

# **Environmental Assessment**

## **Determinations and Compliance Findings for HUD-assisted Projects**

### **24 CFR Part 58**

#### **Project Information**

**Project ID:** PR-RGRW-00018

**Project Name:** Rafael Principe Santiago, Hacienda Raxel

**Responsible Entity:** Puerto Rico Department of Housing

**Grant Recipient** (if different than Responsible Entity): Same as above

**State/Local Identifier:** Puerto Rico/Carolina, PR

**Preparer:** Clifford Jarman

**Certifying Officer Name and Title:** Permit and Compliance Officer: Pedro De Leon Rodriguez, MSEM.

**Consultant** (if applicable): Tetra Tech, 251 Calle Recinto Sur, Ste. 202, San Juan, PR 00091

**Direct Comments to:** Cliff Jarman, (clifford.jarman@tetrattech.com)

#### **Project Location:**

The property is a 13.73-acre site located at Carr. PR-185 Km 15.7, Bo. Cedro in the Municipality of Carolina, Puerto Rico (Parcel ID # 200-000-002-70-000). The proposed project sites are located north and west of the of the residence at 18.275887, -65.913053.

#### **Description of the Proposed Project** [24 CFR 58.32; 40 CFR 1508.25]:

The proposed use of grant funds is for the construction of three 100-foot by 30-foot greenhouses and installation of a water supply well. Two of the greenhouses would be constructed side by side on a 140-foot by 100-foot terrace located northwest of the residence at 18.2764318, -65.9134952. Another greenhouse would be constructed on a approximately 170-foot by 50-foot terrace located west of the residence at 18.27577, -65.91444.

The project includes drilling a 500' deep water well located to the north of the residence at 18.27632, -65.91307. The installation of the well would include an electric pump and connection to electric supply. The applicant indicates that he holds a permit for the well from the Department of Natural and Environmental Resources of Puerto Rico.

These activities will require ground disturbance. The areas were previously cleared and graded as part of farming operations.

Previously used as a coffee plantation, the land at Hacienda Rexel is currently used for cocoa and plantain cultivation.

Site photos are included in Appendix A. A site map is included in Appendix B (Figure 1).

**Statement of Purpose and Need for the Proposal** [40 CFR 1508.9(b)]:

The Re-Grow Puerto Rico Urban-Rural Agriculture Program (RGRW) will increase agricultural capacity while promoting and increasing food security island-wide. This Program will enhance and expand agricultural production related to economic revitalization and sustainable development activities. This agricultural project associated with the construction of new greenhouses and water well is in keeping with the overall objectives of the Economic Development Program.

**Existing Conditions and Trends** [24 CFR 58.40(a)]:

The proposed project site is on an existing farm. The ground clearing in the project area has already been completed. The proposed action would not result in any change in land use.

**Structure of this Environmental Review Report (ERR).**

This ERR discusses the Funding Information immediately below. The environmental impacts of the proposed action are discussed in the Compliance with 24 CFR 58.5 and 58.6 Laws and Authorities checklist and Environmental Factors checklist. The listing of Additional Studies Performed, and Sources, Agencies and Persons Consulted follows the checklists. The discussions of Public Outreach, Cumulative Impacts, Alternatives, and Summary of Findings and Conclusions are presented at the end of the ERR, before the listing of Mitigation Measures and Determination signatures. The appendices contain detailed information.

- Appendix A – Site Inspection
- Appendix B – Maps
- Appendix C – Additional Documentation
- Appendix D – Endangered Species
- Appendix E – SHPO Consultation

**Funding Information**

<b>Grant Number</b>	<b>HUD Program</b>	<b>Funding Amount</b>
B-18-DP-72-0001 B-17-DM-72-0001	CDBG-DR, Re-Grow Puerto Rico Urban-Rural Agricultural Program	\$41,279,480

**Estimated Total HUD Funded Amount:** \$100,000

**Estimated Total Project Cost** (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$100,000

## **Compliance with 24 CFR 58.5 and 58.6 Laws and Authorities**

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

<b>Compliance Factors:</b> Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.6</b>		
<b>Airport Hazards</b>  24 CFR Part 51 Subpart D	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project consists of the construction of three greenhouses and a water supply well. The nearest civilian airport, and military airport is approximately 63,012 feet from the proposed site. The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards requirements. Refer to Figure 2 in <b>Appendix B.</b>
<b>Coastal Barrier Resources</b>  Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	Puerto Rico has various Coastal Barrier Resources Systems (CBRS). The project is in inland central Puerto Rico. The distance to the nearest CBRS unit (PR-87) is 46,340 feet. Therefore, this project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act. Refer to Figure 3 in <b>Appendix B.</b>
<b>Flood Insurance</b>  Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The Project site is not located in a 100-year floodplain per Floodplain Insurance Map 72000C0770J, effective date November 18, 2009. This project is in compliance with Floodplain Insurance requirements. (See Figures 4, 5 and 6 in <b>Appendix B.</b> )
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.5</b>		
<b>Clean Air</b>	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The Project site is not located in a county or air quality management district that is in attainment

<p>Clean Air Act, as amended, particularly section 176(c) &amp; (d); 40 CFR Parts 6, 51, 93</p>		<p>status or nonattainment status for any criteria pollutants. The Municipio of Carolina is not listed in the EPA Green Book “Puerto Rico Nonattainment/Maintenance Status for Each County by Year for all Criteria Pollutants” The project is for the installation of greenhouses and a water supply well for an agricultural site. The pump for the water supply well would be electric. The installation and operation of the greenhouses will have no impact on air quality. The project is in compliance with Clean Air Act. Refer to EPA listing in <b>Appendix C</b>.</p>
<p><b>Coastal Zone Management</b>  Coastal Zone Management Act, sections 307(c) &amp; (d)</p>	<p>Yes    No <input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The project is located 40,725 feet from the nearest Coastal Zone Management area and does not affect a Coastal Zone as defined in the PR Coastal Zone Management Plan. The project is in compliance with the Coastal Zone Management Act. See <b>Appendix B</b> for Figure 7, Coastal Zone Map.</p>
<p><b>Contamination and Toxic Substances</b>  24 CFR Part 58.5(i)(2)</p>	<p>Yes    No <input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>A site visit conducted on November 19, 2022 indicated no visible signs of contamination or toxic substances at the project site. See <b>Appendix A</b>. There are no sites of environmental concern identified within 3,000 feet of the project site. Refer to Figures 8 and 9 in <b>Appendix B</b>. The project is in compliance with Contamination and Toxic Substances.</p>
<p><b>Endangered Species</b>  Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes    No <input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The project will have No Effect on listed species. The nearest critical or proposed critical habitat is 19,097 feet to the east of the project location (see Figures 10 and 11). Per the Official Species List from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) website, the Puerto Rican Boa, Puerto Rican Broad-winged Hawk, and Puerto Rican Parrot can be found, but there are no critical habitats at this location. The proposed project will have no potential to affect species or habitats due to the agricultural nature of the activities involved in the project. The proposed greenhouse and well site have been used for</p>

		<p>agricultural purposes in the past and are cleared of trees.</p> <p>If a Puerto Rican Boa is encountered, work will cease until it moves off the site or, failing that, the USFWS will be notified to relocate the Boa. Refer to Figures 10 and 11 in <b>Appendix B</b> and IPaC report in <b>Appendix D</b>. This project is in compliance with the Endangered Species Act.</p>
<p><b>Explosive and Flammable Hazards</b></p> <p>24 CFR Part 51 Subpart C</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The project does not include development, construction, or rehabilitation that will increase residential density.</p> <p>The project is in compliance with Explosive and Flammable Hazard requirements.</p> <p>Refer to site visit report in <b>Appendix A</b>.</p>
<p><b>Farmlands Protection</b></p> <p>Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>There are no soils on the project site designated as prime farmland. The proposed action would not include any activities that could potentially convert agricultural land to non-agricultural use. This project is in compliance with the Farmland Protection Policy Act. Refer to Figure 12 in <b>Appendix B</b>.</p>
<p><b>Floodplain Management</b></p> <p>Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The Project site is not located in a 100-year floodplain per Floodplain Insurance Map 72000C0770J, effective date November 18, 2009. The project site is not located in Preliminary Firm or an Advisory Base Flood Elevation (ABFE) special flood hazard area. This project is in compliance with Floodplain Management Requirements. (See Figures 4, 5, and 6 in <b>Appendix B</b>.)</p>
<p><b>Historic Preservation</b></p> <p>National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The site was evaluated on December 18, 2022, by and SOI Qualified Archaeologist. Documentation with maps was subsequently submitted to SHPO on January 4, 2023 (<b>Appendix E</b>). SHPO concurred with a finding of <b>No Historic Properties Affected</b> within the project's Area of Potential on Effects on January 23, 2023.</p>
<p><b>Noise Abatement and Control</b></p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>HUD's noise regulations protect residential properties from excessive noise exposure. The proposed project involves the construction of three agricultural greenhouses and installation of</p>

<p>Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>		<p>a water well at a rural farm site. HUD noise regulations do not apply as the project does not include new construction for residential use or rehabilitation of an existing residential property. The proposed project is in compliance with Noise Abatement and Control.</p>
<p><b>Sole Source Aquifers</b>  Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149</p>	<p>Yes    No <input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>There are no EPA sole source aquifers in Puerto Rico (See Figure 14). The project is in compliance with Sole Source Aquifer requirements. Refer to map in <b>Appendix B</b>.</p>
<p><b>Wetlands Protection</b>  Executive Order 11990, particularly sections 2 and 5</p>	<p>Yes    No <input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The NWI maps show no wetlands in the project area. The project does not require draining, dredging, channelizing, filling, diking, impounding or related activities on or near a wetland area as defined in Executive Order 11990. This project does not impact any on or off-site wetlands and includes no activities that would require further evaluation under this section. The project is in compliance with Executive Order 11990. Refer to Figure 15 in <b>Appendix B</b>.</p>
<p><b>Wild and Scenic Rivers</b>  Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)</p>	<p>Yes    No <input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>This project is not within proximity of a National Wild and Scenic River (WSR). The distance to the nearest WSR is approximately 41,711 feet. The project is in compliance with the Wild and Scenic Rivers Act. Refer to Figure 16 in <b>Appendix B</b>.</p>
<p><b>ENVIRONMENTAL JUSTICE</b></p>		
<p><b>Environmental Justice</b>  Executive Order 12898</p>	<p>Yes    No <input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>No adverse environmental impacts were identified in any other compliance review portion of this project that may disproportionately be high for low-income and/or minority communities. Therefore, this topic complies with the regulation.</p>

**Environmental Assessment Factors** [24 CFR 58.40; Ref. 40 CFR 1508.8 & 1508.27] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable, and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits or approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

**Impact Codes:** Use an impact code from the following list to make the determination of impact for each factor.

- (1) Minor beneficial impact
- (2) No impact anticipated
- (3) Minor Adverse Impact – May require mitigation
- (4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>LAND DEVELOPMENT</b>		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	The proposed project is located on a rural, private farm. The proposed action is construction of three greenhouses and a water supply well. The proposed action is compliant with the current agricultural land use of the Project area.
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	The proposed project is located on a rural, mountainous area, on soil classified as Caguabo clay loam (CbF), with 40 to 60 percent slopes, surrounded with dense, secondary woodland vegetation cover. The project site area is rated “moderate” for landslide susceptibility (See Figure 17 in <b>Appendix B</b> ). The proposed location of the greenhouses has been evenly graded. There will be little to no additional runoff associated with the project.

Hazards and Nuisances including Site Safety and Noise	2	<p>During implementation of the project, construction activities may result in temporary elevation of ambient noise levels in immediate areas around active construction areas. The only nearby receptors are the owners of the farm.</p> <p>There is no access to the project area by the public. Standard BMPs, such as construction fencing, would be applied to protect the farm resident public from typical construction hazards.</p>
Energy Consumption	2	The proposed project site is connected to electric power. The operation of the electric pump for the water supply well would result in a negligible increase in energy demand in the area.

Environmental Assessment Factor	Impact Code	Impact Evaluation
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**SOCIOECONOMIC**

Employment and Income Patterns	1	<p>Temporary employment of workers related to construction activities would result, but no new permanent jobs would be created as a result of this project. These workers are expected to come from the local region.</p> <p>The proposed project would not negatively impact employment or income patterns.</p>
Demographic Character Changes, Displacement	2	The proposed project would not result in demographic character changes or displacement. Given the nature of the project area, no relocations or demolition of residential structures or businesses would occur as part of this project.

Environmental Assessment Factor	Impact Code	Impact Evaluation
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**COMMUNITY FACILITIES AND SERVICES**

Educational and Cultural Facilities	2	The project would not result in any change to regional or local area educational and cultural facilities or increase demand for them.
Commercial Facilities	1	The agricultural activity of the project property will improve. Other commercial facilities would not be impacted by the proposed project.

Health Care and Social Services	2	Health care and social services facilities would not be impacted by the proposed project. The project would not increase demand for health care and social services facilities.
Solid Waste Disposal / Recycling	2	Minor solid waste construction debris materials would result from the proposed project. Solid waste could be recycled on the farm as fill.
Wastewater / Sanitary Sewers	2	The proposed project would not involve any wastewater or sanitary sewage. Current farm conditions would remain unchanged.
Water Supply	2	Applicant does not have access to municipal water supplies. A new water supply well would supply water for the greenhouses. The proposed project will have no impact on water supply in the area.
Public Safety - Police, Fire and Emergency Medical	2	The proposed project would not create any new demand for emergency or health services.
Parks, Open Space and Recreation	2	The proposed project would not create or destroy any new parks, open space, or recreational activities. It also would not increase use of those facilities.
Transportation and Accessibility	2	The proposed project would not involve the creation of new roads nor any increase in long-term traffic on existing roads. There would be some minor use of the existing road during construction. All residents and businesses would retain access to their properties during and after the project.

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>NATURAL FEATURES</b>		
Unique Natural Features, Water Resources	2	The proposed project will be situated on previous agricultural property and will have no impact to unique natural features or water resources.

Vegetation, Wildlife	2	The proposed project will occur on land previously used for agricultural purposes and will continue in that capacity. The proposed project will have no impact on vegetation and wildlife.
Climate Change	2	There will be no impact to the climate as a result of this project.

**Additional Studies Performed:** None

**Field Inspection** (Date and completed by):

Site inspection was conducted on November 19, 2022, by Carlos O. Medina.

**List of Sources, Agencies and Persons Consulted** [40 CFR 1508.9(b)]:

Puerto Rico State Historic Preservation Office

FAA, National Plan for Integrated Airport Systems:

[www.faa.gov/airports/planning\\_capacity/npias/reports/NPIAS-Report-2017-2021-Appendix-B-Part6.pdf](http://www.faa.gov/airports/planning_capacity/npias/reports/NPIAS-Report-2017-2021-Appendix-B-Part6.pdf)

John H. Chafee Coastal Barrier Resources System, Puerto Rico

[map.www.fws.gov/CBRA/Maps/Locator/PR.pdf](http://map.www.fws.gov/CBRA/Maps/Locator/PR.pdf)

National Wild and Scenic Rivers System: [www.rivers.gov/puerto-rico.php](http://www.rivers.gov/puerto-rico.php)

Puerto Rico Community Development Block Grant Disaster Recovery Action Plan, July 2018. [www.cdbg-dr.pr.gov/en/action-plan/](http://www.cdbg-dr.pr.gov/en/action-plan/)

Programmatic Agreement among the Federal Emergency Management Agency, the Puerto Rico State Historic Preservation Office and the Central Office for Recovery, Reconstruction and Resilience – amended to include the Puerto Rico Department of Housing.

US Environmental Protection Agency, National Ambient Air Quality Standards, Nonattainment Areas for Criteria Pollutants (Green Book):

[www3.epa.gov/airquality/greenbook/anayo\\_pr.html](http://www3.epa.gov/airquality/greenbook/anayo_pr.html)

US EPA, Environmental Topics, Air Topics: [www.epa.gov/environmental-topics/air-topics](http://www.epa.gov/environmental-topics/air-topics)

US Fish and Wildlife Service, Environmental Conservation Online System:

<https://ecos.fws.gov/ecp/report/species-listings-by-state?stateAbbrev=PR&stateName=Puerto%20Rico&statusCategory=Listed>

Federal Emergency Management Agency, Flood Mapping Service:

<https://msc.fema.gov/portal/home> (compilation of numerous maps)

US Fish and Wildlife Service, National Wetlands Inventory:

[www.fws.gov/wetlands/data/mapper.html](http://www.fws.gov/wetlands/data/mapper.html) (compilation of numerous maps)

Puerto Rico Coastal Zone Management Program Plan, September 2009.

US EPA, Sole Source Aquifers. Esri HERE, Garmin, NOAA, USGS, EPA.

US Geological Survey, Data Release of May Showing Concentration of Landslides Caused by Hurricane Maria,

[www.sciencebase.gov/catalog/item/59de6459e4b05fe04ccd39d8](http://www.sciencebase.gov/catalog/item/59de6459e4b05fe04ccd39d8)

**List of Permits Obtained:**

None

**Public Outreach** [24 CFR 58.43]:

The local community has been very proactive in the recovery process. Puerto Rico Department of Agriculture has worked closely with the agricultural community. The project includes a FONSI / NOI-RROF in compliance with NEPA regulations for HUD.

**Cumulative Impact Analysis** [24 CFR 58.32]:

In accordance with 24 CFR 58.32 (Aggregation), there are no cumulative impacts associated with the proposed project. The agricultural activities at the farm would increase to a minor degree above current levels due to the implementation of the project. Water use would increase to a minor degree but would only impact the existing farm well. There are no other wells nearby to be affected.

**Alternatives** [24 CFR 58.40(e); 40 CFR 1508.9]

The RGRW Program's goal is to increase agricultural capacity while promoting and increasing food security island-wide. This Program seeks to enhance and expand agricultural production related to economic revitalization and sustainable development activities. The applicant submitted a proposal to enhance and expand agricultural production on their property. The proposed use of grant funds will allow the applicant to expand the cultivation of plantains in the new greenhouses and through use of the expanded water supply from the new water supply well. Any alternative that would involve an off-property location would not enhance and expand agricultural production or allow for this economic development for this applicant. The actions are proposed in areas close to the farm residence that has been previously cleared and graded as part of farming operations. Alternative locations on the property would be farther from the farm residence and would require additional tree removal and grading.

**No Action Alternative** [24 CFR 58.40(e)]:

Under the No Action Alternative, the applicant would not receive federal funding for the construction of three greenhouses and the installation of a new water supply well which would inhibit the economic growth opportunity that the applicant would not otherwise have under the PRDOH Re-Grow Puerto Rico program. As a result, these owners may not be able to experience the growth needed to recover and expand their agriculture activities. A provision of the grant allows for economic development for businesses. The No-Action alternative would not allow for the economic development for this applicant.

**Summary of Findings and Conclusions:**

The proposed activity has been found to have no adverse effects on the environment nor is there the requirement for further consultation with any agency. There are no environmental review topics addressed that result in the need for formal compliance steps or the requirement for mitigation.

**Mitigation Measures and Conditions [40 CFR 1505.2(c)]**

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure

**Determination:**

**Finding of No Significant Impact** [24 CFR 58.40(g)(1); 40 CFR 1508.27]

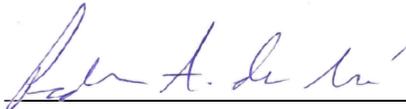
The project will not result in a significant impact on the quality of the human environment.

**Finding of Significant Impact** [24 CFR 58.40(g)(2); 40 CFR 1508.27]

The project may significantly affect the quality of the human environment.

Preparer Signature:  Date: 02/15/23

Name/Title/Organization: Clifford Jarman, Senior Environmental Scientist, Tetra Tech Inc.

Certifying Officer Signature:  Date: 5/30/2023

Name/Title: Pedro A. de León Rodríguez, MSEM, Permits and Environmental Compliance Specialist

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

# Appendix A

## Environmental Field Observation - Puerto Rico Department of Housing

APPLICANT INFORMATION			
Application ID	PR-RGRW-00018		
Applicant Name	Hacienda Raxel		
Property Address	Carr 185 km 15.7 Bo. Cedro Carolina		
Parcel ID	201-000-002-70-000		
Coordinates	18.276446, -65.912902		
Inspector Name	Carlos O. Medina		
Inspection Date	11/19/2022		
Building Type	Concrete_Metal		
Number of Units	1		
Number of Stories	1		
Year Built; Data Source	NA		
ENVIRONMENTAL OBSERVATIONS (attach photos and notes, as necessary, for any YES answers)			
OBSERVATION ITEMS	YES	NO	COMMENTS
<b>A. Is the structure in use?</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3 Scope of Work: 1. 18.27632, -65.91307 Area where the applicant plans to do the drill for the water well. Applicant stated he have the permit from Departamento de Recursos Naturales de Puerto Rico. The water well drill will be 500' feet depth. The pump will be driven by electrical power. 2. 18.2764318, -65.9134952 Applicant plans to construct 2 greenhouses side by side of 100' long x 30' wide. This terraces is approximately 140' long x 100' wide. 3. 18.27577, 65.91444 Applicant plan to construct 1 greenhouse of 100' long x 30' wide. This terraces is approximately 170' x 50'.
<b>B. Is structure a greenhouse?</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>C. Is Electricity connected?</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>D. Is water connected? (Utilities or Well)</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>1. Are there signs of poor housekeeping on site? (mounds of rubble, garbage, storm debris, solid waste, petroleum products, paint, pesticides, cleaning fluids, vehicle batteries, abandoned vehicles, pits, pools, ponds of hazardous substances, etc.)</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>2. Are there any 55-gallon drums visible on site? If yes, are they leaking?</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>3. Are there any (or signs of any) underground storage tanks on the property?</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>4. Are there signs of ASTs on the parcel or adjacent parcel? If yes, list approximate size and contents, if known.</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	250 gallons 250 gallons 250 gallons  At the time of inspection are empty
<b>5. Is there any stained soil or pavement on the parcel?</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>6. Is a water drainage system in use?</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

7. Is a warehouse in use for storage of <b>Fertilizer or Pesticides</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. Are there any <b>groundwater monitoring wells</b> on the site or adjacent parcel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. Is there evidence of a <b>faulty septic system</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Is there <b>distressed vegetation</b> on the parcel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. Is there any visible indication of <b>MOLD</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12. Is there any visible evidence of <b>asbestos, chipping, flaking or peeling paint, or hazardous materials</b> present in or on the structure?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13. Are any <b>additional site hazards</b> observed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
14. Is there any <b>permanent standing water</b> , such as a pond or stream, located on the site (do not include ponding from recent rain / weather events)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
15. Does the subject property have <b>water frontage</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
16. Is there any indication of the presence of <b>Wetlands</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
17. Are there any obvious signs of <b>animals or birds nesting</b> on or near the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
18. Is the applicant aware of any <b>significant historical event or persons</b> associated with the structure, or of it being located in a historic district/area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
19. Is a <b>historic marker</b> present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Additional Notes:**

Case: PR-RGRW-00018  
Hacienda Raxel  
Correct coordinates: 18.2764465, -65.9129024

Scope of Work: Greenhouses and water well

Land current in use for: Platains plantation

Past land use was: Coffee plantation

What the applicant plans to do: 3 Greenhouse and a Water well

Where the applicant plans to do the ground disturbance for the new structures:

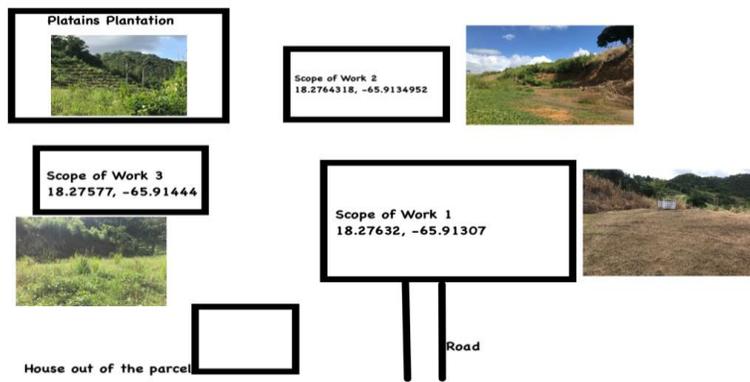
Scope of Work 1: Water Well Drill, 18.27632, -65.91307 Area where the applicant plans to do the drill for the water well. Applicant stated he have the permit from Departamento de Recursos Naturales de Puerto Rico. The water well drill will be 500' feet depth. The pump will be driven by electrical power.

Scope of Work 2: 18.2764318, -65.9134952 Applicant plans to construct 2 greenhouses side by side of 100' long x 30' wide. This terraces is approximately 140' long x 100' wide.

Scope of Work 3: 18.27577, -65.91444 Applicant plan to construct 1 greenhouse of 100' long x 30' wide. This terraces is approximately 170' x 50'.

Any new water connection, well, cisterns or power connection: The applicant plans to do a electrical connection for the pump of the water well.

## Site Sketch



**Front of Structure**

Photo Direction: West



**Facing Away From Front**

Photo Direction: East



**Side #1 of Structure**

Photo Direction: Northwest



**Facing Away From Side #1**

Photo Direction: Southeast



**Back of Structure**

Photo Direction: Northwest



**Facing Away From Back**

Photo Direction: Southeast



**Side #2 of Structure**

Photo Direction: West



**Facing Away From Side #2**

Photo Direction: East



**Streetscape #1**

Photo Direction: South



**Streetscape #2**

Photo Direction: Northeast



Address

Photo Direction: North



Structural Details

Photo Description: Architectural details

Photo Direction: West



Structural Details

Photo Description: Architectural details

Photo Direction: Northeast



Structural Details

Photo Description: Architectural details

Photo Direction: West



Structural Details

Photo Description: Architectural details

Photo Direction: North



Structural Details

Photo Description: Architectural details

Photo Direction: West



Structural Details

Photo Description: Architectural details

Photo Direction: Northeast



Structural Details

Photo Description: Architectural details

Photo Direction: South



Structural Details

Photo Description: Architectural details

Photo Direction: Northwest



Structural Details

Photo Description: Architectural details

Photo Direction: Northwest



Structural Details

Photo Description: Architectural details

Photo Direction: Northwest



Structural Details

Photo Description: Architectural details

Photo Direction: Northwest



Structural Details

Photo Description: Architectural details

Photo Direction: South



Structural Details

Photo Description: Architectural details

Photo Direction: North



Structural Details

Photo Description: Architectural details

Photo Direction: North



Structural Details

Photo Description: Architectural details

Photo Direction: North



Structure Occupied

Photo Description: Scope of Work Area 1

Photo Direction: West



Structure Occupied

Photo Description: Scope of Work Area 1

Photo Direction: Southwest



Structure Occupied

Photo Description: Scope of Work Area 1

Photo Direction: West



Structure Occupied

Photo Description: Scope of work area 2

Photo Direction: Northeast



Structure Occupied

Photo Description: Scope of Work Area 2

Photo Direction: Southwest



Structure Occupied

Photo Description: Scope of Work Area 2

Photo Direction: West



Structure Occupied

Photo Description: Scope of Work Area 3

Photo Direction: Southwest



Structure Occupied

Photo Description: Scope of Work Area 3

Photo Direction: Northeast



Structure Occupied

Photo Description: Scope of Work Area 3

Photo Direction: Southeast



Structure Occupied

Photo Description: Landslide

Photo Direction: Northwest



Structure Occupied

Photo Description: Landslide

Photo Direction: Southwest



Structure Occupied

Photo Description: Scope of work area 3

Photo Direction: North



Structure Occupied

Photo Description: Scope of Work Area 2

Photo Direction: South



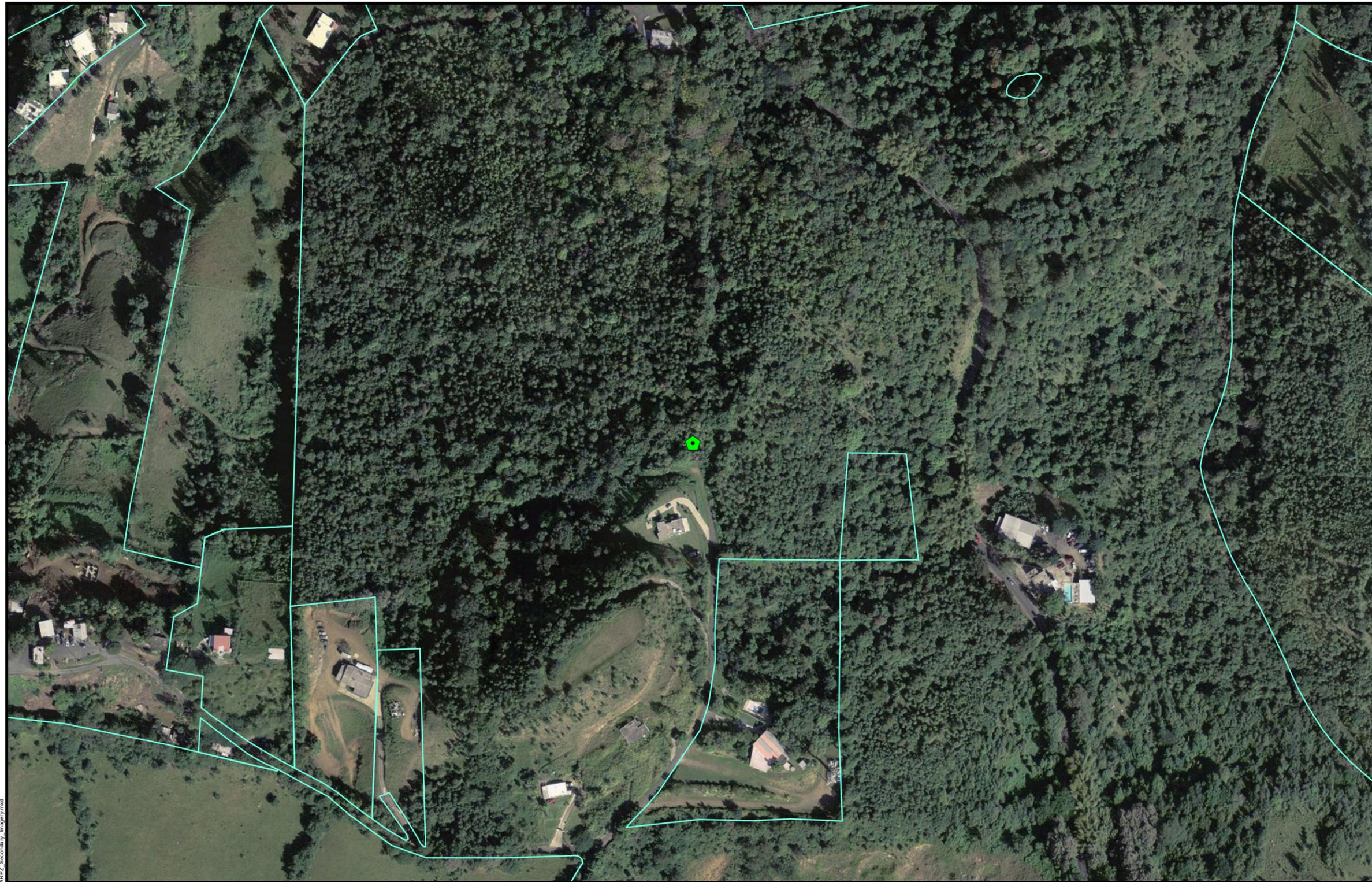
Aboveground Storage Tanks

Photo Description: Water tanks

Photo Direction: West



# Appendix B



**Legend**

-  Tier 2 Site
-  Parcels

**PUERTO RICO**



**FIGURE 1: PROJECT LOCATION**

**APPLICANT ID: PR-RGRW-00018**

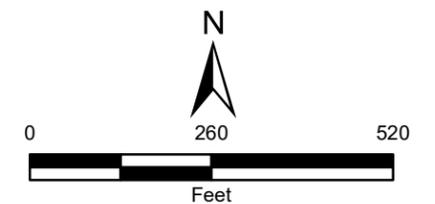
**ADDRESS: Carr 185 km 15.7 Bo. Cedro Carolina , PR 00979**

**Parcel Coordinates: 18.275887, -65.913053**



Source: USDOT  
<https://www.faa.gov>

Author: TG Date: 10/4/2022





**Legend**

-  Tier 2 Site
-  Civilian Runway Protection Zones
-  Military Accident Potential Zones
-  Airport Runways
-  Civilian Airport 2,500 Feet Buffer
-  Military Airport 15,000 Feet Buffer

**Distance to Nearest Airport  
in Feet: 63,012**

**PUERTO RICO**



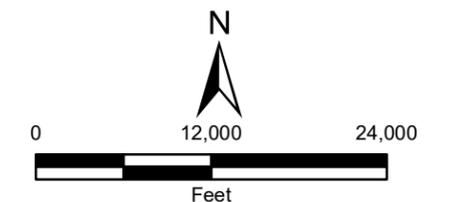
**FIGURE 2: AIRPORT ZONES  
APPLICANT ID: PR-RGRW-00018**

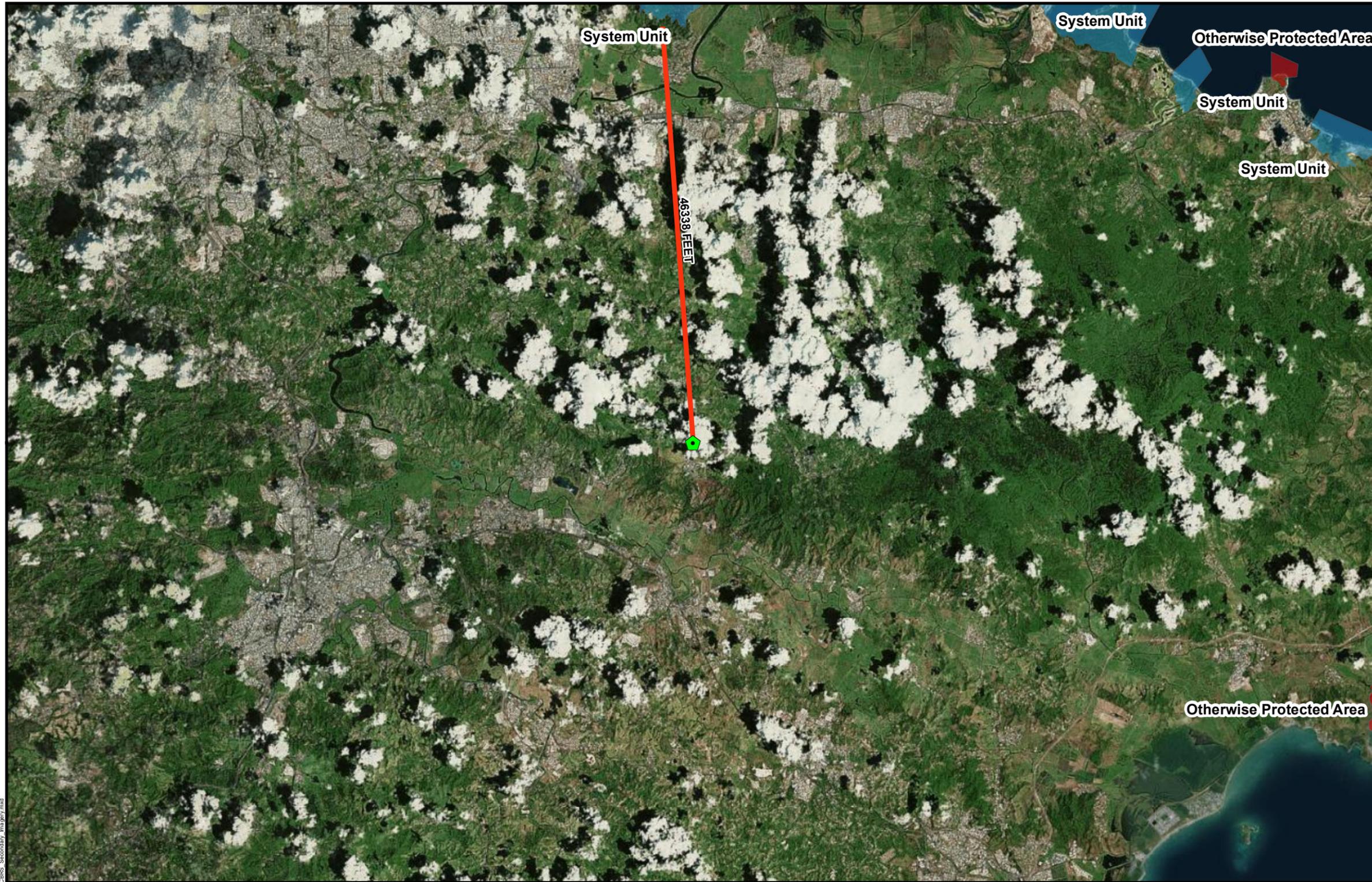
**ADDRESS: Carr 185 km 15.7 Bo. Cedro Carolina , PR 00979  
Parcel Coordinates: 18.275887, -65.913053**



Source: USDOT  
<https://www.faa.gov>

Author: TG Date: 10/4/2022





**Legend**

Tier 2 Site

**Coastal Barrier Resources System Unit Type**

Otherwise Protected Area  
 System Unit

Distance to Nearest Coastal Barrier Resources System in Feet: 46,340

**PUERTO RICO**



**FIGURE 3: COASTAL BARRIERS IMPROVEMENT ACT**

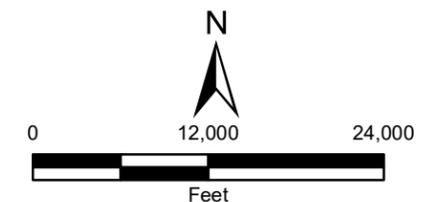
**APPLICANT ID: PR-RGRW-00018**

**ADDRESS: Carr 185 km 15.7 Bo. Cedro Carolina , PR 00979**  
**Parcel Coordinates: 18.275887, -65.913053**



Source: U. S. Fish & Wildlife Service  
<https://www.fws.gov>

Author: TG Date: 10/4/2022



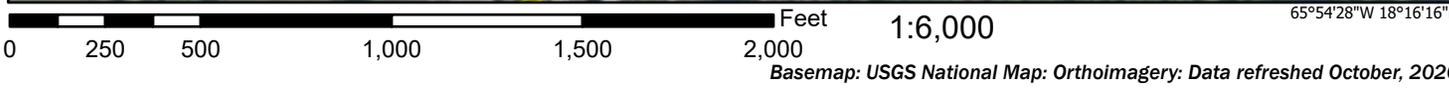
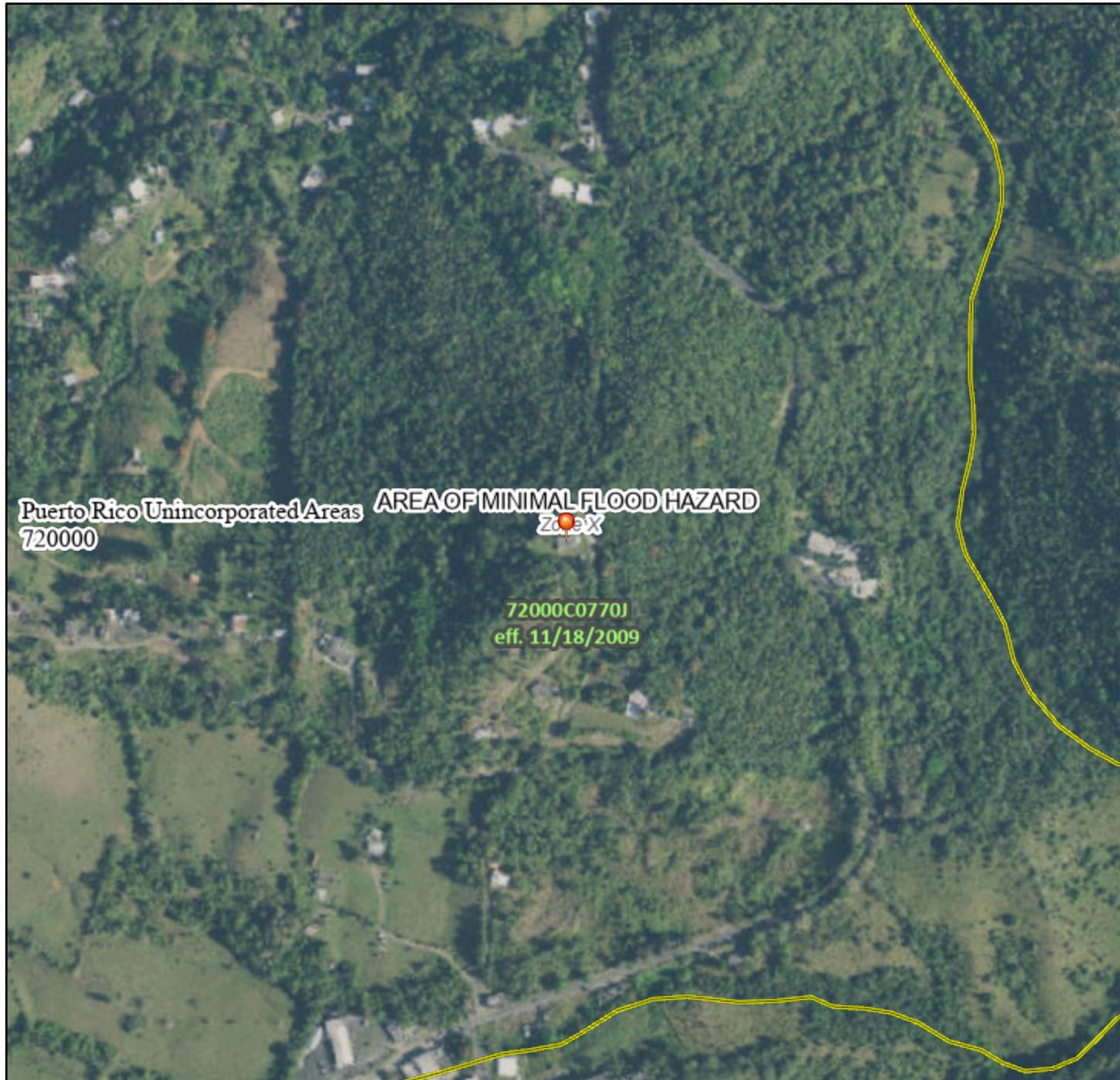


# FIGURE 5: National Flood Hazard Layer FIRMette



Parcel Coordinates: 18.275887, -65.913053

65°55'6"W 18°16'50"N



### Legend

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

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

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **2/12/2023 at 9:28 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

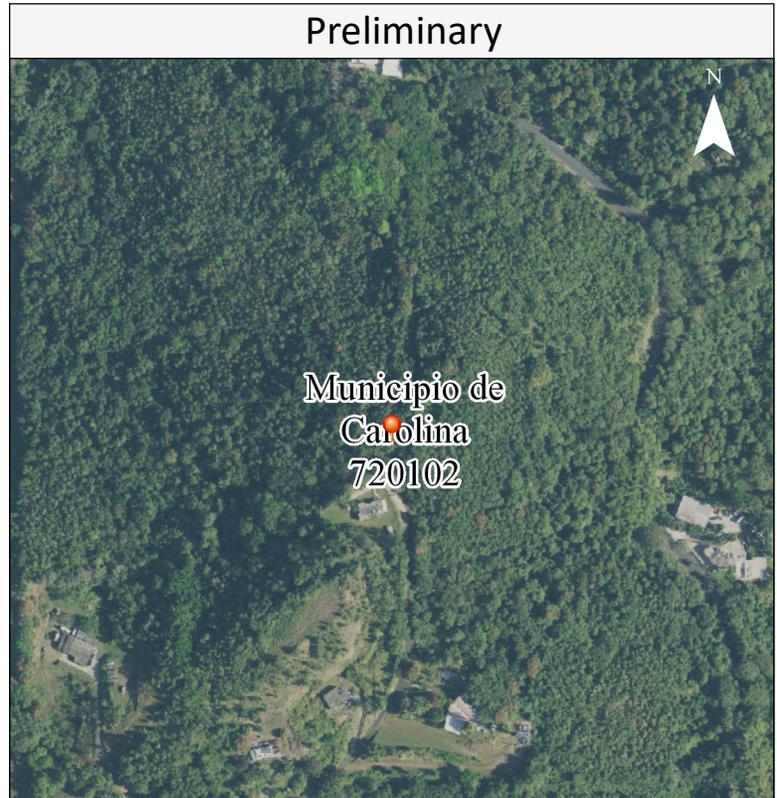
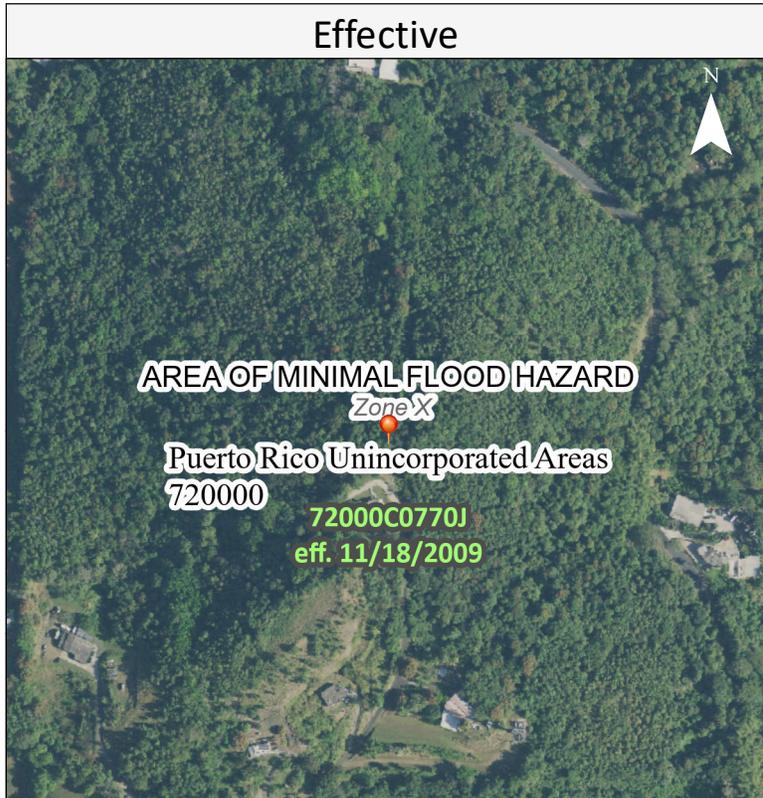
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory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

# FIGURE 6: Comparison of Flood Hazard

Effective & Preliminary Flood Hazards Parcel Coordinates: 18.275887, -65.913053



FEMA



Effective	
POI Longitude/Latitude	-65.9129, 18.2764
Effective FIRM Panel	72000C0770J
Effective Date	11/18/2009
Flood Zone	X
Static BFE*	Not Available
Flood Depth	Not Available
Vertical Datum	Not Available

Preliminary	
POI Longitude/Latitude	-65.9129, 18.2764
Preliminary FIRM Panel	72000C0770J
Preliminary Issue Date	11/16/2018
Flood Zone	Not Available
Estimated Static BFE*	Not Available
Estimated Flood Depth	Not Available
Vertical Datum	Not Available

\* A **Base Flood Elevation** is the expected elevation of flood water during the 1% annual chance storm event. Structures below the estimated water surface elevation may experience flooding during a base flood event.

Hazard Level	Flood Hazard Zone
High Flood Hazard	<b>AE, A, AH, AO, VE and V Zones.</b> Properties in these flood zones have a 1% chance of flooding each year. This represents a 26% chance of flooding over the life of a 30-year mortgage.
Moderate Flood Hazard	<b>Shaded Zone X.</b> Properties in the moderate flood risk areas also have a chance of flooding from storm events that have a less than 1% chance of occurring each year. Moderate flood risk indicates an area that may be provided flood risk reduction due to a flood control system or an area that is prone to flooding during a 0.2% annual chance storm event. These areas may have been indicated as areas of shallow flooding by your community.  <b>Unshaded Zone X.</b> Properties on higher ground and away from local flooding sources have a reduced flood risk when compared to the Moderate and High Flood Risk categories. Structures in these areas may be affected by larger storm events, in excess of the 0.2% annual chance storm event.
Low Flood Hazard	<b>Insurance Note:</b> High Risk Areas are called 'Special Flood Hazard Areas' and flood insurance is mandatory for federally backed mortgage holders. Properties in Moderate and Low Flood Risk areas may purchase flood insurance at a lower-cost rate, known as Preferred Risk Policies. See your local insurance agent or visit <a href="https://www.fema.gov/national-flood-insurance-program">https://www.fema.gov/national-flood-insurance-program</a> for more information.

**Disclaimer:** This report is for informational purposes only and is not authorized for official use. The positional accuracy may be compromised in some areas. Please contact your local floodplain administrator for more information or go to [msc.fema.gov](https://www.fema.gov) to view an official copy of the Flood Insurance Rate Maps.

# My Map

## PuertoRico\_ABFE\_1PCT

Advisory Base Flood Elevation (zoom in to make visible)



Flood Hazard Boundary (zoom in to make visible)

Limit of Moderate Wave Action (LiMWA)



Flood Hazard Extent

- 1% Annual Chance Flood
- 0.2% Annual Chance Flood

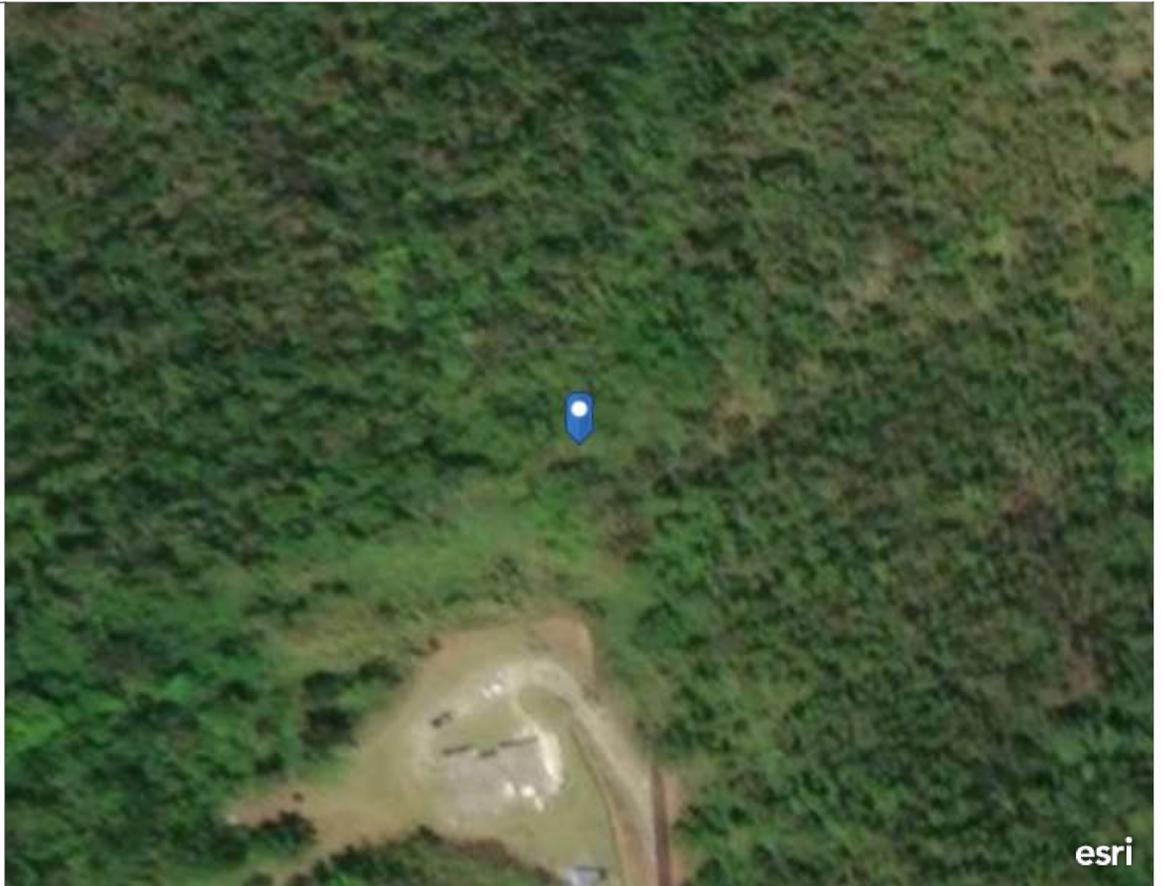
Zone/BFE Boundary



Flood Hazard Area (zoom in to make visible)

Flood Hazard Zone

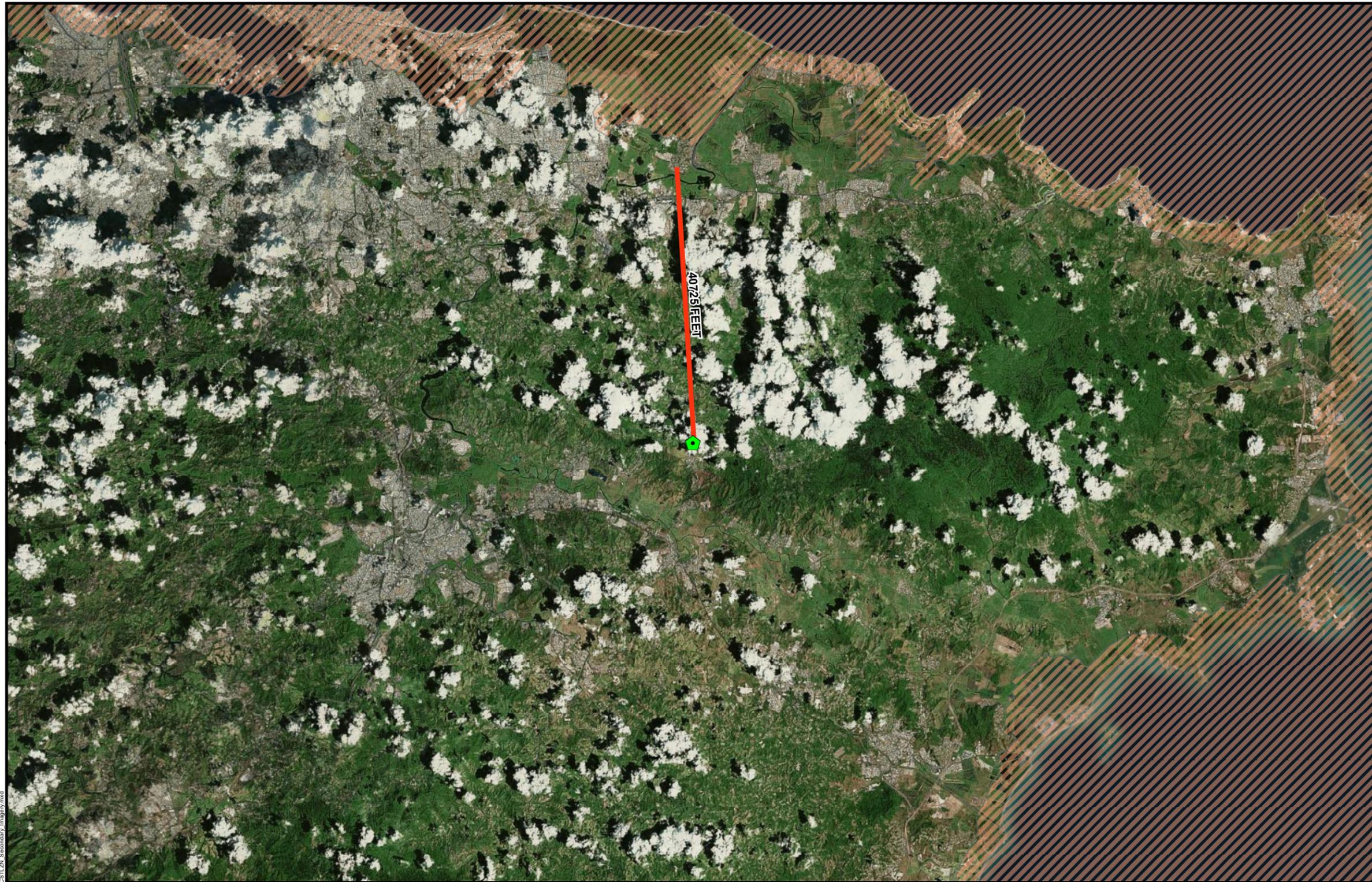
- A
- AO
- AF



esri

100ft

FEMA



- Legend**
-  Tier 2 Site
  -  Coastal Zone Management Boundary

Distance to Nearest Coastal Zone Management in Feet: 40,725

**PUERTO RICO**



File Path: \\nas1202\gis\GIS\PR\Acc\GIS\Shore\TDR\GIS\Shore\USPR\Tier2\CSL\ZN\_Secondary\_Imagery.mxd



Source: NOAA's Ocean Service  
<https://data.noaa.gov>

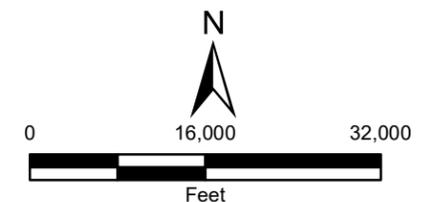
Author: TG Date: 10/4/2022

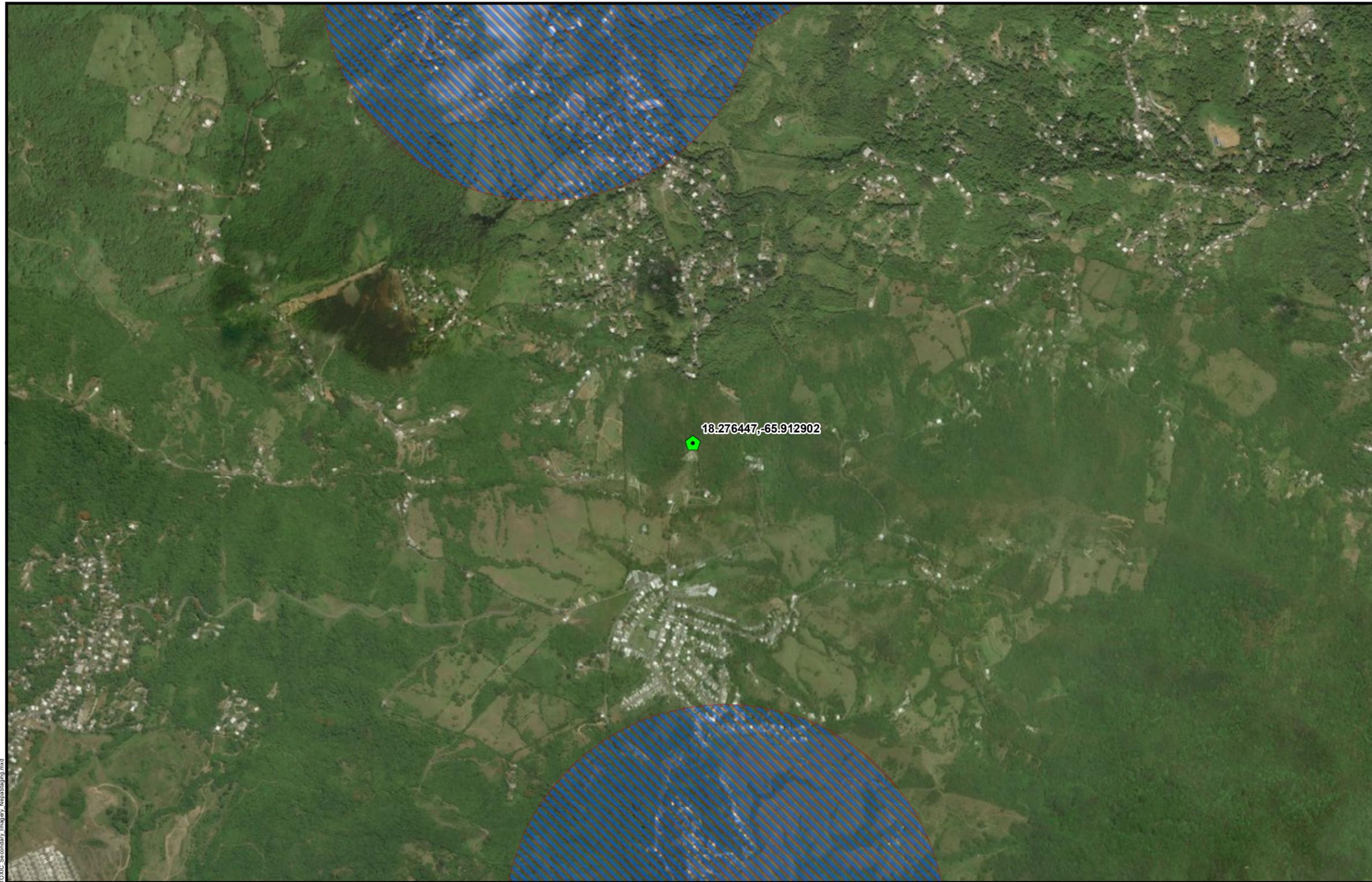
**FIGURE 7: COASTAL ZONE MANAGEMENT**

**APPLICANT ID: PR-RGRW-00018**

**ADDRESS: Carr 185 km 15.7 Bo. Cedro Carolina , PR 00979**

**Parcel Coordinates: 18.275887, -65.913053**





**Legend**

-  RCRA
-  Tier 2 Site
-  Toxic Release Inventory Site
-  Superfund Site
-  Brownfield Sites
-  3000 Ft Buffer TRI
-  3000 Ft Buffer Superfund
-  3000 Ft Buffer RCRA
-  3000 Ft Buffer Brownfield

18.276447,-65.912902

**PUERTO RICO**



**FIGURE 8: TOXIC CHEMICALS AND GASES, HAZARDOUS MATERIALS, CONTAMINATION, AND RADIOACTIVE SUBSTANCES**

**APPLICANT ID: PR-RGRW-00018**

**ADDRESS: Carr 185 km 15.7 Bo. Cedro Carolina , PR 00979**

**Parcel Coordinates: 18.275887, -65.913053**

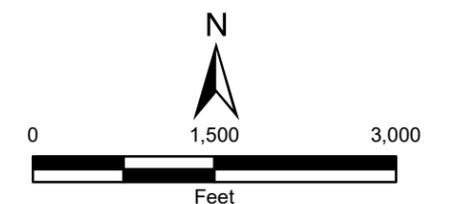


Source: E.P.A.

<https://www.epa.gov/frs/geospatial-data-download-service>

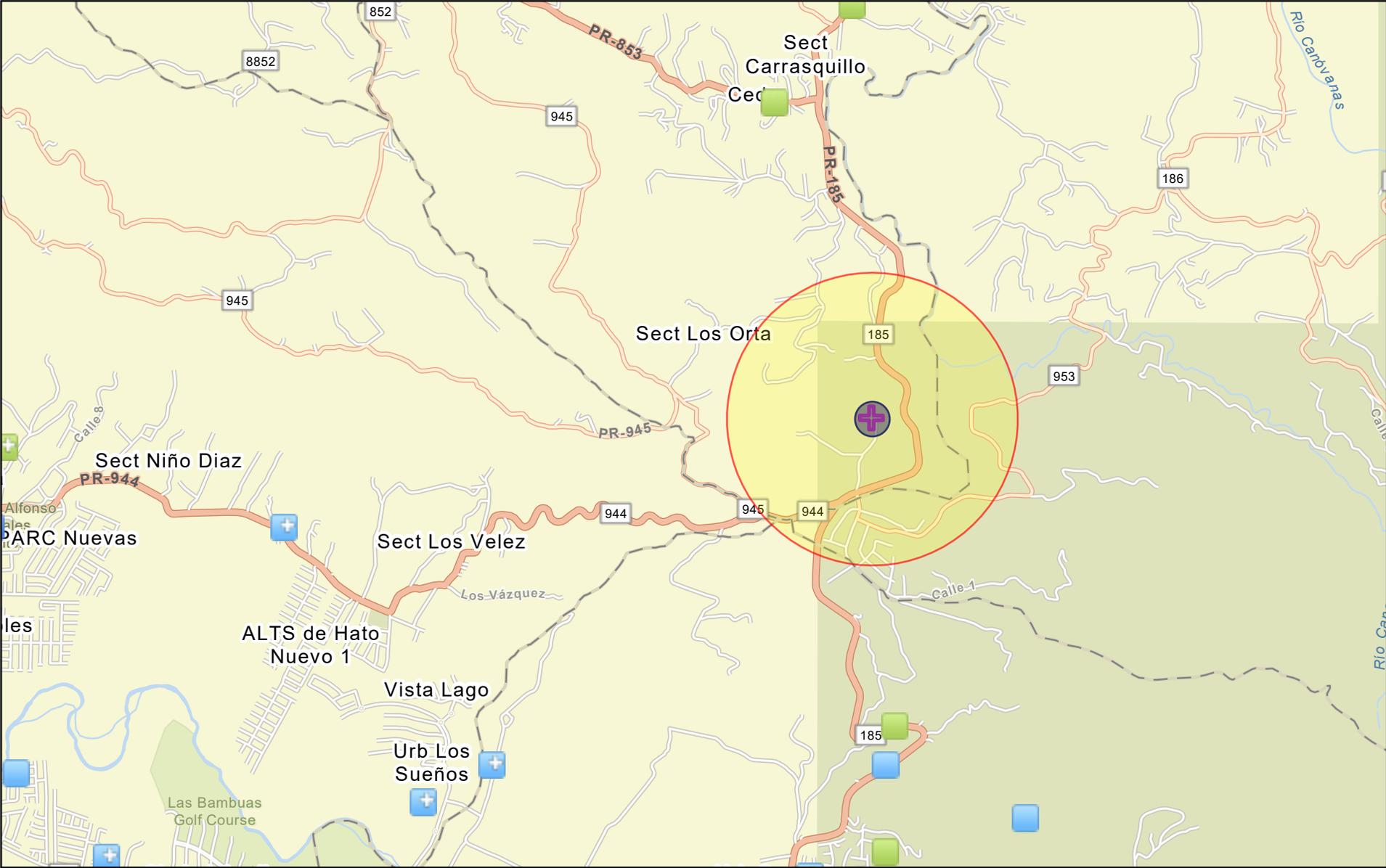
Author: JB/AK

Date: 10/27/2022



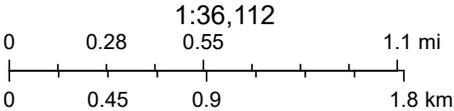
File Path: \\nas1202\gis\TCORP\AccessShare\TDR\ata\USPR\T2\TDR\Secondary\_Imagery\_NepalShading.mxd

**FIGURE 9: NEPAssist Map**



February 12, 2023 Parcel Coordinates: 18.275887, -65.913053

- Hazardous Waste (RCRAInfo)
- Hazardous Waste (RCRAInfo)
- Water Dischargers (NPDES)
- Water Dischargers (NPDES)
- Air Pollution (ICIS-AIR)
- Project Buffer
- Project 1
- Search Result (point)



Esri, HERE, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/ NASA, USGS, NPS, US Census Bureau



Legend  
Tier 2 Site

**PUERTO RICO**



**FIGURE 10: ENDANGERED SPECIES ACT**

**APPLICANT ID: PR-RGRW-00018**

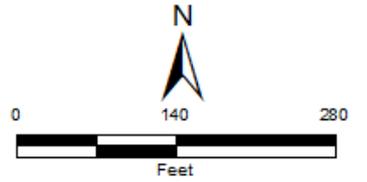
ADDRESS: Carr 185 km 15.7 Bo. Cedro Carolina , PR 00979

Parcel Coordinates: 18.275887, -65.913053



Source: U.S. FISH & WILDLIFE SERVICE  
<https://ecos.fws.gov>

Author: TG | Date: 10/4/2022





**Legend**

 Tier 2 Site

**Common Name**

 Elfin-woods warbler

**PUERTO RICO**



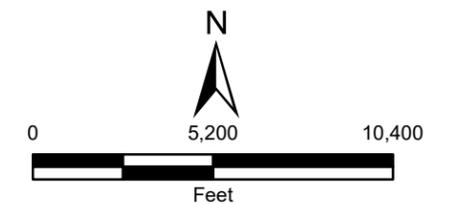
**FIGURE 11: CRITICAL HABITAT  
 APPLICANT ID: PR-RGRW-00018**

**ADDRESS: Carr 185 km 15.7 Bo. Cedro Carolina , PR 00979  
 Parcel Coordinates: 18.275887, -65.913053**

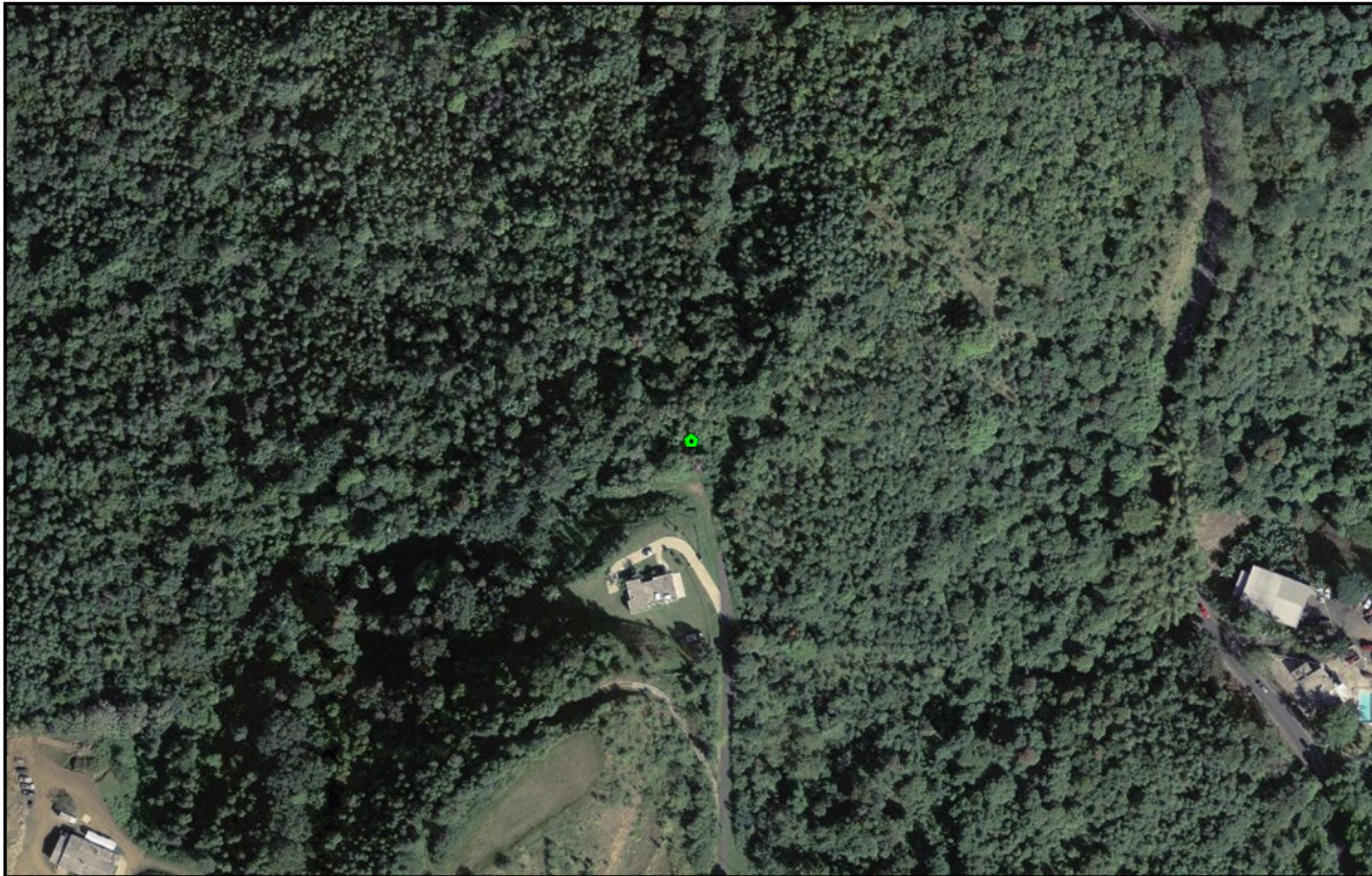


Author: TG

Date: 10/4/2022



File Path: \\sals206gals1\CDRPR\Accis\Share\DR\Data\USPR\T2\CARP2\_Sec\main\_imagery.mxd



**Legend**

- Tier 2 Site
- Farm Class**
- All areas are prime farmland
- Farmland of statewide importance
- Farmland of statewide importance, if irrigated
- Prime farmland if drained
- Prime farmland if irrigated
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Prime farmland if protected from flooding or not frequently flooded during the growing season

**PUERTO RICO**



**FIGURE 12: FARMLAND PROTECTION**

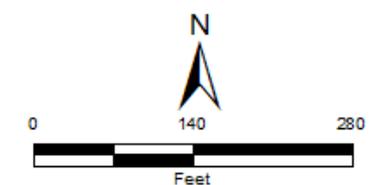
**APPLICANT ID: PR-RGRW-00018**

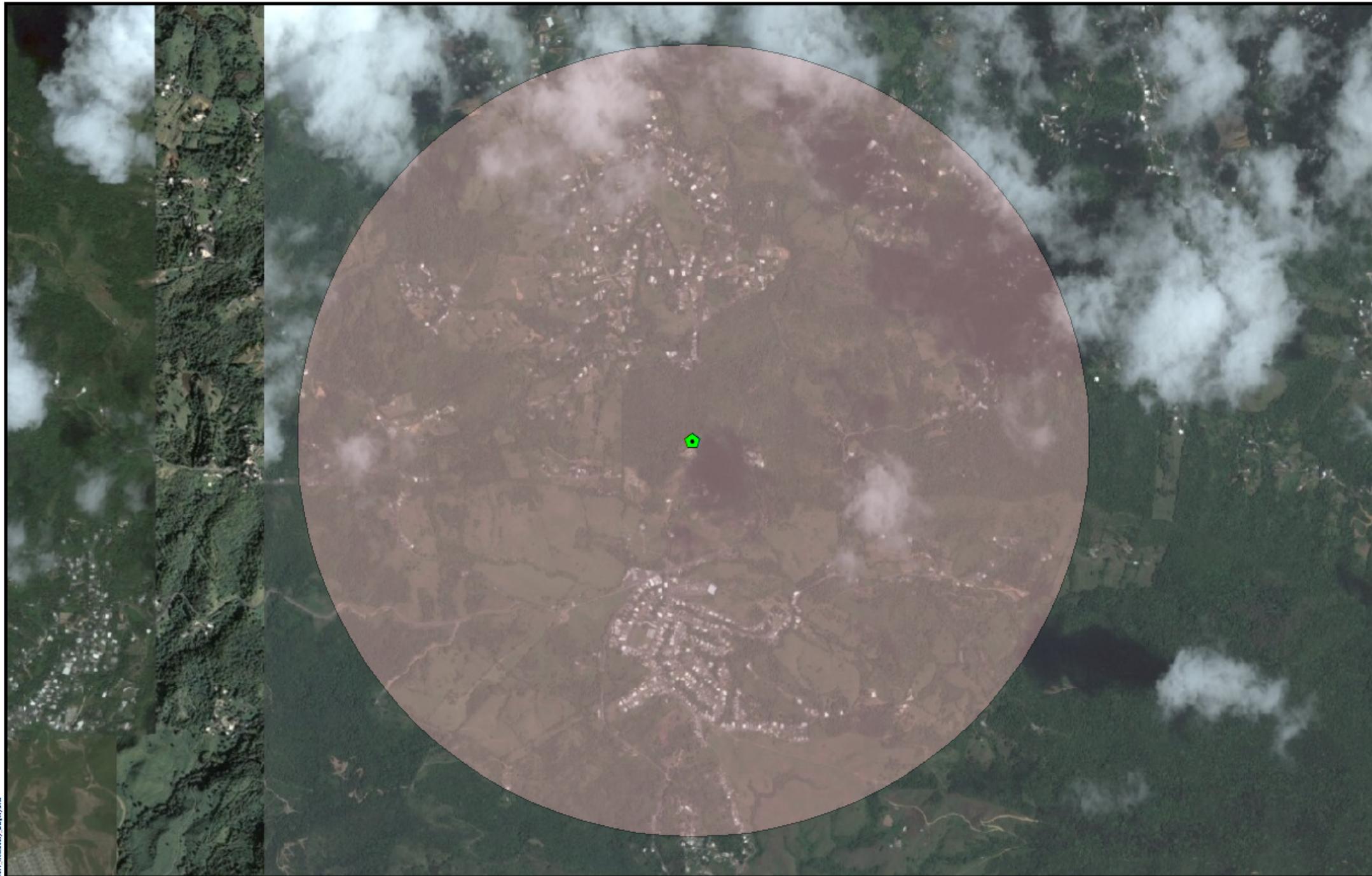
ADDRESS: Carr 185 km 15.7 Bo. Cedro Carolina , PR 00979

Parcel Coordinates: 18.275887, -65.913053



Source: USDA  
<https://websoilsurvey.sc.egov.usda.gov>  
 Author: TG Date: 10/24/2022





- Legend**
-  Tier 2 Site
  -  Historic ICP Sites
  -  Cultural Resource Building Point
  -  Cultural Resource District Point
  -  Cultural Resource Site Point
  -  Cultural Resource Structure Point
  -  Historic Comunidades
  -  Traditional Urban Centers
  -  Cultural Resource Building Polygon
  -  Cultural Resource District Polygon
  -  Cultural Resource Site Polygon
  -  Cultural Resource Structure Polygon
  -  1 Mile Property Buffer

**PUERTO RICO**



**FIGURE 13: HISTORIC PRESERVATION**

**APPLICANT ID: PR-RGRW-00018**

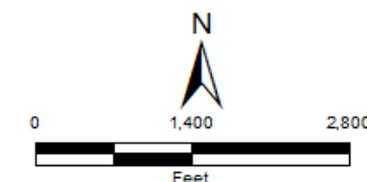
ADDRESS: Carr 185 km 15.7 Bo. Cedro Carolina , PR 00979

Parcel Coordinates: 18.275887, -65.913053



Source: National Park Service  
<https://www.nps.gov/>

Author: TG Date: 10/24/2022





**Legend**

- ◆ Tier 2 Site
- Sole Source Aquifer**
- Biscayne Aquifer SSA
- Streamflow and Recharge Source Zones

18.276447,-65.912902

**PUERTO RICO**



**FIGURE 14: SOLE SOURCE AQUIFERS**

**APPLICANT ID: PR-RGRW-00018**

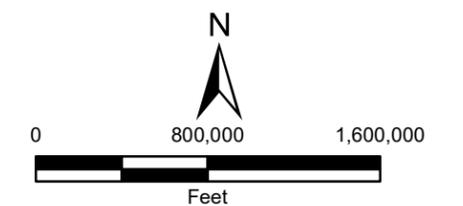
**ADDRESS: Carr 185 km 15.7 Bo. Cedro Carolina , PR 00979**

**Parcel Coordinates: 18.275887, -65.913053**



Source: USDOT  
<https://www.faa.gov>

Author: TG Date: 2/6/2023

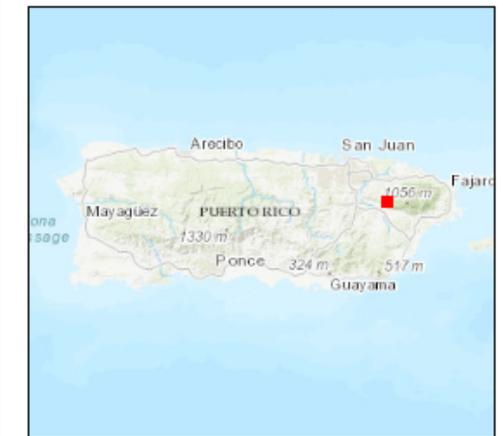




**Legend**

-  Tier 2 Site
- WETLAND TYPE**
-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland
-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond
-  Lake
-  Riverine

**PUERTO RICO**



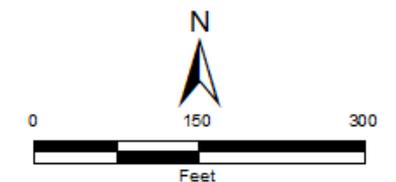
THE DATA AND INFORMATION CONTAINED HEREIN ARE UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. DATE OF DECLASSIFICATION: 01/01/2030.

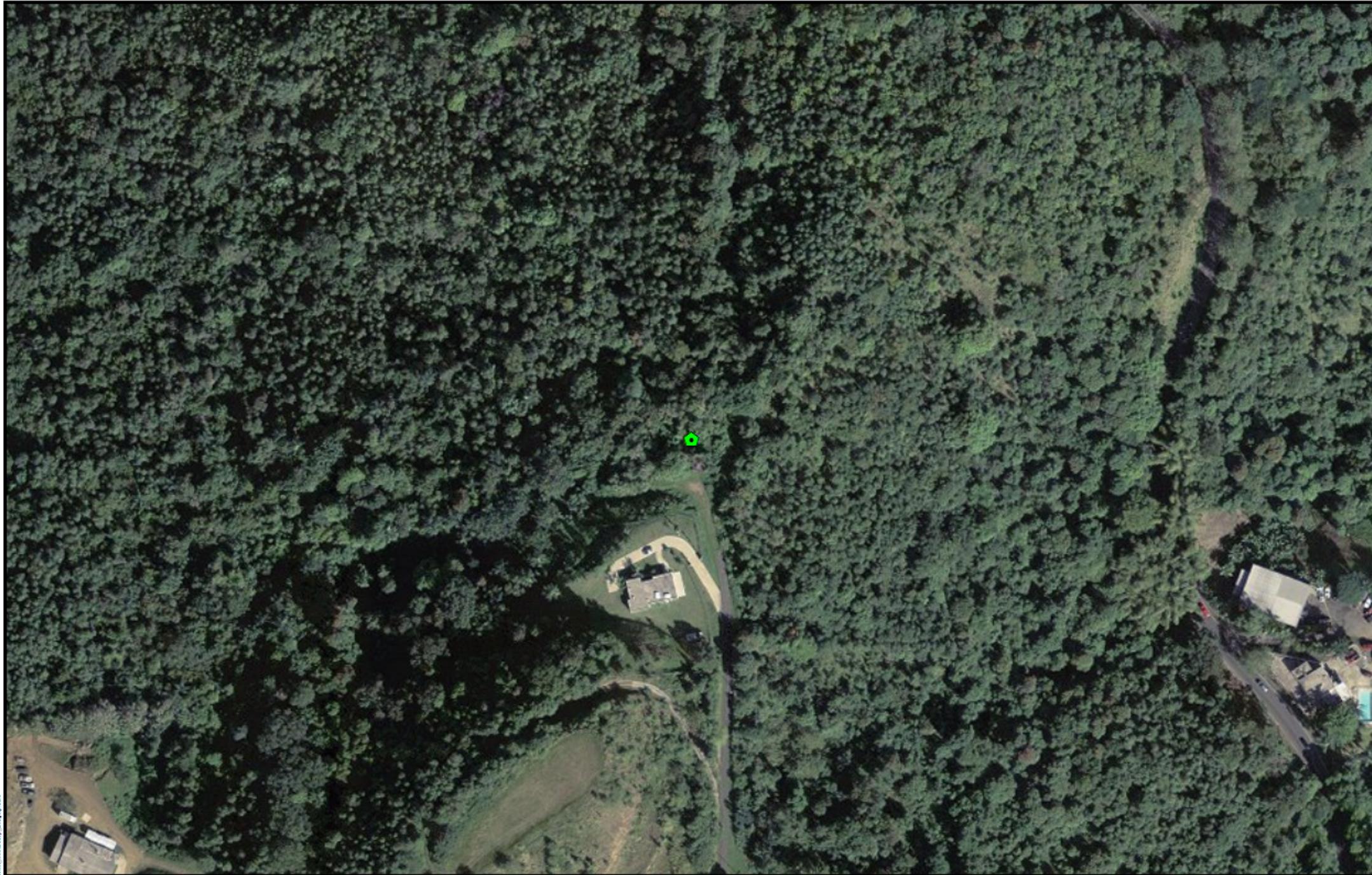


Source: U. S. Fish & Wildlife Service  
<https://www.fws.gov>

Author: TG Date: 10/4/2022

**FIGURE 15: WETLANDS**  
**APPLICANT ID: PR-RGRW-00018**  
 ADDRESS: Carr 185 km 15.7 Bo. Cedro Carolina , PR 00979  
 Parcel Coordinates: 18.275887, -65.913053





Legend

-  Tier 2 Site
-  Wild and Scenic Rivers

Distance to Nearest Wild and Scenic River in Feet: 41,711

PUERTO RICO



FIGURE 16: WILD AND SCENIC RIVERS ACT

APPLICANT ID: PR-RGRW-00018

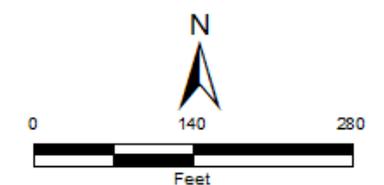
ADDRESS: Carr 185 km 15.7 Bo. Cedro Carolina , PR 00979

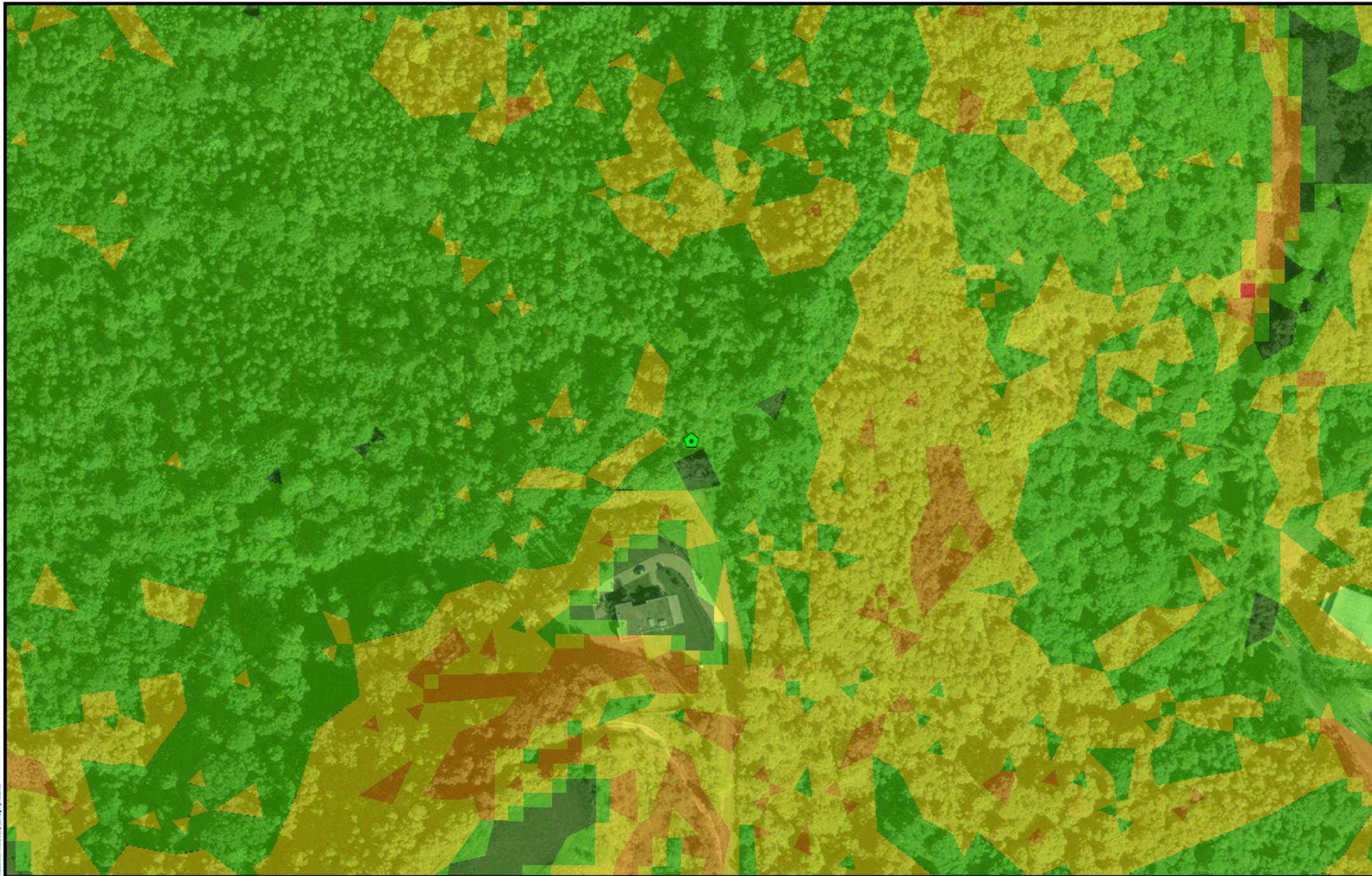
Parcel Coordinates: 18.275887, -65.913053



Source: U. S. Forest Service  
<https://www.fs.usda.gov>

Author: TG Date: 10/4/2022





- Legend**
-  Tier 2 Site
  - Landslide Susceptibility**
  -  Extremely High
  -  Very High
  -  High
  -  Moderate
  -  Low

**PUERTO RICO**



**FIGURE 17: SLOPE AND EROSION**

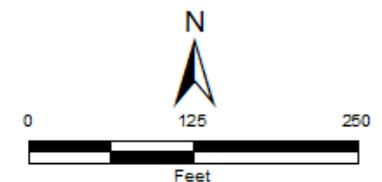
**APPLICANT ID: PR-RGRW-00018**

ADDRESS: Carr 185 km 15.7 Bo. Cedro Carolina , PR 00979

Parcel Coordinates: 18.275887, -65.913053



Source: PRDOH  
<http://maps.mps.a.rogis.com>  
<http://ps/w/e/bap/pv/le/w/r/in/de/x.html?ti=10506eco7f15491daee17647f19248ee>  
 Author: TG Date: 10/4/2022



# Appendix C

You are here: [EPA Home](#) > [Green Book](#) > [National Area and County-Level Multi-Pollutant Information](#) > Puerto Rico Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

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

Data is current as of December 31, 2021

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

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

Change the State:

[Important Notes](#)

[Download National Data as a .csv file](#) | [Data dictionary \(PDF\)](#)

County	NMQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/Part County	Population (2010)	State/County FIPS Codes
<b>PUERTO RICO</b>								
Arecibo Municipio	Lead (2008)	Arecibo, PR	<input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21	//		Part	32,185	72/013
Bayamon Municipio	Sulfur Dioxide (2010)	San Juan, PR	<input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21	//		Part	22,921	72/021
Catano Municipio	Sulfur Dioxide (2010)	San Juan, PR	<input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21	//		Whole	28,140	72/033
Guaynabo Municipio	PM-10 (1987)	Mun. of Guaynabo, PR	<input type="checkbox"/> 92 <input type="checkbox"/> 93 <input type="checkbox"/> 94 <input type="checkbox"/> 95 <input type="checkbox"/> 96 <input type="checkbox"/> 97 <input type="checkbox"/> 98 <input type="checkbox"/> 99 <input type="checkbox"/> 00 <input type="checkbox"/> 01 <input type="checkbox"/> 02 <input type="checkbox"/> 03 <input type="checkbox"/> 04 <input type="checkbox"/> 05 <input type="checkbox"/> 06 <input type="checkbox"/> 07 <input type="checkbox"/> 08 <input type="checkbox"/> 09	02/11/2010	Moderate	Part	90,470	72/061
Guaynabo Municipio	Sulfur Dioxide (2010)	San Juan, PR	<input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21	//		Part	23,802	72/061
Salinas Municipio	Sulfur Dioxide (2010)	Guayama-Salinas, PR	<input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21	//		Part	23,401	72/123
San Juan Municipio	Sulfur Dioxide (2010)	San Juan, PR	<input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21	//		Part	147,963	72/127
Toa Baja Municipio	Sulfur Dioxide (2010)	San Juan, PR	<input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21	//		Part	52,441	72/137

# Appendix D

# 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.

## Location

Carolina County, Puerto Rico



# Local office

Caribbean Ecological Services Field Office

☎ (787) 834-1600

📠 (787) 851-7440

✉ [CARIBBEAN\\_ES@FWS.GOV](mailto:CARIBBEAN_ES@FWS.GOV)

## MAILING ADDRESS

Post Office Box 491

Boqueron, PR 00622-0491

## PHYSICAL ADDRESS

Office Park I

State Road #2 Km 156.5, Suite 303}

Mayaguez, PR 00680

NOT FOR CONSULTATION

# 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 species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

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

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

## Birds

NAME	STATUS
Puerto Rican Broad-winged Hawk <i>Buteo platypterus brunnescens</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/5512">https://ecos.fws.gov/ecp/species/5512</a>	Endangered
Puerto Rican Parrot <i>Amazona vittata</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/3067">https://ecos.fws.gov/ecp/species/3067</a>	Endangered

## Reptiles

NAME	STATUS
Puerto Rican Boa <i>Chilabothrus inornatus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/6628">https://ecos.fws.gov/ecp/species/6628</a>	Endangered

## 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<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

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

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

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

There are no migratory birds of conservation concern expected to occur at this location.

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

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

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

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

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

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

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

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

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

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

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

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

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

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and

3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

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

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

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

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

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

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

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

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

helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

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

There are no refuge lands at this location.

### Fish hatcheries

There are no fish hatcheries at this location.

### Wetlands in the National Wetlands Inventory (NWI)

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

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

This location did not intersect any wetlands mapped by NWI.

**NOTE:** This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

#### **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 tubercid 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 E



**GOVERNMENT OF PUERTO RICO**  
STATE HISTORIC PRESERVATION OFFICE

Executive Director | Carlos A. Rubio-Cancela | [carubio@prshpo.pr.gov](mailto:carubio@prshpo.pr.gov)

January 23, 2023

**Lauren Bair Poche**

HORNE- Architectural Historian Manager  
10000 Perkins Rowe, Suite 610 Bldg G  
Baton Rouge, LA 70810

SHPO: 01-04-23-04 PUERTO RICO DISASTER RECOVERY, CDBG-DR RE-GROW PR URBAN-RURAL AGRICULTURAL RE-GROW PROGRAM, PR-RGRW-00018, RAFAEL PRÍNCIPE SANTIAGO / DBA HACIENDA – CARR. PR-185 KM 15.7, BO. CEDRO, CAROLINA, PUERTO RICO

Dear Ms. Poche,

Our Office has received and reviewed the above referenced project in accordance with 54 USC 306108 (commonly known as Section 106 of the *National Historic Preservation Act, as amended*) and 36 CFR Part 800: *Protection of Historic Properties* from the Advisory Council on Historic Preservation. The State Historic Preservation Officer (SHPO) is to advise and assist federal agencies and other responsible entities when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or reduce the project's effects.

Our records support your finding of **no historic properties affected** within the project's area of potential effects.

Please note that should the Agency discover other historic properties at any point during project implementation, you should notify the SHPO immediately. If you have any questions concerning our comments, do not hesitate to contact our Office.

Sincerely,

Carlos A. Rubio-Cancela  
State Historic Preservation Officer  
CARC/GMO/LCC



January 4, 2023

Carlos A. Rubio Cancela  
Director Ejecutivo  
Oficina Estatal de Conservación Histórica  
Cuartel de Ballajá (Tercer Piso)  
San Juan, PR 00902-3935

**Puerto Rico Disaster Recovery, CDBG-DR Re-Grow PR Urban-Rural Agricultural (Re-Grow PR) Program**

**Section 106 NHPA Effect Determination Submittal: PR-RGRW-00018 – Rafael Príncipe Santiago / DBA Hacienda – Carr. PR-185 Km 15.7, Bo. Cedro, Carolina, Puerto Rico – *No Historic Properties Affected***

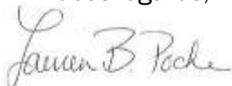
Dear Architect Rubio Cancela,

In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800, HORNE is providing information for your review and requesting your concurrence regarding the above-referenced projects on behalf of the Puerto Rico Department of Housing (PRDOH) and the Home Repair, Reconstruction, or Relocation (R3) Program. On February 9, 2018, an allocation of Community Development Block Grant - Disaster Recovery (CDBG-DR) funds was approved by the United States Department of Housing and Urban Development (HUD) under the Federal Register Volume 83, No. 28, 83 FR 5844, to assist the Commonwealth of Puerto Rico in meeting unmet needs in the wake of Hurricanes Irma and Maria. On August 14, 2018, an additional \$8.22 billion recovery allocation was allocated to Puerto Rico under the Federal Register Volume 83, No. 157, 83 FR 40314. With these funding allocations, the Puerto Rico Department of Housing (Housing) aims to lead a comprehensive and transparent recovery for the benefit of Puerto Rico residents.

On behalf of PRDOH and the subrecipient, the Puerto Rico Department of Agriculture, we are submitting documentation for activities proposed by Rafael Príncipe Santiago / DBA Hacienda at Carr. PR-185 Km 15.7, Bo. Cedro in the municipality of Carolina. This undertaking will involve the construction of two greenhouses measuring 100' long by 30' wide and a 500' water well. Based on the submitted documentation prepared by SOI-qualified Archaeologist Jesus E. Vega, Ph.D., the Program requests a concurrence that a determination of No Historic Properties Affected is appropriate for this proposed project.

Please contact me by email at [lauren.poche@horne.com](mailto:lauren.poche@horne.com) or phone at 225-405-7676 with any questions or concerns.

Kindest regards,



**Lauren Bair Poche, M.A.**

Architectural Historian, Historic Preservation Senior Manager  
Enclosures

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>ReGROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>		
<b>Subrecipient:</b> Rafael Príncipe Santiago, DBA Hacienda		
<b>Case ID:</b> PR-RGRW-00018		<b>City:</b> Carolina

<b>Project Location:</b> Carr. PR-185 Km 15.7, Bo. Cedro, Carolina, PR	
<b>Project Coordinates:</b> 18.276446, -65.912902	
<b>TPID (Número de Catastro):</b> 201-000-002-70-000	
<b>Type of Undertaking:</b> <input type="checkbox"/> Substantial Repair <input checked="" type="checkbox"/> New Construction	
<b>Construction Date (AH est.):</b> c1985	<b>Property Size (acres):</b> 13.73

<b>SOI-Qualified Architect/Architectural Historian:</b> n/a
<b>Date Reviewed:</b> n/a
<b>SOI-Qualified Archaeologist:</b> Jesus E. Vega, Ph.D.
<b>Date Reviewed:</b> December 18, 2022

In compliance with Section 106 of the National Historic Preservation Act (NHPA), the Program is responsible for identifying historic properties listed in the NRHP and any properties not listed that would be considered eligible for listing that are located within the geographic area of potential effects (APE) of the proposed project and assessing the potential effects of its undertakings on these historic properties.

### Project Description (Undertaking)

The proposed activities at Hacienda Raxel include the construction of two greenhouses, both 100' long by 30' wide, and a water well 500' deep, in compliance with Section 106 NHPA Effect Determination. These activities will require ground disturbance. The applicant indicates that he holds a permit from the Department of Natural and Environmental Resources of Puerto Rico. The property is located at Carretera PR-185 Km 15.7, at Bo. Cedro, Municipality of Carolina. Previously used as a coffee plantation, the land at Hacienda Raxel is currently used for plantain cultivation.

### Area of Potential Effects

As defined in 36 CFR §800.16(d), the area of potential effects (APE) 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. Based on this definition and the nature and scope of the Undertaking, the Program has determined that the direct APE for this project includes a 500' deep well at 8.27632, -65.91307, to be driven by electric power, and two 100' by 30' plots for greenhouses located side by side. The first greenhouse is 100' by 30' wide, located on a terrace approximately 140' long by 100' wide. The second greenhouse is also 100' by 30' wide, and located on a terrace approximately 170' long by 50' wide. The direct APE includes a 15-meter buffer to the rear and sides. The visual APE is the viewshed of the proposed project.

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>ReGROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>		
<b>Subrecipient:</b> Rafael Príncipe Santiago, DBA Hacienda		
<b>Case ID:</b> PR-RGRW-00018		<b>City:</b> Carolina

### Identification of Historic Properties - Archaeology

Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information, by a Program contracted Historic Preservation Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61), shows that there are no reported archaeological sites and/or NRHP listed/eligible historic properties within a half-mile radius of the property. "No data" in Table 1 denotes no corresponding Institute of Puerto Rican Culture (IPRC), State Historic Preservation Office (SHPO), or National Register of Historic Places (NRHP) identification was found. The proposed project is located in rural, mountainous terrain, on soil classified as Caguabo clay loam (CbF), with 40 to 60 percent slopes, surrounded by secondary forest vegetation cover, 285 meters above the mean sea level. The north coast is approximately 11.65 miles northeast of the property. The closest fresh-water bodies are the Río Canovanillas, 0.24 miles east of the property, and Quebrada González, 0.31 miles northwest of the property. There are no archaeological studies conducted within a half-mile radius of the APE.

**Table 1. Archaeological Sites and/or NRHP Listed/Eligible Historic Properties Within a Half-Mile Radius of Project Area**

Name	SHPO ID	IPRC ID	Location	Description	NRHP
No data	No data	No data	No data	No data	No data

**Table 2. Cultural Resource Studies Conducted Within a Half-Mile Radius of Project Area**

Author	Title	Year	SHPO/IPRC ID	Results	Location
No data	No data	Nd	No data	No data	No data

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>ReGROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>	 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
<b>Subrecipient:</b> Rafael Príncipe Santiago, DBA Hacienda	
<b>Case ID:</b> PR-RGRW-00018	<b>City:</b> Carolina

### Determination

The following historic properties have been identified within the APE:

- Direct Effect:
  - N/A
- Indirect Effect:
  - N/A

Based on the results of our historic property identification efforts, there are no reported archaeological materials or significant cultural properties within a half-mile radius of the proposed project area. There are no known archaeological sites or NRHP listed/eligible historic properties within or adjacent to where the direct Area of Potential Effect (APE) of case PR-RGRW-00018 is located. The proposed project area is not within the boundaries or visual APE of any NRHP listed/eligible historic properties, or to a Traditional Urban Center or Historic District. Additionally, the closest fresh-water body is 0.24 miles away. The surrounding terrain has been minimally impacted by construction of agricultural infrastructure and public roads. Therefore, the Program has determined that project actions described in the undertaking will not impact any cultural properties.

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>REGROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>	 <small>GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING</small>
<b>Subrecipient:</b> Rafael Príncipe Santiago, DBA Hacienda	
<b>Case ID:</b> PR-RGRW-00018	<b>City:</b> Carolina

**Recommendation**

The Puerto Rico Department of Housing requests that the Puerto Rico SHPO concur that the following determination is appropriate for the undertaking (Choose One):

- No Historic Properties Affected
- No Adverse Effect  
    Condition (if applicable):
- Adverse Effect  
    Proposed Resolution (if applicable)

**This Section is to be Completed by SHPO Staff Only**

<p>The Puerto Rico State Historic Preservation Office has reviewed the above information and:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <b>Concurs</b> with the information provided.</li> <li><input type="checkbox"/> <b>Does not concur</b> with the information provided.</li> </ul>	
<p><b>Comments:</b></p>	
<p>Carlos Rubio-Cancela State Historic Preservation Officer</p>	<p>Date:</p>

Subrecipient: Rafael Príncipe Santiago, DBA Hacienda

Case ID: PR-RGRW-00018

City: Carolina

### Project (Parcel) Location – Area of Potential Effect Map (Aerial)



File Path: Z:\Users\SPRINT\workspace\Archaeology\_Secondary\_Imagery\_Wayback2017.mxd



Source: CRIM

Author: TG

Date: 10/7/2022

#### Legend

-  Tier 2 Site
-  Parcelario
-  Area of Potential Effect



**Subrecipient:** Rafael Príncipe Santiago, DBA Hacienda

**Case ID:** PR-RGRW-00018

**City:** Carolina

### Project (Parcel) Location - Aerial Map



Source: CRIM

Author: TG

Date: 9/22/2022

**Legend**

-  Tier 2 Site
-  Historic Comunidades
-  Traditional Urban Centers
-  Cultural Resource District Polygon
-  Parcelario



**Subrecipient:** Rafael Príncipe Santiago, DBA Hacienda

**Case ID:** PR-RGRW-00018

**City:** Carolina

### Project (Parcel) Location - USGS Topographic Map



Source: USGS

Author: TG

Date: 9/29/2022

#### Legend

-  Tier 2 Site
-  Historic Comunidades
-  Traditional Urban Centers
-  Cultural Resource District Polygon

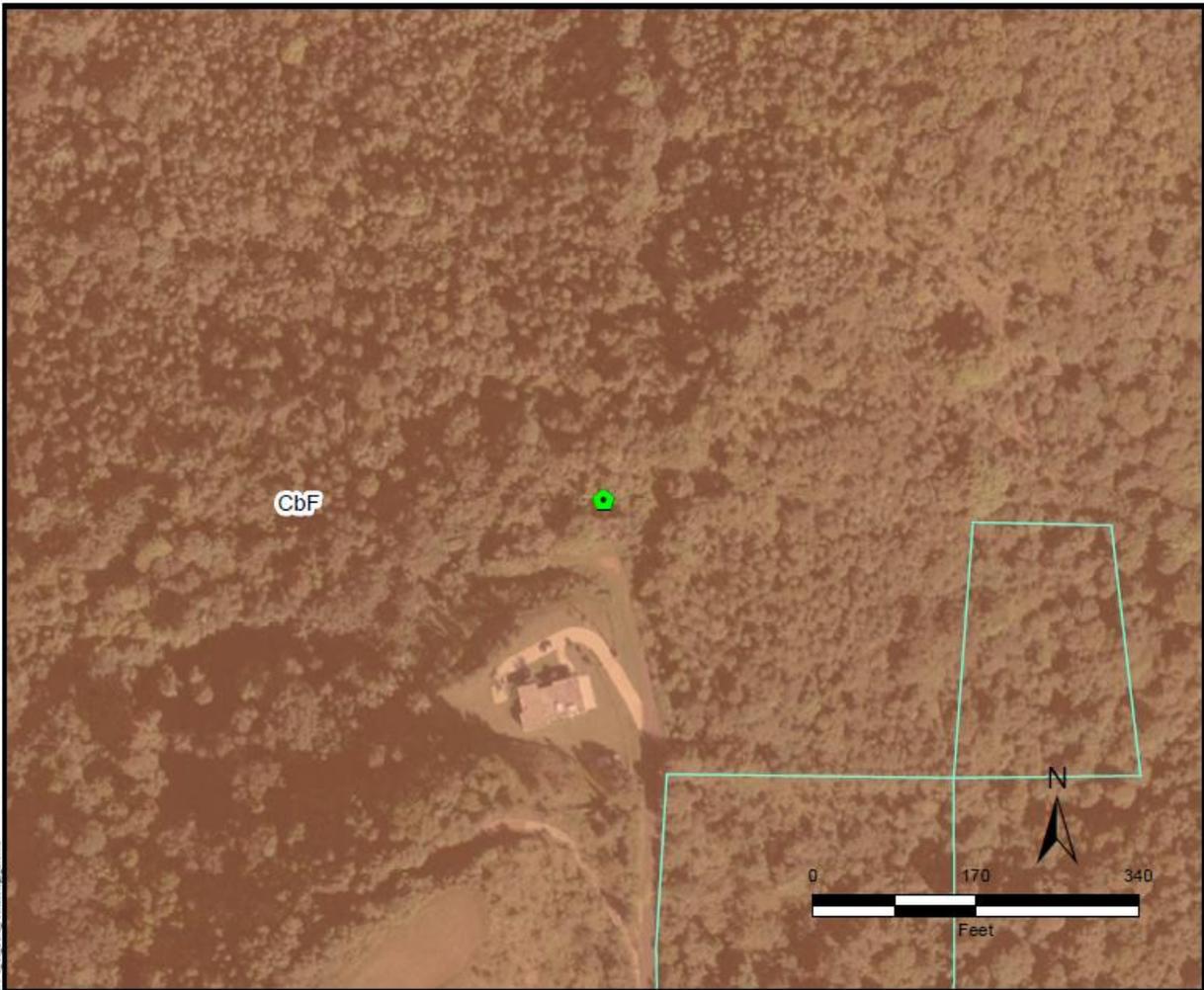


Subrecipient: Rafael Príncipe Santiago, DBA Hacienda

Case ID: PR-RGRW-00018

City: Carolina

### Project (Parcel) Location – Soils Map



Source: USDA

Author: TG

Date: 9/30/2022

- Legend**
-  Tier 2 Site
  -  Parcelario
  - Soil Type**
  -  CbF; Caguabo clay loam, 20 to 60 percent slopes

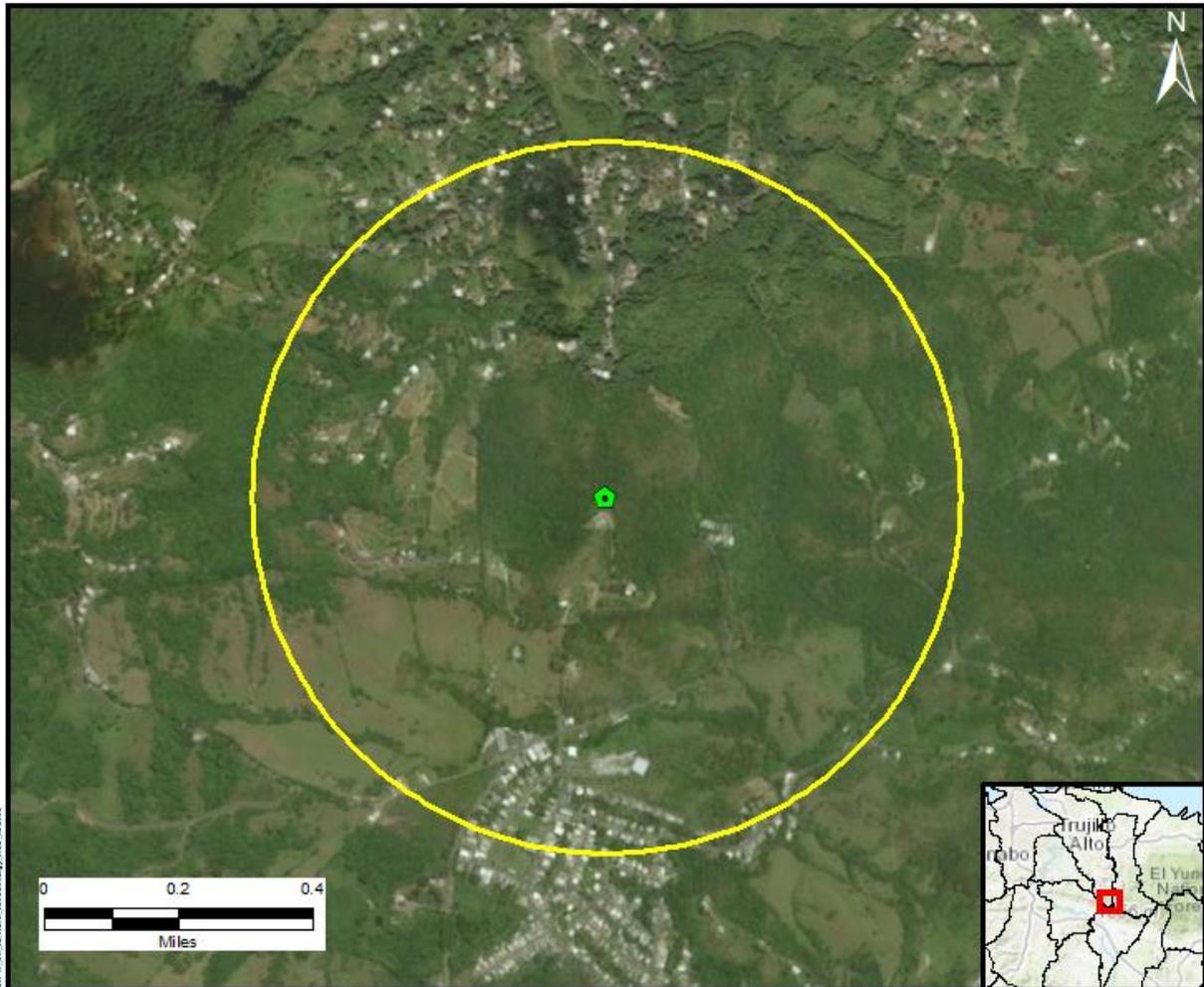


Subrecipient: Rafael Príncipe Santiago, DBA Hacienda

Case ID: PR-RGRW-00018

City: Carolina

### Project (Parcel) Location with Previous Investigations - Aerial Map



Source: National Park Service

Author: TG

Date: 9/29/2022

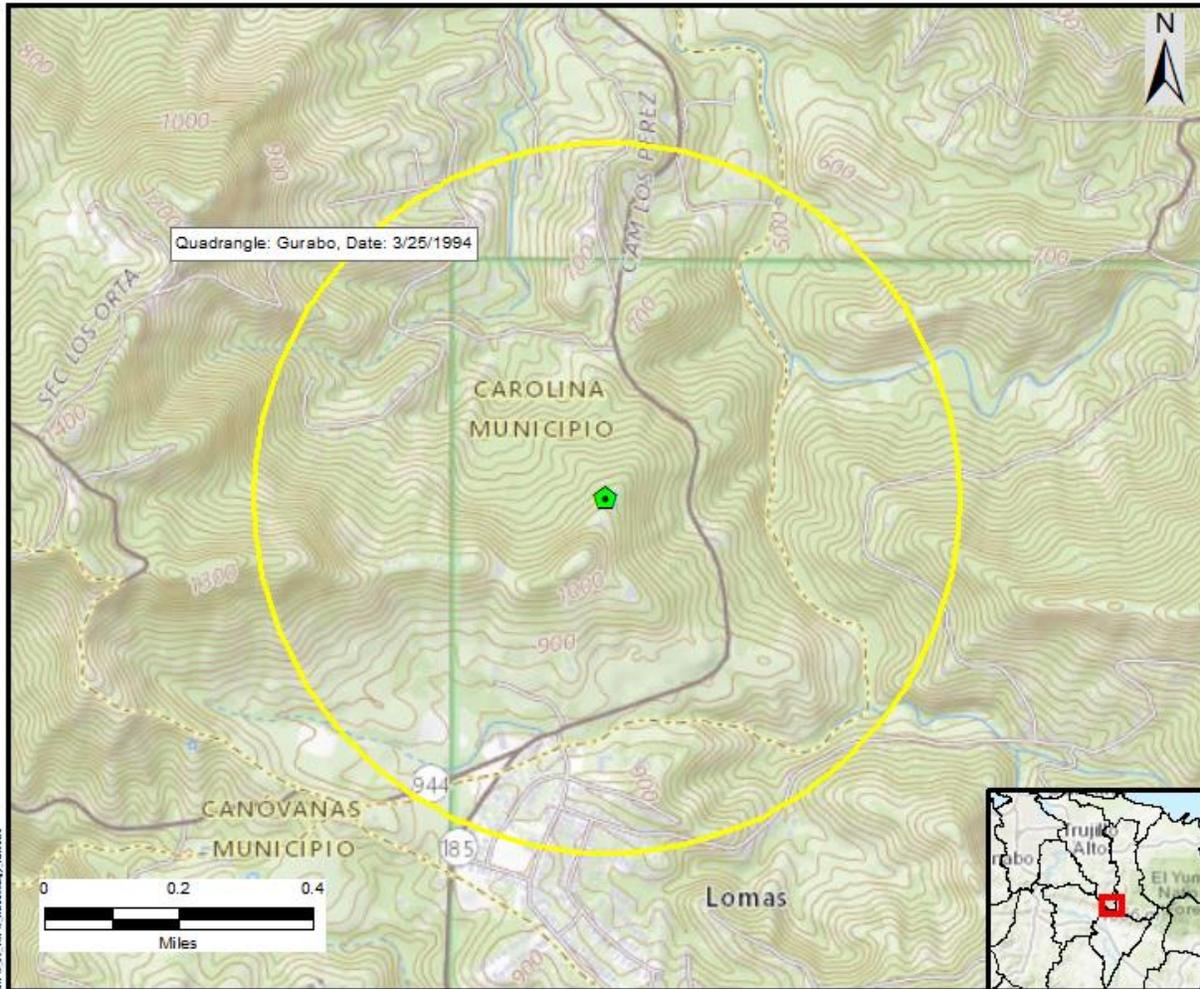
- Legend
-  Tier 2 Site
  -  Half Mile Buffer
  -  Historic Comunidades
  -  Traditional Urban Centers
  -  Cultural Resource District Polygon

Subrecipient: Rafael Príncipe Santiago, DBA Hacienda

Case ID: PR-RGRW-00018

City: Carolina

### Project (Parcel) Location with Previously Recorded Cultural Resources USGS Topographic Map



Source: National Park Service

Author: TG

Date: 9/29/2022

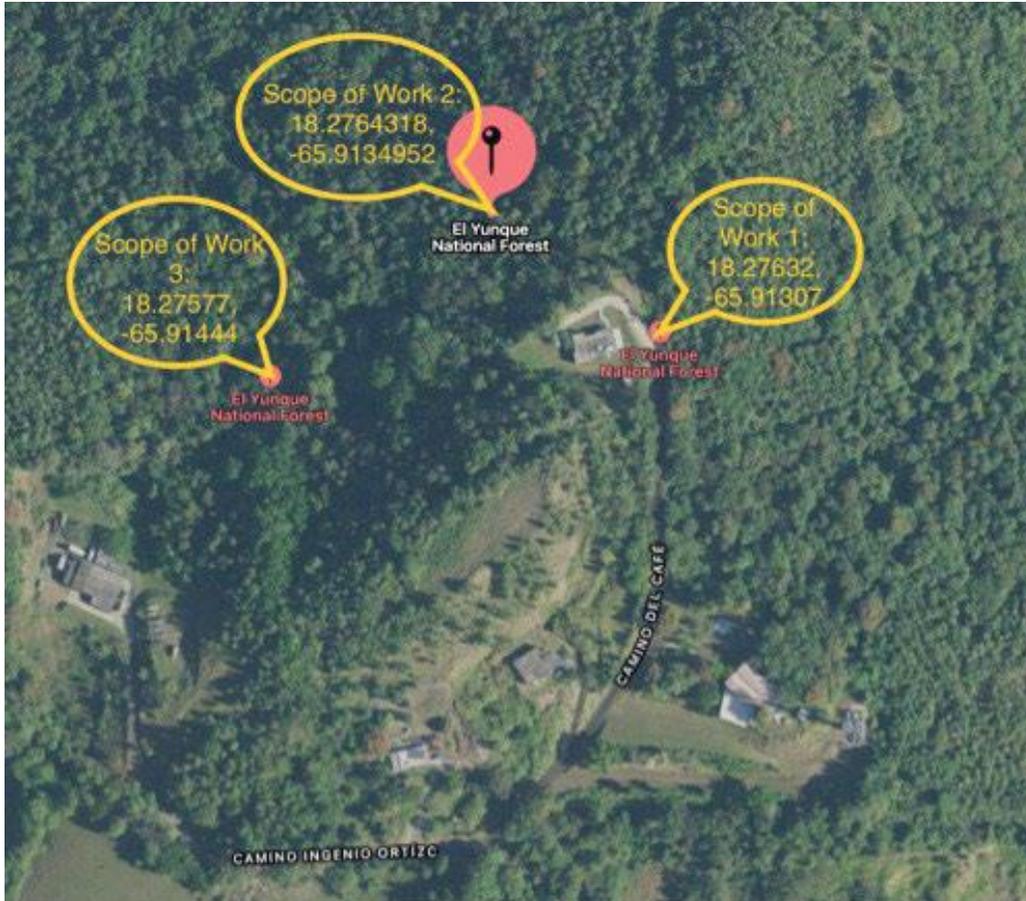
- Legend
-  Tier 2 Site
  -  Half Mile Buffer
  -  Historic Comunidades
  -  Traditional Urban Centers
  -  Cultural Resource District Polygon

**Subrecipient:** Rafael Príncipe Santiago, DBA Hacienda

**Case ID:** PR-RGRW-00018

**City:** Carolina

### Photograph Key



**Subrecipient:** Rafael Príncipe Santiago, DBA Hacienda

**Case ID:** PR-RGRW-00018

**City:** Carolina



**Photo # 1:**

**Description (include direction):** West

**Date:** 11/19/2022

Scope Of Work, Area 1.



**Photo #2:**

**Description (include direction):** Northeast

**Date:** 11/19/2022

Scope Of Work, Area 2.

**Subrecipient:** Rafael Príncipe Santiago, DBA Hacienda

**Case ID:** PR-RGRW-00018

**City:** Carolina



**Photo # 3:**

**Description (include direction):** West

**Date:** 11/19/2022

Scope Of Work, Area 3.



**Photo # 4:**

**Description (include direction):** Northwest.

**Date:** 11/19/2022

Plantains



October 20, 2022

**Arch. Carlos A. Rubio Cancela**

Executive Director

State Historic Preservation Officer

Cuartel de Ballajá Bldg.

San Juan, Puerto Rico

**Re: Authorization to Submit Documents**

Dear Arch. Rubio Cancela:

The U.S. Department of Housing (HUD) approved the allocations of Community Development Block Grant (CDBG-DR) funds on February 9, 2018. It also approved the allocation of Community Development Block Grant Mitigation (CDBG-MIT) funds on January 27, 2020. The purpose of these allocations is to address unsatisfied needs as a result of Hurricanes Irma and Maria in September 2017; and to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses.

To comply with the environmental requirements established by HUD, the Department of Housing of Puerto Rico (PRDOH) contracted Horne Federal LLC to provide environmental registry review services, among others, that will support the objectives of the agenda for both CDBG-DR and CDBG -MIT Programs.

In line to expedite the processes, Horne Federal LLC, is authorized to submit to the State Historic Preservation Officer, documentation of projects related to both the CDBG-DR and CDBG-MIT on behalf of PRDOH.

Cordially,

A handwritten signature in blue ink, appearing to be 'JB', is written over the typed name.

Juan C. Pérez Bofill, P.E. M.Eng

Director of Disaster Recovery

CDBG DR-MIT