



> **Environmental Assessment**
> **FRP Tupelo Solar**

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List of Acronyms and Abbreviations

AC	Alternating Current
ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
ASTM	American Society for Testing and Materials
BCC	Birds of Conservation Concern
BFE	U.S. Bureau of Economic Analysis
BFE	Base Flood Elevation
BMP	Best Management Practice
BMPs	Best Management Practices
CAA	Clean Air Act
CdTe	Cadmium Telluride
CEQ	Council on Environmental Quality
CFA	Core Foraging Areas
CFR	Code of Federal Regulations
CO	carbon monoxide
CSA	Combined Statistical Area
cSi	Crystalline Silicon
CZMA	Coastal Zone Management Act
dB	Decibel
DC	Direct Current
DHR	Division of Historical Resources
DoD	Department of Defense
EA	Environmental Assessment
ECT	Environmental Consulting and Technology, Inc.
EIS	Eastern Indigo Snakes
EO	Executive Order
EPA	U.S. Environmental Protection Agency
F.A.C.	Florida Administrative Code
FAA	Federal Aviation Administration
FDEP	Florida Department of Environmental Quality
FEMA	Federal Emergency Management Agency
FHWY	Federal Highway Administration
FIRMs	Flood Insurance Rate Maps
FNAI	Florida Natural Areas Inventory
FPL	Florida Power & Light
FPPA	Farmland Protection Policy Act
FRP	Florida Renewable Partners Tupelo Solar, LLC
FWC	Florida Fish and Wildlife Conservation Commission
GIS	Geographic Information System
HHS	United States Department of Health and Human Services
HUC	Hydrologic Unit Code
IEEE	Institute of Electrical and Electronics Engineers
IPaC	Information for Planning and Consultation

kV	Kilovolt
kW	Kilowatt
LESA	Land Evaluation and Site Assessment
MBTA	Migratory Bird Treaty Act
MV	Megavolt
MW	Megawatt
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NO ₂	nitrogen dioxide
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
O ₃	ozone
OSHA	Occupational Safety and Health Administration
PAD-US	USGS Protected Areas Database
PAD-US	Protected Areas Database of the United States
Pb	lead
PCU	Solar Power Conditioning Unit
PPA	Power Purchase Agreement
PV	Photovoltaic
ROW	Right-of-way
RUS	Rural Utilities Services, USDA
SEAK	Southeastern American Kestrels
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Office
SPCC	Spill Prevention Control and Countermeasure
STOF	Seminole Tribe of Florida
SWPPP	Stormwater Pollution Prevention Plan
THPO	Tribal Historic Preservation Office
USC	United States Code
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

SUMMARY

Florida Renewable Partners Tupelo Solar, LLC (FRP), proposes to develop the Tupelo Solar Project (Project) located on Yelvington and East End Roads in unincorporated Putnam and Flagler Counties, Florida (Figure 1-1). The Project would generate clean, renewable electricity for rural electric customers and be interconnected to the existing energy transmission system.

FRP is seeking financing from the U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS). This Environmental Assessment (EA) has been prepared pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq., as amended) to assist the USDA's RUS in assessing the potential environmental effects of the Proposed Action.

This EA describes biological, environmental, cultural, and socioeconomic resources that may be affected by the Proposed Action and determines the significance of potential impacts to each of the aspects evaluated.

This EA indicates that the Proposed Action is expected to have no significant impacts to the natural resources, cultural resources, socioeconomics, or aesthetics of the project area. The Proposed Action will result in beneficial outcomes associated with new employment opportunities and increased tax revenue. Based on this assessment and considering the significance criteria in Title 40 of the Code of Federal Regulations Part 1508.27, the Proposed Action is not expected to result in significant cumulative or long-term adverse environmental or socioeconomic impacts

1.0 Purpose and Need of the Proposed Action

FRP Tupelo Solar, LLC (FRP), a wholly owned subsidiary of NextEra Energy Resources, LLC, proposes to develop the Tupelo Solar Project (Project) located on Yelvington and East End Roads in unincorporated Putnam and Flagler Counties, Florida (Figure 1-1).

The Project will generate approximately 74.5 megawatts (MW) of clean, renewable electricity to rural electric customers and be delivered to the electrical grid via interconnection to Florida Power & Light Company's (FPL's) Korona-Putnam 230-kilovolt (kV) transmission line.

FRP is seeking financing from the U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS). This Environmental Assessment (EA) has been prepared pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq., as amended) to assist the USDA's RUS in assessing the potential environmental effects of the project.

The Project location was previously used for agriculture and was chosen for project viability and proximity to the grid. The goal of the Project is to provide energy from a renewable source while minimizing environmental impacts by utilizing previously disturbed land. The land had previously been cleared for row crop cultivation and silviculture.

1.1 **FRP Purpose and Need**

The purpose of the Project is to construct, operate, and maintain a 74.5 MW_{AC} solar photovoltaic (PV) facility to provide clean, cost effective, renewable energy in accordance with a 25-year Power Purchase Agreement (PPA) with Seminole Electric Cooperative, which was fully executed in December 2019. The expected Commercial Operation Date is August 30, 2025, and construction is expected to commence on July 01, 2024. FRP's goal is to minimize environmental impacts by building the Project on already disturbed land that is in close proximity to an existing interconnection point, thereby reducing environmental, social, and financial impacts associated with a lengthy interconnection corridor.

1.2 USDA 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.

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.

The USDA's purpose and need are to either approve or deny FRP's application for financing via their RUS program. The USDA's RUS administers programs that provide infrastructure improvements to rural communities. Specifically, the RUS Electric Program provides loans and loan guarantees to finance the construction or improvement of electric distribution, transmission, and generation facilities in rural areas. Financial assistance can include direct loans, guaranteed loans, and grants in order to accomplish program objectives.

FRP requested a \$63.1 million loan, with a length of 25 years to match the term of the Project's PPA with Seminole Electric Cooperative. The Project and borrower meet the eligibility requirements to receive the loan through RUS, as established by the Rural Electrification Act of 1936 and pursuant to 7 CFR Chapter XVIII.

2.0 Alternatives to the Proposed Project

This section describes the Proposed Action, the No Action Alternative, and other alternatives evaluated.

2.1 **Proposed Action**

The Proposed Action is construction and operation of the FRP Tupelo Solar Project, a new 74.5 MW solar PV energy center facility located upon approximately 548 acres of agricultural lands. The Project consists of a solar PV panel array with inverters, at-grade access paths, a perimeter security fence, a collector yard, and other ancillary equipment. The Project includes the approximately 548-acre solar PV array and an associated 0.68-mile-long gen-tie line, which collectively include the following parcel ID numbers:

Putnam County:

24-10-27-0000-0020-0000
 25-10-27-0000-0020-0000
 25-10-27-0000-0040-0000
 25-10-27-0000-0041-0000

Flagler County:

19-10-28-0000-01010-0006
 30-10-28-0000-01010-0000

This section provides information related to the design, construction, operation, maintenance, and decommissioning of the Project. The preliminary design of the Project has been determined. The final selection of solar modules, inverters, mounting system, array configuration, and precise dimensions will be determined during detailed design and equipment procurement. A detailed description of the Proposed Action is provided in the following sections.

2.1.1 **Facilities Overview**

The Project area is a combination of two primary components: an approximately 548-acre PV solar array and a 0.68-mile-long gen-tie line (Figure 2-1). The solar array will be comprised of “inverter blocks” aggregated to meet the total project output. While the mounting system, final block size dimensions, and number of blocks will be determined during detailed design and equipment selection/procurement, the overall Project will have an installed capacity of approximately 74.5 MW_{AC}. The Project will also include an FRP Tupelo Solar collector yard that will combine all alternating current

(AC) power from the collection circuits and transform the electrical power to the appropriate transmission voltage.

Construction activities are expected to include site preparation, system installation, inspections, and system acceptance. Prior to construction, any necessary erosion and sediment controls will be installed to avoid discharge of erosional materials outside of the work area and to ensure debris associated with the construction activities does not leave the development site.

2.1.2 Modules

The PV modules convert sunlight to direct current (DC) electrical energy. As sunlight hits the solar panels, the PV energy is converted into DC electricity. The PV module type for this Project is proposed to be either crystalline silicon (cSi) or thin film (CIS or CdTe). The final module mix will be chosen based on procurement availability.

2.1.3 Array Mounting System

Individual panels are mounted on a metal racking system with minimal disturbance to the land underneath the panels. The modules will be able to tilt to track the sun from east to west (i.e., tracking system), and will be supported by driven piers (piles) directly embedded in the ground. Following racking system installation natural vegetation will be established beneath the panels.

2.1.4 Inverters and Collection Systems

The inverters convert the DC electrical energy from the photovoltaic arrays into AC power that perform three critical functions for the Project:

1. Collect DC power in a central location,
2. Convert the DC power into AC power, and
3. Convert low-voltage AC power to medium voltage AC power for collection from around the site.

Each inverter consists of DC collection equipment (e.g., junction boxes and overcurrent protective devices, etc.) and a low-to-medium-voltage transformer. The output power from the inverter stations is then fed to the AC collection system, which is typically a network of medium-voltage conductors and collection switchgear.

2.1.5 Collector Yard and Interconnection

FRP proposes to construct a collector yard that increases the voltage of the Project to match the voltage of the interconnecting switchyard. The yard and FPL switchyard are located onsite in the northeast portion of the solar array (Figure 2-1). It will be enclosed within a separate security fence and access gate and will be situated on an impervious base and within a 7-foot chain link fenced enclosure topped with one foot of barbed wire. The proposed finished floor elevation of the collector yard and switchyard will be at least 12 inches above the 100-year flood elevation. Power from the collector yard and switchyard will be transmitted to FPL's existing Korana-Putnam 230 kV transmission line via a new overhead electrical interconnection located on the east side of Yelvington Road. No improvements to this new interconnection easement are proposed other than the addition of the new power poles. Poles would be installed via the existing Yelvington Road right-of-way (ROW).

2.1.6 Access Paths and Perimeter Fencing

The entire solar array will be enclosed within a 6-foot chain link fence topped with one foot of barbed wire. The collector substation will be enclosed within a 7-foot chain link fence topped with one-foot of barbed wire. Access pathways will be constructed as needed throughout the Project to provide access between the solar arrays. Access pathways are typically 12-foot wide and consist of compacted aggregate base material. The main entrance access path to the collector substation may be as wide as 20 feet and the portion within any existing road ROW would be paved. Access pathways will be constructed at-grade to maintain pre-development drainage flow patterns.

2.1.7 Lighting

Lighting will be installed at the site entry gate and the substation location; lighting will be designed to minimize spillover into neighboring properties. Operable lighting at each conversion station might be installed, but these units will only be used during maintenance activities. The entry will have fixtures to provide minimal lighting and will have additional on-demand (timer) lighting as needed or required.

2.1.8 Stormwater Facilities

Appropriate stormwater management facilities will be constructed in accordance with State regulations to account for runoff from impervious access roads, inverter stations, and the collector yard/switchyard. These areas account for less than two percent of the Project’s total area. The proposed facility will result in a net improvement related to stormwater quantity and quality by eliminating agriculture-related activities.

2.1.9 Project Construction

Project construction work generally includes site preparation, site improvements, system installation, system acceptance, and cleanup. The various phases of the construction cycle are outlined in the following sections.

2.1.9.1 Site Preparation

Site preparation will involve surveying and staking, minor grading, clearing and grubbing, installation of a perimeter security fence and area lighting, and preparation of construction laydown areas. FRP Tupelo Solar proposes a “civil light” development approach that focuses on minimal site grading to preserve existing drainage features and surface flow patterns. Fill material will be limited to the inverter pads and collector yard. Site preparation also includes establishment of a construction management area, trailers, equipment, utility connections, and equipment laydown. Local power utility connections are already available at the Project. Construction vehicles will primarily access the Project via East End Road. Temporary logistic areas of the Project include: construction trailers, a first aid station, worker parking, truck loading and unloading areas, and areas for Project assembly tasks. Portable toilet facilities will be temporarily installed during the construction phase and will be serviced by a private company on a regular basis.

2.1.9.2 Stormwater and Erosion Control

A Storm Water Pollution Prevention Plan (SWPPP) incorporating best management practices (BMPs) for erosion control will be prepared prior to the start of construction pursuant to Section 402 of the Clean Water Act. During site preparation the SWPPP will be implemented and initial erosion and sedimentation controls will be installed.

2.1.9.3 Project Installation

The bulk of the Project construction activities involve installation of equipment, including array foundations (driven piles), conversion stations, cables, batteries, and collector switchyard high voltage equipment. Piles will be driven into the ground using a pile driver with a depth of approximately 6 to 10 feet below grade as dictated by the soils and the array structural design. The module racking assembly will then be connected to the piles. The modules will then be fastened to the tracking assembly and electrically connected in series strings or DC harnesses. The strings or harnesses will be routed to DC combiners or load break disconnects and subsequently routed to the inverters.

Subject to final design requirements, the main DC feeder lines to the inverter stations will largely be aboveground and routed through the PV tracking system structures, but the lines could also be direct-buried in some areas. The AC collection system feeder lines will generally use direct-buried conductors, requiring the use of trenching equipment, but could also be aboveground on poles in isolated areas. The trenches for these large diameter conductors will comply with applicable state and/or federal codes and guidelines.

The AC collection conductors will be routed from the inverter stations to the collector substation, which delivers the generated energy to the transmission interconnection line. Concrete foundations for the substation equipment would be installed with trenching machines, concrete trucks and pumpers, vibrators, forklifts, boom trucks, and large cranes. Aboveground and below-ground conduits from this equipment would run to the control enclosure. For personnel safety and equipment protection during faulted conditions, a ground grid would be installed. The ground grid would consist of appropriately sized conductors that are meshed, buried below ground, and connected to ground rods. Each piece of equipment and supporting structure within the substation would be electrically

connected to the ground grid per the requirements of *Institute of Electrical and Electronics Engineers Standard 80* (IEEE 2000).

2.1.9.4 Potentially Hazardous Materials

The majority of waste produced during the construction phase of the Project is expected to be non-hazardous and consist primarily of cardboard, wood pallets, copper and aluminum wire cut-offs, scrap steel, common trash, and wooden wire spools. Construction waste would be recycled wherever possible. Non-recyclable construction waste would be disposed of by a licensed contractor at an approved facility.

Construction equipment will contain various hazardous materials such as hydraulic oil, diesel fuel, grease, lubricants, solvents, adhesives, paints, and other petroleum-based products typically used for construction vehicles. Compliance with regulations and standard manufacturers’ protocols for storage, transportation, and usage of any hazardous construction-related materials will be followed to ensure safety in accordance with Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Resource Conservation and Recovery Act of 1976.

2.1.9.5 Fugitive Dust Control

Construction activities, including clearing, grading, excavating, and moving of heavy equipment, will create fugitive dust at various rates throughout the construction phase of the Project. Any substantial fugitive dust is expected to be short-term and limited to the early construction period, primarily during clearing and grading activities. Dust will be controlled by application of water; this service will be provided by the construction contractor. Following the initial clearing/grading activities, the construction and operational phases of the Project are expected to emit minimal amount of fugitive dust from periodic light truck traffic.

2.1.9.6 Construction Water Requirements

Potable water for drinking and domestic needs will be brought to the Project. Use of water during construction will be limited to dust suppression and soil conditioning.



2.1.9.7 Construction Workers, Hours, and Equipment

Construction workers will include laborers, electricians, supervisory personnel, support personnel, and construction management personnel. It is expected that most workers will commute to the Project from nearby Florida communities such as Gainesville, Palatka, Jacksonville or St. Augustine.

Construction work will generally be conducted during daylight hours, Monday through Saturday. Non-daylight work hours may be necessary to offset schedule deficiencies, or to complete critical construction activities.

2.1.9.8 Testing, Commissioning, and Acceptance

Testing will be conducted throughout the PV facility installation during construction and operation. As each power block is completed, the electrical components of the system will be tested as a subsystem at the functional level. Once all blocks are completed, the subsystem will be interconnected to the existing transmission system and each block will be commissioned again to test performance.

2.1.9.9 Cleanup

Cleanup and recycling of materials during the construction phase will be ongoing. Industrial trash receptacles will be established in the temporary laydown area and will be emptied or interchanged throughout the construction phase of the Project. Upon completion of construction, the Project will be cleared of any remaining debris and/or materials, which will be recycled or disposed of appropriately.

2.1.10 Project Operations and Maintenance

The Project will be operated on an unstaffed basis and monitored remotely with scheduled personnel visits for security, maintenance, services, and system monitoring.

Ongoing system maintenance will be minimal. Planned maintenance is expected to occur on a monthly to quarterly basis and will be scheduled to avoid peak power demand periods. Unplanned maintenance will be on an as-needed basis and depend on the event requiring maintenance.

Preventative maintenance kits, spill kits, and certain critical spares will be stored onsite, while all other components will be readily available from a remote warehouse facility.

2.1.10.1 Module Cleaning

Due to the amount of precipitation in the region, routine washings are not likely to be necessary. In the event a panel washing is needed, less than two acre-feet of water is expected to be necessary; thus, runoff water would be absorbed into the soil. Module cleaning will use purified water only; detergents or other agents will not be used.

2.1.10.2 Potentially Hazardous Material During Project Operations

Project operations will require use of limited hazardous materials, specifically the oil in the step-up transformers. A Spill Prevention, Control, and Countermeasure (SPCC) Plan will be in place to ensure implementation of appropriate spill response measures. In the case of a solar Power Conditioning Unit (PCU) oil-based transformer breach, the relatively small amount of oil would be confined to the area immediately around the PCU. SPCC protocols for cleanup of contaminated soils will be implemented to avoid oil contamination of adjacent areas or stormwater. The contaminated soil would be treated or disposed of at a hazardous waste disposal facility. However, Tupelo Solar may elect to use dry-type transformers at the PCUs, which eliminates oil storage. For the main step-up transformer, the oil would be captured in a sized secondary containment dike capable of accommodating the maximum possible spillage.

The Project may use PV panels that contain a thin semiconductor layer containing cadmium telluride (CdTe). CdTe panels contain small amounts (less than 0.1 percent by weight) of cadmium in an environmentally-stable solid state. CdTe itself is stable compound and the CdTe in the PV panels is bound and sealed within the glass sheets and a laminate material. During normal operations, peer-reviewed studies have consistently concluded that CdTe panels do not present an environmental risk and that there are no cadmium emissions to air, water, or soil during standard operation. Due to CdTe’s high melting temperature (1,041 degrees Celsius), only negligible emissions of CdTe may occur if the panels are broken and exposed to the elements or fire. In the event of any panel damage, proper handling and disposal techniques will be used to ensure that CdTe emissions are minimal or

nonexistent. Risks during the disposal process are minimized as nearly 90 percent of the materials in the PV module can be recycled at the end of their 30-year life.

2.2 No Action Alternative

In accordance with 7 CFR 1970.13(a) and 1970.102(a)(3) the USDA is required to evaluate the environmental effects of the No Action Alternative. The No Action Alternative establishes an environmental baseline that allows USDA RUS decision-makers to compare the environmental impacts that could result if the agency takes the requested action with the environmental impacts that would occur if the agency does not take the requested action.

The No Action alternative would be the denial of USDA RUS funding to FRP for the project purpose to provide 74.5 MW of solar PV generation in accordance with the PPA with SECI. The No Action Alternative would mean the proposed solar energy center would not be built, and the lands associated with the Proposed Action would likely continue to be used for agriculture in the foreseeable future. In addition, the no-action alternative would result in a failure to provide reliable, low cost, renewable electric service to customers in this service territory, therefore failing to meet the increasing demand for electricity with renewable energy generation. Such a scenario fails to address the purpose and need of the project (i.e., providing a source of clean, renewable energy to rural electric users) and thus would not be considered a reasonable alternative. However, it would be carried forward, consistent with CEQ regulations, to provide a baseline against which the impacts of the Proposed Action/preferred alternative can be assessed.

2.3 Other Alternatives Evaluated

Alternative locations for the Project need to satisfy the logistics, engineering, and cost constraints while minimizing social and environmental impacts. Practicable alternatives are those that are available and capable of being completed after taking into consideration cost, existing technology, and logistics in light of the overall project purpose. The following site selection criteria were developed as guidance for locating solar PV generation facilities and were evaluated as part of the site selection process for the Project.

Land constraints:

- At least 400 buildable acres of land required to fulfill generation capacity of 74.5 MW, including the solar PV fields, ancillary facilities, and areas required during construction for equipment laydown and staging.
- Land must be available for purchase or long-term lease.

Co-location Constraints:

- Sites must be located in proximity to existing transmission lines to minimize cost and potential impacts associated with interconnection of new solar generation into the existing grid.

Environmental and Cultural Resource Constraints:

- Avoid/minimize impacts to wetlands
- Avoid/minimize impacts to threatened and endangered species and critical habitats
- Avoid/minimize impacts to public conservation or recreation areas
- Avoid/minimize impacts to cultural resource sites eligible for listing on the National Register of Historic Places (NRHP).

In addition to the Proposed Action, one offsite alternative was initially evaluated that could potentially fulfill FRP’s purpose. The Wherrell Site is located south of Yelvington Road and east of U.S. Highway 17 in Putnam County (Figure 2-2). A summary of the alternative sites relative to the site selection criteria is provided in Table 2-3.

Table 2-3. Comparison of Site Alternatives

Criteria	Tupelo Solar	Wherrell Site
Total Acreage	547.9	546.0
Wetland Acreage	27.2	388.2
Available for Purchase/Lease	Yes	Yes
County	Putnam/Flagler	Putnam
Distance to Transmission	0.68 miles	Onsite
Listed Species	Three federally listed species and 6 state-listed species with potential to occur.	Two federally listed species and 6 state-listed species with potential to occur.
Proximity to Conservation Areas	One within one mile	Two within one mile; one directly adjacent
Cultural Resources	No known NRHP-eligible sites	No known NRHP-eligible sites

The Wherrell site has sufficient size and proximity to transmission to meet the project purpose. However, desktop analysis indicated that it is comprised mostly of State-jurisdictional wetlands. Development of this site would entail significant impacts to wetlands and wetland-dependent listed species. For this reason, it was eliminated from further consideration and the Tupelo Solar site was selected as the only practicable alternative.

3.0 Affected Environment and Environmental Consequences

This section describes the physical, biological, cultural resources, and social factors most likely to be affected by the Proposed Action.

3.1 Land Use

3.1.1 Affected Environment

3.1.1.1 General Land Use

The Project is located entirely within a 562-acre portion of FRP-owned lands presently utilized for crop production and silviculture. Agricultural activities currently encumber approximately 526 acres, or 93.6 percent, of the Project site (Table 3-1; Figure 3-1). The remainder of the Project site is comprised of forested and herbaceous wetlands. Adjacent land uses consist of other agricultural and silvicultural lands, rural residential, and naturally forested lands. The Project is bisected by Yelvington Road, East End Road forms the southern boundary of the Project, and Tupelo Drive forms the western boundary of the Project. According to the USGS Protected Areas Database of the United States, there are no recreation or conservation lands within or directly adjacent to the Project (USGS 2021; FDEP 2021).

Table 3-1. Existing Land Use Within the Project Boundary

FLUCFCS Code ¹	Land Use/Land Cover	Acreage
Solar Array		
214	Row crops	385.19
441	Coniferous Plantation	51.65
443	Forest Regeneration Area	78.05
512	Ditch	9.29
621	Cypress	0.90
625	Wet Pinelands Hydric Pine	13.00
630	Wetland Forested Mixed	18.60
641	Freshwater Marshes	3.53
8145	Unpaved Road	1.67

¹ Florida Land Use, Cover and Forms Classification System (FDOT 1999).

The Project’s proposed solar array is located in unincorporated land in Putnam and Flagler Counties. The Putnam County parcels are currently zoned A1 (Agriculture 1) and is designated as such on the County’s Future Land Use Map (Putnam County 2017), which is part of their Comprehensive Plan. The Putnam County Land Development Code (LDC) does not specifically mention commercial solar facilities as either an approved or prohibited land use; however, pursuant to the Putnam County zoning codes (Sections 45-62, 45-109, and 45-71) (Putnam County 2021), the installation of essential public service facilities and solar panels are permitted within the A1 District via a special use permit.

The adjoining Flagler County parcels are zoned AC (Agriculture) and designated as Agriculture/Agriculture & Timberlands on the County’s Future Land Use Map (Flagler County 2021). The Flagler County LDC does not specifically mention commercial solar facilities as either an approved or prohibited land use; however, pursuant to the County’s zoning code (Flagler County 2020) (Section 3.06.05. – Public, semi-public and special uses, (C) (2)), major utility installations may be permitted in any district, via a special use permit.

3.1.1.2 Important Farmland

According to data available from the USDA-Natural Resources Conservation Service (NRCS) Web Soil Survey, approximately 424.9 acres (approximately 75.6 percent) within the Project is identified as farmland of unique importance (USDA-NRCS 2019; 2021). Unique farmland is defined by the USDA as having “the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields” of “high-value food and fiber crops” when properly managed.

Federal projects or federally funded projects may convert farmland, as defined by the Farmland Protection Policy Act (FPPA) to non-agricultural uses by completing the Land Evaluation and Site Assessment (LESA) process, which helps state and local officials make decisions about land use. Pursuant with the LESA process, Tupelo Solar, on behalf of USDA RUS, submitted USDA *Form AD-1006 Farmland Conversion Impact Rating* to the NRCS on June 18, 2021, for review in accordance with the FPPA. The review was completed by NRCS on June 22, 2021 (Appendix A).



Formally Classified Lands

Properties administered by federal, state, or local agencies or that have special protection through formal legislative designations, have been designated as “formally classified lands” as identified in USDA RUS Bulletin 1794A-602. Such formally classified lands include, but are not limited to:

- National parks and monuments;
- National natural landmarks;
- National battlefield park sites;
- National historic sites and parks;
- Wilderness areas;
- Wild and scenic and recreational rivers;
- Wildlife refuges;
- National seashores, lake shores, and trails;
- State parks;
- Bureau of Land Management administered lands;
- National forests and grasslands; and
- Native American owned lands and leases administered by the Bureau of Indian Affairs.

There are no formally classified lands within or adjacent to the Project (USGS 2021; FDEP 2021). The closest such features include Wetland Reserve Easement #303, located about 0.3-mile to the northwest of the solar array and managed by the USDA, Dunns Creek Conservation Area, located about 2.2 miles to the west and managed by the St. Johns Water Management District, and the Smith Family Farms Conservation Easements, located about 2.3 miles to the northwest and managed by the Florida Department of Agriculture (Figure 3-2).

3.1.2 Environmental Consequences

Development of the Proposed Action will remove approximately 562 acres of land from use in agriculture and silviculture activities. However, when the Project is decommissioned, all of the solar panels and equipment can be removed, and the land can be returned to agriculture production. Approximately 424.9 acres of “farmland of unique importance” will be temporarily taken out of

production; however, no areas classified as “prime farmland” by the NRCS will be taken out of production by Project development.

3.1.3 Mitigation

No mitigation is proposed for the conversion of agriculture production to a solar energy facility because conversion of the Project back to agriculture production may be viable upon decommissioning of the Project and the availability of prime farmland throughout the state.

3.2 Floodplains

Floodplains are areas associated with rivers, creeks, and streams that can be inundated during periods of high flood states. The Federal Emergency Management Agency (FEMA) is responsible for the National Flood Insurance Program (NFIP) to mitigate flood losses through community-enforced building and zoning ordinances and provide access to flood insurance protection.

In support of NFIP, FEMA identifies flood hazard areas throughout the United States and its territories on Flood Insurance Rate Maps (FIRMs). The common and national standards used by NFIP and federal agencies for purposes of requiring flood insurance and regulating development is the 100-year flood, which is shown on FIRMs as Special Flood Hazard Areas (SFHAs) (FEMA 2011; 2021).

3.2.1 Affected Environment

According to FEMA FIRM Panels # 12107C0335C (effective 2/12/2012) and 12035C0060E (effective 6/5/2018) the majority of the Project boundary is within in Zone X, indicating Area of Minimal Flood Hazard, with only a small area (approximately 4.6 acres) along the northern boundary located in Zone A, the 1 percent annual chance flood zone, 100-year floodplain (Figure 3-3). Zone X areas are outside of the SFHA and usually depicted on FIRMs as above the 500-year flood level, defined as 0.2 percent annual chance of flood (FEMA 2011; 2021).

3.2.2 Environmental Consequences

No grading, fill, excavation, or other improvements are proposed within the 100-year floodplain. As such, adverse impacts to floodplain storage capacity and/or alteration of flood base elevations are not anticipated.

3.2.3 Mitigation

Adverse impacts to floodplain storage capacity and/or alteration of flood base elevations are not anticipated; therefore, mitigation is not required.

3.3 Wetlands

3.3.1 Affected Environment

Presence of wetlands were initially evaluated utilizing desktop analyses. A review of National Wetland Inventory (NWI), National Hydrography Dataset, and FDOT FLUCFCS maps was conducted to determine broad-scale information (e.g., likely presence, location, size, and type) regarding wetlands that may be located in the vicinity of the Project. Subsequently, formal State and federal jurisdictional wetland delineations were conducted by FRP in August 2020 and March 2021. The findings indicate the presence of 35.09 acres of State-jurisdictional wetlands and another 6.16 acres of State-jurisdictional surface waters (man-made agricultural ditches; Figure 3-4). None of these features would be classified as waters of the United States under its definition as of March 2022.

3.3.2 Environmental Consequences

The Project has been designed to avoid all direct and secondary impacts to wetlands. Less than 0.5 acres of impacts to State-jurisdictional man-made ditches may occur to accommodate the solar array. Potential minor temporary impacts to offsite water quality during the construction phase of the Project will be minimized by implementation of standard construction BMPs that control and treat stormwater runoff, prevent soil erosion and sedimentation, prevent soil compaction, and reduce non-point source pollution. Thus, the Proposed Action will have no significant adverse impacts to water quality.

3.3.3 Mitigation

The applicant has fully mitigated for impacts to State-jurisdictional ditches via the purchase of credits from the Barberville Conservation Area Mitigation Bank under FDEP Permit No, 54-0407214-001-EI (Appendix D).

3.4 Water Resources

Hydrology and water resources include watersheds, surface water, and groundwater resources. Surface water resources focus on lakes, rivers, streams, and wetlands, while groundwater includes the aquifer or water table and associated underground geology. Waters of the United States and navigable waters include all surface water resources that are subject to jurisdiction under Section 404 of the Clean Water Act (33 U.S. Code § 1344) and Section 10 of the Rivers and Harbor Act, respectively.

3.4.1 Affected Environment

3.4.1.1 Surface Water

The Project lies within the Salt Creek Watershed (HUC 030801030303), which encompasses approximately 175.6 square kilometers (43,398 acres) and flows into Crescent Lake in the Lower St. Johns Watershed (HUC 03080103). According to the USGS topographic quadrangle for San Mateo, the Project ground surface elevation is relatively flat, with elevations ranging from approximately 25 to 35 feet above sea level (Figure 3-5). The annual average annual rainfall for central Florida is 50 to 55 inches (Florida Climate Center 2021).

Wetlands within the Project include six isolated forested communities and one isolated wetland shrub community, all of which are located in the eastern portion of the Project. The western portion of the Project contains a series of interconnected, man-made ditches used for agricultural irrigation and drainage with relatively permanent flow. Surface waters on the eastern portion of the Project include two linear, man-made roadside ditches with ephemeral to intermittent flow.

3.4.1.2 Groundwater

The Project lies within the Coastal Plain physiographic region, a relatively flat geomorphic region stretching from coastal regions of Massachusetts to Texas (USGS 2009). The Project is underlain with the Floridan aquifer, which is found throughout Florida and extends into the southern portions of Alabama, Georgia, and South Carolina (Figure 3-6). It consists of a sequence of limestone and dolomite that is approximately 250 feet thick in Georgia and up to 3,000 feet thick in Florida. One of the highest producing aquifers in the world, this aquifer is a major source of groundwater supply in Florida. Additionally, the surficial aquifer system in Florida is comprised of otherwise undefined aquifers that are present at the land surface. It is typically less than 50 feet thick. This aquifer system is unconfined and made up of mostly unconsolidated sand, shelly sand, and shell. The surficial aquifer system produces less water and is typically only used for domestic, commercial, or small municipal supplies (FDEP 2015).

3.4.2 Environmental Consequences

3.4.2.1 Effects on Surface Water

Construction of the Project will not result in alterations to existing surface water resources, including waters of the United States. All development activities are proposed within FEMA Flood Zone X (Area of Minimal Flood Hazard), and regulations and guidance pertaining to floodplain management are not applicable.

Although existing drainage patterns will be maintained to the maximum extent practicable, minor grading will be necessary during site preparation prior to the construction phase of the Project. A SWPPP detailing how soil erosion and sedimentation control measures and BMPs avoid and minimize effects of soil disturbance, control erosion/sedimentation, and minimize effects on soil and water quality, will be implemented during the construction phase of the Project. The SWPPP will be consistent with conditions of the National Pollutant Discharge Elimination System Generic Permit for Stormwater Discharge from Large and Small Construction Activities (Rule 62-621.300(4), F.A.C).

The Project will entail the addition of impervious surfaces including the access paths, inverter pads, and collector substation pad. The proposed stormwater management system is designed such that no adverse impacts to water quantity or quality are anticipated to downstream receiving waters.

The Project would utilize design features and structural and non-structural BMPs to minimize stormwater impacts to the maximum extent practicable. Thus, adverse effects on surface water from the Proposed Action are anticipated to be negligible.

3.4.2.2 Effects on Groundwater

The Project would only entail minor groundwater withdrawals during construction for dust suppression and/or soil conditioning. Water required for dust control and to facilitate growth of vegetative ground cover during the approximately nine to 12-month construction period will be transported to the Project or derived from onsite wells. Overall, there will be a significant decrease from the current agricultural groundwater use associated with the row crop irrigation. No groundwater withdrawals would be anticipated during Project operation. In addition, any inadvertent and small chemical releases during construction, operation, or maintenance of the Project will not likely adversely affect ground water quality due to proper spill response measures. FRP will have a SPCC Plan in place to ensure readiness for any potential fuel spills during construction and operation. Spills will be remediated immediately. Therefore, adverse effects on groundwater are not anticipated for the Project.

3.4.3 Mitigation

Based on the negligible effects on surface water and groundwater, mitigation for environmental impacts to water resources are not required.

3.5 Coastal Resources

IN 1972, the U.S. Congress enacted the Coastal Zone Management Act (CZMA) to preserve, protect, develop, and where possible, to restore and enhance the resources of the nation’s coastline. The CZMA requires federal agencies to be fully consistent with a state’s approved coastal management program. The Florida Coastal Management Program was approved by the National Oceanic and Atmospheric Administration in 1981 and is codified at Chapter 380, Part II, Florida Statutes.

3.5.1 Affected Environment

In Florida, the coastal zone includes the area encompassed by the state’s 67 counties and its territorial seas.

3.5.2 Environmental Consequences

The Florida State Clearinghouse, administered by the FDEP Office of Intragovernmental Programs, is responsible for federal CZMA consistency reviews. In their letter dated September 9, 2021, the Clearinghouse indicated that “...the funding award is consistent with the Florida Coastal Management Program (Appendix H).”

3.6 Biological Resources

The following sections include a characterization of the biological resources within the Project boundary. Evaluations were conducted through the interpretation of aerial photography interpretation, the review of publicly available resources, agency consultation, and the consideration of previous site evaluations and field surveys. Field reconnaissance surveys were conducted in October 2018, May 2020, August 2020 and March 2021.

3.6.1 Affected Environment

3.6.1.1 Vegetation & Wildlife

An assessment of the Project was conducted using the U.S. Fish & Wildlife Service (USFWS) NWI database and the FDOT’s (1999) FLUCFCS mapping.

The data assessment indicates approximately 93 percent of the Project (527 acres) is in agricultural (row crops) or silviculture (coniferous plantations) use. The remaining portions of the Project Boundary are classified as wetland forest mixed (approximately 21 percent), cypress (1 percent), ditches (9 percent), and forest regeneration (6 percent) (FDOT 1999). Remaining classifications within the Project boundary comprise less than 1 percent and include wet prairies, electrical power transmission lines, and unpaved roads.

West of Yelvington Road, the Project area is comprised of agricultural fields used for row crop production and little natural vegetation occurs. Emergent and floating wetland vegetation is present within the man-made agricultural ditches, such as Peruvian primrose willow (*Ludwigia peruviana*), torpedo grass (*Panicum repens*), soft rush (*Juncus effusus*), flatsedges (*Cyperus* spp.), duckweed (*Lemna* sp.), and swamp smartweed (*Persicaria hydropiperoides*). East of Yelvington Road, the Project area consists of silvicultural lands, which has greatly modified its vegetative characteristics. Within the cultivated areas, planted pines (*Pinus* sp.) are dominant. Other upland vegetation includes live oak (*Quercus virginiana*), laurel oak (*Quercus laurifolia*), saw palmetto (*Serenoa repens*), broomgrass (*Andropogon* sp.), and an assemblage of other herbaceous grassy groundcover. Vegetation within forested wetlands within this portion of the site includes sweetbay (*Magnolia virginiana*), cypress (*Taxodium* sp.), red maple (*Acer rubrum*), wax myrtle (*Pinus elliotii*), and cinnamon fern (*Osmundacstrum cinnamomea*).

Appendix G contains representative photographs of the various vegetative communities and other features.

A variety of non-listed wildlife species were observed through direct or indirect observations (such as calls, burrows, or scat) within and adjacent to the Project site during field efforts, including black vulture (*Coragyps atratus*), turkey vulture (*Cathartes aura*), northern harrier (*Circus hudsonius*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), red shoulder hawk (*Buteo lineatus*), pileated woodpecker (*Dryocopus pileatus*), snowy egret (*Egretta thula*), great egret (*Ardea alba*), white ibis (*Eudocimus albus*), brown anole (*Anolis sagrei*), raccoon (*Procyon lotor*), coyote (*Canis latrans*), nine banded armadillo (*Dasypus novemcinctus*), and gray squirrel (*Sciurus carolinensis*). No significant

impacts to non-listed wildlife species are anticipated, as they are common within the region and suitable habitat will remain following construction of the Project.

3.6.1.2 Threatened & Endangered Species and Other Protected Species

Plant and animal species listed federally or by the State of Florida as endangered, threatened, or of special concern (i.e., listed species) that are known to occur or are likely to occur within the Project were evaluated based upon Geographic Information Systems databases, desktop determination of potentially suitable habitats, and field reconnaissance. Relevant database searches included the USFWS Information for Planning and Conservation (IPaC – Appendix E), the Florida Natural Areas Inventory (FNAI), and various datasets compiled by the Florida Fish and Wildlife Conservation Commission (FWC). Site reconnaissance was performed in October 2018, May 2020, August 2020 and March 2021. Based on these data, listed species that are known to, or may potentially occur within the Project based on its location and habitat, are provided in Table 3-2. In a letter dated June 16, 2023 the USFWS indicated that they did not have any additional records of federally listed species near the proposed site and the findings of this analysis were in full compliance with the Endangered Species Act of 1973 (Appendix E). The Project does not contain appropriate habitat for the following federally-listed species, and therefore they were excluded from this analysis:

- Eastern black rail (*Laterallus jamaicensis ssp. jamaicensis*)
- Green sea turtle (*Chelonia mydas*)
- Hawksbill sea turtle (*Eretmochelys imbricata*)
- Leatherback sea turtle (*Dermochelys coriacea*)
- Loggerhead sea turtle (*Caretta caretta*)

The Project is not located within the federal consultation area for any listed species and it does not intersect any federally-designated critical habitats.

A request for formal consultation was submitted to the USFWS on April 17, 2023. On June 16, 2023, the service responded with no objection to the development of the project site, provided that the

USFWS Standard Protection Measures for the Eastern Indigo Snake are followed during construction of the project (Appendix E).

Table 3-2. Listed Species Known to or Potentially-Occurring Within the Project

Scientific Name	Common Name	Federal Status	State Status	Probability of Occurrence	Habitat Preference
Birds					
<i>Mycteria americana</i>	Wood stork	T	FT	Moderate	Nesting in cypress or mangrove swamps; foraging in freshwater marshes, tidal creeks or pools, and ditches
<i>Egretta tricolor</i>	Tricolored heron	N	T	High	Nests in colonies on islands or thickets near water; forages in fresh and saltwater marshes, ponds, lakes, and ditches.
<i>Egretta caerulea</i>	Little blue heron	N	T	High	Nests in colonies on islands or thickets near water; forages in fresh and saltwater marshes, ponds, lakes, and ditches.
<i>Falco sparverius paulus</i>	Southeastern American kestrel	N	T	Moderate	Open pine habitats, woodland edges, prairies and pastures. Nests in cavities in dead trees and utility poles.
Reptiles					
<i>Gopherus polyphemus</i>	Gopher tortoise	C	T	Observed	Any well drained sandy areas with low growing herbaceous and grassy vegetation
<i>Drymarchon corais couperi</i>	Eastern indigo snake	T	FT		Xeric scrub, pine flatwoods, hardwood forests, agricultural sites
<i>Pituophis melanoleucus</i>	Florida pine snake	N	T	Moderate	Dry upland habitats, including sandhill, xeric scrub, and xeric pine flatwoods
Mammals					
<i>Sorex longirostris eionis</i>	Homosassa shrew	N	SSC*	Moderate	Hydric and xeric hammocks, commercial pineland, mixed hardwood-pine forest.
Flowering Plants					
<i>Conradina etonia</i>	Etonia rosemary	E	E	Low	Deep white sand scrub dominated by sand pine and scrub oaks.

Status Key: E=Endangered; FE=federally-endangered; T=Threatened; FT=federally-threatened; SSC=Species of Special Concern; C=Candidate; N=None.

*Removed from State Species of Special Concern list in 2019, but still covered in the Imperiled Species Management Plan.

Source: USFWS, FNAI, FWC 2023.

Further discussion of federally or state-listed species with the potential to occur within the Project are included below.

Wood Stork

The wood stork is a federally-listed threatened wading bird that occurs within fresh and saltwater habitats in Florida, including marshes, tidal flats, wet prairies, cypress swamps, and drainage ditches (NatureServe 2021). The USFWS North Florida Ecological Field Services has established core foraging areas (CFAs) around all known wood stork nesting colonies within their jurisdiction that are considered important for reproductive success. In north Florida, the CFA is considered to include suitable foraging habitat within a 13-mile radius of a nesting colony. Although some suitable foraging habitat is present in the agricultural ditches, the Project is not located within a wood stork CFA.

Little Blue Heron and Tricolored Heron

State-listed as threatened but not uncommon foraging in wetlands in north Florida. These wading bird species can be found in suitable wetland habitats throughout Florida. Foraging occurs in shallow freshwater, brackish, and saltwater habitats. Both species breed in colonial nesting sites with other wading and shorebird species. Wetlands and surface waters within the site are potentially used for foraging by these species. The FWC Breeding Atlas does not contain any records of these birds breeding in the vicinity of the Project. The birds could potentially forage in the ditches within the Project area but no nesting habitat is present.

Southeastern American Kestrel

Southeastern American kestrels (SEAK) are a small, non-migratory falcon subspecies that feeds primarily on insects, small reptiles, and amphibians. It is typically found in sandhill and pine savannah habitats which undergo periodic, natural fire regimes. The species nests in natural cavities in tall dead trees, utility poles or artificial nest boxes, and routinely utilizes perches for hunting purposes (FWC 2013). The subspecies that breeds in Florida (SEAK) is listed as threatened by the FWC, but the northern migrants are not listed. Northern migrants generally arrive in September and leave by March, but there are some records outside of these dates. In Florida, the SEAK typically nests from

March to June (Collopy 1986). The SEAK is afforded protection under the State of Florida Endangered and Threatened Species Rule.

SEAK have not been observed within the Project but areas of suitable habitat such as cavities within utility poles or tall dead hardwoods may occur within the site. Formal surveys for this species were conducted during the 2021 breeding season and no SEAK nesting was documented within or adjacent to the Project. No adverse impacts to the SEAK are anticipated as a result of construction and operation of the Project. If active nest cavities are encountered during pre-clearing kestrel surveys, the FWC recommends avoiding construction activities within 150 meters of the nest tree during the breeding season (mid-March to mid-June). If kestrels are discovered nesting within or directly adjacent to the construction footprint following commencement of construction activities or if maintaining the recommended 150-meter buffer surrounding the active nest tree is not possible, FRP will coordinate with FWC staff to discuss potential permitting needs.

Eastern Indigo Snake

Federally listed threatened species under the Endangered Species Act of 1973. This large, nonvenomous snake is rare but can be found in almost any habitat in Central and South Florida. Eastern indigo snakes (EIS's) will often seek shelter inside gopher tortoise burrows and other below- and aboveground refugia, such as other animal burrows, stumps, roots, and debris piles. Based on their habitat generality and the presence of gopher tortoise burrows within the Project for use as refugia, there is some potential for presence. The USFWS *Standard Protection Measures for the Eastern Indigo Snake* (USFWS 2013) will be employed and enforced during construction to minimize impacts to this species. These protection measures include training contractors in the proper identification of EIS; posting signs on the construction site regarding the presence of this species and procedures if EIS are encountered; provisions for work stoppage if EIS are encountered until such time as the snake has vacated the area on its own volition.

Gopher Tortoise

Candidate species for federal listing by USFWS in Florida and state-listed as threatened. The gopher tortoise inhabits upland well-drained habitats in the state, including longleaf pine sandhills, xeric oak hammocks, scrub, pine flatwoods, dry prairies, coastal dune, and disturbed and urban properties (Gopher Tortoise Council 2019). A formal 100% gopher tortoise burrow survey was conducted in September 2021, and 34 burrows were identified within the Project limits, all of which were located in the northern portion of the proposed gen-tie corridor (Figure 3-7). An FWC gopher tortoise relocation permit (Number GTC-21-00362) has been obtained to allow the relocation of these animals outside of the Project limits.

Florida Pine Snake

Listed as threatened by the state. The Florida pine snake can be found statewide in well drained sandy soils with a moderate canopy to open tree canopy (Ernst and Ernst 2003). It is nonvenomous with dark brown to reddish blotches on a gray to sandy-colored background and adults average 48 to 66 inches in length. Pine snakes are adapted for burrowing and can spend more than 75 percent of their time underground. While this species was not identified within the Project, the presence of gopher tortoise burrows and suitable habitat make it possible for it to inhabit the Project. This species is most often encountered on sites while excavating and relocating gopher tortoises. If found onsite, these species will be relocated in accordance with FWC's Policy on the Relocation of Priority Commensals (FWC 2020). This includes capture and release of the unharmed snake or collection of the snake in accordance with permit conditions.

Homosassa Shrew

This is a small rodent species that is not federally-listed and is no longer considered a species of special concern by the FWC. The species can be found within northern and central peninsular Florida (FWC 2021a). Little information exists on the preferred habitats for this species exists, but they have been reported in a wide range of habitats, including hardwood swamps, mixed wetland forests, hydric and xeric hammocks, pine plantations, upland hardwood and pine forests, and disturbed habitats. There is no documentation of this species occurring within the Project limits, however suitable habitat does exist.

On December 23, 2018, the State listing status changes proposed in 2011 as part of the newly implemented imperiled species management system became official after the approval of Florida's Imperiled Species Management Plan by FWC Commissioners. The Homosassa shrew was among the four species that were removed from Florida's Endangered and Threatened Species List as State Species of Special Concern.

Etonia Rosemary

Etonia rosemary is a federally-endangered species of shrub found in deep white-sand scrub dominated by sand pine and scrubby oaks. The only occurrences of Etonia rosemary are near Florahome in Putnam County, Florida (FNAI 2021; NatureServe 2021; USFWS 2005). Florahome is located approximately 45 west of the Project boundary near the western border of Putnam County. Etonia rosemary was not observed during either the 2018 or 2020 field reconnaissance. Potentially suitable habitat exists for this species within the northern portion of the proposed interconnection line, although it has been severely degraded by timber operations. For this reason, and due to the highly restricted species range, it is unlikely for Etonia rosemary to occur within the Project.

3.6.1.3 Migratory Birds

Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711) that prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when authorized by the USFWS. Executive Order (EO) 13186 (66 FR 3853) directs federal agencies to evaluate effects from migratory birds as a result of their actions and implement measures to promote conservation of the resource. Although all migratory birds are protected under the MBTA, in accordance with the EO this analysis focuses on Birds of Conservation Concern (BCC). According to the USFWS IPac report generated for the Project, BCC with the potential to occur include the American kestrel, bald eagle (*Haliaeetus leucocephalis*), great blue heron (*Ardea herodias occidentalis*), and swallow-tailed kite (*Elanoides forficatus*). These species have not been directly observed within the Project during field surveys. According to FWC's bald eagle nest locator database, there are no bald eagle nests within two miles of the Project and there is no foraging habitat present.

3.6.1.4 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C 668-668c) prohibits anyone, without a permit issued by the Secretary of the Interior, from taking bald or golden eagles, including their parts, nests, or eggs. While the golden eagle is not known to breed in Florida, bald eagles are common. The FWC maintains a database of bald eagle nesting areas documented by FWC during statewide aerial surveys conducted from 1998 to 2017 (FWC 2021b). According to these data, there are no bald eagle nesting areas within two miles of the Project. No bald eagles have been documented in the Project vicinity during site field surveys.

3.6.1.5 Invasive Species

Invasive exotic plants within Florida are categorized by the Florida Exotic Pest Plant Council. Category I invasive plants are the most destructive and can displace native species and change community structures. The majority of the Project has been managed as row crops which likely limits the density of invasive plant species that may occur onsite. Category I invasive plants that are common in north Florida and may occur within the Project area includes torpedograss (*Panicum repens*), paragrass (*Urochloa mutica*), Caesar's weed (*Urena lobata*), cogon grass (*Imperata cylindrica*), Chinese privet (*Ligustrum sinense*), Japanese climbing fern (*Lygodium japonicum*), sword fern (*Nephrolepis cordifolia*), and tropical soda apple (*Solanum viarum*).

Non-native animals that may occur within the Project area includes wild hog (*Sus scrofa*) and feral domestic cats. The nine-banded armadillo (*Dasypus novemcinctus*), a non-native species that is considered to be naturalized in Florida, may also occur there.

3.6.2 Environmental Consequences

The Project is proposed in previously disturbed land that has been used for agriculture; therefore, impacts to biological resources or changes to baseline conditions are negligible. The Project site has been cleared for row crop and pine cultivation. The Project contains no naturally forested upland habitat, and wetland habitats will not be affected.

Site preparation will require clearing of vegetation remaining in the Project. While ground disturbance creates opportunity for noxious weeds or invasive species populations to increase, potential colonization by noxious weeds or invasive species would be considered temporary because graded areas would be kept devoid of vegetation or revegetated with a ground cover seed-mix or converted to other design features. Restoration/re-vegetation of the Project will utilize a seed-mix appropriate for the geographic location of the Project, type of soil, and season of the year in which the planting is conducted. Project restoration/re-vegetation will mitigate potential increase in noxious weeds; if chemical control of noxious weeds is needed, appropriate technical expertise will be retained.

A formal gopher tortoise burrow survey was conducted in accordance with FWC's Gopher Tortoise Permitting Guidelines (FWC 2023). The survey identified all gopher tortoise burrows that were located within the Project's construction footprint. The applicant has applied for and obtained from FWC a permit to relocate all tortoises in the construction footprint to a State-approved recipient site. Gopher tortoise burrow commensals such as the EIS, and Florida pine snake will also be evacuated from burrows and allowed to leave the construction area of their own volition. The Project will also follow the Standard Protection Measures for the EIS to minimize impacts to this species (USFWS 2013). If a SEAK is discovered nesting within or adjacent to the Project during pre-clearing surveys, a 150-meter buffer around the nest cavity will be enforced until the young have fledged. If the buffer is not able to be maintained, the applicant will consult further with FWC regarding options for incidental take.

Potential risks to wildlife, including migratory birds, may occur as a result of the Project as utility-scale solar energy developments may pose some risks to birds (Leroy et al. 2015; Kagan et al. 2014; Smith and Dwyer 2016; McCrary et al. 1986). However, there is no indication that the Project would result in long-term disturbance or displacements of migratory birds. In addition, PV cells are designed to absorb and not reflect light; therefore utilization of treated glass would reduce glare ("lake effect") and minimize impacts associated with potential lake effect and decrease risks to migratory birds.

3.6.3 Mitigation

Adverse impacts to native vegetation and wildlife, including migratory birds, are expected to be minor. Compensatory mitigation in the form of a financial contribution to the Wildlife Foundation of Florida for impacts to the gopher tortoise will be provided if necessary to offset potential impacts.

3.7 Cultural Resources

The National Historic Preservation Act of 1966 (NHPA), as amended, is the principal federal law addressing cultural resources. The NHPA sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the NRHP. Section 106 of the NHPA directs federal agencies to take into account the effects of their undertakings on such properties; initiate consultation with appropriate consulting parties including the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer(s) (THPO) and the Advisory Council on Historic Preservation (ACHP); to develop measures that would avoid, reduce, or minimize adverse effects; and, to determine adverse effects on historic resources using criteria established in 36 CFR 800 of the ACHP regulations.

To be eligible for the NRHP, cultural resources must be at least 50 years old (generally), meet at least one of the four criteria listed below, and meet most of the seven aspects of integrity. Integrity is the property's ability to convey its demonstrated historical significance through location, design, setting, materials, workmanship, feeling, and association. The ACHP also offers considerations for resources that may have achieved national significance but are less than 50 years old. Criteria for listing on the NRHP (36 CFR 60.4) are as follows:

- Criterion A: Association with events that have made a significant contribution to the broad patterns of our history;
- Criterion B: Association with the lives of persons significant to our past;
- Criterion C: Resources that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or,

Criterion D: Resources that have yielded or may be likely to yield information important in prehistory or history.

Section 106 of the NHPA describes the procedures for identifying and evaluating eligible properties, for assessing the effects of federal actions on eligible properties, and for consulting to avoid, reduce, or minimize adverse effects.

3.7.1 Affected Environment

This section evaluates the potential for cultural resources to occur within the Project Area of Potential Effects (APE) and potential effects on such resources. The information in this section is derived from a Phase I Cultural Resources Survey of the entire Project completed in March 2021 (Terracon Consultants, Inc. 2021). The Survey was performed in compliance with the cultural resources provisions of Section 106 of the NHPA of 1966 (PL 89-190, as amended) and its implementing regulation 36 CFR 800 (Protection of Historic Properties); Chapter 267, Florida Statutes, as well as the Florida Division of Historical Resources (DHR) recommendations for such projects as stipulated in the Division's Historic Preservation Compliance Review Program manual and Chapter 1A-46, F.A.C.

The APE of a federal undertaking is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The Direct Effects APE is defined as the surfaces and depths that would be disturbed within the solar array, collector substation, and the associated interconnection corridor. The Proximity (Visual) Effects APE is defined as all or portions of the adjacent properties with structures in visual range to the current Project boundary.

3.7.1.1 Desktop Review

Prior to initiating fieldwork, ESI/Terracon Consultants, Inc. conducted a desktop review for the Project Study Area (the Project APE and a one-mile buffer) to assemble a list of known archaeological, historic, and cultural properties that might be affected by the proposed Project. These data provide the basis for a preliminary assessment of the range of cultural resources and issues that may be affected. Review of cultural resources information was based on online databases and an archaeological

records search. Online sources consulted included the Florida Master Site File (FMSF), other cultural resource surveys conducted in the vicinity, soil maps, historic aerial photographs, and historic map research including USGS topographical maps from the early 1800's through mid-twentieth century.

FMSF records revealed no previously recorded resources or surveys within or adjacent to the Project. Expanding on one mile surrounding the Project boundary revealed three previously completed surveys and one archaeological site. No historic resources were recorded during the previously completed surveys. The archaeological site is located approximately 4,150 feet north of the Project's solar array, and investigations conducted in 1983 revealed a single lithic flake that has yet to be evaluated by the DHR. This site will not be impacted by the Project.

3.7.1.2 Cultural Resource Assessment Survey

Terracon archaeological staff conducted a Phase I Cultural Resource Assessment Survey of the Project APE during August 2020 and March 2021. The survey was conducted in an effort to determine the presence or absence of cultural resources within the Project APE. The survey included a pedestrian survey and excavation of 255 shovel tests within the approximately 565-acre Project APE. The shovel tests were conducted at 25, 50, and 100-meter intervals with the APE. Each test measured 50 cm by 50 cm (cm²) in size and most were excavated to a depth of at least one meter except in cases where limestone was encountered causing the tests to terminate at shallow depths. All excavated material was placed in portable shakers and sifted through 6.35 mm (1/4") hardware cloth screens. Field data, including test locations, soil stratigraphy, environmental setting, and topography were recorded for each test. Upon completion, each test site was backfilled, marked with flagging tape, and plotted on a Project area map.

The cultural resources investigation did not identify any historic properties within the Project boundary or 500-foot buffer of estimated visual effects. One historic cemetery, the Yelvington Cemetery/Mt. Tabor Baptist Church Cemetery was identified within the Proximity Effects APE. The Yelvington Cemetery/Mt. Tabor Baptist Church Cemetery is unrecorded and has an unknown NRHP eligibility. However, the cemetery is visually shielded from the proposed Project by a dense tree and vegetation barrier; therefore, the Project is unlikely to visually impact this cultural resource.



3.7.1.3 Native American Consultation

Section 106 of the NHPA requires federal agencies to consult with the relevant THPO or official Tribal designees on historic properties of religious or cultural significance that may be affected by the Proposed Action. The Project does not include Tribal lands as defined in 36 CFR 800.16 (x); however, using HUD's Tribal Directory Assessment Tool, three tribes were identified and may have an interest in the location of the Project: Coshatta Tribe of Louisiana, Miccosukee Tribe of Indians, and Muscogee (Creek) Nation.

FRP has well-established relationships with Tribal governments with potential or expressed interest Florida-based projects. On April 29, 2021, FRP sent letters to five Native American Tribes to understand any ancestral or current concerns that may be present within the Project area: the Coshatta Tribe of Louisiana, Miccosukee Tribe of Indians, Muscogee (Creek) Nation, Thlopthlocco Tribal Town, Seminole Tribe of Florida (STOF), and Seminole Tribe of Oklahoma. Only the STOF responded to the notification. On May 19, 2021, the STOF indicated that the Tribe had no objections or other comments about the project.

3.7.2 Environmental Consequences

Cultural resources were considered during a Phase I Cultural Resource Assessment Survey (ESI.Terracon Consultants, Inc. 2021). No cultural or historical resources have been identified within the Proposed Action's Direct Effects APE. The Florida Department of Historical Resources has concurred with the recommendation provided of no adverse effects from the Project. One historic cemetery, the Yelvington Cemetery/Mt. Tabor Baptist Church Cemetery was identified within the Proximity Effects APE. However, the cemetery is visually shielded from the proposed Project by a dense tree and vegetation barrier; therefore, the Project is unlikely to visually impact this cultural resource.

3.7.3 Mitigation

The Proposed Action will not adversely affect cultural resources eligible for NRHP listing; therefore, mitigation is not required. The Cultural Resources Discovery Mitigation Plan, provided in Appendix C, will be kept onsite, and will be adhered to during construction in the event of discovery of any artifacts, foundations, or other indication of past human occupation of the area are uncovered.

3.8 Aesthetics

This section discusses the potential for adverse impacts to the existing visual character or quality of the land within the Project and its surroundings through changes in the existing landscape. Potential effects are evaluated relative to important visual features (e.g., scenic highways, scenic features) and the existing visual landscape and its users.

Aesthetic impacts of solar energy projects are often based on the type of solar technology, the scenic quality of the existing landscape, the degree to which the solar project would change the scenic quality, and the viewer response to project-related changes.

3.8.1 Affected Environment

The visual setting of the Project is largely rural and consists of a mosaic of pine plantations, agricultural land, and residential areas. In addition, highways, local roads, transmission lines, and other types of development contribute to the overall visual character. The Project’s location lacks significant geological or natural features that could be considered scenic.

The Project is bounded to the south by East End Road, to the west by Tupelo Drive, and bisected by Yelvington Road. Several residences are located along Tupelo Drive in unincorporated communities. Pine plantation, agricultural fields, and farming infrastructure are in the immediate vicinity of the remaining portions of the Project.

According to the USGS Protected Areas Database of the United States (PAD-US), protected open space within one-mile of the Project is limited to the USDA’s Wetland Reserve Easement #303, located about 0.3-mile to the northwest of the solar array.

3.8.2 Environmental Consequences

The Project will be visible from East End Road, which is the main east-west thoroughfare near the Project, and residences along Tupelo Drive. While the Project and associated infrastructure have potential to introduce visual contrast and have the potential to change the character of this rural landscape, no significant adverse visual impacts are expected to occur based on the following factors:

- The Project's solar array will include associated electrical equipment, fencing around the perimeter of the Project, and access roads and gates. Additional Project infrastructure includes a collector yard and overhead gen-tie line adjacent to an existing road ROW. All Project components will have a relatively low profile and are not expected to significantly change the current character of the landscape.
- The Project will include minimal lighting and will not substantially degrade the existing visual character or quality of the land within the Project boundary and its surroundings.
- The Project proposes to use dark PV solar cells designed to absorb sunlight. The glass panels that protect the PV surface are typically coated glass designed to allow sunlight to pass with minimal reflection. As a result, the source of glare or light from the Project is minimal.

Based on these factors, the Project will introduce some changes to character of the existing landscape; however, the adverse visual impacts to sensitive receptors from are expected to be low.

The Project is located approximately 13 miles northeast of the Mt. Royal Airport (3FL) and approximately 20 miles northwest of the Flagler Executive Airport. The Project is not located near military airfield control towers, air traffic areas, or helicopter landing zones. An analysis of solar glint/glare and potential ocular impacts was not conducted for the Project because the Federal Aviation Administration's (FAA's) Policy for Solar Energy System Project on Federally Obligated Airports (FAA 2021) and Department of Defense (DoD) guidance (DoD 2016) do not apply to the Project, as modeling is only required for those solar arrays installed at federally-obligated airports. Further, given the respective distances to each airport, glare or glint is not expected to be observed from either airport traffic control tower or would glare be observed along the final approach path for an airplane, as defined by 2 miles from 50 feet above the landing threshold using a standard 3° glidepath.

3.8.3 Mitigation

The Project is not expected to result in significant adverse visual impacts; therefore, mitigation is not required. However, a landscape plan detailing screening measures and/or vegetation buffers that will mitigate minimal visual contrast introduced by the Proposed Action will be developed and submitted to Flagler and Putnam Counties.

3.9 Air Quality

3.9.1 Affected Environment

The Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) (40 CFR 50) for six (6) air pollutants known as criteria pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀ and annual and 24 Hour-PM_{2.5}), and sulfur dioxide (SO₂). NAAQS define the maximum permissible concentrations of these criteria pollutants, which are considered harmful to public health and the environment. NAAQS standards are based on human health criteria for the protection of public health (primary standards) and on environmental criteria to prevent environmental and property damage and for the protection of public welfare (secondary standards) (EPA 2018).

The Project is located in Region 4 of the EPA, and according to the EPA Green Book, as of June 29, 2023, all areas of Florida currently designated as being in attainment (i.e., meeting NAAQS) for criteria pollutants (EPA 2020; 2023).

3.9.2 Environmental Consequences

The Project is not expected to result in adverse impacts to air quality or exceed air quality standards. Emissions during the construction phase of the Project are expected to be temporary and relatively minor and include generation of negligible quantities of exhaust and/or fugitive dust from construction and delivery vehicles, diesel-operated equipment, and vegetation clearing and grading activities. However, applicable emissions and ambient air quality standards will continue to be met. Implementation of BMPs in accordance with ARDEQ guidelines, including stabilization and water trucks, will minimize fugitive dust generation.

Solar panels and associated equipment would have an operating life of several decades; therefore, replacement of panels would be very infrequent. Occasional washings of array module may be scheduled and completed depending on the soil conditions at the Project. However, due to the amount of precipitation in the region, routine washings are not likely to be necessary. Maintenance and security personnel would visit the Project on an as-needed basis. Based on these factors, operational traffic, and associated dust generation, would be minimal.

Electricity generation from a PV system does not generate chemical emissions that would adversely affect air quality. Further, the Project would not emit hazardous emissions or handle hazardous materials, substances, or waste that would contribute to air emissions. Energy production that substitutes fossil fuels to meet the demand for electricity in Flagler County and surrounding communities is expected to reduce regional emissions of regulated pollutants over time.

3.9.3 Mitigation

The Project will not result in adverse impacts to air quality; therefore, mitigation is not required.

3.10 Social Impact Assessment/Environmental Justice

3.10.1 Affected Environment

3.10.1.1 Demographic Overview

Putnam County

Putnam County is located in northeast Florida and is part of the Jacksonville–St. Marys–Palatka, FL–GA Combined Statistical Area (CSA), which includes metropolitan Jacksonville as well as the Palatka, Florida and St. Marys, Georgia Micropolitan Statistical Areas (comprising Putnam County, Florida and Camden County, Georgia). The City of Palatka is the county seat and the principal city of the Palatka Micropolitan Statistical Area. Although the County is part of the 34th largest CSA in the United States, Putnam County has experienced almost no growth over the last decade. In 2022, Putnam County's estimated population was 74,731 and in 2010 the estimated population was 74,362 – a population increase of just 0.4 percent (U.S. Census Bureau 2023).

Flagler County

Flagler County is located on Florida’s northeast coast just east of Putnam County and is part of the Deltona-Daytona Beach-Ormond Beach Metropolitan Statistical Area and is also included in the larger Orlando-Deltona-Daytona Beach Combined Statistical Area. Over the past decade, the population of Flagler County has increased by 24.5 percent; from 95,696 in 2010 to 126,705 in 2022 (US Census Bureau 2023).

3.10.1.2 Environmental Justice

EO 12989 (February 1994), calls on each Federal agency to make achieving environmental justice part of its mission. It directs Federal agencies, “[t]o the greatest extent practicable and permitted by law,” to “identify[...] and address[...], as appropriate, disproportionately high and adverse human health or environmental effects” of agency programs, policies, and actions on minority populations and low-income populations.

Title VI of the 1964 Civil Rights Act prohibits discrimination on the basis of race, color, or national origin in programs and activities supported by Federal funding. It specifically states: “no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” (42 USC §2000d). The USDA Departmental Regulation No. 5600-002 provides direction for integrating environmental justice considerations into USDA programs and activities in compliance with EO 12989 (USDA 1997).

Title VI of the Civil Rights Act of 1964 and federal Environmental Justice guidelines define minority populations as black/African American, Hispanic/Latino, Asian American, American Indian/Alaskan Native and low-income populations as those, regardless of ethnicity, as households with annual incomes at or below the US Department of Health and Human Services (HHS) poverty level, which for 2021 is \$26,500 for a family of four (HHS 2021).

A copy of the EPA EJSscreen Summary Report and map is provided in Appendix B. A one-mile buffer was placed around the project area and data was collected using the 2017-2021 ACS.



The corresponding data reflects a total population within the project buffer area of 27 persons. Of that population, 94 percent are White alone, 1 percent are Black alone, 3 percent are Hispanic, and 2 percent are two or more races. Based on these findings, an estimated 5 percent of the population within the one-mile project buffer is a minority.

Further, income figures were collected from 11 of the 27 reported population. Of those 12, the per capita income was \$22,001 per year and is classified as below the national poverty level. The 2019 HHS ASPE Poverty Guidelines reflect the poverty rate of \$12,880 for a single person household with an increase of \$4,540 per person.

There are no linguistically isolated households within the project buffer area, and 91.5 percent of the households speak only English.

Putnam County

In 2020, minority populations in Putnam County consisted of approximately 15.9 percent black or African American, 10.9 percent Hispanic or Latino, 0.8 percent American Indian and Alaskan Native, and 0.7 percent Asian alone. Minority populations are generally concentrated in unincorporated areas. According to the available U.S. Census Bureau data in 2019, the largest percentage (88.5 percent) of minority populations were located adjacent to State Road (SR) 100, northwest of the City of Palatka .

Between 2017-2021, the estimated median household income in Putnam County was \$33,370 which is lower than the Statewide figure of \$63,062. For the same period, approximately 31 percent of Putnam County’s population was living at or below poverty level compared with 13.1 percent living at or below poverty level Statewide (U.S. Census Bureau 2023).

Flagler County

In 2020, minority populations in Flagler County were slightly lower than both Putnam County and the State. Flagler’s minority groups consisted of approximately 9.8 percent black or African American, 10.9 percent Hispanic or Latino, 0.2 percent American Indian and Alaskan Native, and 2.4 percent Asian



alone. Minority populations are concentrated between US Hwy 1 and I-95 throughout the County with the largest percentage (65.7 percent) located south of the City of Bunnell between SR 11 and South US Hwy 1 (US Census Bureau 2019; USEPA 2014).

Between 2017-2021, the estimated median household income in Flagler County was \$62,618, which is slightly lower than the Statewide figure of \$63,062 but higher than neighboring Putnam County. For the same time period, approximately 11.5 percent of Flagler County’s population was living at or below poverty level which is lower than both Putnam County (31 percent) and the State (13.1 percent) (U.S. Census Bureau 2023).

3.10.1.3 Employment

Putnam County

In 2021, Putnam County had an estimated labor force of 18,219 people and the leading employment industries were educational services, and health care and social assistance (4,346 persons), Construction (2,547 persons), and Retail (1,798 persons) accounting for approximately 47.7 percent of the county’s total employment (Table 3-3).

Flagler County

In the same time period, Flagler County had an estimated labor force of 31,551 people and the leading employment industries were educational services, and health care and social assistance (7,451 persons), Professional, scientific, and management, and administrative and waste management services (4,077 persons), and retail (4,015 persons) accounting for approximately 49.3 percent of the county’s total employment (Table 3-3).

Table 3-3. Employment by Industry, Putnam and Flagler Counties, Florida

2021 Employment by Industry	Putnam County		Flagler County	
	No. of Jobs	Percent	No. of Jobs	Percent
Total Employment ¹	18,219	100	31,551	100
Agriculture, forestry, fishing and hunting, and mining	926	5.08	79	0.25
Construction	2,547	13.98	2,926	9.27
Manufacturing	1,784	9.79	2,142	6.79
Wholesale trade	244	1.34	590	1.87
Retail trade	1,798	9.87	4,015	12.73
Transportation and warehousing, and utilities	1,411	7.74	1,885	5.97
Information	109	0.60	641	2.03
Finance and insurance, and real estate and rental and leasing	819	4.50	2,289	7.25
Professional, scientific, and management, and administrative and waste management services	1,117	6.13	4,077	12.92
Educational services, and health care and social assistance	4,356	23.85	7,451	23.62
Arts, entertainment, and recreation, and accommodation and food services	1,086	5.96	2,318	7.35
Other services, except public administration	639	3.51	1,279	4.05
Public administration	1,393	7.65	1,859	5.89

Source: US Census Bureau, ACS 5Y S2404 2023; ¹ Full-time, year-round civilian employed population 16 years and over.

3.10.1.4 Tax Revenue

The State of Florida levies a general sales tax of 7 percent on all taxable goods and services within the State with the following exceptions: 4 percent on amusement machine receipts, 5.5 percent on the lease or license of commercial real property, and 6.95 percent on electricity. In addition, Florida levies a use tax of 6 percent on taxable items purchased outside the State for use, storage, or consumption within the State (Florida Department of Revenue 2021).

In fiscal year 2020, State sales and use taxes generated approximately \$24.6 billion (Florida Department of Revenue 2021). Many Florida counties have the authority to enact an additional local sales tax, also known as discretionary sales surtax.



The minimum combined 2021 sales tax rate for Putnam County is 7 percent This is the total of State sales tax rate of 6 percent and the County sales tax rate of 1 percent.

3.10.2 Social and Environmental Consequences

The Proposed Action is expected to have a positive impact on the local and regional economy through increased employment opportunities for residents of Putnam and Flagler Counties as well as through adding a stable source of tax revenue for the municipalities. The Project will also play a role in supporting state and national efforts to increase renewable energy sources and reduce air pollution, control water usage, and slow climate change.

3.10.2.1 Employment Opportunities

Construction and operation of the Project is expected to generate economic benefits in the local, regional, and state economies through direct expenditures for materials and services, as well as new payroll income. Such expenditures would generate economic activity and support employment and income elsewhere in the economy through the multiplier effect, as initial changes in demand ripple through the local economy and support indirect impacts. Indirect impacts may be defined as those generated by the expenditures on goods and services by suppliers who provide goods and services for construction of the Project. Indirect effects are often referred to as "*supply-chain*" impacts because they involve interactions among businesses.

The construction phase of the Project is expected to begin in July 2024. Construction of the Project would support temporary employment and income in both Putnam and Flagler Counties as well as within the two corresponding MSA's of Jacksonville and Daytona. Construction activities, including site preparation and transmission system connections, are expected to involve onsite construction related jobs such as construction contractors, foremen, electricians, and laborers that would likely be filled by in-state workers. as well as oversight positions.

Once commissioned, the facility's operation would continue to contribute to the local economy through direct employment and maintenance related expenditures. Typical local operations and maintenance related expenditures may include vehicle-related expenditures such as fuel costs, maintenance, small replacement parts and equipment, and miscellaneous supplies.

3.10.2.2 Environmental Justice

The Project will have no adverse effects on minority or low-income populations within either Putnam or Flagler Counties. The construction and operation of the Project is expected to support employment, provide career training opportunities, and stimulate economic output in other sectors.

3.10.2.3 Tax Revenue

Construction of the Project will have both a direct and indirect benefit on the tax revenues for both Putnam and Flagler Counties. Direct tax revenue benefits would be generated at the state and local levels through employment taxes, ad valorem taxes, and sales taxes from the purchase of construction materials and supplies such as concrete, aggregate, lumber, conduit, cable, building supplies, office supplies, tools and equipment all of which are likely to be made locally, whenever available.

The Project is also expected to have a positive, short-term effect on local businesses not actively involved with construction or operations. Indirect tax revenue benefits are anticipated to occur from increased levels of spending by the construction and operation workforce a wide variety of expenditures including motels, restaurants and grocery stores, gas stations, and retail businesses.

3.11 Miscellaneous Issues

3.11.1 Noise

Noise or sound is defined as a rapid vibration of atmospheric pressure caused by some disturbance of air. Characteristics of noise (e.g., level, frequency/pitch, pressure, duration) play a role in determining the intrusiveness and level of impact of the noise on a noise receptor. Sound levels are recorded on a logarithmic decibel (dB) scale that reflects how the ear perceives differences in sound energy levels (OSHA 2013).



3.11.1.1 Affected Environment

The area surrounding the Project is rural. Sources that contribute to the ambient noise in the vicinity of the Project boundary include manmade noise such as vehicular traffic along East End Road and Yelvington Road, noise from agricultural practices, rural residential sounds, and natural sounds (e.g., wind, wildlife). Some land uses are considered more sensitive to intrusive noise than others because of the activities typically involved at those receptor locations. Sensitive human noise receptors normally include residences, schools, libraries, religious institutions, hospitals and nursing homes, daycare centers, and other businesses. A cursory desktop review of the Project's vicinity indicates that no hospitals, schools, or churches are located within a 2-mile radius. Multiple residences are located within 2 miles of the Project.

3.11.1.2 Environmental Consequences

Noise generated during the construction phase of the Project (i.e., from increased vehicular and truck traffic, heavy construction equipment, and other equipment with internal combustion engines) is likely to result in temporary, short-term increase in ambient sound levels in the Project's vicinity. Construction activities would generally occur between dawn and dusk, Monday through Saturday, 7:00 AM to 7:00 PM. Typical maximum noise level of common construction equipment is presented in Table 3-4 (USDOT FHwy 2006).

Table 3-4. Noise Emission Reference Levels for Common Construction Equipment

Equipment Type	Maximum Noise Level (Lmax) at 50 feet (dBA, slow) * ‡
Compactor (ground)	80
Dozer	85
Dump Truck	84
Excavator	85
Generator	82
Grader	85
Pickup Truck	55
Warning Horn	85
Crane	85

*‡ dBA = decibels A-weighted; ‡ Source: (USDOT FHwy 2006)

Temporary and short-term noise generated during construction is not expected to adversely affect sensitive offsite receptors. During the construction phase of the Project, workers would be expected to wear appropriate hearing protection as required by the OSHA of 1970 (20 U.S.C. 651 et seq.).

Operation of the Project will not impact ambient noise; the primary source of noise associated with operation of the Project would be from light vehicular traffic during regular security and/or maintenance activities. Maintenance, repair, and other operational activities would occur exclusively during daylight hours. Inverters, which will be distributed throughout the Project, are a potential source of noise during the daytime hours, when PV panels are producing electricity. The typical uncontrolled inverter noise is expected to be up to 75 dB, A-scale which can be detected approximately 3 to 5 feet away from the inverters. Thus, changes in ambient noise levels associated with operations are not expected to adversely impact sensitive receptors.

3.11.1.3 Mitigation

Due to the short-term temporary nature of changes in ambient noise levels during the construction phase of the project and negligible changes during the operation phase of the project when compared with pre-development conditions, no mitigation is required.



3.11.2 Transportation

3.11.2.1 Affected Environment

The Project is bisected by Yelvington Road, a two-lane, unpaved and undivided roadway. The unpaved portion of Yelvington Road offshoots from the paved portion of the road to the north, which connects to U.S. Highway 17 (U.S. 17) in Palatka. From U.S. 17 to Turner Road (approximately 1.28 miles), Yelvington Road is classified by the Florida Department of Environmental Protection as an urban local roadway and from Turner Road to the Putnam/Flagler County Line (approximately 3.0 miles), Yelvington Road is classified as a rural local roadway. The roadway supports low-volume local traffic between East Palatka in Putnam County and low density residential in Flagler County.

3.11.2.2 Environmental Consequences

The Project is expected to result in a nominal increase of traffic volumes on the local transportation network during the construction phase. Specifically, increased vehicular and truck traffic is expected to occur on Yelvington Road due to the presence of workers, material and equipment deliveries, and the access/egress of heavy machinery or trucks. Impacts to traffic conditions will be limited to the construction phase; thus, short-term and temporary.

When the Project is completed, vehicular traffic will be limited to operational activities including periodic maintenance and security checks and are not expected to affect current traffic volumes.

3.11.2.3 Mitigation

Safety precautions and work-zone recommended practices in accordance with applicable state and federal regulations will be implemented to maintain safe access/egress of personnel and equipment from the Project while minimizing disruptions to local road conditions. If damages to roadways inadvertently occur due to Project related use, repairs would be performed as needed.

3.12 Human Health & Safety

This section addresses public health and safety associated with Project. Public health issues include emergency response and preparedness to ensure operations do not pose a threat to public health.

Safety issues related to operations include occupational (worker) safety in compliance with OSHA standards. These safety standards are also applicable to construction activities.

3.12.1 Affected Environment

The Project is located on land previously used for agriculture; the Project is private and public access is restricted. There are no current known health and safety issues, regulatory remedial plans, or violations within or adjacent to the Project Boundary. There are no FDEP registered cleanup sites within 2 miles of the Project Boundary, or Superfund sites within 20 miles of the Project Boundary.

A Phase I Environmental Site Assessment was completed for the portion of the Project west of Yelvington Road in November 2018 (Tetra Tech, Inc. 2018). East of Yelvington Road, the Project site consists of vacant land used for silviculture which is unlikely to contain any hazardous materials. Work was performed in accordance with the American Society for Testing and Materials (ASTM Standard Practice E1527-13 and the EPA All Appropriate Inquiry Rule for evaluation of commercial real estate. The purpose of these reports was to assess potential environmental concerns, and to identify areas of environmental interest (AEIs) and recognized environmental conditions related to past and present activities and current conditions of the properties.

Upon review of environmental databases, historical aerial photographs and available historical environmental files, Tetra Tech identified five AEIs associated with the current farming operation of the site (Table 3-5).

Table 3-5. Areas of Environmental Interest Identified Within the Project

Identification	Latitude	Longitude	Comment
AEI 1	29.5973	-81.5310	One area of oil-stained soil on north side of building where scrap metal is stored.
AEI 2	29.5966	-81.5303	Oil-stained concrete observed on the northern end of a shed used for storage of farming implements; limited staining was present on the surface asphalt underneath a 2,000-gallon diesel tank; four additional storage tanks observed with no staining observed.
AEI 3	29.5974	-81.5293	One 500-gallon steel above-ground storage tank, no staining observed.
AEI 4	29.5965	-81.5311	Former herbicide/pesticide fill area, no stained soil or visibly distressed vegetation observed.
AEI 5	29.6012	-81.5310	One bag of blue granular material, probably a copper-based fungicide, split open, no stained soil or visibly distressed vegetation observed. Three semitrailers used for dry storage, no stressed vegetation observed in this area.

Source: Tetra Tech 2018.

3.12.2 Environmental Consequences

Contractors working at the Project may be exposed to short-term safety risks associated with construction. Contractors would be required to establish and maintain a safety plan for construction activities in compliance with OSHA requirements. Standard OSHA recommended BMPs for safety would help minimize any potential safety risks in this regard. Safety BMPs might include, but are not limited to, the following:

- a) Implementing procedures to ensure that equipment guards, housekeeping, and personal protective equipment are in place;
- b) Establishing programs and procedures for lockout, right-to-know, confined space, hearing conservation, forklift operations, etc.;
- c) Conducting employee safety orientations;
- d) Performing regular safety inspections; and
- e) Developing a plan of action for identified hazards.

With the exemption of construction-related materials such as fuels, lubricants, adhesives, and solvents, construction or operation of the Project will not require generation, use, or storage of significant quantities of hazardous substances. Compliance with regulations and standard manufacturers' protocols for storage, transportation, and usage of any hazardous construction-related materials will be followed to ensure safety in accordance with OSHA Hazard Communication Standard (29 CFR 1910.1200) and applicable regulations administered by the local fire departments and Florida OSHA. The toxicity and potential release of these materials would depend on the quantity of material, type of storage container, safety protocols used at the Project, location and/or proximity to residences, frequency and duration of spills or storage leaks, and the reactivity of hazardous substances with other materials. The PV panels for the Project are environmentally sealed collections of PV cells that require no chemicals and produce no waste materials.

The Project is not expected to present unique or serious health and safety hazards to members of the public. Access to the Project will be restricted to personnel and the perimeter of the Project will be fenced off. Any emergency response at the Project would include the local emergency response agencies in both Putnam County and Flagler County.

3.12.3 Mitigation

Impacts to human health and safety are not anticipated and mitigation is not required.

4.0 Cumulative Effects

The Council on Environmental Quality (CEQ) regulations for implementing NEPA define cumulative effects as *"the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions"* (40 CFR 1508.7). NEPA provides the context and carries the mandate to analyze the cumulative effects of federal actions (CEQ 1997).

The Flagler County Growth Management Department and Putnam County Planning and Development Services were consulted in order to evaluate any cumulative impacts the Project may have in conjunction with other planned projects in the area. Correspondence from both departments are included in Appendix F. According to the Flagler County Growth Management Department, no other projects are planned in the area. Putnam County Planning and Development Services also confirmed that while there are a number of planned or ongoing developments within four miles of the Project, they are all located along the U.S. Highway 17 corridor west of the Project site and are unlikely to change the rural character of the areas within the general vicinity of the subject area.

The analysis presented herein (Table 4-1) utilizes principles of the cumulative effects analysis of CEQ guidance (CEQ 1997). The analysis uses natural ecological, regional, and sociocultural boundaries as well as temporal scales relevant to the regional vicinity of the Project. Cumulative impacts have been assessed in a qualitative manner and in the context of each inventoried resource, ecosystem, or human community that might be affected. The following cumulative analysis evaluated the Proposed Action in the context of other development in the region. The Project is not expected to significantly contribute to any cumulative effect.

Table 4-1. Cumulative Impacts Assessment

Resource	Proposed Action	Cumulative Effect
Land Use/ Farmlands	Change of use from agriculture to solar energy generation is allowed via a special use permit. Continued growth in unincorporated areas of Putnam and Flagler Counties will contribute to conversion of agricultural land to residential, commercial, industrial uses.	Some loss of farmland of unique importance.
Floodplains	Majority of the Project is located within FEMA Zone X (Area of Minimal Flood Hazard). No grading, fill, excavation, or other improvements are proposed within the 100-year floodplain.	No adverse impacts are anticipated.
Wetlands/ Waterbodies	The Project contains wetlands, however, however no impacts are proposed. Buffers of a minimum distance of 25 feet will be maintained between wetlands and site development.	No adverse impacts are anticipated.
Water Resources	Minor groundwater withdrawals are anticipated during construction for dust suppression and/or soil conditioning; however, the withdraws would be significantly less than the current agricultural groundwater withdraws. No groundwater withdrawals are anticipated during Project operation.	No adverse impacts are anticipated.
Coastal Resources	The Proposed action is within Florida’s coastal zone management area.	No significant adverse impacts.
Biological Resources – Fish, Wildlife and Vegetation	Project will be constructed on previously disturbed land and impacts to biological resources or changes to baseline conditions are minor. Much of the Project has been cleared for crop cultivation, commercial and residential development, and pine plantation. No wetland impacts will occur.	No significant impacts to non-listed wildlife species are anticipated, as they are common within the region and suitable habitat will remain following construction of the Project. No significant deterioration or fragmentation of wildlife habitat of vegetative communities.
Biological Resources – Threatened and Endangered Species	Project could temporarily affect habitat for one federally-listed species (Eastern Indigo snake) and several State-listed species (gopher tortoise, Florida pine snake). Direct impacts unlikely due to adherence to programmatic guidance.	Not likely to jeopardize the existence of any listed species.

Resource	Proposed Action	Cumulative Effect
Biological Resources – Invasive Species	Invasive plants and wildlife have not been formally documented within the Project.	No significant adverse impacts.
Cultural Resources	Desktop and field investigations documented no cultural or historical resources have been identified within the Proposed Action's Direct Effects APE. One historic cemetery was identified within the Proximity Effects APE, but the Project is not visible from the resource.	No historic resources will be affected as a result of the Project. No adverse impacts are anticipated.
Aesthetics	The Project will likely be visible to drivers from East End (the main thoroughfare near the Project) as personnel enter and exit but this activity is not expected to be distracting or intrusive. The panels and associated infrastructure may be visible from residences located near the western portion of the Project on Tupelo Drive.	A planted buffer be installed for the solar facilities which will limit visibility of the solar array. No adverse impacts are anticipated.
Air Quality	No air emissions or adverse effects to NAAQS.	No adverse impacts are anticipated.
Socio-economics	Some increase in economic benefit through employment opportunities, career development, and short and long-term tax revenue.	No adverse impacts are anticipated.
Miscellaneous Issues - Noise	Negligible increase in noise levels from heavy machinery and vehicular traffic is anticipated during construction and would be temporary and short-term). Once operational, the Project is not anticipated to increase ambient noise. Inverters will be installed towards the center of the array and may produce up to 75 dB of sound detectible approximately 3 to 5 feet away. Noise levels will decrease with distance from the sources.	Ambient noise levels associated with operations are not expected to adversely impact sensitive noise receptors. No adverse impacts are anticipated.
Miscellaneous Issues - Transportation	Minor increases in local traffic volumes during construction phase of the project.	No adverse impacts are anticipated.
Human Health and Safety	No health and safety impacts. No generation of hazardous waste.	No adverse impacts are anticipated.

The Proposed Action is part of FRP’s renewable energy portfolio expansion. Minimal long-term cumulative impacts and no significantly adverse impacts are anticipated within the Project footprint. Temporary noise and air pollution impacts during construction are anticipated; however, at the completion of the project, the noise and air pollution levels will be comparable to the current conditions. No listed historic or archaeological resources will be impacted within the project limits nor

are threatened or endangered species anticipated to be significantly impacted. Environmentally, subsurface disturbance will be limited to shallow depths, with the exception of piles, and erosion and sediment controls will be used during and after construction to control surface runoff. Hazardous wastes will not be generated and are not anticipated to be encountered during construction.

The proposed Project is not expected to negatively impact the surrounding community. Instead, it is anticipated to provide local, regional, and statewide benefits through short and long-term job creation, incentivized career training, and stable sales, employment, and ad valorem tax revenue. 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

The Proposed Action has been selected and designed to avoid and/or minimize impacts to the natural and human environment, and therefore significant mitigative measures are not required. FRP has selected a Project which avoids impact to waters of the United States Standard BMPs to minimize minor, short-term environmental impacts anticipated during the construction phase of the Proposed Action, will be implemented to mitigate potential environmental adverse effects. Specifically:

- a) Implementation of a SWPPP incorporating construction BMPs to control stormwater runoff, prevent soil erosion and sedimentation, prevent soil compaction, and reduce non-point source pollution.
- b) Implementation of a SPCC plan to ensure appropriate response measures and protocols for use, handling, storage of limited potentially hazardous materials utilized during construction and operation of the Proposed Action (e.g., fuel, oils, lubricants, adhesives).
- c) Use of standard BMPs and weed control measures to prevent establishment of noxious weeds and invasive species. Use of appropriate native seed-mix for restoration/revegetation.

FRP has avoided cultural resources that have been identified as eligible for NRHP listing, thereby avoiding mitigation measures.

Mitigation requirements, if any, for impacts to threatened and endangered species will be determined upon further consultation with the USFWS and the FWC. The Project contains suitable habitat for three federally-threatened species, the eastern indigo snake, wood stork, and Etonia rosemary. The extent of impacts to this species will be unknown until further site surveys are conducted. Mitigation for impacts to the eastern indigo snake is not anticipated but for the USFWS North Florida Ecological Services Field Office is typically provided as a contribution to their Eastern Indigo Snake Conservation Fund. Per consultation with USFWS, there is no objection to development of the project site, provided that the USFWS Standard Protection Measures for the Eastern Indigo Snake area followed during construction of the project. Impacts to wood suitable wood stork foraging habitat are not proposed, and the Etonia rosemary is not likely to occur within the Project. Impacts to State-listed species will be mitigated via an appropriate contribution to the Wildlife Foundation of Florida.

6.0 List of Preparers

The following table lists the individuals who contributed to the development of this EA.

Name	Title / Role for this EA	Organization
Erico Lopez	Project Manager	Florida Renewable Partners, LLC
Kennard Proctor	Senior Project Manager, Environmental Services	Florida Renewable Partners, LLC
Matthew Goff	Senior Project Manager	Environmental Consulting & Technology, Inc.
Amanda Sills-Mueller	Staff Scientist	Environmental Consulting & Technology, Inc.
Christopher Wu	Senior Manager	Environmental Consulting & Technology, Inc.
Nate Goddard, PhD.	Principal Scientist	Environmental Consulting & Technology, Inc.
Jude Dawson	Senior Scientist II	Environmental Consulting & Technology, Inc.
Amanda Koonjebharry, PMP	Project Manager II	Environmental Consulting & Technology, Inc.

7.0 Coordination, Consultation, and Correspondence

FRP has coordinated with the following agencies:

- USDA-Natural Resource Conservation Service – Land Evaluation and Site Assessment (Appendix A);
- Native American Tribes
- Florida Division of Historical Resources
- Florida Department of Environmental Protection – FRP has received an Individual Environmental Resource Permit application for the Project’s stormwater management system, (Appendix D);
- U.S. Fish and Wildlife Service Correspondence (Appendix E); and
- Florida State Clearinghouse (Appendix F).
- County Planning Departments (Flagler and Putnam Counties) (Appendix H)

8.0 References/Bibliography

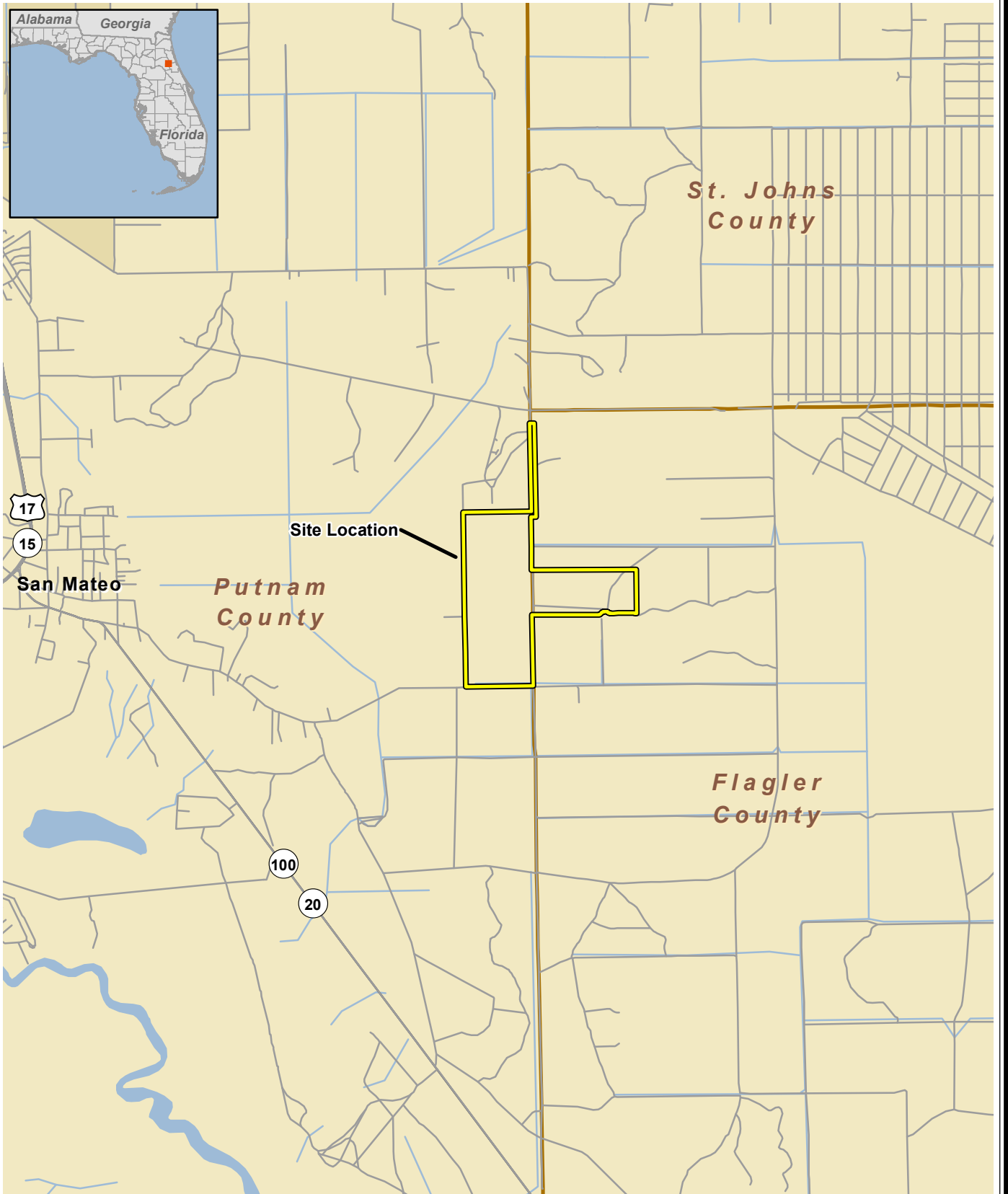
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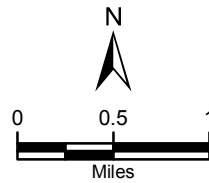
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Figures



Legend

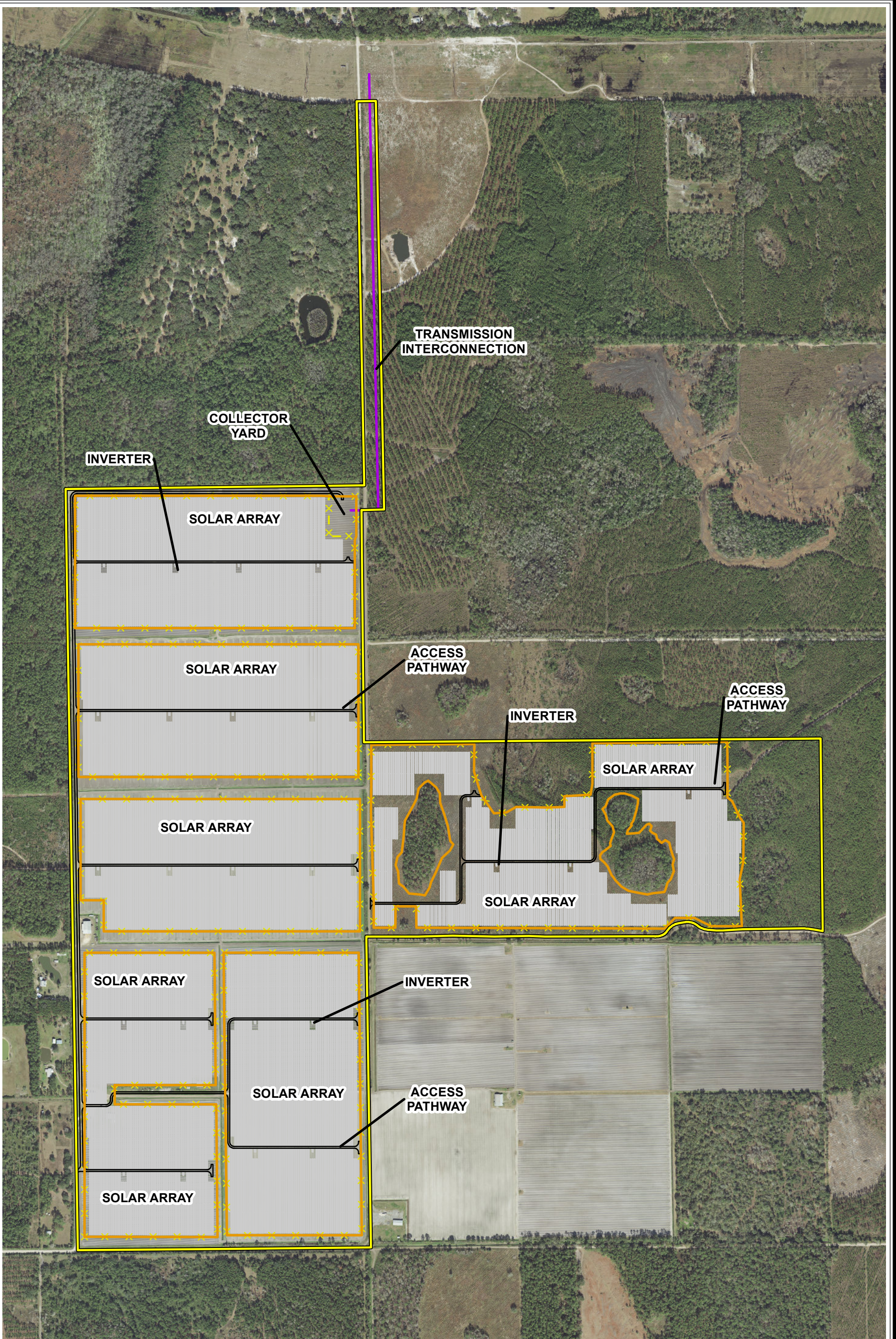
 Project Boundary



**Figure 1-1
Project Location**

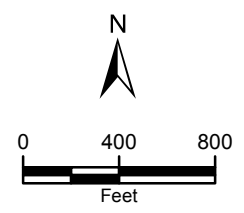
Tupelo Solar
Putnam and Flagler Counties, Florida





Legend

- Project Boundary (561.87 acres)
- Site Fence
- Solar Area (412.21 acres)
- Site Road
- Solar Array
- Overhead Transmission Line

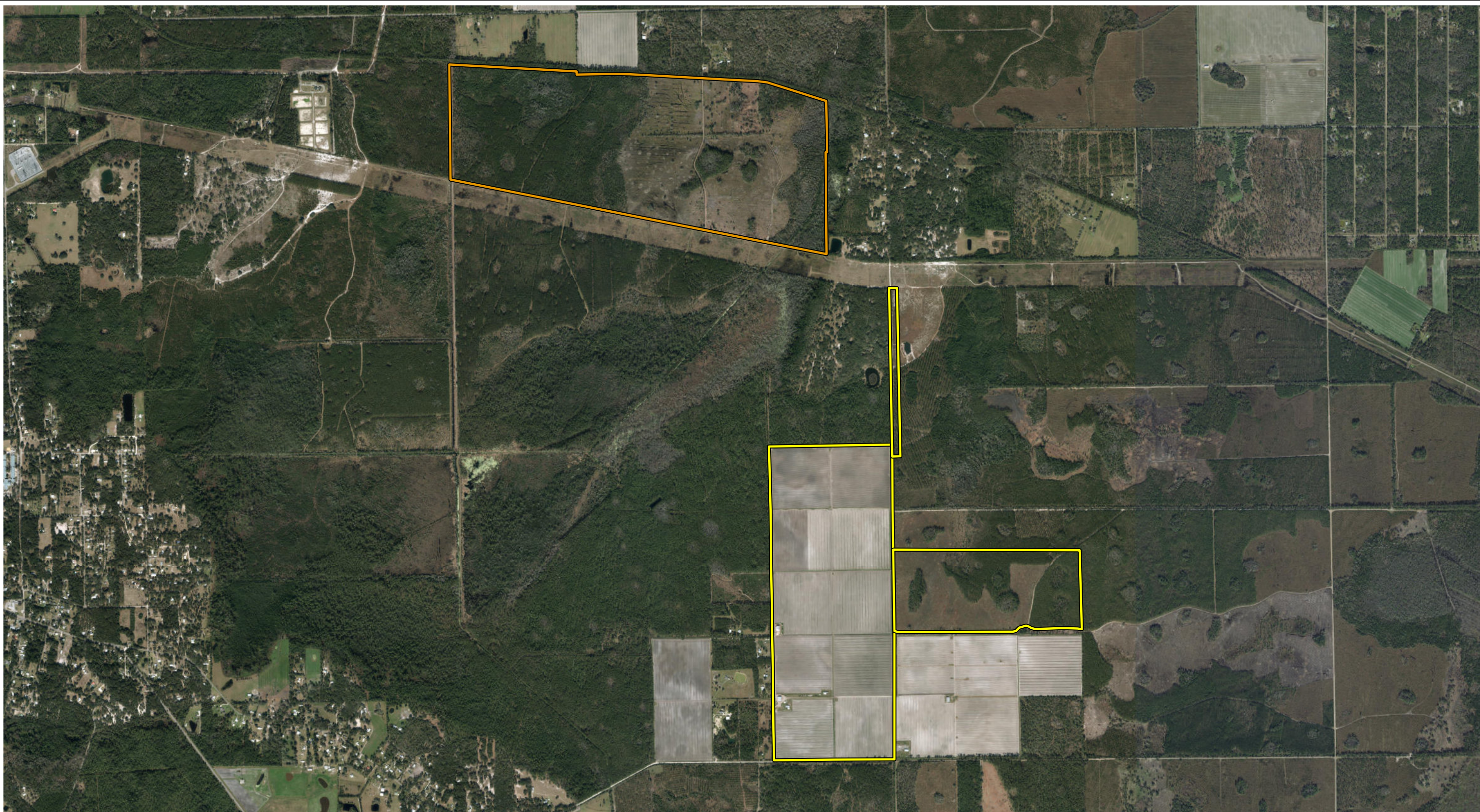


**Figure 2-1
Layout of the Project**

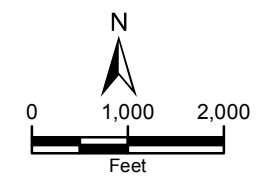
Tupelo Solar
Putnam and Flagler Counties, Florida



Sources: FDOT Imagery, 2020; ECT, 2021.



- Legend**
- Wherrel Site Boundary
 - Tupelo Solar Site Boundary

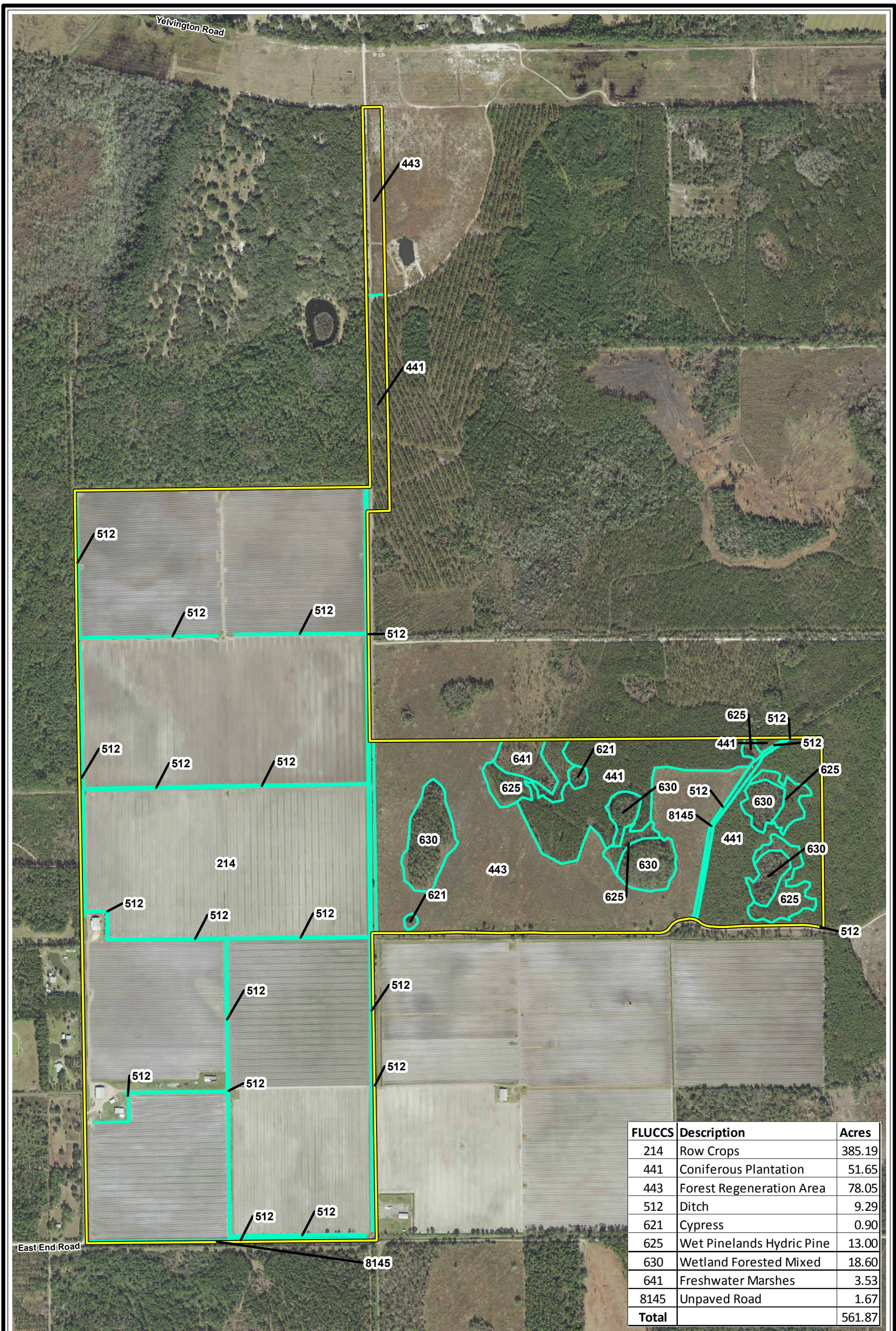


Sources: FDOT Imagery, 2020; ECT, 2021.

Figure 2-2
Alternative Site
and Proposed Site

Tupelo Solar
 Putnam and Flagler Counties, Florida

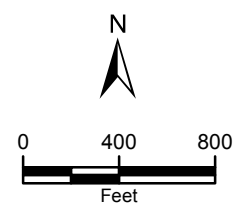




FLUCCS	Description	Acres
214	Row Crops	385.19
441	Coniferous Plantation	51.65
443	Forest Regeneration Area	78.05
512	Ditch	9.29
621	Cypress	0.90
625	Wet Pinelands Hydric Pine	13.00
630	Wetland Forested Mixed	18.60
641	Freshwater Marshes	3.53
8145	Unpaved Road	1.67
Total		561.87

Legend

- Project Boundary
- Land Use/Land Cover

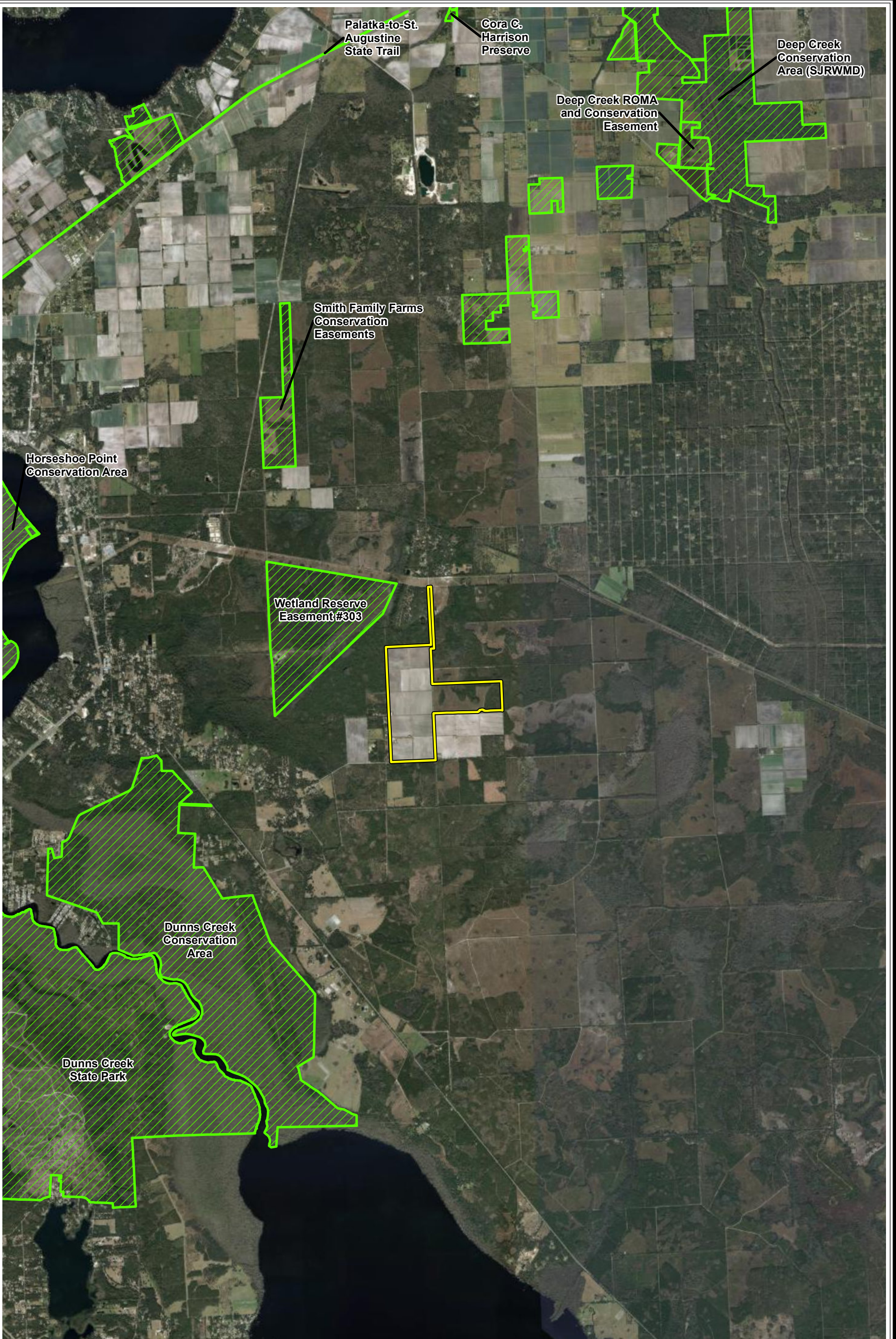




**Figure 3-1
Existing Project Land Use**

Tupelo Solar
Putnam and Flagler Counties, Florida



Sources: FDOT Imagery, 2020; ECT, 2021.



Legend:
 Project Boundary
 Managed Lands

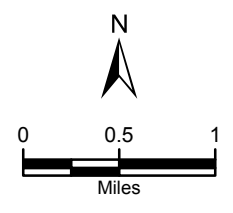
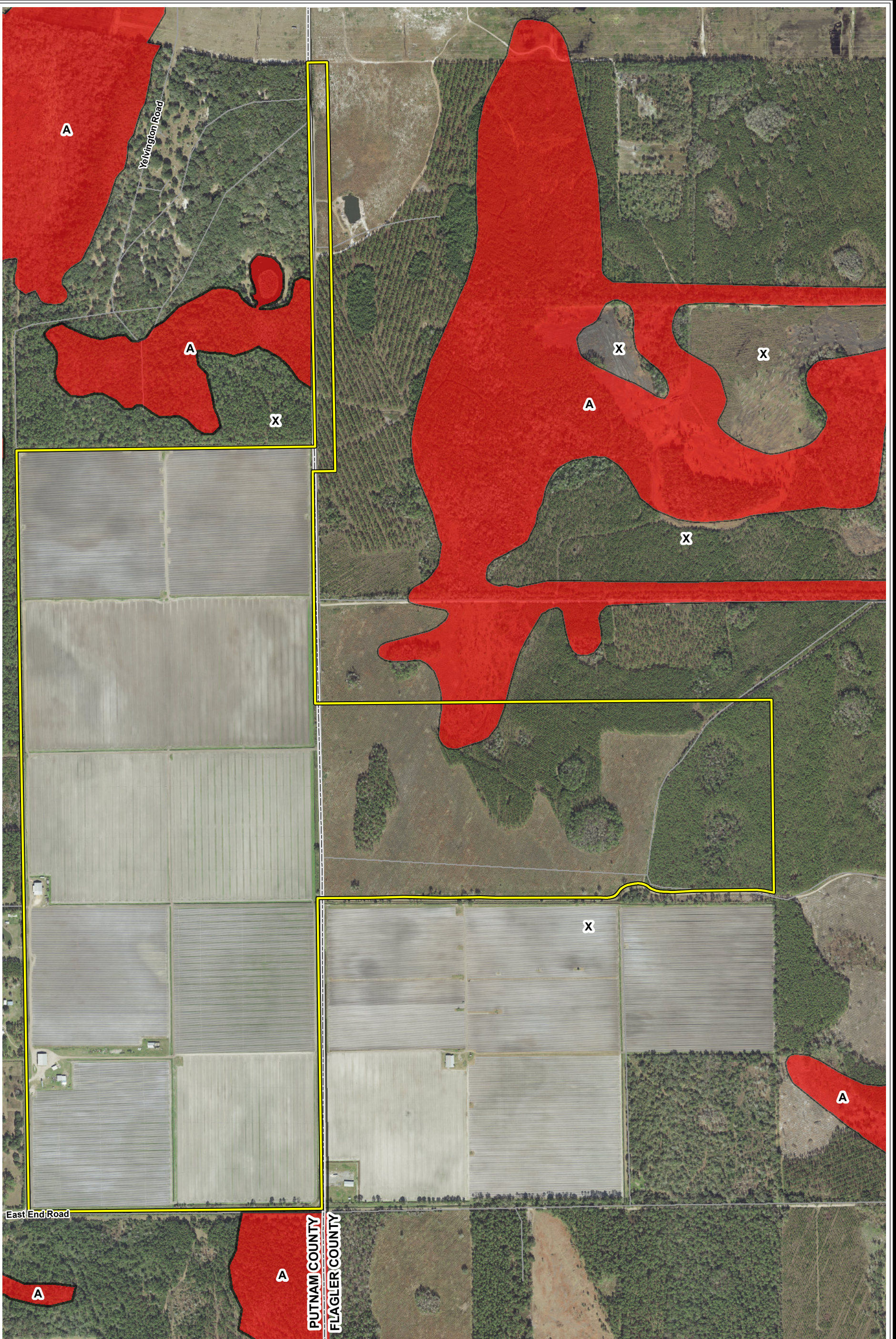


Figure 3-2
Formally Classified Lands

Tupelo Solar
 Putnam and Flagler Counties, Florida



Sources: USFWS, 2020; FDOT, 2019; ECT, 2021.



Legend

Project Boundary

Flood Zone

A

X, Area of Minimal Flood Hazard

N

0 400 800

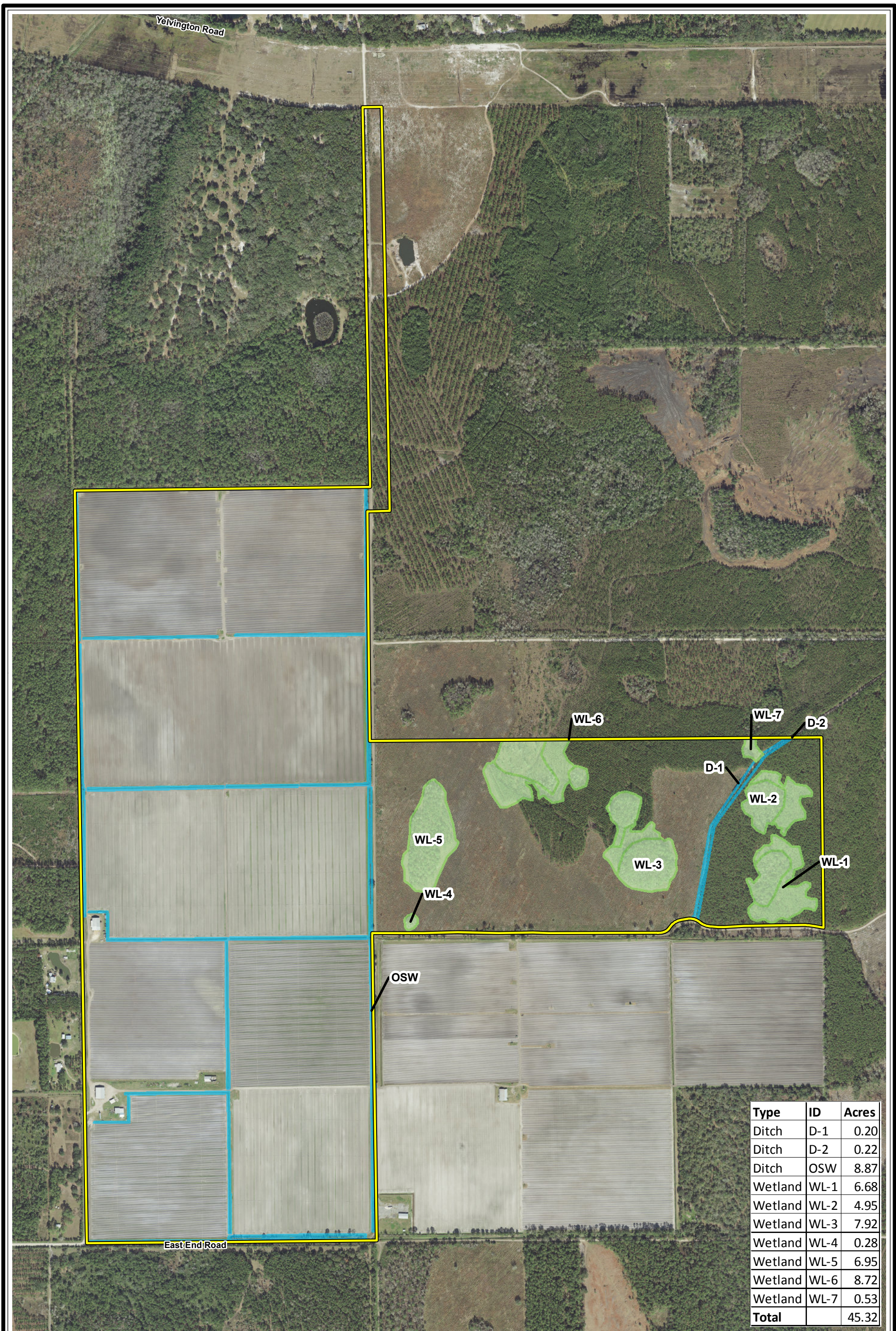
Feet

**Figure 3-3
FEMA Floodplains**

Tupelo Solar
Putnam County and Flagler County, Florida



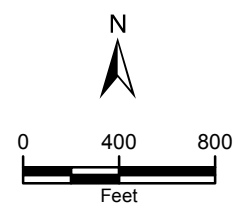
Sources: FEMA, 2020; FDOT Imagery, 2020; ECT, 2021.



Type	ID	Acres
Ditch	D-1	0.20
Ditch	D-2	0.22
Ditch	OSW	8.87
Wetland	WL-1	6.68
Wetland	WL-2	4.95
Wetland	WL-3	7.92
Wetland	WL-4	0.28
Wetland	WL-5	6.95
Wetland	WL-6	8.72
Wetland	WL-7	0.53
Total		45.32

Legend

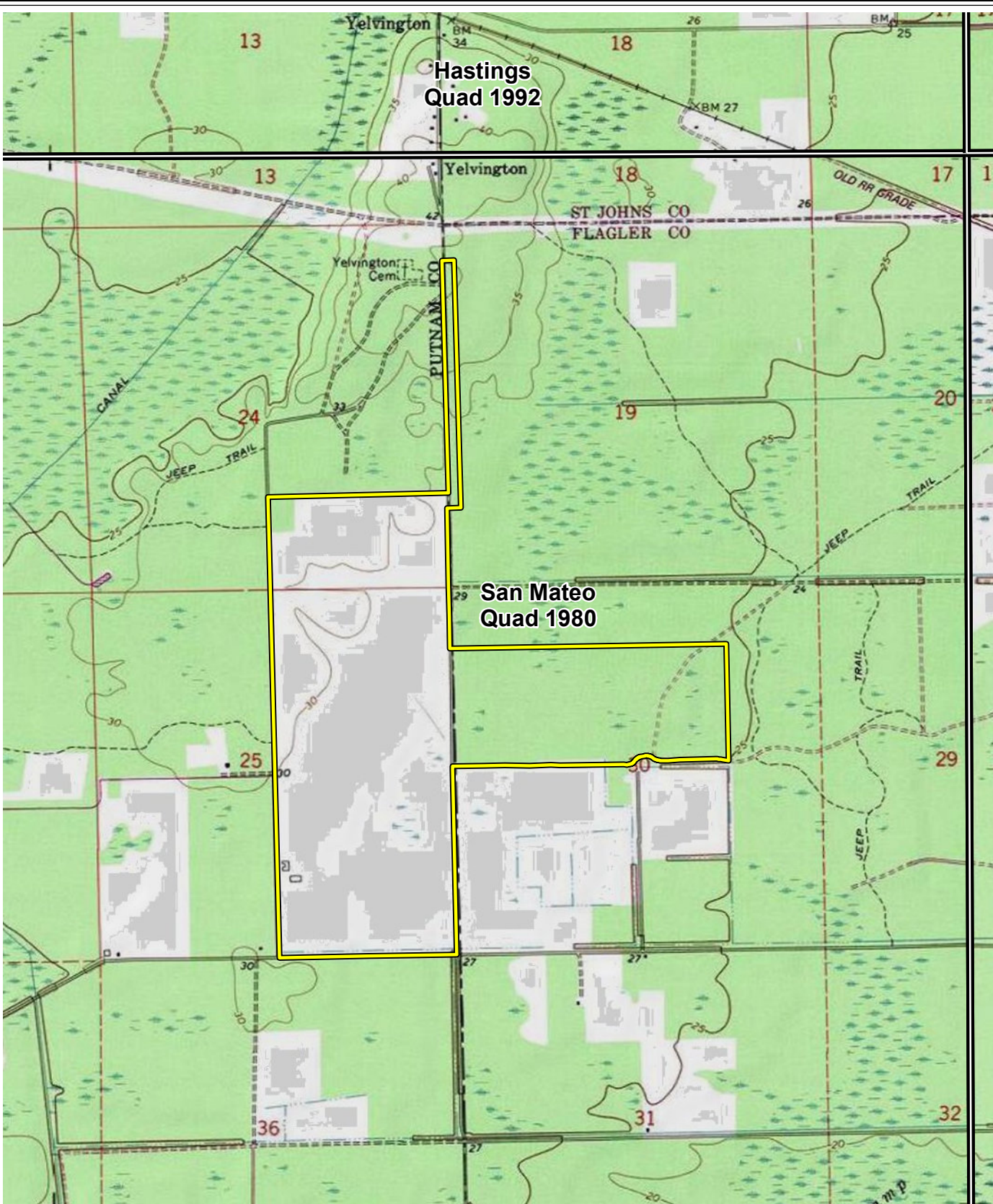
- Project Boundary
- Surface Water
- Wetland





**Figure 3-4
Wetlands and
Surface Waters**
Tupelo Solar
Putnam and Flagler Counties, Florida

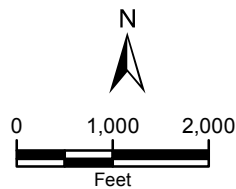


Sources: FDOT Imagery, 2020; ECT, 2021.



Legend

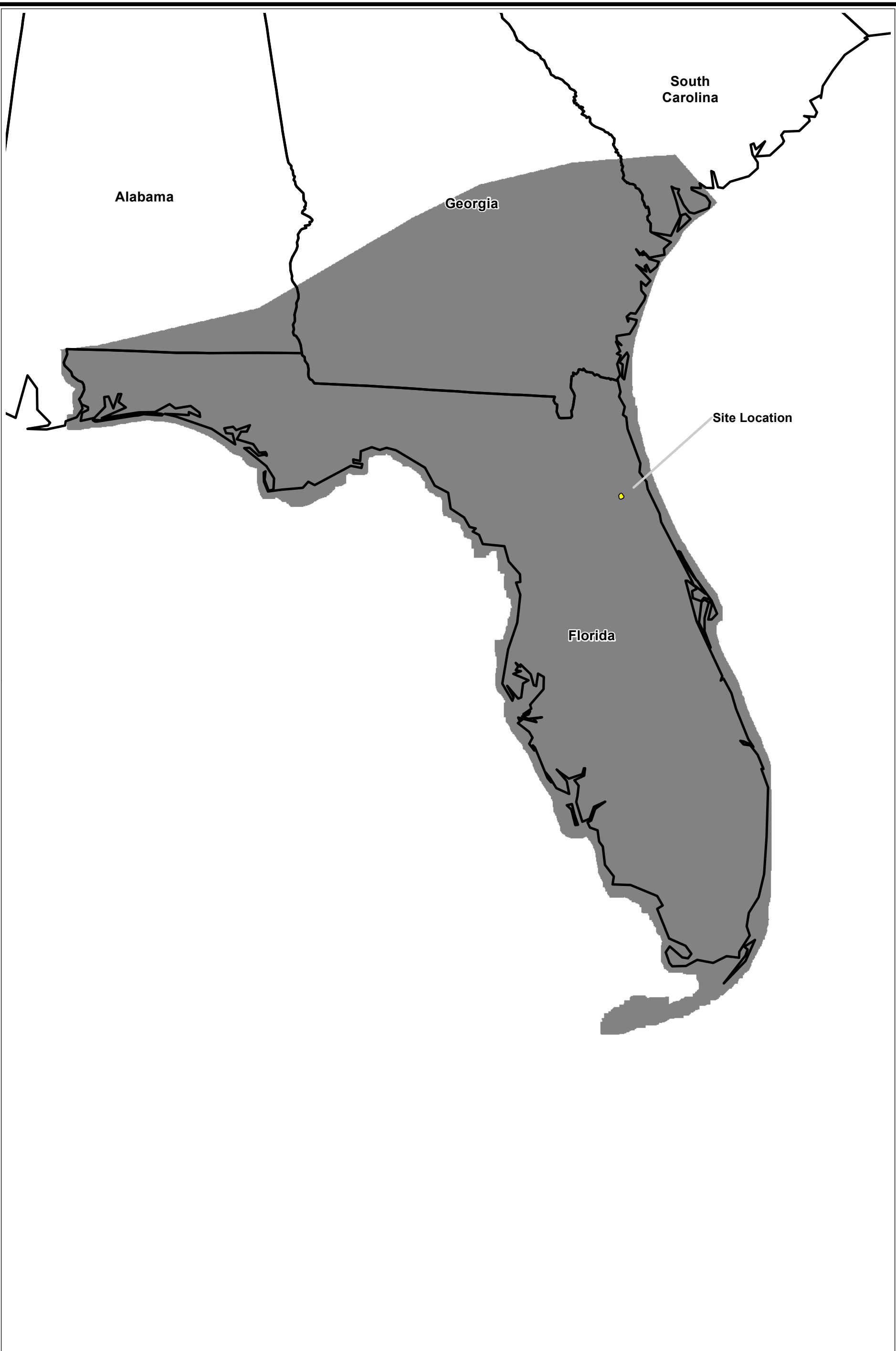
-  USGS Quadrangle Index (24k)
-  Property Boundary





**Figure 3-5
Topographic Map**

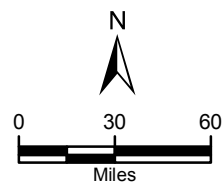
Tupelo Solar
Putnam County and Flagler County, Florida





Legend:

-  Project Boundary
-  Floridan Aquifer Extent

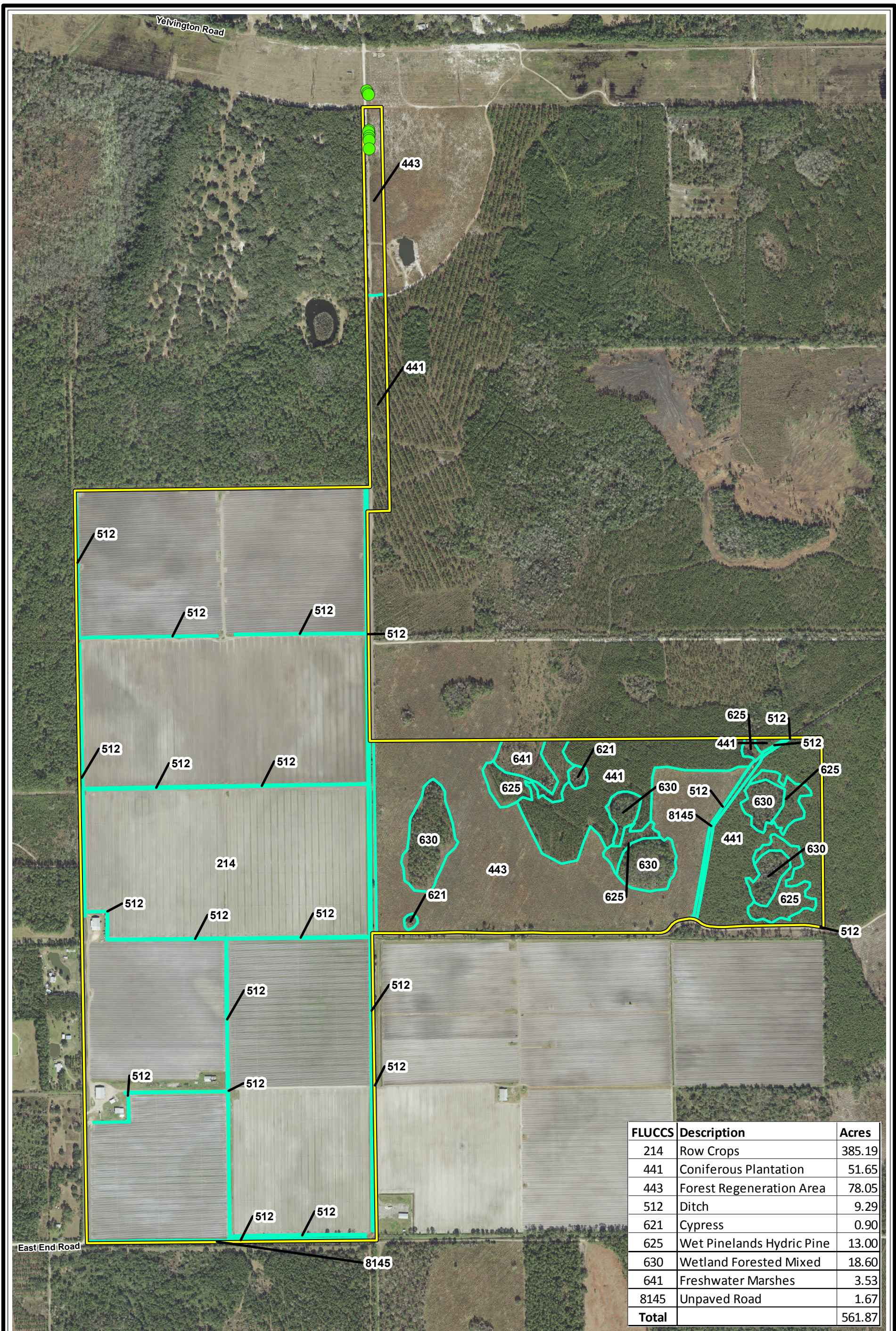


**Figure 3-6
Project Hydrogeology Map**

Tupelo Solar
Putnam and Flagler Counties, Florida

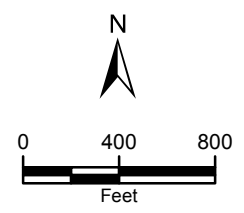


Sources: FDEP, 2021; ECT, 2021.



Legend

- Project Boundary
- Land use/Land Cover
- Potentially Occupied Gopher Tortoise Burrow (10)



**Figure 3-7
Gopher Tortoise Burrows**

Tupelo Solar
Putnam and Flagler Counties, Florida



Sources: FDOT Imagery, 2020; ECT, 2021.

Appendix A

Land Evaluation and Site Assessment

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request			
Name of Project		Federal Agency Involved			
Proposed Land Use		County and State			
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form:	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>		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		
PART III (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					
PART IV (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					
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)					
PART VI (To be completed by Federal Agency) Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i>		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			
PART VII (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			
TOTAL POINTS (Total of above 2 lines)		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: <i>Isabella Giuliani</i>					Date:

(See Instructions on reverse side)

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, 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.

June 18, 2021
ECT No. 210149-0100

Kevin Sullivan
Florida State Soil Scientist
USDA - NRCS
2614 NW 43rd Street
P.O. Box 141510
Gainesville, Florida 32614

Re: Information Request for the Proposed FRP Tupelo Solar Project in Putnam and Flagler Counties,
Florida

Dear Mr. Sullivan:

FRP Tupelo Solar, LLC (FRP), a wholly owned subsidiary of NextEra Energy Resource, LLC, is proposing to develop the FRP Tupelo Solar Project (Project), located in Putnam and Flagler Counties, Florida (Attachment A). FRP is seeking funding from the U.S. Department of Agriculture (USDA) for the Project. Therefore, FRP has been authorized by the USDA Rural Utilities Service (RUS) to transmit this letter on the USDA RUS' behalf to initiate their consultation with your office in order to perform an environmental review pursuant to the National Environmental Policy Act (NEPA) so that the USDA RUS may assess the environmental impacts of the Project.

The Project is being proposed to generate 74.5 megawatts (MW) of clean, renewable electricity and is physically located on East End Road in Putnam and Flagler Counties, Florida, on approximately 562 acres. Enclosed is a location map, a Natural Resources Conservation Service (NRCS) farmland classification figure (Attachment A), and USDA Form AD-1006 (Attachment B). No prime farmland is identified onsite and approximately 425 acres of unconsolidated farmland of unique importance are spread throughout the Project boundary.

On behalf of the USDA RUS, FRP is submitting USDA Form AD-1006 and supplemental figures (Attachment B) to the NRCS for initial review and completion of Parts II, IV, and V. Upon receipt of the modified form, FRP will complete the form and submit it to the NRCS for finalization.

We request that you submit your recommendations within ten (10) days of your receipt of this request to Amanda Mueller with Environmental Consulting & Technology, Inc. at 703-906-2988 or via email at amueller@ectinc.com.

Sincerely,

Environmental Consulting & Technology, Inc.



Amanda Mueller
Senior Associate Scientist



Christopher Wu
Senior Manager

Mr. Kevin Sullivan
Florida State Soil Scientist
June 18, 2021
Page 2

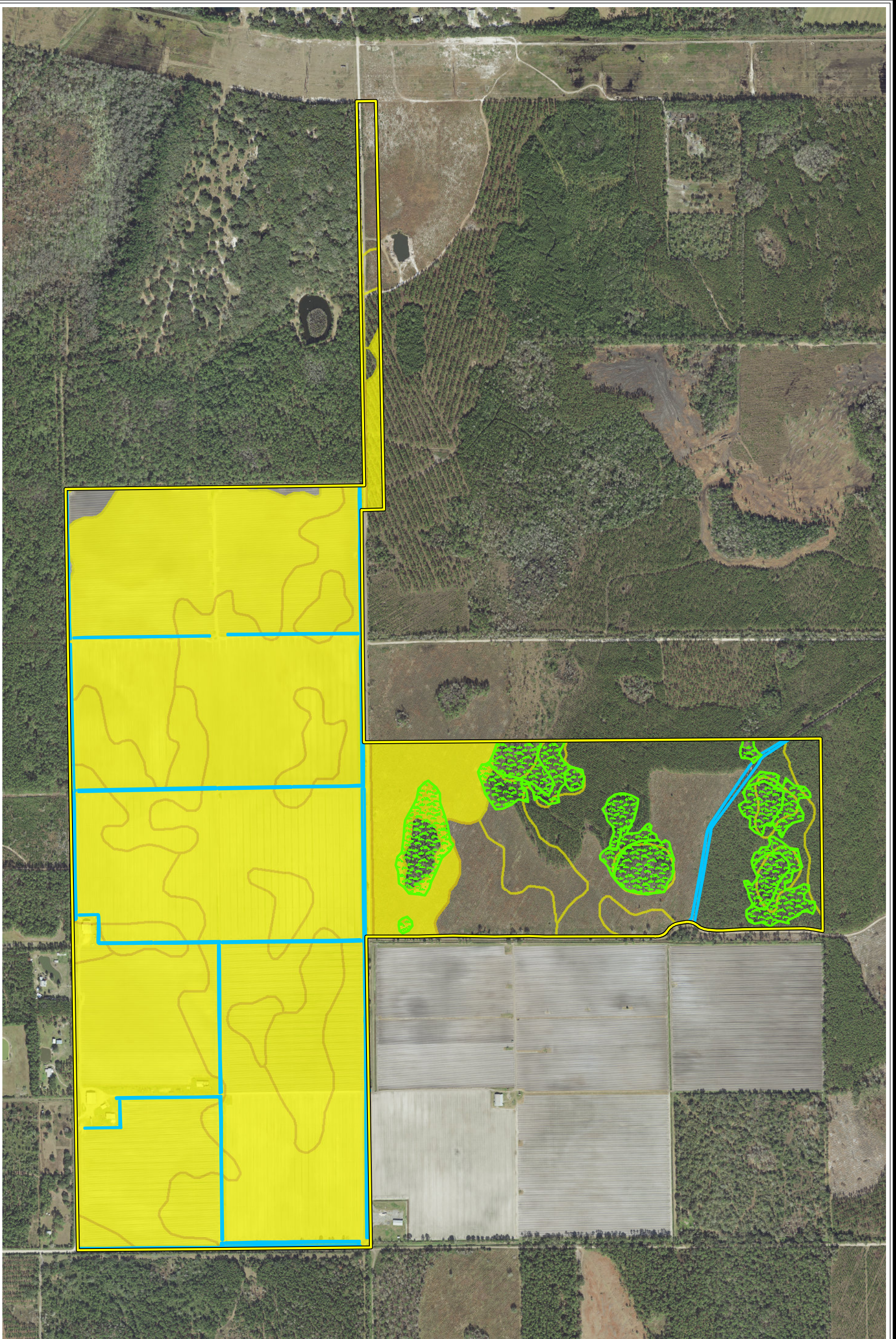
Attachments:

- A. Location Map/Farmland Classification
- B. USDA Form AD-1006

cc: Erico Lopez – FRP Tupelo Solar, LLC
Kennard Proctor – FRP Tupelo Solar, LLC
Matthew Goff – ECT

Mr. Kevin Sullivan
Florida State Soil Scientist
June 18, 2021
Page 3

ATTACHMENT A - LOCATION MAP/FARMLAND CLASSIFICATION



Legend

- Project Boundary
- Farmland of unique Importance (425.70 ac)
- Surface Water
- Not Prime Farmland (136.17 ac)
- Wetland

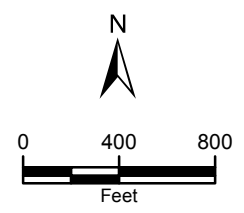


Figure 1
Farmland Classification
 Tupelo Solar
 Putnam and Flagler Counties, Florida



Sources: FDOT Imagery, 2020; ECT, 2021.

Mr. Kevin Sullivan
Florida State Soil Scientist
June 18, 2021
Page 4

ATTACHMENT B - USDA FORM AD-1006

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request			
Name of Project		Federal Agency Involved			
Proposed Land Use		County and State			
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Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %		Amount of Farmland As Defined in FPPA Acres: %		
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(See Instructions on reverse side)

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(For Federal Agency)

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

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.

Appendix B

EJScreen Summary Report 2023

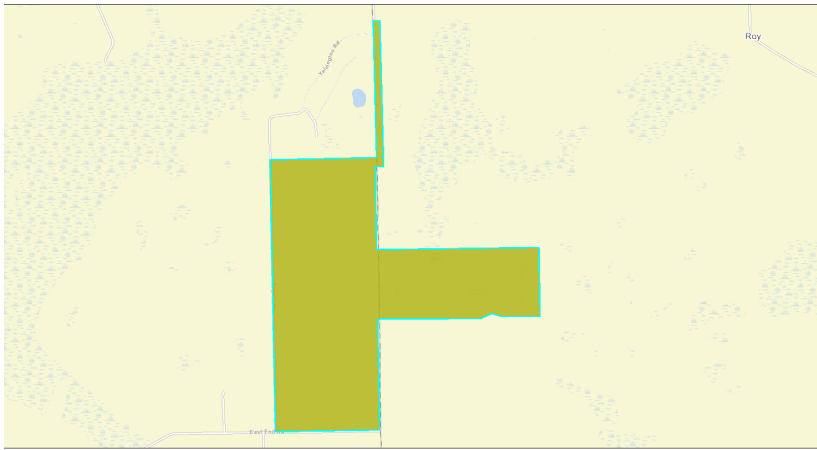


EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

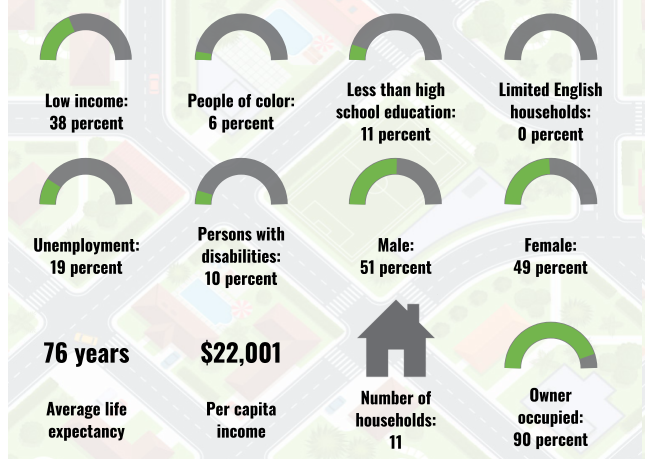
Putnam County, FL

1 mile Ring around the Area
 Population: 27
 Area in square miles: 9.71

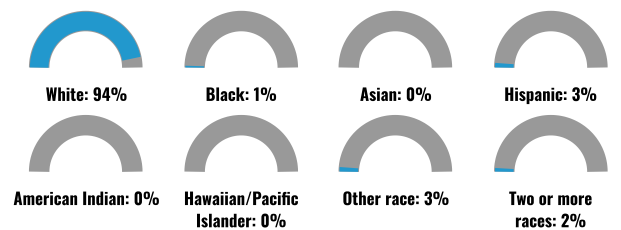


3, 2023
 Project 1
 tupelsolarprojectboundary3
 1:18,056
 0 0.2 0.4 0.8 mi
 0 0.3 0.6 1.2 km
EPA Community Maps: Cartography, FPOB, ENR, HERE, Garmin, SatNav, GeoTechnologies, Inc., METTRAKSA, USGS, EPA, NPS, US Census Bureau, USDA

COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
No language data available.	

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

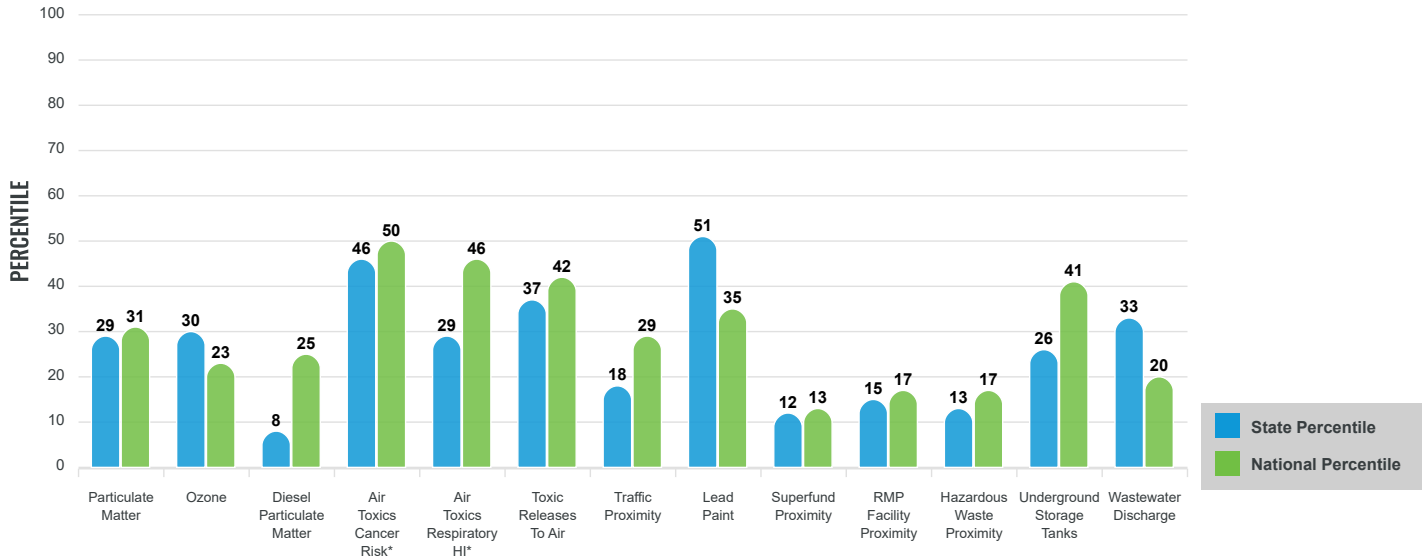
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

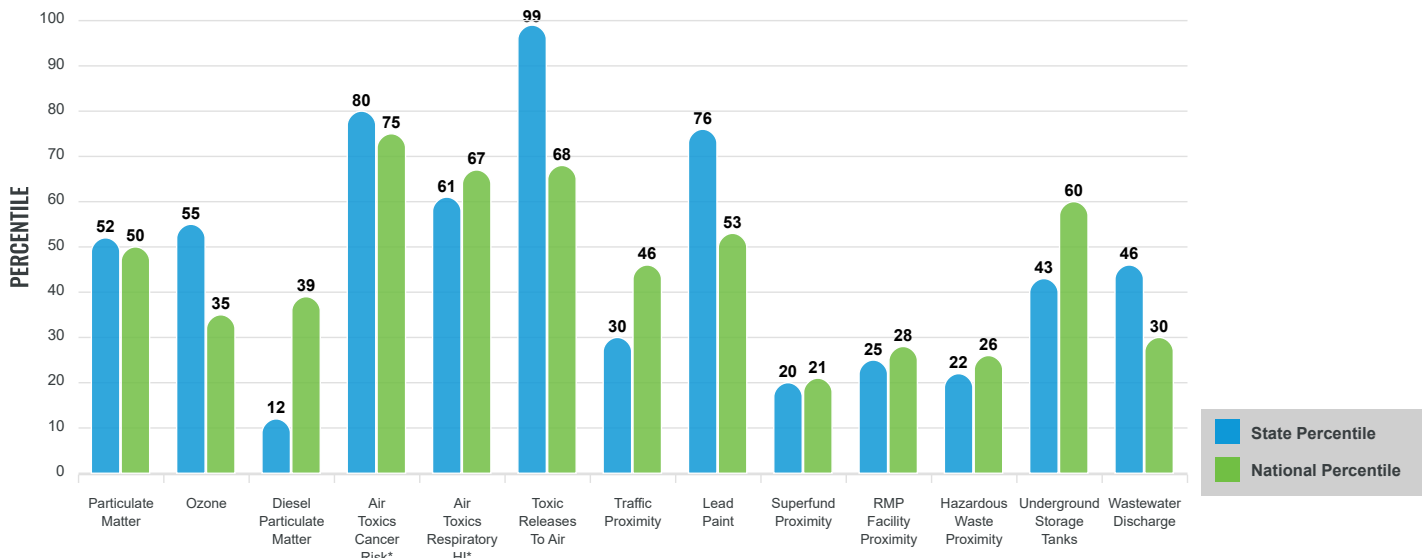
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 1 mile Ring around the Area

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m ³)	7.31	7.52	32	8.08	27
Ozone (ppb)	57.1	59.4	33	61.6	18
Diesel Particulate Matter (µg/m ³)	0.111	0.293	6	0.261	19
Air Toxics Cancer Risk* (lifetime risk per million)	30	27	32	28	35
Air Toxics Respiratory HI*	0.3	0.32	11	0.31	31
Toxic Releases to Air	380	1,900	45	4,600	42
Traffic Proximity (daily traffic count/distance to road)	21	160	16	210	24
Lead Paint (% Pre-1960 Housing)	0.082	0.14	61	0.3	32
Superfund Proximity (site count/km distance)	0.015	0.13	11	0.13	11
RMP Facility Proximity (facility count/km distance)	0.058	0.31	13	0.43	13
Hazardous Waste Proximity (facility count/km distance)	0.061	0.52	11	1.9	12
Underground Storage Tanks (count/km ²)	0.32	7	24	3.9	35
Wastewater Discharge (toxicity-weighted concentration/m distance)	5.2E-06	0.52	21	22	14
SOCIOECONOMIC INDICATORS					
Demographic Index	22%	39%	28	35%	37
Supplemental Demographic Index	20%	15%	75	14%	78
People of Color	6%	45%	9	39%	15
Low Income	38%	33%	64	31%	67
Unemployment Rate	29%	5%	98	6%	98
Limited English Speaking Households	0%	7%	0	5%	0
Less Than High School Education	11%	11%	61	12%	60
Under Age 5	2%	5%	36	6%	27
Over Age 64	13%	23%	32	17%	39
Low Life Expectancy	21%	19%	62	20%	62

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	0
Water Dischargers	0
Air Pollution	0
Brownfields	0
Toxic Release Inventory	0

Other community features within defined area:

Schools	0
Hospitals	0
Places of Worship	0

Other environmental data:

Air Non-attainment	No
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands* No
 Selected location contains a "Justice40 (CEJST)" disadvantaged community Yes
 Selected location contains an EPA IRA disadvantaged community N/A

Report for 1 mile Ring around the Area

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	21%	19%	62	20%	62
Heart Disease	7.8	7.2	66	6.1	81
Asthma	10.2	8.7	88	10	61
Cancer	6	6.9	43	6.1	45
Persons with Disabilities	11.2%	13.9%	36	13.4%	40

CLIMATE INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	34%	26%	75	12%	92
Wildfire Risk	13%	32%	59	14%	82

CRITICAL SERVICE GAPS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	11%	13%	54	14%	51
Lack of Health Insurance	23%	13%	90	9%	94
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Footnotes

Report for 1 mile Ring around the Area

Appendix C

Cultural Resources Discovery Mitigation Plan

Cultural Resources Discovery Mitigation Plan

If during any Project-related ground disturbance, any post review discovery, including but not limited to, any artifacts, foundations, or other indications of past human use or occupation of the area are uncovered, such discoveries shall be protected by complying with 36 CFR § 800.13(b)(3) and (c), and if human remains or suspected human remains are encountered by Chapter 872.05, *Florida Statutes*, and shall include the following procedures:

All Project-related ground disturbing activities (“Work”), including vehicular traffic within a 50-foot radius around the area of discovery shall immediately stop. FRP or their construction contractor shall ensure barriers are established to protect the area of discovery and notify the Construction Manager to contact the FRP Construction Compliance Environmental Lead (FRP-CCEL). The Construction Manager and/or the FRP-CCEL shall contact the FRP Archaeologist, a Secretary of the Interior (SOI) qualified professional, who will quickly (within 24 hours) assess the nature and scope of the discovery; implement interim measures to protect the discovery from looting and vandalism; and establish broader barriers if additional historic and/or precontact properties, can reasonably be expected to occur.

The FRP Archaeologist and/or the FRP-CCEL shall notify the Federal Preservation Officer (FPO) and State Historic Preservation Office (SHPO) immediately. Indian tribe(s) that have an interest in the area of discovery (the Seminole Tribe of Florida [STOF]) shall also be contacted immediately. The SHPO may require additional tribes who may have an interest in the area of discovery also be contacted. The notification shall include an assessment of the discovery provided by the FRP Archaeologist, and a copy shall be provided to the FRP Tribal Relations contact.

Should the discovery contain burial sites or human remains, the Construction Manager shall immediately notify the FRP-CCEL and FRP Archaeologist who will contact the FPO, the Florida SHPO, and the STOF. The relevant law enforcement authorities shall be immediately contacted by onsite personnel to reduce delay times, in accordance with tribal, state, or local laws including 36 CFR Part 800.13; 43 CFR Part 10, Subpart B; and the Advisory Council on Historic Preservation’s *Policy Statement Regarding treatment of Burial Sites, Human Remains, or Funerary Objects* (February 23, 2007).

Due to their Indigenous Traditional Ecological Knowledge (ITEK), FRP will engage with the STOF at the contact listed below. The area will be examined by the FRP Archaeologist and representatives of the STOF (if requested), who, in consultation with FPO and Florida SHPO, will determine if the remains are human or potentially human or if the discovery is significant.

When the discovery contains burial sites or human remains, all construction activities, including vehicular traffic shall stop within a 100-foot radius of the discovery and barriers shall be established. The evaluation of human remains shall be conducted at the site of discovery by a SOI qualified professional. Remains that have been removed from their primary context and where that context may be in question may be retained in a secure location on the Project Site pending further decisions on treatment and disposition. FRP may expand this radius based on the FRP Archaeologist’s professional assessment of the discovery and establish broader barriers if further subsurface burial sites, or human remains can reasonably be expected to occur. FRP, in consultation with the SHPO, the STOF and any other interested tribes, shall develop a plan for the treatment of native human remains.

Work may continue in other areas of the Project Site where no historic properties, burial sites, or human remains are present. If the inadvertent discovery appears to be a consequence of illicit activity such as

looting, the FRP Archaeologist and/or the FRP-CCEL shall contact the appropriate legal authorities immediately or take the necessary precautions to prevent further impacts to the discovery.

Work may not resume in the area of the discovery until a notice to proceed has been issued by FRP. FRP shall not issue the notice to proceed until it has determined that the appropriate local protocols and consulting parties have been consulted.

<u>USDA RUS Federal Preservation Officer</u>	Basia M. Howard Archaeologist, Rural Utilities Service U.S. Department of Agriculture (202) 205-9756 (office) basia.howard@usda.gov
<u>FRP Construction Compliance Environmental Lead (FRP-CCEL)</u>	John Tessier NextEra Energy 700 Universe Boulevard, JES/JB Juno Beach, Florida 33408 561-694-4131 (office) John.Tessier@nee.com
<u>Seminole Tribe of Florida THPO Office</u>	Tina Osceola Tribal Historic Preservation Officer 30290 Josie Billie Highway, PMB 1004 Clewiston, FL 33440 863-983-6549 (office) TinaOsceola@semtribe.com
<u>Florida State Historic Preservation Office (SHPO)</u>	Kathryn (Katie) O'Donnell Miyar, Ph.D. Bureau Chief, Bureau of Archaeological Research and State Archaeologist Division of Historical Resources 850-245-6319 (Office) 850-363-5193 (Cell) Kathryn.Miyar@dos.myflorida.com
<u>FRP Archaeologist</u>	Richard W. Estabrook Ph.D./RPA Florida Renewable Partners 700 Universe Boulevard, JES/JB Juno Beach, Florida 33408 561-427-5483 (cell) 561-691-3054 (office) Richard.Estabrook@nee.com
<u>FRP Tribal Relations</u>	Desiree Estabrook, AICP, CNU-A Florida Renewable Partners 700 Universe Boulevard, E5E Juno Beach, Florida 33408 561-310-8843 (cell) Desiree.Estabrook@nee.com

Appendix D

FDEP Correspondence



FLORIDA DEPARTMENT OF Environmental Protection

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

Northeast District
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

Authorized Entity:

FRP Tupelo Solar, LLC
ATTN: Anthony Pedroni
700 Universe Boulevard
Juno Beach, Florida 33408
anthony.pedroni@nexteraenergy.com

Engineer Consultant:

Golder Associates, Inc.
ATTN: Michael Phelps
9428 Baymeadows Road, Suite 400
Jacksonville, Florida 32246
michael_phelps@golder.com

Environmental Consultant:

FRP Tupelo Solar, LLC
ATTN: Kennard Proctor
700 Universe Boulevard
Juno Beach, Florida 33408
kennard.proctorjr@nee.com

FRP Tupelo Solar Farm

Environmental Resource Permit

State-owned Submerged Lands Authorization – Not Applicable

U.S. Army Corps of Engineers Authorization – Not Included

Putnam County
Permit No.: 54-0407214-001-EI

Permit Issuance Date: November 30, 2021
Permit Construction Phase Expiration Date: November 30, 2026

Environmental Resource Permit

Permittee: FRP Tupelo Solar, LLC
Permit No: 54-0407214-001-EI

PROJECT LOCATION

The activities authorized by this permit are located at East End Road (Parcel ID nos. 24-10-27-0000-0020-0000, 25-10-27-0000-0040-0000, 25-10-27-0000-0041-0000, 25-10-27-0000-0020-0000, 30-10-28-0000-01010-0000), San Mateo, Florida 32187, in Section 24 & 25, Township 10 South, Range 27 East and Section 30, Township 10 South, Range 28 East in Putnam and Flagler Counties, at Latitude 29° 36' 6.47" N / Longitude -81° 31' 31.94" W.

PROJECT DESCRIPTION

The project is to construct a 74.5 MW (AC) solar photovoltaic energy facility upon 548 acres of agricultural land. The facility will consist of solar photovoltaic panels, inverters, and a substation. The total proposed impervious and semi-impervious area are 13.45 acres, which includes 11.68 acres of access paths (20' wide above-grade and 12' wide at-grade access paths), 0.15 acre of inverter pads and 1.62 acres of the substation.

Onsite stormwater will be managed by the existing ditches and a proposed wet detention system. Runoff from the solar field will be collected by the ditches throughout the site and ultimately flow to offsite ditches. Runoff from the substation will be collected to a wet detention system prior to be discharged into an existing ditch east of the substation. The system will consist of a wet detention pond with two interconnected portions and a spillway with a bleed-down orifice. The north portion of the pond will be 0.48 acre at the top with elevation 30.0 feet NAVD88, and 0.06 acre at the bottom with elevation 25.0 feet. The south portion will be 1.77 acres at the top with elevation 30.0 feet, and 0.84 acre at the bottom with elevation 22.5 feet. The pond will be constructed with 4H:1V side slopes. The spillway invert will be 5.0 feet wide at elevation 28.5 feet. The orifice will be a 6-inch diameter pipe with control elevation at 26.5 feet. Existing culverts crossing within the site will remain or be replaced like-to-like, if necessary.

Due to the flat topography and shallow groundwater table across the site, stormwater treatment will be provided by the wet detention pond only. The pond is designed to provide compensatory treatment for 2.5-inch of runoff over the entire 13.45 acres of impervious and semi-impervious area. Engineering analysis indicates that the peak rate of discharge at property boundaries at post development condition will not exceed that of pre-development condition during and up to 25-year, 24-hour storm events.

The project includes filling 0.20 acres of functioning wetlands. Authorized activities are depicted on the attached exhibits.

To offset the unavoidable impacts that will occur from these authorized activities, the permittee shall purchase 0.10 palustrine emergent credits from Barberville Conservation Area Mitigation Bank (Permit # 4-127-0293)

AUTHORIZATIONS

FRP Tupelo Solar

Environmental Resource Permit

The Department has determined that the activity qualifies for an Environmental Resource Permit. Therefore, the Environmental Resource Permit is hereby granted, pursuant to Part IV of Chapter 373, Florida Statutes (F.S.), and Chapter 62-330, Florida Administrative Code (F.A.C.).

Sovereignty Submerged Lands Authorization

As staff to the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), the Department has determined the activity is not on submerged lands owned by the State of Florida. Therefore, your project is not subject to the requirements of Chapter 253, F.S., or Rule 18-21, F.A.C.

Federal Authorization

Your proposed activity as outlined in your application and attached drawings **does not qualify** for Federal authorization pursuant to the State Programmatic General Permit VI. **SEPARATE permit(s) or authorization may be required** from the U.S. Army Corps of Engineers and/or Florida Department of Environmental Protection. The activity, as proposed, does not involve discharge of dredged or fill material into the waters of the United States and therefore, **a SEPARATE PERMIT or authorization pursuant to the State 404 Program, as described in Chapter 62-331, F.A.C. will not be required.**

Authority for review - an agreement with the USACOE entitled "Coordination Agreement Between the U. S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection (or Duly Authorized Designee), State Programmatic General Permit", Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act

Coastal Zone Management

Issuance of this authorization also constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

Water Quality Certification

This permit also constitutes a water quality certification under Section 401 of the Clean Water Act, 33 U.S.C. 1341

Other Authorizations

You are advised that authorizations or permits for this activity may be required by other federal, state, regional, or local entities including but not limited to local governments or municipalities. This permit does not relieve you from the requirements to obtain all other required permits or authorizations.

The activity described may be conducted only in accordance with the terms, conditions and attachments contained in this document. Issuance and granting of the permit and authorizations herein do not infer, nor guarantee, nor imply that future permits, authorizations, or modifications will be granted by the Department.

PERMIT CONDITIONS

The activities described must be conducted in accordance with:

- **The Specific Conditions**
- **The General Conditions**
- **The limits, conditions and locations of work shown in the attached drawings**
- **The term limits of this authorization**

You are advised to read and understand these conditions and drawings prior to beginning the authorized activities, and to ensure the work is conducted in conformance with all the terms, conditions, and drawings herein. If you are using a contractor, the contractor also should read and understand these conditions and drawings prior to beginning any activity. Failure to comply with these conditions, including any mitigation requirements, shall be grounds for the Department to revoke the permit and authorization and to take appropriate enforcement action. Operation of the facility is not authorized except when determined to be in conformance with all applicable rules and this permit, as described.

SPECIFIC CONDITIONS

SPECIFIC CONDITIONS - PRIOR TO ANY CONSTRUCTION

1. The permittee must acquire legal ownership or legal control of the project area as delineated in the permitted construction drawings.
2. Prior to commencement of work authorized by this permit, the permittee shall provide written notification of the date of the commencement and proposed schedule of construction to the Department of Environmental Protection, Northeast District, 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256.

SPECIFIC CONDITIONS – CONSTRUCTION ACTIVITIES

3. This permit does not authorize any dredging, filling, stockpiling of tools, equipment and materials, or other construction activity, including the removal of any vegetation, tree stumps and/or vegetative root masses within any wetland.
4. If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately, and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

SPECIFIC CONDITIONS - OTHER LISTED SPECIES

5. This permit does not authorize the permittee to cause any adverse impact to or “take” of state listed species and other regulated species of fish and wildlife. Compliance with state laws regulating the take of fish and wildlife is the responsibility of the owner or applicant associated with this project. Please refer to Chapter 68A-27 of the Florida Administrative Code for definitions of “take” and a list of fish and wildlife species. If listed species are observed onsite, FWC staff are available to provide decision support information or assist in obtaining the appropriate FWC permits. Most marine endangered and threatened species are statutorily protected and a “take” permit cannot be issued. Requests for further information or review can be sent to FWCConservationPlanningServices@MyFWC.com.

SPECIFIC CONDITIONS - CONSTRUCTION COMPLETION

6. Upon completion of construction, the permittee shall submit to the Department of Form 62-330.310(1) “As-Built Certification and Request for Conversion to Operation Phase”. The form shall be certified by a registered professional and serve to notify the Department that the project, or independent portion of the project, is completed and ready for inspection by the Department. The person completing Form 62-330.310(1) shall inform the Department if there are substantial deviations from the plans approved as part of the permit and include as-built drawings with the form.

7. The plans must be clearly labeled as “as-built” or “record” drawings and shall consist of the permitted drawings that clearly highlight (such as through “red lines” or “clouds”) any substantial deviations made during construction. The permittee shall be responsible for correcting the deviations [as verified by a new certification using Form 62-330.310(1)]. If such deviations require a modification of the permit under Rule 62-330.315, F.A.C., the permittee shall separately request a modification to the permit, which must be issued by the Department prior to the Department approving the request to convert.

8. When projects authorized by the permit are to be constructed in phases, each phase or independent portion of the permitted project must be completed and the permittee must have submitted Form 62-330.310(1) “As-Built Certification and Request for Conversion to Operation Phase,” in accordance with subparagraph 62-330.350(1)(f)2., F.A.C., certifying as to such completion prior to the use of that phase or independent portion of the project. The request for conversion to the operating phase for any phase or independent portion of the permitted project shall occur before construction of any future work that may rely on that infrastructure for conveyance and water quality treatment and attenuation. Phased construction can include a partial certification.

SPECIFIC CONDITIONS – OPERATION AND MAINTENANCE ACTIVITIES

9. In accordance with Section 373.416(2), F.S., unless revoked or abandoned, all stormwater management systems, dams, impoundments, reservoirs, appurtenant works, or works permitted under Part IV of Chapter 373, F.S., must be operated and maintained in perpetuity. The operation and maintenance shall be in accordance with the designs, plans, calculations, and other specifications that are submitted with an application, approved by the Department, and incorporated as a condition into any permit issued.

10. A registered professional shall perform inspections every three years after conversion of the permit to the operation and maintenance phase to identify if there are any deficiencies in structural integrity, degradation due to insufficient maintenance, or improper operation that may endanger public health, safety, or welfare, or the water resources, and to insure that systems are functioning as designed and permitted. Within 30 days of the inspection, a report shall be submitted electronically or in writing to the Department using Form 62-330.311(1), "Operation and Maintenance Inspection Certification".

11. The permittee shall conduct periodic inspections in addition to the above professional inspections, especially after heavy rain. The permittee shall maintain a record of each inspection, including the date of inspection, the name and contact information of the inspector, whether the system was functioning as designed and permitted, and make such record available upon request of the Department. Within 30 days of any failure of any system or deviation from the permit, a report shall be submitted electronically or in writing to the Department using Form 62-330.311(1), "Operation and Maintenance Inspection Certification," describing the remedial actions taken to resolve the failure or deviation.

12. The following operational maintenance activities shall be performed on all permitted systems on a regular basis or as needed:

- a. Inspection of pipes, structures and culverts for damage and blockage
- b. Removal of trash, debris and sediments from the entire stormwater management systems
- c. Mowing and removal of clippings
- d. Stabilization and restoration of eroded areas and slopes
- e. Maintenance of overland flow areas to prevent channelization

GENERAL CONDITIONS FOR INDIVIDUAL PERMITS

The following general conditions are binding on all individual permits issued under this chapter, except where the conditions are not applicable to the authorized activity, or where the conditions must be modified to accommodate project-specific conditions.

1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under chapter 373, F.S.
2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.
3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall

be in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation, June 2007), and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), which are both incorporated by reference in subparagraph 62-330.050(9)(b)5., F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.

4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice," (October 1, 2013), (<http://www.flrules.org/Gateway/reference.asp?No=Ref-02505>), incorporated by reference herein, indicating the expected start and completion dates. A copy of this form may be obtained from the Agency, as described in subsection 62-330.010(5), F.A.C., and shall be submitted electronically or by mail to the Agency. However, for activities involving more than one acre of construction that also require a NPDES stormwater construction general permit, submittal of the Notice of Intent to Use Generic Permit for Stormwater Discharge from Large and Small Construction Activities, DEP Form 62-621.300(4)(b), shall also serve as notice of commencement of construction under this chapter and, in such a case, submittal of Form 62-330.350(1) is not required.
5. Unless the permit is transferred under rule 62-330.340, F.A.C., or transferred to an operating entity under rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms, and conditions of the permit for the life of the project or activity.
6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
 - a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex – "Construction Completion and Inspection Certification for Activities Associated with a Private Single-Family Dwelling Unit" [Form 62-330.310(3)]; or
 - b. For all other activities – "As-Built Certification and Request for Conversion to Operation Phase" [Form 62-330.310(1)].
 - c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.
7. If the final operation and maintenance entity is a third party:
 - a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as-built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.4 of Volume I) as filed with the Florida Department of State, Division of Corporations, and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
 - b. Within 30 days of submittal of the as-built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation and Maintenance Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.

8. The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.

9. This permit does not:

- a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in chapter 62-330, F.A.C.;
- b. Convey to the permittee or create in the permittee any interest in real property;
- c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
- d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.

10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.

11. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.

12. The permittee shall notify the Agency in writing:

- a. Immediately if any previously submitted information is discovered to be inaccurate; and
- b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.

13. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.

14. If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, stone tools, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section (DHR), at (850)245-6333, as well as the appropriate permitting agency office. Project activities shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and the proper authorities notified in accordance with section 872.05, F.S. For project activities subject to prior consultation with the DHR and as an alternative to the above requirements, the permittee may

follow procedures for unanticipated discoveries as set forth within a cultural resources assessment survey determined complete and sufficient by DHR and included as a specific permit condition herein.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under rule 62-330.201, F.A.C., provides otherwise.

16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under chapter 62-330, F.A.C., or cause violations of state water quality standards.

17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.

18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with subsection 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

19. In addition to those general conditions in subsection (1), above, the Agency shall impose any additional project-specific special conditions necessary to assure the permitted activities will not be harmful to the water resources, as set forth in rules 62-330.301 and 62-330.302, F.A.C., Volumes I and II, as applicable, and the rules incorporated by reference in this chapter.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

(c) A statement of when and how the petitioner received notice of the agency decision;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;

(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62-110.106(10)(a).

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver will not apply to persons who have not received written notice of this action.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000,

or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

FLAWAC Review

The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when this order is filed with the Clerk of the Department.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Sincerely,



Thomas G. Kallemeyn
Permitting Program Administrator

Attachments:

Project Plans

Construction Commencement Notice/Form 62-330.350(1)

As-built Certification and Request for Conversion to Operational Phase/ Form 62-330.310(1)

Operation and Maintenance Inspection Certification/Form 62-330.311(1)

Copies furnished to:

Kennard Proctor, FRP Tupelo Solar, LLC, kennard.proctorjr@nee.com
Matthew Goff, mgoff@ectinc.com
Thomas Kallemeyn, FDEP NED
Katie Miller, FDEP NED
June Shi, FDEP NED
Kimberly Mann, FDEP NED

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this permit, including all copies, were mailed before the close of business on November 30, 2021, to the above listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, under 120.52(7) of the Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

  November 30, 2021

Clerk Date

Appendix E

USFWS Correspondence

Amanda Koonjeberry

From: Gawera, Erin <erin_gawera@fws.gov>
Sent: Friday, June 16, 2023 4:59 PM
To: Amanda Koonjeberry
Cc: jenna.santangelo@fpl.com; DC; Emma Smith; Carey, Robert L
Subject: Project (2023-0061737 (FRP Tupelo Solar (Flagler / Putnam)))
Attachments: 20230413_em_ect to svc_frp tupelo solar.pdf; 20230410_em_ect to svc_frp gilchrist solar.pdf

Hi Amanda,

The Service has reviewed your request for concurrence regarding Federally Listed Species on the following two projects (also attached):

Project (2023-0061737 (FRP Tupelo Solar (Flagler / Putnam)))
Project (2023-0041706 (FRP - Gilchrist Solar (Gilchrist)))

The Service has no objection to the development of the project sites provided that The USFWS Standard Protection Measures for the Eastern Indigo Snake are followed during the construction of the project.

Thank you,

Erin

Erin M. Gawera, Fish and Wildlife Biologist
US Fish and Wildlife Service
Email: erin_gawera@fws.gov
<https://www.fws.gov/office/florida-ecological-services>
Florida Ecological Services Field Office
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517
904/731-3121 (direct)
904/731-3336 (main)
Fax: 904/731-3045 or 3048


[EXTERNAL] FRP Gilchrist Solar - 2023-0041706 - USFWS Consultation Request

Amanda Koonjeberry <akoonjeberry@ectinc.com>

Mon 4/10/2023 1:20 PM

To: FLESRegs, FW4 <FW4FLESRegs@fws.gov>

Cc: jenna.santangelo@fpl.com <Jenna.Santangelo@fpl.com>; Bole, Everett - RD, DC <Everett.Bole@usda.gov>; Emma Smith <esmith@ectinc.com>

 1 attachments (1 MB)

USFWS Consultation Request - Gilchrist Solar_2023-0041706.pdf;

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

To Whom It May Concern:

Attached please find the completed U.S. Fish and Wildlife Service (USFWS) Endangered Species Act (ESA) Consultation Request form as well as the required information to complete this Section 7 Consultation Request.

Florida Renewable Partners Gilchrist County Solar, LLC (FRP), proposes to develop the FRP Gilchrist County Solar Project (Project) located south of State Road 26, east of SE 80th Avenue, north of 110th Street, and west of SE 90th Avenue in unincorporated Gilchrist County, Florida. The Project would generate clean, renewable electricity for rural electric customers and be interconnected to the existing energy transmission system.

FRP is seeking financing from the U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS). This Environmental Assessment (EA) has been prepared pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq., as amended) to assist the USDA's RUS in assessing the potential environmental effects of the Proposed Action. This Project is expected to have no significant impact on natural resources, cultural resources, socioeconomics, or aesthetics of the project area.

Previous federal consultation was initiated on May 17, 2021, between Environmental Consulting & Technology, Inc. (ECT) and Ms. Annie Dziergowski of the USFWS, North Florida Ecological Services Office in Jacksonville Florida.

In addition, on February 7, 2023, ECT used the Information for Planning and Consultation (IPaC) tool to conduct an informal consultation for the project. Enclosed are the most species list and the Biological Analysis that were generated based as a result.

We appreciate your assistance with this and should you have any questions or require any additional information, please contact me directly. Thank you!

Amanda Koonjeberry, PMP

Project Manager II

Environmental Consulting & Technology, Inc.

3751 Maguire Boulevard | Suite #234 | Orlando, FL 32803

C: 941.806.9586 | akoonjeberry@ectinc.com



Follow us:



April 10, 2023
ECT No. 210150

Via Electronic Mail

U.S. Fish and Wildlife Service
Florida Ecological Services Field Office
1339 20th Street
Vero Beach, FL 32960-3559
fw4flesregs@fws.gov

**RE: Project Code: 2023-0041706
Project Name: FRP – Gilchrist Solar
Section 7 Consultation Request**

To Whom It May Concern:

Enclosed is the completed U.S. Fish and Wildlife Service (USFWS) Endangered Species Act (ESA) Consultation Request form as well as the required information to complete this Section 7 Consultation Request.

Florida Renewable Partners Gilchrist County Solar, LLC (FRP), proposes to develop the FRP Gilchrist County Solar Project (Project) located south of State Road 26, east of SE 80th Avenue, north of 110th Street, and west of SE 90th Avenue in unincorporated Gilchrist County, Florida. The Project would generate clean, renewable electricity for rural electric customers and be interconnected to the existing energy transmission system.

FRP is seeking financing from the U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS). This Environmental Assessment (EA) has been prepared pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq., as amended) to assist the USDA's RUS in assessing the potential environmental effects of the Proposed Action. This Project is expected to have no significant impact on natural resources, cultural resources, socioeconomics, or aesthetics of the project area.

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We appreciate your assistance with this and should you have any questions or require any additional information, please contact me directly at (941) 806-9586 or akoonjebearry@ectinc.com.

U.S. Fish and Wildlife Service
Florida Ecological Services Field Office
April 10, 2023
Page 2

Sincerely,
ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.



Amanda Koonjeberry, PMP
Senior Project Manager



Kaili Stevens, WDEG, PMP
Project Manager II

AK/ks

Enclosures: Endangered Species Act Consultation Request Form, USFWS Florida
 USFWS Species List – February 7, 2023
 FRP Gilchrist Solar Biological Analysis – February 7, 2023

Endangered Species Act Consultation Request Form

USFWS Florida

November 2016 (Version 2)

Project:

Date Submitted:

Applicant:

County:

Service Consultation Code (to be completed by the Service):

The following items have been included in the attached Endangered Species Act Section 7 consultation initiation package submitted to the U.S. Fish and Wildlife Service (*check all that apply*). Please see *Guidance for Submitting Endangered Species Act Consultation Requests to Florida Field Offices of the U. S. Fish and Wildlife Service* for a description of each item.

(A) Cover Letter

Did you make a "May Affect, Likely to Adversely Affect" determination for any protected resource?

(B) Project Description

(C) Description of the Action Area

If so, for which species:

(D) Protected Resources that may be present

(E) Description of How the Action May Affect Each Protected Resource

(F) Section 7 Findings for all Protected Resources

Did you use a Programmatic Biological Opinion or Key to provide concurrence with a "May Affect, Not Likely to Adversely Affect" determination for any protected resource?

(G) Relevant Reports and/or Documents

If so, for which species:

(H) Cumulative Effects Analysis

(I) History of Contacts Made with Service

(J) List of Preparers

Additional Comments:

(K) Literature Cited

Applicant Signature

Date

(mm/dd/yyyy)



USFWS Use Only

Endangered Species Act Consultation

FRP Gilchrist Solar

Project Description

The proposed project is for the construction of a 74.5-megawatt solar power plant facility. Following construction, the project will produce renewable energy and allow for the re-colonization of native herbaceous vegetative species and animal species. The site (approximately 578 acres) is comprised entirely of upland habitats, which include the following habitat types: improved pasture, row crops, longleaf pine/xeric oak, pine/mesic oak, live oak, and mixed upland coniferous and hardwood forest. The structure construction completion date will be December 1, 2023. The facility consists of solar photovoltaic panels, inverter and transformers, collector lines, and 12-ft wide at-grade access pathways. The total proposed impervious and semi-impervious areas are 11.72 acres, which include 10.93 acres of access pathways and 0.79 acre of inverter pads. The project involves some onsite cut and fill activities, which shall not cause adverse impacts to offsite lands.

Description of the Action Area

The Action Area map is outlined in the attached Biological Analysis. Agricultural activities currently encumber approximately 439 acres, or 76 percent, of the Project site. The remainder of the site is comprised of remnant patches of natural upland forested communities. Adjacent land uses include other agricultural lands, silviculture, livestock pasture, rural residential, and unimproved properties. An existing 100-foot overhead electric and 50-foot underground gas utility corridor runs northeast-southwest through the Project Site. Existing land use within the Project's collector yard consists of a mixture of developed land and upland forest. The Project Site is bounded by SR 26 to the north, farmland to the south, a 6-acre Duke Energy substation to the west, and agricultural property to the east.

Protected Resources that may be present

Animal species listed federally as endangered, threatened, or of special concern (i.e., listed species) that may occur on the Project Site include the Eastern black rail (*Laterallus jamaicensis ssp. Jamaicensis*), Eastern indigo snake (*Drymarchon couperi*) and the monarch butterfly (*Danaus plexippus*). There are no critical habitats within the Project Site. This list was obtained from the U.S. Fish and Wildlife Service (USFWS) website (<http://ecos.fws.gov/ipac/>). The Project Site is comprised of entirely upland habitat and lacks potentially suitable habitat for the Eastern black rail. The monarch butterfly is a generalist species that occurs throughout the eastern portion of the country in areas with suitable host plant species in the milkweed family. The Project Site contains potentially suitable habitat for the Eastern indigo snake.

Description of How the Action May Affect Each Protected Resource

The action of this project will have a direct impact on the Eastern indigo snake through disturbance. This will be a temporary impact and the species will be allowed to utilize the site once work is completed. The USFWS *Standard Protection Measures for the Eastern Indigo Snake* (USFWS 2013) will be employed and enforced during construction to minimize impacts to this species and to avoid directly

disturbing individuals. As stated, the Project Site is comprised of entirely upland habitat and lacks potentially suitable habitat for the Eastern black rail and the monarch butterfly is a Candidate species and is a generalist, therefore, the Eastern black rail and Monarch butterfly are excluded from analysis.

Section 7 Findings for all Protected Resources

Species (Common Name)	Scientific Name	Listing Status	Present in Action Area	Effect Determination
Eastern Black Rail	<i>Laterallus jamaicensis ssp. Jamaicensis</i>	Threatened	No	NE
Eastern Indigo Snake	<i>Drymarchon couperi</i>	Threatened	Yes	NLAA
Monarch Butterfly	<i>Danaus plexippus</i>	Candidate	Excluded from analysis	Excluded from analysis

Relevant Reports and/or Documents

Species protocols are included within the attached biological Assessment.

Cumulative Effects Analysis

It is unlikely that this project will have cumulative effects on this species. The post construction habitats will be suitable to the re-colonization by this species and provide protection from the public.

History of Contacts Made with Service

Previous federal consultation was initiated on May 17, 2021 between Matthew Goff of Environmental Consulting and Technology, Inc., and Ms. Annie Dziergowski of the USFWS, North Florida Ecological Services Office in Jacksonville, Florida.

List of Preparers

Name	Title	Organization
Erico Lopez	Senior Project Manager	FRP Gilchrist County Solar, LLC
Kennard Proctor	Senior Project Manager	FRP Gilchrist County Solar, LLC
Matthew Goff	Project Manager	Environmental Consulting & Technology, Inc.
Michelle Greene	Staff Scientist	Environmental Consulting & Technology, Inc.
Christopher Wu	Senior Manager	Environmental Consulting & Technology, Inc.
Nathan Goddard, PhD.	Principal Scientist	Environmental Consulting & Technology, Inc.
Jude Dawson	Senior Scientist II	Environmental Consulting & Technology, Inc.
Amanda Koonjebharry, PMP	Project Manager II	Environmental Consulting & Technology, Inc

Literature Cited

Carr Jr., A.F. 1940. A contribution to the herpetology of Florida. University of Florida Publications, Biological Sciences 3:1-118

Ernst, C.H., and E.M. Ernst. 2003. Snakes of the United States and Canada. Smithsonian Books, Washington, D.C., USA. 668pp

United States Fish and Wildlife Service (USFWS). 2013. Standard Protection Measures for the Eastern Indigo Snake | North Florida ESO Jacksonville (fws.gov).

USGS. 2021. Protected Areas Database of the United States. <https://maps.usgs.gov/padus/>. Accessed April 2021



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Florida Ecological Services Field Office

1339 20th Street

Vero Beach, FL 32960-3559

Phone: (772) 562-3909 Fax: (772) 562-4288

Email Address: fw4flesregs@fws.gov

<https://www.fws.gov/office/florida-ecological-services>

In Reply Refer To:

Project Code: 2023-0041706

Project Name: FRP - Gilchrist Solar

February 07, 2023

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

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. 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 include your Project Code, listed at the top of this letter, in all subsequent correspondence regarding this project. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

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

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

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

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

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

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

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

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code 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
 - Migratory Birds
 - Wetlands
-

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:

Florida Ecological Services Field Office

1339 20th Street

Vero Beach, FL 32960-3559

(772) 562-3909

Project Summary

Project Code: 2023-0041706

Project Name: FRP - Gilchrist Solar

Project Type: Power Gen - Solar

Project Description: Florida Renewable Partners Gilchrist County Solar, LLC (FRP), proposes to develop the FRP Gilchrist County Solar Project (Project) located south of State Road 26, east of SE 80th Avenue, north of 110th Street, and west of SE 90th Avenue in unincorporated Gilchrist County, Florida (Figure 1-1). The Project would generate clean, renewable electricity for rural electric customers and be interconnected to the existing energy transmission system.

FRP is seeking financing from the U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS). This Environmental Assessment (EA) has been prepared pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq., as amended) to assist the USDA's RUS in assessing the potential environmental effects of the Proposed Action.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@29.61522445,-82.66948643578522,14z>



Counties: Gilchrist County, Florida

Endangered Species Act Species

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

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, 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.

Birds

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened

Reptiles

NAME	STATUS
Eastern Indigo Snake <i>Drymarchon couperi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/646	Threatened

Insects

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

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.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

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

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

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

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

NAME	BREEDING SEASON
American Kestrel <i>Falco sparverius paulus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31

NAME	BREEDING SEASON
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Great Blue Heron <i>Ardea herodias occidentalis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Jan 1 to Dec 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10

Probability Of Presence Summary

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

Probability of Presence (■)

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

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

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

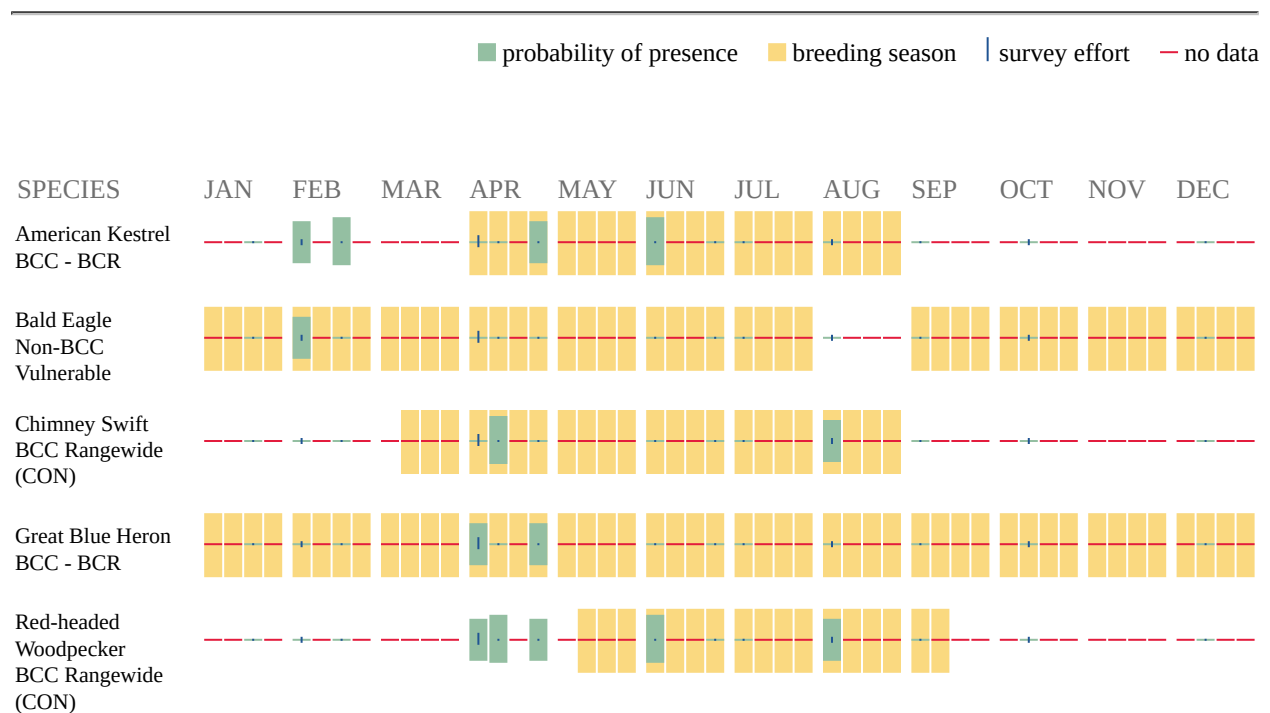
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

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

Migratory Birds FAQ

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

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

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

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

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

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

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

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

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

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

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point

within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

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

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

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

Details about birds that are potentially affected by offshore projects

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

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

What if I have eagles on my list?

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

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no

data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPaC User Contact Information

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Lead Agency Contact Information

Lead Agency: Department of Agriculture
Name: Nathaniel Goddard
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FRP - Gilchrist Solar

Biological Analysis

Prepared using IPaC

Generated by Nathaniel Goddard (nategoddard@yahoo.com)

February 7, 2023

The purpose of this document is to assess the effects of the proposed project and determine whether the project may affect any federally threatened, endangered, proposed, or candidate species. If appropriate for the project, this document may be used as a biological assessment (BA), as it is prepared in accordance with legal requirements set forth under [Section 7 of the Endangered Species Act \(16 U.S.C. 1536 \(c\)\)](#).

In this document, any data provided by U.S. Fish and Wildlife Service is based on data as of February 7, 2023.

Prepared using IPaC version 6.87.0-rc7

FRP - Gilchrist Solar Biological Assessment

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1 Description Of The Action

1.1 Project Name

FRP - Gilchrist Solar

1.2 Executive Summary

[Florida Renewable Partners Gilchrist County Solar, LLC \(FRP\), \(https://null\)](https://null) proposes to develop the FRP Gilchrist County Solar Project (Project) located south of State Road 26, east of SE 80th Avenue, north of 110th Street, and west of SE 90th Avenue in unincorporated Gilchrist County, Florida (Figure 1-1). The Project would generate clean, renewable electricity for rural electric customers and be interconnected to the existing energy transmission system. FRP is seeking financing from the U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS). This Environmental Assessment (EA) has been prepared pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq., as amended) to assist the USDA's RUS in assessing the potential environmental effects of the Proposed Action. This EA describes biological, environmental, cultural, and socioeconomic resources that may be affected by the Proposed Action and determines the significance of potential impacts to each of the aspects evaluated.

1.3 Effect Determination Summary

SPECIES (COMMON NAME)	SCIENTIFIC NAME	LISTING STATUS	PRESENT IN ACTION AREA	EFFECT DETERMINATION
Eastern Black Rail	Laterallus jamaicensis ssp. jamaicensis	Threatened	No	NE
Eastern Indigo Snake	Drymarchon couperi	Threatened	Yes	NLAA
Monarch Butterfly	Danaus plexippus	Candidate	Excluded from analysis	Excluded from analysis

1.4 Project Description

1.4.1 Location



LOCATION

Gilchrist County, Florida

1.4.2 Description of project habitat

The site is comprised entirely of approximately 578 acres of upland habitats, which include the following habitat types: Improved pasture, row crops, longleaf pine/xeric oak, pine/mesic oak, live oak, and mixed upland coniferous and hardwood forest.

Relevant documentation

- [Figures land use](#)

1.4.3 Project proponent information

Provide information regarding who is proposing to conduct the project, and their contact information. Please provide details on whether there is a Federal nexus.

Requesting Agency

N/A

FULL NAME

Nathaniel Goddard

STREET ADDRESS

2513 Regal Oaks Ln

CITY

Lutz

STATE

FL

ZIP

33559

PHONE NUMBER

3522819787

E-MAIL ADDRESS

nategoddard@yahoo.com

Lead agency

Department of Agriculture

1.4.4 Project purpose

The proposed project is for the construction of a 74.5 megawatt solar power plant facility. Following construction, the project will produce renewable energy and allow for the re-colonization of native herbaceous vegetative species and animal species.

1.4.5 Project type and deconstruction

This project is a solar power plant construction project.

1.4.5.2 photovoltaic solar power plant

Structure completion date

April 01, 2023

Removal/decommission date (if applicable)

Not applicable

Stressors

This activity is not expected to have any impact on the environment.

Description

The majority of impacts will be temporary, and following construction, native species will be allowed to utilize the site.

1.4.6 Anticipated environmental stressors

Describe the anticipated effects of your proposed project on the aspects of the land, air and water that will occur due to the activities above. These should be based on the activity deconstructions done in the previous section and will be used to inform the action area.

1.4.6.1 Animal Features

Individuals from the Animalia kingdom, such as raptors, mollusks, and fish. This feature also includes byproducts and remains of animals (e.g., carrion, feathers, scat, etc.), and animal-related structures (e.g., dens, nests, hibernacula, etc.).

1.4.6.2 Plant Features

Individuals from the Plantae kingdom, such as trees, shrubs, herbs, grasses, ferns, and mosses. This feature also includes products of plants (e.g., nectar, flowers, seeds, etc.).

1.4.6.3 Human Features

Man-made Structures on the landscape (e.g., roads, trails, buildings, bridges, farm fields, etc.).

1.4.6.4 Soil and Sediment

The topmost layer of earth on the landscape and its components (e.g., rock, sand, gravel, silt, etc.). This feature includes the physical characteristics of soil, such as depth, compaction, etc. Soil quality attributes (e.g, temperature, pH, etc.) should be placed in the Environmental Quality Features.

1.7 Prior Consultation History

Previous federal consultation was initiated on May 17, 2021 between Matthew Goff of Environmental Consulting and Technology, Inc, and Ms. Annie Dziergowski of the USFWS, North Florida Ecological Services Office in Jacksonville Florida

1.8 Other Agency Partners And Interested Parties

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

1.9 Other Reports And Helpful Information

N/A

2 Species Effects Analysis

This section describes, species by species, the effects of the proposed action on listed, proposed, and candidate species, and the habitat on which they depend. In this document, effects are broken down as direct interactions (something happening directly to the species) or indirect interactions (something happening to the environment on which a species depends that could then result in effects to the species).

These interactions encompass effects that occur both during project construction and those which could be ongoing after the project is finished. All effects, however, should be considered, including effects from direct and indirect interactions and cumulative effects.

2.1 Eastern Black Rail

This species has been excluded from analysis in this environmental review document.

Relevant documentation

- [Figures land use](#)

Justification for exclusion

The site is comprised entirely of upland habitat and lacks potentially suitable habitat for this species.

2.2 Eastern Indigo Snake

2.2.1 Status of the species

This section should provide information on the species' background, its biology and life history that is relevant to the proposed project within the action area that will inform the effects analysis.

2.2.1.1 Legal status

The Eastern Indigo Snake is federally listed as 'Threatened' and additional information regarding its legal status can be found on the [ECOS species profile](#).

2.2.1.2 Recovery plans

Available recovery plans for the Eastern Indigo Snake can be found on the [ECOS species profile](#).

2.2.1.3 Life history information

Average adult size is 60-74 inches (152-188 cm), record is 103.5 inches (262.8 cm). Adults are large and thick bodied. The body is glossy black and in sunlight has iridescent blue highlights. The chin and throat is reddish or white, and the color may extend down the body. The belly is cloudy orange and blue-gray. The scales on its back are smooth, but some individuals may possess some scales that are partially keeled. There are 17 dorsal scale rows at midbody. The pupil is round. Juveniles are black-bodied with narrow whitish blue bands.

Identified resource needs

Anurans

Artificial refugia

Burrows

Multiple types

Mammals

Size: small

Native vegetation

Sandy substrates

Snakes

Turtles

2.2.1.4 Conservation needs

The standard eastern indigo protection measures will be utilized during construction, and construction crews will be informed on appropriate measures when encountering eastern indigo snakes on site. Following construction, eastern indigo snakes will be allowed to re-colonize the property and utilize the site.

2.2.2 Environmental baseline

*The environmental baseline describes the species' health **within the action area only** at the time of the consultation, and does not include the effects of the action under review. Unlike the species information provided above, the environmental baseline is at the scale of the Action area.*

2.2.2.1 Species presence and use

There is potentially suitable habitat for this species within the project area.

Relevant documentation

- [Gopher Tortoise survey](#)

2.2.2.2 Species conservation needs within the action area

Impacts to the area will be limited to the installation of photovoltaic solar panels, racks, and transformers. This will not result in long term impacts to the eastern indigo snake and will not hinder the long-term wellbeing of this species. The Standard protection measures for eastern indigo snakes will be utilized throughout construction and maintenance. Following construction, the site will provide habitat and protection for this species with limited access and potential for human interaction with the species.

2.2.2.3 Habitat condition (general)

The site currently has potentially suitable habitat for this species on site, and following construction, upland habitats will remain present on site that may provide potentially suitable habitat for this species.

2.2.2.4 Influences

Impacts associated with the construction of the project will be temporary and are not anticipated to influence reproduction and numbers of this species.

2.2.2.5 Additional baseline information

No additional baseline information is available for his property.

2.2.3 Effects of the action

This section considers and discusses all effects on the listed species that are caused by the proposed action and are reasonably certain to occur, including the effects of other activities that would not occur but for the proposed action.

2.2.3.1 Indirect interactions

Provide a brief overview of what the applicable science has discovered regarding the species and its response to the stressors that each project activity may cause. This should include an explanation of the pathways and mechanisms that have potential to translate environmental change (impact) into response and effects to individuals.

2.2.3.2 Direct interactions

DIRECT IMPACT	CONSERVATION MEASURES	INDIVIDUALS IMPACTED	IMPACT EXPLANATION
Disturbance	Utilization of standard protection measures for the eastern indigo snake	No	Utilizing the Conservation Measures we avoid directly disturbing individuals of this species.

2.2.4 Cumulative effects

It is unlikely that this project will have cumulative effects on this species. The post construction habitats will be suitable to the re-colonization by this species and provide protection from the public.

2.2.5 Discussion and conclusion

Determination: NLAA

Compensation measures

Avoidance measures will be implemented, and the Standard Protection Measures for the Eastern Indigo Snake will be utilized.

Relevant documentation

- [Gopher Tortoise survey](#)
- [Figures land use](#)

2.3 Monarch Butterfly

This species has been excluded from analysis in this environmental review document.

Justification for exclusion

This is a generalist species that occurs throughout the eastern portion of the country in areas with suitable host plant species in the milkweed family.

3 Critical Habitat Effects Analysis

No critical habitats intersect with the project action area.

4 Summary Discussion And Conclusion

4.1 Summary Discussion

The overall effects of the project will be temporary to this species. Following construction, the site will provide protection for this species and allow for the re-colonization of prey.

4.2 Conclusion

The project is anticipated to result in temporary disturbance and the habitats on site will remain potentially suitable for the eastern indigo snake following construction. The maintenance of the site will ensure that the site remains in an early successional herbaceous community which is suitable for the presence of this species.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Florida Ecological Services Field Office
1339 20th Street
Vero Beach, FL 32960
Phone: (772) 5623909 Fax: (772) 7780683

In Reply Refer To:
Project Code: 2022-0021817
Project Name: FRP Tupelo Solar

March 21, 2022

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

To Whom It May Concern:

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.*).

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

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

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

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

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

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

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code 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
 - Migratory Birds
 - Wetlands
-

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:

Florida Ecological Services Field Office

1339 20th Street

Vero Beach, FL 32960

(772) 5623909

Project Summary

Project Code: 2022-0021817

Event Code: None

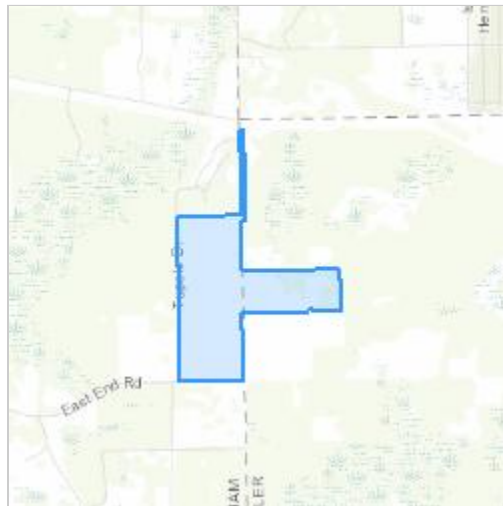
Project Name: FRP Tupelo Solar

Project Type: Power Gen - Solar

Project Description: Construction and operation of a 74.5 MW solar photovoltaic energy facility on approximately 548 acres of agricultural lands, including a 0.68-mile long gen-tie interconnection line to the existing power grid.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@29.60724915,-81.52747131128302,14z>



Counties: Flagler and Putnam counties, Florida

Endangered Species Act Species

There is a total of 10 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 Fisheries¹, 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.

Birds

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8477	Threatened

Reptiles

NAME	STATUS
Eastern Indigo Snake <i>Drymarchon corais couperi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/646 General project design guidelines: https://ipac.ecosphere.fws.gov/project/J7EJZOWHW5AFDLVJCGMF3BWZXA/documents/generated/6946.pdf	Threatened
Gopher Tortoise <i>Gopherus polyphemus</i> Population: eastern No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6994	Candidate
Green Sea Turtle <i>Chelonia mydas</i> Population: North Atlantic DPS There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened
Hawksbill Sea Turtle <i>Eretmochelys imbricata</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3656	Endangered
Leatherback Sea Turtle <i>Dermochelys coriacea</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1493	Endangered
Loggerhead Sea Turtle <i>Caretta caretta</i> Population: Northwest Atlantic Ocean DPS There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1110	Threatened

Insects

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

Flowering Plants

NAME	STATUS
Etonia Rosemary <i>Conradina etonia</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5841	Endangered

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.

The following FWS National Wildlife Refuge Lands and Fish Hatcheries lie fully or partially within your project area:

FACILITY NAME	ACRES
FARM SERVICE AGENCY INTEREST OF FL https://www.fws.gov/refuges/profiles/index.cfm?id=41550	636.082

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

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

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

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

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

NAME	BREEDING SEASON
American Kestrel <i>Falco sparverius paulus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31

NAME	BREEDING SEASON
Great Blue Heron <i>Ardea herodias occidentalis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Jan 1 to Dec 31
Swallow-tailed Kite <i>Elanoides forficatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30

Probability Of Presence Summary

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

Probability of Presence (■)

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

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

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

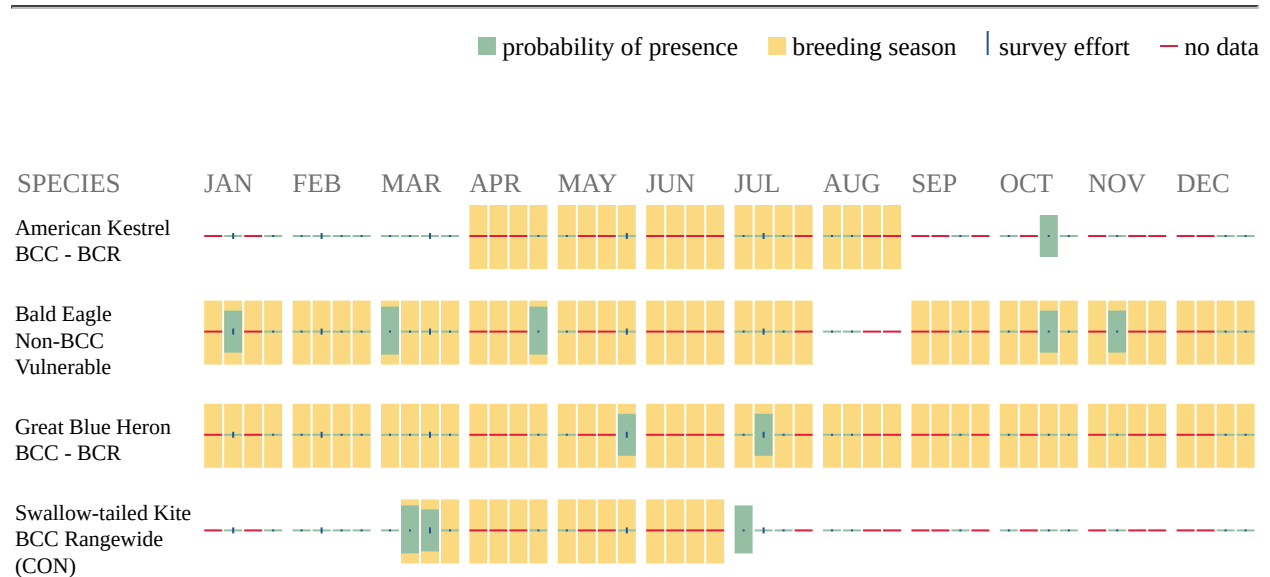
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

Migratory Birds FAQ

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

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in

the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

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

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

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

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

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

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

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

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

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

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

Details about birds that are potentially affected by offshore projects

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

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

What if I have eagles on my list?

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

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of

certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPaC User Contact Information

Agency: Department of Agriculture

Name: Matthew Goff

Address: 2507 Callaway Road

City: Tallahassee

State: FL

Zip: 32303

Email: mgoff@ectinc.com

Phone: 8505456423

June 11, 2021

Ms. Annie Dziergowski
U. S. Fish & Wildlife Service North Florida Ecological Services
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256

Re: USDA Rural Utilities Service
Tupelo Solar Project: Request for Information

Dear Ms. Dziergowski:

FRP Tupelo Solar, LLC (Tupelo Solar) is seeking financial assistance from the U.S. Department of Agriculture's (USDA) Rural Utilities Service (RUS) for their Tupelo Solar Project (Project) under its direct loan program, pursuant to the Rural Electrification Act of 1936. FRP Tupelo Solar is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA RUS so that it may assess the environmental impacts of the Project, located on East End Road, in Putnam and Flagler Counties, Florida (Figure 1). The purpose of the Project is to construct, operate, and maintain a 74.5 MW_{AC} photovoltaic solar facility to provide clean, cost effective, and renewable energy.

The proposed Project involves the installation of equipment associated with the operation of a solar facility, including driven pilings supporting photovoltaic (PV) modules, power inverter stations, access pathways, a collector line, and a collector yard. The proposed Project boundary encompasses approximately 549 acres of land for the solar array, which is currently used entirely for agricultural purposes. A proposed overhead interconnection line along the eastern side of Yelvington Road will connect the collector substation to the Florida Power & Light Company's existing transmission system. Project facilities will be constructed entirely within uplands which have been previously converted to agriculture. The remainder of the Project Area consists of forested wetland communities which will not be impacted. Adjacent land use consists primarily of agriculture and rural residential.

Construction of the Project is anticipated to start on or around January 1, 2022 and is expected to conclude by December 2022. Construction activities will include grading, subsurface work, system installation, testing and commissioning, and clean-up/restoration. Equipment used will likely include water trucks, graders, bulldozers, rollers, backhoes, trenchers, forklifts, cranes, and pile drivers. Following construction and during operation, areas underneath the PV array will be allowed to revegetate naturally.

To initiate the environmental review process, Environmental Consulting & Technology, Inc. (ECT) has been asked 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 Project should not represent a "major construction activity" as defined in 50 CFR 402.02.

Using the U.S. Fish and Wildlife Service’s (USFWS) Information for Planning and Consultation (IPaC) tool (accessed March 17, 2021), ECT identified four federally listed species with potential to occur in the Project area, and two Birds of Conservation Concern (Table 1; Attachment C). Species were not considered if suitable habitat is not present within the Project site.

Table 1. Federally listed species identified by USFWS’ IPaC tool with potential to occur in the FRP Putnam County Solar Project Area in Putnam and Flagler County, Florida.

Species	Critical Habitat	Status
Eastern indigo snake (<i>Drymarchon corais couperi</i>)	Not present	Threatened
Wood stork (<i>Mycteria americana</i>)	Not present	Threatened
Etonia rosemary (<i>Conradina etonia</i>)	Not present	Endangered
Gopher Tortoise (<i>Gopherus polyphemus</i>)	Not present	Candidate Species
American kestrel (<i>Falco sparverius paulus</i>)	N/A	Bird of Conservation Concern
Common ground dove (<i>Columbina passerina exigua</i>)	N/A	Bird of Conservation Concern
Short-tailed hawk (<i>Buteo brachyurus</i>)	N/A	Bird of Conservation Concern
Swallow-tailed kite (<i>Elanoides fortificatus</i>)	N/A	Bird of Conservation Concern

There is no federally-designated critical habitat in the vicinity of the Project, and it does not appear to lie within any USFWS consultation area.

Biological resource evaluations documenting vegetative communities, wildlife use observations, and water resources was conducted in 2018 and 2020. No federal-listed species were observed within the Project limits, however one candidate species was observed (i.e, the gopher tortoise). Suitable habitat for the wood stork is present but the project does not lie within a core foraging area. The gopher tortoise, a candidate species, was observed during the surveys. As such, there is the potential for the presence of the eastern indigo snake. It is currently unknown how many gopher tortoise burrows will be affected by the Project. During informal surveys conducted in 2020, nine potentially-occupied burrows were documented in the northern portion of the interconnection corridor. A formal 100% gopher tortoise survey of the Project will be conducted prior to development. Permits will be obtained for excavation of burrows and evacuation of their occupants in accordance with State and federal rules. Deep sand habitat for the Etonia rosemary occurs within this area of the Project as well, but has been severely degraded by silviculture activities.

Annie Dziergowski
USFWS
June 11, 2021
Page 3

ECT requests a list of any other federally-listed species which may be present in the Project boundary, and please advise us of any present concerns you may have related to possible effects of the Project to on such species or critical habitats, or any other wildlife concerns. We respectfully request that you submit any recommendations within thirty (30) days of your receipt of this letter to Matthew Goff with Environmental Consulting & Technology, Inc. at 850-545-6423 or via email at mgoff@ectinc.com.

Sincerely,

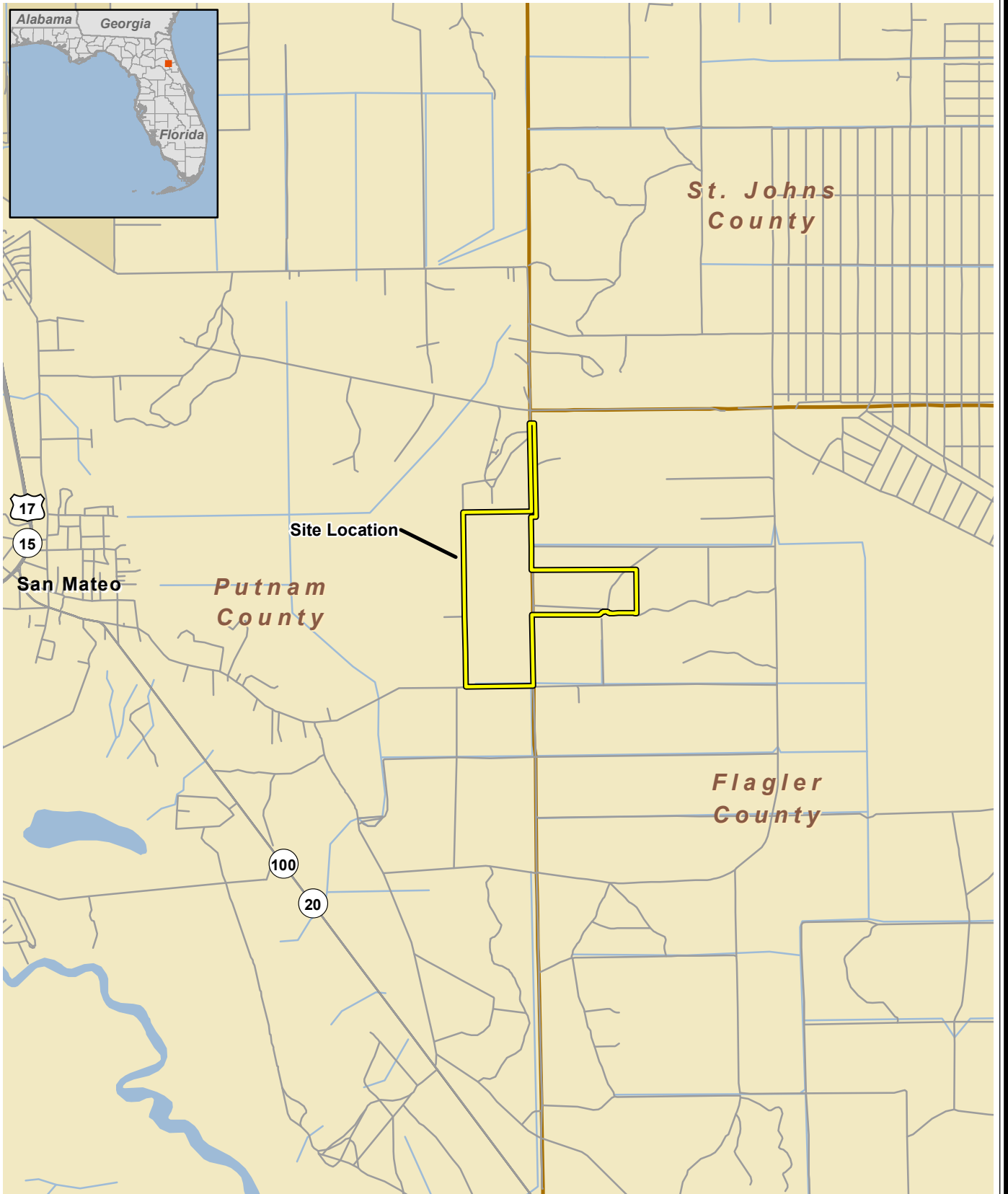
Environmental Consulting & Technology, Inc.



Matthew Goff
Senior Manager

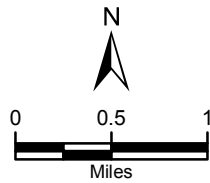


Christopher Wu
Senior Manager



Legend

 Project Boundary



**Figure 1
Site Location**

Tupelo Solar
Putnam County and Flagler County, Florida



Matthew D. Goff

From: Williams, Zakia <zakia_williams@fws.gov>
Sent: Wednesday, June 30, 2021 3:02 PM
To: Matthew D. Goff
Subject: Re: [EXTERNAL] Request for Coordination - FRP Tupelo Solar project

Thank you for your request for informal request for the FRP Tupelo Solar Project. I reviewed the submitted due diligence report and our threatened and endangered species records. The Service does not have any additional records of federally listed species near the proposed site. The findings you have made fulfill compliance with the Endangered Species Act of 1973, as amended (16 U.S.C. et seq.).

For solar facilities, I have been providing the following best management practices to consider incorporating in environmental planning. These practices may minimize impacts of the solar facility and increase the habitat and species diversity within the facility area.

1. Implement the eastern indigo snake standard protection measures during any clearing and construction. This recommendation was included in the assessment and the Service supports incorporating this measure during habitat modification (such as FWC permitted gopher tortoise relocation activities) and construction.
1. Sow native seed mixes with plant species that are beneficial to pollinators throughout the site, if feasible. Taller growing pollinator plant species should be planted around the periphery of the site and anywhere on the site where mowing can be restricted during the summer months. Taller plants, left un-mowed during the summer, would provide benefits to pollinators, habitat to ground nesting/feeding birds, and cover for small mammals. Low growing/groundcover native species should be planted under the solar panels and between the rows of solar panels. This would provide benefits to pollinators while also minimizing the amount of maintenance such as mowing and herbicide treatment. Using a seed mix that includes milk weed species (milk weed is an important host plant for monarch butterflies) is especially beneficial. Additional information regarding plant species, seed mixes, and pollinator habitat requirements can be provided upon request.
2. If feasible, create openings in fencing to allow passage issues for small mammals and turtles.
3. Provide nesting sites for pollinator species. Different pollinators have different needs for nesting sites. Therefore, we recommend designing the solar facility to maintain a diverse array of habitats to accommodate varied pollinators from hummingbirds to butterflies to bees. Hummingbirds typically nest in trees or shrubs while many butterflies lay eggs on specific host plants. Most bees nest in the ground and in wood or dry plant stems. For additional information and actions that can be taken to benefit pollinators, please visit the following web-site: <http://www.fws.gov/pollinators/pollinatorpages/yourhelp.html>

Please let me know if you have any further questions or concerns.

Thank you,

Zakia Williams

Fish and Wildlife Biologist
US Fish and Wildlife Service
7915 Baymeadows Way, Ste. 200
Jacksonville, Florida 32256
(o) 904-731-3119
(f) 904-731-3045

Appendix F

Florida State Clearinghouse Correspondence

Matthew D. Goff

From: Stahl, Chris <Chris.Stahl@FloridaDEP.gov>
Sent: Thursday, September 9, 2021 1:02 PM
To: Matthew D. Goff
Cc: State_Clearinghouse
Subject: State Clearance Letter for FL202107159292C - Development Of The FRP Tupelo Solar Project, Juno Beach, Palm Beach County Florida

September 9, 2021

Matthew Goff
Environmental Consulting & Technology, Inc.
2507 Callaway Road, Suite 102
Tallahassee, Florida 32303

RE: US Department of Agriculture, Rural Utilities Service, Development of the FRP Tupelo Solar Project, Juno Beach, Palm Beach County Florida
SAI # FL202107159292C

Dear Matthew:

Florida State Clearinghouse staff has reviewed the proposal under the following authorities: Presidential Executive Order 12372; § 403.061(42), Florida Statutes; the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, as amended.

If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes. If you have any questions, please contact Rachel Thompson, Historic Sites Specialist, by email at Rachel.Thompson@dos.myflorida.com, or by telephone at 850.245.6453 or 800.847.7278.

Based on the information submitted and minimal project impacts, the state has no objections to allocation of federal funds for the subject project and, therefore, the funding award is consistent with the Florida Coastal Management Program (FCMP). The state's final concurrence of the project's consistency with the FCMP will be determined during any environmental permitting processes, in accordance with Section 373.428, Florida Statutes, if applicable.

Thank you for the opportunity to review the proposed plan. If you have any questions or need further assistance, please don't hesitate to contact me at (850) 717-9076.

Sincerely,

Chris Stahl

Chris Stahl, Coordinator
Florida State Clearinghouse
Florida Department of Environmental Protection
3800 Commonwealth Blvd., M.S. 47
Tallahassee, FL 32399-2400
ph. (850) 717-9076
State.Clearinghouse@floridadep.gov



Appendix G

Representative Site Photographs



Photo 1. Row crop fields in the western portion of the site.



Photo 2. Agricultural ditch in the western portion of the site.



Photo 3. Minor agricultural ditch in the western portion of the site.



Photo 4. Clear cut pine plantation in the eastern portion of the site.



Photo 5. Pine plantation in the eastern portion of the site.



Photo 6. Baygall forested wetland in the eastern portion of the site.



Photo 7. Gopher tortoise burrow in the proposed gen-tie corridor.



Photo 8. Isolated herbaceous wetland in the eastern portion of the site.



Photo 9. Trail road ditch in the eastern portion of the site.



Photo 10. Isolated cypress dome wetland in the eastern portion of the site.

Appendix H

Flagler and Putnam County Correspondence

Growth Management

1769 E. Moody Blvd., Bldg. 2
Bunnell, FL 32110



www.flaglercounty.gov

Phone: (386)313-4103

Fax: (386)313-4102

August 10, 2022

Mark Shelton, AICP
Kimley-Horn
12740 Gran Bay Parkway West, Suite 2350
Jacksonville, FL 32258

RE: FRP SOLAR FARM (APPLICATION #3259) – USDA RURAL UTILITIES SERVICE

Dear Mr. Shelton:

Please accept this letter on behalf of Flagler County regarding major projects proximate – within five (5) miles – to the FRP Solar Farm approved as a Special Use through Application #3259.

The Flagler County Growth Management Department has no knowledge of other projects planned in the area.

I hope that this information is helpful and please contact me with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Adam Mengel", enclosed in a thin black rectangular border.

Adam Mengel, AICP, LEED AP BD+C
Growth Management Director

**PUTNAM COUNTY
PLANNING & DEVELOPMENT SERVICES**

P. O. Box 1486
Palatka, FL 32178-1486
Fax: 386-329-1213
In FL Toll Free: 1-800-432-0364
Email: pzb@putnam-fl.com
Website: <https://main.putnam-fl.com>



Planning: 386-329-0491
Zoning: 386-329-0316
Building: 386-329-0307
Animal Control: 386-329-0396
Code Enforcement: 386-329-0317

August 12, 2022

Mark Shelton, AICP
Kimley-Horn
12740 Gran Bay Parkway West, Suite 2350
Jacksonville, FL 32258

RE: FRP Tupelo Solar Farm Site – Surrounding Development Inquiry

Dear Mr. Shelton:

This letter is in response to a request for information regarding any known major developments within the vicinity of the property owned by FRP Tupelo Solar, LLC. The subject property is zoned PUD and comprises parcels 25-10-27-0000-0020-0000, 25-10-27-0000-0041-0000, 25-10-27-0000-0040-0000, and 24-10-27-0000-0020-0000.

A five-mile radius encompasses most of the US 17 corridor in the San Mateo and East Palatka communities to the west of the subject site. Areas approximately four miles from the site contain a number of planned or ongoing developments including a new boat storage facility and marina, a new recreational vehicle park, and several new commercial retail stores. However, these developments are all concentrated along the aforesaid corridor and are unlikely to change the rural character of the areas within the general vicinity of the subject site.

If you should have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Gabriel Quintas". The signature is written in a cursive, flowing style.

Gabriel Quintas, AICP, CFM
Senior Divisional Planning Manager