

Environmental Assessment FRP Gilchrist County Solar

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FRP Gilchrist County Solar, LLC Juno Beach, Florida



Document Review

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This document has been authored and reviewed by the following employees:

Amanda Koonjebeharry, PMP

Author

Peer Review

Signature

Date

Inde Daum

Jude Dawson

Signature

July 28, 2023

July 28, 2023

Date

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Table of Contents

Sum	Summary1-1				
1.0	Purp 1.1	ose an FRP P	id Need o urpose an	of the Proposed Action	
	1.2	USDA	Purpose	and Need1-3	
2.0	Alte 2.1	r native Propo	es to the l sed Actio	Proposed Project2-1 n2-1	
		2.1.1	Facilities	Overview2-1	
		2.1.2	Modules		
		2.1.3	Array Mo	ounting System2-2	
		2.1.4	Inverters	s and Collection System2-2	
		2.1.5	Collector	Substation and Distribution Interconnection2-3	
		2.1.6	Access P	aths and Perimeter Fencing2-3	
		2.1.7	Lighting.		
		2.1.8	Stormwa	ater Facilities2-4	
		2.1.9	Project C	Construction2-4	
			2.1.9.1	Site Preparation2-4	
			2.1.9.2	Stormwater and Erosion Control2-4	
			2.1.9.3	Project Installation2-5	
			2.1.9.4	Potentially Hazardous Materials2-6	
			2.1.9.5	Fugitive Dust Control2-6	
			2.1.9.6	Construction Water Requirements2-6	
			2.1.9.7	Construction Workers, Hours, and Equipment2-7	
			2.1.9.8	Testing, Commissioning, and Acceptance2-7	
			2.1.9.9	Cleanup2-7	
		2.1.10	Project C	Operations and Maintenance2-7	
			2.1.10.1	Module Cleaning2-8	
			2.1.10.2	Potentially Hazardous Material During Project Operations2-8	
	2.2	No Ac	tion Alter	native2-9	
	2.3	Other	Alternativ	ves Evaluated2-9	
3.0	Affe 3.1	cted Er Land	ivironme Use	nt and Environmental Consequences3-1 	



	3.1.1	Affected Environment
		3.1.1.1 General Land Use
		3.1.1.2 Important Farmland3-2
		3.1.1.3 Formally Classified Lands
	3.1.2	Environmental Consequences
	3.1.3	Mitigation
3.2	Flood	olains3-4
	3.2.1	Affected Environment
	3.2.2	Environmental Consequences
	3.2.3	Mitigation
3.3	Wetla	nds3-5
	3.3.1	Affected Environment
	3.3.2	Environmental Consequences
3.4	Water	Resources
	3.4.1	Affected Environment
		3.4.1.1 Surface Water3-6
		3.4.1.2 Groundwater3-6
	3.4.2	Environmental Consequences
		3.4.2.1 Effects on Surface Water
		3.4.2.2 Effects on Groundwater
	3.4.3	Mitigation
3.5	Coast	al Resources
	3.5.1	Affected Environment
	3.5.2	Environmental Consequences
3.6	Biolog	ical Resources
	3.6.1	Affected Environment
		3.6.1.1 Vegetation and Wildlife
		3.6.1.2 Threatened and Endangered Species and Other Protected Species 3-10
		3.6.1.3 Migratory Birds 3-14
		3.6.1.4 Bald and Golden Eagle Protection Act
		3.6.1.5 Invasive Species
	3.6.2	Environmental Consequences
	3.6.3	Mitigation



3.7	3.7 Cultural Resources				
	3.7.1	Affected E	nvironment		
		3.7.1.1 D	esktop Review		
		3.7.1.2 C	ultural Resource Asse	ssment Survey	
		3.7.1.3 N	lative American Consu	ltation	
	3.7.2	Environme	ental Consequences		
	3.7.3	Mitigation			
3.8	Aesth	etics			
	3.8.1	Affected E	nvironment		
	3.8.2	Environme	ental Consequences		
	3.8.3	Mitigation			
3.9	Air Qu	ality			
	3.9.1	Affected E	nvironment		
	3.9.2	Environme	ental Consequences		
3.10	Social	Impact Ass	sessment/Environmer	tal Justice	
	3.10.1	Affected E	nvironment		
		3.10.1.1 D	emographic Overviev	/	
		3.10.1.2 Ei	nvironmental Justice .		
		3.10.1.3 Ei	mployment		
		3.10.1.4 Ta	ax Revenue		
	3.10.2	Environme	ental Consequences		
		3.10.2.1 Ei	mployment		
		3.10.2.2 Ei	nvironmental Justice .		
		3.10.2.3 Ta	ax Revenue		
	3.10.3	Mitigation			
3.11	Misce	llaneous Iss	sues		
	3.11.1	Noise			
		3.11.1.1 A [.]	ffected Environment .		
		3.11.1.2 Ei	nvironmental Conseq	uences	
	3.11.2	Mitigation			
	3.11.3	Transporta	ation		
		3.11.3.1 A [.]	ffected Environment .		
		3.11.3.2 Ei	nvironmental Conseq	uences	



	3.12 Human Health and Safety	
	3.12.1 Affected Environment	
	3.12.2 Environmental Consequences	
	3.12.3 Mitigation	
4.0	Cumulative Effects	4-1
5.0	Summary of Mitigation	5-1
6.0	List of Preparers	6-1
7.0	Coordination, Consultation, and Correspondence	7-1
8.0	References/Bibliography	

Appendices

Appendix A	Gilchrist County Special Use Permit
Appendix B	USACE No Permit Required Letter
Appendix C	Representative Site Photos
Appendix D	Web Soil Survey Map Report
Appendix E	EPA EJScreen
Appendix F	Other Agency Consultation
Appendix G	Cultural Resources Discovery Plan
Appendix H	Gilchrist Surrounding Development Inquiry



List of Tables

- Table 2-1Estimated Construction Duration, Equipment, and Works by Activity
- Table 2-2 Estimated Truck Activity
- Table 2-3Comparison of Site Alternatives
- Table 3-1Existing Land Use Within the Project Boundary
- Table 3-2Listed Species Known to or Potentially-Occurring Within the Project
- Table 3-3 Employment by Industry, Gilchrist County and Florida
- Table 3-4Noise Emission Reference Levels for Common Construction Equipment
- Table 4-1Cumulative Impacts Assessment



List of Figures

Figure 1-1	Site Location
Figure 2-1	Layout of Solar Array
Figure 2-2	Layout of Collector Yard
Figure 2-3	Alternative Site and Proposed Site
Figure 3-1	Existing Project Land Use
Figure 3-2	Formally Classified Lands
Figure 3-3	FEMA Floodplain Map
Figure 3-4	National Wetlands Inventory
Figure 3-5	USGS Topographic Map
Figure 3-6	Project Hydrogeology Map
Figure 3-7	Gopher Tortoise Burrow Map
Figure 3-8	Florida Master Site File Results



List of Acronyms and Abbreviations

AC	Alternating Current
ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
AMASDA	Automated Management of Archeological Site Data
BEA	U.S. Bureau of Economic Analysis
BFE	Base Flood Elevation
BGEPA	Bald and Golden Eagle Protection Act
BMP	Best Management Practice
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
COD	Commercial Operation Date
cSl	crystalline silicon
CZMA	Coastal Zone Management Act
CWA	Clean Water Act
dB	Decibel
DC	Direct Current
DEF	Duke Energy Florida
DoD	Department of Defense
EA	Environmental Assessment
ECT	Environmental Consulting and Technology, Inc.
EIA	U.S. Energy Information Administration
EIS	Eastern Indigo Snake
EO	Executive Order
ESA	Endangered Species Act
EPA	United States Environmental Protection Agency
FAA	Federal Aviation Authority
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Quality
FEMA	Federal Emergency Management Agency
FLUCFCS	Florida Land Use, Cover and Forms Classification System
FWC	Florida Fish and Wildlife Conservation Commission
FHWY	Federal Highway Administration
FILOT	Fee In Lieu of Taxes
FIRMs	Flood Insurance Rate Maps
FNAI	Florida Natural Areas Inventory
FPPA	Farmland Protection Policy Act
FRP	Florida Renewable Partners
FPSC	Horida Public Service 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
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
OSHA	Occupational Safety and Health Administration
PAD-US	USGS Protected Areas Database
PCU	Solar Power Conditioning Unit
PJD	Preliminary Jurisdictional Determination
PPA	Power Purchase Agreement
PV	Photovoltaic
RIMS II	Regional Input-Output Modeling System
ROW	Right-of-way
RUS	Rural Utilities Services, USDA
SEAK	Southeastern American Kestrels
SECI	Seminole Electric Cooperative
SFETSR	State of Florida Endangered and Threatened Species Rule
SESC	Soil Erosion and Sedimentation Control
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Office
SPCC	Spill Prevention Control and Countermeasure
SWPPP	Storm Water Pollution Prevention Plan
SR	State Road
TDAT	Tribal Directory Assessment Tool
T&E Species	Threatened and Endangered Species
THPO	Tribal Historic Preservation Office
TMS	Tax Map Sequence
USACE	United States Army Corps of Engineers
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 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.

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 Gilchrist County Solar, LLC (FRP), a wholly owned subsidiary of NextEra Energy Resources, LLC, proposes to develop the Gilchrist County Solar Project (Project) located south of State Road (SR) 26, east of SE 80th Avenue, north of SE 110th Street, and west of SE 90th Avenue in unincorporated Gilchrist County, 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 Duke Energy Florida's (DEF's) Newberry Substation.

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 crop cultivation and livestock pastures.

1.1 FRP Purpose and Need

The purpose of the Project is to construct, operate, and maintain a 74.5 MW_{AC} PV solar facility to provide clean, cost effective, renewable energy in accordance with a 20-year Power Purchase Agreement (PPA) with Seminole Electric Cooperative (SECI) and an Interconnection Agreement with Duke Energy, which is fully executed. The expected Commercial Operation Date is September 2025, and construction is expected to commence in August of 2024. FRP's goal is to minimize environmental impacts by building the Project on already disturbed land and that is close 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:

- 1. Rural Business-Cooperative Service,
- 2. Rural Housing Service, and
- 3. 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.

FRP requested a \$70.9 million loan, with a length of 20 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 Title 7 of the Code of Federal Regulations (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 <u>Proposed Action</u>

The Proposed Action is construction and operation of the FRP Gilchrist County Solar Project, a new 74.5 MW solar photovoltaic energy center facility located upon 578 acres of agricultural lands. The Project consists of a solar photovoltaic panel array with inverters, at-grade access pathways, a perimeter security fence, an offsite collector yard and overhead distribution line, and other ancillary equipment. The Project includes the 578-acre solar photovoltaic array and an associated 3.5-acre offsite yard site located on rural residential property, which include the following parcel ID numbers: 02-10-16-0000-0009-0030, 02- 10-16-0000-0009-000, 13-10-16-0000-0002-0000, 13-10-16-0000-0004-0000, 13-10-16-0000-0003-0000, 24-10-16-0000-0007-0000, 24-10-16-0000-0006-0010, 24-10-16-0000-0007-0000, 24-10-16-0000-0006-0010, 24-10-16-0000-0007-0000, 24-10-16-0000-0006-0010, 24-10-16-0000-0008-0010.

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: a 578-acre photovoltaic solar array and a 3.5-acre collector yard site (Figures 2-1 and 2-2). 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 74.5 MW_{AC}. The Project will also include an FRP Gilchrist County 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. Electrical power from the solar array will be delivered to the collector substation via an approximately 1.2-mile overhead 34.5 kV distribution line within a 30-foot-wide easement located west of and directly adjacent to S.E 80th Avenue, a public road.

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 photovoltaic (PV) modules convert sunlight to direct current (DC) electrical energy. 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 is established beneath the panels.

2.1.4 Inverters and Collection System

The inverters convert the DC electrical energy from the photovoltaic arrays into AC power, which 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 Substation and Distribution Interconnection

FRP proposes to construct a collector yard that increases the voltage of the Project to match the voltage of the interconnecting substation. The collector yard is located on State Road 26 approximately one mile north of the solar array on approximately 3.5 acres of former commercial land. 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 will be at least 12 inches above the 100-year flood elevation. The collector yard will receive power generated from the solar array via a new 34.5kV overhead distribution line located on the west side of SE 80th Avenue. No improvements to the overhead distribution line easement are proposed other than the addition of the new power poles. Poles would be installed via the existing SE 80th Avenue 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 yard 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. 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 and establishing large grass swales and vegetated buffer areas around the proposed impervious areas.

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 <u>Site Preparation</u>

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 Gilchrist County Solar proposes a "civil light" development approach, which 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 access the Project via SR 26 and SE 80th Avenue. 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 Stormwater 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 yard 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 tracking 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 directburied 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 nonhazardous 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 <u>Construction Water Requirements</u>

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, Ocala, or Tampa.

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

2.1.9.8 <u>Testing, Commissioning, and Acceptance</u>

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 <u>Cleanup</u>

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, Gilchrist 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 a 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 <u>No Action Alternative</u>

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. Site QF 42-6 is located south of SR 26 and west of SE 70th Avenue in Gilchrist County (Figure 2-3). 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	Gilchrist County Solar	Site QF 42-6
Total Acreage	578.0	300.2
Wetland Acreage	0.0	0.0
Available for Purchase/Lease	Yes	No
County	Gilchrist	Gilchrist
Distance to Transmission	1.2 miles	0.2 miles



Criteria	Gilchrist County Solar	Site QF 42-6
Listed Species	One federally listed species and 4 state-listed species with potential to occur. One state-listed species known to occur.	One federally listed species and 4 state- listed species with potential to occur. One state-listed species known to occur.
Proximity to Conservation	One within one mile	One within one mile
Cultural Resources	No NRHP-eligible sites	No NRHP-eligible sites

Site QF 42-6 has similar impacts to the Proposed Action from a natural resource and social perspective. However, subsequent to preliminary review of the QF 42-6 site, the property was purchased by another commercial developer and is therefore not currently available for purchase or lease. Additionally, it does not have sufficient acreage to meet the Project's purpose. For these reasons, it was eliminated from further consideration and the Gilchrist County Solar site was selected as the only practicable alternative.



3.0 Affected Environment and Environmental Consequences

This chapter describes the physical, social, economic, and environmental conditions that may be affected by the Proposed Action.

3.1 Land Use

3.1.1 Affected Environment

3.1.1.1 General Land Use

The Project's solar array field is located entirely within a 578-acre portion of the FRP-owned lands presently utilized mostly for crop and livestock production. Agricultural activities currently encumber approximately 439 acres, or 76 percent, of the Project site (Table 3-1; Figure 3-1). 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. Existing land use within the Project's collector yard consists of a mixture of developed land and upland forest, and it 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 (Figure 3-1). According to the United States Geological Survey (USGS) Protected Areas Database of the United States, there are no recreation or conservation lands within or adjacent to the Project (USGS 2021; FDEP 2021).

FLUCFCS Code ¹	Land Use/Land Cover	Acreage
Solar Array		
211	Improved pastures	61.86
214	Row crops	101.0
215	Field crops	276.46
412	Longleaf pine – xeric oak	93.32
414	Pine – Mesic oak	9.32
427	Live oak	23.92
434	Upland mixed coniferous/hardwood	4.86
832	Electrical power transmission lines	7.26

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



FLUCFCS Code ¹	Land Use/Land Cover	Acreage		
112	Residential low-density mobile homes	1.89		
434	Upland mixed coniferous/hardwood	1.34		
441	Coniferous plantations	0.22		
Distribution Corridor				
441	Coniferous plantations	3.22		
832	Electrical power transmission lines	0.10		
110	Residential, low-density	0.86		

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

The Project's proposed solar array is located in unincorporated Gilchrist County, is currently zoned AG-2 (Agricultural), and is designated as such on the County's Future Land Use Map, which is part of their Comprehensive Plan. Pursuant to the Gilchrist County zoning code (Article 7, Section 7.26), solar farms are an allowed use within the Agricultural District via a special use permit. The collector yard is located within a parcel zoned and designated as Commercial. The Gilchrist County Land Development Code does not specifically mention electrical substations as either an approved or prohibited use of commercial lands, however they are allowable via a special use permit. In March 2021 FRP received local approval in the form of special use permits for development of both the solar array and collector yard (Appendix A).

3.1.1.2 Important Farmland

The USDA Natural Resource Conservation Service (NRCS) defines Prime Farmland as "...land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses". Prime Farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the USDA NRCS recognizes that responsible levels of government, as well as individuals, should encourage and facilitate wise use of Prime Farmland.

Although portions of the Project site have been historically used for agricultural purposes, a USDA NRCS Web Soil Survey WSS Map Report Analysis (Appendix D) classifies that all the soils within the Project as 'Not Prime Farmland' (USDA-NRCS 2021).



3.1.1.3 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 are the Goethe State Forest, located about 1.6 miles to the southeast of the solar array, and the Nature Coast State Trail, located about 0.7 miles to the north of the proposed collector yard (Figure 3-2).

3.1.2 Environmental Consequences

Development of the Project will result in the temporary conversion of approximately 578 acres of land from agricultural activities and 133 acres of upland forest to herbaceous dry prairie. However, when the Project is decommissioned, the solar panels and equipment can be removed, and the land may be returned to their previous uses. There is no Prime Farmland or formally classified lands located within the Project Boundary; therefore, impacts anticipated as a result of the Proposed Action are negligible.



3.1.3 Mitigation

No mitigation is proposed for the conversion of agriculture production and upland forest to a solar energy generation facility because conversion of the Project back to these uses is a viable option upon Project decommissioning.

3.2 <u>Floodplains</u>

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 (FEMA 2011).

3.2.1 Affected Environment

According to a review of FEMA FIRM Panels # 12041C0220E (effective 1/19/2018) and 12041C0285E (effective 1/19/2018) the majority of the Project is located within Zone X, indicating Area of Minimal Flood Hazard (Figure 3-3). Approximately 1.0-acre along the Project's southwest boundary is located within Zone AE, the 1 percent annual chance flood zone, 100-year floodplain.

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 <u>Wetlands</u>

3.3.1 Affected Environment

The presence of wetlands was evaluated utilizing desktop analyses and field investigations. A desktop review of National Wetland Inventory (NWI) maps, USDA-NRCS soils data, and the Florida Department of Transportation (FDOT) Florida Land Use, Cover and Forms Classification System (FLUCFCS) was used to evaluate the presence of wetlands found within the Project and to determine the presence of jurisdictional wetlands pursuant to criteria established by the U.S. Army Corps of Engineers (USACE) and Florida Department of Environmental Protection (FDEP) (USFWS 2021; USDA NRCS 2021; FDOT 1999). Field investigations of the Project site were conducted in July 2017, February 2020, and March 2021.

Based on the available desktop and field data, there are no wetlands or surface waters within the limits of the Project (Figure 3-4). The applicant has consulted with the USACE Jacksonville District regarding the need for a Section 404 dredge and fill permit for proposed activities, and due to the lack of jurisdictional Waters of the United States, the USACE issued a "No Permit Required" determination for the Project (Appendix B).

3.3.2 Environmental Consequences

Adverse impacts to jurisdictional wetlands and Waters of the United States will not occur as a result of the Proposed Action since none are located within the limits of the Project.

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 nonpoint source pollution. Thus, the Proposed Action will have no significant adverse impacts to water quality.

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 43,398 acres and flows into Crescent Lake in the Lower St. Johns Watershed (HUC 03080103). According to the USGS topographic quadrangle map for Newberry SW and Waters Lake, the Project ground surface elevation is relatively flat, with elevations ranging from approximately 75 to 100 feet above sea level (Figure 3-5). The annual average annual rainfall for central Florida is 50 to 55 inches (Florida Climate Center, 2021).

There are no natural or man-made surface water features within the boundary of the Project. The nearest known surface water feature is a man-made cattle pond about 0.4 miles west of the Project. Ingress to and egress from the site during construction and operation will be from existing roads and bridges; no new surface water crossings are proposed.

3.4.1.2 <u>Groundwater</u>

The Project lies within the Floridian section of 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 approximately 12.31 acres of impervious surfaces including the access paths, inverter pads, and collector yard pad. The proposed stormwater management system is designed such that no adverse impacts to water quantity or quality are anticipated to downstream receiving waters. FRP has been authorized by the FDEP under Environmental Resource Permit Number 21-0403244-001-El to construct and operate the proposed stormwater management system.

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, chemical releases during construction, operation, or maintenance of the Project will not likely adversely affect ground water quality. FRP will have an 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 is not required.

3.5 <u>Coastal Resources</u>

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 August 30, 2021, the Clearinghouse indicated that "...the funding award is consistent with the Florida Coastal Management Program (Appendix F)."

3.6 <u>Biological Resources</u>

The following sections include a characterization of the biological resources for the Project. Evaluations were conducted through the interpretation of aerial photography, the review of publicly



available resources, agency consultation, and the consideration of previous site evaluations and field surveys.

3.6.1 Affected Environment

3.6.1.1 Vegetation and Wildlife

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

The desktop data assessment and subsequent field reconnaissance indicate all of the area within the Project is comprised of uplands. Approximately 76 percent of the proposed solar array area (439 acres) is in agricultural use, with main crops being comprised of peanuts, corn, tobacco, and watermelon. The remaining portions of this area consist of naturally vegetated forested communities, including live oak hammock and longleaf pine-xeric oak sandhill habitat.

The vegetation in this longleaf pine-xeric oak area consists of approximately 52 acres of widely spaced pine trees with a sparse midstory of oaks and a moderate groundcover of grasses and low shrubs. Plant species observed included longleaf pine (*Pinus palustris*), turkey oak (*Quercus laevis*), and wiregrass (*Aristida stricta*), as well as saw palmetto (*Serona repens*), sand pine (*Pinus clausa*), bracken fern (Pteridium aquilinum), fennel (*Eupatorium capillifolium*), ragweed (*Ambrosia artemisiifolia*), prickly pear cactus (*Opuntia spinosisima*), Florida rosemary (*Ceratiola ericoides*), and pawpaw (*Asimina triloba*). Smaller areas of pine-mesic oak containing laurel oak (*Quercus laurifolia*), saw palmetto, sumac (*Rhus copallinum*), and dogwood (*Cornus florida*) were found within the Project.

Approximately 20 acres in the northeastern quadrant of the solar array is improved pasture planted in bahiagrass (*Paspalum notatum*). Smaller areas of mixed conifers and hardwoods (approximately 4.8 acres) and live oak (*Quercus virginiana*) (approximately 24.0 acres) are also found on the northern half of the solar array. These areas support live oak and bahiagrass. The existing gas and electric utility corridor comprise approximately 7.5 acres and traverses diagonally across the subject property. Vegetation here is maintained as low-growing grasses and herbs pursuant to its use as a utility corridor.



The collector yard is situated within a vacant residential property. Remnant natural vegetation on this site consists of slash pine (*Pinus elliottii*), live oak, and blackberry (*Rubus* sp.) bushes. Vegetation along the interconnecting distribution line is similar to that described above, mostly consisting of planted slash pine and blackberry.

There are no wetlands, surface waters, or agricultural ditches within the limits of the Project. Appendix C 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*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), red shoulder hawk (*Buteo lineatus*), meadow lark (*Sturnella neglecta*), pileated woodpecker (*Dryocopus pileatus*), raccoon (*Procyon lotor*), coyote (*Canis latrans*), nine banded armadillo (*Dasypus novemcinctus*), gray squirrel (*Sciurus carolinensis*), and pocket gopher (*Geomys pinetis*). 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 <u>Threatened and Endangered Species and Other Protected Species</u>

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), the Florida Natural Areas Inventory, and various datasets complied by the Florida Fish and Wildlife Conservation Commission (FWC). Site reconnaissance was performed in July 2017, February 2020, and March 2021. Based on these data, listed species that are known to, or may potentially occur within the Project are provided in Table 3 2. 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 letter was sent to the USFWS on May 17, 2021, seeking concurrence to these findings, however no response to that letter was received.



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 F).

Scientific Name	Common Name	Federal Status	State Status	Probability of Occurrence	Habitat Preference
Birds					
Falco sparverius paulus	Southeastern American kestrel	N	Т	Observed	Open pine habitats, woodland edges, prairies and pastures. Nests in cavities in dead trees and utility poles.
Reptiles					
Gopherus polyphemus	Gopher tortoise	N	т	Observed	Any well drained sandy areas with low growing herbaceous and grassy vegetation
Drymarchon corais couperi	Eastern indigo snake	Т	FT	Moderate	Xeric scrub, pine flatwoods, hardwood forests, agricultural sites
Pituophis melanoleucus	Florida pine snake	Ν	т	Moderate	Dry upland habitats, including sandhill, xeric scrub, and xeric pine flatwoods
Lampropeltis extenuate	Short-tailed snake	Ν	т	Moderate	Sandy soils, particularly longleaf pine and xeric oak sandhills.
Mammals					
Sorex longirostris eionis	Homosassa shrew	N	SSC*	Moderate	Hydric and xeric hammocks, commercial pineland, mixed hardwood-pine forest.

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

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.

Southeastern American kestrel

Southeastern American kestrels (SEAK) are a small, non- migratory falcon subspecies which 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 (SFETSR).

SEAK have been observed within the Project and areas of suitable nesting habitat such as tall dead hardwoods occur within the site. 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 obtained an Incidental Take Permit (ITP) No LSNR-22-00005A from FWC on February 25, 2022 for the take of inactive nest cavities. The permit expires in September 2023 and can be renewed, if needed. As such, no adverse impacts to the Southeastern American kestrel are anticipated as a result of construction and operation of the Project.

<u>Gopher tortoise</u>

Listed by the state of Florida as a threatened species. 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). An informal gopher tortoise burrow survey was conducted during a previous field assessment, and approximately 30 burrows were identified within the Project limits (Figure 3-7). One gopher tortoise burrow was also observed in the distribution interconnection corridor during the site survey. Formal 100-percent burrow surveys will be conducted within all potential gopher tortoise habitat prior to development. A FWC gopher tortoise relocation permit would be required if burrows cannot be avoided and captured tortoises will be relocated to an FWC-approved recipient site prior to construction.

Eastern indigo snake

Federally listed threatened species under the Endangered Species Act of 1973 (ESA). This large, nonvenomous snake is rare but can be found in almost any habitat in Central and South Florida.


Eastern indigo snakes (EISs) will often seek shelter inside gopher tortoise burrows and other belowand 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.

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 (FNAI 2001). 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 on site, 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.

<u>Short-tailed snake</u> - The short-tailed snake is a small, non-venomous snake which is endemic to Florida. The species is cryptic and fossorial in nature. A secretive burrower only rarely seen above ground or under cover objects. It can be found mainly from the north central to central portion of peninsular Florida. It prefers xeric habitats such as longleaf pine flatwoods, turkey oak sandhills, and scrubby oak communities (Carr 1940).

The short-tailed snake is classified as threatened by the FWC but is not listed federally by the USFWS. No individuals or signs of their presence were observed during field efforts. The upland forests within the Project may provide suitable habitat for the species. This species is most often encountered on sites while excavating and relocating gopher tortoises. If found on site, 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.

<u>Homosassa shrew</u>

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 2021). 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.

3.6.1.3 <u>Migratory Birds</u>

Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711) which 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 and the red-headed woodpecker (*Melanerpes erythrocephalus*). Neither species has been directly observed within the Project during field surveys, although suitable habitat exists.



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 one mile 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 include wild hog (Sus scrofa) and feral domestic cats. The nine-banded armadillo (*Dasypus novemcinctus*), a non-native species is considered to be naturalized in Florida, may also occur there.

3.6.2 Environmental Consequences

The Project is proposed in mainly previously disturbed land that has been used for agriculture; therefore, impacts to biological resources or changes to baseline conditions are minor. Much of the Project has been cleared for crop cultivation, commercial development, and pine plantation. No wetland impacts will occur. The Project will result in the clearing of approximately 133 acres of upland forest communities. Wildlife displaced from these areas could potentially relocate to other suitable habitat in the area. Mobile species would be expected to disperse; however some mortality may occur during construction to smaller or less mobile species. Tree nesting species may suffer mortality during



clearing and/or experience reduced reproductive success for one breeding season. Larger wildlife species may be precluded from accessing the solar array and collector yard due to security fencing.

Site preparation will require clearing of vegetation remaining in the Project area. 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. Restoration/re-vegetation of the Project will utilize a native 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 will be conducted in accordance with FWC's Gopher Tortoise Permitting Guidelines (FWC 2023) prior to construction. The survey will identify gopher tortoise burrows that are located within the Project's construction footprint. If necessary, the applicant will apply for an obtain from FWC a permit to relocate all tortoises in the construction footprint to Stateapproved recipient site. Gopher tortoise burrow commensals such as the EIS, Florida pine snake, and short-tailed 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 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 and SEAK will be provided if necessary to offset potential impacts to this species.

3.7 <u>Cultural Resources</u>

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 Part 800 of the ACHP regulations.

To be eligible for the NRHP, cultural resources must be at least 50 years old (generally), meet most of the seven aspects of integrity, and meet at least one of the four criteria listed below. 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 fewer 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 proposed 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 April 2021 (ESI/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 it implementing regulation 36 CFR Part 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 Rule 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 archaeological Direct Project APE is defined as the surfaces and depths that would be disturbed by excavation within the approximately 578-acre solar array, 3.5-acre collector yard, and 1.2-mile-long overhead distribution line easement. For this Project an archaeological site is defined by three or more artifacts recovered in a 30-meter radius. An area with less than three artifacts was classified as an archaeological occurrence (AO), which does not qualify as an archaeological site.

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 late 1800s through mid-twentieth century.

Previous Research

A review of the Florida Master Site File records indicated that no resources had previously been recorded within the Project; however, when the search parameters were extended to include the "general vicinity" of the Project, one archaeological site, one historic cemetery, and four historic structures were revealed.

3.7.1.2 Cultural Resource Assessment Survey

Following the desktop review, fieldwork consisted of a pedestrian survey and excavation of 252 subsurface shovel tests. The pedestrian survey involved a thorough inspection of transects aligned north-south that were spaced at 25 and 50-meter intervals. The shovel tests were conducted at 25, 50, and 100-meter intervals with the APE). Each testmeasured 50 cm by 50 cm (cm2) in size and most were excavated to a depth of at least one meterexcept 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") hardwarecloth screens. Field data, including test locations, soil stratigraphy, environmental setting, andtopography were recorded for each test. Upon completion, each test site was backfilled, marked withflagging tape, and plotted on a Project area map.

In addition to the archaeological survey, a historic resource survey was conducted within the project boundaries. No historic structural remains were discovered. An expanded survey within the visual effects area of all or portions of adjacent parcels located within a 500-foot radius of the Project boundary revealed two structures constructed more than 50 years ago. However, neither structure was recommended as being eligible for NRHP listing.



The results of the archaeological and historic resource surveys and the subsequent historic listing ineligibility determination suggest that the Project would not affect any significant cultural resource, directly or indirectly.

3.7.1.3 Native American Consultation

Section 106 of the NHPA requires federal agencies to consult with the relevant Tribal Historic Preservation Officer(s) (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 the Housing and Urban Development's Tribal Directory Assessment Tool (TDAT), four tribes were identified and may have an interest in the location of the Project: the Choctaw Nation of Oklahoma, the Coushatta Tribe of Louisiana, the Miccosukee Tribe of Indians, and the Muscogee (Creek) Nation.

FRP has well-established relationships with Tribal governments with potential or expressed interest Florida-based projects. On March 23, 2021, FRP sent letters to five Native American Tribes to ensure awareness of the Project: the Coushatta Tribe of Louisiana, Miccosukee Tribe of Indians, Muscogee (Creek) Nation, Thlopthlocco Tribal Town, and Seminole Tribe of Florida (STOF). Only the STOF responded to the notification. On April 8, 2021, the STOF requested and was sent a copy of the Cultural Resource Assessment Survey (CRAS) that was prepared for the Project. On April 9, 2021, the STOF indicated that the Tribe had no concerns about the project. In addition, on June 24, 2022, the USDA sent copies of their finding letters and the CRAS to the five Native American Tribes listed above. No comments have been received.

3.7.2 Environmental Consequences

As a result of the desktop and field investigations performed for the Project, one archaeological site and one AO were identified within the APE. However, neither site is considered eligible for NRHP listing. Therefore, no historic resources will be affected as a result of the Project. In a letter dated June 7, 2021, the Florida Department of State, Division of Historical Resources, has concurred with these findings (Appendix F). In addition, no Tribal lands will be directly or indirectly affected.



3.7.3 Mitigation

The Proposed Action will not adversely impact cultural resources eligible for NRHP listing or tribal lands; therefore, mitigation is not required. If cultural resources (e.g., lithic tools, pottery, human remains, etc.) are discovered during construction, then the Cultural Resources Discovery Mitigation Plan detailed in Appendix G will be kept on site and adhered to during construction. In the event of discovery, earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find in consultation with the Florida SHPO and interested Native American tribes (as applicable).

3.8 <u>Aesthetics</u>

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 uplands, agricultural land, and residential areas. In addition, State highways, local roads, overhead 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.

Three public roadways adjoin the Project, SR 26, SE 80th Avenue, and SE 80th Street. SR 26 is the Project's northern boundary and the primary east-west corridor in southern Gilchrist County. Several commercial businesses are located along SR 26 within close proximity of the Project and two residences are located within one mile; the first is 0.60 miles to the east and the second is 0.98 miles to the west. The second roadway is SE 80th Avenue which connects to SR 26 and provides access to residences and the proposed solar array. The new overhead distribution line connecting the solar



array to the collector yard would be located west of and directly adjacent to SE 80th Avenue. The third roadway, SE 80th Street, is the northern boundary for the Project's solar array and connects SE 80th Avenue to SE 90th Avenue/SW 298th Street/CR 2085. The Gilchrist County Planning Director confirmed that no other projects are currently proposed for the area that would further alter the surrounding land use (Appendix H).

According to the USGS Protected Areas Database of the United States (PAD-US), protected open space in the general vicinity of the Project include Goethe State Forest, which is approximately 1.6 miles southeast of the Project and not visible from the Project. No federal Wildlife Management Areas/Refuges, parks or other protected areas were identified within two miles of the Project.

3.8.2 Environmental Consequences

Once completed, a small portion of the Project (collector yard) will likely be visible from SR 26 which is the main thoroughfare near the Project. Equipment within the collector yard may be visible to drivers as personnel enter and exit the Project, but this activity is not expected to be distracting or intrusive and will be adjacent to an existing Duke Energy substation. The Project solar array is located approximately 1.25 miles south of SR 26 at the terminus of SE 80th Avenue and will not be visible to passers-by; however, the panels and associated infrastructure may be visible from residences located near the western portion of the Project.

While the Project and associated infrastructure has the potential to introduce visual contrast and 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 be limited to a maximum height of 15 feet excluding utility poles and communication equipment (Gilchrist County LDC). Additional Project infrastructure includes a collector yard that will be constructed on a former commercial area near an existing substation.
- All Project components will have a relatively low profile and are not expected to significantly change the current character of the landscape.
- The Project site will include minimal lighting and will not substantially degrade the existing visual character or quality of the land within the Project or its surroundings.



- The Project proposes to use glare-reducing photovoltaic solar cells to absorb sunlight. The glass panels that protect the photovoltaic surface are designed to allow sunlight to pass with minimal reflection. As a result, the source of glare from the Project is expected to be minimal.
- The Project will adhere to Gilchrist County's LDC Article 7, Section 7.26-Solar Farms, which prescribes site development, setbacks, fencing, and landscape screening requirements to reduce Project impacts.

Based on these factors, the Project will introduce some changes to the character of the existing landscape; however, no adverse visual impacts to sensitive receptors are expected.

The Project is located approximately 28 miles west of the Gainesville Regional Airport, approximately 20 miles southeast of the Williston Municipal Airport, and approximately 29 miles east of the Cross City Airport. The Project is not located near military airfield control towners, 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) Interim Policy for Solar Energy System Project on Federally Obligated Airports (FAA 2021) and Department of Defense guidance (Department of Defense 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. The Gilchrist County's LDC, Section 7.26.03 – Solar Farms, requires a 20-foot minimum planted buffer be installed for all solar facilities (Municode 2023). A landscape plan detailing the vegetation type, location, and planting schedule will be developed as part of the local site plan approval application package.



3.9 <u>Air Quality</u>

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 part 50] for six (6) air pollutants known as criteria pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), articulate matter (PM10 and annual and 24 Hour-PM2.5), and sulfur dioxide (SO₂). NAAQS defines 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 2018a).

The Project is located in EPA Region 4, and as of April 15, 2021, Gilchrist County in Florida is currently designated as being in attainment (i.e., meeting NAAQS) for criteria pollutant (EPA 2018b).

3.9.2 Environmental Consequences

The Project is not expected to result in adverse impacts to air quality or exceed air quality standards. The solar array does not generate any emissions during operation; in fact, increasing reliance on renewable sources such as solar rather than the burning of fossil fuels to generate power will result in a foreseeable decrease in emissions. 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, 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. Maintenance and security personnel would visit the Project routinely with maintenance activities occurring on a monthly 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 Gilchrist County and surrounding communities is expected to reduce regional emissions of regulated pollutants over time.

3.10 Social Impact Assessment/Environmental Justice

3.10.1 Affected Environment

3.10.1.1 Demographic Overview

Gilchrist County is located in north central Florida and is part of the Gainesville, Florida metropolitan area. The total estimated population of Gilchrist County in 2022 was 18,992, with an average population density of 51.1 persons per square mile in 2020. Between April 2020 and July 2022, the total population growth in the County was higher at 6.3 percent compared with the decrease in the statewide population change rate of 3.3 percent (US Census Bureau QuickFacts, 2023).

3.10.1.2 Environmental Justice

EO 12989 (59 FR 7629, 1994), Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, is intended to ensure that each federal agency achieves environmental justice as part of their mission by identifying and addressing disproportionately high and adverse human health and environmental effects of its programs, policies, and activities on minority populations and low-income populations. The USDA's Departmental Regulation No. 5600-002 provides direction to agencies for integrating environmental justice considerations into USDA programs and activities in compliance with EO 12989 (USDA 1997).

The Environmental Justice and Title VI of the Civil Rights Act of 1964 analysis defines minority persons as black/African American, Hispanic/Latino, Asian American, American Indian, or Alaskan Native. Lowincome populations are those, regardless of ethnicity, that are households with annual incomes at or below the U.S. Department of Health and Human Services (HHS) poverty level, which for 2021 is \$26,500 for a family of four (HHS 2021).



The minority populations in Gilchrist County include 5.7 percent Black or African American, 6 percent Hispanic or Latino, 0.7 percent American Indian and Alaskan Native, and 0.6 percent Asian American (US Census Bureau Quickfacts 2019). These percentages compare to 16.9 percent Black or African American, 26.4 percent Hispanic or Latino, 0.5 percent American Indian and Alaskan Native, and 3 percent Asian American for the State of Florida. Minority populations are generally concentrated in southwestern Gilchrist County, near the City of Trenton (EPA, EJScreen). The EJScreen result has a value for people of color population for Gilchrist County of 8 percent and for Florida of 46 percent. An environmental justice community is not present in the Project area.

The estimated median household income in Gilchrist County from 2015-2019 was \$43,640 with 15 percent of the population living in poverty compared with the Statewide 2015-2019 median household income of \$55,660 and 12.7 percent poverty level (State of Florida EDR 2019). The EJScreen result has a value for low-income population for Gilchrist County of 39 percent and for Florida of 35 percent. The difference between the county and state does not denote an environmental justice community.

3.10.1.3 Employment

An estimated 4,689 people were employed in Gilchrist County in 2019 (Table 3-3). The leading employment industries were education and health care/social services and construction which accounted for approximately 38 percent of the county's total employment. Statewide, these same industries accounted for 29.3 percent of Florida's total employment. (US Census Bureau, ACS 2022, Table S2404). Major employers in Gilchrist County include the Gilchrist County School District and Trenton Medical Center.



	Gilchrist County		State of Florida	
2021 Employment by Industry	Number of Jobs	Percent of Total	Number of Jobs	Percent of Total
Total Employment ¹	5,298	100	7,044,067	100
Agriculture, forestry, fishing and hunting, and mining	405	7.64	57,764	0.82
Construction	709	13.38	620,949	8.82
Manufacturing	368	6.95	429,261	6.09
Wholesale trade	63	1.19	208,595	2.96
Retail trade	665	12.55	747,885	10.62
Transportation and warehousing, and utilities	228	4.30	449,739	3.38
Information	13	0.25	130,103	1.85
Finance and insurance, and real estate and rental and leasing	319	6.02	618,708	8.78
Professional, scientific, and management, and administrative and	469	8.85	983,282	13.96
Educational services, and health care and social assistance	1,336	25.22	1,496,087	21.24
Arts, entertainment, and recreation, and accommodation and food services	155	2.93	604,511	8.58
Other services, except public administration	160	3.02	313,232	4.45
Public administration	408	7.7	383,951	5.45

Table 3-3. Employment by Industry, Gilchrist County and Florida

*Source: US Census Bureau, ACS 2021;*¹ *Full-time, year-round civilian employed population 16 years and over.*

3.10.1.4 Tax Revenue

Sales and Use Tax:

The State of Florida levies a general sales tax of 6 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, the State levies a use tax of 6 percent on taxable items purchased outside the State of Florida for use, storage, or consumption within the State (Florida Department of Revenue 2021). In FY 2020, State sales and use taxes generated approximately \$24.6 billion (Florida EDR 2021). Many Florida counties have the



authority to enact an additional local sales tax, also known as discretionary sales surtax. Gilchrist County levies an additional 1 percent sales tax making the effective tax rate 7 percent. Local sales and use tax in Gilchrist County generated approximately \$981,000 in revenues in FY 2020.

3.10.2 Environmental Consequences

The Proposed Action is expected to have a positive regional and local effect, specifically through increased employment opportunities, economic benefits, and tax revenue.

3.10.2.1 Employment

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.

Construction:

The construction phase of the project is expected to begin in August 2024 and extend between nine and 12 months. Construction of the Project would support temporary employment and income in Gilchrist County and the region. 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.

Operation:

Operation of the Project would continue to contribute to the local economy through direct employment and Project operations 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 Gilchrist County. The construction and operation of the Project is expected to support employment, provide labor income, and increase economic output in other sectors.

3.10.2.3 Tax Revenue

Construction of the Project will generate sales and use tax revenues through in-state Project expenditures on construction materials, supplies, and equipment. Indirect revenues, such as increased levels of spending by the construction and operation workforce, will also benefit the state and local economies. The Project is expected to have a positive impact on local businesses and the local economy as a whole during construction and operation. Purchases of a wide variety of services and supplies such as concrete, aggregate, lumber, conduit, cable, building supplies, office supplies, and tools, are likely to be made locally, whenever available. Motels, restaurants, gas stations, and retail businesses, will also benefit, particularly during construction. Additional indirect state and local revenues will be generated from the purchases previously described through corporate income taxes, as well as retail sales taxes paid by the businesses and their employees.

3.10.3 Mitigation

No mitigation will be required because the Project will not have a negative impact on the people within the surrounding community.

3.11 <u>Miscellaneous Issues</u>

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 on SR 26 and smaller roadways, noise from agricultural activities, rural residential sounds, and natural sounds (e.g., wind, wildlife). Some land uses are considered more sensitive to 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 desktop review of the area surrounding the Project boundary indicates that no hospitals, schools, or churches are located within a 2-mile radius. Residences and several businesses are located within 2 miles of the Project.

3.11.1.2 Environmental Consequences

Noise levels may increase slightly during the construction phase due to increased vehicular and truck traffic, heavy equipment, and portable installation equipment. 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).

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

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

*‡ 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 Act of 1970 (20 U.S.C. 651 et seq.).



Once operational, the Project is not anticipated to increase ambient noise. The primary source of noise associated with operation of the Project would be from light vehicular traffic accessing the site during regular security and inspection activities. Maintenance, repairs, and other operational activities would occur exclusively during daylight hours. Inverters, which will be installed towards the center of the site, 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 level which can be detected approximately 3 to 5 feet away from the inverters. The noise level will decrease with distance from the sources. Thus, changes in ambient noise levels associated with operations are not expected to adversely impact sensitive noise receptors.

3.11.2 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.

3.11.3 Transportation

3.11.3.1 Affected Environment

The Project is bounded to the north by SR 26, which is a two-lane, undivided rural roadway. Within Gilchrist County, SR 26 is classified as a principal arterial on the FDOT Functional Classification System and is the main east-west corridor in southern Gilchrist County.

3.11.3.2 Environmental Consequences

Construction:

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 SR 26 and SE 80th Avenue 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.



Operation:

When the Project is completed, vehicular traffic will have direct access to the site from SR 26 and SE 80th Avenue. Traffic associated with operation of the Project is expected from security and periodic maintenance activities. However, these routine activities are not expected to affect current traffic volumes.

3.11.3.3 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 Project related use, repairs would be performed as needed.

3.12 Human Health and 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 within the Project boundary.

A Phase I Environmental Site Assessment was performed for the solar array field in July 2017 (Tetra Tech, Inc. 2017) and the collector yard parcel in April 2021 (Tetra Tech, Inc 2021). 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 (RECs) 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 did not identify any AEIs or RECs associated with the properties encompassing the solar array and collector yard.

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 during construction and operation. 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 Gilchrist 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 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.

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 Gilchrist County will contribute to conversion of agricultural land to residential, commercial, industrial uses (Gilchrist County Vision, 2009).	No loss of prime farmlands or farmland of statewide importance. No adverse impacts are anticipated.	
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	No existing wetlands or waterbodies,	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.	

Table 4-1. Cumulative Impacts Assessment



Resource	Proposed Action	Cumulative Effect
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 the one federally-listed species (Eastern Indigo snake) and several State-listed species (gopher tortoise, Florida pine snake, short-tailed snake). Direct impacts unlikely due to adherence to programmatic guidance.	Not likely to jeopardize the existence of any listed species.
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 identified one archaeological site and one AO were identified within the ADI. However, neither site is considered eligible for NRHP listing.	No historic resources will be affected as a result of the Project. No adverse impacts are anticipated.
Aesthetics	The collector yard will likely be visible to drivers from SR 26 (the main thoroughfare near the Project) as personnel enter and exit but this activity is not expected to be distracting or intrusive and will be adjacent to an existing Duke Energy Florida substation. The Project solar array is located approximately 1.25 miles south of SR 26 at the terminus of SE 80th Avenue and will not be visible to passers-by. The panels and associated infrastructure may be visible from residences located near the western portion of the Project.	Gilchrist County LDC, Section 7.26.01 – Solar Farms, requires a 20-foot minimum planted buffer be installed for all solar facilities and will limit visibility of the solar array. Planting along SR 26 are likely to improve the visual character of the area. No adverse impacts are anticipated.
Air Quality	No air emissions or adverse effects to NAAQS.	No adverse impacts are anticipated.



Resource	Proposed Action	Cumulative Effect
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. An inquiry was submitted to the Gilchrist County Planning Director (Appendix H), who indicated that there are no proposed or new projects in Gilchrist County that would change or alter the rural nature of the area. 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 location which has no wetlands or other waterbodies and thereby 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:

- 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.
- 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).
- 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 one federally-threatened species, the EIS. 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 State-listed species, if any, 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	Senior Project Manager	FRP Gilchrist County Solar, LLC
Kennard Proctor	Senior Project Manager, Environmental Services	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 Koonjebeharry, PMP	Project Manager II	Environmental Consulting & Technology, Inc.



7.0 Coordination, Consultation, and Correspondence

FRP has coordinated with the following agencies:

- Gilchrist County A Special Use Permit has been obtained for the Project (Appendix A);
- U.S. Army Corps of Engineers A "No permit Required Letter" has been obtained from the Jacksonville District (Appendix B);
- Florida Department of Environmental Protection FRP has applied for an Individual Environmental Resource Permit application for the Project's stormwater management system, permit pending (Appendix F);
- Florida Division of Historical Resources Letter has been sent to the (DHR) requesting concurrence with the findings of the Project's CRAS (Appendix F);
- U.S. Fish and Wildlife Service (Appendix F); and
- Florida State Clearinghouse (Appendix F).



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Figures








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Appendix A Gilchrist County Special Use Permit



GILCHRIST COUNTY Division of Planning & Development

From:	David M. Lang, Jr. Gilchrist County Attorney
Date:	March 15, 2021
Case Type:	Special Use Permit
Case Number:	SUP 2021-01
Applicant/Owner:	FRP Gilchrist County Solar, LLC, as owner, applicant, and agent for Wylie Cobb, as owner
Property Address:	8740 SE 80 Ave., Newberry, Florida 32669; SE 90 Ave., Newberry, Florida 32669; Co. Grade, Newberry, Florida 32669; Off SE 90 Ave., Newberry, Florida; and 7829 SE SR 26, Trenton, Florida 32693
Parcel ID Number:	Tax Parcel Numbers 13-10-16-0000-0002-0000; 13-10-16-0000-0003-0000; 13-10-16-0000-0004-0000; 24-10-16-0000-0006-0010; 24-10-16-0000-0008-0010; 24-10-16-0000-0008-0010; 24-10-16-0000-0008-0020; and 02-10-16-0000-0009-0000.
Parcel Size:	581.24 acres, more or less
FLUM Designation:	Agriculture
Requested Special Use:	Solar Farm.

FINAL ORDER

Representatives of FRP Gilchrist County Solar, LLC, as owner, agent and applicant for Wylie Cobb, as owner, appeared before the Gilchrist County Board of County Commissioners, serving as the Planning Commission on March 15, 2021 requesting a Special Use Permit for a 74.5-MWac solar photovoltaic (PV) SOLAR FARM, together with appropriate fencing and landscaped buffers, in an Agriculture-2 (A-2) land use category, located on approximately 581.24 acres, more or less, with location described by the Gilchrist County Property Appraiser's Office as 8740 SE 80 Ave., Newberry, Florida 32669; SE 90 Ave., Newberry, Florida 32669; Co. Grade, Newberry, Florida 32669; Off SE 90 Ave., Newberry, Florida 32669; and 7829 SE SR 26, Trenton, Florida 32693 and with Tax Parcel Numbers specifically set-forth and described above, all lying and bring in Gilchrist County, Florida.

After required notice having been given, the County Commission conducted a quasi-judicial hearing with competent, substantial testimony and evidence proffered by all parties. At the conclusion of the hearing, the County Commission made the following findings and conclusions:

Findings and Conclusions

1. Section 12.03.03 of the Gilchrist County Land Development Code empowers the County Commission to approve, approve with conditions, or deny Special Use Permits.

2. The applicant submitted an application for Special Use Permit and supporting documentation for a Solar Farm, together with appropriate fencing and landscaped buffers, to be located on the premises in an Agriculture land use district on the Future Land Use Map. (Application and Staff Report are attached hereto as Composite Exhibit A and incorporated herein by reference).

3. The proposed use (Solar Farm) is allowed in the A-2 land use district by Special Use Permit in accordance with Section 2.06.02 (mm) of the Gilchrist County Land Development Code.

4. The general criteria for approval of a Special Use Permit is set forth in Section 12.03 of the Gilchrist County Land Development Code. Section 7.26 of the Gilchrist County Code sets forth the general criteria, definitions, and specific regulations for Solar Farms.

5. The general criteria for approval of a Special Use Permit are listed at subsection 12.03.03(c) of the Gilchrist County Land Development Code and are as follows:

a. That the proposed use and associated development is consistent with the Gilchrist County Comprehensive Plan, and complies with all required regulations and standards of the Land Development Code and other applicable regulations.

b. That the proposed use or development will have general compatibility and harmony with the uses and structures on adjacent and nearby properties.

c. That necessary public infrastructure is available to the proposed site and that the requirements of concurrency management have been fulfilled by the proposed use or development.

d. That the proposed use or development will have screening and buffers of such dimension, type and character to improve the compatibility and harmony with adjacent and nearby properties.

6. The applicant and the owner have been fully advised and informed of the requirements governing Solar Farms as set forth in Section 7.26, et. seq., of the Gilchrist County Land Development Regulations and agree to comply with all such requirements.

7. Subject to the conditions set forth below, the proposed use:

a. Is consistent with the Gilchrist County Comprehensive Plan, Land Development Code, and other applicable regulations.

b. Is generally compatible and harmonious with the uses and structures on adjacent and nearby property.

c. Has the necessary public infrastructure available to the site and the requirements of concurrency management have been met. A concurrency reservation is not being given concurrent with the Special Use Permit.

d. Will have screening and buffers of the dimension, type, and character to improve the compatibility and harmony with adjacent and nearby properties which will be more fully developed, identified, conditioned, and approved by the Board of County Commissioners and specifically shown on the Preliminary Development and Site Plan to be submitted for approval by the applicant prior to any improvements being made to the subject property.

8. The foregoing findings are based on evidence presented at the meeting, and the Staff Report which is attached hereto and incorporated herein as Composite Exhibit A and made a part hereof.

9. All of the above findings and conclusions are incorporated into this order and made a part hereof as if more fully written in their entirety below.

IT IS THEREFORE, ORDERED AND ADJUDGED THAT:

The application for a Special Use Permit by FRP Gilchrist County Solar, LLC, as owner, applicant, and agent for Wylie Cobb, as owner, for a 74.5-MWac solar photovoltaic (PV) Solar Farm, together with appropriate fencing and landscaped buffers, on approximately 581.24 acres located in an Agriculture-2 (A-2) land use district is GRANTED subject to the following conditions:

1. The Special Use Permit is issued to FRP Gilchrist County Solar, LLC, as owner, applicant, and agent for Wylie Cobb, as owner, for a 74.5-MWac solar photovoltaic (PV) Solar Farm, together with appropriate fencing and landscaping, on approximately 581.24 acres located in an A-2 land use district with property addresses as shown by the Gilchrist County Property Appraiser's Office as 8740 SE 80 Ave., Newberry, Florida 32669; SE 90 Ave., Newberry, Florida 32669; Co. Grade, Newberry, Florida 32669; Off SE 90 Ave., Newberry, Florida 32669; and 7829 SE SR 26, Trenton, Florida 32693. Gilchrist County Property Appraiser's Office Tax Parcel Numbers: 13-10-16-0000-0002-0000; 13-10-16-0000-0003-0000; 13-10-16-0000-0004-

0000; 24-10-16-0000-0006-0010; 24-10-16-0000-0007-0000; 24-10-16-0000-0008-0010; 24-10-16-0000-0008-0020; and 02-10-16-0000-0009-0000.

2. Any violation of this Special Use Permit (SUP) or conditions thereof, shall cause the revocation of this SUP by the Board of County Commissioners. Any change of use from the application submitted, shall require an amendment to the Special Use permit. The Board of County Commissioners shall hold a public hearing on the proposed revocation with the notice of public hearing provided by certified mail to the property owners. Evidence of violation of the SUP may be presented by any person including a resident, the County Code Enforcement Officer, or other County Official. Once the SUP has been revoked pursuant to this provision, the owners shall be prohibited from re-applying for s SUP for a Solar Farm on the premises without good cause shown to be determined in the sound discretion of the Board of County Commissioners.

3. Approval of this SUP does not alleviate the applicant and owner's obligation to obtain all other applicable County, State, and Federal permits that are required.

4. The applicant shall submit a Preliminary Site and Development Plan in accordance with Section 12.02 and Section 7.26 of the Gilchrist County Land Development Regulations for review and approval by the Board of County Commissioners, sitting also as the Planning Commission, for approval prior to the issuance of any building permits or development on the property described or referenced in this SUP. Following approval, the Final Site Plan shall be submitted to the Planning Director for approval or denial in accordance with Section 12.02 of the Gilchrist County Land Development Regulations.

5. Notwithstanding the provisions set forth in accordance with Section 12.03.03(e) of the Gilchrist County Land Development Code, upon request of the applicant and for good cause shown at the hearing, the Board has determined that this SUP shall expire three (3) years after the date it is rendered. In cases where hardship is shown, this deadline may be extended for a single one year period at the sole discretion of the Board so long as the extension is applied for in time to be heard by the Planning Commission prior to the expiration of the initial three-year period.

6. The Specific Regulations set forth in section 7.26.03 of the Gilchrist Land Development Code must be complied with including, but not limited to, resource protection, set-backs, landscaping, interconnection points and on-site power, height, secure fencing, signage, and reasonable accessibility for emergency services vehicles, and all requirements of the Florida Building Code and National Electric Code shall be fully complied with and shall be inspected by and approved by the Gilchrist County Building Inspector and/or a duly authorized and licensed Solar Farm or Solar Energy System inspector selected by the Building Inspector to assist them with any such inspections.

7. Additionally, no grid-tied system shall be installed until evidence has been given to Gilchrist County that the owner has been approved by the utility company to install the system. Evidence shall consist of an interconnection agreement from the utility company. Off-grid systems shall be exempt from this requirement.

8. Adequate provisions for noise control of inverters and related electrical equipment will be considered at the Site and Development Plan approval stage.

9. Because the Solar Farm is proposed to be constructed on property from which access shall be derived utilizing Gilchrist County unimproved limerock roadways, the applicant shall be required to keep the roadway in good, improved condition to ensure unimpeded ingress and egress to other properties by the general public and the applicant and owners shall be responsible for all road repairs of the existing public roadway accessing the solar farm as necessary and determined by the Gilchrist County Administrator as required during and until completion of the construction of the proposed solar farm.

10. Landscaping and buffering requirements in accordance with the Gilchrist County Land Development Regulations shall be determined and approved by the Board at the Preliminary Site and Development Plan approval hearing.

11. Photovoltaic and not thin-film solar panels shall be required for the project.

12. The applicant shall provide a decommissioning plan in recordable form for approval by the Board of County Commissioners at the Preliminary Site and Development Plan hearing to guarantee to the Board that provisions are in place for the applicant and/or the landowners to be fully responsible for cleaning-up the property and removing all installed equipment thereon, including the solar panels and related equipment, at the conclusion of the use of the premises as a Solar Farm. The decommissioning plan shall be in the form of a protective covenant running with the land to be recorded in the Official Records of Gilchrist County, Florida, in order to provide constructive notice on all parties of this requirement at the conclusion of the use of the property as a solar farm. The applicant has stated in its narrative to the Board that the project is anticipated to have an operational life span of approximately 30 years.

13. This Special Use Permit and the rights and privileges granted hereunder are specifically limited and exclusively granted to FRP Gilchrist County Solar, LLC, and to the property owners named herein, for use of the premises as a Solar Farm. This Special Use Permit and the approval and rights given hereunder may not be assigned by FRP Gilchrist County Solar, LLC to any third party without prior written notice given, and approval thereafter granted, by the Board of County Commissioners at a duly advertised public meeting called for such purpose.

14. The applicant and owners shall comply with all county, state, and federal requirements, as applicable, concerning any Special Flood Hazard Areas on the subject property.

15. As conditioned, the proposed use contained with this Special Use Permit:

a. Is consistent with the Gilchrist County Comprehensive Plan, Land Development Code, and other applicable regulations.

b. Is generally compatible and harmonious with the uses and structures on adjacent and nearby property.

c. Has the necessary public infrastructure available to the site and the requirements of concurrency management have been met. A concurrency reservation is not being given with this Special Use Permit.

d. Will have screening and buffers of the dimension, type, and character to maintain the compatibility and harmony with adjacent and nearby properties.

Dated this 23nd day of March 2021.



Board of County Commissioners of Gilchrist County, Florida

sharon A. Langford Chair

Attest:

Todd Newton Clerk to the Board of County Commissioners

Appendix B USACE No Permit Required Letter





DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS 4400 PGA BOULEVARD, SUITE 500 PALM BEACH GARDENS, FLORIDA 33410

December 21, 2020

REPLY TO ATTENTION OF

Regulatory Division North Permits Branch Jacksonville Permits Section SAJ-2020-04704 (NPR-TLO)

Florida Renewable Partners Attn: Mr. Ken Proctor 700 Universe Boulevard Juno Beach, FL 33408

Dear Mr. Proctor:

Reference is made to the application received on November 12, 2020, for a Department of the Army permit to perform work associated with the project identified as the Florida Renewable Partners' Gilchrist County Solar Energy Center project. The work involves the construction of a new 74.5-megawatt photovoltaic solar energy facility and related infrastructure within an approximate 576-acre land area. The facility will consist of solar photovoltaic panels, inverters, access pathways, collector lines, and a collector yard. The facility has been designed to minimize ground disturbance by installing solar arrays without requiring mass grading and construction of at-grade access pathways to the greatest extent possible. The purpose of the project is to provide clean, safe, and reliable energy to consumers in Florida. The project site is located near South East 80th Avenue, in Sections 13 and 24, Township 10 South, Range 16 East, Newberry, Gilchrist County, Florida. The application has been assigned the file number SAJ-2020-04704 (NPR-TLO).

The project as proposed will not require a Department of the Army permit in accordance with Section 10 of the Rivers and Harbors Act of 1899 as it is not located within the navigable waters of the United States. Furthermore, a permit will not be required in accordance with Section 404 of the Clean Water Act as it will not involve the discharge of dredged or fill material into waters of the United States. Provided the work is done in accordance with the enclosed drawings, Department of the Army authorization will not be required.

This letter contains an approved jurisdictional determination for your subject site. If you object to this determination/decision, you may request an administrative appeal under Corps' regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination/decision, you must submit a completed RFA form to the South Atlantic Division Office at the following address:

Mr. Phillip A. Shannin South Atlantic Division U.S. Army Corps of Engineers CESAD-CM-CO-R, Room 9M15 60 Forsyth St., SW. Atlanta, Georgia 30303-8801 Via electronic mail at Philip.A.Shannin2@usace.army.mil

Mr. Shannin can be reached by telephone number at 404-562-5136, or by facsimile at 404-562-5138.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division office within 60 days of the date of the RFA. Should you decide to submit an RFA form, it must be received at the above address by February 19, 2021. It is not necessary to submit an RFA form to the Division office, if you do not object to the determination/decision in this letter.

This determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work. Please be advised this determination reflects current policy and regulations and is valid for a period of no longer than 5 years from the date of this letter unless new information warrants a revision of the determination before the expiration date. If after the 5-year period, the Corps has not specifically revalidated this determination, it will automatically expire. Any reliance upon this determination beyond the expiration date may lead to possible violation of current Federal laws and/or regulation.

Additionally, your project site may contain species protected by the Endangered Species Act (ESA) of 1972, as amended. You should contact your local U.S. Fish and Wildlife Service (FWS) office to determine if federally listed species or their habitat are present on your project site. If it is determined that federally listed species may be affected by the proposed project, authorization for "incidental take" may be required. FWS offices can be contacted by the following telephone numbers: Jacksonville at 904-232-2580, Panama City at 850-769-0552, St. Petersburg at 727-570-5398, or Vero Beach at 772-562-3909.

This letter does not obviate the requirement to obtain any other Federal, State, or local permits that may be necessary for your project. Should you have any questions, please contact Tarrie Ostrofsky at the letterhead address, by telephone at 904-232-1237, or by email at Tarrie.L.Ostrofsky@usace.army.mil.

Thank you for your cooperation with our permit program. The Corps Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to take a few minutes to visit http://per2.nwp.usace.army.mil/survey.html and complete our automated Customer Service Survey. Your input is appreciated – favorable or otherwise. Please be aware this web address is case sensitive and should be entered as it appears above.

Sincerely,

Clif Pavne Chief, North Permits Branch

Enclosures

- 1. Notification of Administrative Appeal Options and Process and Request for Appeal
- 2. U.S. Army Corps of Engineers, Regulatory Program, Approved Jurisdictional Determination Form (Interim), Navigable Waters Protection Rule
- 3. Project Drawing

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Арр	licant: Florida Renewable Partners	File Number: SAJ-2020-04704	Date: 12-21-2020
Atta	iched is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit c	or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter	В	
	PERMIT DENIAL		С
Х	APPROVED JURISDICTIONAL DETERMINATION	D	
	PRELIMINARY JURISDICTIONAL DETERMINATI	ON	E
^	PRELIMINARY JURISDICTIONAL DETERMINATION	N ON	E

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

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

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

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

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

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

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

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

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

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

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

POINT OF CONTACT FOR QUESTIONS OR INFORMA	TION:	
If you have questions regarding this decision you may contact:	If you have questions regar may contact:	ding the appeal process you
Project Manager as noted in letter	Phillip A. Shannin 404-562-5136 or Philip.A.S	Shannin2@usace.army.mil
RIGHT OF ENTRY: Your signature below grants the rig government consultants, to conduct investigations of the You will be provided a 15-day notice of any site investigations.	ht of entry to Corps of Engine project site during the course ation, and will have the oppor	eers personnel, and any e of the appeal process. tunity to participate in all site
Signature of appellant or agent	Date:	Telephone number:



U.S. ARMY CORPS OF ENGINEERS REGULATORY PROGRAM APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM) NAVIGABLE WATERS PROTECTION RULE

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 12/21/2020 ORM Number: SAJ-2020-04704 Associated JDs: N/A Review Area Location¹: State/Territory: FL City: Newberry County/Parish/Borough: Gilchrist Center Coordinates of Review Area: Latitude 29.61249 Longitude -82.66944

II. FINDINGS

- **A. Summary:** Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.
 - The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: The Area of Review encompasses approximately 576 acres. Reivew of the information and data provided by the applicant (Florida Power & Light Company), maps identified under Section III.A., and additional comments identified under Section III.D., indicates that the site is comprised entirely of dry land, as no features exhibiting the characteristics of wetlands, tributaries, or other water features were identified as being present within the Area of Review.
 - □ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
 - □ There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
 - □ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size)	§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): ³						
(a)(1) Name	(a)(1) Siz	e	(a)(1) Criteria	Rationale for (a)(1) Determination		
N/A.	N/A.	N/A.	N/A.	N/A.		

Tributaries ((a)(2) waters):						
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination		
N/A.	N/A.	N/A.	N/A.	N/A.		

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):					
(a)(3) Name	(a)(3) Siz	e	(a)(3) Criteria	Rationale for (a)(3) Determination	
N/A.	N/A.	N/A.	N/A.	N/A.	

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



U.S. ARMY CORPS OF ENGINEERS REGULATORY PROGRAM APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM) NAVIGABLE WATERS PROTECTION RULE

Adjacent wetlands ((a)(4) waters):						
(a)(4) Name	(a)(4) Siz	e	(a)(4) Criteria	Rationale for (a)(4) Determination		
N/A.	N/A.	N/A.	N/A.	N/A.		

D. Excluded Waters or Features

Excluded waters ((b)(1) - (b))(12)):4		
Exclusion Name	Exclusior	n Size	Exclusion ⁵	Rationale for Exclusion Determination
N/A.	N/A.	N/A.	N/A.	N/A.

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

Information submitted by, or on behalf of, the applicant/consultant: Location Map, Plans, Aerial

Photographs, Soil Survey Maps, submitted on November 12, 2020 by the Florida Power & Light Company. This information is sufficient for purposes of this AJD.

Rationale: N/A

Data sheets prepared by the Corps: Title(s) and/or date(s).

Photographs: Aerial and Other: Aerial photographs obtained using Google Earth Maps, prepared on November 10, 2020, for the following years: 1994, 1999, 2008, 2019. Site photographs taken in June 2020, submitted by the Florida Power & Light Company.

- \Box Corps site visit(s) conducted on: Date(s).
- Previous Jurisdictional Determinations (AJDs or PJDs): ORM Number(s) and date(s).
- Antecedent Precipitation Tool: *provide detailed discussion in Section III.B.*

☑ USDA NRCS Soil Survey: U.S. Department of Agriculture, Natural Resources Conservation Service, Washington, D.C. Web Soil Survey from https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Soil Survey Map entitled: Soil Map – Gilchrist County, Florida (SAJ-2020-04704). Map prepared on December 4, 2020.

☑ USFWS NWI maps: U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. National Wetlands Inventory map, from https://www.fws.gov/wetlands/data/mapper.html. Map entitled: SAJ-2020-04704. Map prepared on December 4, 2020.

USGS topographic maps: 1:24K Quad Name: Newberry SW

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
USDA Sources	N/A.
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	Florida Land Use, Cover, and Forms Classification System (FLUCFCS) Map
Other Sources	N/A.

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



U.S. ARMY CORPS OF ENGINEERS REGULATORY PROGRAM APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM) NAVIGABLE WATERS PROTECTION RULE

B. Typical year assessment(s): N/A

C. Additional comments to support AJD: The Area of Review consists of an approximately 576-acre site. The site has predominantly and historically been subjected to agricultural activities. In present times, approximately 71 percent of the lands within the AOR are in agricultural land use, with a mix of row crops and field crops. Active farming activities were occurring during the consultants' site investigation. Additionally, the Area of Review is bisected by an existing utility corridor containing both a 230-kilovolt transmission line and an intra-state natural gas pipeline. Other areas not currently in agricultural land use are identified as sandhill habitat. Review of aerial photographs further indicates that the lands within the Area of Review have primarily historically been utilized for agricultural purposes. Review of the aerial photograps also indicates that lands within the Area of Review may also have been utilized for silviculture purposes. Review of site delineation information submitted by the consultants taken during their site investigation on June 12, 2020 indicates that no hydrology indicators, hydric soils, or hydrophytic vegetation were identified within the Area of Review. Review of the U.S. Department of the Interior, Fish and Wildlife Service, National Wetlands Inventory map does not identify any aquatic features as being present within, or directly adjacent to, the Area of Review. Review of the Natural Resource Conservation Service, Soil Survey map indicates that the soil types located within the Area of Review are identified as non-hydric. Review of the FLUCFCS map identifies the Area of Review as containing the land uses of predominantly Forested Regeneration Areas (FLUCFCS 443) and a small portion identified as Mixed Rangeland (FLUCFCS 330). The Area of Review is surrounded by the land uses identified as Pine Flatwoods (FLUCFCS 411) to the north, Unimproved Pastures (FLUCFCS 212) to the northwest, Mixed Rangeland (FLUCFCS 330) to the east, Transportation (FLUCFCS 812) and Electrical Power Transmission Lines (FLUCFCS 832) to the south, and Improved Pastures (211) to the west. Based on the above findings, the Area of Review is comprised entirely of dry land, as no indicators of waters or water features, including wetland indicators of hydrology, hydric soils, or hydrophytic vegetation, of any kind have been identified within the entire review area.



NAD 1983 StatePlane Florida West FIPS 0902 FeetTransverse Mercator





SAJ-2020-04704 (NPR-TLO)

SAJ-2020-04704 (NPR-TLO)



Appendix C Representative Site Photographs





Photograph No. 1 Row crop (melon) fields in the central portion of the site.



Photograph No. 2 Remnant upland forest community (oak-pine) in the central portion of the site.



Photograph No. 3 Row crop (melon) fields.



Photograph No. 4 Row crop (tobacco) fields in the northern portion of the site.



Photograph No. 5 Live oak hammock in the eastern portion of the site.



Photograph No. 6 Row crop (peanut) fields in the northeast portion of the site.



Photograph No. 7 Existing overhead transmission line intersecting the site.



Photograph No. 8 Agricultural fields in the southern portion of the site.



Photograph No. 9 Woodland pasture in the southern portion of the site.



Photograph No. 10 Existing conditions in the proposed collector substation site.
Appendix D Web Soil Survey Map Report





USDA Natural Resources Conservation Service Web Soil Survey National Cooperative Soil Survey



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

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the
- growing season Farmland of statewide importance, if irrigated and drained

1990 B

- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
 Farmland of statewide importance, if subsoiled.
- completely removing the root inhibiting soil layer Farmland of statewide importance, if irrigated

and the product of I (soil erodibility) x C (climate factor) does not exceed 60

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

Farmland of unique importanceNot rated or not available

Soil Rating Points

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

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



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indexted uning the growing season Farmland of statewide importance, if irrigated and rained Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season Streams and Canals Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857) Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if warm enough, and either drained or either drained or either drained or either drained or either growing season Interstate Highways importance, if warm enough, and either drained or either enough Source of Map: Natural Resources Conservation Service Web Soil Survey JRL: Coordinate System: Web Mercator (ESRCE) Farmland of statewide importance, if warm enough Farmland of statewide importance, if warm enough Interstate Highways background Major Roads background Major Roads background Farmland of statewide importance, if warm enough Farmland of statewide importance, if warm enough Farmland of statewide importance, if irrigated Major Roads Soil Survey Area: Gilchrist County, Florida Survey Area Data: Version 19, Sep 1, 2022 Soil ang units are labeled (as space allows) for map scales 1:50,000 or larger.			er protected from ding or not frequently	and reclaimed of excess salts and sodium		Not rated or not available	Please rely on the bar scale on each map sheet for map
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 and either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if warm enough, and either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if subsolied, completely removing the root inhibiting soil layer Farmland of statewide importance, if warm enough Farmland of statewide importance, if irrigated Farmland of local importance, if irrigated Farmland of local importance, if irrigated Wajor Roads Local Roads Background Aerial Photography Soil Survey Area: Gilchrist County, Florida Survey Area Data: Version 19, Sep 1, 2022 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Jan 9, 2022—Feb 10, 2022 The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor schling and either of the product or the problem of the product or the problem of the product or the		importance, if irrigated		Farmland of statewide	~	Interstate Highways	Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts
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 as of the version date(s) listed below. Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 Farmland of local importance, if irrigated 		Farmland of statewide		not frequently flooded during the growing	\sim	Local Roads	This product is generated from the USDA-NRCS certified data
 root inhibiting soil layer Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 Farmland of statewide importance, if thawed Farmland of statewide importance, if thawed Farmland of local importance, if irrigated Farmland of local Farmland of		importance, if subsoiled, completely removing the	ed, he	season	Background		as of the version date(s) listed below.
 Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 Farmland of statewide importance, if thawed Farmland of statewide importance, if thawed Farmland of local importance, if irrigated Survey Area Data: Version 19, Sep 1, 2022 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Jan 9, 2022—Feb 10, 2022 The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of man unit boundaries may be evident 		root inhibiting soil layer		Farmland of statewide	No.	Aerial Photography	Soil Survey Area: Gilchrist County, Florida
and the product of I (soil erodibility) x C (climate factor) does not exceed 60 Farmland of local importance, if thawed 60 Farmland of local importance 60 Farmland of local importance, if irrigated Farmland of local importance, if irrigated		Farmland of statewide importance, if irrigated and the product of I (soil		enough			Survey Area Data: Version 19, Sep 1, 2022
erodibility) x C (climate factor) does not exceed 60 Farmland of local importance, if thawed 1:50,000 or larger. Date(s) aerial images were photographed: Jan 9, 2022—Feb 10, 2022 The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident				Farmland of statewide			Soil map units are labeled (as space allows) for map scales
60 Parmand of local importance Date(s) aerial images were photographed: Jan 9, 2022—Feb 60 Farmland of local importance, if irrigated Date(s) aerial images were photographed: Jan 9, 2022—Feb 7 Farmland of local importance, if irrigated The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident		erodibility) x C (climate factor) does not exceed	_	importance, if thawed			1:50,000 or larger.
 Farmland of local importance, if irrigated The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident 		60		importance			Date(s) aerial images were photographed: Jan 9, 2022—Feb
importance, if irrigated The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident				Farmland of local			10, 2022
				importance, if irrigated			The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident



Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
2	Penney fine sand, 0 to 5 percent slopes	Not prime farmland	167.1	28.1%
3	Penney fine sand, 5 to 8 percent slopes	Not prime farmland	168.0	28.2%
9	Hurricane fine sand, 0 to 5 percent slopes	Not prime farmland	0.8	0.1%
13	Wadley fine sand, 0 to 5 percent slopes	Not prime farmland	185.9	31.2%
15	Blanton fine sand, 0 to 5 percent slopes	Not prime farmland	14.4	2.4%
29	Shadeville-Otela fine sands, 0 to 5 percent slopes	Not prime farmland	9.5	1.6%
35	Alpin fine sand, 0 to 5 percent slopes	Not prime farmland	49.6	8.3%
Totals for Area of Interest			595.4	100.0%

Description

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

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Appendix E EPA EJScreen Report





EJSCREEN ACS Summary Report



Location: User-specified polygonal location

Ring (buffer): 0-miles radius

Description: Gilchrist County

Summary of ACS Estimates	2014 - 2018
Population	17,615
Population Density (per sq. mile)	50
People of Color Population	2,383
% People of Color Population	14%
Households	6,511
Housing Units	7,486
Housing Units Built Before 1950	307
Per Capita Income	22,139
Land Area (sq. miles) (Source: SF1)	349.69
% Land Area	98%
Water Area (sq. miles) (Source: SF1)	5.55
% Water Area	2%

	2014 - 2018 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	17,615	100%	463
Population Reporting One Race	17,337	98%	788
White	16,104	91%	467
Black	1,110	6%	203
American Indian	31	0%	32
Asian	38	0%	29
Pacific Islander	0	0%	19
Some Other Race	54	0%	38
Population Reporting Two or More Races	278	2%	59
Total Hispanic Population	998	6%	134
Total Non-Hispanic Population	16,617		
White Alone	15,232	86%	460
Black Alone	1,079	6%	190
American Indian Alone	4	0%	19
Non-Hispanic Asian Alone	38	0%	29
Pacific Islander Alone	0	0%	19
Other Race Alone	0	0%	19
Two or More Races Alone	264	1%	59
Population by Sex			
Male	9,249	53%	283
Female	8,366	47%	265
Population by Age			
Age 0-4	851	5%	105
Age 0-17	3,562	20%	281
Age 18+	14,053	80%	466
Age 65+	3.517	20%	228

 Data Note:
 Detail may not sum to totals due to rounding.
 Hispanic population can be of any race.

 N/A means not available.
 Source:
 U.S. Census Bureau, American Community Survey (ACS) 2014 - 2018



EJSCREEN ACS Summary Report



Location: User-specified polygonal location Ring (buffer): 0-miles radius

Description: Gilchrist County

	2014 - 2018 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	11,890	100%	298
Less than 9th Grade	584	5%	153
9th - 12th Grade, No Diploma	1,089	9%	116
High School Graduate	5,017	42%	284
Some College, No Degree	3,515	30%	237
Associate Degree	1,321	11%	136
Bachelor's Degree or more	1,685	14%	185
Population Age 5+ Years by Ability to Speak English	, i i i i i i i i i i i i i i i i i i i		
Total	16.764	100%	450
Speak only English	15,869	95%	426
Non-English at Home ¹⁺²⁺³⁺⁴	895	5%	112
¹ Speak English "very well"	554	3%	83
² Speak English "well"	84	1%	38
³ Speak English "not well"	225	1%	97
⁴ Speak English "not at all"	32	0%	26
³⁺⁴ Speak English "less than well"	257	2%	97
²⁺³⁺⁴ Speak English "less than very well"	341	2%	103
Linguistically Isolated Households*			
Total	97	100%	54
Speak Spanish	97	100%	51
Speak Other Indo-European Languages	0	0%	19
Speak Asian-Pacific Island Languages	0	0%	19
Speak Other Languages	0	0%	19
Households by Household Income			
Household Income Base	6.511	100%	198
< \$15.000	833	13%	127
\$15.000 - \$25.000	841	13%	152
\$25,000 - \$50,000	2.049	31%	229
\$50,000 - \$75,000	1.076	17%	126
\$75.000 +	1.712	26%	166
Occupied Housing Units by Tenure	,		
Total	6.511	100%	198
Owner Occupied	5.441	84%	224
Renter Occupied	1 070	16%	132
Employed Population Age 16+ Years	1,010	1070	102
Total	14,590	100%	375
In Labor Force	7,215	49%	344
Civilian Unemployed in Labor Force	440	3%	85
Not In Labor Force	7.375	51%	292

DataNote:Datail may not sum to totals due to rounding.Hispanic population can be of anyrace.N/Ameans not available.Source:U.S. Census Bureau, American Community Survey (ACS)*Households in which no one 14 and over speaks English "very well" or speaks English only.



EJSCREEN ACS Summary Report



Location: User-specified polygonal location Ring (buffer): 0-miles radius Description: Gilchrist County

	2014 - 2018 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home [*]			
Total (persons age 5 and above)	16,764	100%	450
English	15,869	95%	437
Spanish	748	4%	126
French	12	0%	19
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	12	0%	19
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	0	0%	19
Chinese	24	0%	29
Japanese	N/A	N/A	N/A
Korean	0	0%	19
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	0	0%	19
Other Asian	17	0%	28
Tagalog	3	0%	19
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	11	0%	19
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	0	0%	19
Total Non-English	895	5%	627

Data Note: Detail may not sum to totals due to rounding. Hispanic popultion can be of any race. N/A meansnot available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2014 - 2018. *Population by Language Spoken at Home is available at the census tract summary level and up. Appendix F Other Agency Consultation





FLORIDA DEPARTMENT Of STATE

RON DESANTIS Governor **LAUREL M. LEE** Secretary of State

Brent M. Handley Terracon Consultants Inc. 8801 Baymeadows Way, Suite 1 Jacksonville, FL 32256 June 7, 2021

RE: DHR Project File No.: 2021-2787-A Received by DHR: May 12, 2021 Cultural Resource Assessment Survey of the Gilchrist County Solar Energy Center

Dear Mr. Handley:

Our office reviewed the referenced project in accordance with Chapter 267.061, *Florida Statutes*, and implementing state regulations for possible effects on historic properties listed in, or eligible for, the *National Register of Historic Places* (NRHP), or otherwise of historical, architectural, or archaeological value. In February and March of 2021, Terracon Consultants Inc., (TCI) conducted the above referenced Phase I cultural resource assessment survey (CRAS) on behalf of Environmental Consulting & Technology, Inc. The project is subject to compliance with Florida Department of Environmental Protection (DEP) permit 0403244-001-EI.

One archaeological site and one archaeological occurrence were encountered. The site is a low density lithic scatter that TCI recommends as not eligible for NRHP inclusion. By definition, archaeological occurrences are not NRHP eligible. In addition, two historic structures (and) were recorded outside the project boundaries. These two mid-twentieth century residences are also recommended as not NRHP eligible. These structures will not be impacted by the present project. TCI encountered no other cultural resources within the 570-acre APE during their investigation. TCI proposes that this project will have no effect on cultural resources listed, or eligible for listing in the NRHP, or otherwise of archaeological, historical, or architectural significance within the survey area. TCI recommends no additional work in the APE.

Based on the information provided, our office concurs with the presented survey results and recommendations, and determined that the proposed project will likely have no effect on historic properties listed, or eligible for listing, on the NRHP, or otherwise of historical, architectural, or archaeological value. Further, we find the submitted report complete and sufficient in accordance with Chapter 1A-46, *Florida Administrative Code*. If I can be of any further help, or if you have any questions about this letter, please feel free to contact Clete Rooney at *Cletus.Rooney@dos.myflorida.com*.

Sincerely,

Timothy A. Parsons, Ph.D. Director, Division of Historical Resources and State Historic Preservation Officer

Division of Historical Resources R.A. Gray Building • 500 South Bronough Street • Tallahassee, Florida 32399 850.245.6300 • 850.245.6436 (Fax) • FLHeritage.com



Matthew D. Goff

From:	Stahl, Chris <chris.stahl@floridadep.gov></chris.stahl@floridadep.gov>
Sent:	Monday, August 30, 2021 1:20 PM
То:	Matthew D. Goff
Cc:	State_Clearinghouse
Subject:	State Clearance Letter for FL202107149285C- Develop the FRP Gilchrist County Solar Project, Gilchrist County, Florida

August 30, 2021

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

RE: US Department of Agriculture, Rural Utilities Service, Develop the FRP Gilchrist County Solar Project, Gilchrist County, Florida SAI # FL202107149285C

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 <u>Rachel.Thompson@dos.myflorida.com</u>, 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 <u>State.Clearinghouse@floridadep.gov</u>

Amanda Koonjebeharry

From:	Gawera, Erin <erin_gawera@fws.gov></erin_gawera@fws.gov>
Sent:	Friday, June 16, 2023 4:59 PM
То:	Amanda Koonjebeharry
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: <u>erin_gawera@fws.gov</u> <u>https://www.fws.gov/office/florida-ecological-services</u> 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 Koonjebeharry <akoonjebeharry@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 Koonjebeharry, PMP

Project Manager II

Environmental Consulting & Technology, Inc.

3751 Maguire Boulevard | Suite #234 | Orlando, FL 32803 C: 941.806.9586 | <u>akoonjebeharry@ectinc.com</u>





Via Electronic Mail

April 10, 2023 ECT No. 210150

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.

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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 at (941) 806-9586 or akoonjebeharry@ectinc.com.



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

Sincerely, ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Amanda Koonjebeharry, PMP Senior Project Manager

AK/ks

Kaili Stevens, WDEG, PMP

Raili Stevens, WDEG, PM Project Manager II

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
(B) Project Description	Adversely Affect" determination for any protected resource?
(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"
(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 (<u>http://ecos.fws.gov/ipac/</u>). 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



FRP Gilchrist Solar ESA Consultation Page 2

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	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

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 Koonjebeharry, PMP	Project Manager II	Environmental Consulting & Technology, Inc



FRP Gilchrist Solar ESA Consultation Page 3

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: <u>fw4flesregs@fws.gov</u> 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: <u>https://www.google.com/maps/@29.61522445,-82.66948643578522,14z</u>



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. <u>NOAA Fisheries</u>, 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: <u>https://ecos.fws.gov/ecp/species/10477</u>	Threatened
Reptiles NAME	STATUS
Eastern Indigo Snake Drymarchon couperi No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/646</u>	Threatened
Insects NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/9743</u>	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 <u>National Wildlife Refuge</u> 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 Act^{1} and the Bald and Golden Eagle Protection Act^{2} .

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 <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The <u>Bald and Golden Eagle Protection Act</u> 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 <u>https://ecos.fws.gov/ecp/species/9587</u>	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 Ardea herodias occidentalis 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 <u>https://www.fws.gov/library/</u> <u>collections/avoiding-and-minimizing-incidental-take-migratory-birds</u>
- Nationwide conservation measures for birds <u>https://www.fws.gov/sites/default/files/</u> <u>documents/nationwide-standard-conservation-measures.pdf</u>

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 <u>Birds of Conservation Concern</u> (<u>BCC</u>) 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 <u>Avian</u> <u>Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> 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 (<u>Eagle Act</u> 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 <u>Rapid Avian Information</u> <u>Locator (RAIL) Tool</u>.

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 <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey, banding, and citizen science datasets</u>.

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 <u>RAIL Tool</u> 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 <u>Birds of Conservation Concern</u> (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 <u>Eagle Act</u> 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 <u>Northeast Ocean Data Portal</u>. 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 <u>NOAA NCCOS Integrative Statistical</u> <u>Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic</u> <u>Outer Continental Shelf</u> 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 <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> 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 <u>NWI wetlands</u> 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>U.S. Army Corps of</u> <u>Engineers District</u>.

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

 Agency:
 N/A

 Name:
 Nathaniel Goddard

 Address:
 2513 Regal Oaks Ln

 City:
 Lutz

 State:
 FL

 Zip:
 33559

 Email
 nategoddard@yahoo.com

 Phone:
 3522819787

Lead Agency Contact Information

Lead Agency: Department of Agriculture

Name: Nathaniel Goddard

Email: nategoddard@yahoo.com

Phone: 3522819787

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 unde <u>Section 7 of the Endangered Species Act (16 U.S.C. 1536 (c))</u>.

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

Table Of Contents

1 Description of the action	4
1.1 Project name	4
1.2 Executive summary	4
1.3 Effect determination summary	4
1.4 Project description	5
1.4.1 Location	5
1.4.2 Description of project habitat	5
1.4.3 Project proponent information	6
1.4.4 Project purpose	6
1.4.5 Project type and deconstruction	6
1.4.6 Anticipated environmental stressors	8
1.5 Action area	9
1.6 Conservation measures	9
1.6.1 utilization of standard protection measures for the eastern indigo snake	9
1.7 Prior consultation history	10
1.8 Other agency partners and interested parties	10
1.9 Other reports and helpful information	10
2 Species effects analysis	11
2.1 Eastern Black Rail	11
Relevant documentation	11
Justification for exclusion	11
2.2 Eastern Indigo Snake	11
2.2.1 Status of the species	11
2.2.2 Environmental baseline	12
2.2.3 Effects of the action	13
2.2.4 Cumulative effects	14
2.2.5 Discussion and conclusion	14
Relevant documentation	14
2.3 Monarch Butterfly	14
Justification for exclusion	14
3 Critical habitat effects analysis	15
4 Summary Discussion and Conclusion	16
4.1 Summary discussion	16
4.2 Conclusion	16

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) 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.

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

1.3 Effect Determination Summary

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	STATE
Lutz	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.

1.4.5.1 Project map



LEGEND

Project footprint

Layer 1: Photovoltaic solar power plant (structure)

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.

1.5 Action Area



1.6 Conservation Measures

1.6.1 utilization of standard protection measures for the eastern indigo snake

Description

adhering to the guidelines stipulated in the March 2021 publication of the Standard Protection Measures for the Eastern Indigo Snake

Direct interactions

• <u>disturbance</u>

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 <u>ECOS species profile</u>.

2.2.1.2 Recovery plans

Available recovery plans for the Eastern Indigo Snake can be found on the <u>ECOS</u> <u>species profile</u>.

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

<u>Gopher Tortoise survey</u>

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.

DIRECT IMPACT	CONSERVATION	INDIVIDUALS	IMPACT
	MEASURES	IMPACTED	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.

2.2.3.2 Direct interactions

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

- <u>Gopher Tortoise survey</u>
- 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 recolonization 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.

May 17, 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 Gilchrist County Solar Project: Request for Information

Dear Ms. Dziergowski:

FRP Gilchrist County Solar, LLC (Gilchrist Solar) is seeking financial assistance from the U.S. Department of Agriculture's (USDA) Rural Utilities Service (RUS) for their FRP Gilchrist Solar Project (Project) under its direct loan program, pursuant to the Rural Electrification Act of 1936. FRP Gilchrist County 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 South East 80th Avenue, in Gilchrist County, 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 578 acres of land for the solar array, which is currently used for agricultural purposes, and 3.5 acres for an associated proposed collector substation. A proposed overhead electrical distribution line will connect the collector substation to the solar facility within a 30-foot easement located on the west side of S.E. 80th Avenue. Project facilities will be constructed entirely within uplands, much of which (439 acres) has been previously converted to agriculture. The remainder consists of remnant patches of upland forest. Adjacent land use consists primarily of agriculture and rural residential.

There are no wetlands or surface waters within the Project boundary. A No Permit Required letter was issued for the Project by the Jacksonville District of the U.S. Army Corps of Engineers (USACE) on December 21, 2020.

Construction of the Project is anticipated to start on or around October 1, 2022 and is expected to conclude by Summer 2023. 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



Annie Dziergowski USFWS May 17, 2021 Page 2

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 three federally listed species with potential to occur in the Project area, and two Birds of Conservation Concern (Table 1; Attachment C).

in the rise county solar roject fied in dienist county, norda.			
Species	Critical Habitat	Status	
Eastern indigo snake (Drymarchon corais couperi)	Not present	Federally Threatened	
Wood stork (Mycteria americana)	Not present	Federally Threatened	
Eastern black rail (<i>Laterallus jamaicensis</i>)	Not present	Federally Threatened	
Gopher Tortoise (Gopherus polyphemus)	Not present	Candidate Species	
American kestrel (<i>Falco</i> sparverius paulus)	N/A	Bird of Conservation Concern	
Red-headed woodpecker (Melanerpes erythocephalus)	N/A	Bird of Conservation Concern	

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

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

Biological resource evaluations documenting vegetative communities, wildlife use observations, and water resources was conducted in 2017, 2020, and 2021. Suitable habitat for the eastern black rail and wood stork is not present. 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 2017, thirty potentially-occupied burrows were documented. 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.

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



Annie Dziergowski USFWS May 17, 2021 Page 3

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

Josteved

Christopher Wu Senior Manager





ATTACHMENT A

USFWS IPaC Report, January 2023

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.



Local office

Florida Ecological Services Field Office

\$ (772) 562-3909

(772) 562-4288

✓ <u>fw4flesregs@fws.gov</u>

1339 20th Street Vero Beach, FL 32960-3559

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

NOTFORCONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

 Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status</u> <u>page</u> for more information. IPaC only shows species that are regulated by USFWS (see FAQ). 2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Eastern Black Rail Laterallus jamaicensis ssp. jamaicensis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10477	Threatened
Reptiles	10.
NAME	STATUS
Eastern Indigo Snake Drymarchon couperi Wherever found No critical habitat has been designated for this species. <u>https://ecos.fws.gov/ecp/species/646</u>	Threatened
Insects	
NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. <u>https://ecos.fws.gov/ecp/species/9743</u>	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act^{1} and the Bald and Golden Eagle Protection Act^{2} .

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 <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The <u>Bald and Golden Eagle Protection Act</u> of 1940.

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 <u>https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds</u>
- Nationwide conservation measures for birds <u>https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf</u>

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 <u>E-bird data mapping tool</u> (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 <u>below</u>.

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
 Falco sparverius paulus
 Breeds Apr 1 to Aug 31

 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

Bald Eagle Haliaeetus leucocephalus 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.

Chimney Swift Chaetura pelagica This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Great Blue Heron Ardea herodias occidentalis This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Red-headed Woodpecker Melanerpes erythrocephalus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

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

Breeds Sep 1 to Jul 31

Breeds Mar 15 to Aug 25

Breeds Jan 1 to Dec 31

Breeds May 10 to Sep 10

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.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

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.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.



Red-headed	
Woodpecker	
BCC	
Rangewide	
(CON)	

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 <u>Birds of Conservation Concern (BCC)</u> 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 <u>Avian Knowledge</u> <u>Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science</u> <u>datasets</u> 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 (<u>Eagle Act</u> 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 <u>Rapid Avian Information Locator (RAIL) Tool</u>.

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 <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey, banding,</u> <u>and citizen science datasets</u>.

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 <u>RAIL Tool</u> 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 <u>Birds of Conservation Concern</u> (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 <u>Eagle Act</u> 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 <u>Northeast Ocean</u> <u>Data Portal</u>. 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 <u>NOAA NCCOS Integrative Statistical Modeling and Predictive</u> <u>Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf</u> 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 <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> 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

IPaC: Explore Location resources

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.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> 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 at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to <u>NWI wetlands</u> 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>U.S. Army Corps of</u> <u>Engineers District</u>.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the <u>NWI map</u> to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix G Cultural Resources Discovery 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.

USDA RUS Federal Preservation Officer	Basia M. Howard
	Archaeologist, Rural Utilities Service
	U.S. Department of Agriculture
	(202) 205-9756 (office)
	basia.howard@usda.gov
FRP Construction Compliance Environmental	John Tessier
Lead (FRP-CCEL)	NextEra Energy
	700 Universe Boulevard, JES/JB
	Juno Beach, Florida 33408
	561-694-4131 (office)
	John.Tessier@nee.com
Seminole Tribe of Florida THPO Office	Tina Osceola
	Tribal Historic Preservation Officer
	30290 Josie Billie Highway, PMB 1004
	Clewiston, FL 33440
	863-983-6549 (office)
	TinaOsceola@semtribe.com
Florida State Historic Preservation Office (SHPO)	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
FRP Archaeologist	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
FRP Tribal Relations	Desiree Estabrook, AICP, CNU-A
	Florida Renewable Partners
	700 Universe Boulevard, E5E
	Juno Beach, Florida 33408
	561-310-8843 (cell)
	Desiree.Estabrook@nee.com

FINAL

Appendix H Gilchrist County – Surrounding Development Inquiry



Bobby Crosby Gilchrist County Administrator 209 SE First Street Trenton, FL 32693 352-463-3198 – Phone 352-463-3411 - Fax

October 5, 2022

Craig Brashier, Director of Planning CHW 11801 Research Drive Alachua, FL 32615

RE: FRP Gilchrist County Facility – Surrounding Development Inquiry

Dear Mr. Brashier,

This letter is response to a request for information regarding any known major developments within a five-mile radius of the FRP Gilchrist County Solar Energy Collection Facility approved by a Final Order for SUP 2021-01. The subject property is approximately 581 acres and generally located south of SE 80th Street and east of SE 80th Avenue.

To the best of my knowledge there are no proposed projects, new projects, or projects under construction in Gilchrist County that would change or alter the rural nature of this area.

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

Sincerely,

Bobby Crosby Gilchrist County Administrator