

# **Environmental Assessment**

**Moran Solar Project  
Prince Edward County, Virginia**



**U.S. Department of Agriculture  
Rural Utilities Service (RUS)**

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## ACRONYMS

AC	Alternating Current
APE	Area of Potential Effect
BMP	Best Management Practice
DC	Direct Current
DCR	Department of Conservation and Recreation
DHR	Department of Historic Resources
DNR	Department of Natural Resources
E&S	Erosion & Sediment
EA	Environmental Assessment
EJ	Environmental Justice
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
VaFWIS	Virginia Fish and Wildlife Information Service
IPaC	Information for Planning and Consultation (USFWS Only)
LOD	Limits of Disturbance
MBTA	Migratory Bird Treaty Act
MW	Mega-Watt
NEPA	National Environmental Policy Act
NLEB	Northern Long-eared Bat
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OEE	Office of Environment and Energy
PESA	Phase I Environmental Site Assessment
RUS	Rural Utilities Service
SHPO	State Historic Preservation Offices
SWPPP	Stormwater Pollution Prevention Plan
TDAT	Tribal Directory Assessment Tool
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VADGIF	Virginia Department of Gameland and Inland Fisheries
VCRIS	Virginia Cultural Resources Information System
VDEQ	Virginia Department of Environmental Quality
VPDES	Virginia Pollutant Discharge Elimination System
WNS	White-nose syndrome

## 1.0 PURPOSE AND NEED

### 1.1 Project Description

This project involves the construction of an approximate 18.8-acre solar farm (16.1 acre operation) on a portion of a larger 99.63 acre property, which includes the laydown areas for construction as well as the temporary access road, and concrete washout area. The site is located at 1867 Piney Grove Road, Rice, Prince Edward County, Virginia. Of the larger parent parcel, Holocene Clean Energy (Holocene) on behalf of HCE Moran Solar, LLC proposes to lease 18.8 acres of land for the solar project (Reference Appendix I, Figures 1 through 3). Project components include the installation of photovoltaic panel arrays ground-mounted on single-axis tracking solar racking equipment with a maximum height of 15 feet from the ground surface. The project will also include the construction of an inverter and control unit, a perimeter fence to enclose the arrays, vegetative buffers/screening, and necessary stormwater management Best Management Practices (BMPs) (Reference Appendix II for proposed site plan). The solar panel array itself will include approximately 61 rows of panels and is anticipated to generate approximately 3.8 MW of DC power and 3 MW AC power. Interconnection to the electrical grid will be completed by the electrical company sometime in the future as part of a second, separate project and will undergo required reviews at that time. Existing infrastructure (power poles, utility lines, etc.) is located in proximity to the site and the planned interconnection point is to these existing power poles located immediately adjacent to the access road entering the site. This area is depicted on the enclosed maps and site plans for clarity and will include a small grassy area adjacent to Piney Grove Road next to the proposed concrete washout area and within or immediately next to the depicted limits of disturbance for the solar project itself. The future interconnection will use an existing power pole in this location next to the access road and will only involve the running of a subsurface power line approximately 100' from the inverter location to the existing power pole. No special equipment is needed and typical subsurface trenching will be the likely method employed by the local utility when this occurs and is almost entirely within the proposed limits of disturbances (LODs) for the project.

The proposed project would operate seven days per week during daylight hours. Operational activities would consist of monitoring system operation to track status, performance, and diagnostics. Operation activities would include meter reading and production reporting, along with updating O&M manuals. The project will be fenced to prevent access by the public to ensure public safety and protect equipment from theft and vandalism.

The solar field would be inspected once annually for condition of the arrays, inverters, and controls. Damaged or under performing solar modules would be repaired and replaced as required and as flagged by the monitoring system. No on-site lighting will be present after construction.

The disturbance of land will be limited to 18.8 acres (leased area) during construction which includes the laydown areas for construction as well as the temporary access road, and concrete washout areas. The site is currently an open field with some scrubby areas; tree clearing is not proposed. Three existing structures (a fire damaged residential dwelling and two out-of-use agricultural outbuildings) are located onsite and proposed for demolition. The final project area will include 16.1 fenced acres with the remaining acreage being associated with roadway set backs.

## **1.2 Purpose and Need**

USDA, Rural Development is a mission area that includes three federal agencies – Rural Business-Cooperative Service, Rural Housing Service, and Rural Utilities Service (RUS). The agencies have in excess of 50 programs that provide financial assistance and a variety of technical and educational assistance to eligible rural and tribal populations, eligible communities, individuals, cooperatives, and other entities with a goal of improving the quality of life, sustainability, infrastructure, economic opportunity, development, and security in rural America. Financial assistance can include direct loans, guaranteed loans, and grants in order to accomplish program objectives. This proposed project is seeking federal financial assistance from the RUS.

The purpose of this project is to provide clean renewable energy to the existing electrical grid for the purposes of bettering the natural and human environment. The proposed project will help limit greenhouse gas emissions through the generation of solar energy while providing electricity to residential and commercial customers connected to the existing electrical grid. The Commonwealth of Virginia has recently established ambitious renewable energy goals across the Commonwealth and those goals can only be met through cooperation with private projects. As a result, electrical utility providers, which are regulated by the Commonwealth, have been requesting development of renewable energy projects from private entities to help meet or exceed the goal set by the state government. Holocene has therefore partnered with the local electrical utility provider to construct the project and allow its future interconnection to the utility grid, therefore making Virginia's energy use more sustainable and in line with future goals and market forces.

## 2.0 ALTERNATIVES EVALUATED INCLUDING THE PROPOSED ACTION

### 2.1 Proposed Action

This project involves the construction of an approximate 18.8-acre solar farm (16.1-acre operational) on a portion of a larger 99.63 acre property located at 1867 Piney Grove Road, Rice, Prince Edward County, Virginia. As part of the development, three existing derelict structures located onsite are proposed for demolition. Project components include the installation of photovoltaic panel arrays ground-mounted on single-axis tracking solar racking equipment. The project will also include the construction of an inverter and control unit, a perimeter fence to enclose the arrays, vegetative buffers/screening, and necessary stormwater BMPs. Proposed grading will be minimized through the use of driven piles for the mounting poles which will therefore reduce excavation and earth disturbance. The project has been sited to avoid floodplains, streams, minimize clearing, and is situated within close proximity to existing utility infrastructure to allow easy future interconnection to the existing grid. It should be noted that the future interconnection to the grid is not a part of the proposed action as that connection will be conducted by the local utility using a separate project and funding source. The proposed action described herein only involves the construction of the arrays and supporting infrastructure.

### 2.2 Other Alternatives Evaluated

Holocene considered its sites through a process of elimination which involved a wide area search, which was then further refined based on a set of established criteria. Specifically, a substation level review of parcels within a certain radius from each existing substation associated with the existing grid was completed and isolated parcels that had workable topography, few streams or wetlands (based on database and GIS information), no floodplain, and sufficient acreage were selected. The results were candidate sites, which were all contacted via letter and phone by Holocene to evaluate existing landowner openness to leasing a set of acres within the identified parameters of topography and other environmental factors. Although multiple additional sites met these parameters, they were ruled out because of landowner disapproval of entering into a lease.

### 2.3 No Action Alternative

The “no action alternative” would not provide benefits to the human environment nor provide a clean renewable energy alternative to other energy sources. The overall objective of the project is to provide clean energy for the existing grid to reduce the environmental impact of fossil fuel emissions. The No Action alternative would not realize this environmental benefit. A permanent conversion of land will occur for the proposed action, however, no significant adverse impacts are expected to the environment as a result of the proposed action.

### 3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

#### 3.1 Land Use

##### 3.1.1 General

The subject property is currently zoned A-1; agricultural use. A total of 18.8 acres are proposed to be leased for the proposed solar arrays and the remainder of the larger 99.63 acre parcel will remain open scrub land. The current land use is scrub-shrub land and may have been farmed or harvested for timber in the past. Three existing structures, a fire damaged residential dwelling and two outbuildings, located onsite and proposed for demolition. In general, the project is located within a rural residential and agricultural area of Rice, Virginia. No known master plans or other development plans are known to exist for this part of the County and the site and surrounding area has been rural wooded land since at least the late 1950s. Portions of the larger parent parcel were previously timbered. The proposed project has undergone all applicable local site plan reviews and approvals.

##### 3.1.2 Important Farmland

###### Affected Environment

The site is located in a rural area of Rice, Prince Edward County, Virginia and is currently scrub land (Reference Appendix III for site photographs). According to the USDA National Cooperative Soil Survey website, the site is located within an area designated as farmland of statewide importance or as prime farmland. This designation is based on the mapped soil type at the site and surrounding areas.

###### Environmental Consequences

As a result of the presence of farmland and the proposed conversion to a non-agricultural use, the AD-1006 Farmland Conversion Impact Rating form was completed and submitted to the US Department of Agriculture Natural Resources Conservation Service (NRCS) local field office. The values from Sections V and VI for the project site does not equal or exceed 160 points (the site scored 127) and is not precluded from conversion of important farmland to non-agriculture uses. Reference Appendix IV for the AD-1006 form, completed in coordination with the local NRCS office and returned and verified by the NRCS on June 26, 2020.

##### 3.1.3 Formally Classified Land

###### Affected Environment

Formally Classified Lands (National Parks, Monuments, Landmarks, Wildlife Refuges, etc.) are not located within or near the project area (Reference Appendix IV).

### Environmental Consequences

Based on our review of the proposed project and the U.S. National Map, no environmental consequences to formally classified land appear to be associated with the project. Additionally, a response was received from the Virginia Outdoors Foundation (VOF) that stated "As of 4 January 2021, there are not any existing nor proposed VOF open-space easements in the immediate vicinity of the project." A copy of this response is included in Appendix IV.

## **3.2 Floodplains**

### Affected Environment

We reviewed the Flood Insurance Rate Map (FIRM) available from the Federal Emergency Management Agency (FEMA). According to Map Number 51147C0250C dated October 2, 2009, the project area is located in Zone X which is determined to be outside the 500 year floodplain (Reference Appendix V). This was one of the initial site selection criteria (avoidance of floodplains) and all appropriate and required stormwater quantity controls will be established so that no off-site flooding will occur.

### Environmental Consequences

Based on our review of the floodplain maps, no environmental consequences to floodplains associated with the project are expected and additional analysis of floodplain impacts is not necessary.

## **3.3 Wetlands**

### Affected Environment

According to the National Wetland Inventory (NWI) Map available from the U.S. Fish and Wildlife Service (USFWS) no wetlands were identified on the project site (Reference Appendix VI). The absence of wetlands was another initial site selection criteria. However, based on the wetland delineation, procured by Holocene, six jurisdictional wetland areas totaling 0.23-acres and two jurisdictional streams totaling 1,010-linear feet were identified and delineated within the study area. The wetland delineation was reviewed and confirmed by the U.S. Army Corps of Engineers (USACE) in a Jurisdictional Determination issued on November 25, 2019 (reference Appendix VI).

### Environmental Consequences

Following completion of the wetland delineation and confirmation of the wetland and stream boundaries by the USACE, Holocene adjusted the project boundary to minimize wetland impacts as much as possible. Early design proposals included potential solar panels in or close to the wetland area present to the east of the proposed panels, and that lease area was contracted to avoid impact to those areas. Portions of the small and isolated wetlands identified in the central and western portions of the site cannot be completely avoided given their location and position in the low lying portions of the site where stormwater is required to be routed to achieve gravity fall. As can be seen in the attached site plans, the small (0.01 acre) emergent wetland in the western portion of the site



is proposed to be impacted by placing piles from the proposed panels, which is not considered an impact by the USACE as no fill is being placed where piles are proposed. As such, this wetland will likely remain functional, but has been included in the impact calculations for conservative purposes. The 0.05 acre emergent wetland near the southern property border is proposed to be filled as part of installation of a stormwater BMP. Given the topographical position, alternative placements of the BMP was not possible to avoid this impact; a BMP is required in this low-lying portion of the site to meet local stormwater management regulations. While these isolated impacts cannot be avoided, 75% of the wetlands identified onsite as well as 100% of stream channels have been completely avoided.

The projects have been discussed with the USACE and have been determined to qualify for the Nationwide Permit 51 for Land Based Renewable Energy Projects. That permit requires the engineers to design the project so that wetland and stream impacts are avoided and minimized to the maximum extent practicable, which has been demonstrated above. The permit also requires mitigation when impacts exceed 0.1 acre, which is not the case for the proposed project. Impacts below that threshold are considered minimal such that mitigation is not required. Nonetheless, the proposed landscape buffer plantings and water quality improvements to downstream areas which will likely result from the proposed stormwater management measures (decreased erosion, sedimentation, lower nutrient additions, and increased habitat/vegetative cover from the plantings) will result in a net increase in ecosystem benefits to the environment. The assumed increase in ecosystem benefits is due to the requirement for no net increase in stormwater quantity post-construction to prevent erosion and no degradation in stormwater quality in stormwater regulations. The buffer plantings will also provide increased habitat heterogeneity and variability. Thus, these benefits are qualitative in nature. In addition, Holocene held a neighborhood meeting and 2 separate public meetings for the project to provide the public and neighbors with the opportunity to comment on the proposed project and no comments opposing the project were received. As a result, the project has complied with the requirements of Executive Order 11990 as well as permitting requirements of local, state, and federal agencies. A copy of the wetland delineation map and USACE confirmation is included in Appendix VI.

### **3.4 Water Resources**

#### Affected Environment

The site is not located in an area identified by the USEPA as a sole source aquifer (reference Appendix VII) and there are no Wild or Scenic Rivers on or near the project site (Reference Appendix IV). According to the USGS Topographic Map (Appendix I, Figure 2), the nearest surface water body is an unnamed tributary to Miller Lake located approximately 630 feet east of the site. Six jurisdictional wetland areas totaling 0.23-acres and two jurisdictional streams totaling 1,010-linear feet were identified and delineated within the study area by ECS (see Section 3.3). An erosion and sediment control plan has been prepared and will be implemented in compliance with Prince Edward County and Virginia Department of Environmental Quality (DEQ) requirements. The site is not located within a wellhead protection area and is not subject to other groundwater protection requirements.

### Environmental Consequences

Based on our review, no impacts to water quality are expected as a result of the proposed work. Solar panels are not considered impermeable surfaces and their impact is considered to be minimal to the stormwater management on the site. The proposed stormwater management controls during and post-construction will be designed to meet or exceed local and state regulations and will therefore be protective of local water quality. Because of local topography, stormwater BMPs are required post-construction to limit offsite transport of stormwater runoff and maintain existing stormwater quality. Because of the low impact solar panels have on stormwater runoff and the absence of impermeable surface proposed, offsite stormwater impacts would likely not occur as a result of the project, but are required according to local and state regulations. All required design reviews and permits will be or have been obtained prior to construction as part of the plan review and approval process. As can be seen in the attached site plans, adequate and appropriate erosion and sediment controls during construction will also be a requirement of the project and the required land disturbance permit, and are expected to include silt fences, gravel construction entrances, and other best management practices required by the local authority. During land disturbance activities, routine inspections will be required by a properly certified Responsible Land Disturber to ensure Erosion & Sediment (E&S) controls are adequate and functioning properly and that the project's Stormwater Pollution Prevention Plan does not require modification. The project will also not result in any new effluent discharges. No direct or indirect impacts to waters, either onsite or offsite, are proposed.

### **3.5 Coastal Resources**

#### Affected Environment

Coastal barrier resources are not located within the project area as Prince Edward County is located outside of Virginia's Coastal Zone (Appendix VIII).

#### Environmental Consequences

Based on our review of the proposed work, no environmental consequences to coastal resources appear to be associated with the project and the subject site is not located within an area subject to the Coastal Zone Management Act.

### **3.6 Biological Resources**

#### **3.6.1 Fish, Wildlife, and Vegetation Resources**

##### Affected Environment

The subject site is an existing scrub/shrub land that was formerly managed agricultural land. The land appears to have been managed agricultural land from at least 1959 until 1991. Between 1991 and 2012 the property was managed as timberland and appears to have been cleared by 2016. The open and fallow pasture land provides minimal habitat for wildlife. No surface waters are located within the project limits other than the perennial stream in the eastern portion of the site. Vegetation within the project area consists of grasses and small shrubs and tree clearing is not proposed. Clearing will likely be conducted by mechanical methods, but the contractor will clearly demarcate

clearing limits in the field prior to start. In general, the past farmed and managed nature of the subject site, including the access road corridor, results in minimal wildlife habitat and vegetative resources being present on the site.

### Environmental Consequences

Significant adverse impacts to fish, wildlife, or vegetation is not proposed as part of the project. Streams are not proposed for impact and all appropriate E&S and stormwater controls will be implemented to prevent offsite impacts to the aquatic system. The project site is former timberland and is currently fallow and impacts to wildlife habitat or resources will not occur. Similarly, significant vegetation communities will not be impacted as the site is currently a fallow scrub/shrub field. Areas of the field which are now scrub brush will be converted to solar panel arrays, but the existing scrubland provides minimal ecological functions or values and adverse impact is not expected.

### **3.6.2 Listed Threatened and Endangered Species**

#### Affected Environment

ECS conducted a review of the USFWS Information for Planning and Consultation (IPaC) database to evaluate the documented occurrences or potential habitat for federally-listed species within the project boundaries (see Appendix IX). According to the IPaC database, one species is listed as having potential to occur at the project site:

- Federally-threatened Northern long-eared bat (NLEB) (*Myotis septentrionalis*) - According to the USFWS' Species Fact Sheet, the male bat prefers large caves and abandoned mines during the winter and summer. Female bats prefer caves and mines during the winter and maternity colonies are located in riparian forests along streams. It is also known that this bat species generally roosts in trees greater than 3 inches dbh that are found on south-facing slopes and have exfoliating bark or snags during the summer months.

ECS conducted a search of the Virginia Department of Game and Inland Fisheries (VADGIF) Fish and Wildlife Information Service (FWIS) threatened and endangered species database to evaluate documented occurrences of federally and/or state listed species within a two-mile radius of the project site (see Appendix IX). According to the FWIS, no species are listed as having been documented within this radius.

### Environmental Consequences

The USFWS issued a Final 4(d) rule under the Endangered Species Act (ESA) effective February 16, 2016. The rule specified that for areas of the country impacted by white-nose syndrome (WNS), incidental take is prohibited under the following circumstances:

1. If it occurs within a hibernacula,
2. If it results from tree removal activities and,
  - The activity occurs within ¼-mile of a known, occupied hibernacula; or,
  - The activity cuts or destroys a known, occupied maternity roost tree or other trees within a 150 foot radius from the maternity roost tree during the pup season from June 1 through July 31.

Because of the lack of existing preferred habitat at the subject site and no tree clearing, ECS believes no adverse impacts to habitat or the species will occur for the species listed. A project review request package was prepared based on this information and is attached in Appendix IX. The project review request package provided documentation that the project will not adversely impact protected species and was submitted to the USFWS on June 25, 2020 for their review and concurrence. That agency has 30 days to review and comment on the conclusions therein if they disagree with the findings. No response was received from USFWS which indicates they do not disagree with the Not Likely to Adversely Effect finding for the NLEB and no additional surveys or coordination with the USFWS is necessary. An updated IPaC Official Species List was run on December 23, 2020 to verify no new species were listed and that updated search confirmed no new listings for the site are present on the USFWS database. A follow up letter was also sent to the USFWS to confirm that agency did not have any additional requirements or concerns with the project and a response has yet to be received. We conclude that section 7 consultation under the Endangered Species Act is complete.

### **3.6.3 Migratory Bird Treaty Act**

#### Affected Environment

The project site consists of a fallow field with some forested areas in the southern portion of the site. Database information concerning the presence of protected species was reviewed from the USFWS (IPaC), VADGIF (FWIS), and the VA Department of Natural Resources (DNR) Natural Heritage Database, all of which do not indicate the presence of protected species, migratory birds, or their habitat being present on the subject site (Reference Appendix IX).

#### Environmental Consequences

Impacts to protected migratory bird species are not anticipated as none are known to be present at the site. Moreover, the proposed project will entail the construction of ground mounted solar arrays, which will pose little to no risk to migratory birds and the subject site consists of fallow field which provides very marginal habitat for protected species. Information obtained from the Audubon Society indicate that utility scale solar projects such as the proposed project are beneficial to native songbirds as they promote native plant species growth and aid in foraging for these species (<https://www.audubon.org/news/why-solar-power-good-birds>). Native plant species will be planted around the panels to promote the native species growth, as well as provide E&S control around the panel racks. The panels proposed are not the mirror reflective type that have caused bird mortality in mainly western states nor would this project cause population level impacts because of its small size. The solar panels proposed for use at this facility are designed to absorb the sunlight (photovoltaic panels) versus reflect the light; therefore a reflective glare and the phenomenon referred to as the "lake effect" is not a concern for this facility. Additionally, the photovoltaic panel type, the type proposed for this facility, are the preferred type of panel by the Audubon Society. Construction for the proposed project is anticipated to start in the winter, which is well outside the nesting season for birds in this location, further minimizing the potential for adverse impacts to migratory bird species. In summary, adverse impacts to migratory birds are not anticipated and special precautions should not be imposed by the MBTA as take of these species is not expected based on the project.

### 3.6.4 Invasive Species

#### Affected Environment

The proposed project site includes scrub and fallow land and invasive plant, noxious weeds, or other invasive species are not known to exist within the project site. Some relatively common invasive plants may be present along the fringes of the project area (Japanese honeysuckle or Multiflora rose), but the subject site in general does not appear to have an abundance of invasive species and consists primarily of early successional native growth.

#### Environmental Consequences

The proposed project does not have the potential to increase the spread of invasive species. Solar panels require vegetation to be maintained below the panel surface to operate efficiently and plant life will not be expected to spread following construction. The lack of significant earthwork, no fill material being imported onto the site, and lack of aquatic habitats within the project site result in a minimal potential for establishment of invasive species as a result of the proposed project.

### 3.7 Historic and Cultural Properties

#### Affected Environment

The site is located in a rural area of Rice, Prince Edward County, Virginia and is currently undeveloped scrub-shrub land. In order to evaluate the project's potential to impact cultural or historic resources, the direct Area of Potential Effect (APE) for the project was established as the 18.8 acre leased area. An additional indirect APE was established approximately 1/4 mile from the site to account for potential visual impacts. Along the northern and northeastern border, the 1/4 mile indirect APE was reduced to follow topography and vegetative screening boundaries. It should be noted that this indirect APE is likely over-conservative given the vegetative screening which will be provided or existing forest cover, which limits sight lines. According to the Virginia Department of Historic Resources (DHR) Virginia Cultural Resource Information System (VCRIS), no historic or cultural resources are mapped within the project area or area of potential effect (APE), both direct or indirect. A map showing the APE and VCRIS search results are provided in Appendix X.

#### Environmental Consequences

ECS submitted the results of the Virginia Cultural Resources Information System (VCRIS) database search to the State Historic Preservation Office (SHPO) for their concurrence, who responded and requested a Phase I archaeological and architectural study be conducted to verify the recommended no adverse effect determination. Dutton and Associates completed the requested evaluation in October 2020 and concluded that the project as proposed would have no adverse impact on historic resources and did not recommend additional investigation. Dutton and Associates' evaluation included the three existing structures located onsite and proposed for demolition. That evaluation was submitted to the SHPO for review and concurrence was received from DHR, dated December 16, 2020. A copy of this letter is provided in Appendix X. DHR indicated that, after consideration of all of the comments and documentation received related to potential impacts to historic property,

a recommended finding of *no adverse effect* is appropriate for the project and this should fulfill the Federal Agency's Section 106 obligations. The USDA submitted a finding of no adverse effect to DHR on January 4th.

Tribal consultation was determined through the use the online Tribal Directory Assessment Tool (TDAT) developed by the Office of Environment and Energy (OEE) to help users identify tribal contact information to assist users with initiating Section 106 consultation under the National Historic Preservation Act (54 U.S.C. § 300101 et seq.) On June 16, 2020 ECS submitted a finding of no historic properties affected in accordance with 36 CFR § 800.4(d)(1) and supporting documentation for review and consideration to the Delaware and Monacan Indian Nations. A concurrence or objection was requested to be provided within 30 days of submittal to each tribal nation. The Delaware Nation Tribal Historic Preservation Officer replied to the request stating no objection to the project and the Monacan Nation responded they do not wish to actively consult on the project. Both tribes did indicate should archaeological sites, artifacts, human remains or other unanticipated native cultural remains be encountered or if the scope of the project changes, all construction and ground disturbing activities should immediately be halted until appropriate state agencies and the tribes be notified and proper archaeological assessment can be made. Tribal consultation information is provided in Appendix X.

### **3.8 Aesthetics**

#### Affected Environment

The site is currently fallow scrub land and is not located within a visually sensitive area such as a wilderness area, park, scenic area, etc. Three derelict structures (former farm sheds) are present in the area proposed for the solar arrays and proposed for removal. Existing forest cover is present to the northeast, east, and south of the site and the proposed site plan calls for additional vegetation screening along the north and western portions of the site to eliminate sight lines from those directions, thereby reducing or eliminating visibility from public thoroughfares.

#### Environmental Consequences

While the proposed developments will alter the landscape of the area from scrub land, significant visual impacts on the surrounding area are not expected, especially in consideration of the limited height (14 feet) of the solar arrays and the surrounding wooded land and vegetative screening. Additionally, the removal of the derelict structures during the development of the solar project will help improve the overall aesthetics as these structures are rundown and in disrepair. The removal will include the remains of a fire destroyed house and two ivy covered farm structures and will also improve the natural aesthetics. Photographs of the structures are provided in Appendix III. The site is also not located in a designated scenic or visually sensitive area. As such, adverse impacts to aesthetics are not expected.

### 3.9 Air Quality

#### Affected Environment

According to the National Ambient Air Quality Standards, the site is not located in a non-attainment zone or in a maintenance zone (Reference Appendix XI). As such, no specific air quality standards are imposed on the project site. No fixed emission sources are proposed nor are construction emissions expected to be above *de minimis* levels given the short duration of construction.

#### Environmental Consequences

We expect temporary and transient increases in air pollution as a result of construction activities associated with the project. These sources may include dust and emissions from construction equipment and vehicles. We expect these increases to be sporadic and minimal. Fugitive dust will be kept to a minimum as will be required by the Stormwater Pollution Prevention Plan (SWPPP) and land disturbance permit. Measures to control dust may include application of water to suppress dust, and washing down construction vehicles and paved roadways immediately adjacent to construction areas (9VAC5-50-60 et. seq.) No sources of particulate or volatile pollutant emissions are proposed as part of the construction project (i.e. large boilers or generators). While transient construction vehicles will be used during the construction of the project, emissions from those vehicles will be short in duration and minimal through the use of low sulfur fuels. Therefore, we anticipate that the construction of the project will have an insignificant effect on the air quality within the immediate site vicinity and the County as a whole and is considered *de minimis* given the proposed use and duration of construction activities. Best management practices will be utilized to reduce or eliminate construction vehicle emissions or dust generation for the short term during construction. Long term air quality impacts are not expected; rather, given that the project involves implementing renewable energy generation, overall emissions would be expected to decrease as a result of lower fossil fuel demands for the existing power grid.

### 3.10 Socio-Economic/Environmental Justice

As part of the Agency's mission to support sound development of rural communities and provide economic opportunities for rural residents, consideration is made for either the positive or negative broader socioeconomic status of the areas being served, often focusing on population or income changes, or effects of local institutions such as schools, health care, or housing. Other factors for consideration must also be included regarding tax revenues, community cohesion or growth, property values, displacement of people or land, transportation, health and public safety, and public services or facilities.

Applicants are required to determine if their proposal has or may have a disproportionately high and adverse human health or environmental effect on minority or low-income populations under E.O. 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* and DR 5600-2 *Environmental Justice*.



### Affected Environment

A review of demographic information was performed by obtaining information from the U.S. Census Bureau. Year 2010 demographics data were obtained for Prince Edward County, Virginia (Reference Appendix XII). The census information indicates that approximately 63.4% of the population is white, approximately 32.8% of the population is black/African American, with the remaining 3.8% being Hispanic, American Indian, Asian, or other minorities. The population growth trend for the County is reported as a loss of 2.4% between April, 2010 and July, 2019.

As the site is currently undeveloped scrubland and the development of the solar site will not change how the surrounding properties are used or traveled on, the proposal should not change people's lives beyond the immediate provision of providing electricity to the area. Construction will require the use of local contractors to an extent, but that employment will be short term. The surrounding area is rural residential and the proposed project will not change the nature or character of the landscape as a vast majority of the farmland will remain unaltered. No residents will be displaced by the project.

According to EPA's Environmental Justice screening tool (Reference Appendix XII), the site is located in an area with 45% of the population identified as low income, almost double the state average, and 33% minority population, slightly below the state average. The proposed project will involve new construction of a solar farm on unoccupied, agricultural land and will not displace existing residents or adversely impact the environment or create injustice. Moreover, the EPA EJ Screen report and the Phase I ESA completed on the property did not identify environmental issues in the proximity of the property which would be expected to pose an environmental justice concern. Moreover, the proposed solar project will not impact local public services, roadways, institutions, schools, health care services, or housing. The local government would likely see an increase in tax revenue as a result of the project, the size of which would not be expected to be significant. Property values would also not be expected to be positively or negatively impacted, nor would any other public safety or service be impacted beyond the direct generation of clean energy.

### Environmental Consequences

The construction of the solar farm is not expected to have negative social or economic environmental consequences on the surrounding community. Conversely, the proposed project is intended to provide clean renewable energy to the existing electrical grid for the purposes of bettering the natural and human environment. The proposed project will help limit greenhouse gas emissions through the generation of solar energy while providing electricity to residential and commercial customers connected to the existing electrical grid. The public has been and will be provided opportunities to comment or participate in the planning for the project through the local site plan review process and no known objections have been raised. The project is not considered controversial or environmentally damaging and will not impact businesses, residences, or result in any other adverse social or economic impacts to local residents. No adverse environmental conditions were identified at the site or surrounding area which would pose a disproportionate environmental justice concern.



### **3.11 Miscellaneous Issues**

#### **3.11.1 Noise**

##### Affected Environment

The ambient noise at the site is typical of the noise expected in a rural/agricultural area. The vicinity of the project site is considered rural. Based on aerial photography, the nearest residential property to the proposed project site is located approximately 290 feet to the south. As a result, potential noise receptors are limited at the project site.

##### Environmental Consequences

Construction activities will increase some noise levels initially from construction equipment; however, these activities are scheduled to be performed during normal working hours for a short duration during the construction of the project.

The level of noise produced by the solar farm after construction is not expected to exceed current ambient noise levels in the area and will be negligible outside of the fenced area. No specialized equipment that would generate loud noises is proposed to be used or installed. Also, the noise that a solar facility produces only occurs when the equipment is in use and when the panels and inverters are resting at night there is no noise. No long term noise pollution is expected as a result of the proposed project.

BMPs will be employed to reduce or eliminate noise pollution during construction efforts, but given the short duration and lack of nearby sensitive noise receptors, impacts are not expected.

#### **3.11.2 Transportation**

##### **3.11.2.1 Federal Aviation Administration**

##### Affected Environment

Based on the NEPA Assist Mapping tool and the Federal Aviation Administration (FAA), the Site is not located within 20,000 feet of an airport (Reference Appendix I, Figure 4) and site developments are proposed to be less than 200 feet above the ground surface. As such, no official notice must be filed with the FAA.

##### Environmental Consequences

Based on our review of the proposed project, no environmental consequences to air traffic would be associated with the project.

### **3.11.2.2 Traffic**

#### Affected Environment

The proposed project anticipates a negligible increase in traffic to the site as the facility generally operates autonomously. Periodic (annual) and as-needed maintenance will be necessary, but these will be very sporadic and will not increase local traffic volumes or noise levels. In addition, no transportation of hazardous or other substances to or from the site are proposed during or after construction.

The construction activities do not propose to impact traffic patterns as the work will not be performed within the roadways. Supply materials will be off loaded at the site at the beginning of the project to reduce truck volume and duration. This will only cause a temporary delay in traffic on the site and will not affect traffic on Piney Grove Road given the low existing traffic and volume on that roadway. In total, the construction of the project is expected to take 22 weeks, although the material delivery will occur only at the very start of the project and no obstruction to traffic will occur during construction. The access road to the site, located on private property, will be upgraded to accommodate the construction and maintenance traffic to the site. A traffic study is not required by Prince Edward County and was not completed as part of the assessment of the site.

#### Environmental Consequences

The existing roadway and access road are considered adequate to accommodate the anticipated construction traffic without disrupting local traffic flow or patterns. The solar array is designed to operate with minimal maintenance requirements and post construction traffic will also not adversely impact the site or surrounding area. No traffic impacts are expected and additional evaluation or traffic studies are not required.

### **3.12 Human Health and Safety**

#### **3.12.1 Electromagnetic Fields and Interference**

#### Affected Environment

Because the project involves construction of a solar panel array and generation of electrical energy, the potential exists for Electromagnetic Fields (EMFs) to be generated. Studies conducted on the EMF generation of commercial solar fields have indicated that EMF generation at these commercial scale facilities is below acceptable exposure levels with the highest EMF generation measured near inverters and transformer units. The abstract of one such study, (Tell, 2015), stated:

"A solar facility converts direct current generated by the solar panels to three-phase 60-Hz power that is fed to the grid. This conversion involves sequential processing of the direct current through an inverter that produces low-voltage three-phase power, which is stepped up to distribution voltage (~12 kV) through a transformer. This study characterized magnetic and electric fields between the frequencies of 0 Hz and 3 GHz at two facilities operated by the Southern California Edison Company in Porterville, CA and San Bernardino, CA. Static

magnetic fields were very small compared to exposure limits established by IEEE and ICNIRP. The highest 60-Hz magnetic fields were measured adjacent to transformers and inverters, and radiofrequency fields from 5–100 kHz were associated with the inverters. The fields measured complied in every case with IEEE controlled and ICNIRP occupational exposure limits. In all cases, electric fields were negligible compared to IEEE and ICNIRP limits across the spectrum measured and when compared to the FCC limits ( $\geq 0.3$  MHz)."

While the project will likely generate some EMF, available scientific literature suggests they will be negligible levels well below established permissible exposure thresholds.

### Environmental Consequences

The solar panel arrays have been sited away from occupied residences and well beyond the range expected for EMF generation. Studies (Tell, 2015) show that at approximately 3 feet of distance from inverter units, which generate the highest EMF levels on a commercial solar project, EMF levels are a fraction of the permissible exposure level. Beyond 3 feet levels are negligible. Since the project site is several hundred feet from any occupied residence and will be fenced to prevent unauthorized access, exposure to EMF is not anticipated.

## **3.12.2 Environmental Risk Management**

### Affected Environment

A Phase I Environmental Site Assessment (PESA) was conducted at the subject site by ECS on June 20, 2019 in accordance with ASTM E1527-13 and updated May 11, 2020 and January 14, 2021. The results of the ESAs did not identify Recognized Environmental Conditions for the subject site. A former drinking water supply well was observed near the abandoned and derelict structures located on the central portion of the subject property. Based on the rural nature of the surrounding area it is likely that a septic system is also located on the property. It was recommended that these systems should be properly abandoned in accordance with health department procedures during development of the property.

### Environmental Consequences

No indications of releases or contamination were observed at or around the property. The proposed project will not generate or store hazardous waste and special permitting or regulatory coordination is not required for environmental waste or contaminant issues. As such, no impacts are expected.

## **3.13 Corridor Analysis**

### Affected Environment

Interconnection to the existing electrical grid will be completed sometime in the future by the local utility company as part of a different project and will obtain all required reviews and approvals for that project, as necessary. Connection to the grid is not currently part of this development project or funding request. No federal funding is expected to be used in the future interconnection project and is anticipated to be completed by the local utility company. While information from the local utility is not available concerning timing or design of this future project, Holocene believes the

most likely interconnection point for the project will be to the north of the solar array along Piney Grove Road and near the proposed access road and almost entirely within the proposed limits of disturbance of this project (reference Appendix II). Therefore, the interconnection corridor will likely be entirely contained within the project site as existing infrastructure exists along Piney Grove Road.

### Environmental Consequences

Based on our review of the proposed work, no corridor analysis is necessary at this time. Nonetheless, given the proximity to existing infrastructure, specifically electrical poles and lines along the northern property boundary, the interconnection corridor project to be conducted by the local utility would not be expected to adversely impact environmental resources.

## 4.0 SUMMARY OF ENVIRONMENTAL IMPACTS

Resource	Impact Analysis
Land Use	No significant adverse impacts.
Farmland	Conversion of approximately 18.8 acres of farmland proposed. No significant impact to surrounding farmland infrastructure or capability and consultation with USDA concluded.
Formerly Classified Land	No significant adverse impacts.
Floodplains	Not present; no significant adverse impacts.
Wetlands	Minimal impacts (0.06 ac) are proposed but are limited. All impacts will be completed in compliance with Nationwide Permit 51 and USACE requirements.
Water Resources	No significant adverse impacts. Stormwater management and E&S controls required by VPDES permits.
Coastal Resources	Not present. No significant adverse impacts.
Biological Resources - Fish, Wildlife and Vegetation	No significant deterioration or fragmentation of wildlife habitat or vegetation communities. No significant adverse impacts; USFWS consultation concluded.
Biological Resources - Threatened and Endangered	Not likely to adversely effect Northern Long Eared Bat given minimal tree clearing proposed. USFWS consultation concluded.
Biological Resources - Migratory Bird Treaty Act	No significant adverse impacts.
Biological Resources - Invasive Species	No significant adverse impacts.
Historic and Cultural Properties	No significant adverse impacts. Archaeological study concluded and SHPO concurrence requested.
Aesthetics	No significant adverse impacts.
Air Quality	Minimal short term effect during construction; no significant adverse impacts.

Resource	Impact Analysis
Socio-Economic/ Environmental Justice	No significant adverse impacts.
Noise	Minimal short term effect during construction; no significant adverse impacts.
Transportation	No significant adverse impacts.
Human Health and Safety	No significant adverse impacts.

Temporary impacts due to noise and air pollution during construction are anticipated from construction vehicles; however, these impacts are temporary and at the completion of the project, noise and air pollution will be comparable to the current conditions. Construction will only be allowed during normal working hours to prevent noise pollution on nearby properties outside of these times. Disturbance to the subsurface is proposed to be performed at shallow depths with the exception of piles, to be driven directly into the ground. On-site erosion and sediment controls will be utilized during and after construction to control surface runoff and all appropriate stormwater management plans and reviews will be completed prior to site plan approval. No listed historic or archaeological resources have been documented within the project limits nor are threatened or endangered species believed to be adversely effected. Hazardous wastes will not be generated nor are anticipated to be encountered during construction. The proposed project will not be expected to impact the surrounding community but rather is designed to provide a benefit to it through the production of clean renewable energy for the purposes of bettering the natural and human environment. In summary, no significant adverse environmental impacts are proposed or anticipated and the minor/short term impacts discussed above are not expected to significantly impact the natural or human environment.

## 5.0 SUMMARY OF MITIGATION

Based on the proposed project and information gathered for this EA, we believe the information contained herein demonstrates no significant environmental impact and extra mitigation measures do not appear to be warranted for the project. The site selection procedures, project design layout and landscape buffers, VPDES and USACE permit conditions, standard construction BMPs, and adequate stormwater management and E&S plans all appear sufficient to alleviate and/or prevent impacts to the natural or human environment. The avoidance and minimization measures have either already been employed in the design conducted to date, or will be part of the standard construction procedures for a project such as this. Additional mitigation measures beyond the procedures specified above do not appear warranted.

## 6.0 COORDINATION, CONSULTATION AND CORRESPONDENCE

During the preparation of this EA, ECS consulted with the following agencies or agency websites:

- Prince Edward County Property Cards
- NRCS Soil Survey and local Field Office
- FEMA Flood Plain Map
- US Fish and Wildlife Services – Wetland Mapper
- National Park Service - National Wild and Scenic Rivers System
- EPA – Sole Source Aquifers Mapping System
- VDEQ - Scoping Letters (Appendix XIII)
- VDEQ's Map of Virginia Coastal Zone
- US Fish and Wildlife Services – Coastal Barrier Resource System
- US Fish and Wildlife Services – IPaC
- Delaware Nation
- Monacan Indian Nation
- VA DCR
- EPA Green Book: Nonattainment Areas for Criteria Pollutant
- EPA Environmental Justice Screening
- US Census Data
- FAA
- NEPA Assist



## 7.0 REFERENCES

Supporting documentation from the consulted agencies and sources is provided in the Appendices to this EA.

Prince Edward County Property Cards, last accessed July 10, 2020. <https://epayments.co.prince-edward.va.us/applications/txapps/VPCIndex.htm>

NRCS Soil Survey, last accessed June 16, 2020. <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

Formally Classified Land, last accessed June 5, 2020  
<https://www.arcgis.com/home/item.html?id=5e92f2e0930848faa40480bcb4fdc44e>

FEMA Flood Plain Map, last accessed June 12, 2020. <https://msc.fema.gov/portal/home>

US Fish and Wildlife Services – Wetland Mapper, last accessed June 16, 2020. <https://www.fws.gov/wetlands/data/mapper.html>

National Park Service - National Wild and Scenic Rivers System, last accessed June 25, 2020. <https://www.rivers.gov/virginia.php>

EPA – Sole Source Aquifers Mapping System, last accessed June 8, 2020. <https://www.epa.gov/dwssa/map-sole-source-aquifer-locations>

VDEQ's Map of Virginia Coastal Zone, last accessed June 8, 2020. <https://www.deq.virginia.gov/Portals/0/DEQ/CoastalZoneManagement/Virginia%20CZM%20Program%20Overview.pdf>

US Fish and Wildlife Services – Coastal Barrier Resource System, last accessed July 10, 2020. <https://www.fws.gov/CBRA/Maps/Mapper.html>

US Fish and Wildlife Services – Threatened and Endangered Species Virginia, last accessed June 25, 2020. <https://ecos.fws.gov/ecp/>

Tribal Directory Assessment Tool (TDAT), last accessed June 4, 2020 <https://egis.hud.gov/tdat/>

Section 106 Review Basics, last accessed June 10, 2020 <https://www.rd.usda.gov/programs-services/all-programs/water-environmental-programs/section-106-review-basics>

VA DCR, last accessed June 17, 2020. <https://www.dcr.virginia.gov/>

EPA Green Book: Nonattainment Areas for Criteria Pollutant, last accessed June 8, 2020. <https://www.epa.gov/green-book>

EPA Environmental Justice Screening, last accessed June 12, 2020. <https://www.epa.gov/environmentaljustice>

US Census Data, last accessed June 12, 2020. <https://www.census.gov/quickfacts/pittsylvaniacountyvirginia>

Prince Edward - USDA 2017 Agricultural Census, last accessed June 16, 2020. [https://www.nass.usda.gov/Publications/AgCensus/2017/Online\\_Resources/County\\_Profiles/Virginia/cp51143.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Virginia/cp51143.pdf)

FAA, last accessed June 8, 2020. <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp>

NEPA Assist, last accessed June 8, 2020. <https://www.epa.gov/nepa/nepassist>

USDA, last accessed June 25, 2020 <https://www.rd.usda.gov/resources/environmental-studies/environmental-guidance>

Phase I Environmental Site Assessment Completed by ECS, dated July 20, 2019 (ECS Project No. 47:8304-A) updated May 11, 2020 (ECS Project No. 47:8302-B).

Tell RA, Hooper HC, Sias GG, Mezei G, Hung P, Kavet R. Electromagnetic Fields Associated with Commercial Solar Photovoltaic Electric Power Generating Facilities. *J Occup Environ Hyg*. 2015;12(11):795-803. doi:10.1080/15459624.2015.1047021

## 8.0 LIST OF PREPARERS

This EA was completed by the following ECS Mid-Atlantic, LLC (consultant) personnel:

Alexandra Moon  
Senior Project Manager

Adam Meurer, CHMM, PWS, LEED AP  
Principal

This EA was completed by the following USDA RUS personnel:

Christine Allen  
Senior Environmental Protection Specialist

Suzanne Kopich  
Environmental Protection Specialist

James Warner  
State Environmental /Civil Rights Coordinator

# **Appendix I: Figures**



**Figure 1 Site Location Map**

Moran I Solar

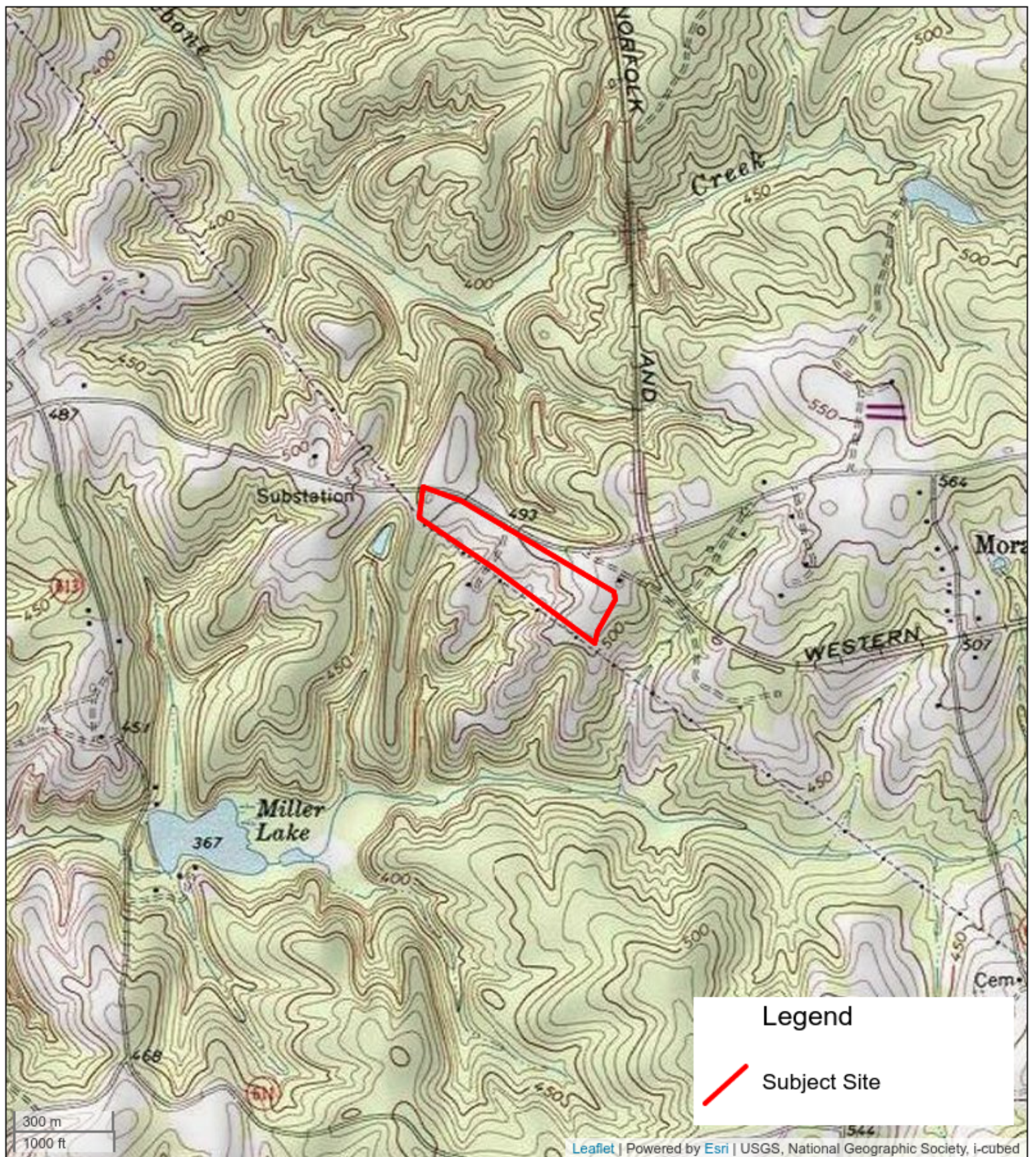
Piney Grove Road

Rice, Virginia 23966

ECS Project No. 47:8304-C







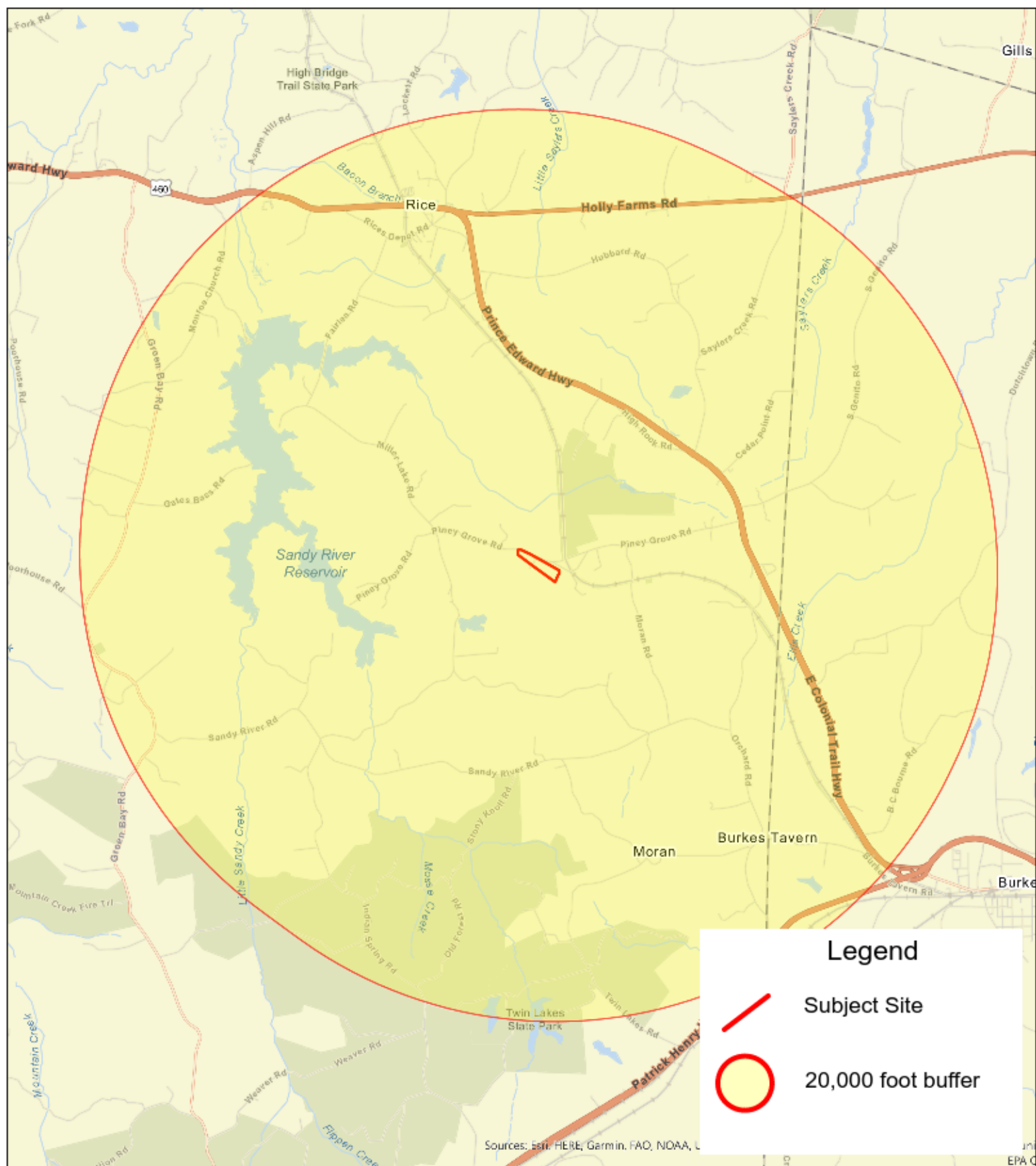
**Figure 2 USGS Topographic Map**

Moran I Solar  
Piney Grove Road  
Rice, Virginia 23966  
ECS Project No. 47:8304-C









**Figure 4 20,000 Foot Airport Buffer**

Moran I Solar

Piney Grove Road

Rice, Virginia 23966

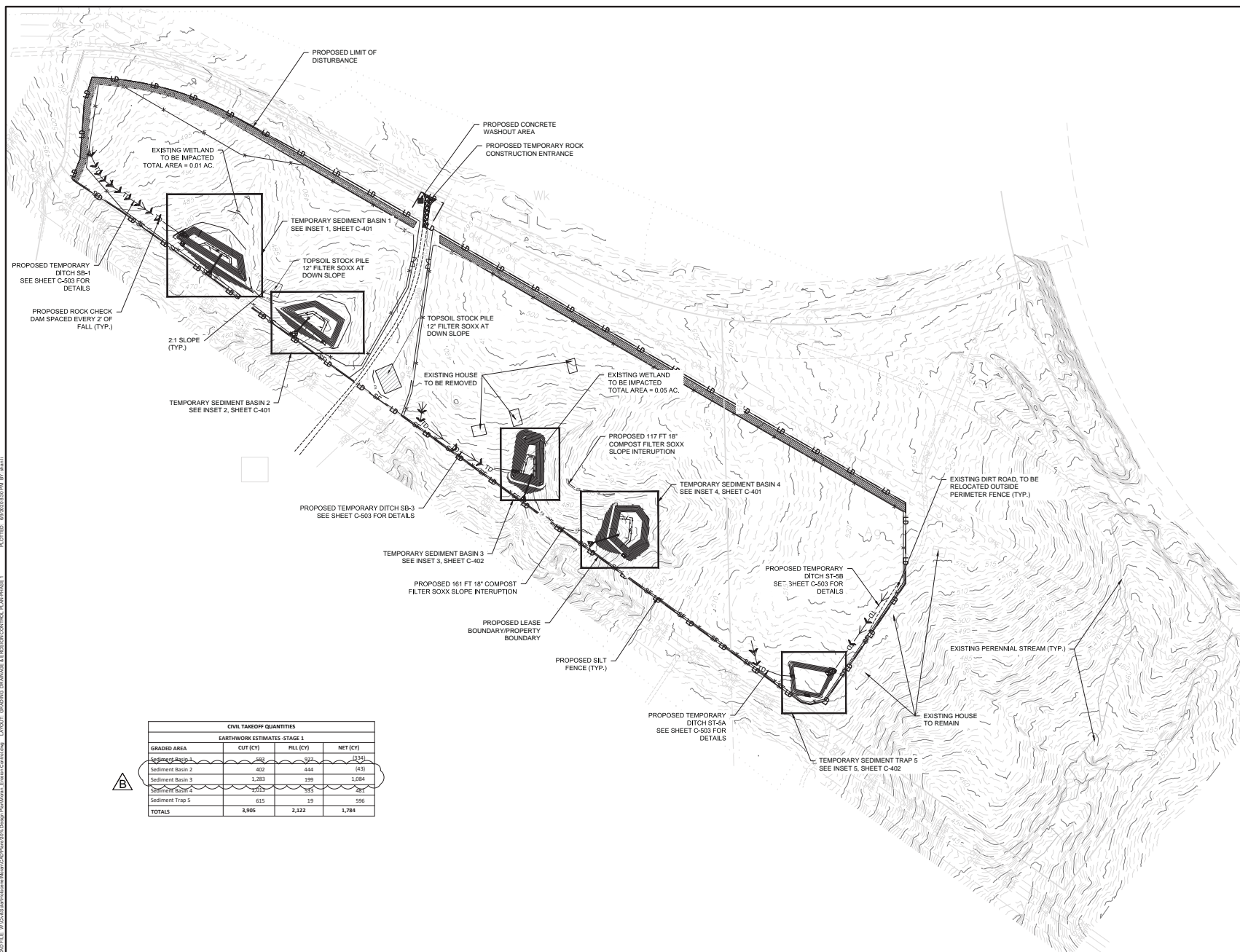
ECS Project No. 47:8304-C



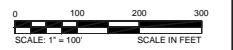
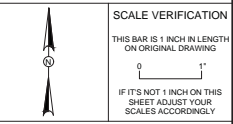


## **Appendix II: Drawings**



[illegible]

ISSUED FOR  
PERMITTING



GRADING, DRAINAGE & EROSION  
CONTROL PLAN-PHASE 1

MORAN SOLAR I, LLC  
PINEY GROVE ROAD  
PRINCE EDWARD COUNTY, VIRGINIA



ISSUE FOR PERMIT	
PROJECT NO. 20203784.001A	C-301
ISSUE DATE 4/14/2020	
CURRENT REVISION A	
DESIGNED BY YQ	
DRAWN BY YQ	
CHECKED BY BMP	
APPROVED BY CGO	SHEET NUMBER







## **Appendix III: Site Photographs**





1 - Northern portion of the property.



2 - Central portion of the property.



3 - Central portion of the property.



4 - Southern property boundary.





5 - Agricultural outbuilding to be removed.



6 - Remains of a residential structure to be removed.





7 - Remains of a residential structure to be removed.



8 - Well located near the former residential structure.





9 - Surface water along the southern property boundary.



10 - Surface water along the southern property boundary.





11 - Access to the adjoining residential property to the south.



12 - Northern portion of the property.

## **Appendix IV: Land Use**

**FARMLAND CONVERSION IMPACT RATING**

<b>PART I</b> (To be completed by Federal Agency)		Date Of Land Evaluation Request			
Name of Project		Federal Agency Involved			
Proposed Land Use		County and State			
<b>PART II</b> (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form:	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)		YES <input type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres:                      %		Amount of Farmland As Defined in FPPA Acres:                      %		
Name of Land Evaluation System Used	Name of State or Local Site Assessment System		Date Land Evaluation Returned by NRCS		
<b>PART III</b> (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly					
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site					
<b>PART IV</b> (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide Important or Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
<b>PART V</b> (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)					
<b>PART VI</b> (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)			
2. Perimeter In Non-urban Use		(10)			
3. Percent Of Site Being Farmed		(20)			
4. Protection Provided By State and Local Government		(20)			
5. Distance From Urban Built-up Area		(15)			
6. Distance To Urban Support Services		(15)			
7. Size Of Present Farm Unit Compared To Average		(10)			
8. Creation Of Non-farmable Farmland		(10)			
9. Availability Of Farm Support Services		(5)			
10. On-Farm Investments		(20)			
11. Effects Of Conversion On Farm Support Services		(10)			
12. Compatibility With Existing Agricultural Use		(10)			
TOTAL SITE ASSESSMENT POINTS		160			
<b>PART VII</b> (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100			
Total Site Assessment (From Part VI above or local site assessment)		160			
<b>TOTAL POINTS (Total of above 2 lines)</b>		260			
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>			
Reason For Selection:					
Name of Federal agency representative completing this form:					Date:

(See Instructions on reverse side)

Form AD-1006 (03-02)

## **STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM**

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at [http://offices.usda.gov/scripts/ndISAPI.dll/oip\\_public/USA\\_map](http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map), or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

## **INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM**

*(For Federal Agency)*

**Part I:** When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

**Part III:** When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

**Part VI:** Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

**Part VII:** In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$
---

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

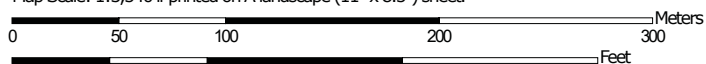


# Farmland Classification—Prince Edward County, Virginia



Soil Map may not be valid at this scale.

Map Scale: 1:3,540 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84



**Natural Resources  
Conservation Service**


Web Soil Survey  
National Cooperative Soil Survey

6/16/2020  
Page 1 of 5











## MAP LEGEND








### Area of Interest (AOI)






 Area of Interest (AOI)








### Soils



#### Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season









-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of unique importance
-  Not rated or not available

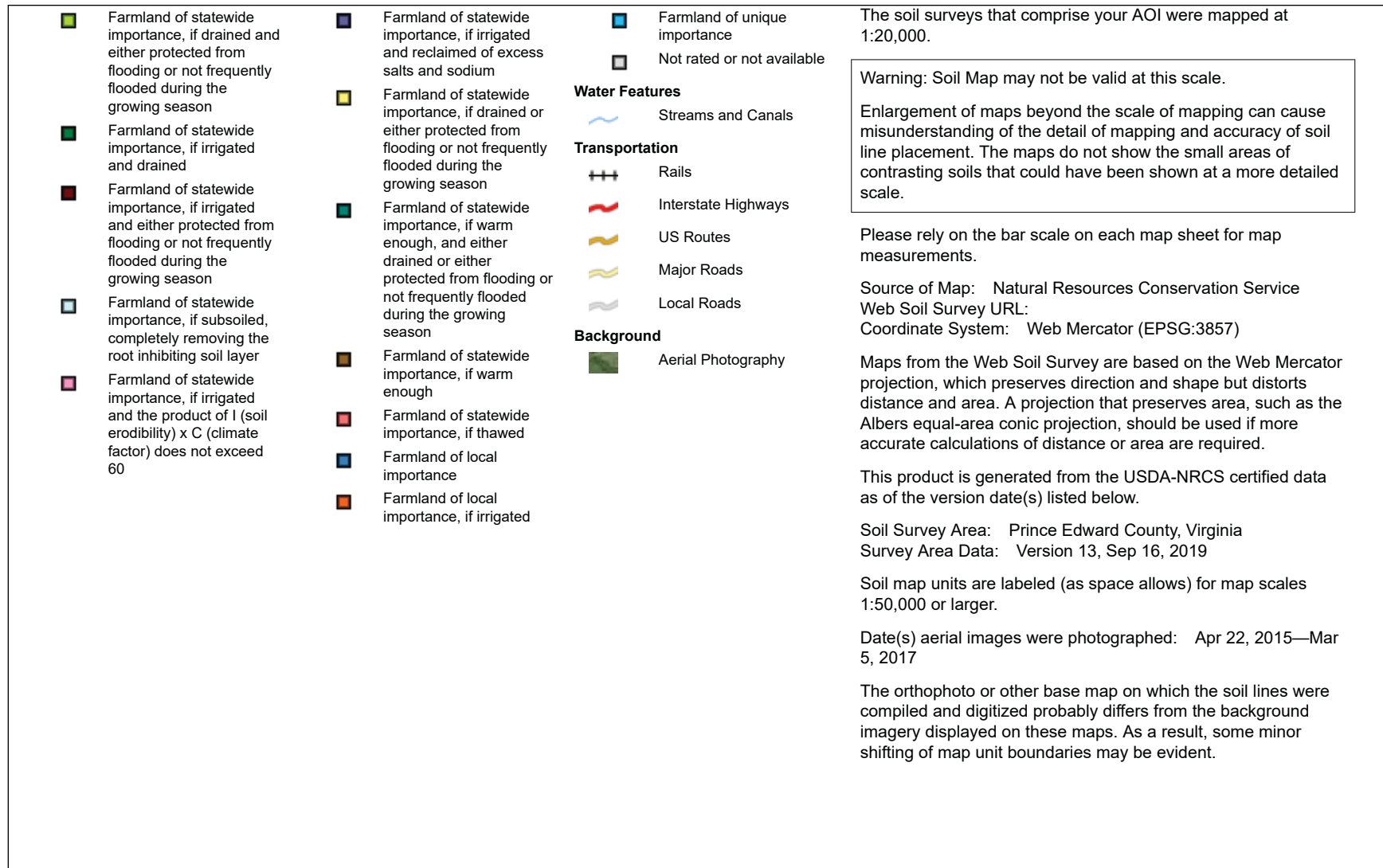
### Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

# Farmland Classification—Prince Edward County, Virginia

	Prime farmland if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium		Farmland of unique importance		Prime farmland if subsoiled, completely removing the root inhibiting soil layer
	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if irrigated and drained		Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season	<b>Soil Rating Points</b>			Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
	Prime farmland if irrigated and reclaimed of excess salts and sodium		Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season		Not prime farmland		Prime farmland if irrigated and reclaimed of excess salts and sodium
	Farmland of statewide importance		Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if thawed		Prime farmland if protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance
	Farmland of statewide importance, if drained		Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of local importance		Prime farmland if irrigated		Farmland of statewide importance, if drained
	Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season				Farmland of local importance, if irrigated		Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
	Farmland of statewide importance, if irrigated						Prime farmland if irrigated and drained		Farmland of statewide importance, if irrigated
							Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season		

# Farmland Classification—Prince Edward County, Virginia



## Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ag	Appling sandy loam, undulating phase	All areas are prime farmland	3.0	15.2%
Ca	Cecil clay loam, eroded rolling phase	Not prime farmland	4.4	22.6%
Ce	Cecil fine sandy loam, hilly phase	Farmland of statewide importance	0.1	0.4%
Cf	Cecil fine sandy loam, rolling phase	Farmland of statewide importance	2.3	11.7%
Cg	Cecil fine sandy loam, undulating phase	All areas are prime farmland	5.5	28.0%
lb	Iredell-Zion fine sandy loams, undulating phases	Farmland of statewide importance	0.2	1.0%
Lc	Lloyd clay loam, eroded undulating phase	Not prime farmland	1.6	8.0%
Li	Louisa fine sandy loam, eroded undulating phase	Not prime farmland	2.6	13.0%
Rb	Rock land	Not prime farmland	0.0	0.1%
Totals for Area of Interest			19.6	100.0%

## Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

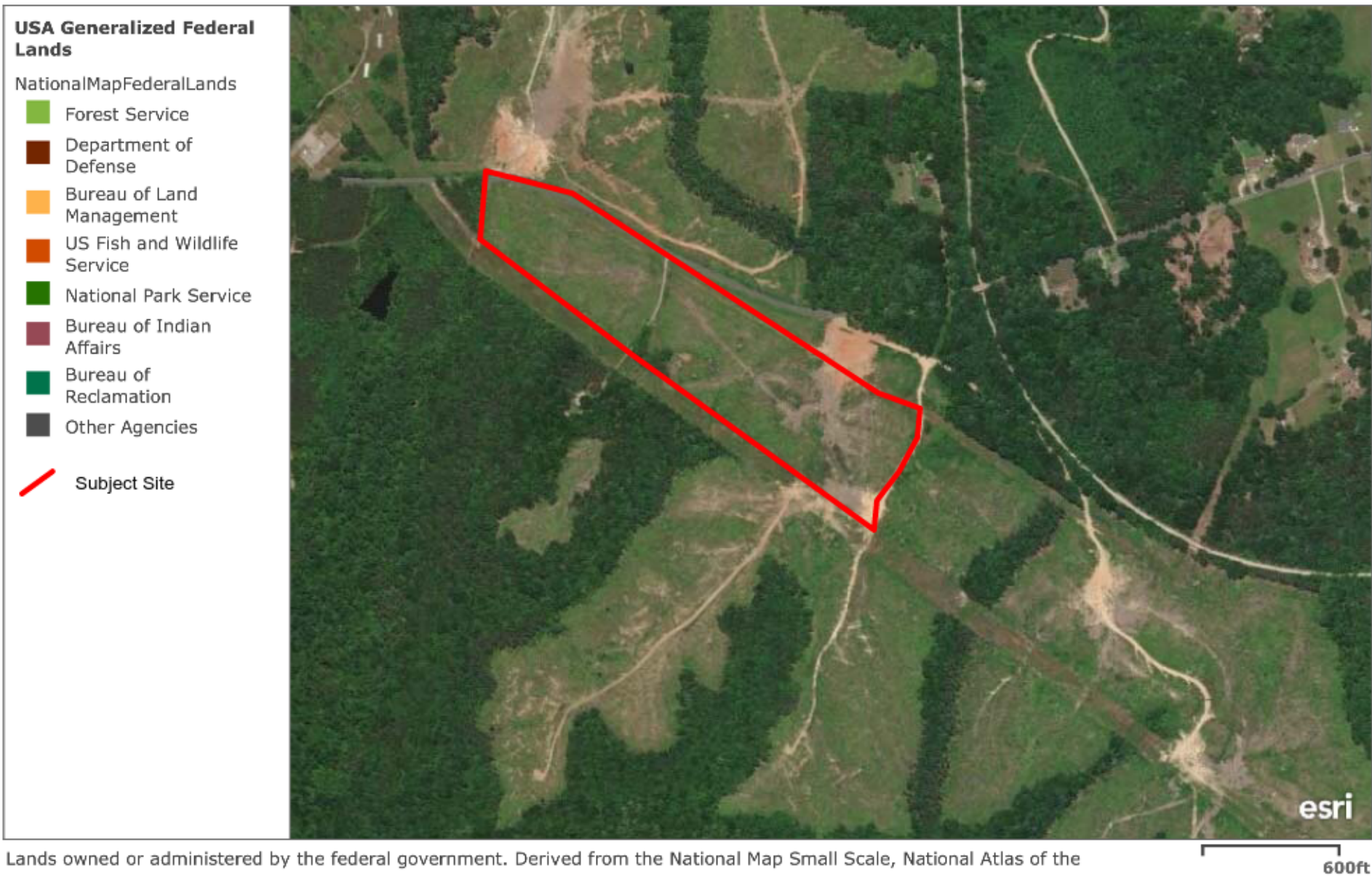
## Rating Options

*Aggregation Method:* No Aggregation Necessary

*Tie-break Rule:* Lower



USA Generalized Federal Lands



Lands owned or administered by the federal government. Derived from the National Map Small Scale, National Atlas of the United States.



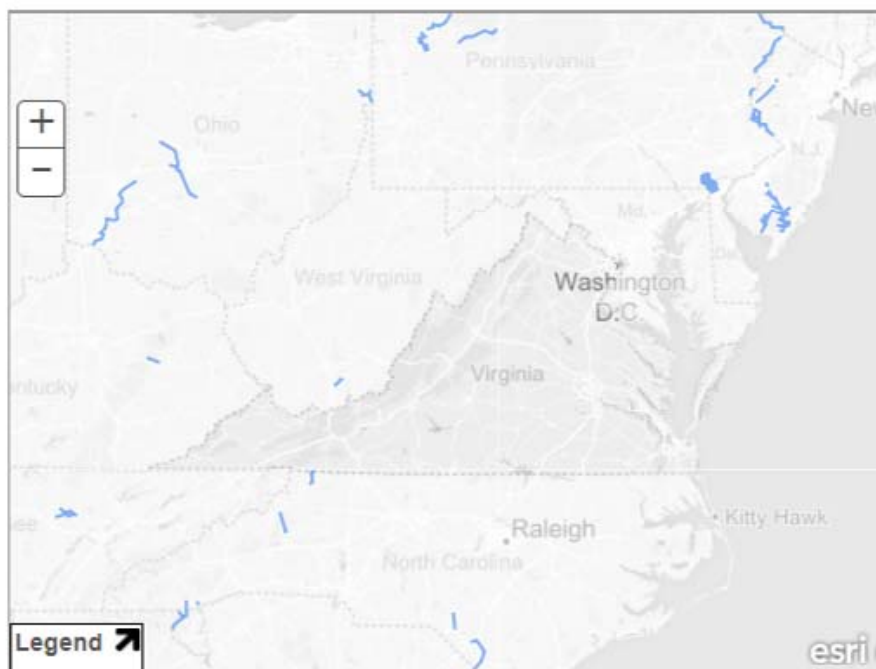


# NATIONAL WILD AND SCENIC RIVERS SYSTEM

[NATIONAL SYSTEM](#)[MANAGEMENT](#)[RESOURCES](#)[PUBLICATIONS](#)[CONTACT US](#)[50 YEARS](#)[SITE INDEX](#)

## VIRGINIA

Virginia has approximately 49,350 miles of river, but no designated wild & scenic rivers.

[+ View larger map](#)

Virginia does not have any designated rivers.

### EXPLORE DESIGNATED RIVERS

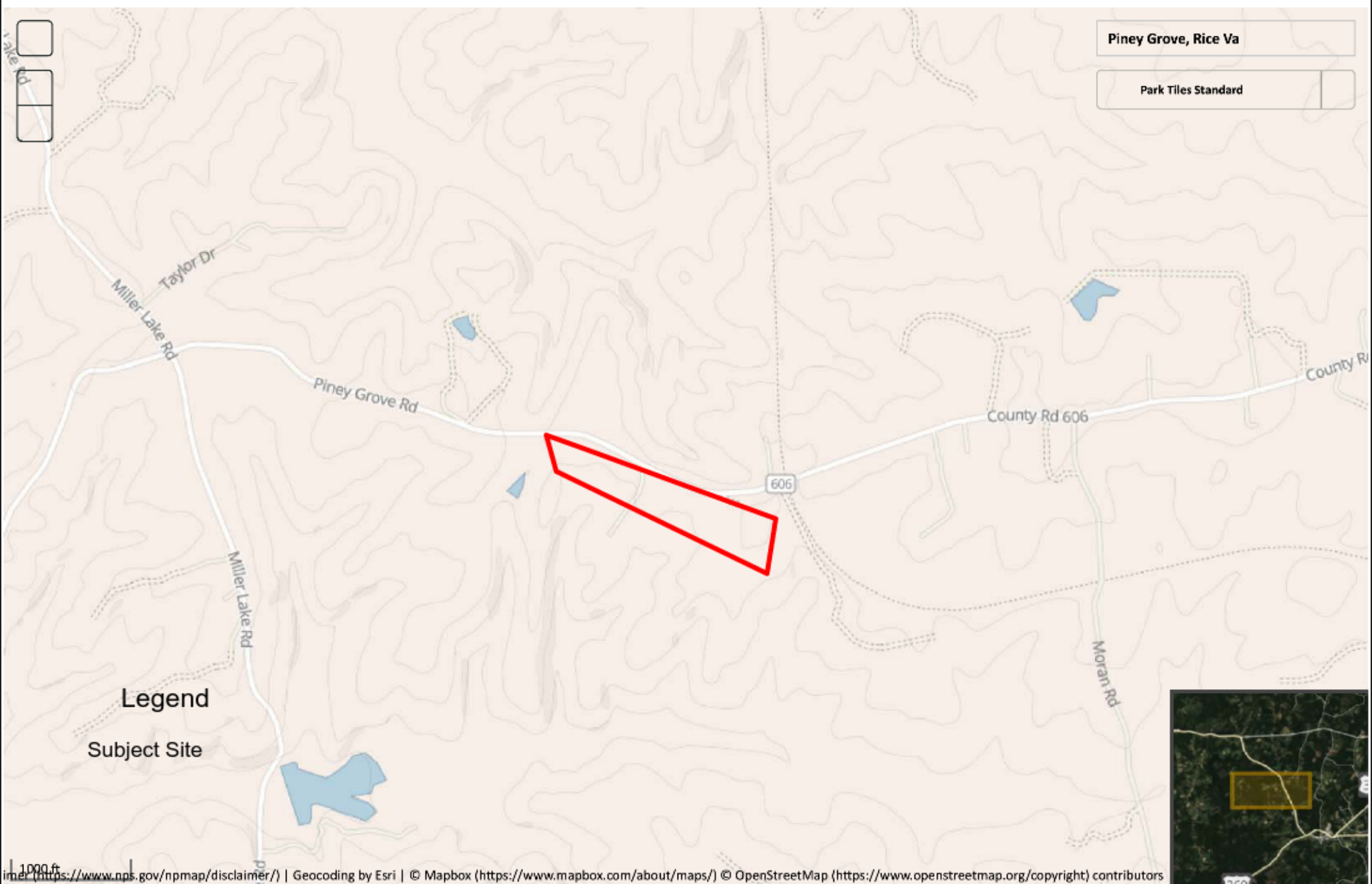
*While progress should never come to a halt,  
there are many places it should never come to  
at all. — Paul Newman*



# Nationwide Rivers Inventory

National Park Service  
U.S. Department of the Interior

This is a listing of more than 3,200 free-flowing river segments in the U.S. that are believed to possess one or more "outstandingl...



## Alexandra Moon

---

**From:** ImpactReview <impactreview@vof.org>  
**Sent:** Monday, January 4, 2021 11:37 AM  
**To:** Fulcher, Valerie; Alexandra Moon; eir@deq.virginia.gov  
**Subject:** RE: NEW SCOPING REQUEST Moran Solar 1 Project, Prince Edward County

Ms. Moon,

The Virginia Outdoors Foundation has reviewed the project referenced above. As of 4 January 2021, there are not any existing nor proposed VOF open-space easements in the immediate vicinity of the project.

Please contact VOF again for further review if the project area changes or if this project does not begin within 24 months. Thank you for considering conservation easements.

Thanks,  
Mike

Mike Hallock-Solomon, AICP  
Virginia Outdoors Foundation

---

**From:** Fulcher, Valerie <valerie.fulcher@deq.virginia.gov>  
**Sent:** Friday, December 18, 2020 2:00 PM  
**Cc:** AMoon@ecslimited.com  
**Subject:** NEW SCOPING REQUEST Moran Solar 1 Project, Prince Edward County

Alert: This email originated from outside VOF

**Good afternoon—attached is a request for scoping comments on the following:**

**Moran Solar 1 Project Piney Grove Road, Rice, Prince Edward County, Virginia**

**If you choose to make comments, please send them directly to the project sponsor ([AMoon@ecslimited.com](mailto:AMoon@ecslimited.com)) and copy the DEQ Office of Environmental Impact Review: [eir@deq.virginia.gov](mailto:eir@deq.virginia.gov). We will coordinate a review when the environmental document is completed.**

**DEQ-OEIR's scoping response is also attached.**

**If you have any questions regarding this request, please email our office at [eir@deq.virginia.gov](mailto:eir@deq.virginia.gov).**

**Valerie**

--

Valerie A. Fulcher, CAP, OM, Admin/Data Coordinator Senior

Department of Environmental Quality

Environmental Enhancement - Office of Environmental Impact Review



1111 East Main Street

Richmond, VA 23219

[804/698-4330](tel:8046984330)

Email: [Valerie.Fulcher@deq.virginia.gov](mailto:Valerie.Fulcher@deq.virginia.gov)

<https://www.deq.virginia.gov/permits-regulations/environmental-impact-review>

**OUR ENFORCEABLE POLICIES HAVE BEEN UPDATED FOR 2020:** <https://www.deq.virginia.gov/permits-regulations/environmental-impact-review/federal-consistency>

For program updates and public notices please subscribe to Constant

Contact: <https://lp.constantcontact.com/su/MVcCump/EIR>

=====

This message has been analyzed by Deep Discovery Email Inspector.

## **Appendix V: Flood Plains**

# National Flood Hazard Layer FIRMMette



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance Water Surface Elevation
MAP PANELS		Coastal Transect
		Base Flood Elevation Line (BFE)
MAP PANELS		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Coastal Transect Baseline
		Profile Baseline
MAP PANELS		Hydrographic Feature
		Digital Data Available
MAP PANELS		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/12/2020 at 12:40:33 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

37°13'55.41"N

78°18'39.65"W



USGS The National Map: Orthoimagery. Data refreshed April 2020

37°13'26.76"N

78°18'2.19"W

0 250 500 1,000 1,500 2,000 Feet 1:6,000

## **Appendix VI: Wetlands**

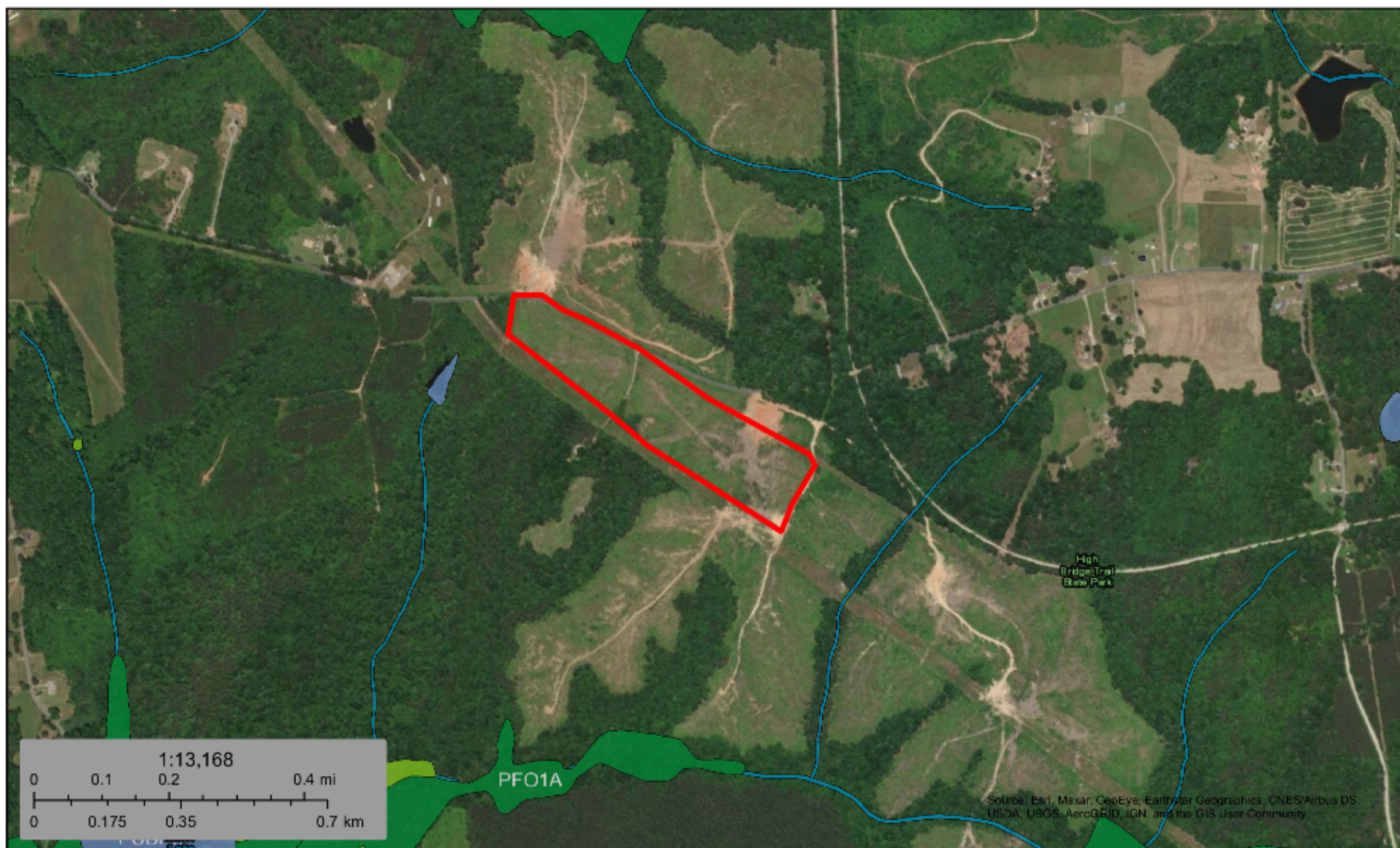




U.S. Fish and Wildlife Service

# National Wetlands Inventory

Moran



June 16, 2020

## Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Subject Site

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



DEPARTMENT OF THE ARMY  
US ARMY CORPS OF ENGINEERS  
NORFOLK DISTRICT  
FORT NORFOLK  
803 FRONT STREET  
NORFOLK VA 23510-1011

November 25, 2019

**PRELIMINARY JURISDICTIONAL DETERMINATION**

Western Virginia Regulatory Section  
NAO-2019-01751 (Unnamed Tributaries to Sandy River Reservoir)

Ms. Ana Sawyer  
394 East Main Street  
Lebanon, Virginia 24266

Mr. Davis Plunkett  
Holocene Clean Energy  
4325 Lake Boone Trail #200  
Raleigh, North Carolina 27607

Dear Ms. Sawyer and Mr. Plunkett:

This letter is in regards to Holocene Clean Energy's request for a preliminary jurisdictional determination for waters of the U.S. (including wetlands) on property known as Moran I Solar Site, an approximately 40-acre project area located to the along Piney Grover Road, in Rice, Prince Edward County, Virginia (portions of tax map parcels 69-4-B and 69-A-14).

The map entitled "Waters of the U.S. Delineation Map, Moran Solar I Piney Grove Road", by ECS Mid-Atlantic, LLC; dated July 2, 2019, (copy enclosed) provides the locations of waters and/or wetlands on the property listed above. The basis for this delineation includes application of the Corps' 1987 Wetland Delineation Manual (*and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region*) and the positive indicators of wetland hydrology, hydric soils, and hydrophytic vegetation and the presence of an ordinary high water mark. Please note this letter is not the Corps' confirmation of the Cowardin classifications of these aquatic resources.

The Norfolk District relied on the information and data provided by the applicant or agent. If such information and data subsequently prove to be materially false or materially incomplete, this verification may be suspended or revoked, in whole or in part, and/or the Government may institute appropriate legal proceedings.

Discharges of dredged or fill material, including those associated with mechanized landclearing, into waters and/or wetlands on this site may require a Department of the Army permit and authorization by state and local authorities including a Virginia Water Protection Permit from the Virginia Department of Environmental Quality (DEQ), a permit from the Virginia Marine Resources Commission (VMRC) and/or a permit from

Western Virginia Regulatory Section  
NAO-2019-01751 (Unnamed Tributaries to Sandy River Reservoir)

your local wetlands board. This letter is a confirmation of the Corps preliminary jurisdiction for the waters and/or wetlands on the subject property and does not authorize any work in these areas. Please obtain all required permits before starting work in the delineated waters/wetland areas.

This is a preliminary jurisdictional determination and is therefore not a legally binding determination regarding whether Corps jurisdiction applies to the waters or wetlands in question. Accordingly, you may consent to jurisdiction as set out in this preliminary jurisdictional determination and the attachments hereto if you agree with the determination, or you may request and obtain an approved jurisdictional determination. This preliminary jurisdictional determination and associated delineation map may be submitted with a permit application.

Enclosed is a copy of the "Preliminary Jurisdictional Determination Form". Please review the document, sign, and return one copy to me, via email at [jennifer.s.frye@usace.army.mil](mailto:jennifer.s.frye@usace.army.mil) or via standard mail to USACE, Roanoke Regulatory Field Office, Richard H. Poff Federal Building, Room 749, 210 Franklin Road SW, Roanoke, Virginia 24011, within 30 days of receipt and keep one for your records. You may rely on this delineation for planning and permitting purposes for no more than five years; however, new information may warrant revisions to this delineation at any time.

If you have any questions or concerns regarding this preliminary jurisdictional determination or the Corps' Regulatory Program, please contact me at (540) 344-1498.

Sincerely,

Jennifer Serafin  
Frye

Digitally signed by Jennifer Serafin  
Frye  
Date: 2019.11.25 14:54:49 -05'00'

Jennifer Serafin Frye, Chief  
Western Virginia Regulatory Section

Enclosure(s):  
Appeals Form  
Delineation Map  
Preliminary Jurisdictional Determination Form

Cc:

Matt Dalton and Jessica Consolvo, ECS Mid-Atlantic, LLC  
Jesse (Jay) Roberts, Virginia Department of Environmental Quality





**LEGEND**

- STREAM CHANNEL
- PALUSTRINE EMERGENT (PEM) WETLAND
- PALUSTRINE FORESTED (PFO) WETLAND
- PALUSTRINE OPEN WATER (POW)
- PALUSTRINE SCRUB-SHRUB (PSS)/PEM WETLAND
- APPROXIMATE WETLAND DATAPOINT LOCATION
- STUDY AREA

1. WATER FEATURES WERE DELINEATED BY ECS ON JUNE 13-14, 2019 AND LOCATED USING A SUB-METER ACCURACY GPS UNIT.
2. WATER FEATURES DEPICTED HEREIN SHOULD BE CONSIDERED PRELIMINARY UNTIL CONFIRMED BY THE U.S. ARMY CORPS OF ENGINEERS.
3. BASEMAP SOURCE: 2016 GOOGLE EARTH.

Compass rose showing North (N), South (S), East (E), and West (W).

SCALE (IN FEET)

300 150 0 300

MORAN SOLAR I  
PINEY GROVE ROAD  
PRINCE EDWARD COUNTY, VIRGINIA



WATERS OF THE U.S.  
DELINEATION MAP  
HOLOCENE CLEAN ENERGY

ECS REVISIONS	
ENGINEER AMM	DRAFTING JAA
SCALE	1" = 300'
PROJECT NO.	47:8304
SHEET	1 OF 1
DATE	07-02-2019

## NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Holocene Clean Energy		File Number: NAO-2019-01751	Date: 11/25/2019
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
	PERMIT DENIAL	C	
	APPROVED JURISDICTIONAL DETERMINATION	D	
X	PRELIMINARY JURISDICTIONAL DETERMINATION	E	

**SECTION I -** The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/appeals.aspx> or Corps regulations at 33 CFR Part 331.

**A: INITIAL PROFFERED PERMIT:** You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT:** You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:

Jennifer S. Frye  
Western Virginia Regulatory Section  
U.S. Army Corps of Engineers, Norfolk District  
Richard H. Poff Federal Building  
Room 749  
210 Franklin Road SW  
Roanoke, Virginia 24011  
Office: (540) 344-1498  
Mobile: (757) 450-6681  
Email: jennifer.s.frye@usace.army.mil

If you only have questions regarding the appeal process you may also contact:

Mr. James W. Haggerty  
Regulatory Program Manager (CENAD-PD-OR)  
U.S. Army Corps of Engineers  
Fort Hamilton Military Community  
301 General Lee Avenue  
Brooklyn, New York 11252-6700  
Telephone number: 347-370-4650

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

\_\_\_\_\_  
Signature of appellant or agent.

Date:

Telephone number:



## NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Ana Sawyer		File Number: NAO-2019-01751	Date: 11/25/2019
Attached is:			See Section below
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**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:

Jennifer S. Frye  
Western Virginia Regulatory Section  
U.S. Army Corps of Engineers, Norfolk District  
Richard H. Poff Federal Building  
Room 749  
210 Franklin Road SW  
Roanoke, Virginia 24011  
Office: (540) 344-1498  
Mobile: (757) 450-6681  
Email: jennifer.s.frye@usace.army.mil

If you only have questions regarding the appeal process you may also contact:

Mr. James W. Haggerty  
Regulatory Program Manager (CENAD-PD-OR)  
U.S. Army Corps of Engineers  
Fort Hamilton Military Community  
301 General Lee Avenue  
Brooklyn, New York 11252-6700  
Telephone number: 347-370-4650

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

\_\_\_\_\_  
Signature of appellant or agent.

Date:

Telephone number:

## BACKGROUND INFORMATION

**B. NAME AND ADDRESS OF PERSON REQUESTING PJD:**

**C. DISTRICT OFFICE, FILE NAME, AND NUMBER:**

**D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:**

State: Virginia

County/parish/borough: Prince Edwards City: Rice

Lat.: xx.xxx° Long.: yy.yyy°

Name of nearest waterbody: Sandy River Reservoir

☒ Office (Desk) Determination. Date: November 25, 2019

☐ Field Determination. Date(s):

[illegible]

- 1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "may be" waters of the U.S. and/or that there "may be" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:



**SUPPORTING DATA. Data reviewed for PJD (check all that apply)**

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- ☒ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:  
Map: ECS Mid-Atlantic, LLC "MORAN Solar I".
- ☒ Data sheets prepared/submitted by or on behalf of the PJD requestor.  
☒ Office concurs with data sheets/delineation report.  
☐ Office does not concur with data sheets/delineation report. Rationale: \_\_\_\_\_.
- ☐ Data sheets prepared by the Corps: \_\_\_\_\_.
- ☐ Corps navigable waters' study: \_\_\_\_\_.
- ☐ U.S. Geological Survey Hydrologic Atlas: \_\_\_\_\_.
- ☐ USGS NHD data.
- ☐ USGS 8 and 12 digit HUC maps.
- ☐ U.S. Geological Survey map(s). Cite scale & quad name: \_\_\_\_\_.
- ☐ Natural Resources Conservation Service Soil Survey. Citation: \_\_\_\_\_.
- ☐ National wetlands inventory map(s). Cite name: \_\_\_\_\_.
- ☐ State/local wetland inventory map(s): \_\_\_\_\_.
- ☐ FEMA/FIRM maps: \_\_\_\_\_.
- ☐ 100-year Floodplain Elevation is: \_\_\_\_\_. (National Geodetic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): NAIP (various), Google Earth (Various)  
or ☒ Other (Name & Date): land photos submitted with ECS Report
- ☐ Previous determination(s). File no. and date of response letter: \_\_\_\_\_.
- ☐ Other information (please specify): \_\_\_\_\_.

**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.**

**Jennifer Serafin**  
Frye

Digitally signed by Jennifer  
Serafin Frye  
Date: 2019.11.25 14:23:46  
-05'00'

Signature and date of  
Regulatory staff member  
completing PJD

**Davis Plunkett**

Digitally signed by Davis  
Plunkett  
Date: 2019.12.02 09:58:00  
-05'00'

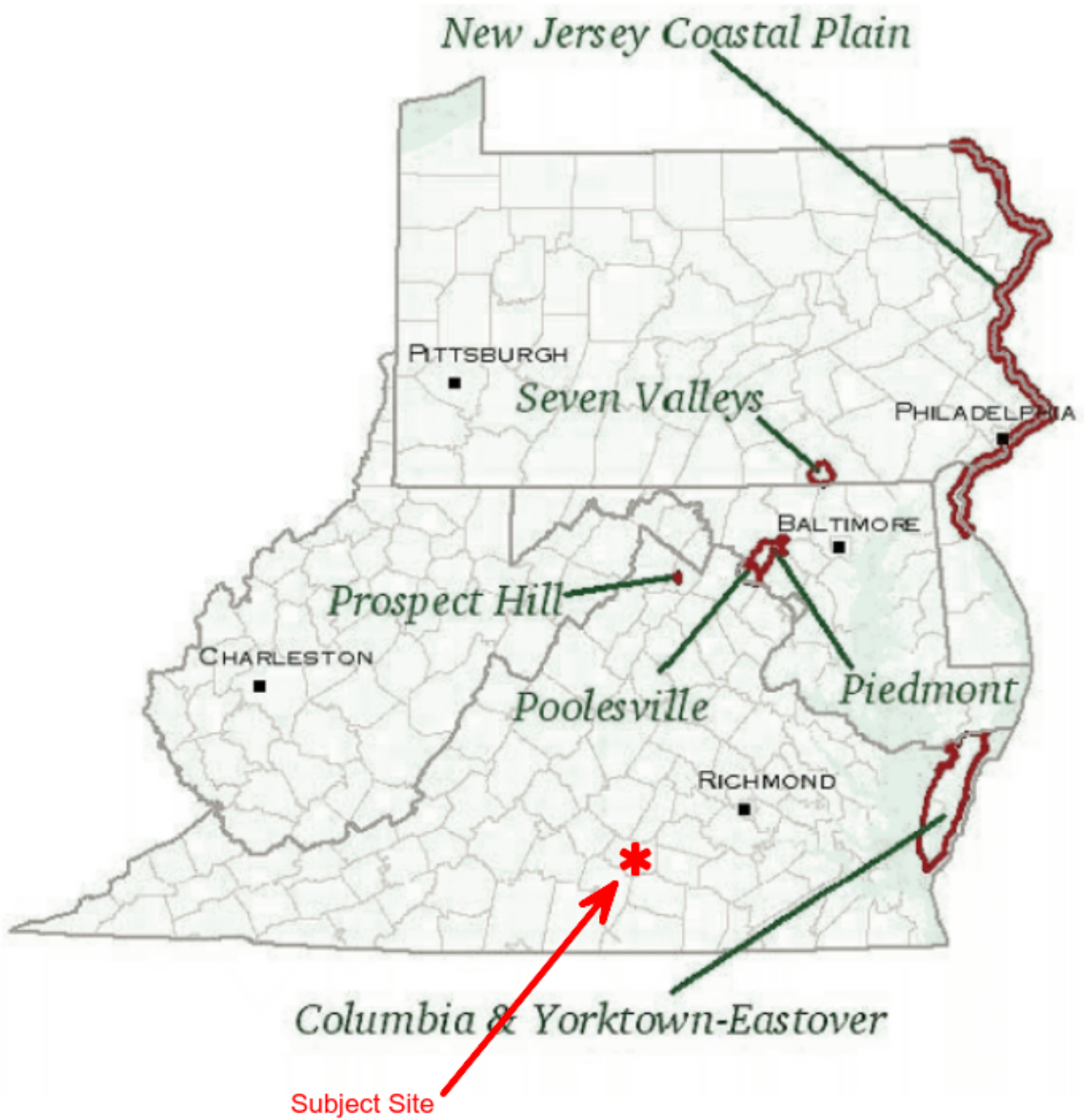
Signature and date of  
person requesting PJD  
(REQUIRED, unless obtaining  
the signature is impracticable)<sup>1</sup>

<sup>1</sup> Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.



Waters_Name	Latitude	Longitude	Waters Size	Type Of Aquatic Resour	Geographic Authority
OWB	37.22779	-78.26861	.01 ACRES	open water	Section 404
Stream 1	37.22703	-78.26904	781 FEET	Tributary	Section 404
Stream 2	37.22777	-78.26936	229 FEET	Tributary	Section 404
Wetland A/C	37.22772	-78.26947	.16 ACRES	wetland	Section 404
Wetland D	37.22869	-78.27349	.05 ACRES	wetland	Section 404
Wetland E	37.22999	-78.27517	.01 ACRES	wetland	Section 404

## **Appendix VII: Water Resources**



**Sole Source Aquifer Map**

Moran I Solar

Piney Grove Road

Rice, Virginia 23966

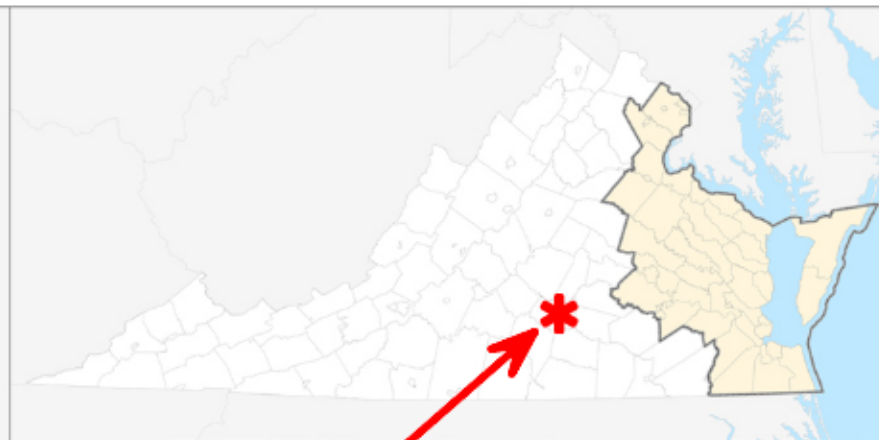
ECS Project No. 47:8304-C



# **Appendix VIII: Coastal Resources**



# Virginia's Coastal Zone



Subject Site



## Boundary Description

Virginia's coastal zone encompasses 29 counties, 15 cities, and 42 incorporated towns in the "Tidewater" region of the state.

Virginia's coastal zone includes 5,000 miles of shoreline, four tidal rivers reaching as far as 100 miles inland - the Potomac, Rappahannock, York, and James Rivers and all of the waters therein, and out to, the three nautical mile Territorial Sea boundary, including all of Virginia's Atlantic coast watershed as well as parts of the Chesapeake Bay and Albemarle - Pamlico Sound watersheds.

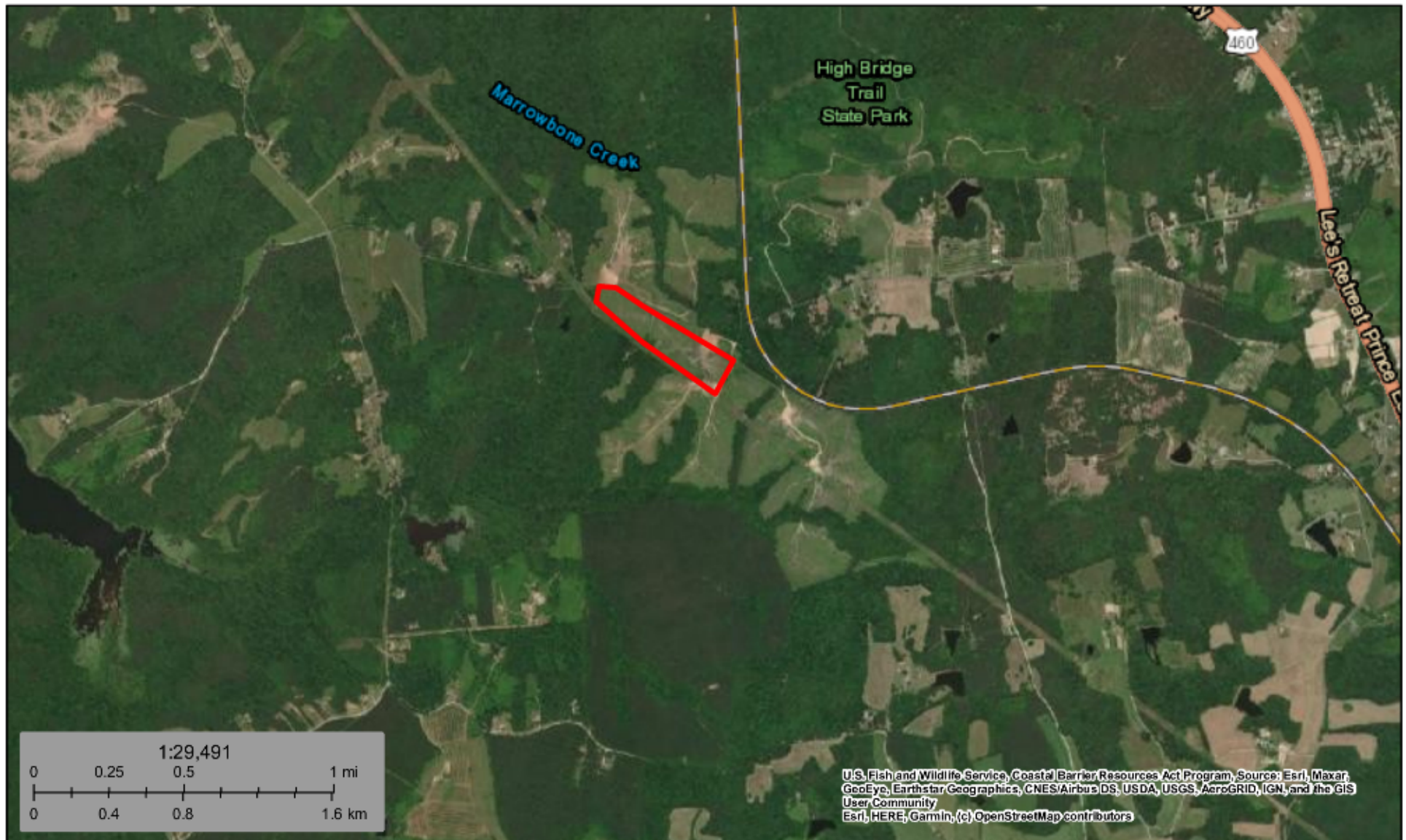
## Federal Consistency

Federal consistency is the CZMA requirement where Federal agency activities, Federal license or permit activities, and Federal financial assistance activities located inside or outside the state's coastal zone that have reasonably foreseeable effects on coastal uses or resources must be consistent with the enforceable policies of the state's coastal zone management program.







**U.S. Fish and Wildlife Service**  
**Coastal Barrier Resources System**

Moran Solar I



July 10, 2020

-  CBRS Buffer Zone       System Unit
- CBRS Units**
-  Otherwise Protected Area       Subject Site

This map is for general reference only. The Coastal Barrier Resources System (CBRS) boundaries depicted on this map are representations of the controlling CBRS boundaries, which are shown on the official maps, accessible at <https://www.fws.gov/cbra/maps/index.html>. All CBRS related data should be used in accordance with the layer metadata found on the CBRS Mapper website.

The CBRS Buffer Zone represents the area immediately adjacent to the CBRS boundary where users are advised to contact the Service for an official determination (<http://www.fws.gov/cbra/Determinations.html>) as to whether the property or project site is located "in" or "out" of the CBRS.

CBRS Units normally extend seaward out to the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS mapper.

# **Appendix IX: Biological Resources**





USFWS  
Virginia Ecological Services Field Office  
6669 Short Lane  
Gloucester, VA 23061-4410

December 18, 2020

Subject: United States Department of Agriculture (USDA) – Rural Development (RD)  
USFWS Scoping Letter  
Moran Solar 1 Project  
Piney Grove Road, Rice, Prince Edward County, Virginia  
Consultation Tracking Number: 05E2VA00-2020-SLI-4558

To Whom It May Concern:

Holocene Clean Energy is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Development in order that it may assess the environmental impacts of the construction of an approximate 18.8-acre solar farm on a portion of a larger 99.63-acre property in Prince Edward County, Virginia. The project is being proposed to provide clean renewable energy to surrounding electric utility customers in support of Governor Northam's and the General Assembly's clean energy mandate. Project components include the installation of photovoltaic panel arrays ground-mounted on single-axis tracking solar racking equipment. The project will also include the construction of an inverter and control unit, a perimeter fence to enclose the arrays, vegetative buffers/screening, and necessary stormwater management BMPs. The solar panel array itself will include approximately 61 rows of panels and is anticipated to generate approximately 3.8 MW of DC power and 3 MW AC power. Interconnection to the electrical grid will be completed by the electrical company sometime in the future as part of a second, separate project and will undergo required reviews at that time. No on-site lighting will be present after construction. The disturbance of land will be limited to 18.8 acres (leased area) during construction. The site is currently an open field with some scrubby areas; tree clearing is not proposed. The final project area will include 16.1 fenced acres with the remaining acreage being associated with roadway setbacks. Enclosed is a U.S. Geological Survey map that depicts the proposal's location and a site plan that depicts the proposal's construction activities and a description of the work involved.

To initiate the process, Rural Development has asked us to gather information regarding Federally-listed species, critical habitat, and migratory birds from your office. Rural Development, as the lead Federal agency, is responsible for compliance with Section 7(a)(2) of



the Endangered Species Act and will provide determinations of effect as appropriate during the consultation process.

The proposal should not represent a "major construction activity" as defined in 50 CFR 402.02. We have generated the Official Species List of Federally-listed or proposed threatened or endangered species and designated or proposed critical habitat that may be present in the project area through the online IPaC System. Please note that a project review package was submitted to your office on June 25, 2020 for review and comment (Consultation Code: 05E2VA00-2020-SLI-4558) and a response for additional information was not received within 30 days of submission. We do request you advise us of any present concerns you may have related to possible effects of the project listed above on such species or critical habitat, as well as any other wildlife concerns.

We would appreciate a response within 30 days or as soon as practicable. If you need any further information or wish to discuss the project, please contact Alexandra Moon at 540-362-2000.

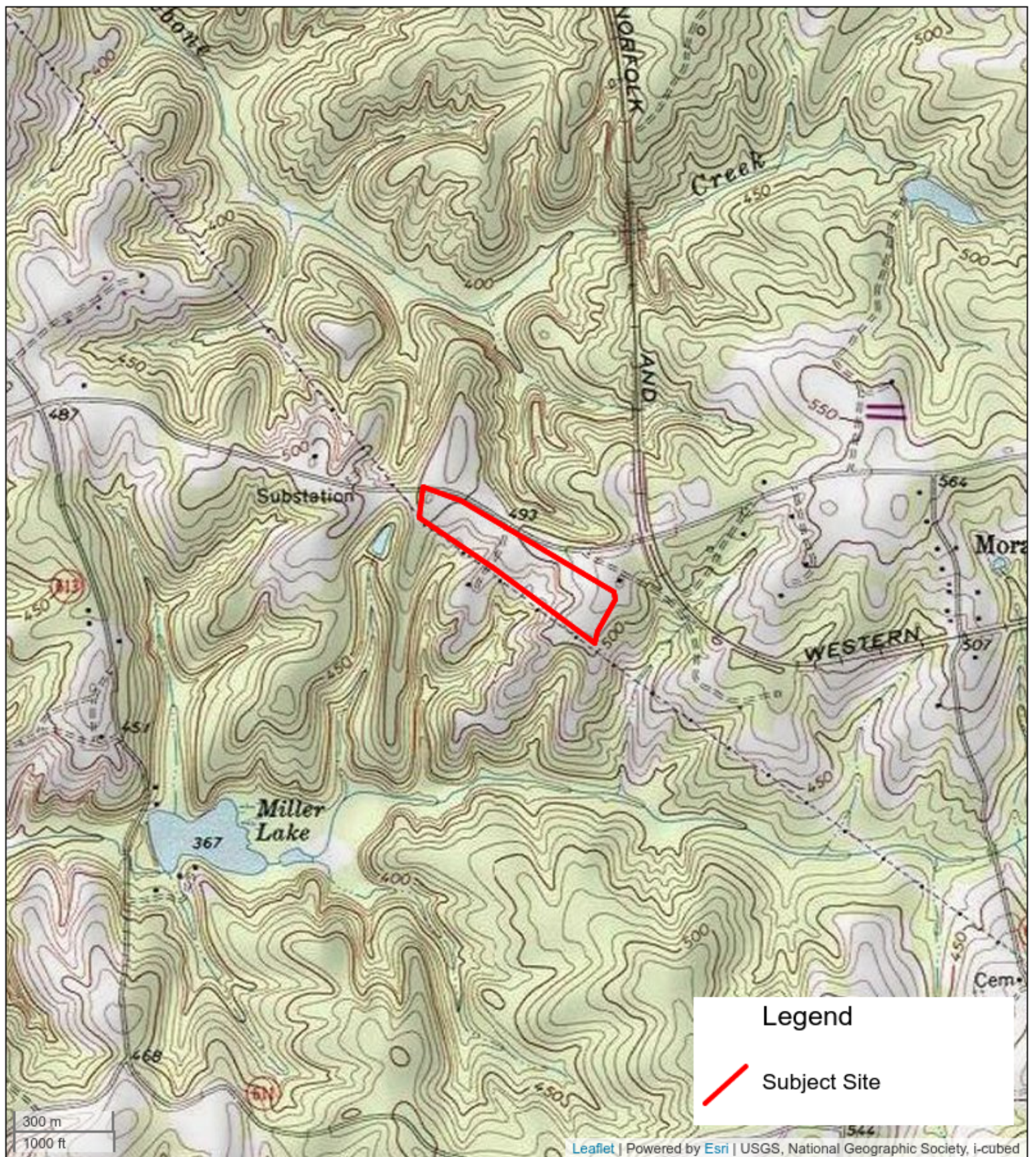
Sincerely,

A handwritten signature in blue ink that reads "Alexandra Moon".

Alexandra Moon  
Senior Project Manager  
ECS Mid-Atlantic, LLC

Enclosure(s): USGS Topographic Map  
Proposed Site Plan  
IPAC List of Threatened and Endangered Species





**Figure 1 USGS Topographic Map**

Moran I Solar  
Piney Grove Road  
Rice, Virginia 23966  
ECS Project No. 47:8304-C









# United States Department of the Interior

## FISH AND WILDLIFE SERVICE



Virginia Field Office  
6669 Short Lane  
Gloucester, VA 23061

Date: June 24, 2020

### Self-Certification Letter

Project Name: Moran Solar 1 Project

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 positioned above the printed name.

Cindy Schulz  
Field Supervisor  
Virginia Ecological Services

Enclosures - project review package



## 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 25, 2020

Consultation Code: 05E2VA00-2020-TA-4558

Event Code: 05E2VA00-2020-E-12741

Project Name: Moran Solar I Project

Subject: Verification letter for the 'Moran Solar I 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 Camille VanSkiver:

The U.S. Fish and Wildlife Service (Service) received on June 25, 2020 your effects determination for the 'Moran Solar I 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.

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.

---

[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)].

---

**Action Description**

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

**1. Name**

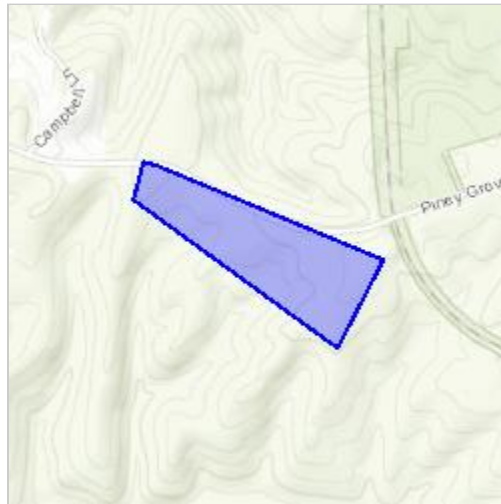
Moran Solar I Project

**2. Description**

The following description was provided for the project 'Moran Solar I Project':

Project in Rice, VA

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.229132410812134N78.27274767399236W>

**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.

---



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?

*No*

---

## 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:

1

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

1

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

0

**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

---

## Species Conclusions Table

Project Name: Moran Solar Project

Date: June 24, 2020

Species / Resource Name	Conclusion	ESA Section 7 / Eagle Act Determination	Notes / Documentation
Northern long-eared Bat ( <i>Myotis septentrionalis</i> )	Suitable habitat present	May affect, not likely to adversely affect.	<ul style="list-style-type: none"><li>-Relying upon the findings of the 1/5/2016 Programmatic Biological Opinion for Final 4(d) Rule on the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions to fulfill our project-specific section 7 responsibilities.</li><li>-Subject site is not located within Critical Habitat.</li><li>-Subject site is not within ¼-mi of known hibernacula or within 150-ft of known maternity roost nest tree.</li><li>-Approximately 1 acre of trees will be cleared from the subject site.</li><li>-Since there are no documented occurrences within close proximity to the subject site (see attached habitat map), and due to the minimal amount of tree clearing proposed, no adverse effects on this species is expected.</li></ul>
Critical Habitat	No critical habitat present.	No effect.	Official species list.



## 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 24, 2020

Consultation Code: 05E2VA00-2020-SLI-4558

Event Code: 05E2VA00-2020-E-12704

Project Name: Moran Solar I Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/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.

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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

---

## Project Summary

Consultation Code: 05E2VA00-2020-SLI-4558

Event Code: 05E2VA00-2020-E-12704

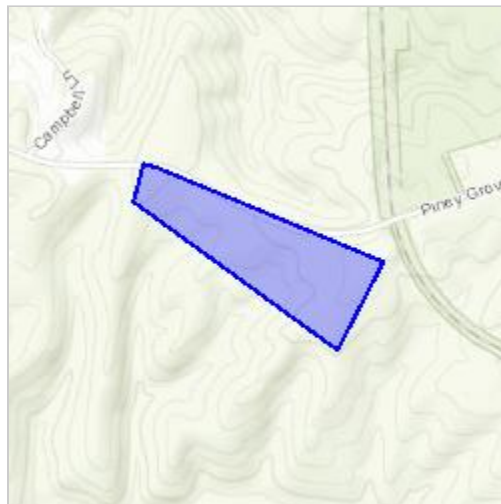
Project Name: Moran Solar I Project

Project Type: POWER GENERATION

Project Description: Project in Rice, VA

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.229132410812134N78.27274767399236W>



Counties: Prince Edward, VA

---

## Endangered Species Act Species

There is a total of 1 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

## 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.

---

**Site Location**

37,13,46.5 -78,16,26.9  
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

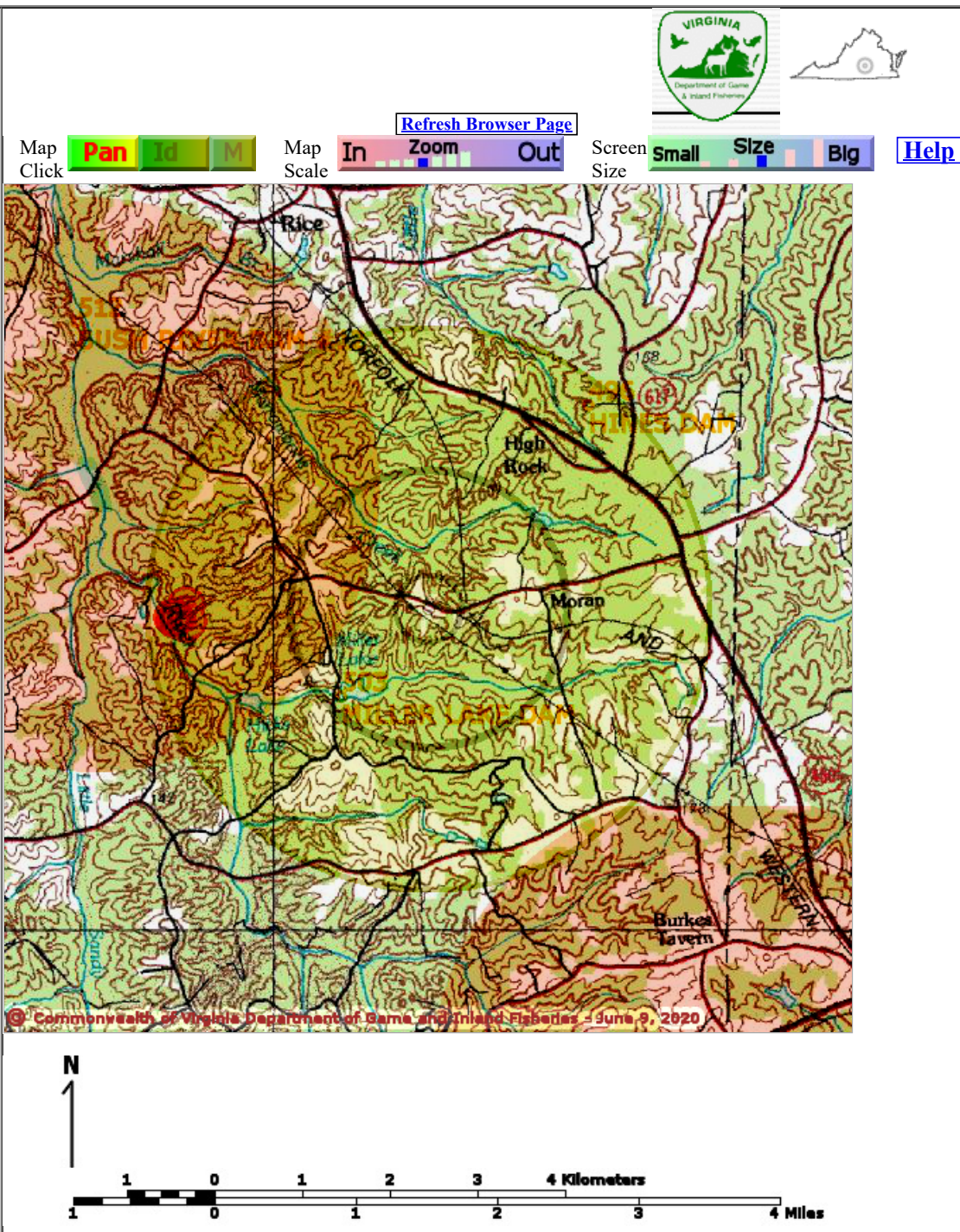
Search Point is at  
map center

**Base Map [Choices](#)**

Topography ▼

**Map Overlay [Choices](#)**

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

**Map Overlay Legend**

Point of Search 37,13,46.5 -78,16,26.9

Map Location 37,13,46.5 -78,16,26.9

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](https://microsoft.terraserver-usa.com) for details)

Map projection is UTM Zone 17 NAD 1983 with left 737028 and top 4128625. 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****23 Impediment**

**Position Rings  
1 mile and 1/4  
mile 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 2020-06-09 12:49:31 (qa/qc March 21, 2016 12:20 - tn=1037353.0 dist=3218 I)  
\$poi=37.2296030 -78.2741618



Virginia Department of Game and Inland Fisheries

Search Va DGIF

Go

Home » **By Coordinates** » VaFWIS GeographicSelect Options

Fish and Wildlife Information Service

- Options
- Species Information
  - By Name
  - By Land Management
  - References
- Geographic Search
  - By Map
  - By Coordinates
  - By Place Name
- Database Search
- Help
- Logout

Show This Page as  
Printer Friendly

**VaFWIS Search Report** Compiled on 6/9/2020, 12:49:10 PM

Known or likely to occur within a **2 mile radius around point 37.2296030 -78.2741618**  
in **147 Prince Edward County, VA**

[View Map of Site Location](#)

[Help](#)

447 Known or Likely Species ordered by Status Concern for Conservation  
(displaying first 20) (17 species with Status\* or Tier I\*\* or Tier II\*\* )

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
060003	FESE	Ia	<a href="#">Wedgemussel, dwarf</a>	Alasmidonta heterodon		BOVA
050022	FTST	Ia	<a href="#">Bat, northern long-eared</a>	Myotis septentrionalis		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
040293	ST	Ia	<a href="#">Shrike, loggerhead</a>	Lanius ludovicianus		BOVA
040385	ST	Ia	<a href="#">Sparrow, Bachman's</a>	Peucaea aestivalis		HU6
060173	FPST	Ia	<a href="#">Pigtoe, Atlantic</a>	Fusconaia masoni		BOVA
060081	ST	Ila	<a href="#">Floater, green</a>	Lasmigona subviridis		BOVA
040292	ST		<a href="#">Shrike, migrant loggerhead</a>	Lanius ludovicianus migrans		BOVA
030063	CC	IIla	<a href="#">Turtle, spotted</a>	Clemmys guttata		BOVA,HU6
010077		Ia	<a href="#">Shiner, bridge</a>	Notropis bifrenatus		BOVA
040213		Ic	<a href="#">Owl, northern saw-whet</a>	Aegolius acadicus		HU6
040052		Ila	<a href="#">Duck, American black</a>	Anas rubripes		BOVA,HU6
040320		Ila	<a href="#">Warbler, cerulean</a>	Setophaga cerulea		BOVA,HU6
040140		Ila	<a href="#">Woodcock, American</a>	Scolopax minor		BOVA,HU6
040105		Ilb	<a href="#">Rail, king</a>	Rallus elegans		BOVA
100166		Ilc	<a href="#">Skipper, Dotted</a>	Hesperia attalus slossonae		BOVA,HU6
010131		IIla	<a href="#">Eel, American</a>	Anguilla rostrata		BOVA
030068		IIla	<a href="#">Turtle, woodland box</a>	Terrapene carolina carolina	Yes	BOVA,SppObs,HU6
040100		IIla	<a href="#">Bobwhite, northern</a>	Colinus virginianus	Potential	BOVA,BBA,HU6

To view All 447 species [View 447](#)

\*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** ( 2 records )
[View Map of All Fish Impediments](#)

ID	Name	River	View Map
496	<a href="#">HINES DAM</a>	TR-LITTLE SAYLERS CREEK	<a href="#">Yes</a>
503	<a href="#">MILLER LAKE DAM</a>	TR-SANDY RIVER	<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** ( 2 records )
[View Map of All Query Results Bald Eagle Nests](#)

Nest	N Obs	Latest Date	DGIF Nest Status	View Map
<a href="#">PE1001</a>	1	Jan 1 2010	UNKNOWN	<a href="#">Yes</a>
<a href="#">PE9601</a>	20	May 6 2008	UNKNOWN	<a href="#">Yes</a>

Displayed 2 Bald Eagle Nests

**Species Observations** ( 9 records )
[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="#">623214</a>	SppObs	Aug 7 2013	Dave; Perry	1		III	<a href="#">Yes</a>
<a href="#">623358</a>	SppObs	Oct 19 2013	Dave; Perry	1			<a href="#">Yes</a>
<a href="#">622248</a>	SppObs	Jul 17 2013	Dave; Perry	1			<a href="#">Yes</a>
<a href="#">623209</a>	SppObs	May 11 2013	Dave; Perry	1			<a href="#">Yes</a>
<a href="#">622397</a>	SppObs	May 11 2013	Dave; Perry	1			<a href="#">Yes</a>
<a href="#">611960</a>	SppObs	Jul 19 2011	Wayne; Starnes	2			<a href="#">Yes</a>
<a href="#">318012</a>	SppObs	Sep 30 2006	Frank Burbrink	1			<a href="#">Yes</a>
<a href="#">11371</a>	SppObs	May 20 1986	NORMAN	15			<a href="#">Yes</a>
<a href="#">27299</a>	SppObs	Jan 1 1900	Mitchell, J. C.	1			<a href="#">Yes</a>

Displayed 9 Species Observations

**Habitat Predicted for Aquatic WAP Tier I & II Species**

N/A

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

N/A

**Virginia Breeding Bird Atlas Blocks** ( 1 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**	
44076	<a href="#">Rice, SE</a>	56		III	<a href="#">Yes</a>

Public Holdings: ( 1 names )

Name	Agency	Level
Prince Edward-Gallion State Forest	VA Dept. of Forestry	State

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
147	<a href="#">Prince Edward</a>	404	FTSE	I

USGS 7.5' Quadrangles:

Green Bay  
Rice  
Crewe West

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
JA14	<a href="#">Bush River-Sandy River</a>	48	ST	I
JA15	<a href="#">Saylers Creek</a>	49	ST	I
JA24	<a href="#">Flat Creek-Little Creek</a>	50	ST	I

Compiled on 6/9/2020, 12:49:10 PM I1037353.0 report=all searchType=R dist= 3218 poi= 37.2296030 -78.2741618  
PixelSize=5k, Anadromous=0.025362, BBA=0.068501, BECAR=0.024878, Bats=0.023104, Buffer=0.096054, County=0.089076, HU6=0.102237, Impediments=0.039248, Init=0.157354, PublicLands=0.041135, Quad=0.058443, SppObs=0.284288, TEWaters=0.031388, TierReaches=0.040816, TierTerrestrial=0.071986, Total=1.299387, Tracking\_BOVA=0.15693  
Tours=0.027841, Waves=0.049818

If you have difficulty reading or accessing documents, please [Contact Us](#) for assistance.



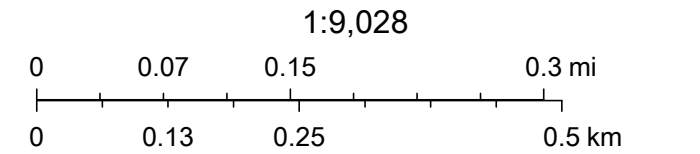
# NLEB Locations and Roost Trees



6/9/2020, 12:46:35 PM

No NLEB Location and Roost Trees Identified

\*Note: Blue box is site location pin and red outline is subject site boundaries.



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



# DCR Map

accessed on 6/9/2020





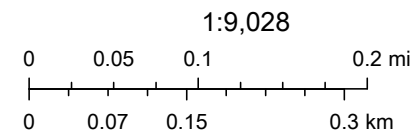
# Critical Habitat in Virginia



June 9, 2020

**No Critical Habitats identified**

\*Note: Blue pin is site location pin and red outline is subject site boundaries.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus



The CENTER for  
CONSERVATION  
BIOLOGY

# CCB Mapping Portal

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**Layers:** Eagle Roosts

**Map Center [longitude, latitude]:** [-78.27263116836548, 37.22925203700086]

**Map Link:**

[https://ccbbirds.org/maps/#layer=Eagle+Roosts&zoom=16&lat=37.22925203700086&lng=-78.27263116836548&legend=legend\\_tab\\_59557df6-c07b-11e5-a485-0e31c9be1b51&base=World+Imagery+%28ESRI%29](https://ccbbirds.org/maps/#layer=Eagle+Roosts&zoom=16&lat=37.22925203700086&lng=-78.27263116836548&legend=legend_tab_59557df6-c07b-11e5-a485-0e31c9be1b51&base=World+Imagery+%28ESRI%29)

**Report Generated On:** 06/09/2020

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---

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

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





The CENTER for  
CONSERVATION  
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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:  
Consultation Code: 05E2VA00-2020-SLI-4558  
Event Code: 05E2VA00-2021-E-03630  
Project Name: Moran Solar I Project

December 23, 2020

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/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: 05E2VA00-2020-SLI-4558

Event Code: 05E2VA00-2021-E-03630

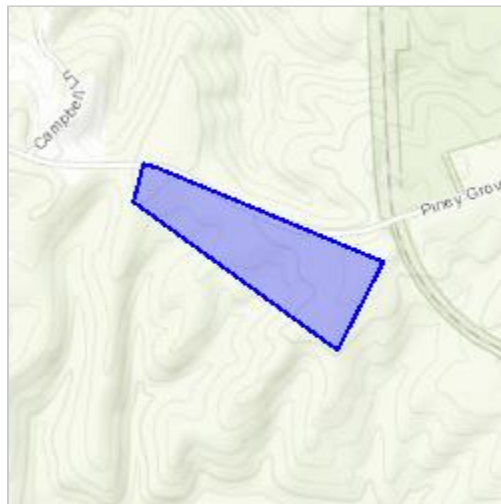
Project Name: Moran Solar I Project

Project Type: POWER GENERATION

Project Description: Project in Rice, VA

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.229132410812134N78.27274767399236W>



Counties: Prince Edward, VA

---



## Endangered Species Act Species

There is a total of 1 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

## 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.

REFUGE INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED.  
PLEASE CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

---

# **Appendix X: Historic and Cultural Properties**



# COMMONWEALTH of VIRGINIA

Matthew Strickler  
Secretary of Natural Resources

**Department of Historic Resources**  
2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan  
Director

Tel: (804) 367-2323  
Fax: (804) 367-2391  
TDD: (804) 367-2386  
[www.dhr.virginia.gov](http://www.dhr.virginia.gov)

December 16, 2020

Camille VanSkiver  
2119-D N Hamilton St  
Richmond, VA 23230

Re: Moran Solar I Project  
Prince Edward County, VA  
DHR File No. 2020-3950

Dear Ms. VanSkiver

We have received for review the *Phase I Cultural Resource Survey of the Moran Solar Project Area, Prince Edward County, Virginia* prepared by Dutton + Associated (D+A) on behalf of United States Department of Agriculture (USDA). The undertaking, as presented, involves the construction of solar facility on approximately 18.1 acres of a larger, 154.19-acre parent parcel. Our comments are provided as assistance to the United States Department of Agriculture's (USDA) Rural Development (RD) in meeting their responsibilities under Section 106 of the National Historic Preservation Act.

## Archaeology

The report documents a cultural resources survey of approximately 24 acres. During the course of the survey, one (1) new archaeological site was (44PE0114) identified. 44PE0114 consists of a scatter of domestic debris which is most likely associated with a 1968 map projected structure D+A recommends that **44PE0114** is *not eligible* for listing in the Virginia Landmarks Register (VLR) and the National Register of Historic Places (NHRP). DHR concurs with D+A's eligibility and impact recommendations.

## Architecture

The architectural resources survey for the Moran Solar project resulted in the identification of seven (7) architectural resources greater than 50 years of located within the area of potential effects (APE). One (1) resource was previously recorded (DHR ID No. 006-5007) and six (6) were newly recorded during the course of the survey (DHR ID Nos. 073-5119 through 073-5124 *inclusive*). The High Bridge Trail State Park/Norfolk Southern Railroad (006-5007) is considered *potentially eligible* for listing in the NRHP but will *not be adversely affected* (visually) by the undertaking. The rest of the surveyed resources (DHR ID Nos. 073-5119 through 073-5124 *inclusive*) are not recommended for inclusion in the VLR/NRHP individually or collectively. DHR concurs with D+A's eligibility and impact recommendations.

Western Region Office  
962 Kime Lane  
Salem, VA 24153  
Tel: (540) 387-5443  
Fax: (540) 387-5446

Northern Region Office  
5357 Main Street  
PO Box 519  
Stephens City, VA 22655  
Tel: (540) 868-7029  
Fax: (540) 868-7033

Eastern Region Office  
2801 Kensington Avenue  
Richmond, VA 23221  
Tel: (804) 367-2323  
Fax: (804) 367-2391



Implementation of the undertaking in accordance with the finding of **No Adverse Effect** as documented fulfills the Federal agency's responsibilities under Section 106 of the National Historic Preservation Act. If for any reason the undertaking is not or cannot be conducted as proposed in the finding, consultation under Section 106 must be reopened

Thank you for seeking our comments on this project. If you have any questions at this time, please do not hesitate to contact me at [jennifer.bellville-marrion@dhr.virginia.gov](mailto:jennifer.bellville-marrion@dhr.virginia.gov).

Sincerely,

A handwritten signature in cursive script, appearing to read 'J. Bellville-Marrion', written in dark ink.

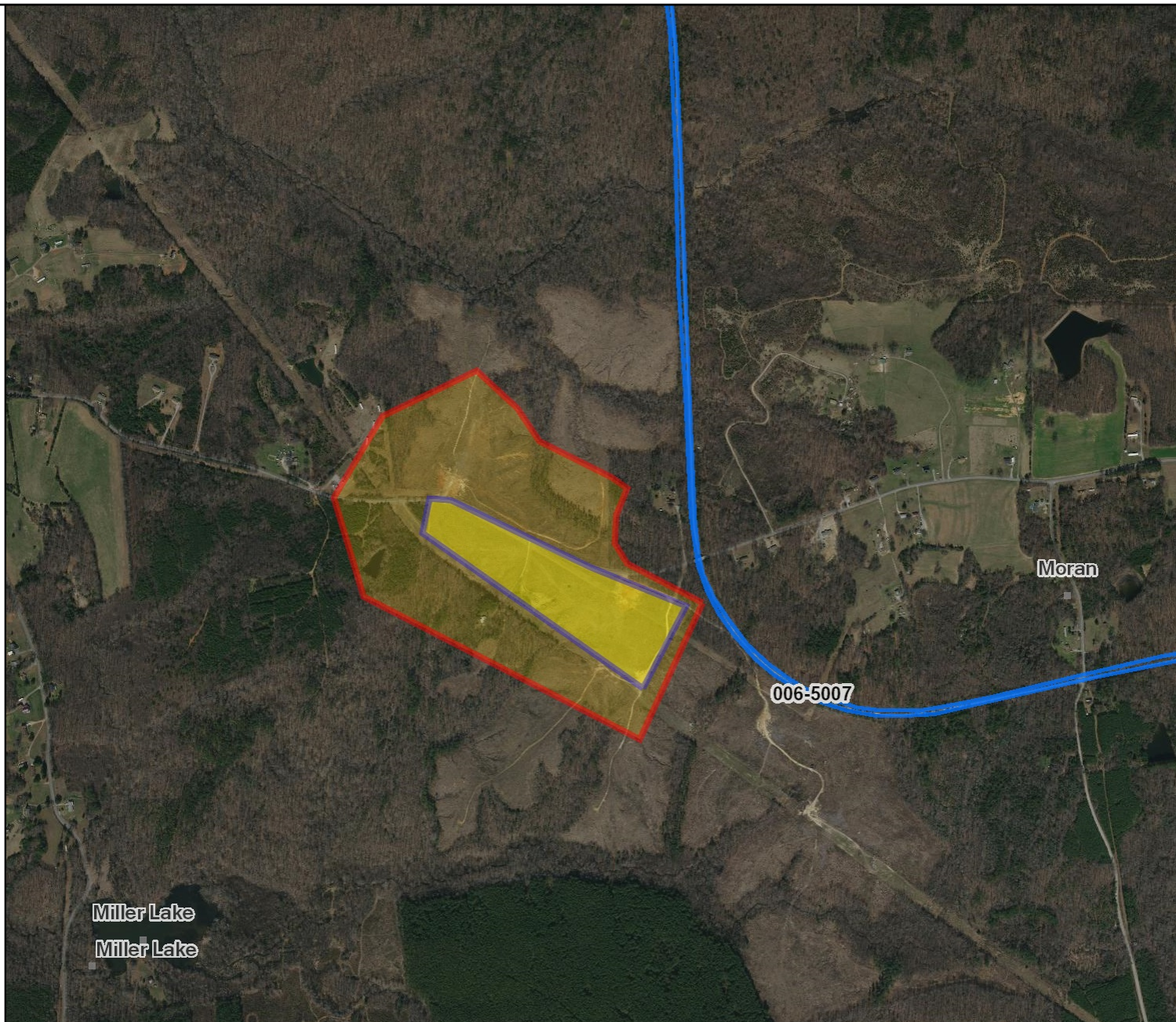
Jenny Bellville-Marrion, Project Review Archaeologist  
Review and Compliance Division

c. Robert Taylor (D+A)



### Legend

- Architecture Resources
- Architecture Labels
- Individual Historic District Properties
- Archaeological Resources
- Archaeology Labels
- DHR Easements
- USGS GIS Place names
- County Boundaries



Feet

0 500 1000 1500 2000

1:18,056 / 1"=1,505 Feet

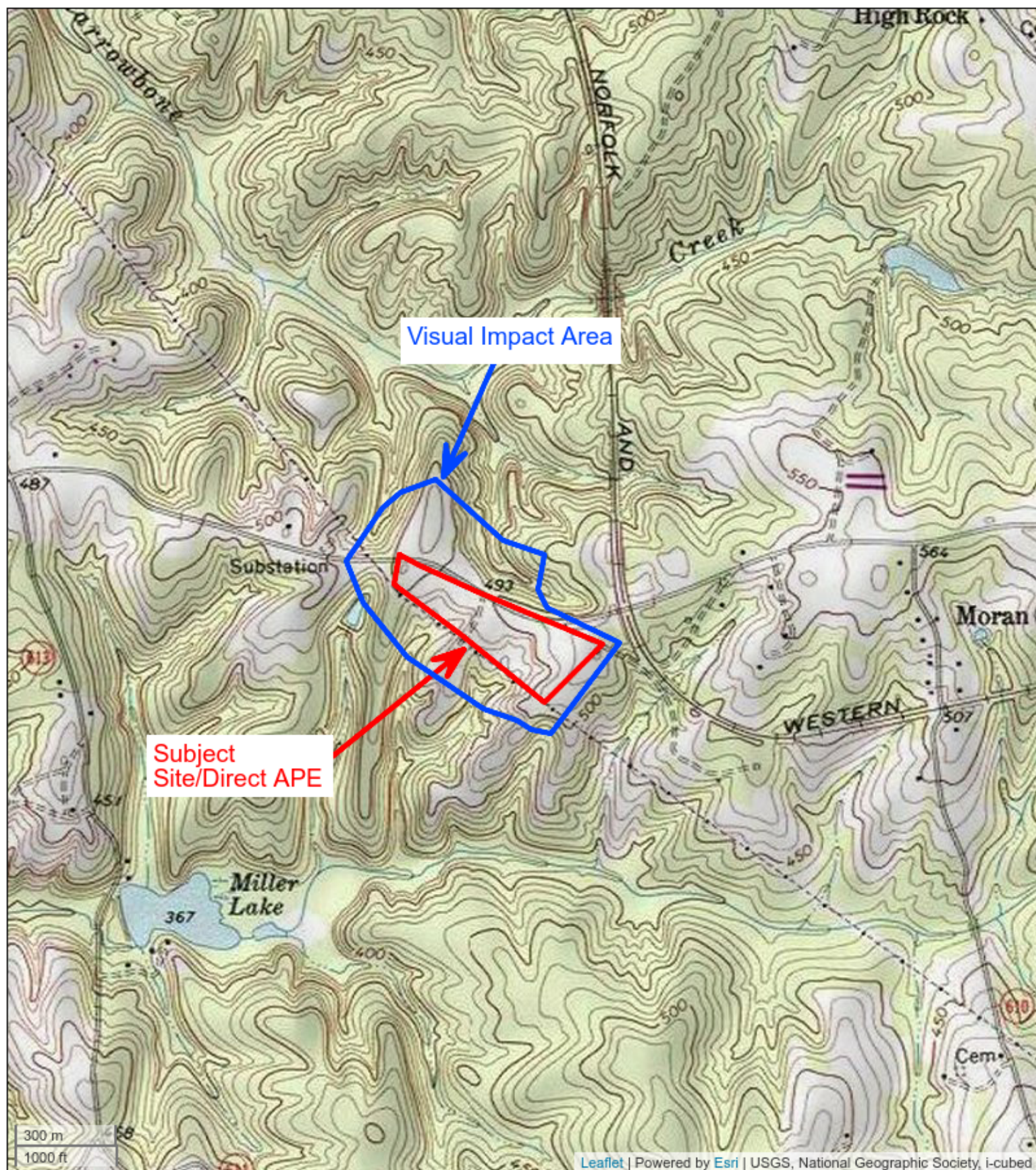
**Title:**

**Date: 6/17/2020**

*DISCLAIMER: Records of the Virginia Department of Historic Resources (DHR) have been gathered over many years from a variety of sources and the representation depicted is a cumulative view of field observations over time and may not reflect current ground conditions. The map is for general information purposes and is not intended for engineering, legal or other site-specific uses. Map may contain errors and is provided "as-is". More information is available in the DHR Archives located at DHR's Richmond office.*

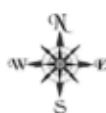
*Notice if AE sites: Locations of archaeological sites may be sensitive the National Historic Preservation Act (NHPA), and the Archaeological Resources Protection Act (ARPA) and Code of Virginia §2.2-3705.7 (10). Release of precise locations may threaten archaeological sites and historic resources.*





**Figure 1 USGS Topographic Map**

Moran I Solar  
Piney Grove Road  
Rice, Virginia 23966  
ECS Project No. 47:8304-B







United States Department of Agriculture

6/25/2020

Rural Development  
Rural Utilities Service  
1400 Independence  
Ave SW, Room 2230  
Stop 1570,  
Washington, DC,  
20250  
Voice 202.695.2540  
Fax 202.690.0649

Julie Langan  
DHR Director & State Historic Preservation Officer  
2801 Kensington Avenue  
Richmond, VA 23221

Subject: USDA RD Rural Utilities Service Staff SHPO Recommended Finding of No  
Historic Properties Affected  
Moran Solar 1 Project  
Piney Grove Road, Rice, Prince Edward County, Virginia

Dear Ms. Langan,

Holocene Clean Energy (Applicant) plans to seek financial assistance from the USDA Rural Development (RD), Rural Utilities Service (RUS) under its Electrical Program for the Moran Solar 1 Project. This Project will not be using the NPA.<sup>1</sup>

This project involves the construction of an approximate 19 acre solar farm on a portion of a larger 154 acre property. Project components include the installation of photovoltaic panel arrays ground-mounted on fixed solar racking equipment. The project will also include the construction of an inverter and control unit, a perimeter fence to enclose the arrays, vegetative buffers/screening, and necessary stormwater management BMPs. The area of potential effect (APE) is determined to be the 19 acre site itself. The visual APE for effects to above-ground historic properties is an approximate 0.25 mile buffer surrounding the project site except in areas where tree cover or topography block line of sight from the project site (see included topographic map). Interconnection to the existing electrical grid will be completed sometime in the future by the local utility company as part of a different project and will obtain all required reviews and approvals for that project, as necessary.

The purpose of this project is to provide clean renewable energy to the existing electrical grid for the purposes of bettering the natural and human environment. The proposed project will help limit greenhouse gas emissions through the generation of solar energy while providing electricity to residential and commercial customers connected to the existing electrical grid.

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<sup>1</sup> *Nationwide Programmatic Agreement among the U.S. Department of Agriculture Rural Development Programs, National Conference of State Historic Preservation Officers, Tribal Signatories, and The Advisory Council on Historic Preservation for Sequencing Section 106 (NPA).*



If RUS elects to fund the Project, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800.

RUS defines the area of potential effect (APE), as an area that includes all Project construction and excavation activity required to construct, modify, improve, or maintain any facilities; any right-of-way or easement areas necessary for the construction, operation, and maintenance of the Project; all areas used for excavation of borrow material and habitat creation; all construction staging areas, access routes, utilities, spoil areas, and stockpiling areas. Impacts that come from the undertaking at the same time and place with no intervening causes, are considered “direct” regardless of its specific type (e.g., whether it is visual, physical, auditory, etc.). “Indirect” effects to historic properties are those caused by the undertaking that are later in time or farther removed in distance but are still reasonably foreseeable.

The APE for the referenced project consists of the 19 acres of the solar project itself and a visual impact area approximately ¼-mile from the project boundaries except where topography or forest cover obscure sight lines, as shown on the enclosed map. Additionally, the APE does or does not include any federal and/or tribal lands as defined pursuant to 36 CFR § 800.16(x).

On 6/16/2020 the following Indian tribes were notified about the Moran Solar 1 Project: Monacan Nation and Delaware Nation. As of today’s date (6/25/2020), no response has been received.

The enclosed search of the Virginia Department of Historic Resources (DHR) Virginia Cultural Resource Information System (VCRIS) describes the results of the investigation of the APE. No natural heritage resources or historic or cultural resources are mapped within the project area or APE. Based on the findings of the searches complete in June 2020, a finding of no historic properties affected in accordance with 36 CFR § 800.4(d)(1) is appropriate for the referenced project.

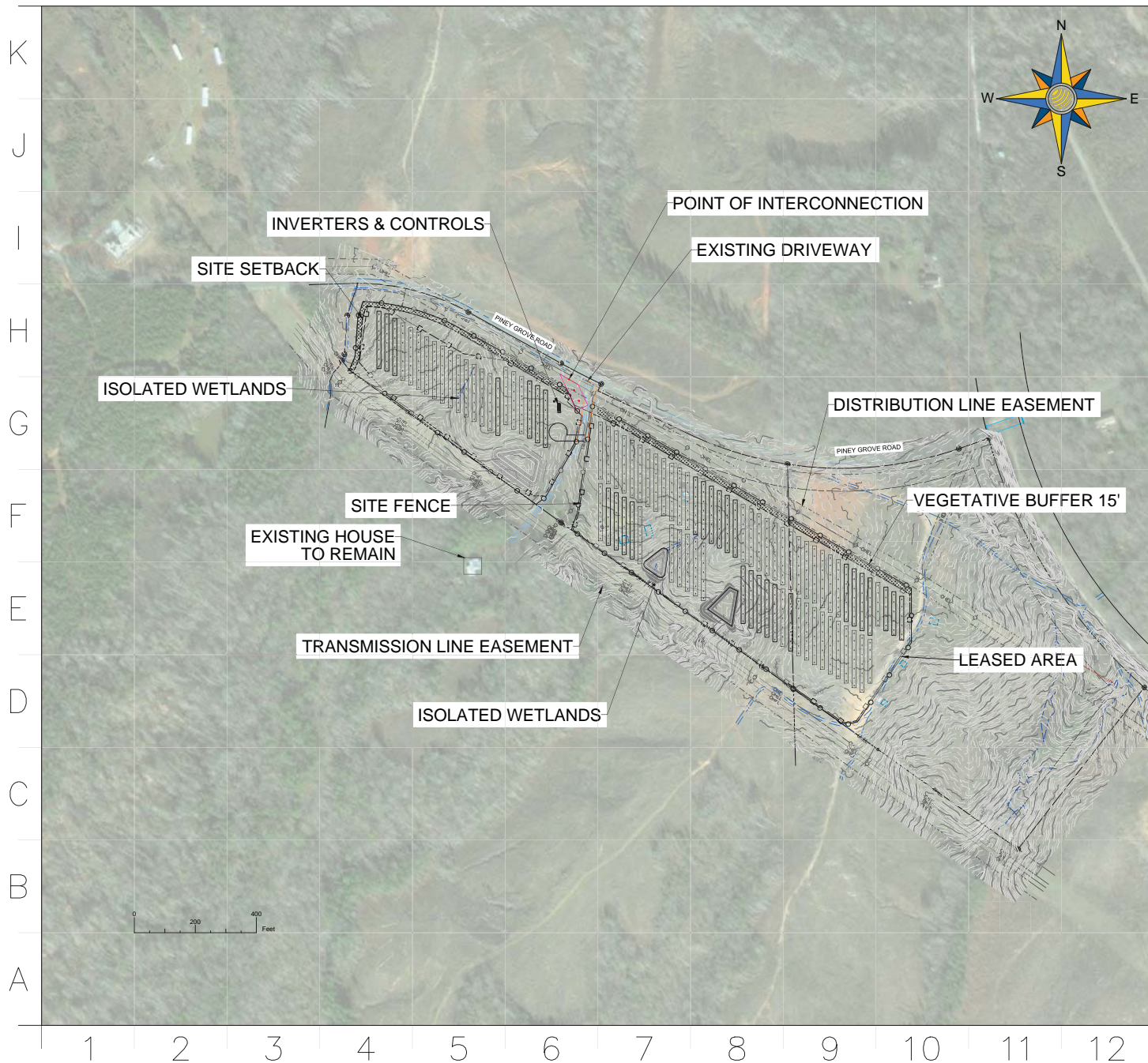
Accordingly, the RUS is submitting a finding of no historic properties affected in accordance with 36 CFR § 800.4(d)(1) and supporting documentation for review and consideration by the State Historic Preservation Office. Please provide your concurrence or objection, **electronically** within 30 days of your receipt of this recommended finding. In accordance with 36 CFR § 800.3(c)(4), RUS will proceed to the next step in review if we do not receive a response from you within thirty days. Please direct any questions you may have to Camille VanSkiver with ECS Mid-Atlantic, LLC at [cvanskiver@ecslimited.com](mailto:cvanskiver@ecslimited.com), 804-591-4048 or Steven Polacek at [steve.polacek@usda.gov](mailto:steve.polacek@usda.gov); 202-205-9805 (office).

Sincerely,

A handwritten signature in black ink, appearing to read "Cam VanSkiver". The signature is fluid and cursive, with the first name "Cam" and last name "VanSkiver" clearly distinguishable.

Camille N. VanSkiver  
Environmental Staff Project Manager  
ECS Mid-Atlantic, LLC

Enclosure(s): USGS Topographic Map  
Proposed Site Plan  
DHR Search Results Map



## NOTES:

### General

Sawyer  
Prince Edward County  
2' Contour Interval  
26' Racking Pitch

### System

3.0 MW AC  
3.8 MW DC  
1.3 DC/AC Ratio

### Setbacks

75' Front  
50' Side  
50' Rear

### Equipment

405W Module (or equal)  
x2 SMA 250kW Inverter (or equal)  
Single Axis N-S Tracker (or equal)

### Civil Takeoffs

Parcel Acreage:	154.19
Fence Acreage:	16.4
Leased acreage:	18.1
Acreage to Clear:	0.5
Fence [LF]:	5200
Silt Fence [LF]:	5225
Access Road [LF]:	350
Cut/Fill [CY]:	5,000
Building Demolition:	4


Fencing 6' with 1' barbed wire.  
Solar Array maximum height 14'.

Storm Water and Erosion & Control will be designed at a later date to meet state and county regulations.

Modules to be UL1703 Certified and have anti-reflective coating.

Construction entrance to meet VDOT regulations.

\*Locations are approximate.  
Subject to change based on environmental and electrical studies, permitting, civil work, surveying, county requirements, and final equipment selection.



**Holocene**  
CLEAN ENERGY

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HOLOCENE DESIGN  
BUILD, LLC

4325 LAKE BOONE TRAIL  
SUITE 220  
RALEIGH, NC 27607  
UNITED STATES

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MORAN SOLAR I  
1867 PINEY GROVE RD  
RICE, VA 23966  
UNITED STATES

---

PRELIMINARY  
DRAWING

NOT FOR  
CONSTRUCTION

---

DATE ISSUED: 6.4.2020  
DRAWN BY: HJH  
DESIGNED BY: HJH

---

SHEET NAME

PRELIMINARY  
LAYOUT

---

SHEET NUMBER

**01**

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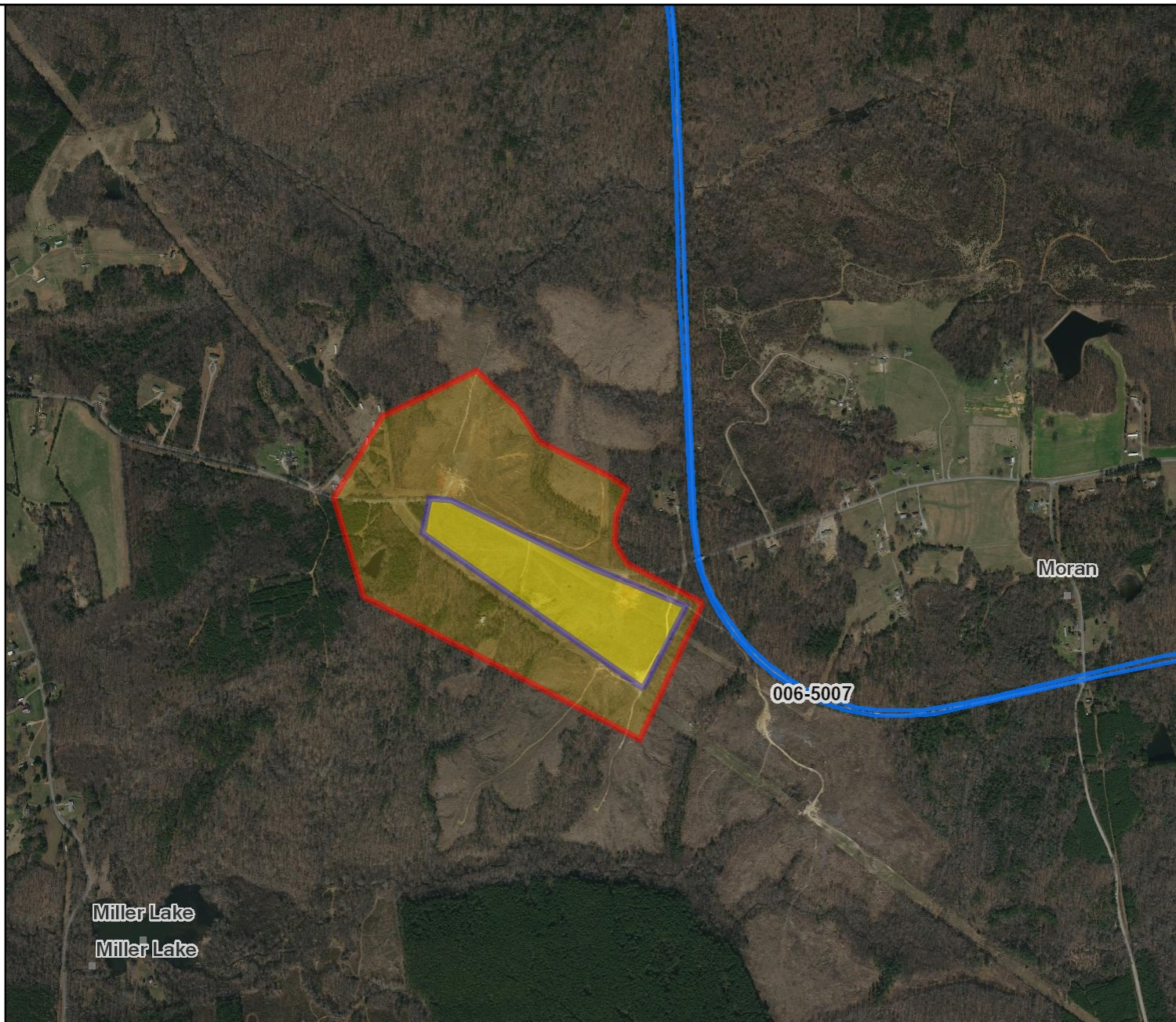
MORAN SOLAR I





## Legend

- Architecture Resources
- Architecture Labels
- Individual Historic District Properties
- Archaeological Resources
- Archaeology Labels
- DHR Easements
- USGS GIS Place names
- County Boundaries



Feet

0 500 1000 1500 2000

1:18,056 / 1"=1,505 Feet

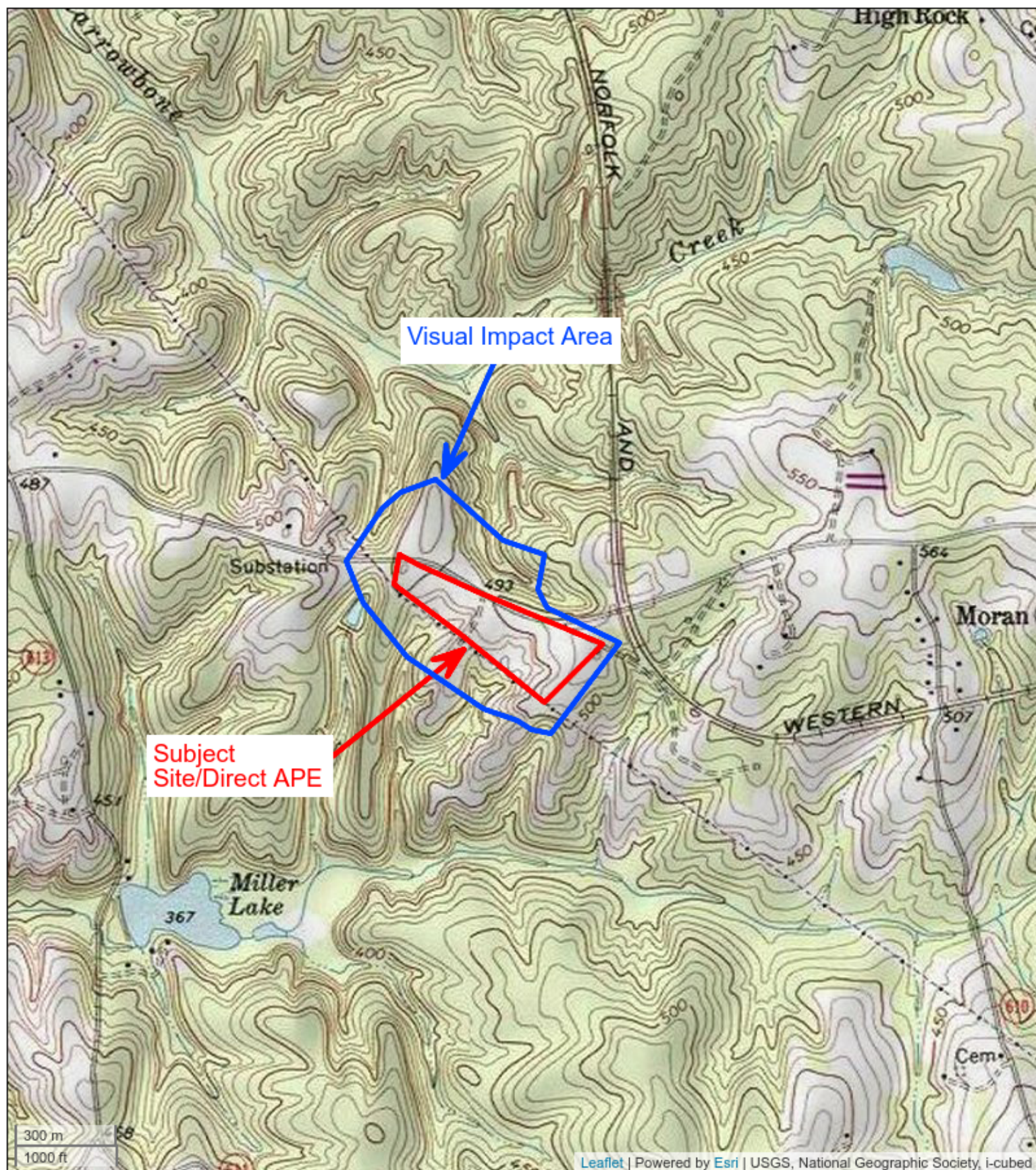
**Title:**

**Date: 6/17/2020**

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*Notice if AE sites: Locations of archaeological sites may be sensitive the National Historic Preservation Act (NHPA), and the Archaeological Resources Protection Act (ARPA) and Code of Virginia §2.2-3705.7 (10). Release of precise locations may threaten archaeological sites and historic resources.*





**Figure 1 USGS Topographic Map**

Moran I Solar  
Piney Grove Road  
Rice, Virginia 23966  
ECS Project No. 47:8304-B





## Camille VanSkiver

---

**From:** ePIX System <ePIX@dhr.virginia.gov>  
**Sent:** Thursday, July 2, 2020 9:54 AM  
**To:** Camille VanSkiver  
**Subject:** Moran Solar 1 Project (DHR File No. 2020-3950) | e-Mail #01213

Dear Camille VanSkiver:

Thank you for submitting your application through the ePIX system and requesting the comments of the Department of Historic Resources on the referenced project. Your application is being processed and our 30-day review period will start on the next business day after submission. You will be notified if your application is insufficient or if additional materials are required for our review.

You may view the submitted application and track our review of this project through your ePIX account under "My Projects" (<https://epix.dhr.virginia.gov>). When our review is complete, comments will be emailed to you and attached to the application in your ePIX account. No project activities that have the potential to impact historic properties should take place until the lead agency has provided a notice to proceed.

If you wish or are asked to submit additional materials in support of your application, documents must be submitted electronically to the appropriate reviewer. Submissions with a total size of less than 10mb may be submitted via email. Submissions larger than 10mb must be made through VITA's Large File Transfer Application (<https://lft.virginia.gov>). Contact your reviewer for instructions.

Please reference the assigned DHR File Number on all future correspondence.

If you have any questions concerning the review process or if we may provide any further assistance, please do not hesitate to contact me. We look forward to working with you on this project.

Sincerely,

Jennifer Bellville-marrion  
Review and Compliance Division

=====  
This message has been analyzed by Deep Discovery Email Inspector.



# COMMONWEALTH of VIRGINIA

Matthew Strickler  
*Secretary of Natural Resources*

**Department of Historic Resources**  
2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan  
*Director*

Tel: (804) 367-2323  
Fax: (804) 367-2391  
TDD: (804) 367-2386  
[www.dhr.virginia.gov](http://www.dhr.virginia.gov)

July 28, 2020

Camille VanSkiver  
2119-D N Hamilton St  
Richmond, VA 23230

Re: Moran Solar I Project  
Prince Edward County, VA  
DHR File No. 2020-3950

Dear Ms. VanSkiver

We have received your request for comments on the project referenced above. The undertaking, as presented, involves the construction of solar facility on approximately 18.1 acres of a larger, 154.19-acre parent parcel. Our comments are provided as assistance to the United States Department of Agriculture's (USDA) Rural Development (RD) and Rural Utilities Service (RUS) in meeting their responsibilities under Section 106 of the National Historic Preservation Act.

According to our records, the area of potential effects (APE) has not been systematically surveyed. One Architectural resource has been recorded within the APE (DHR ID# 006-5007; High Bridge Trail). DHR ID # 006-5007 is the former Norfolk Southern Rail Line and has been found to be potentially eligible for listing in the National Register of Historic Places (NRHP).

In order to identify historic properties that may be affected by this undertaking, we recommend that a Phase I cultural resources survey be conducted within the APE. The cultural resources survey should include archaeological investigations of the proposed solar facility footprint. The architecture portion of the survey should include the documentation and assessment of any structures located within ½ mile of the project area that are 50 years or older. This survey must be conducted by qualified professionals in accordance with the Secretary of the Interior's Standards and Guidelines (48 FR 44716-42) and DHR's Guidelines for Conducting Historic Resources Survey in Virginia (2017). One bound copy and one digital copy of the resulting report should be submitted to our office for review.

Western Region Office  
962 Kime Lane  
Salem, VA 24153  
Tel: (540) 387-5443  
Fax: (540) 387-5446

Northern Region Office  
5357 Main Street  
PO Box 519  
Stephens City, VA 22655  
Tel: (540) 868-7029  
Fax: (540) 868-7033

Eastern Region Office  
2801 Kensington Avenue  
Richmond, VA 23221  
Tel: (804) 367-2323  
Fax: (804) 367-2391

Additionally, in order to understand potential impacts to DHR ID# 006-5007, DHR recommends conducting a viewshed analysis of the project area.

Thank you for seeking our comments on this project. If you have any questions at this time, please do not hesitate to contact me at [jennifer.bellville-marrion@dhr.virginia.gov](mailto:jennifer.bellville-marrion@dhr.virginia.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "J. Bellville-Marrion", with a long horizontal flourish extending to the right.

Jenny Bellville-Marrion, Project Review Archaeologist  
Review and Compliance Division





**Rural Development**

January 4, 2021

RD Area Office

Jennifer Bellville-Marrion

140 Highland Drive  
Suite 5

Virginia Department of Historic Resources

Lebanon, VA 24266

Division of Review and Compliance

2801 Kensington Avenue

Richmond, VA 23221

Voice 276-415-3518

Fax 855-636-4613

Subject: SHPO Recommended Finding of No Adverse Effect

Moran Solar I Solar Farm Construction Project

Piney Grove Road, Rice, Prince Edward County, VA

Dear Ms. Bellville-Marrion:

Holocene Finance LLC (Owner) is seeking financial assistance from the USDA Rural Development (RD), Rural Business-Cooperative Service (RBS) under its Rural Energy for America Program for the Moran Solar I Solar Farm Construction Project (Project). In regards to the *Nationwide Programmatic Agreement among the U.S. Department of Agriculture Rural Development Programs, National Conference of State Historic Preservation Officers, Tribal Signatories, and The Advisory Council on Historic Preservation for Sequencing Section 106* (NPA): This Project will not use the NPA.

If completed, the Project will consist of construction of an approximate 18.8 acre solar farm that will include 61 rows of ground-mounted photovoltaic panels, an inverter an control unit, perimeter security fencing, vegetative buffers/screening, and stormwater management features. The completed farm will generate 3.8 MW of DC power and 3 MW of AC power and will interconnect with the existing electrical grid. The existing water lines are dilapidated and in very poor condition and experience line failures and leaks. The Project is needed to provide clean, renewable energy that limits greenhouse gas emissions and that will assist with meeting recently established renewable energy goals that have been mandated by the Commonwealth of Virginia.

If RBS elects to fund the Project, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800.

RBS defines the area of potential effect (APE), as an area that includes all Project construction and excavation activity required to construct, modify, improve, or maintain any facilities; any right-of-way or easement areas necessary for the construction, operation, and maintenance of the Project; all areas used for excavation of borrow material and habitat creation; all construction staging areas, access routes, utilities, spoil areas, and stockpiling areas; and at least a ½-mile radius for the indirect APE for towers and other above ground resources that will cause a visual or otherwise indirect impact to historic districts or properties.

USDA is an equal opportunity provider and employer.

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at [http://www.ascr.usda.gov/complaint\\_filing\\_cust.html](http://www.ascr.usda.gov/complaint_filing_cust.html), or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at [program.intake@usda.gov](mailto:program.intake@usda.gov).

The APE for the referenced project consists of the proposed disturbance area as well as an additional one-quarter mile radius as shown on the enclosed map. Additionally, the APE does not include any federal and/or tribal lands as defined pursuant to 36 CFR § 800.16(x).

On June 16, 2020 the following Indian tribes were notified about the Project: Delaware Nation, Oklahoma and Monacan Indian Nation. In correspondence dated June 30, 2020, the Delaware Nation, Oklahoma responded that the location of the proposed project does not endanger cultural, or religious sites of interest to the Delaware Nation. They did not request to consult on the project. In correspondence dated July 22, 2020, the Monacan Indian Nation responded that they do not wish to actively consult on the project. Both Tribes requested to be informed if any inadvertent discoveries are made during construction.

The enclosed report titled, *Phase I Cultural Resource Survey of the Moran Solar Project Area, Prince Edward County, Virginia* dated November 2020 describes the results of the survey of the APE. The report documents a cultural resources survey of approximately 24 acres. During the course of the survey, one (1) new archaeological site was identified (44PE0114). The site consists of a scatter of domestic debris which is most likely associated with a 1968 map projected structure. The surveyor recommended that 44PE0114 is not eligible for listing on the Virginia Landmark Register (VLR) or the National Register of Historic Places (NRHP). The architectural resources survey for the Project resulted in the identification of seven (7) resources greater than 50 years of age that are located with the Project APE. One (1) resource was previously recorded (006-5007) and six (6) were newly recorded during the course of the survey (073-5119 – 073-5124 *inclusive*). The High Bridge Trail State Park/Norfolk Southern Railroad (006-5007) is considered potentially eligible for listing on the NRHP but will not be adversely affected (visually) by the undertaking. The rest of the surveyed resources (073-5119 – 073-5124 *inclusive*) are not recommended for inclusion in the VLR/NRHP individually or collectively. In correspondence dated December 16, 2020, the SHPO concurred with the surveyor's findings and recommended that a finding of no adverse effect is appropriate for the referenced project.

Accordingly, the RBS is submitting a finding of no adverse effect in accordance with 36 CFR § 800.5(b) and supporting documentation for review and consideration by the SHPO. Please provide your concurrence or objection, **electronically** within 30 days of your receipt of this recommended finding. In accordance with 36 CFR § 800.3(c)(4), RBS will proceed to the next step in review if we do not receive a response from you within thirty days. Please direct any questions you may have to Jim Warner, State Environmental Coordinator at (276) 415-3518 or james.warner2@usda.gov.

Sincerely,

James P. Warner  
State Environmental Coordinator

Enclosure(s)

CC: Laurette Tucker, Rural Business Program Specialist, Richmond  
Alexandra Moon, ECS Mid-Atlantic, LLC

Phase I Cultural Resources Survey of the Moran Solar Project Area provided electronically.



# Tribal Directory Assessment Information



## Contact Information for Tribes with Interests in Prince Edward County, Virginia

	Tribal Name	County Name
+	Delaware Nation, Oklahoma	Prince Edward
+	Monacan Indian Nation	Prince Edward
1 - 2 of 2 results		« < 1 > » 10 ▾





Alexandra Moon  
Senior Project Manager  
ECS Mid-Atlantic, LLC  
7670 Enon Drive, Suite 101  
Roanoke, Virginia 24019

6/16/2020

Erin Paden  
Historic Preservation/106 Director  
Delaware Nation  
PO Box 825  
Anadarko, Oklahoma 73005

Subject: United States Department of Agriculture (USDA) – Rural Development (RD)  
USDA RD Applicant THPO Section 106 Finding  
Moran Solar 1 Project  
Piney Grove Road, Rice, Prince Edward County, Virginia

Dear Ms. Paden:

Holocene Clean Energy (Applicant) plans to seek financial assistance from the USDA Rural Development (RD), Rural Utilities Service (RUS) under its Electrical Program for the Moran Solar 1 Project (Project). This Project will not be using the NPA.<sup>1</sup>

This project involves the construction of an approximate 19 acre solar farm on a portion of a larger 154 acre property. Project components include the installation of photovoltaic panel arrays ground-mounted on fixed solar racking equipment. The project will also include the construction of an inverter and control unit, a perimeter fence to enclose the arrays, vegetative buffers/screening, and necessary stormwater management BMPs. The area of potential effect (APE) is determined to be the 19 acre site itself. The visual APE for effects to above-ground historic properties is a ¼-mile buffer surrounding the project site where tree cover and topography allow such a distance to be seen from the site, and confined to a shorter distance where site lines are not present (see included topographic map). Interconnection to the existing electrical grid will be completed sometime in the future by the local utility company as

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<sup>1</sup> *Nationwide Programmatic Agreement among the U.S. Department of Agriculture Rural Development Programs, National Conference of State Historic Preservation Officers, Tribal Signatories, and The Advisory Council on Historic Preservation for Sequencing Section 106 (NPA).*

part of a different project and will obtain all required reviews and approvals for that project, as necessary.

The purpose of this project is to provide clean renewable energy to the existing electrical grid for the purposes of bettering the natural and human environment. The proposed project will help limit greenhouse gas emissions through the generation of solar energy while providing electricity to residential and commercial customers connected to the existing electrical grid.

If RUS elects to fund the Project, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800.

RUS defines the area of potential effect (APE), as an area that includes all Project construction and excavation activity required to construct, modify, improve, or maintain any facilities; any right-of-way or easement areas necessary for the construction, operation, and maintenance of the Project; all areas used for excavation of borrow material and habitat creation; all construction staging areas, access routes, utilities, spoil areas, and stockpiling areas. Impacts that come from the undertaking at the same time and place with no intervening causes, are considered “direct” regardless of its specific type (e.g., whether it is visual, physical, auditory, etc.). “Indirect” effects to historic properties are those caused by the undertaking that are later in time or farther removed in distance but are still reasonably foreseeable.

The APE for the referenced project consists of the 19 acres of the solar project itself and a visual impact area approximately ¼-mile from the project boundaries or a shorter distance where site lines are restricted by topography or tree cover, as shown on the enclosed map. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4(a)(1). The APE does not include any tribal lands as defined pursuant to 36 CFR § 800.16(x).

The enclosed search of the Virginia Department of Historic Resources (DHR) Virginia Cultural Resource Information System (VCRIS) describes the results of the assessment of the area of potential effects (APE). One architectural resource is mapped in the vicinity of the project site. Following a review of available information for this resource (High Bridge Trail State Park; DHR ID 006-5007), it has been considered ‘potentially eligible’ for listing on the National Register of Historic Places by DHR due to its Civil War connections. ECS understands that site development will not be occurring near this side of the site and a 15 foot vegetative buffer is proposed along the perimeter of the arrays. Furthermore, existing tree cover will be maintained between the resource and the subject site so that it will not be visible from the Trail. Based on the findings of the search completed in June 2020, a finding of no adverse effect in accordance with 36 CFR § 800.5(b) is appropriate for the referenced project.

Accordingly, the RUS is submitting a finding of no adverse effect in accordance with 36 CFR § 800.5(b) and supporting documentation for review and consideration by the Delaware Nation. Please provide your concurrence or objection, **electronically** within 30 days of your receipt of this recommended finding. In accordance with 36 CFR § 800.3(c)(4), RUS will proceed to the next step in review if we do not receive a response from you within thirty days. Please direct any questions you may have to Steven Polacek at [steve.polacek@usda.gov](mailto:steve.polacek@usda.gov); 202-205-9805 (office).

Sincerely,

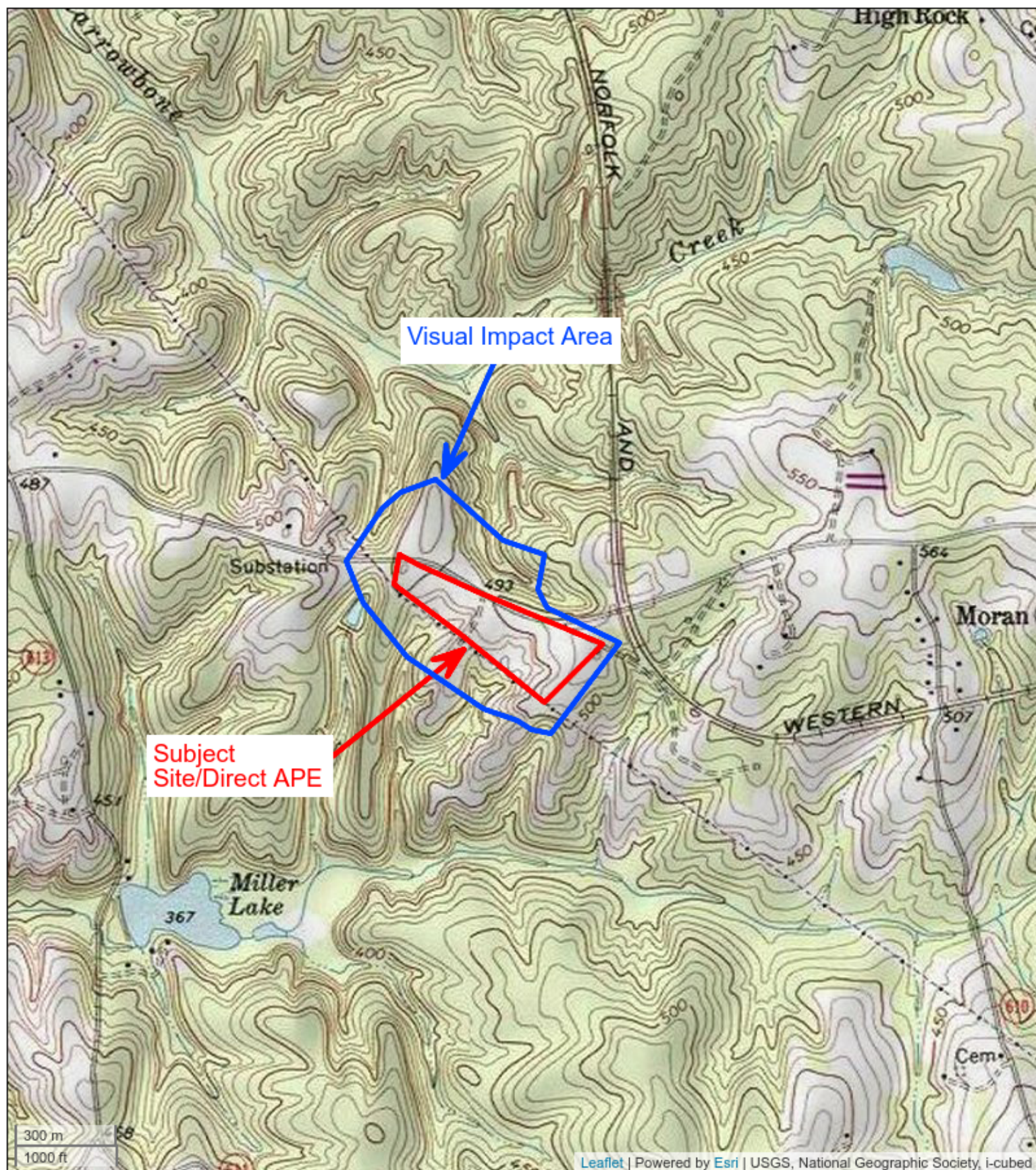


Alexandra Moon  
Senior Project Manager  
ECS Mid-Atlantic, LLC

Enclosure(s): USGS Topographic Map  
Proposed Site Plan  
DHR Search Results Map  
DHR Architectural Survey Form

CC Deborah Dotson – President [[ddotson@delawarenation-nsn.com](mailto:ddotson@delawarenation-nsn.com)]



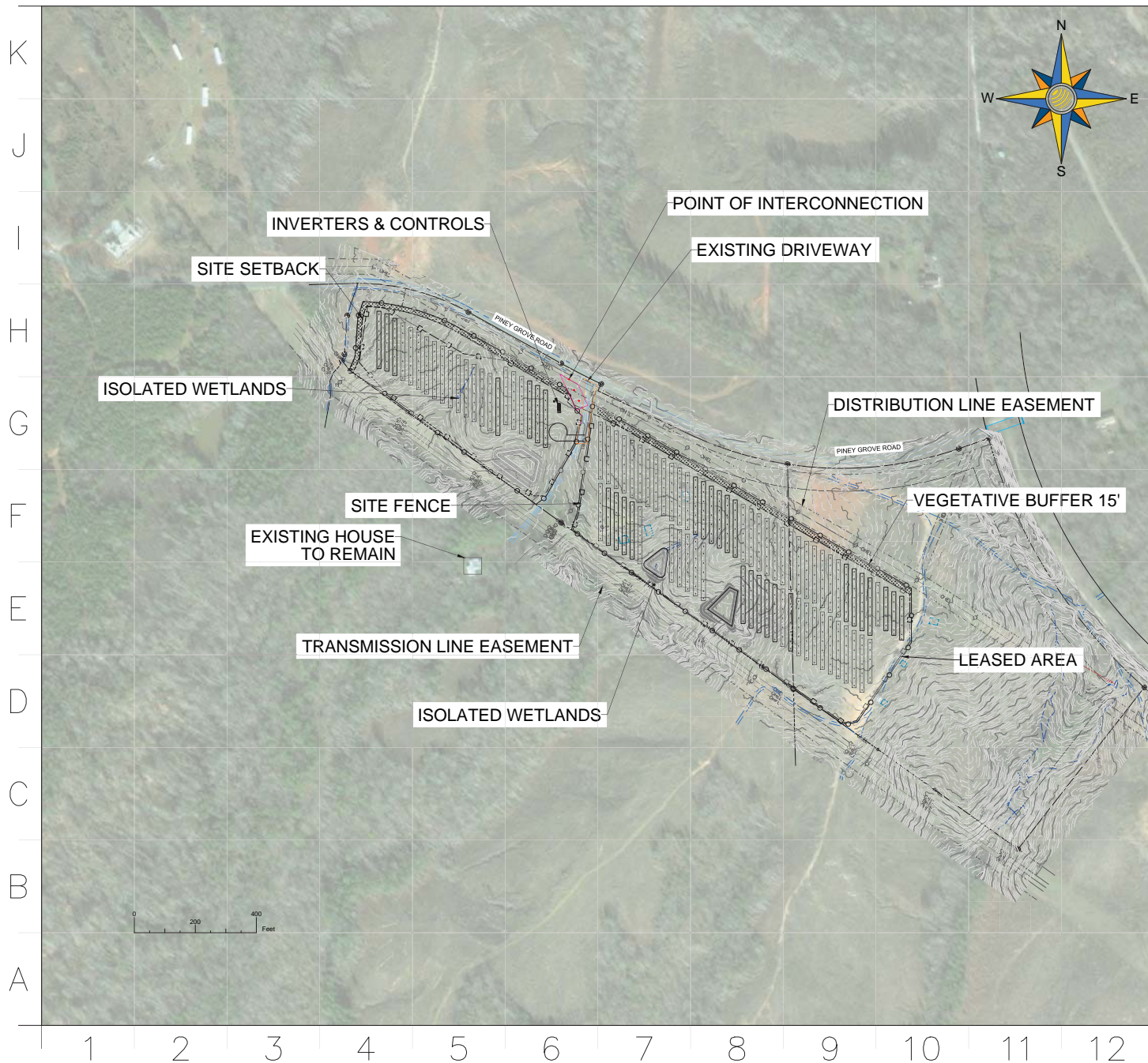


**Figure 1 USGS Topographic Map**

Moran I Solar  
Piney Grove Road  
Rice, Virginia 23966  
ECS Project No. 47:8304-B







## NOTES:

### General

Sawyer  
Prince Edward County  
2' Contour Interval  
26' Racking Pitch

### System

3.0 MW AC  
3.8 MW DC  
1.3 DC/AC Ratio

### Setbacks

75' Front  
50' Side  
50' Rear

### Equipment

405W Module (or equal)  
x2 SMA 250kW Inverter (or equal)  
Single Axis N-S Tracker (or equal)

### Civil Takeoffs

Parcel Acreage:	154.19
Fence Acreage:	16.4
Leased acreage:	18.1
Acreage to Clear:	0.5
Fence [LF]:	5200
Silt Fence [LF]:	5225
Access Road [LF]:	350
Cut/Fill [CY]:	5,000
Building Demolition:	4


Fencing 6' with 1' barbed wire.  
Solar Array maximum height 14'.

Storm Water and Erosion & Control will be designed at a later date to meet state and county regulations.

Modules to be UL1703 Certified and have anti-reflective coating.

Construction entrance to meet VDOT regulations.

\*Locations are approximate.  
Subject to change based on environmental and electrical studies, permitting, civil work, surveying, county requirements, and final equipment selection.



**Holocene**  
CLEAN ENERGY

---

HOLOCENE DESIGN  
BUILD, LLC

4325 LAKE BOONE TRAIL  
SUITE 220  
RALEIGH, NC 27607  
UNITED STATES

---

MORAN SOLAR I  
1867 PINEY GROVE RD  
RICE, VA 23966  
UNITED STATES

---

PRELIMINARY  
DRAWING

NOT FOR  
CONSTRUCTION

---

DATE ISSUED: 6.4.2020  
DRAWN BY: HJH  
DESIGNED BY: HJH

---

SHEET NAME

PRELIMINARY  
LAYOUT

---

SHEET NUMBER

**01**

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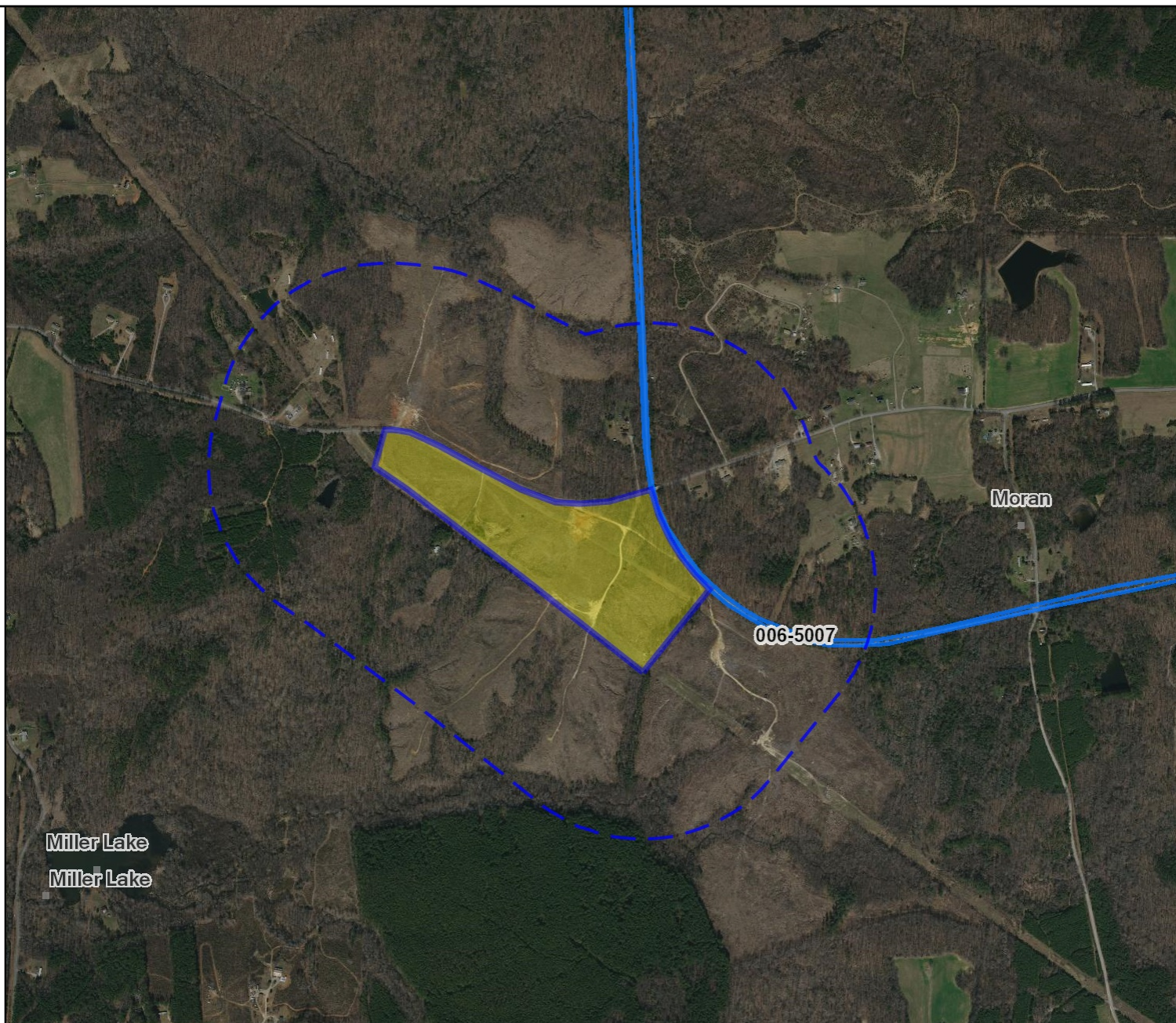
MORAN SOLAR I





### Legend

- Architecture Resources
- Architecture Labels
- Individual Historic District Properties
- Archaeological Resources
- Archaeology Labels
- DHR Easements
- USGS GIS Place names
- County Boundaries



Feet

0 500 1000 1500 2000  
1:18,056 / 1"=1,505 Feet

**Title:**

**Date: 6/12/2020**

*DISCLAIMER: Records of the Virginia Department of Historic Resources (DHR) have been gathered over many years from a variety of sources and the representation depicted is a cumulative view of field observations over time and may not reflect current ground conditions. The map is for general information purposes and is not intended for engineering, legal or other site-specific uses. Map may contain errors and is provided "as-is". More information is available in the DHR Archives located at DHR's Richmond office.*

*Notice if AE sites: Locations of archaeological sites may be sensitive the National Historic Preservation Act (NHPA), and the Archaeological Resources Protection Act (ARPA) and Code of Virginia §2.2-3705.7 (10). Release of precise locations may threaten archaeological sites and historic resources.*

## Property Information

### Property Names

Name Explanation	Name
Historic	Norfolk Southern Rail Line
Current	High Bridge Trail State Park

### Property Evaluation Status

DHR Staff: Potentially Eligible

This Property is associated with the High Bridge Trail State Park.

### Property Addresses

Current - Route 460

**County/Independent City(s):** Appomattox (County), Cumberland (County), Nottoway (County), Prince Edward (County)

**Incorporated Town(s):** No Data

**Zip Code(s):** No Data

**Magisterial District(s):** No Data

**Tax Parcel(s):** No Data

**USGS Quad(s):** CREWE WEST, FARMVILLE, GREEN BAY, PAMPLIN, PROSPECT, RICE

## Additional Property Information

**Architecture Setting:** Transportation Corridor

**Acreage:** 608

### Site Description:

31 mile stretch of abandoned rail line in Appomattox and Nottoway counties.

April 2008: The High Bridge Trail State Park encompasses 608 acres along a 33.5 mile stretch of an abandoned railroad corridor. The line extends between Pamplin, on the west, and Burkesville, on the east, and roughly parallels U.S. Route 460. The corridor passes through several small towns in a largely rural region. Much of the immediate vicinity of the corridor is heavily wooded. The two bridges cross, in a southeasterly-northwesterly direction, the low-lying flood plain of the Appomattox River. Conifers and deciduous trees forest the area to either side of the crossing, while small shrubs vegetate the cleared land around the bridge piers. The 1914 bridge is sited slightly northeast of the 1854 remains and extends between two, steep, wooded bluffs. The railroad tracks were removed from the corridor in 2005, and the grade is currently covered in crushed stone. Wooden utility poles line much of the rail-bed.

April 2008: There are no secondary resources associated with this property.

### Surveyor Assessment:

End Year: 1865  
Date Source: Written Data  
Type: Historical Event  
Notes: Union troops tried to burn bridge to block the Confederate retreat to Appomattox.

2004: 33-mile stretch of rail line that includes the pre-Civil War era High Bridge (with a new trestle dating to 1912) is being abandoned by Norfolk Southern. The corridor has strong Civil War connections and the bridge, though the trestle is a replacement, is a well-known landmark and was regularly painted and photographed from the 1850s forward.

RTD article, 10/27/2004: "On April 6, 1865, Union forces tried to burn the bridge to block the Confederate retreat to Appomattox. Confederate cavalry saved the bridge, and the next day Confederate forces crossed the bridge and succeeded in burning the four western sections, one of which fell into the river. Union troops crossed the river on the lower wagon bridge."

2007: Soon to be converted to the new High Bridge Trail State Park, for use by the general public for a number of non-motorized activities, including hiking, running, bicycling and horseback riding. Decking and side rails will be added to High Bridge, and the track will be removed for the trail along the course of the entire 31 mile park.

April 2008:

**Surveyor Recommendation:** Legacy

### Ownership

Ownership Category	Ownership Entity
State Govt	Virginia Department of Conservation and Recreation

## Primary Resource Information

**Resource Category:** Transportation  
**Resource Type:** Rail-Related  
**NR Resource Type:** Structure  
**Historic District Status:** *No Data*  
**Date of Construction:** 1854  
**Date Source:** Written Data  
**Historic Time Period:** Antebellum Period (1830 - 1860)  
**Historic Context(s):** Commerce/Trade, Industry/Processing/Extraction, Military/Defense, Technology/Engineering, Transportation/Communication  
**Other ID Number:** *No Data*  
**Architectural Style:** No Discernable Style  
**Form:** *No Data*  
**Number of Stories:** *No Data*  
**Condition:** Good  
**Threats to Resource:** Development

**Architectural Description:**

2004: 33-mile stretch of railroad between Pamplin and Burkeville. Rail line includes High Bridge, about 15 minutes east of Farmville by rail. Built in 1854 of wooden stone piers.

2007: 31-mile stretch of rail line was transferred to the state from Norfolk Southern, for use as a rails-to-trails connecting Pamplin to Burkeville, running through Prospect, Farmville, High Bridge and Rice.

April 2008: The 608-acre district encompasses the 33.5-mile stretch of abandoned railroad corridor that extends between the towns of Pamplin and Burkeville, passing through Farmville, Rice, and Prospect. The corridor includes the site of two architecturally- and historically-significant bridges that cross the Appomattox River and a major Civil War battle.

**Secondary Resource Information**

**Historic District Information**

**Historic District Name:** High Bridge Trail State Park  
**Local Historic District Name:** *No Data*  
**Historic District Significance:** *No Data*

**CRM Events**

**Event Type: NRHP Nomination**

**DHR ID:** 006-5007  
**Staff Name:** Andre, Elizabeth  
**Event Date:** 4/9/2008  
**Staff Comment:**  
*No Data*

**Event Type: DHR Staff: Potentially Eligible**

**DHR ID:** 006-5007  
**Staff Name:** DHR  
**Event Date:** 7/1/2004  
**Staff Comment:**

Project Review  
Marc Holma presenting:  
Norfolk & Southern Railroad, Appomattox and Nottoway counties, DHR Project Review File Number 2004-0835, DHR File Number 006-5007.  
The resource, a 33 mile stretch of the Norfolk & Southern railroad that includes the pre-Civil War –era High Bridge (with a new trestle dating to



1912) is being abandoned by Norfolk & Southern. The corridor has strong Civil War connections, and the bridge – though the trestle is a replacement – is a well-known landmark and was regularly painted and photographed from the 1850s forward. The committee recommends that the corridor is potentially eligible for listing for its Civil War associations and its role in the transportation history of the Commonwealth.

### **Bibliographic Information**

**Bibliography:**

No Data

**Property Notes:**

No Data



*The Delaware Nation*  
**Historic Preservation Department**  
31064 State Highway 281  
Anadarko, OK 73005  
Phone (405)247-2448

June 30, 2020

To Whom It May Concern:

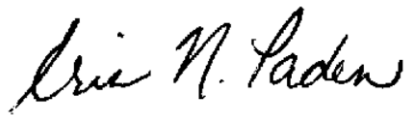
The Delaware Nation Historic Preservation Department received correspondence regarding the following referenced project(s).

**Project(s):    Moran Solar 1 Project**  
**Piney Grove Road, Rice, Prince Edward County, Virginia**

Our office is committed to protecting tribal heritage, culture and religion with particular concern for archaeological sites potentially containing burials and associated funerary objects.

The Lenape people occupied the area indicated in your letter prior to European contact until their eventual removal to our present locations. According to our files, the location of the proposed project does not endanger cultural, or religious sites of interest to the Delaware Nation. **Please continue with the project as planned** keeping in mind during construction should an archaeological site or artifacts inadvertently be uncovered, all construction and ground disturbing activities should immediately be halted until the appropriate state agencies, as well as this office, are notified (within 24 hours), and a proper archaeological assessment can be made.

Please note the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge Munsee Band of Mohican Indians are the only Federally Recognized Delaware/Lenape entities in the United States and consultation must be made only with designated staff of these three tribes. We appreciate your cooperation in contacting the Delaware Nation Historic Preservation Office to conduct proper Section 106 consultation. Should you have any questions, feel free to contact our offices at 405-247-2448 ext. 1403.



Erin Paden  
Director of Historic Preservation  
Delaware Nation  
31064 State Highway 281  
Anadarko, OK 73005  
Ph. 405-247-2448 ext. 1403  
epaden@delawarenation-nsn.gov



Alexandra Moon  
Senior Project Manager  
ECS Mid-Atlantic, LLC  
7670 Enon Drive, Suite 101  
Roanoke, Virginia 24019

6/16/2020

Kenneth Branham  
Chief  
Monacan Indian Nation  
PO Box 960  
Amherst, Virginia 24521

Subject: United States Department of Agriculture (USDA) – Rural Development (RD)  
USDA RD Applicant THPO Section 106 Finding  
Moran Solar 1 Project  
Piney Grove Road, Rice, Prince Edward County, Virginia

Dear Mr. Branham:

Holocene Clean Energy (Applicant) plans to seek financial assistance from the USDA Rural Development (RD), Rural Utilities Service (RUS) under its Electrical Program for the Moran Solar 1 Project (Project). This Project will not be using the NPA.<sup>1</sup>

This project involves the construction of an approximate 19 acre solar farm on a portion of a larger 154 acre property. Project components include the installation of photovoltaic panel arrays ground-mounted on fixed solar racking equipment. The project will also include the construction of an inverter and control unit, a perimeter fence to enclose the arrays, vegetative buffers/screening, and necessary stormwater management BMPs. The area of potential effect (APE) is determined to be the 19 acre site itself. The visual APE for effects to above-ground historic properties is a ¼-mile buffer surrounding the project site where tree cover and topography allow such a distance to be seen from the site, and confined to a shorter distance where site lines are not present (see included topographic map). Interconnection to the existing electrical grid will be completed sometime in the future by the local utility company as

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<sup>1</sup> *Nationwide Programmatic Agreement among the U.S. Department of Agriculture Rural Development Programs, National Conference of State Historic Preservation Officers, Tribal Signatories, and The Advisory Council on Historic Preservation for Sequencing Section 106 (NPA).*

part of a different project and will obtain all required reviews and approvals for that project, as necessary.

The purpose of this project is to provide clean renewable energy to the existing electrical grid for the purposes of bettering the natural and human environment. The proposed project will help limit greenhouse gas emissions through the generation of solar energy while providing electricity to residential and commercial customers connected to the existing electrical grid.

If RUS elects to fund the Project, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800.

RUS defines the area of potential effect (APE), as an area that includes all Project construction and excavation activity required to construct, modify, improve, or maintain any facilities; any right-of-way or easement areas necessary for the construction, operation, and maintenance of the Project; all areas used for excavation of borrow material and habitat creation; all construction staging areas, access routes, utilities, spoil areas, and stockpiling areas. Impacts that come from the undertaking at the same time and place with no intervening causes, are considered “direct” regardless of its specific type (e.g., whether it is visual, physical, auditory, etc.). “Indirect” effects to historic properties are those caused by the undertaking that are later in time or farther removed in distance but are still reasonably foreseeable.

The APE for the referenced project consists of the 19 acres of the solar project itself and a visual impact area approximately ¼-mile from the project boundaries or a shorter distance where site lines are restricted by topography or tree cover, as shown on the enclosed map. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4(a)(1). The APE does not include any tribal lands as defined pursuant to 36 CFR § 800.16(x).

The enclosed search of the Virginia Department of Historic Resources (DHR) Virginia Cultural Resource Information System (VCRIS) describes the results of the assessment of the area of potential effects (APE). One architectural resource is mapped in the vicinity of the project site. Following a review of available information for this resource (High Bridge Trail State Park; DHR ID 006-5007), it has been considered ‘potentially eligible’ for listing on the National Register of Historic Places by DHR due to its Civil War connections. ECS understands that site development will not be occurring near this side of the site and a 15 foot vegetative buffer is proposed along the perimeter of the arrays. Furthermore, existing tree cover will be maintained between the resource and the subject site so that it will not be visible from the Trail. Based on the findings of the search completed in June 2020, a finding of no adverse effect in accordance with 36 CFR § 800.5(b) is appropriate for the referenced project.



Accordingly, the RUS is submitting a finding of no adverse effect in accordance with 36 CFR § 800.5(b) and supporting documentation for review and consideration by the Monacan Indian Nation. Please provide your concurrence or objection, **electronically** within 30 days of your receipt of this recommended finding. In accordance with 36 CFR § 800.3(c)(4), RUS will proceed to the next step in review if we do not receive a response from you within thirty days. Please direct any questions you may have to Steven Polacek at [steve.polacek@usda.gov](mailto:steve.polacek@usda.gov); 202-205-9805 (office).

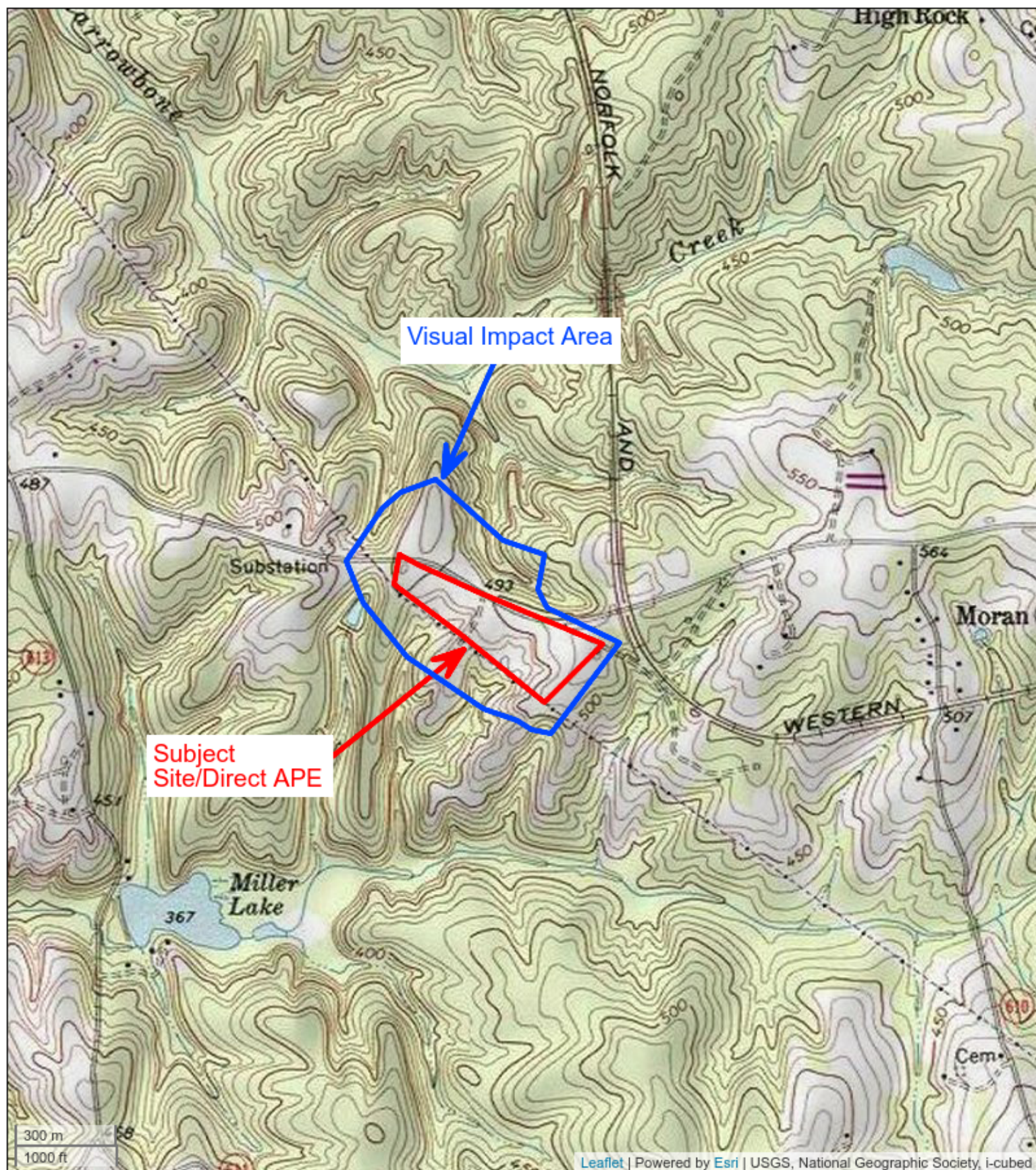
Sincerely,



Alexandra Moon  
Senior Project Manager  
ECS Mid-Atlantic, LLC

Enclosure(s): USGS Topographic Map  
Proposed Site Plan  
DHR Search Results Map  
DHR Architectural Survey Form



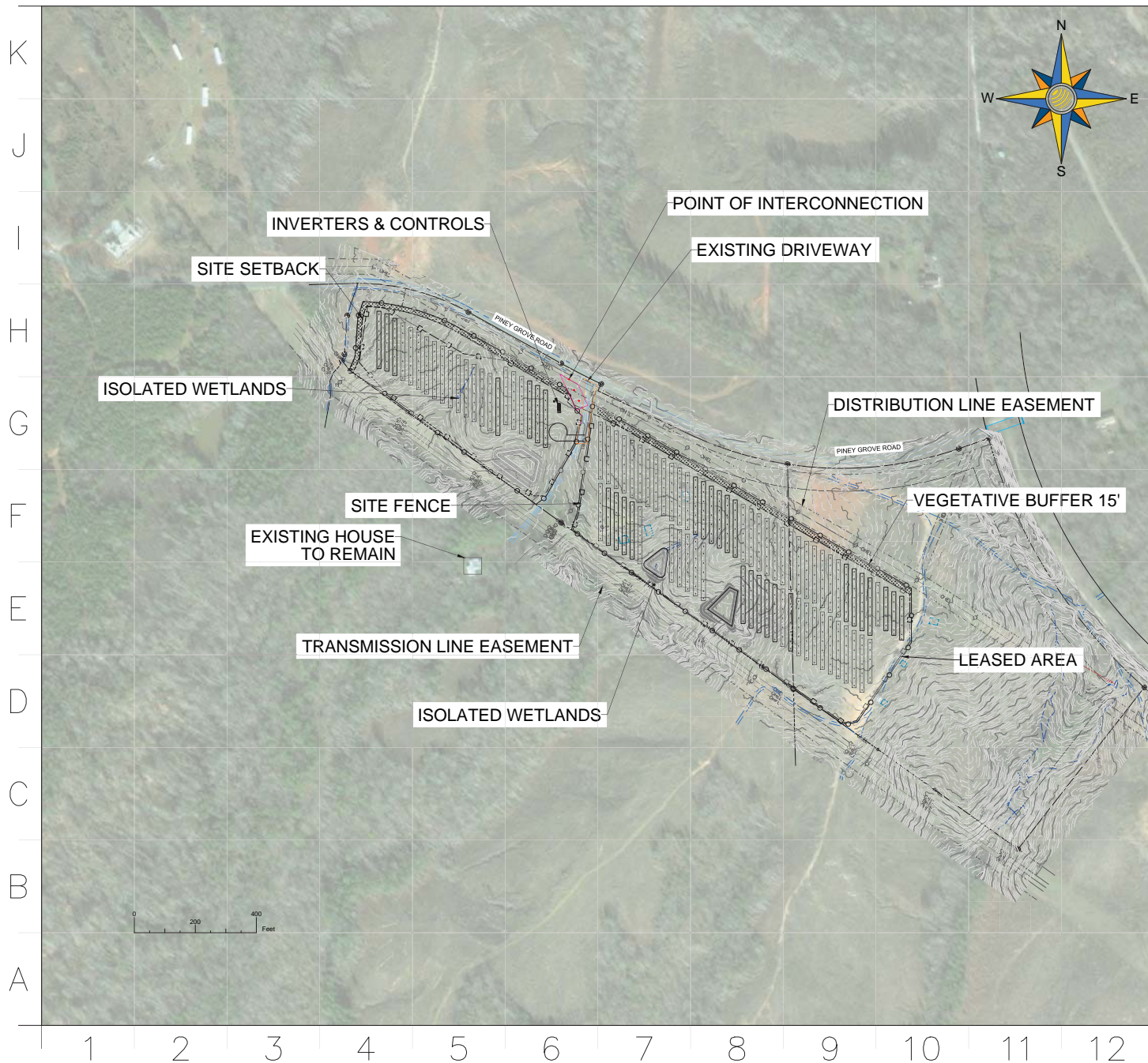


**Figure 1 USGS Topographic Map**

Moran I Solar  
Piney Grove Road  
Rice, Virginia 23966  
ECS Project No. 47:8304-B







## NOTES:

### General

Sawyer  
Prince Edward County  
2' Contour Interval  
26' Racking Pitch

### System

3.0 MW AC  
3.8 MW DC  
1.3 DC/AC Ratio

### Setbacks

75' Front  
50' Side  
50' Rear

### Equipment

405W Module (or equal)  
x2 SMA 250kW Inverter (or equal)  
Single Axis N-S Tracker (or equal)

### Civil Takeoffs

Parcel Acreage:	154.19
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Acreage to Clear:	0.5
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Building Demolition:	4


Fencing 6' with 1' barbed wire.  
Solar Array maximum height 14'.

Storm Water and Erosion & Control will be designed at a later date to meet state and county regulations.

Modules to be UL1703 Certified and have anti-reflective coating.

Construction entrance to meet VDOT regulations.

\*Locations are approximate.  
Subject to change based on environmental and electrical studies, permitting, civil work, surveying, county requirements, and final equipment selection.



**Holocene**  
CLEAN ENERGY

---

HOLOCENE DESIGN  
BUILD, LLC

4325 LAKE BOONE TRAIL  
SUITE 220  
RALEIGH, NC 27607  
UNITED STATES

---

MORAN SOLAR I  
1867 PINEY GROVE RD  
RICE, VA 23966  
UNITED STATES

---

PRELIMINARY  
DRAWING

NOT FOR  
CONSTRUCTION

---

DATE ISSUED: 6.4.2020  
DRAWN BY: HJM  
DESIGNED BY: HJM

---

SHEET NAME

PRELIMINARY  
LAYOUT

---

SHEET NUMBER

**01**

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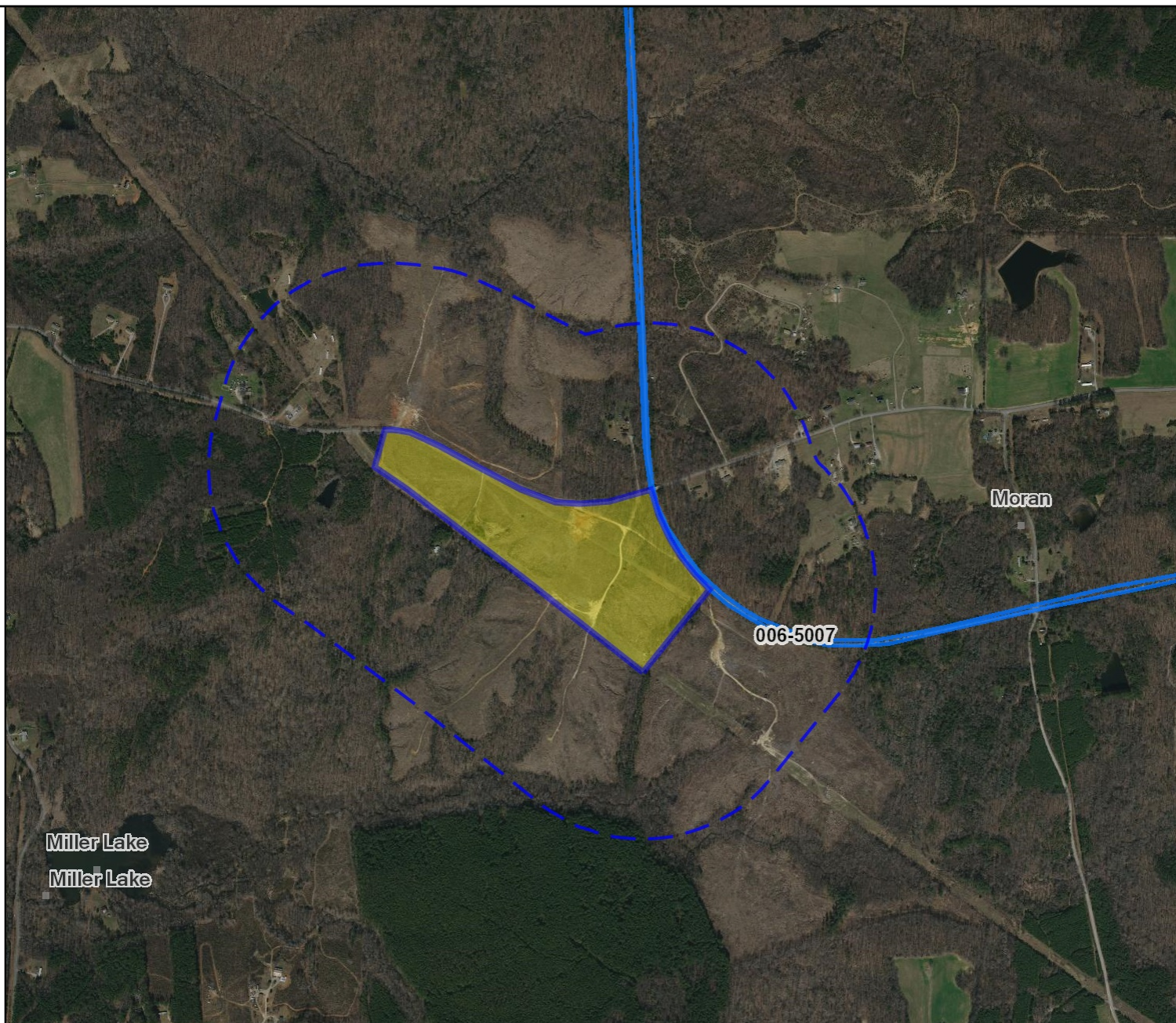
MORAN SOLAR I





### Legend

- Architecture Resources
- Architecture Labels
- Individual Historic District Properties
- Archaeological Resources
- Archaeology Labels
- DHR Easements
- USGS GIS Place names
- County Boundaries



Feet

0 500 1000 1500 2000  
1:18,056 / 1"=1,505 Feet

**Title:**

**Date: 6/12/2020**

*DISCLAIMER: Records of the Virginia Department of Historic Resources (DHR) have been gathered over many years from a variety of sources and the representation depicted is a cumulative view of field observations over time and may not reflect current ground conditions. The map is for general information purposes and is not intended for engineering, legal or other site-specific uses. Map may contain errors and is provided "as-is". More information is available in the DHR Archives located at DHR's Richmond office.*

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## Property Information

### Property Names

Name Explanation	Name
Historic	Norfolk Southern Rail Line
Current	High Bridge Trail State Park

### Property Evaluation Status

DHR Staff: Potentially Eligible

This Property is associated with the High Bridge Trail State Park.

### Property Addresses

Current - Route 460

**County/Independent City(s):** Appomattox (County), Cumberland (County), Nottoway (County), Prince Edward (County)

**Incorporated Town(s):** No Data

**Zip Code(s):** No Data

**Magisterial District(s):** No Data

**Tax Parcel(s):** No Data

**USGS Quad(s):** CREWE WEST, FARMVILLE, GREEN BAY, PAMPLIN, PROSPECT, RICE

## Additional Property Information

**Architecture Setting:** Transportation Corridor

**Acreage:** 608

### Site Description:

31 mile stretch of abandoned rail line in Appomattox and Nottoway counties.

April 2008: The High Bridge Trail State Park encompasses 608 acres along a 33.5 mile stretch of an abandoned railroad corridor. The line extends between Pamplin, on the west, and Burkesville, on the east, and roughly parallels U.S. Route 460. The corridor passes through several small towns in a largely rural region. Much of the immediate vicinity of the corridor is heavily wooded. The two bridges cross, in a southeasterly-northwesterly direction, the low-lying flood plain of the Appomattox River. Conifers and deciduous trees forest the area to either side of the crossing, while small shrubs vegetate the cleared land around the bridge piers. The 1914 bridge is sited slightly northeast of the 1854 remains and extends between two, steep, wooded bluffs. The railroad tracks were removed from the corridor in 2005, and the grade is currently covered in crushed stone. Wooden utility poles line much of the rail-bed.

April 2008: There are no secondary resources associated with this property.

### Surveyor Assessment:

End Year: 1865  
Date Source: Written Data  
Type: Historical Event  
Notes: Union troops tried to burn bridge to block the Confederate retreat to Appomattox.

2004: 33-mile stretch of rail line that includes the pre-Civil War era High Bridge (with a new trestle dating to 1912) is being abandoned by Norfolk Southern. The corridor has strong Civil War connections and the bridge, though the trestle is a replacement, is a well-known landmark and was regularly painted and photographed from the 1850s forward.

RTD article, 10/27/2004: "On April 6, 1865, Union forces tried to burn the bridge to block the Confederate retreat to Appomattox. Confederate cavalry saved the bridge, and the next day Confederate forces crossed the bridge and succeeded in burning the four western sections, one of which fell into the river. Union troops crossed the river on the lower wagon bridge."

2007: Soon to be converted to the new High Bridge Trail State Park, for use by the general public for a number of non-motorized activities, including hiking, running, bicycling and horseback riding. Decking and side rails will be added to High Bridge, and the track will be removed for the trail along the course of the entire 31 mile park.

April 2008:

**Surveyor Recommendation:** Legacy

### Ownership

Ownership Category	Ownership Entity
State Govt	Virginia Department of Conservation and Recreation

## Primary Resource Information

**Resource Category:** Transportation  
**Resource Type:** Rail-Related  
**NR Resource Type:** Structure  
**Historic District Status:** *No Data*  
**Date of Construction:** 1854  
**Date Source:** Written Data  
**Historic Time Period:** Antebellum Period (1830 - 1860)  
**Historic Context(s):** Commerce/Trade, Industry/Processing/Extraction, Military/Defense, Technology/Engineering, Transportation/Communication  
**Other ID Number:** *No Data*  
**Architectural Style:** No Discernable Style  
**Form:** *No Data*  
**Number of Stories:** *No Data*  
**Condition:** Good  
**Threats to Resource:** Development

**Architectural Description:**

2004: 33-mile stretch of railroad between Pamplin and Burkeville. Rail line includes High Bridge, about 15 minutes east of Farmville by rail. Built in 1854 of wooden stone piers.

2007: 31-mile stretch of rail line was transferred to the state from Norfolk Southern, for use as a rails-to-trails connecting Pamplin to Burkeville, running through Prospect, Farmville, High Bridge and Rice.

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**Secondary Resource Information**

**Historic District Information**

**Historic District Name:** High Bridge Trail State Park  
**Local Historic District Name:** *No Data*  
**Historic District Significance:** *No Data*

**CRM Events**

**Event Type: NRHP Nomination**

**DHR ID:** 006-5007  
**Staff Name:** Andre, Elizabeth  
**Event Date:** 4/9/2008  
**Staff Comment:**  
*No Data*

**Event Type: DHR Staff: Potentially Eligible**

**DHR ID:** 006-5007  
**Staff Name:** DHR  
**Event Date:** 7/1/2004  
**Staff Comment:**

Project Review  
Marc Holma presenting:  
Norfolk & Southern Railroad, Appomattox and Nottoway counties, DHR Project Review File Number 2004-0835, DHR File Number 006-5007.  
The resource, a 33 mile stretch of the Norfolk & Southern railroad that includes the pre-Civil War –era High Bridge (with a new trestle dating to

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### Bibliographic Information

**Bibliography:**

No Data

**Property Notes:**

No Data



## MONACAN INDIAN NATION

7/22/2020

**ECS Mid-Atlantic LLC**  
**Alexandra Moon**  
**7670 Enon Drive**  
**Suite 101**  
**Roanoke, VA 24019**

RE: Request for Consulting Party Status on USDA RD Moran Solar I Project (Rice, VA)

Dear Ms. Moon,

Thank you for contacting us regarding the proposed project in Prince Edward County, VA.

The Monacan Indian Nation is a federally recognized sovereign tribe, headquartered on Bear Mountain in Amherst County. Citizens of the Nation are descended from Virginia and North Carolina Eastern Siouan cultural and linguistic groups, and our ancestral territory includes Virginia west of the fall line of the rivers, sections of southeastern West Virginia, and portions of northern North Carolina. At this time, the active Monacan consultation areas include:

**Virginia:** Albemarle, Alleghany, Amherst, Appomattox, Augusta, Bath, Bedford, Bland, Buchanan, Buckingham, Campbell, Carroll, Charlotte, Clarke, Craig, Culpepper, Cumberland, Dickenson, Floyd, Fluvanna, Franklin, Frederick, Giles, Goochland, Grayson, Greene, Halifax, Henry, Highland, Lee, Loudoun, Louisa, Madison, Mecklenburg, Montgomery, Nelson, Orange, Page, Patrick, Pittsylvania, Powhatan, Prince Edward, Pulaski, Rappahannock, Roanoke, Rockbridge, Rockingham, Russell, Scott, Shenandoah, Smyth, Tazewell, Warren, Washington, Wise, and Wythe Counties, and all contiguous cities.

**West Virginia:** Greenbrier, Mercer, Monroe, Pendleton, Pocahontas, and Summers Counties.

**North Carolina:** Alamance, Caswell, Granville, Orange, Person, Rockingham, Vance, and Warren Counties.

At this time, the Nation does not wish to actively participate in this consultation project, because:

	This project is outside our ancestral territory
X	The project's impacts are anticipated to be minimal
	The project is more closely related to _____, which should be contacted to participate in consultation
	The tribal office does not currently have the capacity to participate in this project
	Other:





## MONACAN INDIAN NATION

However, the Nation requests to be contacted if:

- Sites associated with native history may be impacted by this project;
- Adverse effects associated with this project are identified;
- Human remains are encountered during this project;
- Unanticipated native cultural remains are encountered during this project;
- Other tribes consulting on this project cease consultation; or
- The project size or scope becomes larger or more potentially destructive than currently described.

Please do not make any assumptions about future consultation interests based on this decision, as priorities and information may change. We request that you send any future consultation communications in electronic form to [TribalOffice@MonacanNation.com](mailto:TribalOffice@MonacanNation.com) AND hard copy to PO Box 960, Amherst, VA 24521. We appreciate your outreach to the Monacan Indian Nation and look forward to working with you in the future.

Respectfully,

  
Chief Kenneth Branham  
Monacan Indian Nation

## **Appendix XI: Air Quality**

**You are here:** EPA Home > Green Book > Current Nonattainment Counties for All Criteria  
Pollutants

## Current Nonattainment Counties for All Criteria Pollutants

Data is current as of November 30, 2020

The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.

The asterisk (\*) indicates only a portion of the county is included in the designated nonattainment area (NA).

Download National Dataset of all designated areas (currently nonattainment, maintenance, revoked):

dbf | xls | Data dictionary (PDF)

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Listed by State, County, NAAQS (Classification, if applicable)	* Part County NA	NA Area Name
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## **VIRGINIA**

Alexandria city

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Marginal)

Arlington County

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Marginal)

Fairfax County

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Marginal)

Fairfax city

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Marginal)

Falls Church city

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Marginal)

Loudoun County

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Marginal)

Manassas Park city

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Marginal)

Manassas city

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Marginal)

Prince William County

*8-Hour Ozone (2015)* Washington, DC-MD-VA - (Marginal)



**You are here:** EPA Home > Green Book > >National Area and County-Level Multi-Pollutant Information >Virginia Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

## Virginia Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

Data is current as of November 30, 2020

Listed by County, NAAQS, Area. The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.

\* The 1997 Primary Annual PM-2.5 NAAQS (level of 15 µg/m<sup>3</sup>) is revoked in attainment and maintenance areas for that NAAQS. For additional information see the PM-2.5 NAAQS SIP Requirements Final Rule, effective October 24, 2016. (81 FR 58009)

Change the State:

VIRGINIA

Important Notes

Download National Dataset: [dbf](#) | [xls](#) | [Data dictionary \(PDF\)](#)

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
<b>VIRGINIA</b>								
Alexandria city	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	//	Severe-15	Whole	139,966	51/510
Alexandria city	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	Moderate	Whole	139,966	51/510
Alexandria city	8-Hour Ozone (2008)	Washington, DC-MD-VA	12131415161718	05/15/2019	Marginal	Whole	139,966	51/510
Alexandria city	8-Hour Ozone (2015)	Washington, DC-MD-VA	181920	//	Marginal	Whole	139,966	51/510
Alexandria city	Carbon Monoxide (1971)	Washington, DC-MD-VA	92939495	03/15/1996	Moderate <= 12.7ppm	Whole	139,966	51/510
Alexandria city	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	050607080910111213	11/05/2014 *	Moderate	Whole	139,966	51/510

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Arlington County	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	//	Severe-15	Whole	207,627	51/013
Arlington County	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	Moderate	Whole	207,627	51/013
Arlington County	8-Hour Ozone (2008)	Washington, DC-MD-VA	12131415161718	05/15/2019	Marginal	Whole	207,627	51/013
Arlington County	8-Hour Ozone (2015)	Washington, DC-MD-VA	181920	//	Marginal	Whole	207,627	51/013
Arlington County	Carbon Monoxide (1971)	Washington, DC-MD-VA	92939495	03/15/1996	Moderate <= 12.7ppm	Whole	207,627	51/013
Arlington County	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	050607080910111213	11/05/2014 *	Moderate	Whole	207,627	51/013
Charles City County	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	9293949596	12/17/1997	Moderate	Part	62	51/036
Charles City County	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	040506	06/18/2007	Marginal	Whole	7,256	51/036
Chesapeake city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	9293949596	07/28/1997	Marginal	Whole	222,209	51/550
Chesapeake city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	040506	06/01/2007	Marginal	Whole	222,209	51/550

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Chesterfield County	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	92 93 94 95 96	12/17/1997	Moderate	Whole	316,236	51/041
Chesterfield County	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	Marginal	Whole	316,236	51/041
Colonial Heights city	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	92 93 94 95 96	12/17/1997	Moderate	Whole	17,411	51/570
Colonial Heights city	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	Marginal	Whole	17,411	51/570
Fairfax County	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92 93 94 95 96 97 98 99 00 01 02 03 04	//	Severe-15	Whole	1,081,726	51/059
Fairfax County	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	04 05 06 07 08 09 10 11 12 13 14	//	Moderate	Whole	1,081,726	51/059
Fairfax County	8-Hour Ozone (2008)	Washington, DC-MD-VA	12 13 14 15 16 17 18	05/15/2019	Marginal	Whole	1,081,726	51/059
Fairfax County	8-Hour Ozone (2015)	Washington, DC-MD-VA	18 19 20	//	Marginal	Whole	1,081,726	51/059
Fairfax County	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	05 06 07 08 09 10 11 12 13	11/05/2014 *	Moderate	Whole	1,081,726	51/059
Fairfax city	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92 93 94 95 96 97 98 99 00 01 02 03 04	//	Severe-15	Whole	22,565	51/600

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Fairfax city	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	Moderate	Whole	22,565	51/600
Fairfax city	8-Hour Ozone (2008)	Washington, DC-MD-VA	12131415161718					
Fairfax city	8-Hour Ozone (2015)	Washington, DC-MD-VA	181920	//	Marginal	Whole	22,565	51/600
Fairfax city	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	050607080910111213	11/05/2014 *	Moderate	Whole	22,565	51/600
Falls Church city	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	//	Severe-15	Whole	12,332	51/610
Falls Church city	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314					
Falls Church city	8-Hour Ozone (2008)	Washington, DC-MD-VA	12131415161718	05/15/2019	Marginal	Whole	12,332	51/610
Falls Church city	8-Hour Ozone (2015)	Washington, DC-MD-VA	181920	//	Marginal	Whole	12,332	51/610
Falls Church city	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	050607080910111213	11/05/2014 *	Moderate	Whole	12,332	51/610
Fredericksburg city	8-Hour Ozone (1997)-NAAQS revoked	Fredericksburg, VA	0405	01/23/2006	Moderate	Whole	24,286	51/630
Gloucester County	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	040506	06/01/2007	Marginal	Whole	36,858	51/073



County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Hampton city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	92 93 94 95 96	07/28/1997	Marginal	Whole	137,436	51/650
Hampton city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	Marginal	Whole	137,436	51/650
Hanover County	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	92 93 94 95 96	12/17/1997	Moderate	Whole	99,863	51/085
Hanover County	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	Marginal	Whole	99,863	51/085
Henrico County	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	92 93 94 95 96	12/17/1997	Moderate	Whole	306,935	51/087
Henrico County	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	Marginal	Whole	306,935	51/087
Hopewell city	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	92 93 94 95 96	12/17/1997	Moderate	Whole	22,591	51/670
Hopewell city	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	Marginal	Whole	22,591	51/670

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Isle of Wight County	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	Marginal	Whole	35,270	51/093
James City County	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	92 93 94 95 96	07/28/1997	Marginal	Whole	67,009	51/095
James City County	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	Marginal	Whole	67,009	51/095
Loudoun County	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92 93 94 95 96 97 98 99 00 01 02 03 04	//	Severe-15	Whole	312,311	51/107
Loudoun County	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	04 05 06 07 08 09 10 11 12 13 14	//	Moderate	Whole	312,311	51/107
Loudoun County	8-Hour Ozone (2008)	Washington, DC-MD-VA	12 13 14 15 16 17 18	05/15/2019	Marginal	Whole	312,311	51/107
Loudoun County	8-Hour Ozone (2015)	Washington, DC-MD-VA	18 19 20	//	Marginal	Whole	312,311	51/107
Loudoun County	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	05 06 07 08 09 10 11 12 13	11/05/2014 *	Moderate	Whole	312,311	51/107
Madison County	8-Hour Ozone (1997)-NAAQS revoked	Madison and Page Cos (Shenandoah NP), VA	04 05	02/02/2006	Former Subpart 1	Part	237	51/113

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Manassas Park city	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	//	Severe-15	Whole	14,273	51/685
Manassas Park city	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	Moderate	Whole	14,273	51/685
Manassas Park city	8-Hour Ozone (2008)	Washington, DC-MD-VA	12131415161718	05/15/2019	Marginal	Whole	14,273	51/685
Manassas Park city	8-Hour Ozone (2015)	Washington, DC-MD-VA	181920	//	Marginal	Whole	14,273	51/685
Manassas Park city	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	050607080910111213	11/05/2014 *	Moderate	Whole	14,273	51/685
Manassas city	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	//	Severe-15	Whole	37,821	51/683
Manassas city	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	Moderate	Whole	37,821	51/683
Manassas city	8-Hour Ozone (2008)	Washington, DC-MD-VA	12131415161718	05/15/2019	Marginal	Whole	37,821	51/683
Manassas city	8-Hour Ozone (2015)	Washington, DC-MD-VA	181920	//	Marginal	Whole	37,821	51/683
Manassas city	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	050607080910111213	11/05/2014 *	Moderate	Whole	37,821	51/683
Newport News city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	9293949596	07/28/1997	Marginal	Whole	180,719	51/700

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Newport News city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	Marginal	Whole	180,719	51/700
Norfolk city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	92 93 94 95 96	07/28/1997	Marginal	Whole	242,803	51/710
Norfolk city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	Marginal	Whole	242,803	51/710
Page County	8-Hour Ozone (1997)-NAAQS revoked	Madison and Page Cos (Shenandoah NP), VA	04 05	02/02/2006	Former Subpart 1	Part	1,789	51/139
Petersburg city	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	Marginal	Whole	32,420	51/730
Poquoson city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	92 93 94 95 96	07/28/1997	Marginal	Whole	12,150	51/735
Poquoson city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	Marginal	Whole	12,150	51/735
Portsmouth city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	92 93 94 95 96	07/28/1997	Marginal	Whole	95,535	51/740



County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Portsmouth city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	Marginal	Whole	95,535	51/740
Prince George County	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	Marginal	Whole	35,725	51/149
Prince William County	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	//	Severe-15	Whole	402,002	51/153
Prince William County	8-Hour Ozone (1997)-NAAQS revoked	Washington, DC-MD-VA	0405060708091011121314	//	Moderate	Whole	402,002	51/153
Prince William County	8-Hour Ozone (2008)	Washington, DC-MD-VA	12131415161718	05/15/2019	Marginal	Whole	402,002	51/153
Prince William County	8-Hour Ozone (2015)	Washington, DC-MD-VA	181920	//	Marginal	Whole	402,002	51/153
Prince William County	PM-2.5 (1997)-NAAQS revoked	Washington, DC-MD-VA	050607080910111213	11/05/2014 *	Moderate	Whole	402,002	51/153
Richmond city	1-Hour Ozone (1979)-NAAQS revoked	Richmond, VA	9293949596	12/17/1997	Moderate	Whole	204,214	51/760
Richmond city	8-Hour Ozone (1997)-NAAQS revoked	Richmond-Petersburg, VA	04 05 06	06/18/2007	Marginal	Whole	204,214	51/760
Smyth County	1-Hour Ozone (1979)-NAAQS revoked	Smyth Co, VA (White Top Mtn)	92939495969798990001020304	//	Rural Transport (Marginal)	Part	0	51/173

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Spotsylvania County	8-Hour Ozone (1997)-NAAQS revoked	Fredericksburg, VA	04 05	01/23/2006	Moderate	Whole	122,397	51/177
Stafford County	1-Hour Ozone (1979)-NAAQS revoked	Washington, DC-MD-VA	92939495969798990001020304	/ /	Severe-15	Whole	128,961	51/179
Stafford County	8-Hour Ozone (1997)-NAAQS revoked	Fredericksburg, VA	04 05	01/23/2006	Moderate	Whole	128,961	51/179
Suffolk city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	9293949596	07/28/1997	Marginal	Whole	84,585	51/800
Suffolk city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	Marginal	Whole	84,585	51/800
Virginia Beach city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	9293949596	07/28/1997	Marginal	Whole	437,994	51/810
Virginia Beach city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	04 05 06	06/01/2007	Marginal	Whole	437,994	51/810
Williamsburg city	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	9293949596	07/28/1997	Marginal	Whole	14,068	51/830

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
Williamsburg city	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA		06/01/2007	Marginal	Whole	14,068	51/830
			04 05 06					
York County	1-Hour Ozone (1979)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA	92 93 94 95 96	07/28/1997	Marginal	Whole	65,464	51/199
York County	8-Hour Ozone (1997)-NAAQS revoked	Norfolk-Virginia Beach-Newport News (Hampton Roads), VA		06/01/2007	Marginal	Whole	65,464	51/199
			04 05 06					

Important Notes

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2020-11-30

## **Appendix XII: Socio-Economic/ Environmental Justice**

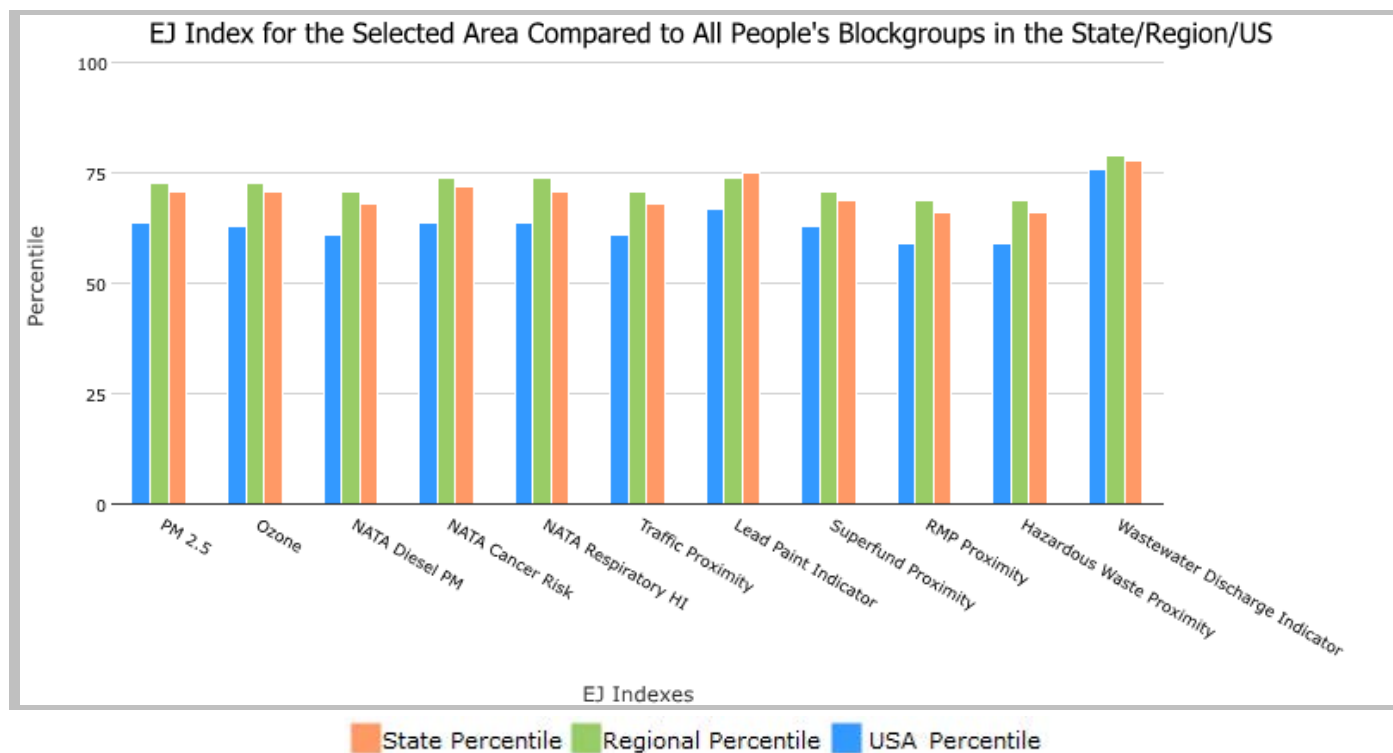


1 miles Ring Centered at 37.228639,-78.272605, VIRGINIA, EPA Region 3

Approximate Population: 73

Input Area (sq. miles): 3.14

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
<b>EJ Indexes</b>			
EJ Index for PM2.5	71	73	64
EJ Index for Ozone	71	73	63
EJ Index for NATA* Diesel PM	68	71	61
EJ Index for NATA* Air Toxics Cancer Risk	72	74	64
EJ Index for NATA* Respiratory Hazard Index	71	74	64
EJ Index for Traffic Proximity and Volume	68	71	61
EJ Index for Lead Paint Indicator	75	74	67
EJ Index for Superfund Proximity	69	71	63
EJ Index for RMP Proximity	66	69	59
EJ Index for Hazardous Waste Proximity	66	69	59
EJ Index for Wastewater Discharge Indicator	78	79	76



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

**1 miles Ring Centered at 37.228639,-78.272605, VIRGINIA, EPA Region 3**

**Approximate Population: 73**

**Input Area (sq. miles): 3.14**



June 12, 2020  
Project 3

14,514  
0 0.04 0.09 0.18 mi  
0 0.05 0.1 0.2 km

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

## EJSCREEN Report (Version 2019)

1 miles Ring Centered at 37.228639,-78.272605, VIRGINIA, EPA Region 3

Approximate Population: 73

Input Area (sq. miles): 3.14

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
<b>Environmental Indicators</b>							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$ )	7.69	7.79	44	8.64	19	8.3	31
Ozone (ppb)	38	42.5	0	44.9	0	43	21
NATA* Diesel PM ( $\mu\text{g}/\text{m}^3$ )	0.173	0.425	11	0.477	<50th	0.479	<50th
NATA* Cancer Risk (lifetime risk per million)	31	31	52	31	<50th	32	<50th
NATA* Respiratory Hazard Index	0.41	0.41	47	0.4	50-60th	0.44	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	33	570	23	640	20	750	20
Lead Paint Indicator (% Pre-1960 Housing)	0.098	0.21	46	0.36	26	0.28	37
Superfund Proximity (site count/km distance)	0.029	0.11	20	0.15	12	0.13	26
RMP Proximity (facility count/km distance)	0.029	0.38	0	0.62	0	0.74	1
Hazardous Waste Proximity (facility count/km distance)	0.041	0.66	3	1.3	2	4	5
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	4.1E-06	0.8	46	30	31	14	43
<b>Demographic Indicators</b>							
Demographic Index	39%	32%	70	30%	72	36%	62
Minority Population	33%	37%	49	32%	61	39%	52
Low Income Population	45%	26%	82	28%	81	33%	72
Linguistically Isolated Population	0%	3%	52	3%	55	4%	45
Population With Less Than High School Education	21%	11%	86	11%	87	13%	80
Population Under 5 years of age	2%	6%	10	6%	10	6%	10
Population over 64 years of age	14%	14%	53	16%	45	15%	51

\* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: [www.epa.gov/environmentaljustice](http://www.epa.gov/environmentaljustice)

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

## QuickFacts

### Prince Edward County, Virginia

QuickFacts provides statistics for all states and counties, and for cities and towns with a *population of 5,000 or more*.

## Table

All Topics	Prince Edward County, Virginia
<b>Population estimates, July 1, 2019, (V2019)</b>	<b>22,802</b>
 <b>PEOPLE</b>	
<b>Population</b>	
<b>Population estimates, July 1, 2019, (V2019)</b>	<b>22,802</b>
Population estimates base, April 1, 2010, (V2019)	23,363
Population, percent change - April 1, 2010 (estimates base) to July 1, 2019, (V2019)	-2.4%
Population, Census, April 1, 2010	23,368
<b>Age and Sex</b>	
Persons under 5 years, percent	▲ 4.8%
Persons under 18 years, percent	▲ 16.0%
Persons 65 years and over, percent	▲ 17.0%
Female persons, percent	▲ 50.0%
<b>Race and Hispanic Origin</b>	
White alone, percent	▲ 63.4%
Black or African American alone, percent (a)	▲ 32.8%
American Indian and Alaska Native alone, percent (a)	▲ 0.3%
Asian alone, percent (a)	▲ 1.4%
Native Hawaiian and Other Pacific Islander alone, percent (a)	▲ 0.1%
Two or More Races, percent	▲ 2.0%
Hispanic or Latino, percent (b)	▲ 3.0%
White alone, not Hispanic or Latino, percent	▲ 61.2%
<b>Population Characteristics</b>	
Veterans, 2015-2019	1,265
Foreign born persons, percent, 2015-2019	5.1%
<b>Housing</b>	
Housing units, July 1, 2019, (V2019)	9,501
Owner-occupied housing unit rate, 2015-2019	64.4%
Median value of owner-occupied housing units, 2015-2019	\$159,700
Median selected monthly owner costs -with a mortgage, 2015-2019	\$1,150
Median selected monthly owner costs -without a mortgage, 2015-2019	\$354
Median gross rent, 2015-2019	\$765
Building permits, 2019	49
<b>Families &amp; Living Arrangements</b>	
Households, 2015-2019	7,185
Persons per household, 2015-2019	2.45
Living in same house 1 year ago, percent of persons age 1 year+, 2015-2019	87.0%
Language other than English spoken at home, percent of persons age 5 years+, 2015-2019	6.7%
<b>Computer and Internet Use</b>	
Households with a computer, percent, 2015-2019	78.0%
Households with a broadband Internet subscription, percent, 2015-2019	66.7%
<b>Education</b>	
High school graduate or higher, percent of persons age 25 years+, 2015-2019	86.0%
Bachelor's degree or higher, percent of persons age 25 years+, 2015-2019	26.8%
<b>Health</b>	
With a disability, under age 65 years, percent, 2015-2019	10.3%
Persons without health insurance, under age 65 years, percent	▲ 12.7%
<b>Economy</b>	
In civilian labor force, total, percent of population age 16 years+, 2015-2019	47.2%
In civilian labor force, female, percent of population age 16 years+, 2015-2019	48.6%
Total accommodation and food services sales, 2012 (\$1,000) (c)	49,916
Total health care and social assistance receipts/revenue, 2012 (\$1,000) (c)	135,037
Total manufacturers shipments, 2012 (\$1,000) (c)	D



Total merchant wholesaler sales, 2012 (\$1,000) (c)	41,747
Total retail sales, 2012 (\$1,000) (c)	390,494
Total retail sales per capita, 2012 (c)	\$16,804

#### Transportation

Mean travel time to work (minutes), workers age 16 years+, 2015-2019	23.0
--	------

#### Income & Poverty

Median household income (in 2019 dollars), 2015-2019	\$47,202
Per capita income in past 12 months (in 2019 dollars), 2015-2019	\$21,017
Persons in poverty, percent	▲ 20.6%



#### BUSINESSES

##### Businesses

Total employer establishments, 2018	512
Total employment, 2018	6,987
Total annual payroll, 2018 (\$1,000)	241,862
Total employment, percent change, 2017-2018	6.7%
Total nonemployer establishments, 2018	1,014
All firms, 2012	1,170
Men-owned firms, 2012	588
Women-owned firms, 2012	373
Minority-owned firms, 2012	280
Nonminority-owned firms, 2012	796
Veteran-owned firms, 2012	188
Nonveteran-owned firms, 2012	850





#### GEOGRAPHY

##### Geography

Population per square mile, 2010	66.8
Land area in square miles, 2010	349.96
FIPS Code	51147

Value Notes

 Estimates are not comparable to other geographic levels due to methodology differences that may exist between different data sources.

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable. Click the Quick Info  icon to the row in TABLE view to learn about sampling error.

The vintage year (e.g., V2019) refers to the final year of the series (2010 thru 2019). *Different vintage years of estimates are not comparable.*

Fact Notes

- (a) Includes persons reporting only one race
- (b) Hispanics may be of any race, so also are included in applicable race categories
- (c) Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data

Value Flags

- Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest or upper inf open ended distribution.
- D Suppressed to avoid disclosure of confidential information
- F Fewer than 25 firms
- FN Footnote on this item in place of data
- N Data for this geographic area cannot be displayed because the number of sample cases is too small.
- NA Not available
- S Suppressed; does not meet publication standards
- X Not applicable
- Z Value greater than zero but less than half unit of measure shown

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and F Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

CONNECT WITH US



## **Appendix XIII: DEQ Scoping Letters**



Ms. Valerie Fulcher  
Environmental Program Specialist  
Office of Environmental Impact Review  
P.O. Box 1105  
Richmond, VA 23218

December 18, 2020

Subject: United States Department of Agriculture (USDA) – Rural Development (RD)  
DEQ Scoping Letter  
Moran Solar 1 Project  
Piney Grove Road, Rice, Prince Edward County, Virginia

Dear Ms. Fulcher:

Holocene Clean Energy is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Development in order that it may assess the environmental impacts of the construction of an approximate 18.8 acre solar farm on a portion of a larger 99.63 acre property in Prince Edward County, Virginia. The project is being proposed to provide clean renewable energy to surrounding electric utility customers in support of Governor Northam's and the General Assembly's clean energy mandate. Project components include the installation of photovoltaic panel arrays ground-mounted on single-axis tracking solar racking equipment. The project will also include the construction of an inverter and control unit, a perimeter fence to enclose the arrays, vegetative buffers/screening, and necessary stormwater management BMPs. The solar panel array itself will include approximately 61 rows of panels and is anticipated to generate approximately 3.8 MW of DC power and 3 MW AC power. Interconnection to the electrical grid will be completed by the electrical company sometime in the future as part of a second, separate project and will undergo required reviews at that time. No on-site lighting will be present after construction. The disturbance of land will be limited to 18.8 acres (leased area) during construction. The site is currently an open field with some scrubby areas; tree clearing is not proposed. The final project area will include 16.1 fenced acres with the remaining acreage being associated with roadway setbacks. Enclosed is a U.S. Geological Survey map that depicts the proposal's location and a site plan that depicts the proposal's construction activities and a description of the work involved.

Holocene Clean Energy requests that your office review the proposal as it pertains to construction activities and potential impacts to environmental resources such as wetlands, erosion and sediment control, storm water management, air quality, solid and hazardous waste



management, pollution prevention, pesticide/herbicide management and any other important State natural resources that may occur in the project area. Please provide any recommendations you may have to mitigate or avoid these impacts.

We would appreciate a response as soon as practicable as the construction timeline for this project is somewhat expedited and any attention the Department can pay to this matter would be greatly appreciated by the Applicant. If you need any further information or wish to discuss the project, please contact Alexandra Moon at 540-362-2000.

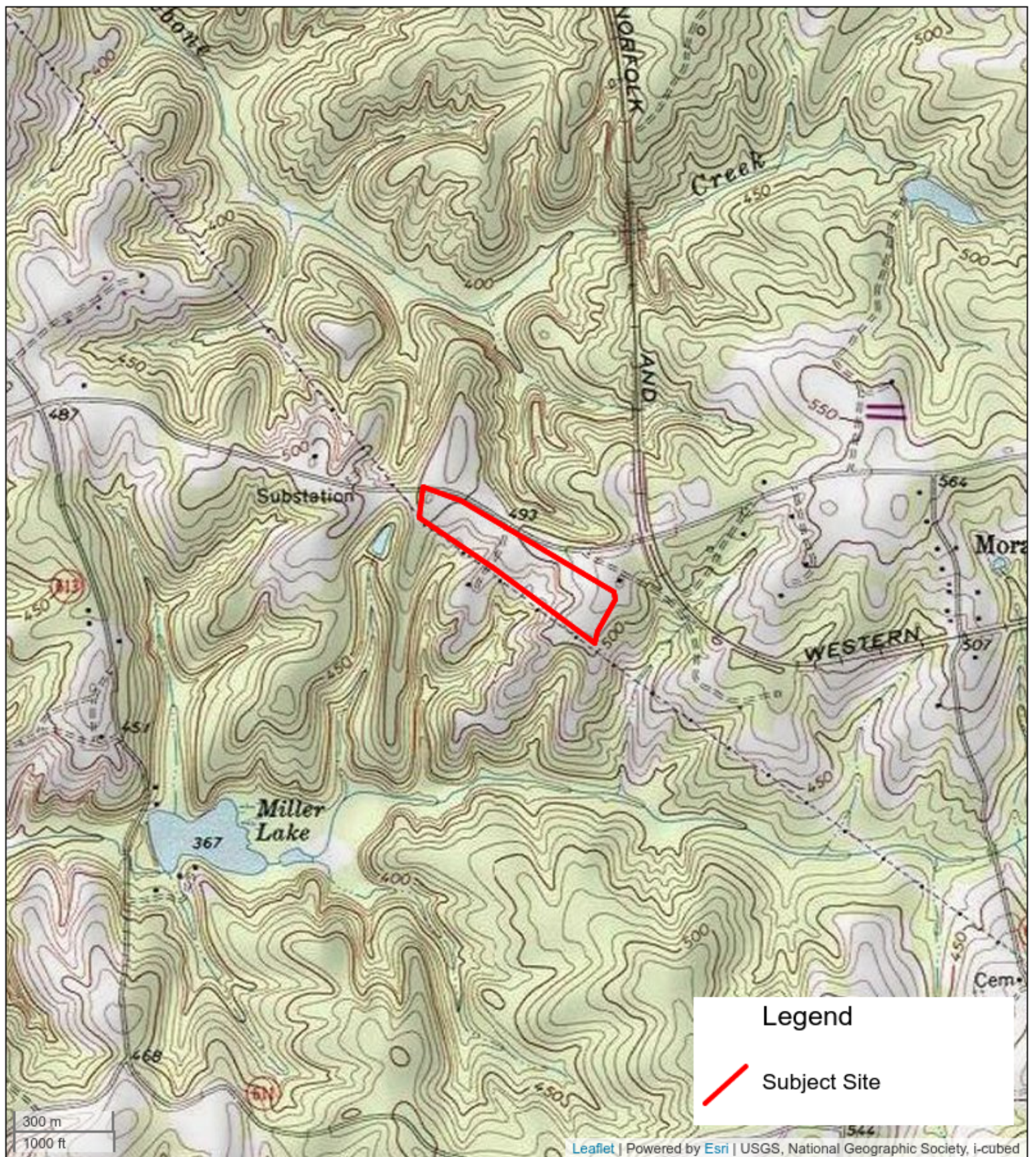
Sincerely,

A handwritten signature in blue ink that reads "Alexandra Moon". The signature is cursive and fluid.

Alexandra Moon  
Senior Project Manager  
ECS Mid-Atlantic, LLC

Enclosure(s): USGS Topographic Map  
Proposed Site Plan



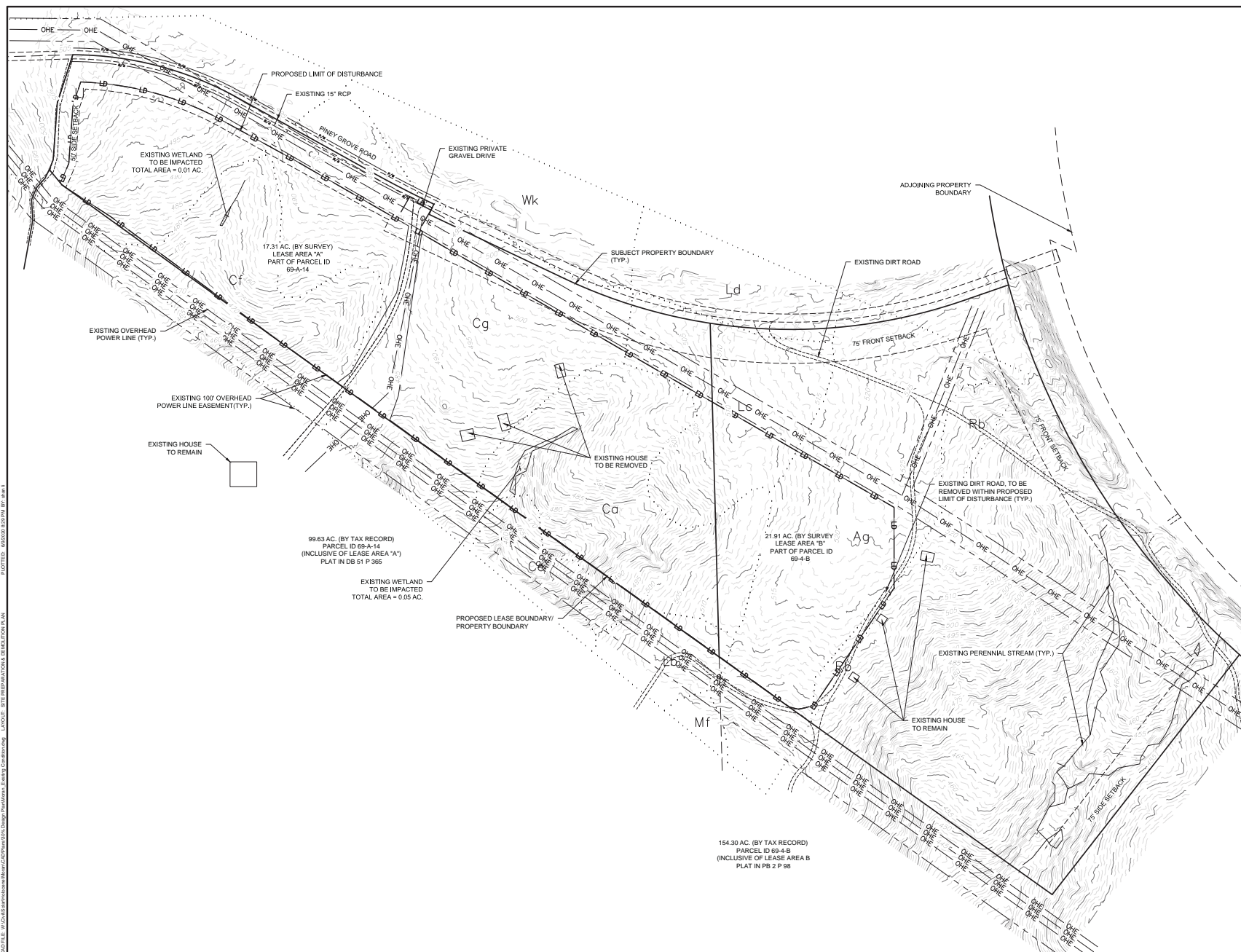


**Figure 1 USGS Topographic Map**

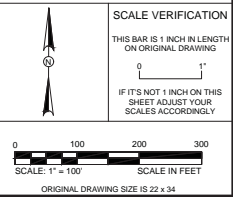
Moran I Solar  
Piney Grove Road  
Rice, Virginia 23966  
ECS Project No. 47:8304-C





[illegible]

ISSUED FOR  
PERMITTING



SITE PREPARATION & DEMOLITION PLAN

MORAN SOLAR I, LLC  
PINEY GROVE ROAD  
PRINCE EDWARD COUNTY, VIRGINIA



ISSUE FOR PERMIT		
PROJECT NO. 20203784.001A		C-101
ISSUE DATE 4/14/2020		
CURRENT REVISION A		
DESIGNED BY YQ		
DRAWN BY YQ		
CHECKED BY BMP		
APPROVED BY CGO	SHEET NUMBER	



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

[www.deq.virginia.gov](http://www.deq.virginia.gov)

Matthew J. Strickler  
Secretary of Natural Resources

David K. Paylor  
Director

(804) 698-4000  
1-800-592-5482

December 18, 2020

Alexandra Moon  
Senior Project Manager  
ECS Mid-Atlantic, LLC  
7670 Enon Drive, Suite 101  
Roanoke, Virginia 24019  
[AMoon@ecslimited.com](mailto:AMoon@ecslimited.com)

RE: Scoping Response: Moran Solar 1 Project; Piney Grove Road, Rice, Prince Edward County, Virginia

Dear Ms. Moon:

This letter is in response to the scoping request for the above-referenced project.

As you may know, the Department of Environmental Quality, through its Office of Environmental Impact Review (DEQ-OEIR), is responsible for coordinating Virginia's review of federal environmental documents prepared pursuant to the National Environmental Policy Act (NEPA) and responding to appropriate federal officials on behalf of the Commonwealth.

### DOCUMENT SUBMISSIONS

In order to ensure an effective coordinated review of the NEPA document, notification of the NEPA document and federal consistency documentation should be sent directly to OEIR. We request that you submit one electronic to [eir@deq.virginia.gov](mailto:eir@deq.virginia.gov) (25 MB maximum) or make the documents available for download at a website, file transfer protocol (ftp) site or the VITA LFT file share system (Requires an "invitation" for access. An invitation request should be sent to [eir@deq.virginia.gov](mailto:eir@deq.virginia.gov)).

The NEPA document should include U.S. Geological Survey topographic. We strongly encourage you to issue shape files with the NEPA document. In addition, project details should be adequately described for the benefit of the reviewers.

### ENVIRONMENTAL REVIEW UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT: PROJECT SCOPING AND AGENCY INVOLVEMENT

As you may know, NEPA (PL 91-190, 1969) and its implementing regulations (Title 40, *Code of Federal Regulations*, Parts 1500-1508) requires a draft and final Environmental Impact Statement (EIS) for federal activities or undertakings that are federally licensed or federally funded which will or may give rise to significant impacts upon the human environment. An EIS carries more stringent public



participation requirements than an Environmental Assessment (EA) and provides more time and detail for comments and public decision-making. The possibility that an EIS may be required for the proposed project should not be overlooked in your planning for this project. Accordingly, we refer to “NEPA document” in the remainder of this letter.

While this Office does not participate in scoping efforts beyond the advice given herein, other agencies are free to provide scoping comments concerning the preparation of the NEPA document. Accordingly, we are providing notice of your scoping request to several state agencies and those localities and Planning District Commissions, including but not limited to:

Department of Environmental Quality:

- DEQ Regional Office
- Air Division
- Office of Wetlands and Stream Protection
- Office of Local Government Programs
- Division of Land Protection and Revitalization
- Office of Stormwater Management

Department of Conservation and Recreation

Department of Health

Department of Agriculture and Consumer Services

Department of Game and Inland Fisheries

Virginia Marine Resources Commission

Department of Historic Resources

Department of Mines, Minerals, and Energy

Department of Forestry

Department of Transportation

## **DATA BASE ASSISTANCE**

Below is a list of databases that may assist you in the preparation of a NEPA document:

- DEQ Online Database: Virginia Environmental Geographic Information Systems

Information on Permitted Solid Waste Management Facilities, Impaired Waters, Petroleum Releases, Registered Petroleum Facilities, Permitted Discharge (Virginia Pollution Discharge Elimination System Permits) Facilities, Resource Conservation and Recovery Act (RCRA) Sites, Water Monitoring Stations, National Wetlands Inventory:

- [www.deq.virginia.gov/ConnectWithDEQ/VEGIS.aspx](http://www.deq.virginia.gov/ConnectWithDEQ/VEGIS.aspx)

- DEQ Virginia Coastal Geospatial and Educational Mapping System (GEMS)

Virginia’s coastal resource data and maps; coastal laws and policies; facts on coastal resource values; and direct links to collaborating agencies responsible for current data:

- <http://128.172.160.131/gems2/>

- MARCO Mid-Atlantic Ocean Data Portal

The Mid-Atlantic Ocean Data Portal is a publicly available online toolkit and resource center that consolidates available data and enables users to visualize and analyze ocean resources and human

use information such as fishing grounds, recreational areas, shipping lanes, habitat areas, and energy sites, among others.

<http://portal.midatlanticocean.org/visualize/#x=-73.24&y=38.93&z=7&logo=true&controls=true&basemap=Ocean&tab=data&legends=false&layers=true>

- DHR Data Sharing System

Survey records in the DHR inventory:

- [www.dhr.virginia.gov/archives/data\\_sharing\\_sys.htm](http://www.dhr.virginia.gov/archives/data_sharing_sys.htm)

- DCR Natural Heritage Search

Produces lists of resources that occur in specific counties, watersheds or physiographic regions:

- [www.dcr.virginia.gov/natural\\_heritage/dbsearchtool.shtml](http://www.dcr.virginia.gov/natural_heritage/dbsearchtool.shtml)

- DGIF Fish and Wildlife Information Service

Information about Virginia's Wildlife resources:

- <http://vafwis.org/fwis/>

- Total Maximum Daily Loads Approved Reports

- <https://www.deq.virginia.gov/programs/water/waterqualityinformationtmdls/tmdl/tmdldevelopment/approvedtmdlreports.aspx>

- Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Database: Superfund Information Systems

Information on hazardous waste sites, potentially hazardous waste sites and remedial activities across the nation, including sites that are on the National Priorities List (NPL) or being considered for the NPL:

- [www.epa.gov/superfund/sites/cursites/index.htm](http://www.epa.gov/superfund/sites/cursites/index.htm)

- EPA RCRAInfo Search

Information on hazardous waste facilities:

- [www.epa.gov/enviro/facts/rcrainfo/search.html](http://www.epa.gov/enviro/facts/rcrainfo/search.html)

- EPA Envirofacts Database

EPA Environmental Information, including EPA-Regulated Facilities and Toxics Release Inventory Reports:

- [www.epa.gov/enviro/index.html](http://www.epa.gov/enviro/index.html)

- EPA NEPAassist Database

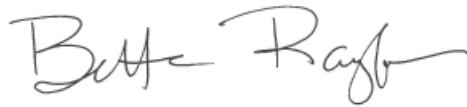
Facilitates the environmental review process and project planning:

<http://nepaassisttool.epa.gov/nepaassist/entry.aspx>

If you have questions about the environmental review process, please feel free to contact me (telephone (804) 698-4204 or e-mail [bettina.rayfield@deq.virginia.gov](mailto:bettina.rayfield@deq.virginia.gov)).

I hope this information is helpful to you.

Sincerely,

A handwritten signature in black ink, reading "Bettina Rayfield". The signature is written in a cursive style with a long horizontal flourish extending from the end of the name.

Bettina Rayfield, Program Manager  
Environmental Impact Review and  
Long-Range Priorities

## Alexandra Moon

---

**From:** Warren, Arlene <arlene.warren@vdh.virginia.gov>  
**Sent:** Monday, December 21, 2020 12:51 PM  
**To:** Alexandra Moon  
**Cc:** rr Environmental Impact Review  
**Subject:** Re: NEW SCOPING REQUEST Moran Solar 1 Project, Prince Edward County

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Project Name: NEW SCOPING REQUEST Moran Solar 1 Project**

Project #: N/A

UPC #: N/A

**Location: Rice, Prince Edward Co.**

VDH – Office of Drinking Water has reviewed the above project. Below are our comments as they relate to proximity to **public drinking water sources** (groundwater wells, springs and surface water intakes). Potential impacts to public water distribution systems or sanitary sewage collection systems **must be verified by the local utility.**

There are no public groundwater wells within a 1-mile radius of the project site.

There are no surface water intakes located within a 5-mile radius of the project site.

The project is within the watershed of the following public surface water sources:

PWS ID Number	System Name	Facility Name
4041035	APPOMATTOX RIVER WATER AUTHORITY	LAKE CHESDIN RAW WATER INTAKE
3670800	VIRGINIA-AMERICAN WATER CO	APPOMATTOX RIVER

Best Management Practices should be employed, including Erosion & Sedimentation Controls and Spill Prevention Controls & Countermeasures on the project site.

*The Virginia Department of Health – Office of Drinking Water appreciates the opportunity to provide comments. If you have any questions, please let me know.*

Best Regards,

Arlene Fields Warren

**GIS Program Support Technician**

**Office of Drinking Water**

**Virginia Department of Health**

109 Governor Street



Richmond, VA 23219

(804) 864-7781

On Fri, Dec 18, 2020 at 2:00 PM Fulcher, Valerie <[valerie.fulcher@deq.virginia.gov](mailto:valerie.fulcher@deq.virginia.gov)> wrote:

**Good afternoon—attached is a request for scoping comments on the following:**

**Moran Solar 1 Project Piney Grove Road, Rice, Prince Edward County, Virginia**

**If you choose to make comments, please send them directly to the project sponsor**

**([AMoon@ecslimited.com](mailto:AMoon@ecslimited.com)) and copy the DEQ Office of Environmental Impact**

**Review: [eir@deq.virginia.gov](mailto:eir@deq.virginia.gov). We will coordinate a review when the environmental document is completed.**

**DEQ-OEIR's scoping response is also attached.**

**If you have any questions regarding this request, please email our office at [eir@deq.virginia.gov](mailto:eir@deq.virginia.gov).**

**Valerie**

--

**Valerie A. Fulcher, CAP, OM, Admin/Data Coordinator Senior**

**Department of Environmental Quality**

**Environmental Enhancement - Office of Environmental Impact Review**

**1111 East Main Street**

**Richmond, VA 23219**

**[804/698-4330](tel:8046984330)**

**Email: [Valerie.Fulcher@deq.virginia.gov](mailto:Valerie.Fulcher@deq.virginia.gov)**

**<https://www.deq.virginia.gov/permits-regulations/environmental-impact-review>**

**OUR ENFORCEABLE POLICIES HAVE BEEN UPDATED FOR 2020: <https://www.deq.virginia.gov/permits-regulations/environmental-impact-review/federal-consistency>**

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Contact: <https://lp.constantcontact.com/su/MVcCump/EIR>

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