timber, and rural residential land uses. There are other large tracts adjacent to the Property that are also used for timbering activities. To minimize visibility from other properties, the Project site will include substantial setbacks and will be extensively screened by existing timber tracts and planted buffers (a minimum of 50 feet of vegetation will be provided within the setbacks) where necessary. A landscaped strip at least 50 feet wide is required within the setback around the entire perimeter of the Property. Landscaping will be existing or installed vegetation as deemed necessary during CUP approval, and will be comprised of native (non-invasive, pollinator-friendly and wildlife friendly) plant materials at least three (3) feet tall at the time of planting and expected to grow to a minimum height of eight (8) feet within three years (or as otherwise approved by the Board). Vegetative buffers shall be maintained for the life of the facility. The Project will include minimum setbacks of 200 feet from adjacent property lines and the centerline of all adjoining rights-of-way. A minimum setback of 400 feet will be maintained from adjacent residential structures.⁴ Areas between module array segments will be fenced separately allowing the open area between the fences to serve as wildlife corridors that will allow for the movement of migratory animals and other wildlife. These areas are also shown on the Preliminary Site Plan at TAB G.

Once constructed, the Project will be monitored 24/7 via surveillance cameras and electrical system monitoring equipment. The Project will be constructed over an approximate 18-month period with a peak of 150 employees on the site during module installation. It is anticipated that construction will commence in 2024 and the Project will be operational by the end of 2025. Opportunities will be provided for local labor where practicable. Once operational, maintenance crews of 2-3 people will visit the Project site as necessary to mow and perform other maintenance activities. The Project will place little to no burden on the existing transportation infrastructure once constructed. Furthermore, the Project will not require water or sewer, trash collection, or increase the student population of area schools.

Dominion is leasing the various properties that comprise the Project site for an approximate period of 38 years, which includes a Construction Term of up to 2 years, an Operations Term of 35 years,

⁴ Setbacks will not apply to internal property lines that are part of the Project site, including the Switchyard site. Access roads, stormwater management facilities and interconnection facilities are permitted in the setback(s) provided they are generally perpendicular to the property line, where applicable.

and a Restoration Term of up to 1 year. At the end of its useful life, the Project will be decommissioned in accordance with an approved decommissioning plan and all County requirements.⁵

E. Location, appearance and operational requirements.⁶

All signage on the Property will comply with the County Sign Ordinance and all noise will comply with the County Noise Ordinance. Unless approved in writing by the County, no signage shall be permitted on the Property. Signage containing notices, warnings, or other information, if required by law or deemed by the County to be in the interest of the safety and welfare of the community, shall be permitted.

During construction, temporary signage to direct deliveries, identifying the site name, address and contact information for the contractors on a board at the project entrance location(s) will be needed. Safety and security signage in these locations will be posted as well. Post construction, warning and notice signs will be provided on the fence, including environmental signage for environmentally sensitive areas.

During construction of the Project, any temporary construction lighting shall be directed and positioned downward, inward, and shielded to eliminate glare from all adjacent properties. Emergency and/or safety lighting shall be exempt from this construction lighting condition. Any permanent lighting shall be limited to the minimum amount necessary for security purposes. Post construction lighting shall be limited to security and/or safety lighting only. All lighting will be limited to the minimum necessary for security purposes and fixtures will be dark-sky compliant shielded away from adjacent properties and positioned downward to minimize light spillage onto adjacent properties. Emergency and/or safety lighting shall be exempt from this post construction lighting condition.

The maximum height of the lowest edge of photovoltaic panels will be ten (10) feet as measured from the finished grade and will not exceed a height of fifteen (15) feet as measured from the highest natural grade below each solar panel (provided that the height limitation will not apply to utility poles and/or the interconnection to the overhead electric utility grid); however, as VEPCO is required to negotiate a siting agreement with the County Board of Supervisors, that agreement may permit deviations from underlying zoning requirements if approved following a public hearing.⁷

Groundcover on the site will consist of pollinator plants where practicable, and grasses, forbs, and wildflowers native to the County. No invasive plants listed by DCR will be used. All groundcover will be maintained as set forth in the Landscaping Plan, which is included in the Preliminary Site Plan, TAB G. A performance bond will be posted to ensure maintenance. If pesticides and fertilizers are applied to the Property, the operator will notify the County prior to application. The Project areas will be enclosed by security fencing not less than six (6) feet in height and equipped with barbed wire on top of the fence. Fencing will be installed on the interior of the vegetative buffer and provided in sections to provide access corridors for wildlife.

The County's emergency services providers will be provided materials, education, and/or training on how to safely respond to any on-site emergencies and a key or code to access the property in case of an on-site emergency. Dominion intends to grant the easements needed for inspections and other requirements to the County, as required by Section 5(A)(7) of the County's Solar Ordinance.

The Project is not located within any designated growth area. Portions of parcels 047-04-0-6, 047-04-0-B1, 047-04-0-B1B, 047-0A-0-25, and 047-04-0-5 are within a mile from the Town of Kenbridge;

⁵ The Switchyard will not be decommissioned but will remain part of Dominion's electrical system.

⁶ This section addresses the requirements in Section 5 of the Solar Ordinance.

⁷ See VA. Code § 15.2-2316.9.

however, as VEPCO is required to negotiate a siting agreement with the County Board of Supervisors, that agreement may permit deviations from underlying zoning requirements if approved following a public hearing.⁸

To Dominion's knowledge, the Project is not closer than one (1) mile from any existing medium- or large-scale solar facilities. Two existing transmission lines run through the Property, joining on the north side of Plank Road near Oral Oaks Road. Based on current documentation and understanding of the area, approval of the Project will not result in more than 5% of the land in a five-mile radius of any existing large scale solar energy facility being used for large-scale solar energy projects. As shown on the Preliminary Site Plan (TAB G), the location and design of the Project will minimize impacts on public viewsheds. Only panels with anti-glare technology, anti-reflective coatings, and other available mitigation techniques, all that meet or exceed industry standards will be used to reduce glint and glare (as will be documented). The majority of the Property will not be located on prime farmland as most of the Property is established and managed silviculture.

Prior to operation, VEPCO will provide a final decommissioning and reclamation plan to the County per the Solar Ordinance, and, if necessary, will provide a security in the amount of the estimated cost of the decommissioning unless an alternative security is provided (including the acceptance of VEPCO's investment-grade credit rating).

Dominion intends the facility to meet or exceed the standards and regulations of the Federal Aviation Administration ("FAA"). The Project is currently within 5 miles of the Lunenburg County airport and utilization of the FAA notice criteria tool indicates that the Project will need to file with the FAA. Dominion intends to file with the FAA prior to construction of the Project.

⁸ See VA. Code § 15.2-2316.9.

TAB F

Environmental Inventory and
Impact Statement

Environmental Inventory and Impact Statement

Laurel Branch Solar Project

May 20, 2022

Prepared for

Lunenburg County, Virginia

Prepared by



4101 Cox Road, Suite 120
Glen Allen, VA 23060

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Acronyms and Abbreviations

3D	three-dimensional
BMP	best management practices
CUP	Conditional Use Permit
GIS	geographic information system
GPS	global positioning system
KOP	key observation point
MW	megawatts
Project Area	The approximately 2,189 acres of privately-owned land where the proposed Project is located
Project	Laurel Branch Solar Project
VADEQ	Virginia Department of Environmental Quality

1.0 INTRODUCTION AND PROJECT DESCRIPTION

Dominion Energy Virginia (Dominion) is proposing to develop a commercial solar energy project, Laurel Branch Solar Project (Project), on private land encompassing approximately 2,189 acres. The Project study area includes the parcels that were actively under consideration by Dominion. The Project is located in Lunenburg County, Virginia, as shown on the Orthoimagery and Topographic Project Location Maps (Figure 1 and Figure 2).

1.1 Project Description

The scope of the Project will consist of all work to construct, commission, energize, train operation staff, and decommission of the solar power plant and associated infrastructure, including but not limited to the following:

- Approximately 176,094 Bifacial Monocrystalline modules;
- Approximately 96 inverter units;
- Approximately 2,025 trackers;
- Current facility capacity is 80 megawatts alternating current; and
- Internal infrastructure including permanent gravel access roads and security fencing.

A desktop environmental inventory was conducted to identify environmental, wildlife, and cultural resources within and within applicable buffers off of the Project survey area. These resources include wetlands, surface water, floodplains, air quality, federal and state listed threatened and endangered species, and architectural and archaeological resources. Additionally, a preliminary assessment was conducted to evaluate the impact of the Project on environmental, wildlife, and cultural resources within a 2.5-mile radius of the Project survey area. This impact assessment was based on preliminary site plans and anticipated avoidance and minimization measures that may be implemented.

2.0 ENVIRONMENTAL IMPACTS NARRATIVE

2.1 Existing Conditions

A desktop wetland determination memo was prepared in February 2022 to summarize the findings of publicly available desktop resources within the Project study area. The desktop wetland determination identified 145 potential streams totaling approximately 127,823 linear feet and 41 potential wetlands, and 21 potential freshwater ponds totaling approximately 105 acres. Based on desktop research, the floodplain data for the Project were obtained from Federal Emergency Management Agency Flood Insurance Rate Map Number 51111C0175B, effective July 20, 2009 (FEMA 2021). According to these data, the majority of the site is located within Zone X, area of minimal flood hazard. Bears Element Creek on the western Project study area, Crooked Creek in the central Project study area, and Flat Rock Creek on the eastern Project study area boundaries are mapped as Zone A, with a one percent annual chance flood hazard.

The Project is located within Lunenburg County, which is not one of Virginia's 29 coastal counties deemed "Tidewater Virginia". Therefore, the Project is not subject to the Chesapeake Bay Preservation Act Resource Protection Area or Resource Management Area regulatory buffers, as outline in 9 Virginia Administrative Code 25-830-80. Additional information, including references, on wetlands, surface waters, and groundwater can be found in Attachment A: Wetland Determination Memo. Wetlands, waterbodies, and floodplains have not been inventoried outside of the Project survey area; however, off-site impacts to these potential features will be addressed under the direct and indirect impacts section.

Primary air quality standards protect the public health, including the health of "sensitive populations, such as people with asthma, children, and older adults." Secondary air quality standards protect public welfare by promoting ecosystems health and preventing decreased visibility and damage to crops and buildings. The EPA has set national ambient air quality standards (NAAQS) for the following six criteria pollutants: ozone (O₃), particulate matter (PM_{2.5}, PM₁₀), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), and lead (Pb). The AirNow Interactive Map of Air Quality (AirNow 2022) was used to identify nearby monitoring locations and determine the current estimated air quality index (AQI). According to the AirNow map, the nearest Ozone monitoring location to the Project survey area is the Prince Edward County EPA Office of Atmospheric Programs. This air quality monitoring station identified that the ozone daily AQI level was considered in good standing (29) at the issuance of this report. There were no results for the five other criteria pollutants.

2.2 Direct and Indirect Impacts

The desktop wetland determination identified 145 potential streams, and 62 potential wetlands and/or waterbodies within the Project study area (Figure 3). The Project is currently designed to avoid and minimize impacts to wetlands and streams as they are currently desktop mapped within the Project Area to the extent practicable. These features have not yet been confirmed by the USACE or VDEQ and are subject to change. Pending any changes to mapped features, impacts to jurisdictional features will be permitted through the proper regulatory agency. Wetlands, waterbodies, and floodplains have not been inventoried outside of the Project survey area; however, there are no anticipated direct impacts to any features outside of the Project survey area. Through the use of stormwater and erosion and sediment control best management practices (BMPs) during construction, as well as routine stormwater inspections, no indirect impacts to adjacent water resources are anticipated from the Project. These BMPs, in tandem with temporary and permanent soil stabilization, will minimize erosion and sedimentation to protect water quality of these aquatic resources. The Project will abide by all erosion and sediment control regulations as outlined by the Virginia Erosion and Sediment Control Program.

The Project may result in a minor centralized increase of air emissions during construction; however, construction air emissions would be temporary. To reduce temporary impacts to air quality, the construction contractors may water down construction areas to control dust when necessary. Emissions from fuel-burning internal combustion engines (e.g. heavy equipment and earthmoving machinery) could temporarily increase the levels of some of the criteria pollutants, including CO, NO₂, O₃, PM₁₀, and non-criteria pollutants such as volatile organic compounds. To reduce the emission of

criteria pollutants, fuel-burning equipment running times should be kept to a minimum and engines should be properly maintained. Additional best management practices for construction include using low or ultra-low sulfur fuel (including biodiesel) and using electric-powered tools (instead of gas-powered tools) wherever feasible. The operations and maintenance of the Project are not anticipated to have any long-term effects on air quality or increased air emissions.

3.0 WILDLIFE IMPACTS NARRATIVE

3.1 Existing Conditions

A desktop threatened and endangered species determination memo was prepared in May 2022 to summarize the findings of publicly available desktop resources within the Project study area.

According to the threatened and endangered species determination memo, the United States Fish and Wildlife Service (USFWS) Information Planning and Consultation (IPaC) System indicated that the northern long-eared bat (*Myotis septentrionalis*), which is listed as both federally threatened and state threatened, is expected to occur within the Project study area.

The bald eagle (*Haliaeetus leucocephalus*) is protected under the Bald and Golden Eagle Protection Act. According to the Center for Conservation Biology (CCB) Bald Eagle Nest Locator, the closest known bald eagle nest is approximately 15 miles to the southeast of the proposed Project study area. A field assessment is recommended to confirm the presence and/or absence of bald eagle nests on the Project study area. If bald eagle nests are identified during the recommended field assessments and work is anticipated to be conducted during the breeding season (October 1 through May 15), a 660-foot buffer is recommended around active nests. The buffer may be reduced to 330 feet for special circumstances.

The USFWS Bald Eagle Conservation Area (BECA) Map did not indicate a bald eagle concentration area within the Project study area. The closest bald eagle concentration is approximately 58 miles southwest of the Project study area.

No federally listed critical habitat was documented on the USFWS Critical Habitat for Threatened and Endangered Species Mapper as occurring within or in the vicinity of the proposed Project study area. The Project study area is approximately 8 miles south of the closest critical habitat for Yellow lance (*Elliptio lanceolata*).

The Virginia Department of Wildlife Resources (VDWR) northern long-eared bat (NLEB) mapping application shows that there are no known NLEB winter hibernacula or roost trees in the vicinity of the Project. The nearest winter hibernacula and roosting habitat is located approximately 99 miles northwest of the Project study area.

The VDWR mapping system of the little brown bat (*Myotis lucifugus*) and tri-colored bat (*Perimyotis subflavus*) shows that the nearest winter hibernacula and roosting habitat are located approximately 80 miles northwest of the Project study area.

The VDWR Virginia Fish and Wildlife Information Service (VaFWIS) indicates no state threatened or endangered species with confirmed occurrences within the Project study area and a 2-mile radius

from the Project study area boundary. Please note that the Virginia Department of Game and Inland Fisheries has recently changed its name to the VDWR, but the VaFWIS database search results still show the outdated department name.

The Virginia Department of Conservation and Resources Natural Heritage Data Explorer identified two state threatened species, loggerhead shrike (*Lanius ludovicianus*) and Atlantic pigtoe (*Fusconaia masoni*), as possibly occurring within the Project study area watersheds, Meherrin River-Mason Creek (12-digit Hydrologic Unit Code [HUC] 030102040301), Meherrin River – Crooked Creek (HUC 030102040302), and Flat Rock Creek (HUC 030102040303).

Additional information, including references, on biological resources is included in Attachment B: Threatened and Endangered Species Determination Memo.

3.2 Direct and Indirect Impacts

The Desktop Threatened and Endangered Species Determination identified several federal and state listed species that have the potential to occur within the vicinity of the Project study area. Upon a review of the information gathered from publicly available resources, the following actions or avoidance measures are recommended for the Project to ensure potential impacts to listed wildlife species that have potential to occur are avoided:

- Based on the results of the environmental field assessment, potential impacts to threatened and endangered species and their habitats can be reduced by avoiding and minimizing Project impacts to wetlands, forested areas, streams, and riparian corridors; and
- Informal consultation with state and federal agencies is recommended after the completion of the environmental field assessments to better determine the need for species-specific onsite surveys and the need for avoidance or mitigation measures.

4.0 CULTURAL IMPACTS NARRATIVE

4.1 Existing Conditions

A cultural resources desktop review memo was prepared in May 2022 to summarize the findings of publicly available desktop resources within the Project study area. This assessment reviewed the Project survey area and a 0.5-mile radius around the Project survey area.

According to the cultural resources memo, a review of Virginia Department of Historic Resources (VDHR) Virginia Cultural Resources Information System (VCRIS) records identified 13 previously recorded architectural resources within a 0.5-mile radius of the Project study area. Among the resources are 10 dwellings, a wagon shed, a church/chapel, and a school. The resources range in date from the late-eighteenth century to the mid-twentieth century. VDHR #055-0003, Flat Rock, a circa 1780 farmhouse, is additionally listed in the National Register of Historic Places (NRHP; reference number 79003051) and the Virginia Landmarks Register. VDHR #055-5132 (Good Hope Christadelphian Chapel) has been determined to be eligible for inclusion in the NRHP.

Two resources are located partially within the Project study area. These resources include: VDHR #055-5132 (Good Hope Christadelphian Chapel) and VDHR #055-5138 (Samuel A. Wallace, Jr. House). As mentioned above, VDHR #055-5132 (Good Hope Christadelphian Chapel) has been determined to be eligible for inclusion in the NRHP and VDHR #055-5138 has been determined to not be eligible for inclusion in the NRHP.

The Project study area excludes the majority of VDHR #055-5132 and VDHR #055-5138. Likewise, VDHR #055-0117 is located within a parcel which is excluded from the Project study area.

Additional information on cultural resources can be found in Attachment C: Cultural Resources Desktop Review Memo.

In accordance with the Lunenburg County solar ordinance, a supplemental desktop review was conducted for resources in a 2-mile radius from the previously assessed area in the May 2022 cultural resources desktop review memo to assess a total 2.5-mile radius around the Project survey area. The supplemental desktop review of the VDHR VCRIS for resources identified an additional 23 architectural resources and one historic district, Broad Branch Creek Rural Historic District (VCRIS, 2022). Archaeological resources were not assessed during the supplemental desktop review.

4.2 Direct and Indirect Impacts

Preparation of a Phase IA cultural resources assessment (Phase IA), including a research design to guide a subsequent Phase I identification survey, is recommended for the Project study area. The Phase IA should include further consideration of site soils, historic maps, and existing field conditions and result in the development of a stratified testing strategy for identifying archaeological resources within the project area. The completed Phase IA should be submitted to the Virginia Department of Environmental Quality and VDHR for review and comment prior to initiation of Phase I identification survey of the site in accordance with the recommended testing strategy. There are no anticipated direct impacts to cultural resources outside of the 0.5-mile radius of the Project survey area, including the architectural resources and mapped historic district. Archaeological resources outside of the 0.5-mile radius of the Project survey area were not evaluated as there are no anticipated ground disturbing activities that would directly or indirectly impact these resources.

5.0 PROJECT DEVELOPMENT

5.1 Erosion and Stormwater

The Project will be developed predominately on agricultural and forested lands and will require the detention and release of stormwater. The Project will meet construction and post construction stormwater quantity requirements in accordance with Chapter 840 (9VAC25-840-40.19) and 870 (9VAC25-870.66) of the Virginia Administrative Code. Where applicable all post construction stormwater technical criteria will be implemented across the Project. The following conditions will be reviewed and analyzed when applicable, Channel protection for concentrated flows shall be met via the application of the Energy Balance Method. Flood protection for concentrated flows shall be met by reducing the 10-year 24-hour runoff totals. Sheet flow requirements will be met via no additional

increases in sheet flow volumes and may at times require the installation of energy dissipaters. Additionally, permissible stormwater runoff velocities will be analyzed at the point of discharge and when applicable within the immediate receiving channel.

The Solar Ordinance Section 5.D.4.e states: “Access, erosion & stormwater structures, and interconnection to the electrical grid may be made through setback areas provided that such are generally perpendicular to the property line.” Virginia regulations emphasizes the placement of temporary and permanent erosion & stormwater facilities adjacent to a natural stormwater conveyance system to further decrease a potential impact to the environment and downstream properties. When performing work within the setback area, this Project intends to meet Virginia water quantity regulations by returning runoff to a sheet flow condition (9VAC25-870-66.D). The need to place stormwater facilities within the setback area is to effectively convey the stormwater runoff to an adequate natural stormwater conveyance system and its placement will be based on natural topography. Natural topography can be parallel or perpendicular to setbacks and property lines. These facilities will be designed to further assure that sheet flow conditions and non-erosive velocities are maintained when stormwater runoff leaves the Project area. Meaning that the stormwater runoff can be discharged into a main channel of a natural stream/waterbody or within the flood-prone area (e.g. wetland edge) adjacent to the main channel.

When discharging stormwater runoff directly into a natural stormwater conveyance system an outfall will be constructed to allow for the runoff to be released perpendicular to the contours and will flow through an energy dissipater (e.g. level spreader, flow diffuser). It should be noted that an energy dissipator is a device that is used to convert concentrated stormwater runoff into sheet flow so that it is released in such a manor to decrease the likelihood of downstream impacts to the environment and neighboring properties. The design of an energy dissipator is to maintain sheet flow prior to entering an existing natural stormwater conveyance channel. This existing channel may be within the setback and be perpendicular or parallel to the setback based on natural topographic contours.

Additionally, minimal clearing and grading will be performed within the setback areas to allow for the adequate construction and installation of erosion & stormwater facilities. Any area disturbed outside of the footprint of an erosion & stormwater facility will be restored to a natural vegetative state.

During the site planning process, a comprehensive and detailed engineered erosion & stormwater plan will be submitted for review and consideration by the County and VADEQ.

5.2 Visual Impacts

This Project will utilize materials that will have the least negative impact on the surrounding environment. Solar panels with anti-glare, or anti-reflective coatings shall be installed when other mitigation techniques such as vegetative screens are not applicable. Technology that meet or exceed industry standards will be utilized to reduce the potential glint and glare that may be produced from a solar energy project.

Additionally, a visual impact assessment has been conducted to determine visual impacts from potentially sensitive visual resources within the surrounding community. It was determined that visual impacts would vary depending on several factors, such as the distance of the viewer from the

Project, whether the viewer is stationary or in motion, and whether views toward the Project are unobstructed or screened by vegetation, topography, or existing structures. Project views can be very different from one location to another, including in proximity, because of the rolling terrain and dense vegetation. In all cases, the Project would be located 200 feet or more from public roadways, limiting viewing opportunities.

Additional information on visual impacts can be found in Attachment D: Visual Impact Assessment.

6.0 REFERENCES

AirNow. 2022. AirNow Interactive Map of Air Quality. Available online at:

[https://gispub.epa.gov/airnow/?xmin=-](https://gispub.epa.gov/airnow/?xmin=-8772280.263742598&ymin=4344250.063163923&xmax=-8623564.381510958&ymax=4438305.776892184&clayer=ozonepm&mlayer=none)

[8772280.263742598&ymin=4344250.063163923&xmax=-](https://gispub.epa.gov/airnow/?xmin=-8772280.263742598&ymin=4344250.063163923&xmax=-8623564.381510958&ymax=4438305.776892184&clayer=ozonepm&mlayer=none)

[8623564.381510958&ymax=4438305.776892184&clayer=ozonepm&mlayer=none](https://gispub.epa.gov/airnow/?xmin=-8772280.263742598&ymin=4344250.063163923&xmax=-8623564.381510958&ymax=4438305.776892184&clayer=ozonepm&mlayer=none)

VCRIS (Virginia Cultural Resources Information System) 2022. VCRIS Mapping Tool. Available online at:

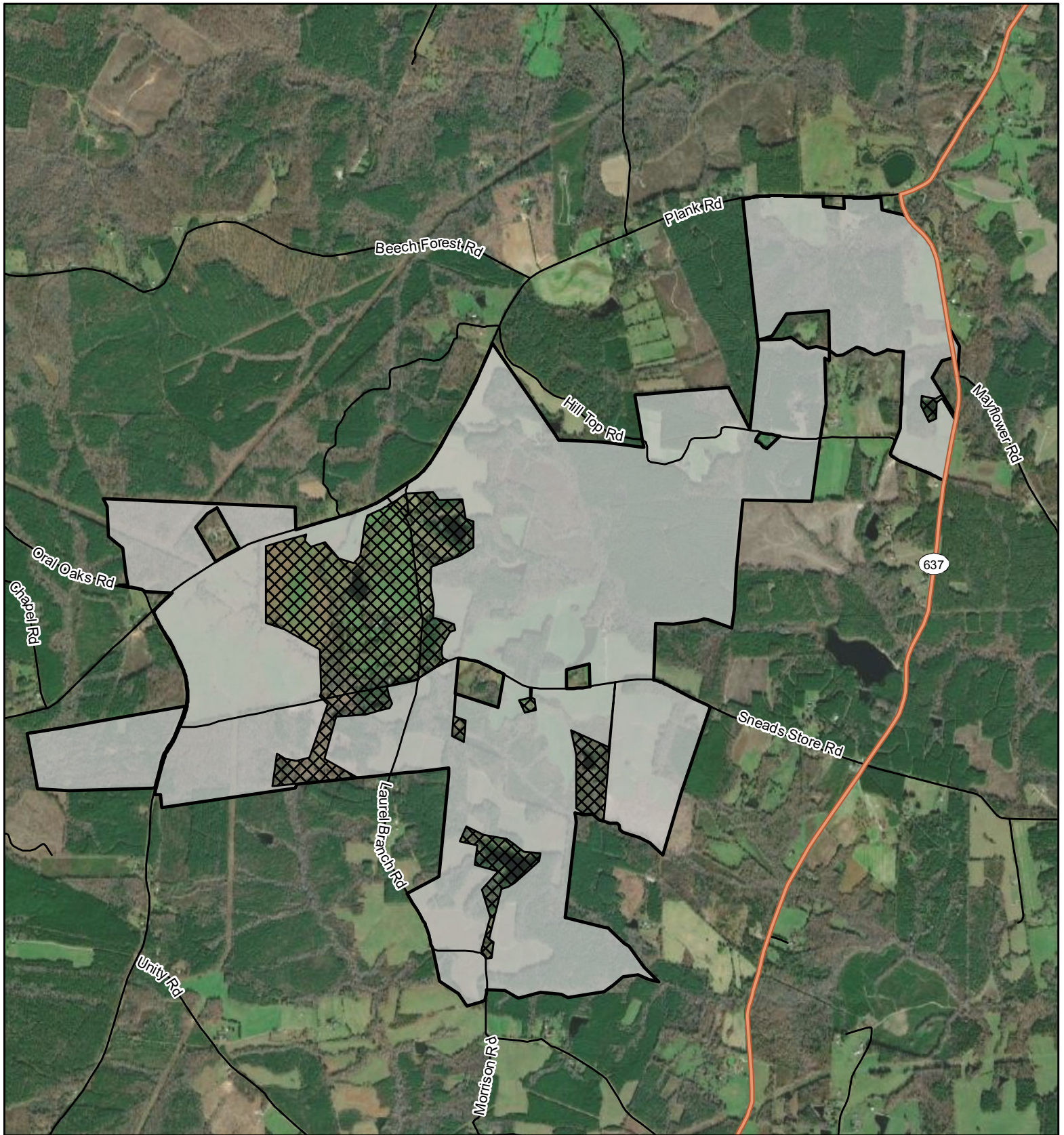
<https://www.dhr.virginia.gov/v/cris/>

FIGURES

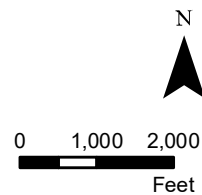
Figure 1: Orthoimagery Project Location Map

Figure 2: Topographic Project Location Map

Figure 3: Wetlands and Other Waters Map



- Project Study Area
- Anticipated Parcel Carve Out

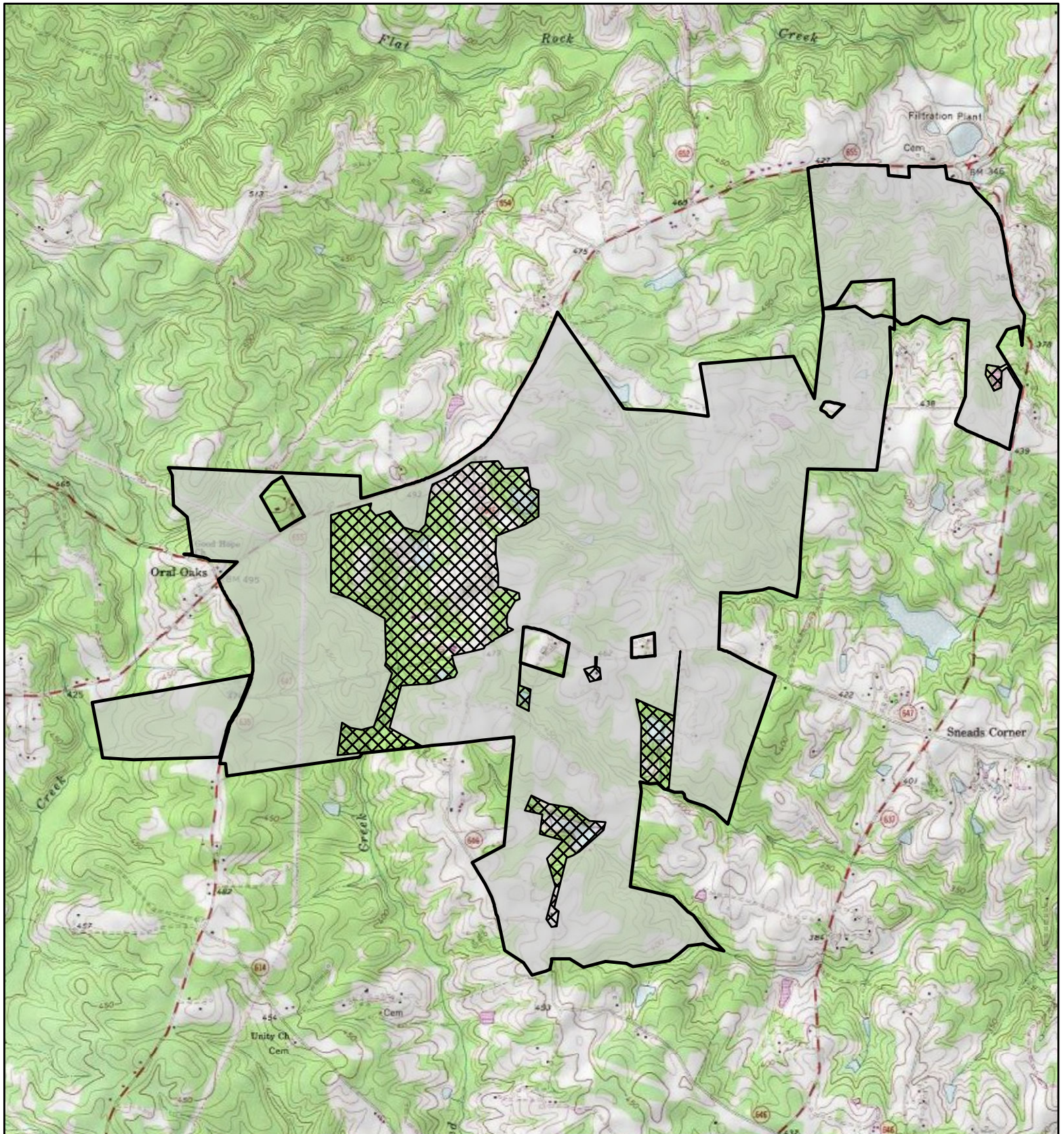


Source: ESRI/Vivid Imagery (2020)



Figure 1 Orthoimagery Project Location Map

Laurel Branch Solar Project
Lunenburg County, Virginia



- Project Study Area
- Anticipated Parcel Carve Out



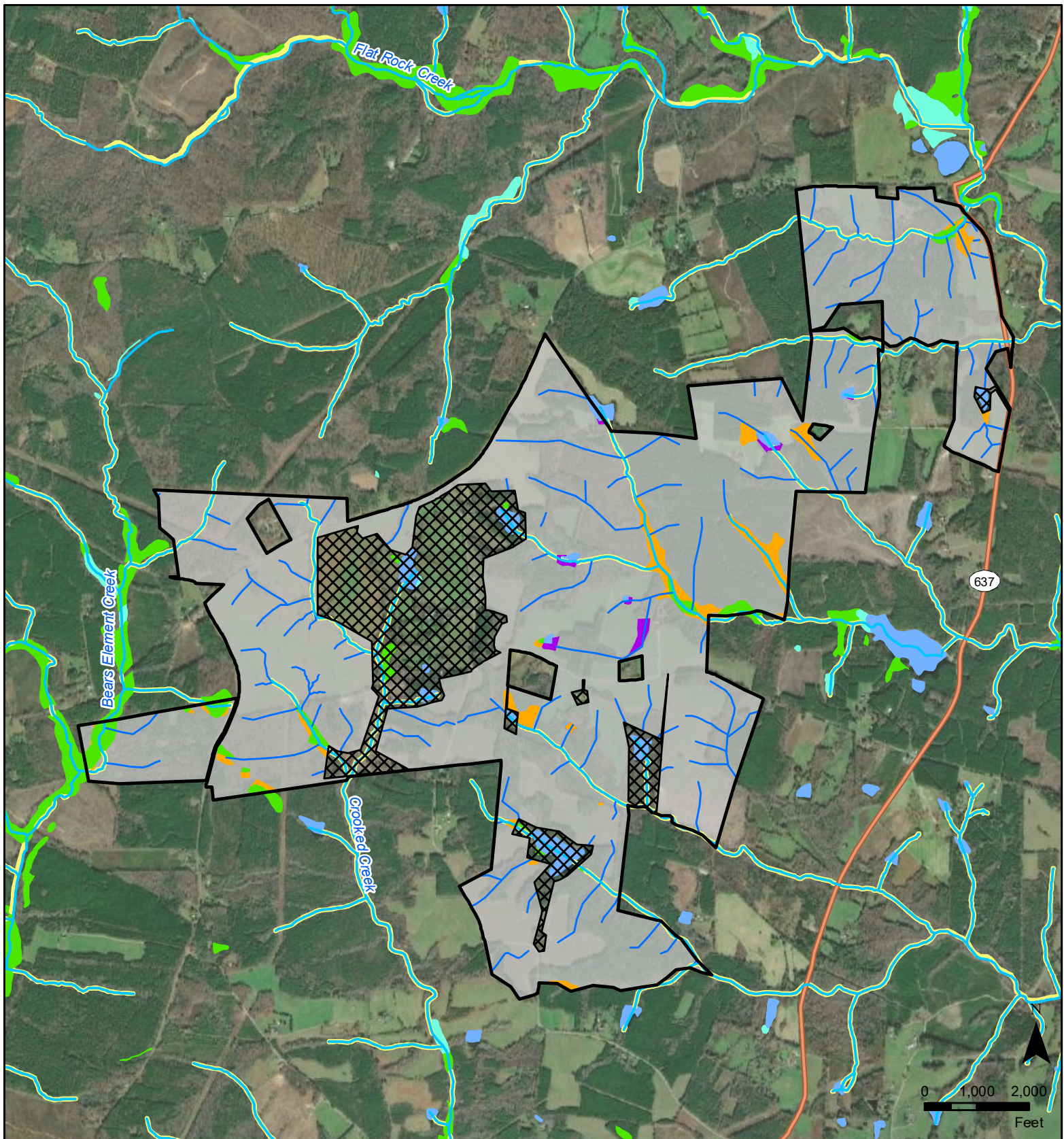
0 1,000 2,000
Feet

Source: USGS (2020)



Figure 2
Topographic
Project Location Map

Laurel Branch Solar Project
Lunenburg County, Virginia



	Project Study Area		NHD Stream (34,248 feet)
	Anticipated Parcel Carve Out		NWI Wetland (55 acres)
	TT Mapped Streams (93,576 feet)		Freshwater Emergent Wetland
	TT Mapped Wetlands (44.7 acres)		Freshwater Forested/Shrub Wetland
	TT Mapped Waterbodies (5.7 acres)		Freshwater Pond
			Riverine

Source: NHD (2020), NWI (2020)



Figure 3
Wetlands and
Other Waters Map

Laurel Branch Solar Project
Lunenburg County, Virginia

ATTACHMENT A: WETLAND DETERMINATION MEMO

Desktop Wetland Determination Report

Laurel Branch Solar Project

May 20, 2022

Prepared for



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Prepared by



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Figure 4: Flood Hazard Map

Figure 5: NRCS Soils Map

Acronyms and Abbreviations

3D	three-dimensional
CUP	Conditional Use Permit
GIS	geographic information system
GPS	global positioning system
KOP	key observation point
MW	megawatts
Project Area	The 2,189± acres of privately-owned land where the proposed Project is located
Project	Laurel Branch Solar Project

1.0 INTRODUCTION AND PROJECT DESCRIPTION

Dominion Energy Virginia (Dominion) is proposing to develop a commercial solar energy project, Laurel Branch Solar Project (Project), on private land encompassing approximately 2,189± acres (based on the current project boundary). The Project study area includes the parcels that were actively under consideration by Dominion. The Project is in Lunenburg County, Virginia (VA), as shown on the Orthoimagery and Topographic Project Location Maps (Figure 1 and Figure 2).

Tetra Tech, on behalf of Dominion, prepared this Desktop Wetland Determination Memo summarizing the findings of publicly available desktop resources for the Project study area (Figures 3 through 5) for the presence of potential wetland and surface water feature constraints. Tetra Tech made preliminary wetland determinations utilizing methods detailed in the United States Army Corps of Engineers' (USACE) *Wetland Delineation Manual (1987 Manual)*; Environmental Laboratory 1987).

2.0 METHODOLOGY

The primary objective of the desktop wetland determination and delineation is to identify the potential wetlands and surface waters on or adjacent to the Project study area. Information from Google Earth Pro®, United States Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2019), United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI; USFWS 2021), United States Geological Survey (USGS) National Hydrography Dataset (NHD; USGS 2021), and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs; FEMA 2021) was consulted to create Figure 3 (Wetlands and Other Waters Map), Figure 4 (Flood Hazard Map), and Figure 5 (NRCS Soils Map). These maps were reviewed by a Tetra Tech Natural Resource Specialist who identified and classified wetlands and other surface waters within the Project study area. The Tetra Tech-identified wetlands and surface waters are summarized in Table 1 and depicted on Figure 3.

3.0 FINDINGS AND RECOMMENDATIONS

The desktop wetland determination identified two large wetland-stream systems and several smaller systems, which appear to be associated with the Bears Element Creek, Crooked Creek, and Flat Rock Creek. The NWI and NHD mapping applications identified 15 potential streams within the Project study area totaling approximately 34,248 linear feet. The NWI and NHD mapping applications identified 11 potential freshwater ponds and 15 potential wetlands totaling approximately 55 acres within the Project study area. Of the approximate 55 acres of NWI mapped wetlands, 1 wetland was classified as palustrine emergent (PEM), 13 wetlands were classified as palustrine forested (PFO), and 1 wetland was classified as palustrine scrub-shrub (PSS) (USFWS 2021). In addition to the NWI and NHD mapped features, Tetra Tech identified an additional 130 potential streams totaling approximately 96,576 linear feet, 26 potential wetlands totaling approximately 44.7 acres, and 10 potential freshwater ponds totaling approximately 5.7 acres using the USGS topographic map, Google

Earth Pro orthoimagery, and NRCS Soils database. These desktops identified features can all be found on Figure 3.

3.1 Findings

The Desktop Aquatic Resources Table (Table 1) summarizes the stream and wetland information for all features identified during the desktop wetland determination. The desktop wetland determination identified 145 potential streams totaling approximately 127,824 linear feet and 41 potential wetlands and 21 potential freshwater ponds totaling approximately 105 acres (Figure 3).

Based on desktop research, the floodplain data for the Project were obtained from FEMA FIRM Numbers 51111C0175B, effective July 20, 2009 (FEMA 2021). According to these data, the majority of the site is located within Zone X, area of minimal flood hazard. Bears Element Creek on the western Project study area, Crooked Creek in the central Project study area, and Flat Rock Creek on the eastern Project study area boundaries are mapped as Zone A, with a 1 percent annual chance flood hazard (Figure 4).

The Project is located within Lunenburg County, which is not one of Virginia's 29 coastal counties deemed "Tidewater Virginia." Therefore, the Project is not subject to the Chesapeake Bay Preservation Act (CBPA) Resource Protection Area or Resource Management Area regulatory buffers, as outlined in 9 Virginia Administrative Code 25-830-80.

3.2 Recommendations

The desktop wetland determination identified 145 potential streams, and 62 potential wetlands and/or waterbodies within the Project study area. Figure 3 illustrates the wetland and stream locations in relation to the Project study area and the Project boundary. Upon a review of the information gathered from the cursory desktop surveys of the proposed Project study area, Tetra Tech recommends the following actions to expedite permit timelines:

- Conduct a formal wetland and stream delineation for the proposed Project utilizing methods detailed in the USACE's *1987 Manual* (Environmental Laboratory 1987); and
- Submit an request for a jurisdictional determination with the USACE based on the results of the formal delineation.

This Desktop Wetland Determination Memo represents our best professional judgment and is based on publicly available desktop resources for the Project study area. All designations, classifications, and boundaries should be considered preliminary and should not be considered to be final. Using boundaries of features provided in this memo (and associated shapefiles) should only be utilized for preliminary Project design and may be changed upon the completion of formal delineations.

4.0 REFERENCES

- FEMA (Federal Emergency Management Agency). 2021. National Flood Hazard Layer. U.S. Department of Homeland Security, FEMA, Generated January 3, 2022. Available at: <https://www.fema.gov/flood-maps/national-flood-hazard-layer>
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TABLES

Table 1: Desktop Aquatic Resources Table

Location ID	Area Description
Stream 1	Bears Element Creek, perennial stream (R5UBH)
Stream 2	Crooked Creek, perennial stream (R5UBH)
Stream 3	Unnamed tributary to Crooked Creek, appears to be intermittent stream (R4SBC)
Stream 4	Unnamed tributary to Crooked Creek, appears to be intermittent stream (R4SBC)
Stream 5	Unnamed tributary to Flat Rock Creek, appears to be perennial stream (R5UBH)
Stream 6	Unnamed tributary to Flat Rock Creek, appears to be perennial stream (R5UBH)
Stream 7	Unnamed tributary to Flat Rock Creek, appears to be perennial stream (R5UBH)
Stream 8	Unnamed tributary to Flat Rock Creek, appears to be perennial stream (R5UBH)
Stream 9	Unnamed tributary to Flat Rock Creek, appears to be perennial stream (R5UBH)
Stream 10	Unnamed tributary to Flat Rock Creek, appears to be intermittent stream (R4SBC)
Stream 11	Unnamed tributary to Flat Rock Creek, appears to be intermittent stream (R4SBC)
Stream 12	Unnamed tributary to Flat Rock Creek, appears to be intermittent stream (R4SBC)
Stream 13	Unnamed tributary to Flat Rock Creek, appears to be intermittent stream (R4SBC)
Stream 14	Unnamed tributary to Flat Rock Creek, appears to be intermittent stream (R4SBC)
Stream 15	Unnamed tributary to Flat Rock Creek, appears to be intermittent stream (R4SBC)
Stream 16	Tetra Tech mapped stream.
Stream 17	Tetra Tech mapped stream.
Stream 18	Tetra Tech mapped stream.
Stream 19	Tetra Tech mapped stream.
Stream 20	Tetra Tech mapped stream.
Stream 21	Tetra Tech mapped stream.
Stream 22	Tetra Tech mapped stream.
Stream 23	Tetra Tech mapped stream.
Stream 24	Tetra Tech mapped stream.
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Stream 27	Tetra Tech mapped stream.
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Stream 31	Tetra Tech mapped stream.
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Stream 33	Tetra Tech mapped stream.
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Stream 40	Tetra Tech mapped stream.
Stream 41	Tetra Tech mapped stream.
Stream 42	Tetra Tech mapped stream.
Stream 43	Tetra Tech mapped stream.
Stream 44	Tetra Tech mapped stream.

Location ID	Area Description
Stream 45	Tetra Tech mapped stream.
Stream 46	Tetra Tech mapped stream.
Stream 47	Tetra Tech mapped stream.
Stream 48	Tetra Tech mapped stream.
Stream 49	Tetra Tech mapped stream.
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Stream 86	Tetra Tech mapped stream.
Stream 87	Tetra Tech mapped stream.
Stream 88	Tetra Tech mapped stream.
Stream 89	Tetra Tech mapped stream.
Stream 90	Tetra Tech mapped stream.
Stream 91	Tetra Tech mapped stream.
Stream 92	Tetra Tech mapped stream.
Stream 93	Tetra Tech mapped stream.
Stream 94	Tetra Tech mapped stream.
Stream 95	Tetra Tech mapped stream.
Stream 96	Tetra Tech mapped stream.

Location ID	Area Description
Stream 98	Tetra Tech mapped stream.
Stream 99	Tetra Tech mapped stream.
Stream 100	Tetra Tech mapped stream.
Stream 101	Tetra Tech mapped stream.
Stream 102	Tetra Tech mapped stream.
Stream 103	Tetra Tech mapped stream.
Stream 104	Tetra Tech mapped stream.
Stream 105	Tetra Tech mapped stream.
Stream 106	Tetra Tech mapped stream.
Stream 107	Tetra Tech mapped stream.
Stream 108	Tetra Tech mapped stream.
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Stream 110	Tetra Tech mapped stream.
Stream 111	Tetra Tech mapped stream.
Stream 112	Tetra Tech mapped stream.
Stream 113	Tetra Tech mapped stream.
Stream 114	Tetra Tech mapped stream.
Stream 115	Tetra Tech mapped stream.
Stream 116	Tetra Tech mapped stream.
Stream 117	Tetra Tech mapped stream.
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Stream 120	Tetra Tech mapped stream.
Stream 121	Tetra Tech mapped stream.
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Stream 123	Tetra Tech mapped stream.
Stream 124	Tetra Tech mapped stream.
Stream 125	Tetra Tech mapped stream.
Stream 130	Tetra Tech mapped stream.
Stream 132	Tetra Tech mapped stream.
Stream 133	Tetra Tech mapped stream.
Stream 134	Tetra Tech mapped stream.
Stream 135	Tetra Tech mapped stream.
Stream 136	Tetra Tech mapped stream.
Stream 137	Tetra Tech mapped stream.
Stream 138	Tetra Tech mapped stream.
Stream 139	Tetra Tech mapped stream.
Stream 140	Tetra Tech mapped stream.
Stream 141	Tetra Tech mapped stream.
Stream 142	Tetra Tech mapped stream.
Stream 143	Tetra Tech mapped stream.
Stream 144	Tetra Tech mapped stream.
Stream 145	Tetra Tech mapped stream.
Wetland 1	NWI mapped freshwater forested/shrub wetland (PFO1C) with hydrological connection to Bears Element Creek
Wetland 2	NWI mapped freshwater forested/shrub wetland (PFO1C) with hydrological connection to Bears Element Creek
Wetland 3	NWI mapped freshwater forested/shrub wetland (PFO1A) with hydrological connection to Bears Element Creek
Wetland 4	NWI mapped freshwater forested/shrub wetland (PFO1A) with hydrological connection to Crooked Creek
Wetland 5	NWI mapped freshwater forested/shrub wetland (PFO1C) with hydrological connection to Bears Element Creek

Location ID	Area Description
Wetland 6	NWI mapped freshwater forested/shrub wetland (PFO1A) with hydrological connection to Crooked Creek
Wetland 7	NWI mapped freshwater forested/shrub wetland (PFO1A) with hydrological connection to Crooked Creek
Wetland 8	NWI mapped freshwater forested/shrub wetland (PFO1A) with hydrological connection to Crooked Creek
Wetland 9	NWI mapped freshwater forested/shrub wetland (PFO1Ch) with hydrological connection to Flat Rock Creek
Wetland 10	NWI mapped freshwater emergent wetland (PEM1Ah) with hydrological connection to Crooked Creek
Wetland 11	NWI mapped freshwater forested/shrub wetland (PSS1C) with hydrological connection to Flat Rock Creek
Wetland 12	NWI mapped freshwater forested/shrub wetland (PFO1A) with hydrological connection to Flat Rock Creek
Wetland 13	NWI mapped freshwater forested/shrub wetland (PFO1Ch) with hydrological connection to Flat Rock Creek
Wetland 14	NWI mapped freshwater forested/shrub wetland (PFO1Ch) with hydrological connection to Flat Rock Creek
Wetland 15	NWI mapped freshwater forested/shrub wetland (PFO1Ch) with hydrological connection to Flat Rock Creek
Wetland 16	Tetra Tech mapped wetland.
Wetland 17	Tetra Tech mapped wetland.
Wetland 18	Tetra Tech mapped wetland.
Wetland 19	Tetra Tech mapped wetland.
Wetland 20	Tetra Tech mapped wetland.
Wetland 21	Tetra Tech mapped wetland.
Wetland 22	Tetra Tech mapped wetland.
Wetland 23	Tetra Tech mapped wetland.
Wetland 24	Tetra Tech mapped wetland.
Wetland 25	Tetra Tech mapped wetland.
Wetland 26	Tetra Tech mapped wetland.
Wetland 27	Tetra Tech mapped wetland.
Wetland 28	Tetra Tech mapped wetland.
Wetland 29	Tetra Tech mapped wetland.
Wetland 30	Tetra Tech mapped wetland.
Wetland 31	Tetra Tech mapped wetland.
Wetland 32	Tetra Tech mapped wetland.
Wetland 33	Tetra Tech mapped wetland.
Wetland 34	Tetra Tech mapped wetland.
Wetland 35	Tetra Tech mapped wetland.
Wetland 36	Tetra Tech mapped wetland.
Wetland 37	Tetra Tech mapped wetland.
Wetland 38	Tetra Tech mapped wetland.
Wetland 39	Tetra Tech mapped wetland.
Wetland 40	Tetra Tech mapped wetland.
Wetland 41	Tetra Tech mapped wetland.
Waterbody 1	NWI mapped freshwater pond
Waterbody 2	NWI mapped freshwater pond
Waterbody 3	NWI mapped freshwater pond
Waterbody 4	NWI mapped freshwater pond
Waterbody 5	NWI mapped freshwater pond, Sneads Pond
Waterbody 6	NWI mapped freshwater pond
Waterbody 7	NWI mapped freshwater pond
Waterbody 8	NWI mapped freshwater pond

Location ID	Area Description
Waterbody 9	NWI mapped freshwater pond
Waterbody 10	NWI mapped freshwater pond
Waterbody 11	NWI mapped freshwater pond
Waterbody 12	TT mapped waterbody.
Waterbody 13	TT mapped waterbody.
Waterbody 14	TT mapped waterbody.
Waterbody 15	TT mapped waterbody.
Waterbody 16	TT mapped waterbody.
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Waterbody 18	TT mapped waterbody.
Waterbody 19	TT mapped waterbody.
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Waterbody 21	TT mapped waterbody.

FIGURES

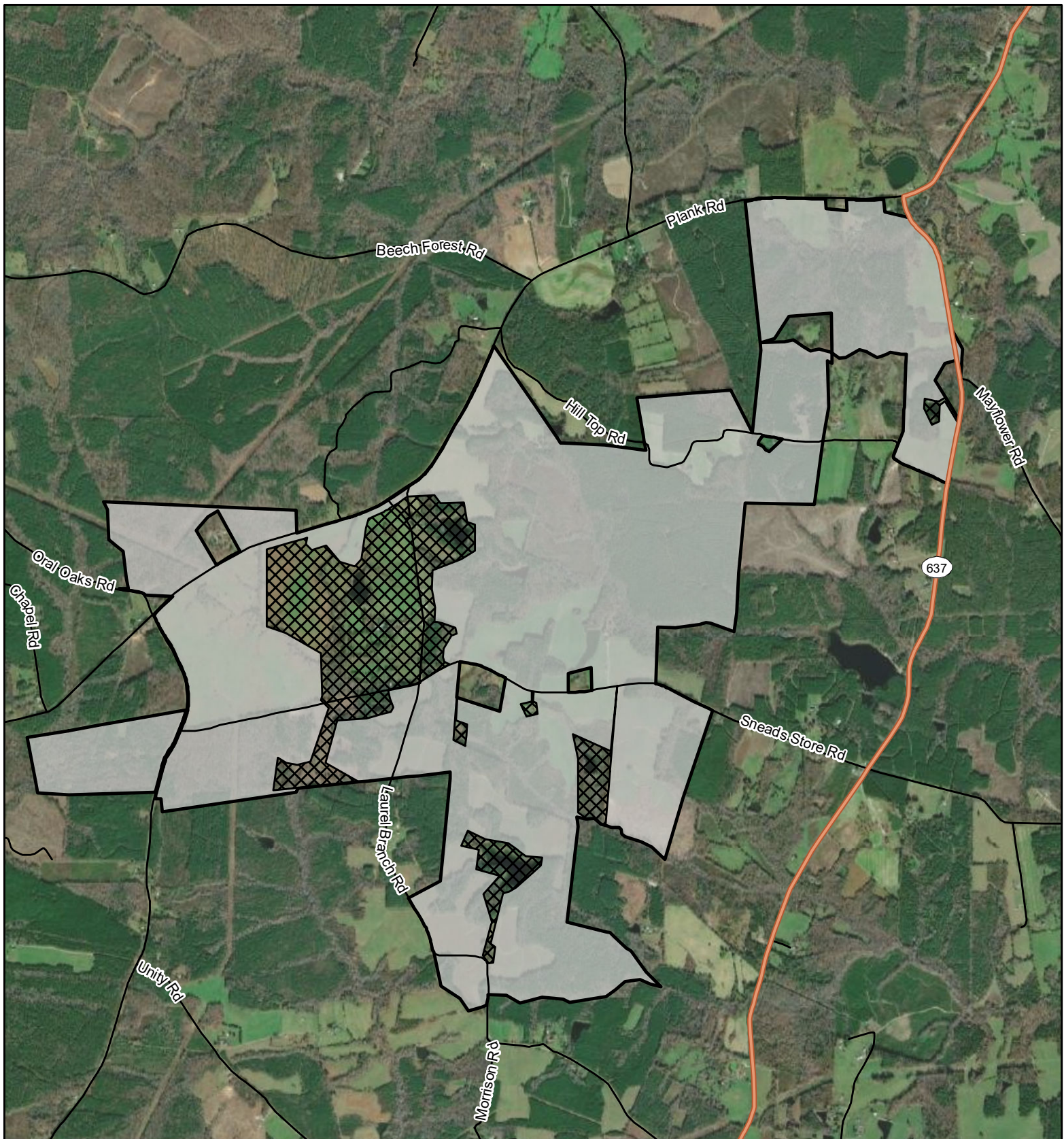
Figure 1: Orthoimagery Project Location Map

Figure 2: Topographic Project Location Map

Figure 3: Wetlands and Other Waters Map

Figure 4: Flood Hazard Map

Figure 5: NRCS Soils Map



- Project Study Area
- Anticipated Parcel Carve Out



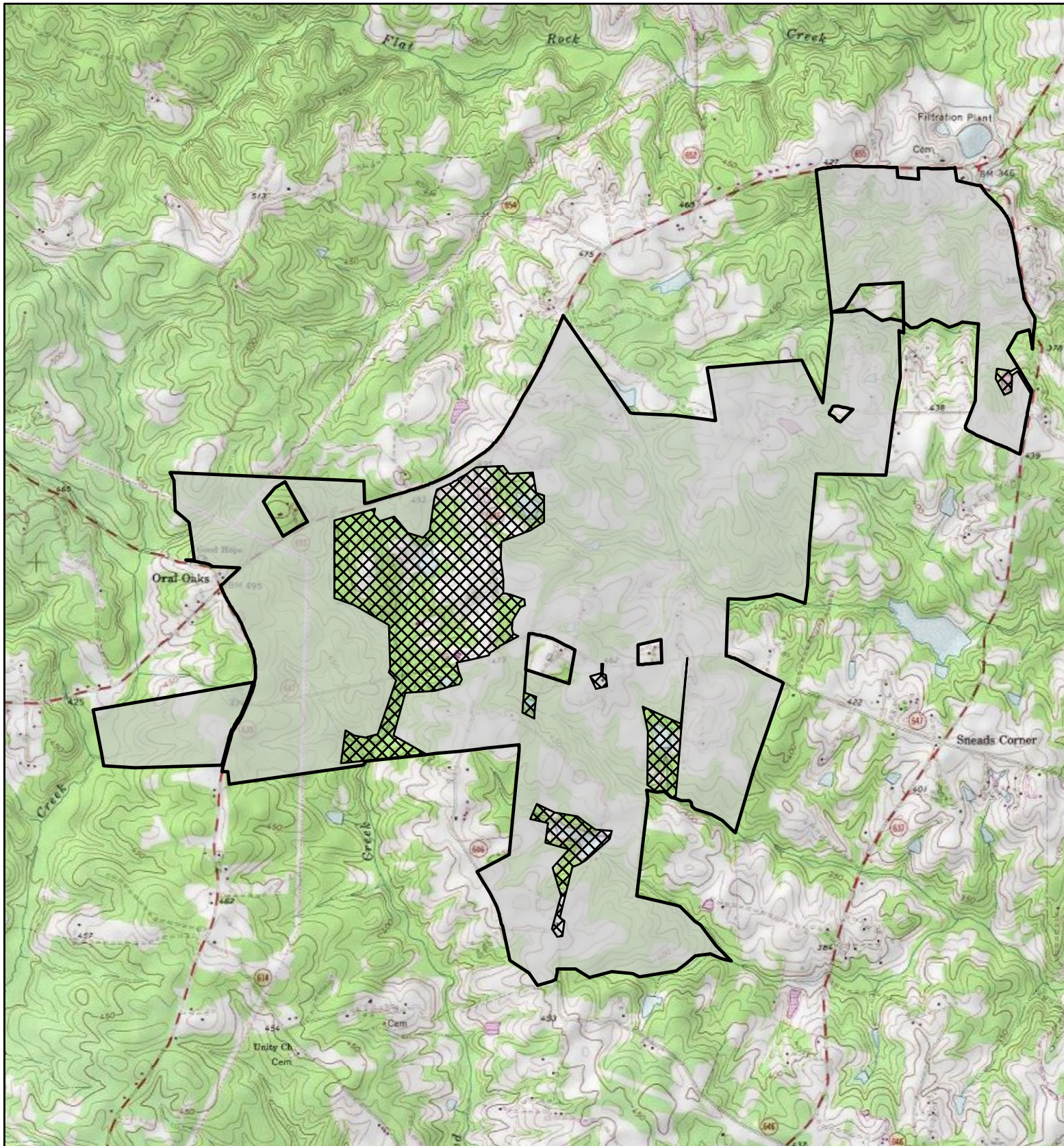
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Feet

Source: ESRI/Vivid Imagery (2020)



Figure 1 Orthoimagery Project Location Map

Laurel Branch Solar Project
Lunenburg County, Virginia



- Project Study Area
- Anticipated Parcel Carve Out



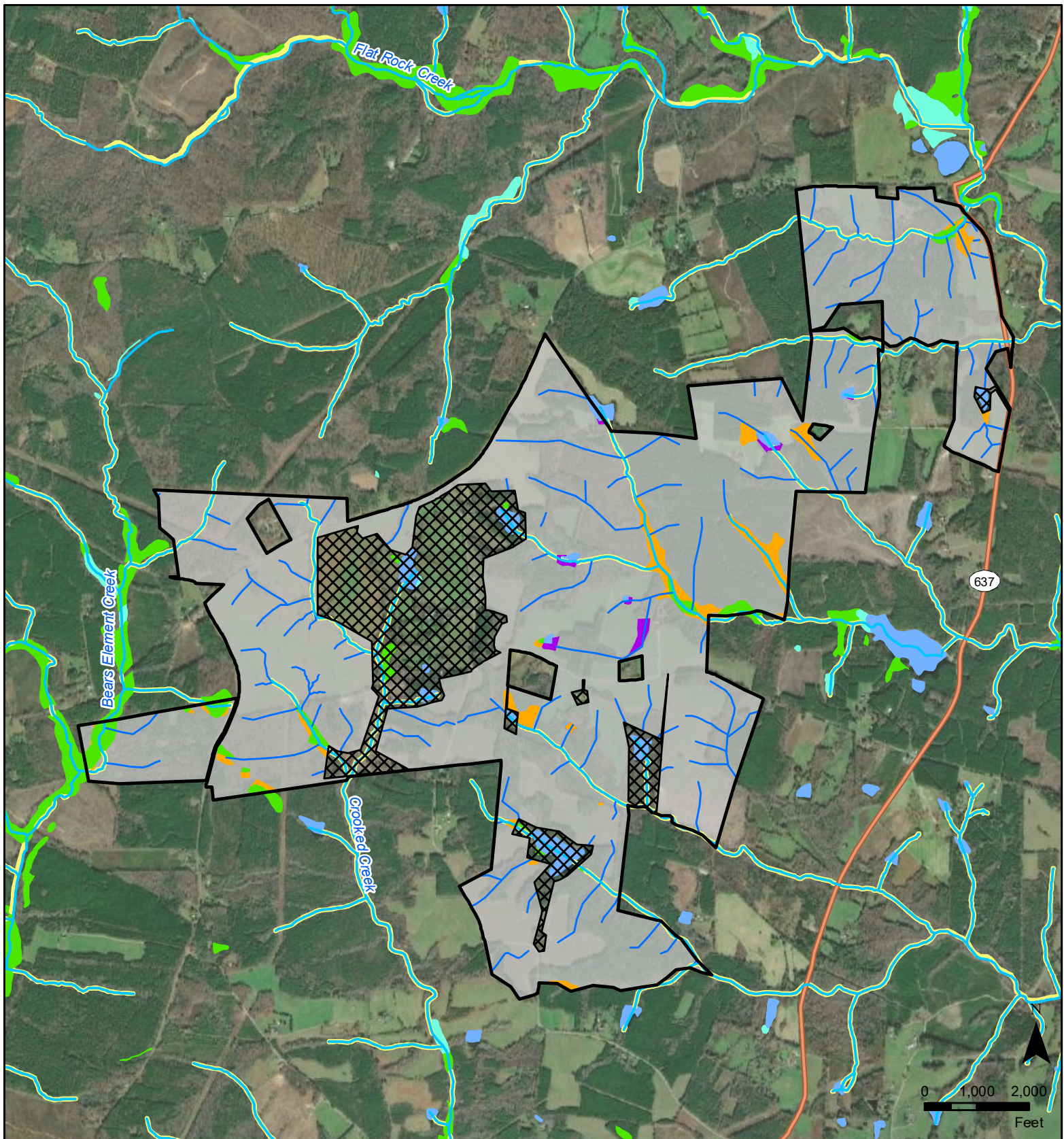
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Feet

Source: USGS (2020)



Figure 2
Topographic
Project Location Map

Laurel Branch Solar Project
Lunenburg County, Virginia



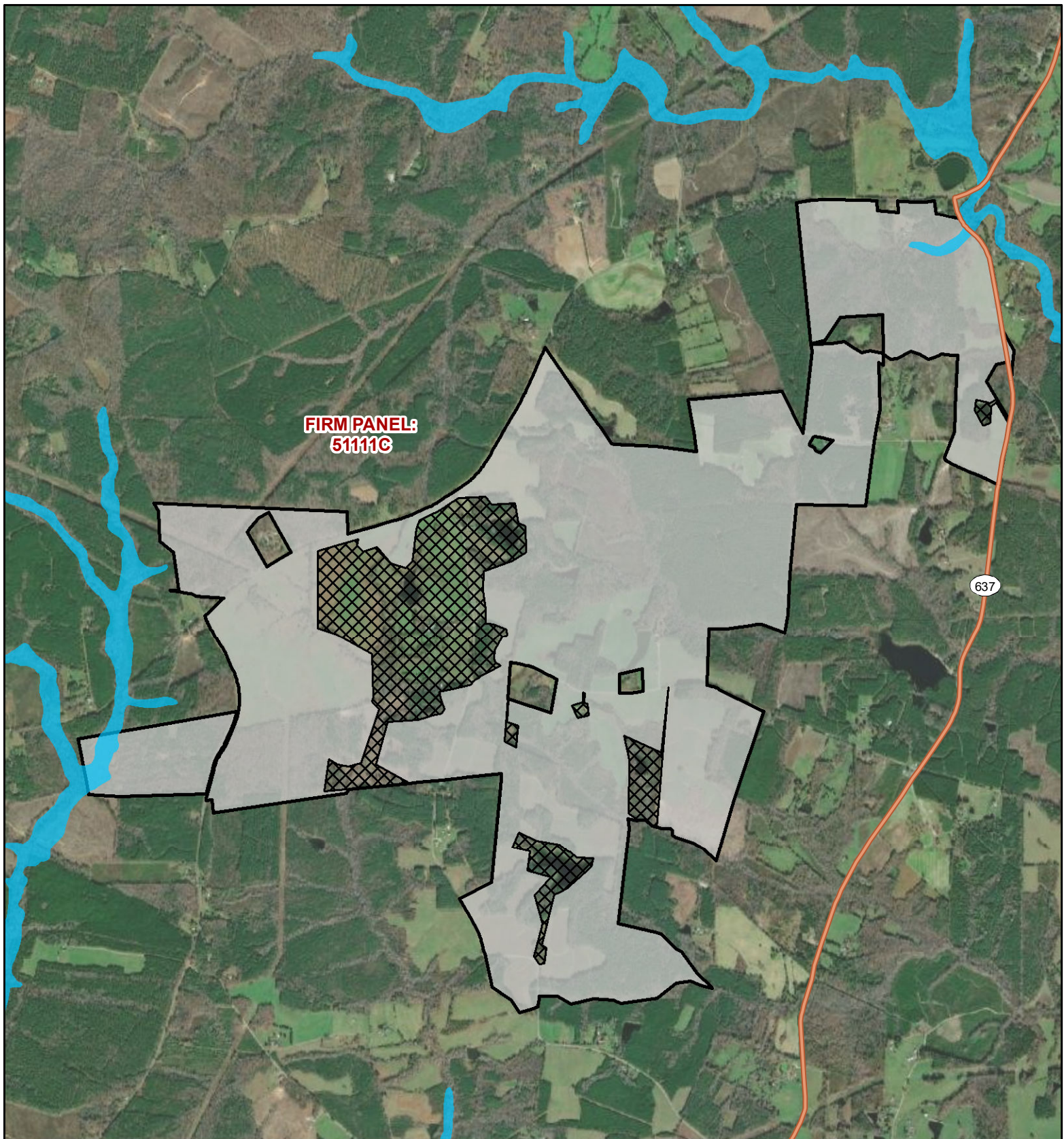
	Project Study Area		NHD Stream (34,248 feet)
	Anticipated Parcel Carve Out		NWI Wetland (55 acres)
	TT Mapped Streams (93,576 feet)		Freshwater Emergent Wetland
	TT Mapped Wetlands (44.7 acres)		Freshwater Forested/Shrub Wetland
	TT Mapped Waterbodies (5.7 acres)		Freshwater Pond
			Riverine





Source: NHD (2020), NWI (2020)



Figure 3
Wetlands and
Other Waters Map

Laurel Branch Solar Project
Lunenburg County, Virginia



-  Project Study Area
-  Anticipated Parcel Carve Out
-  1% Annual Chance Flood Hazard
-  FIRM Panel

Source: FEMA (2009)

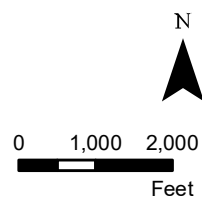
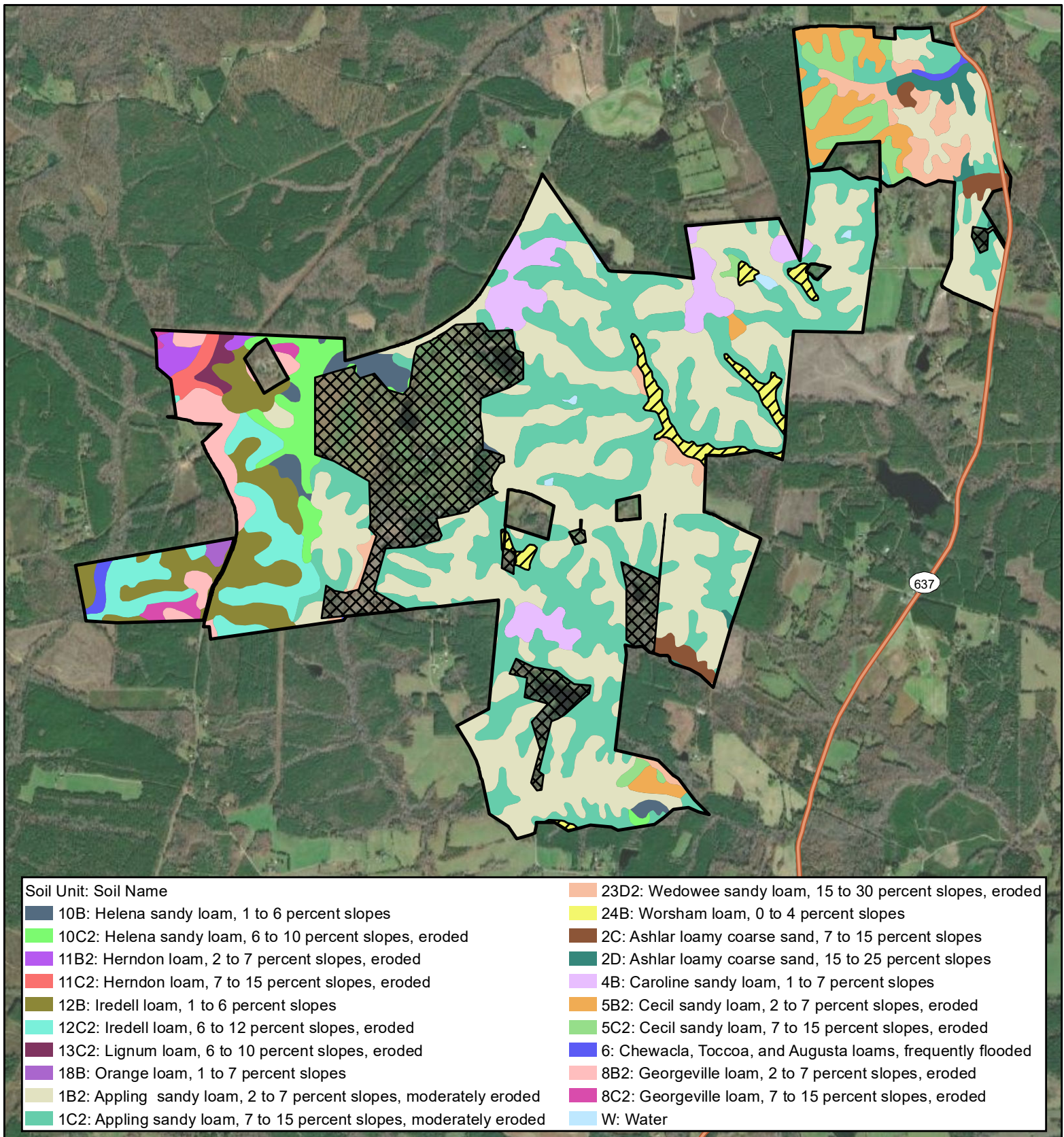
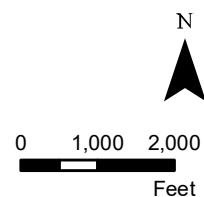


Figure 4
Flood Hazard Map

Laurel Branch Solar Project
Lunenburg County, Virginia



- Project Study Area
- Anticipated Parcel Carve Out
- Hydric Soil



Source: NRCS (2021)



Figure 5
NRCS Soils Map

Laurel Branch Solar Project
Lunenburg County, Virginia

ATTACHMENT B: THREATENED AND ENDANGERED SPECIES DETERMINATION MEMO

Desktop Threatened and Endangered Species Determination Report

Laurel Branch Solar Project

May 20, 2022

Prepared for



600 E Canal Street
Richmond, VA 23219

Prepared by



4101 Cox Road, Suite 120
Glen Allen, VA 23060

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Figure 2: Topographic Project Location Map

Figure 3: Wetlands and Other Waters Map

List of Attachments

Attachment A: USFWS Ipac and Federally Listed Species Informal Review

Attachment B: State Listed Species Informal Review

Acronyms and Abbreviations

3D	three-dimensional
CUP	Conditional Use Permit
GIS	geographic information system
GPS	global positioning system
KOP	key observation point
MW	megawatts
Project Area	The 2,189± acres of privately-owned land where the proposed Project is located
Project	Laurel Branch Solar Project

1.0 INTRODUCTION AND PROJECT DESCRIPTION

Dominion Energy Virginia (Dominion) is proposing to develop a commercial solar energy project, Laurel Branch Solar Project (Project), on private land encompassing approximately 2,189± acres (based on the current project boundary). The Project study area includes the parcels that were actively under consideration by Dominion. The Project is located in Lunenburg County, Virginia (VA), as shown on the Orthoimagery and Topographic Project Location Maps (Figure 1 and Figure 2).

Tetra Tech, on behalf of Dominion, prepared this Desktop Threatened and Endangered Species Determination Memo summarizing the findings of publicly available desktop resources for the Project study area. Additional resources were evaluated to make preliminary determinations for habitat suitability, including the National Hydrography Dataset (NHD) and the United States Fish and Wildlife Service (USFWS) National Wetland Inventory (Figure 3). Additionally, Tetra Tech utilized publicly available desktop resources to identify additional areas of potential wetlands and surface waters that may also provide suitable habitat for listed species. These potential features are also included on Figure 3.

2.0 METHODOLOGY

The primary objective of the Desktop Threatened and Endangered Species Determination is to identify the potential for the Project to impact federal and state protected species and designated critical habitat. The following state and federal natural resource databases were reviewed:

- USFWS Information for Planning and Consultation (IPaC; USFWS 2022a);
- USFWS Critical Habitat for Threatened and Endangered Species Map (USFWS 2021b);
- USFWS Bald Eagle Concentration Area (BECA) Map (USFWS 2021c);
- Center for Conservation Biology (CCB) Bald Eagle Nest Locator for Virginia (CCB 2021);
- Virginia Department of Wildlife Resources (VDWR) Northern-Long Eared Bat (NLEB; *Myotis septentrionalis*) Winter Habitat and Roost Trees Map (VDWR 2021a);
- VDWR Little Brown Bat and Tri-colored Bat Winter Habitat and Roosts (VDWR 2021b);
- VDWR Virginia Fish and Wildlife Information Services (VaFWIS) (VDWR 2021c); and
- Virginia Department of Conservation and Recreation (VDCR) Natural Heritage Data Explorer (NHDE) (VDCR 2021).

3.0 FINDINGS AND RECOMMENDATIONS

Tetra Tech prepared this Desktop Threatened and Endangered Species Determination Memo for Dominion based on evaluations made by qualified biologists that are experienced within the region. The Threatened and Endangered Species List for the Project study area (Table 1) summarizes federal and state listed species within and adjacent to the Project study area. Federal resources reviewed, including the IPaC System, USFWS Critical Habitat for Threatened and Endangered Species Map, CCB Bald Eagle Nest Locator, and the BECA map are found in Attachment A. State resources evaluated, which include the NLEB Winter Habitat & Roost Tree Application Map, VDWR VaFWIS, VDCR NHDE, and

the Little Brown and Tri-Colored Bat Winter Habitat & Roost Tree Application Map, are found in Attachment B.

3.1 Findings

The IPaC System (USFWS 2021a) indicated that the Northern long-eared bat (*Myotis septentrionalis*), which is listed as both federally threatened and state threatened, is expected to occur within the Project study area.

The bald eagle (*Haliaeetus leucocephalus*) is protected under the Bald and Golden Eagle Protection Act. According to the CCB Bald Eagle Nest Locator, the closest known bald eagle nest is approximately 15.42 miles to the southeast of the proposed Project study area. A field assessment is recommended to confirm the presence and/or absence of bald eagle nests on the Project study area. If bald eagle nests are identified during the recommended field assessments and work is anticipated to be conducted during the breeding season (October 1 through May 15), a 660-foot buffer is recommended around active nests. The buffer may be reduced to 330 feet for special circumstances.

The USFWS BECA Map did not indicate a bald eagle concentration area within the Project study area. The closest Bald Eagle concentration is approximately 58 miles southwest of the Project area.

No federally listed critical habitat was documented on the USFWS Critical Habitat for Threatened and Endangered Species Mapper as occurring within or in the vicinity of the proposed Project study area. The Project study area is approximately 8 miles south of the closest critical habitat for Yellow lance (*Elliptio lanceolata*).

The VDWR NLEB mapping application shows that there are no known NLEB winter hibernacula or roost trees in the vicinity of the Project. The nearest winter hibernacula and roosting habitat is located approximately 99 miles northwest of the Project study area.

The VDWR mapping system of the little brown bat (*Myotis lucifugus*) and tri-colored bat (*Perimyotis subflavus*) shows that the nearest winter hibernacula and roosting habitat are located approximately 80 miles northwest of the Project study area.

The VDWR VaFWIS indicates no state threatened or endangered species with confirmed occurrences within the Project study area and a ± 2 -mile radius from the Project study area boundary. Please note that the Virginia Department of Game and Inland Fisheries has recently changed its name to the VDWR, but the VaFWIS database search results still show the outdated department name.

The VDCR NHDE identified two state threatened species, loggerhead shrike (*Lanius ludovicianus*) and Atlantic pigtoe (*Fusconaia masoni*), as possibly occurring within the Project study area watersheds, Meherrin River - Mason Creek (12-digit Hydrologic Unit Code [HUC] 030102040301), Meherrin River - Crooked Creek (HUC 030102040302), and Flat Rock Creek (HUC 030102040303).

Table 1. Threatened and Endangered Species List for the Project Study Area

Common Name	Scientific Name	Status ¹	Potential to Occur at Project study area	Habitat Description	Database ²
Birds					
Loggerhead Shrike	<i>Lanius ludovicianus</i>	ST	Medium	Agricultural fields, open pastures, riparian areas, and prairies characterized by barbed wire fences and/or vegetation typically with spines or thorns.	NHDE
Bivalves					
Atlantic pigtoe	<i>Fusconaia masoni</i>	FP, ST	Medium	Small creeks to large rivers with excellent water quality and coarse sand to gravel substrate.	NHDE
Mammals					
Northern long-eared bat	<i>Myotis septentrionalis</i>	FT, ST	Medium	Underneath bark, in cavities or in crevices of both live trees and snags (dead trees)	IPaC

Notes:

1. FT: Federally Threatened; ST: State Threatened

2. IPaC: Information for Planning and Consultation; VaFWIS: VDWR Virginia Fish and Wildlife Information Services; NHDE: VDCR Natural Heritage Data Explorer

3.2 Recommendations

The Desktop Threatened and Endangered Species Determination identified several federal and state listed species that have the potential to occur within and in the vicinity of the Project study area. Upon a review of the information gathered from publicly available resources, Tetra Tech recommends the following actions or avoidance measures;

- Conduct an environmental field assessment to determine habitat suitability for listed species potentially present within Project study area;
- Conduct a pedestrian bald eagle nest survey, concurrent with the habitat suitability field assessment, by visually inspecting canopy trees within the study area were for the presence of large stick nests;
- Based on the results of the environmental field assessment, potential impacts to threatened and endangered species and their habitats can be reduced by avoiding and minimizing Project impacts to wetlands, forested areas, streams, and riparian corridors; and
- Informal consultation with state and federal agencies is recommended after the completion of the environmental field assessment to better determine the need for species-specific onsite surveys and the need for avoidance or mitigation measures. Tetra Tech will coordinate with VDCR once the final project boundary is determined to obtain an accurate species list for the Project-specific area.

This Desktop Threatened and Endangered Species Determination Memo represents our best professional judgment and is based on publicly available desktop resources for the Project study area.

4.0 REFERENCES

CCB (The Center for Conservation Biology) 2021. CCB Mapping Portal. Accessed December 1, 2021.

Available online at: <https://www.ccbirds.org/maps/>

USFWS. 2021a. USFWS Information Planning and Conservation System. Accessed May 17, 2022.

Available online at: <https://ecos.fws.gov/ipac/>

USFWS. 2021b. Critical Habitat for Threatened and Endangered Species Map. Accessed December 1, 2021. Available online at:

<https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>

USFWS (United States Fish and Wildlife Service). 2021c. Bald Eagle Concentration Areas Mapping Portal. Accessed December 1, 2021. Available online at:

<http://fws.maps.arcgis.com/apps/Viewer/index.html?appid=0e5ca36a4056471db1b12c1b4065f3cb#>

VDCR (Virginia Department of Conservation and Resources). 2021. Natural Heritage Data Explorer (NHDE). Accessed December 5, 2021 Available online at: <https://vanhde.org/species-search>

VDWR (Virginia Department of Wildlife Resources). 2021a. NLEB Winter Habitat & Roost Tree Application. Accessed December 1, 2021. Available online at: <https://dgif->

virginia.maps.arcgis.com/apps/webappviewer/index.html?id=32ea4ee4935942c092e41ddcd19e5ec5

VDWR. 2021b. Little Brown Bat and Tri-Colored Bat Winter Habitat and Roosts Application. Accessed December 1, 2021. Available online at: <https://dwr.virginia.gov/wildlife/bats/little-brown-bat-tri-colored-bat-winter-habitat-roosts-application/>

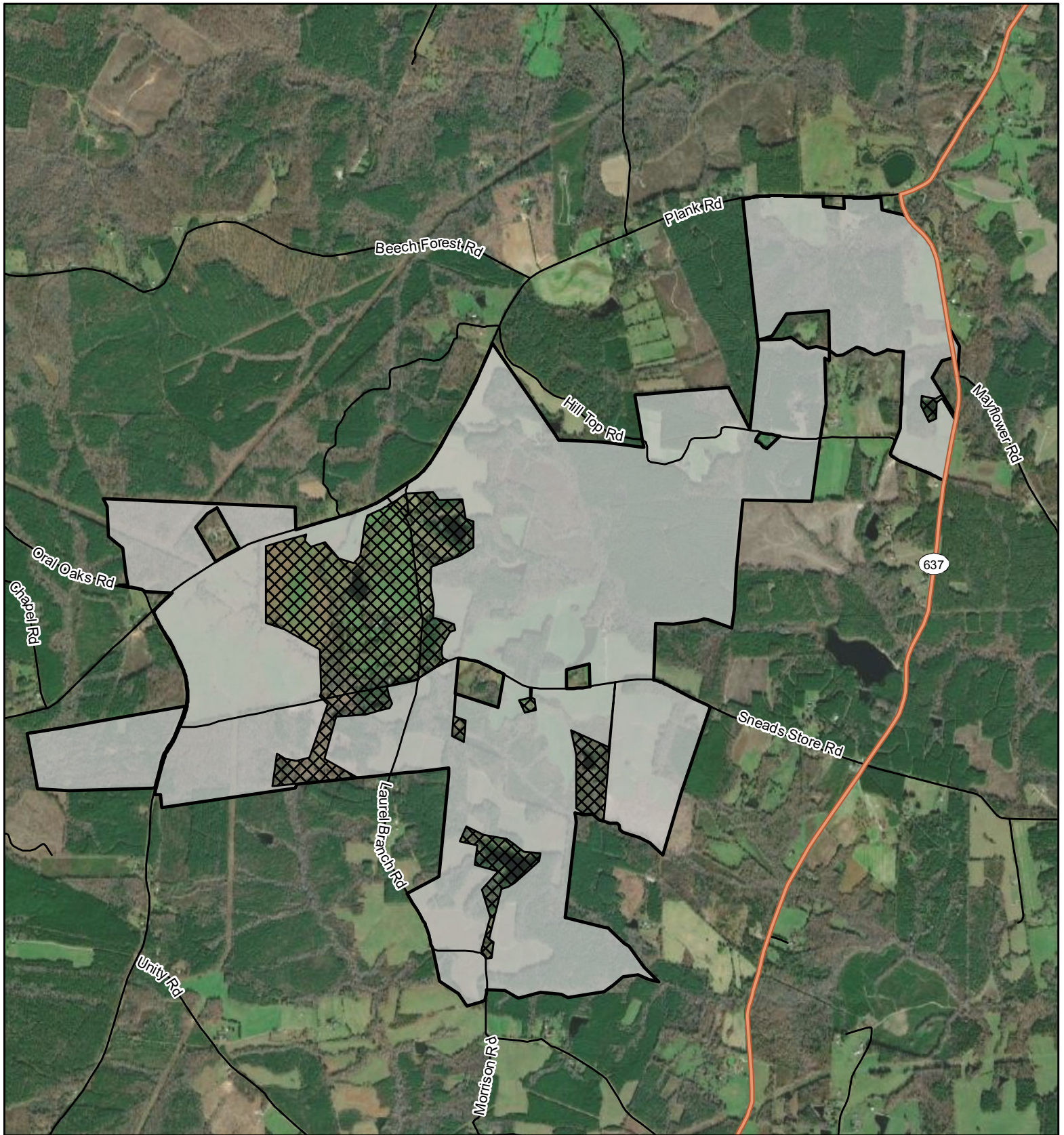
VDWR. 2021c. Virginia Fish and Wildlife Information Service (VaFWIS). Accessed January 3, 2022. Available online at: <https://vafwis.dgif.virginia.gov/fwis/>

FIGURES

Figure 1: Orthoimagery Project Location Map

Figure 2: Topographic Project Location Map

Figure 3: Wetlands and Other Waters Map



- Project Study Area
- Anticipated Parcel Carve Out



0 1,000 2,000
Feet

Source: ESRI/Vivid Imagery (2020)



Figure 1 Orthoimagery Project Location Map

Laurel Branch Solar Project
Lunenburg County, Virginia