

# **Environmental Assessment**

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

### **24 CFR Part 58**

#### **Project Information**

**Project ID:** PR-RGRW-01658

**Project Name:** AR Farm LLC

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

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

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

**Preparer:** Patricia Carmenatty

**Certifying Officer Name and Title:** Permit and Environmental Compliance Officers: Sally Acevedo Cosme, Pedro de León Rodríguez, María T. Torres Bregon, Ivelisse Lorenzo, Angel Gabriel Lopez Guzman, Janette Cambrelen, Santa Ramirez, Limary Vélez Marrero, Juan Carlos Perez Bofill and Mónica M. Machuca Ríos.

**Consultant:** Behar Ybarra & Associates LLC

**Direct Comments to:** Puerto Rico Department of Housing:  
([environmentcdbg@vivienda.pr.gov](mailto:environmentcdbg@vivienda.pr.gov))

#### **Project Location:**

Carr 159 km 1.9 Int, Bo. Unibon Patron, Morovis, PR 00687

Greenhouse location: latitude 18.343256, longitude -66.375685

Parcel cadastral # 110-000-006-20

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

The proposed project for PR-RGRW-01658 consist of the purchase and installation of a greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System. The installation of a greenhouse will require ground disturbance. The new greenhouse will be anchored to 8' spaced supports buried 2 feet deep. The water needed for the greenhouse will be provided by an existing cistern that is supplied from a PRASA intake on the property. The power needed to operate the water pump will be provided by an existing PREPA/LUMA connection on the property. The project area is located at PR-159

km. 1.9 within the Municipality of Morovis. Based on a review of historical aerial imagery, the general area has been used for agricultural purposes for the past 7 years.

The Area of Potential Effect (APE) has been defined as the area potentially impacted by ground disturbing activities related to the installation of the new greenhouse. Based on this definition and the nature and scope of the Undertaking, the Program has determined that the direct APE for this project is the location of the new greenhouse plus a 15-meter buffer and the visual APE is the viewshed of the proposed project.

A site Map is included in Figure 1, illustrating the location of the new greenhouse on the property. Photos of the location are included in the Section 106 documentation, Appendix 1. Refer Appendix 3 for Site Inspection Report.

**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 purchase and installation of a new greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System is in keeping with the overall objectives of the Economic Development Program.

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

The existing area where the greenhouse will be placed has a flat topography. On the surface we observed grasses, bushes and stones. The visibility is good despite the vegetation. Therefore, there is little to no change in land use associated with these placements.

### **Funding Information**

<b>Grant Number</b>	<b>HUD Program</b>	<b>Funding Amount</b>
B-18-DP-72-0001	Community Planning and Development (CPD) / Community Development Block Grant - Disaster Recovery (CDBG-DR)	\$11,938,162,230.00
B-17-DP-72-0001		
B-19-DP-78-0002		
B-18-DE-72-0001		

**Estimated Total HUD Funded Amount:** \$100,000.00

**Estimated Total Project Cost** (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$100,000.00.

## **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"/>	This project of the purchase and installation of a new greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System will have no impact on any Airports. The site is located 104,610 feet from the nearest major civil airport (Fernando Luis Ribas Dominicci Airport in San Juan) and 134,161 feet from the nearest military airport (Luis Muñoz Marín International Airport in San Juan). This project is in compliance with the HUD's Airport Hazard regulations without further evaluation. See the attached Airport map Runway Protection Zone, Figure 2.
<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"/>	This project is not located in a CBRS Unit. The project is located 45,016 feet southeast of the nearest Coastal Barrier Resource System, PR-83. Therefore, this project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act. See the attached CBRS map, Figure 3.
<b>Flood Insurance</b>  Flood Disaster Protection Act of 1973 and National	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project is located in a Zone X, Panel 72000C0660H, 4/19/2005 on the FEMA FIRM. The project does not require flood

Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]		insurance or is excepted from flood insurance. See attached Flood Map, Figure 4 and 4.1.
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.5</b>		
<b>Clean Air</b>  Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	This project consists of the purchase and installation of a new greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System for an agricultural site and is not located in a nonattainment municipality of Puerto Rico (Arecibo, Bayamón, Cataño, Guaynabo, Salinas, San Juan, Toa Baja). The installation and operation of this project will have no impact and is in compliance with the Clean Air Act without further evaluation. See attached published list of Puerto Rico Nonattainment/Maintenance Status for each country by year for all criteria pollutants in Appendix 2.
<b>Coastal Zone Management</b>  Coastal Zone Management Act, sections 307(c) & (d)	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project is located 40,329 feet from the nearest Coastal Zone Management Area and does not affect a Coastal Zone as defined in the state Coastal management Plan. The project is in compliance with the Coastal Zone Management Act. See the attached CZMA map, Figure 5.
<b>Contamination and Toxic Substances</b>  24 CFR Part 58.5(i)(2)	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	This project consists of the purchase and installation of a new greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System for an agricultural project. On-site or nearby toxic, hazardous, or radioactive substances that could affect the health and safety of project occupants or conflict with the intended use of the property were not found. There are two sites of environmental concern identified within 3,000 feet near the location of the proposed greenhouse.

		<p>EPA Facility Interests NPDES (Water Discharges) 110028077952 Riberas De Unibon – 2,118 ft. Address: PR-159 KM 5.8, Morovis, PR 00901. Coordinates: 18.337808, -66.375023</p> <p>EPA Facility Interests RCRA Info (Hazardous Waste) 110043860480 S U Jose Barreras School PR-159 KM 5.6 Unibon Ward, Morovis, PR 00687. Coordinates: 18.336397, -66.373805</p> <p>Based on EPA Enforcement and Compliance History Online (EPA ECHO) there are no violations reported. See Appendix 3.</p> <p>The project is in compliance with contamination and toxic substances requirements. See attached Toxics Map, Figure 6.</p>
<p><b>Endangered Species</b></p> <p>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The project could involve any activity that has an adverse effect on protected species or critical habitats. After reviewing data from the United States Fish and Wildlife Service (USFWS) Information and Planning Consultation (IPaC) and the Puerto Rico Department of Natural and Environmental Resources (DNER) database, the PR boa (<i>Chilabothrus inornatus</i>) could be found in the project area. The scope of work includes continued agricultural use of the property with no intention of cutting down trees or altering the general area where the new greenhouse will be installed. The greenhouse will be in a space that has been cleared and maintained that way for agricultural purposes.</p> <p>The nature of the project, scope of work, information available, a careful analysis of the IpaC, the Puerto Rico Boa conservation measures, the Caribbean Dkey dated October 12, 2023, in the US</p>

		<p>Fish and Wildlife Service's online IPaC application, and the observations during the field visit, were used to evaluate the potential impacts to federally listed species from this project. Based on that information and the answer inputted into the Dkey, it was determined that the proposed action will have "No Effect" determination on the Puerto Rican Boa (see attached Appendix 4). The project is 55,744 feet from the nearest final endangered species critical habitat. Therefore, the project has no critical habitats in the area.</p> <p>If a Puerto Rican Boa is found in the project activity site, work shall cease until the Boa moves off on its own. If the Boa does not move off, the Construction Manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask for them to relocate the Boa. As established by the USFWS Puerto Rican Boa Conservation Measures Guideline.</p> <p><a href="https://ipac.ecosphere.fws.gov/guideline/design/population/156/office/41430.pdf">https://ipac.ecosphere.fws.gov/guideline/design/population/156/office/41430.pdf</a></p> <p>This project is in compliance with the Endangered Species Act. See attached Endangered Species map, Figure 7. Refer to Appendix 4 for the Ipac Report and Threatened and Endangered Species review letter.</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>This project consists of the purchase and installation of a new greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System and does not include development, construction or rehabilitation that will increase residential density. This project is in compliance with Explosive and Flammable hazards without further evaluation.</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>This project does not include any activities that could potentially convert agricultural land to non-agricultural use. All areas under the project site are not prime farmland. The project is in compliance with the Farmland Protection Policy Act. See the attached Farmlands map, Figure 8.</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 is located in a Zone X, Panel 72000C0660H, 4/19/2005 (Figure 4). The site is not located in a Preliminary Firm or an Advisory Base Flood Elevation special flood hazard area. The project is in compliance with Executive Order 11988. See attached Flood Map (Figure 9).</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 visited on September 20, 2023, by SOI-qualified archaeologist. Based on the nature and scope of the undertaking, the APE has been defined as the area potentially affected by ground-disturbing activities related to installation of the new greenhouse. Documentation with photographs and maps was subsequently submitted to SHPO (attached Appendix 1). In a response from PR SHPO dated October 2, 2023, SHPO concurred with a finding of <b>No Historic Properties Affected</b> within the project's Area of Potential Effects (see attached Appendix 1). The property is not considered historic or contributing to an historic district (See attached Historic map, Figure 10). Therefore, this activity is in compliance with National Historic Preservation Act.</p>
<p><b>Noise Abatement and Control</b></p> <p>Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>This project consists of the purchase and installation of a new greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System for an agricultural site. The project does not include new construction for residential use or rehabilitation of an existing residential</p>

		property. The site is rural in nature and there will be no impact to or from the surrounding area from a noise perspective. This topic is in compliance with Noise Control Act without further evaluation.
<b>Sole Source Aquifers</b>  Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	There are no EPA sole source aquifers in Puerto Rico. The project is in compliance with the Safe Drinking Water Act without further evaluation.
<b>Wetlands Protection</b>  Executive Order 11990, particularly sections 2 and 5	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	The Unibón River is approximately 150 feet from where the new greenhouse will be installed. However, for the installation of the greenhouse the only ground disturbance will be anchored to 8' spaced supports buried 2 feet deep, and this will be outside of the area of potential effect. Furthermore, the wetland will not be affected by the project. However, standard BMPs should be applied to mitigate impact on wetlands, like installing erosion controls or diverting runoff (in any) around the areas of ground disturbance. The project is in compliance with Executive Order 11990. See the attached Wetlands map, Figure 11.
<b>Wild and Scenic Rivers</b>  Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	This project is not within proximity of the NWSRS river. The project is located 203,790 feet from the nearest Wild and Scenic River. The project is in compliance with the Wild and Scenic Rivers Act. See Map, Figure 12.
<b>ENVIRONMENTAL JUSTICE</b>		
<b>Environmental Justice</b>  Executive Order 12898	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	Based on the scope of work for this project, there will be no additional impact on low-income or minority

		residents. This proposed activity will not have a negative impact on Environmental Justice. Therefore, the proposed activity complies with this section.
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**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 of 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 action is continued agricultural use of property which is compatible with a zoning code of R-0 (Residential zero) and existing land use of SRC(Common Rustic Land). There is no urban design associated with this rural, agricultural site

Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	The soil is currently being used for agriculture purposes. There is no change in land use since the land will continue to be used to agriculture purposes. The soil in the project area has been classified as Colinas cobbly clay loam, 20 to 60 percent slopes, eroded (CmF2). This soil is moderately deep, steep to very steep, and well drained. It is on side slopes and ridgetops. The permeability of this soil is moderate. The available water capacity is high. Runoff is very rapid. Natural fertility is medium. The landslide data indicates moderate to high landslide susceptibility; therefore, no erosion is expected to occur from this project. The project will not affect the drainage in the area. There will be little to no additional runoff associated with the project. See Landslide Susceptibility Map, Figure 13.
Hazards and Nuisances including Site Safety and Noise	2	There are no specific environmental hazards that have been identified for this site. The site is not in a high Noise Level area, nor will the project generate any additional noise. Additionally, the project does not include housing or such to where inhabitants would be affected.
Energy Consumption	2	The project consists of the purchase and installation of a new greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System on an existing agricultural farm and will not require new connections or any expansion to existing power facilities. The power needed to operate the water pump will be provided by an existing PREPA/LUMA connection on the property.

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

Employment and Income Patterns	2	The project will result in short-term benefit to employment when contractors are hired for the construction of the new greenhouse. After construction, there may be a net positive benefit for the farm, a small business receiving this funding for economic development recovery purposes, which will aid in the continued operations of the intended use of
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		the farm which products will be used by Puerto Rico population. The project is not anticipated to have a significant impact on Employment and Income Patterns.
Demographic Character Changes, Displacement	2	The proposed project will not alter the demographic characteristics of Morovis, PR. The applicant is already located at this location and the project will provide opportunities for the continuous agricultural growth of the business.
Environmental Justice	2	<p>In the project area within a one-mile radius:</p> <ul style="list-style-type: none"> <li>• The people of color are 100% compared to PR average of 96%</li> <li>• 73% of the people are low income compared to PR average of 70%</li> <li>• 18% of the people are unemployed compared to PR average of 15%</li> </ul> <p>The proposed activities of the installation of the greenhouse will have a positive impact on creating jobs for local people. Therefore, the proposed activity complies with this section. See EJSscreen Report in Appendix 3.</p>

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>COMMUNITY FACILITIES AND SERVICES</b>		
Educational and Cultural Facilities	2	The project consists of the purchase and installation of a new greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System for an agricultural site and will have no impact on educational and cultural facilities.
Commercial Facilities	2	The proposed project may aid in restoring the demand for local commercial services; however, not to the point of putting undue pressure on commercial facilities.
Health Care and Social Services	2	The project consists of the purchase and installation of a new greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System for an agricultural site

		and will have no impact on Health Care and Social Services.
Solid Waste Disposal / Recycling	2	The proposed project will have no impact on Solid Waste Disposal / Recycling services. The products and by-products are agricultural, and any waste would be biodegradable. The remaining construction solid waste materials would be collected for transport to the local landfill.
Wastewater / Sanitary Sewers	2	The installation and construction of the new greenhouse will not produce any wastewater. Based on the scope of work is not expected to result in significant changes in wastewater or sanitary sewer generation. The proposed project will have no impact on Wastewater / Sanitary Sewers.
Water Supply	2	The proposed project will not require an additional water supply. The water needed for the greenhouse will be provided by an existing cistern that is supplied from a PRASA intake on the property. Therefore, the proposed project will have no impact on the water supply.
Public Safety - Police, Fire and Emergency Medical	2	The project consists of the purchase and installation of a new greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System for an agricultural site and will have no impact on Public Safety.
Parks, Open Space and Recreation	2	The proposed project will have no impact to Parks, Open Space and Recreation. The property being used is agricultural and it will continue as agricultural use.
Transportation and Accessibility	2	The project consists of the purchase and installation of a new greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System for an agricultural site and will have no impact on transportation and accessibility.

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 agriculture 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. There may be wildlife attracted to the new greenhouse but no negative impact on wildlife.
Climate Change	2	The Re-Grow Program proposed project aims to increase resiliency in the agricultural industry to prepare for future climate related disasters. The project will not contribute to climate change and will provide a minor net benefit by allowing for increased food production.

**Additional Studies Performed:** Not applicable.

**Field Inspection** (Date and completed by): September 20, 2023, Jaqueline Lopez, SOI-Qualified Archaeologist

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

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://www.fws.gov/CBRA/Maps/Locator/PR.pdf)

National Park Service, National Registry of Natural Landmarks.

[www.nature.nps.gov/nnl/docs/NNLRegistry.pdf](http://www.nature.nps.gov/nnl/docs/NNLRegistry.pdf)

US Fish and Wildlife Service, Wild and Scenic Rivers – correspondence to Agency on October 16, 2018

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.

Sierra Research for Office of Mobile Sources. US Environmental Protection Agency.

Report No. SR93-03-02, Evaluation of Methodologies to Estimate Nonroad Mobile Source Usage, March 19, 1993: <http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=9100UR51.txt>

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/ecp0/reports/species-listed-by-state-report?state=PR&status=listed>

Federal Emergency Management Agency, Flood Mapping Service:  
<https://msc.fema.gov/portal/home> (compilation of numerous maps)

Puerto Rico Planning Board, Communication regarding Floodplain Management, November 29, 2018.

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)

US Army Corps of Engineers, Jacksonville District, Antilles Section, Communication regarding Wetlands Management, November 13, 2018.

Puerto Rico Coastal Zone Management Program Plan, September 2009.

Puerto Rico Planning Board, Communication regarding Coastal Zone Management, November 16, 2018 (No response).

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

US Fish and Wildlife Service, Caribbean Ecological Services Field Office. E-mail communication regarding October 23, 2018 letter on Threatened and Endangered Species and Critical Habitats.

NOAA Fisheries / National Marine Fisheries Service, NEPA Coordinator Southeast Regional Office. Communication on October 16, 2018 regarding designated critical habitat. (No response).

US Geological Survey, Data Release of May Showing Concentration of Landslides Caused by Hurricane Maria, <https://doi:10.5066/F7JD4VRF>

**List of Permits Obtained:** None required.

**Public Outreach** [24 CFR 58.43]: Puerto Rico Department of Agriculture has worked closely with the agricultural community. This project will include 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 purchase and installation of a new greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System for an agricultural site.

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

The Regrow Program purpose is to enhance and expand agricultural production related to economic revitalization and sustainable development activities while promoting and increasing food security island wide. The "Alternative" action would mean that the applicant would consider other locations for the new greenhouse. However, other locations may result in tree clearing prior to construction and/or need to fill in some steep area. Any option that requires going off-site would not contribute to the improvement and growth of agricultural production or enable economic development for this applicant.

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

The 'No-Action' alternative would mean that the applicant would not receive federal funding to provide the purchase and installation of a new greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System for an agricultural site 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 not have any adverse effects on the environmental 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
<p><b>Wetlands Protection</b>            (Executive Order 11990, particularly sections 2 and 5)</p>	<p>Standard BMPs should be applied to mitigate impact on wetlands.</p>
<p>Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff</p>	<p>Soil suitability will be assessed prior to construction. Contractors will be required to use BMPs during construction if erosion impacts occur. DNER authorization may be required for any ground disturbance associated with the activities in the proposed project.</p>
<p><b>Endangered Species</b>            Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>If a Puerto Rican Boa is found in the project activity site, work shall cease until the Boa moves off on its own. If the Boa does not move off, the Construction Manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask for them to relocate the Boa.</p>

**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: 1/3/2024

Name/Title/Organization: Patricia Carmenatty / Environmental Specialist/ Behar Ybarra & Associates LLC

Certifying Officer Signature:  Date: January 26, 2024

Name/Title: Mónica M. Machuca Ríos / 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).

## Figures

Figure 1

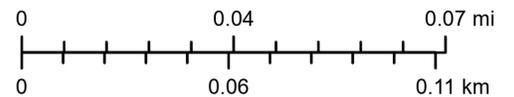
# Location: Aerial Map

Puerto Rico Department of Housing ReGrow



**Legend**

-  PR-RGRW-01658
-  PR-RGRW-01658 Parcel
-  CRIM Parcels



Service Layer Credits: World Imagery: Maxar  
Google Satellite: © OpenStreetMap (and) contributors,  
CC-BY-SA  
World Street Map: Esri, HERE, Garmin, NGA, USGS  
and Google Earth

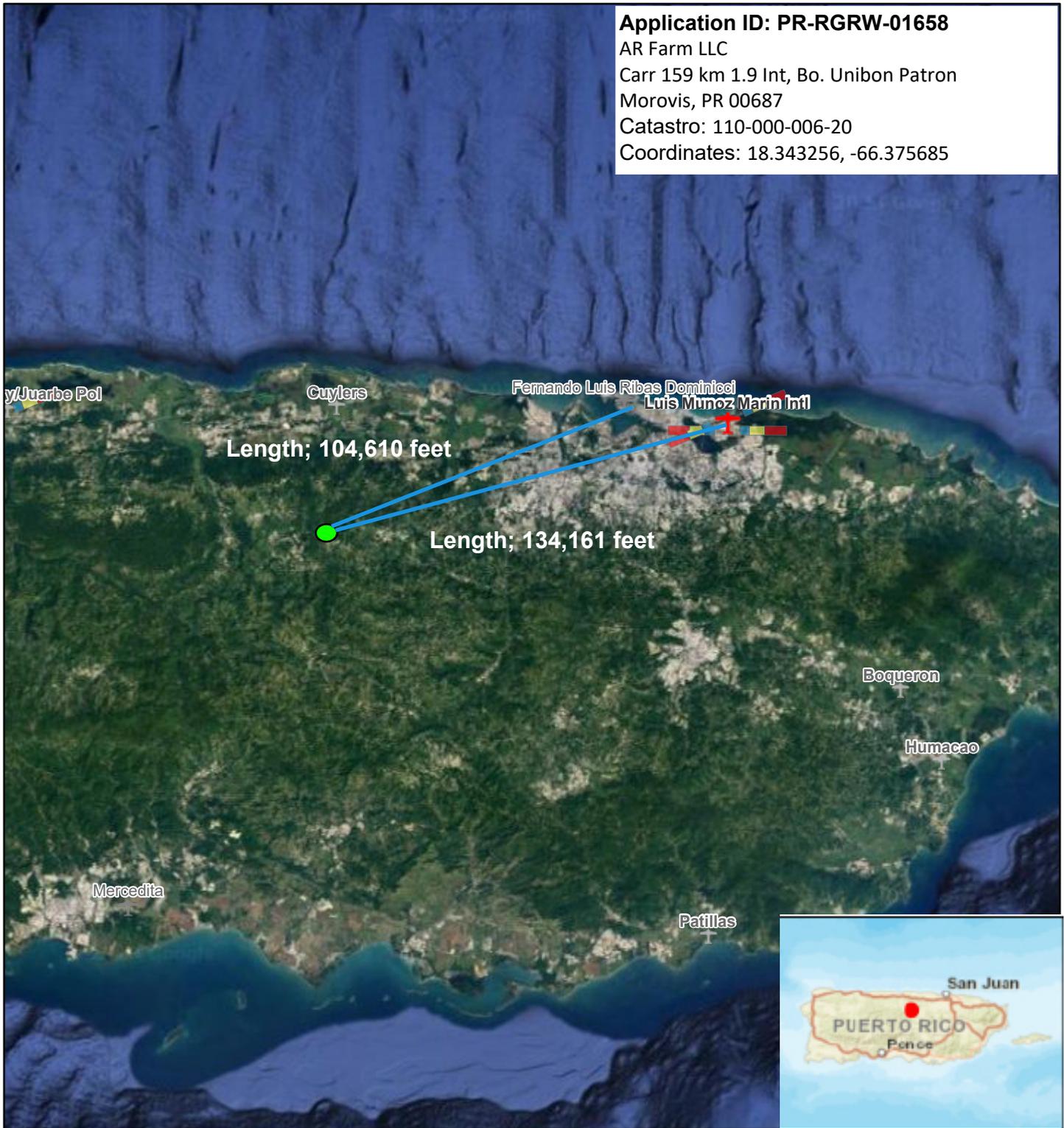


**Source**

Centro de Recaudación de Ingresos Municipales (CRIM)  
<https://catastro.crimpr.net/cdprpc/>

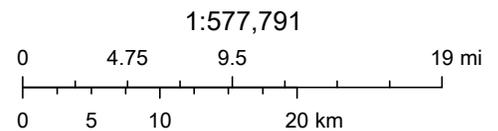
# Figure 2 PR-RGRW-01658 Airports

**Application ID: PR-RGRW-01658**  
AR Farm LLC  
Carr 159 km 1.9 Int, Bo. Unibon Patron  
Morovis, PR 00687  
Catastro: 110-000-006-20  
Coordinates: 18.343256, -66.375685



10/13/2023, 11:56:58 AM

- |                         |            |                       |
|-------------------------|------------|-----------------------|
| Accident Potential Zone |            | USA Military Airports |
|                         | Clear Zone |                       |
|                         | APZ 1      | USA Civil Airports    |
|                         | APZ 2      |                       |
|                         |            | PR-RGRW-01658         |



Runway Protection Zones  
Major Civil and Military Airports

**Source**

Federal Aviation Administration (FAA)  
<https://adds-faa.opendata.arcgis.com/>



# Figure 3 PR-RGRW-01658 CBRS

**Application ID: PR-RGRW-01658**  
AR Farm LLC  
Carr 159 km 1.9 Int, Bo. Unibon Patron  
Morovis, PR 00687  
Catastro: 110-000-006-20  
Coordinates: 18.343256, -66.375685



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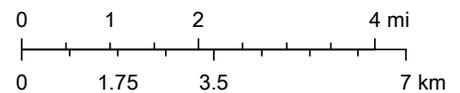
1:144,448

□ CBRS Map Panels      ● PR-RGRW-01658

CBRS Units

□ Otherwise Protected Area

□ System Unit



**Source**

U.S. Fish and Wildlife Service (FWS):  
<https://www.fws.gov/program/coastal-barrier-resources-act>

# National Flood Hazard Layer FIRMette Figure 4



66°22'51"W 18°20'53"N



## Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D

OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall

OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature

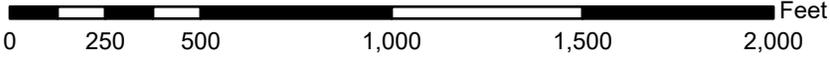
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



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 **10/13/2023 at 12:30 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.



1:6,000 66°22'14"W 18°20'19"N

Basemap Imagery Source: USGS National Map 2023

# PR-RGRW-01658 Flood Hazard

**Application ID: PR-RGRW-01658**  
AR Farm LLC  
Carr 159 km 1.9 Int, Bo. Unibon Patron  
Morovis, PR 00687  
Catastro: 110-000-006-20  
Coordinates: 18.343256, -66.375685

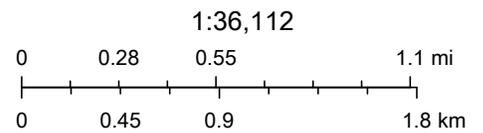


10/13/2023, 12:27:18 PM

FEMA\_FIRM - FEMA\_FLOOD\_HAZARD\_AREAS

Other Areas

PR-RGRW-01658



**Source**

Federal Emergency Management Agency (FEMA)

# Figure 5 PR-RGRW-01658 CZM

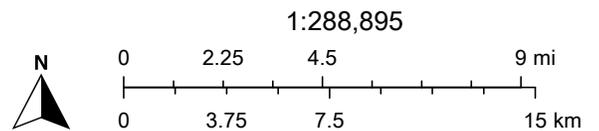
**Application ID: PR-RGRW-01658**  
AR Farm LLC  
Carr 159 km 1.9 Int, Bo. Unibon Patron  
Morovis, PR 00687  
Catastro: 110-000-006-20  
Coordinates: 18.343256, -66.375685



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 PR CoastalZoneManagementActBoundary

 PR-RGRW-01658

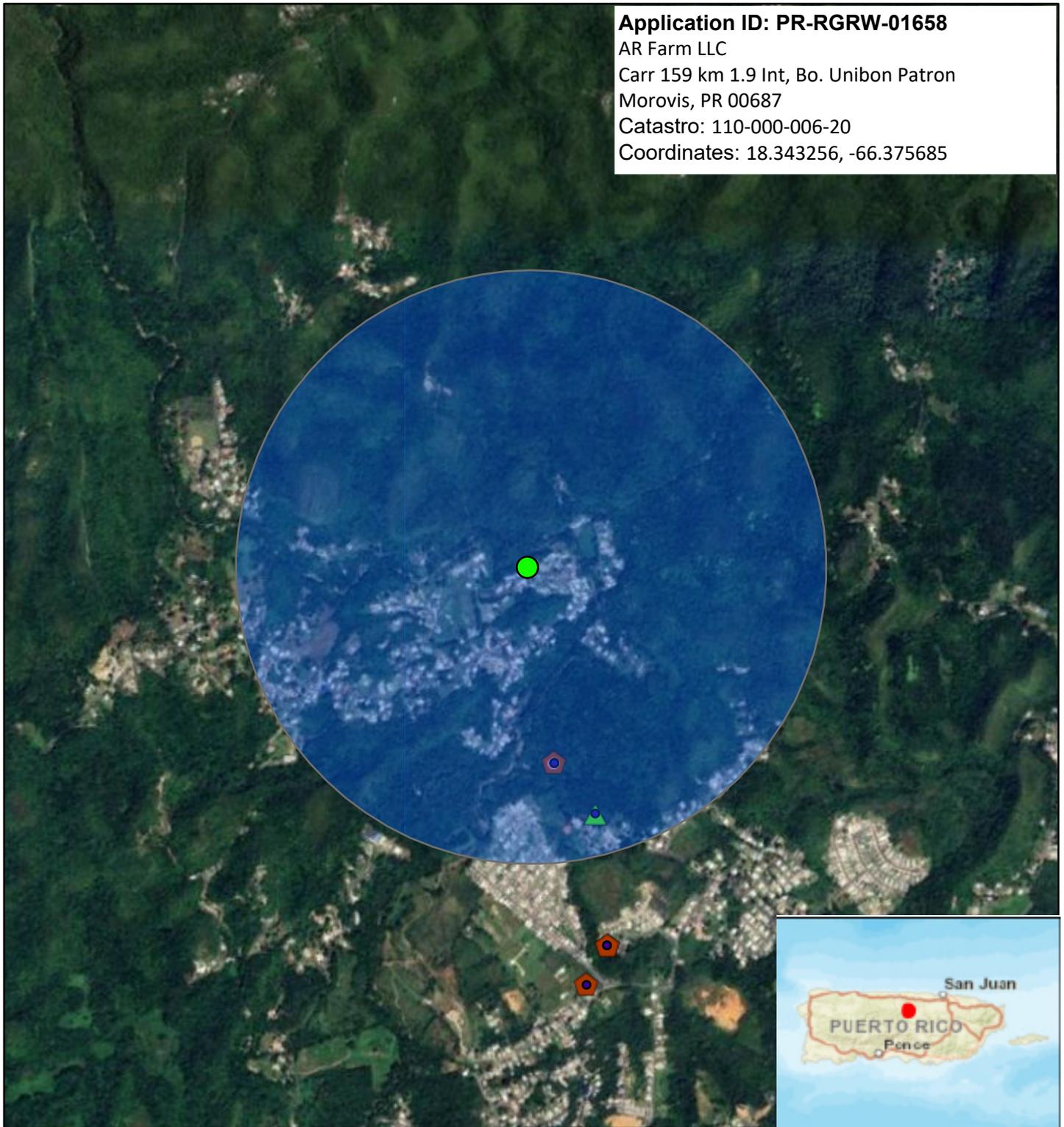


**Source**

National Oceanic and Atmospheric Administration (NOAA)  
NOAA Office for Coastal Management (NOAA/OCM)  
<https://www.fisheries.noaa.gov/inport/item/53132>

# Figure 6 PR-RGRW-01658 Toxic

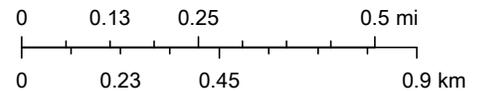
**Application ID: PR-RGRW-01658**  
AR Farm LLC  
Carr 159 km 1.9 Int, Bo. Unibon Patron  
Morovis, PR 00687  
Catastro: 110-000-006-20  
Coordinates: 18.343256, -66.375685



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1:18,056

- Buffer of 01658\_3000ft
- FACILITY INTERESTS
- ICIS
- PR-RGRW-01658
- NPDES
- RCRA
- RCRA ACTIVE



**Source**

U.S. Environmental Protection Agency (EPA)  
Facility Registry Service (FRS)  
<https://www.epa.gov/frs>

PR-RGRW-01658 Endangered Species

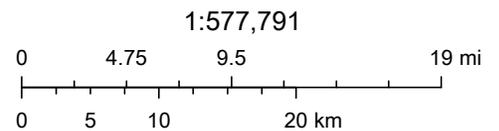
**Application ID: PR-RGRW-01658**  
 AR Farm LLC  
 Carr 159 km 1.9 Int, Bo. Unibon Patron  
 Morovis, PR 00687  
 Catastro: 110-000-006-20  
 Coordinates: 18.343256, -66.375685



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Critical Habitat for Threatened & Endangered Species

- Final
- Proposed
- USFWS Critical Habitat - Final
- PR-RGRW-01658



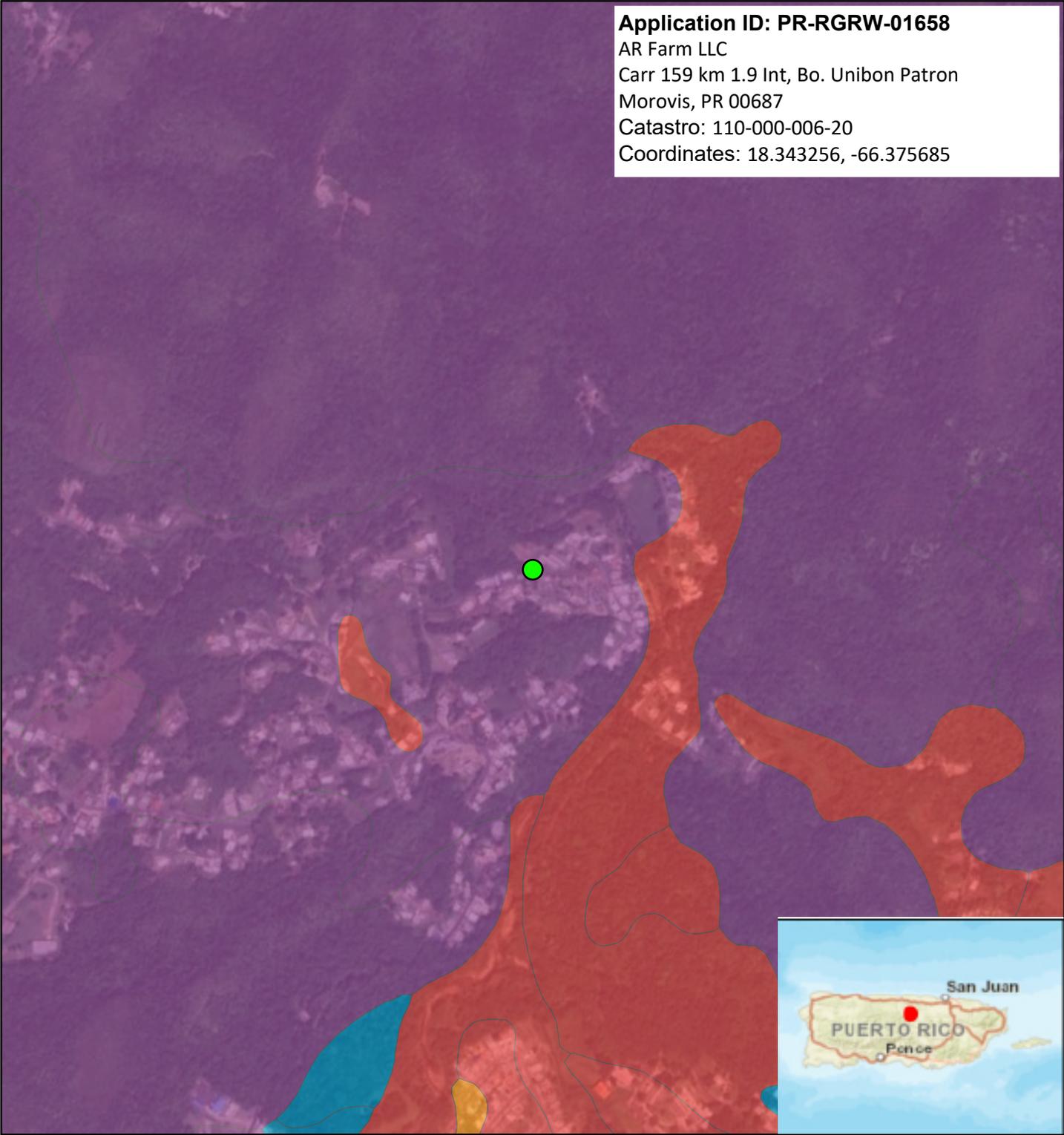
**Source**

National Oceanic and Atmospheric Administration (NOAA)  
 Office of Response and Restoration  
<https://response.restoration.noaa.gov/>

Figure 8

PR-RGRW-01658 Farmland

**Application ID: PR-RGRW-01658**  
 AR Farm LLC  
 Carr 159 km 1.9 Int, Bo. Unibon Patron  
 Morovis, PR 00687  
 Catastro: 110-000-006-20  
 Coordinates: 18.343256, -66.375685

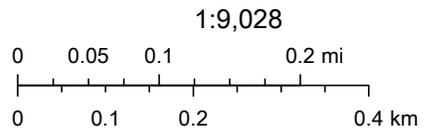


10/12/2023, 3:21:16 PM

Farmland Protection

 PR-RGRW-01658

-  All areas are prime farmland
-  Farmland of statewide importance
-  Not prime farmland
-  Prime farmland if drained



Source

Natural Resources Conservation Service (NRCS)  
 Gridded Soil Survey Geographic Database (gSSURGO)  
<https://data.nal.usda.gov/dataset/soil-survey-geographic-database-ssurgo>

# Figure 9 PR-RGRW-01658 ABFE

**Application ID: PR-RGRW-01658**  
AR Farm LLC  
Carr 159 km 1.9 Int, Bo. Unibon Patron  
Morovis, PR 00687  
Catastro: 110-000-006-20  
Coordinates: 18.343256, -66.375685



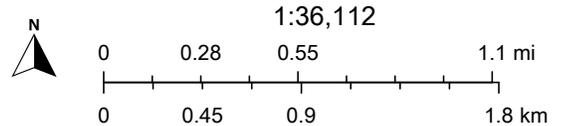
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**Flood Hazard Zone**

- A
- X 0.2% Annual Chance Flood
- Zone/BFE Boundary
- PR-RGRW-01658

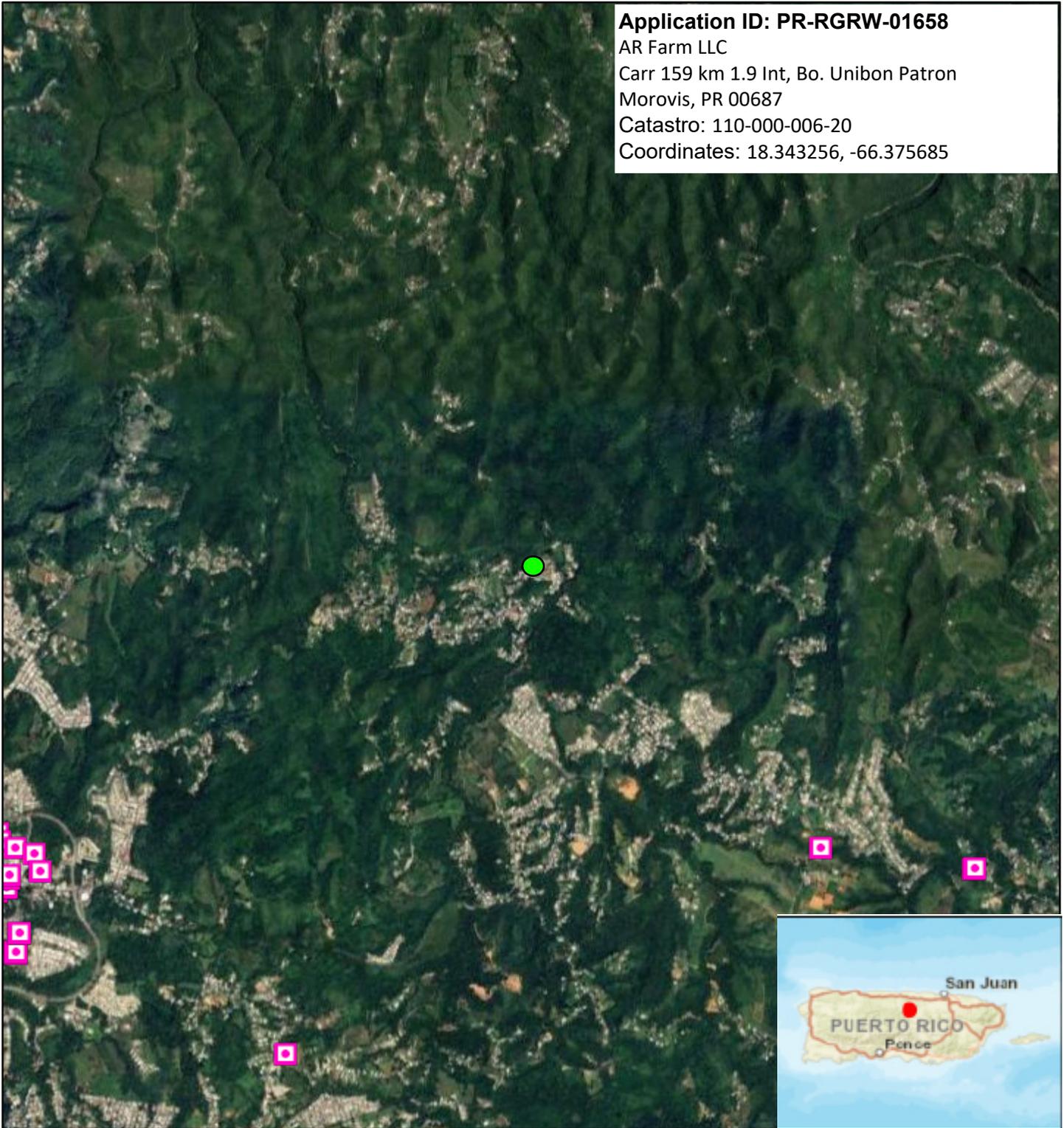
**Flood Hazard Extent**

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



**Source**  
Federal Emergency Management Agency (FEMA)  
FEMA's National Flood Hazard Layer  
<https://www.fema.gov/flood-maps/national-flood-hazard-layer>

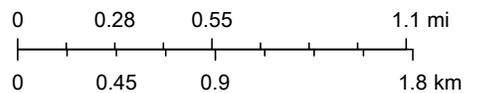
**Application ID: PR-RGRW-01658**  
AR Farm LLC  
Carr 159 km 1.9 Int, Bo. Unibon Patron  
Morovis, PR 00687  
Catastro: 110-000-006-20  
Coordinates: 18.343256, -66.375685



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1:36,112

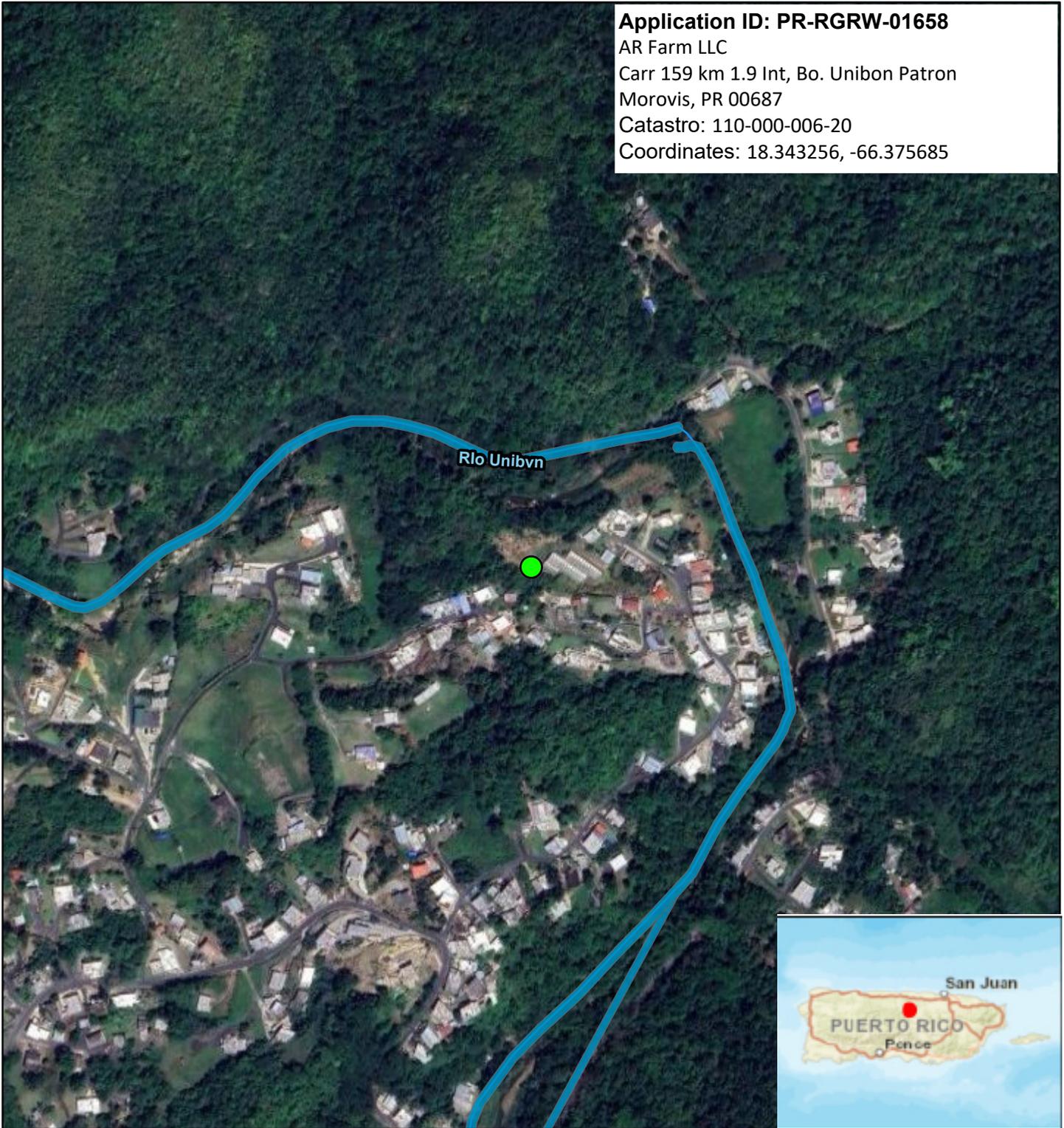
-  Cultural\_Resources - Cultural Value Places
-  Cultural\_Resources - Archeological Resources
-  PR-RGRW-01658



**Source**

National Park Service (NPS) - National Register of Historic Places (NRHP)  
<https://www.nps.gov/subjects/nationalregister/index.htm>  
State Historic Preservation Office (SHPO)  
<https://oehc.pr.gov/Pages/default.aspx>

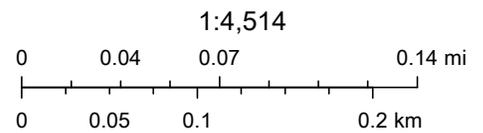
**Application ID: PR-RGRW-01658**  
AR Farm LLC  
Carr 159 km 1.9 Int, Bo. Unibon Patron  
Morovis, PR 00687  
Catastro: 110-000-006-20  
Coordinates: 18.343256, -66.375685



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WETLANDS - National Wetlands Inventory

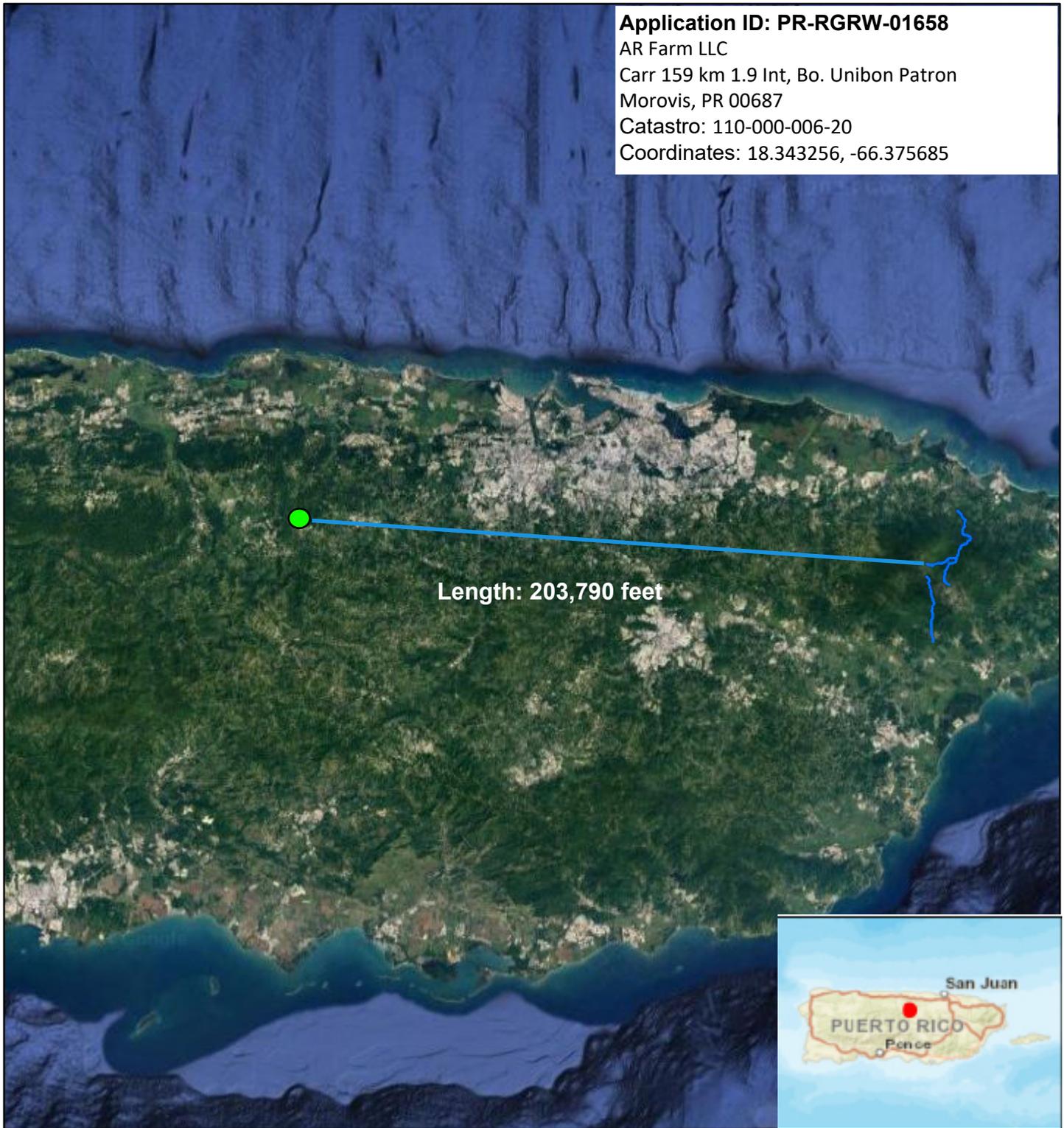
-  Riverine
-  Hidrografia - Oficina Plan de Agua
-  PR-RGRW-01658



**Source**

U.S. Fish and Wildlife Service (FWS):  
National Wetlands Inventory  
<https://www.fws.gov/program/national-wetlands-inventory>

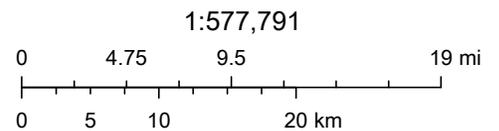
**Application ID: PR-RGRW-01658**  
AR Farm LLC  
Carr 159 km 1.9 Int, Bo. Unibon Patron  
Morovis, PR 00687  
Catastro: 110-000-006-20  
Coordinates: 18.343256, -66.375685



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 National Wild and Scenic River Line

 PR-RGRW-01658



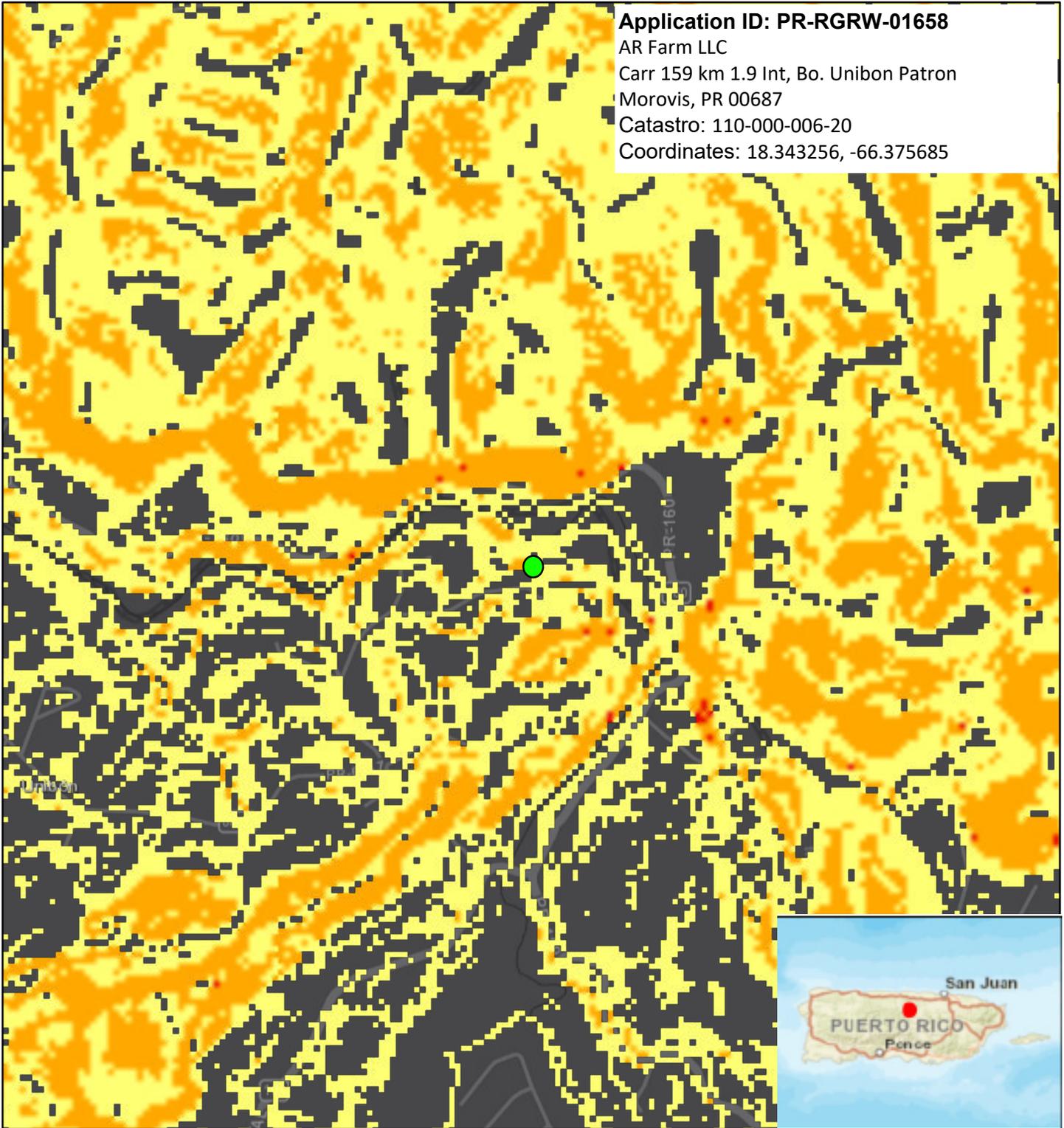
**Source**

U.S. Fish and Wildlife Service (FWS)  
National Wild and Scenic Rivers System  
<https://www.rivers.gov/mapping-gis.php>

Figure 13

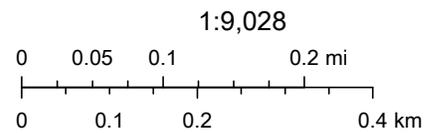
# PR-RGRW-01658 Landslide

**Application ID: PR-RGRW-01658**  
 AR Farm LLC  
 Carr 159 km 1.9 Int, Bo. Unibon Patron  
 Morovis, PR 00687  
 Catastro: 110-000-006-20  
 Coordinates: 18.343256, -66.375685



13/10/2023, 12:58:23

- Landslide Susceptibility**
- High
  - Very High
  - Moderate
  - Extremely High
- PR-RGRW-01658



Source: Landslide data from USGS:  
 Esri Imagery Basemap service.

# Appendix 1



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

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

October 2, 2023

**Lauren Bair Poche**

HORNE  
10000 Perkins Rowe, Suite 610, Bldg G  
Baton Rouge, LA 70810

SHPO 09-27-23-06 SECTION 106 NHPA EFFECT DETERMINATION  
SUBMITTAL: PR-RGRW-01658- AR FARM, LLC- CARR. 159, KM 1.9, MOROVIS,  
PUERTO RICO

Dear Ms. Bair,

Our Office has received and reviewed the above referenced project in accordance with 54 U.S.C. 306108 (commonly known as Section 106 of the *National Historic Preservation Act*) and 36 CFR Part 800: *Protection of Historic Properties*.

Our records support your finding of no historic properties affected for this undertaking.

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

Sincerely,

Carlos A. Rubio-Cancela  
State Historic Preservation Officer

CARC/GMO/MB



September 27, 2023

Carlos A. Rubio Cancela  
State Historic Preservation Officer  
Puerto Rico State Historic Preservation Office  
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-01658 – AR Farm LLC – Carr 159 Km. 1.9, Morovis, 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). 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, HORNE is submitting documentation for activities proposed by AR Farm LLC at Carr 159 Km 1.9 in the municipality of Morovis. The proposed activities for PR-RGRW-01658 consist of the purchase and installation of a greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System. The installation of a greenhouse will require ground disturbance. The new greenhouse will be anchored to 8' spaced supports buried 2' deep. The water needed for the greenhouse will be provided by an existing cistern that is supplied from a PRASA intake on the property. The power needed to operate the water pump will be provided by an existing PREPA/LUMA connection on the property.

Based on the submitted documentation, the Program requests a concurrence that a finding 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

Attachments

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>REgROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>		
<b>Applicant: AR Farm LLC</b>		
<b>Case ID: PR-RGRW-01658</b>	<b>City: Morovis</b>	

<b>Project Location:</b> Carr 159 Km. 1.9	
<b>Project Coordinates:</b> 18.343256 -66.375685	
<b>TPID (Número de Catastro):</b> 110-000-006-20	
<b>Type of Undertaking:</b> <input type="checkbox"/> Substantial Repair/Improvements <input checked="" type="checkbox"/> New Construction	
<b>Construction Date (AH est.):</b> n/a	<b>Property Size (acres):</b> 7.41

<b>SOI-Qualified Archaeologist:</b> Jaqueline López Meléndez
<b>Date Reviewed:</b> September 20, 2023

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 for PR-RGRW-01658 consist of the purchase and installation of a greenhouse (25'x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System. The installation of a greenhouse will require ground disturbance. The new greenhouse will be anchored to 8' spaced supports buried 2 feet deep. The water needed for the greenhouse will be provided by an existing cistern that is supplied from a PRASA intake on the property. The power needed to operate the water pump will be provided by an existing PREPA/LUMA connection on the property. The project area is located at PR-159 km. 1.9 within the Municipality of Morovis. Based on a review of historical aerial imagery, the general area has been used for agricultural purposes for the past 7 years.

### 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 is the location of the greenhouse plus a 15-meter buffer and the visual APE is the viewshed of the proposed project.

### 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

<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>Applicant: AR Farm LLC</b>	
<b>Case ID: PR-RGRW-01658</b>	<b>City: Morovis</b>

the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61), shows that there are no reported archaeological sites, archaeological materials of significant cultural properties within a half-mile (0.50 miles) radius of the project location. The closest reported archaeological site to the PR-RGRW-01658 project area is the Pre-Columbian site Terrazas de Patron (ICP: MV-11) located 0.56 miles southwest. The proposed project is located in Morovis, at an elevation of 492 feet above sea level. Per the USGS/NRCS Web Soil Survey, the project area is within mapped soil series: Colinas cobbly clay loam. The project area APE is in CmF2. The nearest bodies of water are: Unibón river, located 0.04 miles north and 0.11 miles east from the project area. The coast is approximately 9.95 miles north from the project area.

There are two (2) archaeological studies within 0.50 miles radius of the project area, both with negative results.

The project area does not have cultural resources that are listed either on the National Register of Historic Places (NRHP) or in a Traditional Urban Center or Historic District. On September 18, 2023, we visually inspected the project area. The area where the greenhouse will be placed has a flat topography. On the surface we observed grasses, bushes and stones. The visibility is good in spite of the vegetation.

The soil in the project area has been classified as Colinas cobbly clay loam, 20 to 60 percent slopes, eroded (CmF2). This soil is moderately deep, steep to very steep, and well drained. It is on side slopes and ridgetops. The permeability of this soil is moderate. The available water capacity is high. Runoff is very rapid. The natural fertility is medium.

There are two cultural resource studies with negative results within a half-mile radius of the property.

The project area does not have cultural resources that are listed either on the National Register of Historic Places (NRHP) or in a Traditional Urban Center or Historic District. On September 18, 2023, we visually inspected the project area. No cultural remains can be observed on the surface of the parcel.

**Determination**

The project area is not within or adjacent to the boundaries of a National Register of Historic Places (NRHP)-eligible or listed historic district or Traditional Urban Center. There are no reported archaeological materials or significant cultural properties within a half-mile radius of the proposed project location. There are no known archaeological sites or NRHP listed/eligible historic properties are within or adjacent to the property or the parcel in which the Area of Potential Effect of case PR-RGRW-01658 is located. The construction of public roads and agricultural infrastructure has minimally impacted the surrounding terrain. Therefore, no historic properties will be affected by this reconstruction 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>Applicant: AR Farm LLC</b>		
<b>Case ID: PR-RGRW-01658</b>	<b>City: Morovis</b>	

**Recommendation (Please keep on same page as SHPO Staff Section)**

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**

The Puerto Rico State Historic Preservation Office has reviewed the above information and:	
<input type="checkbox"/> <b>Concurs</b> with the information provided. <input type="checkbox"/> <b>Does not concur</b> with the information provided.	
<b>Comments:</b>	
Carlos Rubio-Cancela State Historic Preservation Officer	Date:

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>REgROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>		
<b>Applicant: AR Farm LLC</b>		
<b>Case ID: PR-RGRW-01658</b>	<b>City: Morovis</b>	

**Table of archaeological sites, historic properties and historic districts located within the project area or within a 0.50-miles radius**

Name	SHPO id #	IPRC id #	Distance/Direction	Description	NRHP (listed, eligible, non-eligible, no data)
None	-	-	-	-	-

**Table of cultural resources surveys conducted within the project area or within a 0.50-miles radius.**

Author	Phase/Title	Year	SHPO / IPRC code	Results	Distance/Direction
Juan A. Rivera Fontán	IA-IB/ Mejoras al Sistema de Acueductos	1993	ICP/CAT-MV-93-02-05, SHPO: 09-13-93-01	Negative	0.18 mi SW
Carlos Ayes	IA-IB/ Brisas del Río	1998	ICP/CAT-MV-98-03-06	Negative	0.44 mi S

Applicant: AR Farm LLC

Case ID: PR-RGRW-01658

City: Morovis

### Project (PR-RGRW-01658) Location – Area of Potential Effect Map (Aerial)

**BYA** BEHAR-YBARRA & ASSOCIATES LLC  
CONSULTING ENGINEERS, ARCHITECTS AND PLANNERS  
Corral, Suite 1 Suite J-3, Calle Pinar 504, Arroyo, San Juan, PR, 00980 Tel: 787-753-0290

Application ID: PR-RGRW-01658

AR Farm LLC

Carr 159 Km 1.9

Int Bo Unibon Patron

Morovis PR 00687

Catastro: 110-000-006-20

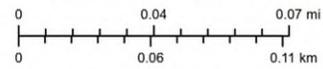
Lat: 18.343256, Lon: -66.375685

## Area of Potential Effect

Puerto Rico Department of Housing ReGrow



- Legend**
- PR-RGRW-01658 Applicant Structure
  - Area of Potential Effect
  - PR-RGRW-01658 Parcel
  - CRIM Parcels



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World Street Map: Esri, HERE, Garmin, NGA, USGS  
and Google Earth



**Source**

Centro de Recaudación de Ingresos Municipales (CRIM)  
<https://catastro.crimpr.net/cdprpc/>

Applicant: AR Farm LLC

Case ID: PR-RGRW-01658

City: Morovis

### Project (PR-RGRW-01658) Location - Aerial Map

**BYA** BEHAR-YBARRA & ASSOCIATES LLC  
CONSULTING ENGINEERS, ARCHITECTS AND PLANNERS

Location: Aerial Map  
Puerto Rico Department of Housing ReGrow

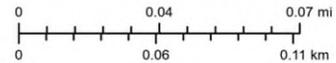
Application ID: PR-RGRW-01658

AR Farm LLC  
Carr 159 Km 1.9  
Int Bo Unibon Patron  
Morovis PR 00687  
Catastro: 110-000-006-20  
Lat: 18.343256, Lon: -66.375685



**Legend**

- PR-RGRW-01658
- PR-RGRW-01658 Parcel
- CRIM Parcels



Service Layer Credits: World Imagery: Maxar  
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World Street Map: Esri, HERE, Garmin, NGA, USGS  
and Google Earth



**Source**

Centro de Recaudación de Ingresos Municipales (CRIM)  
<https://catastro.crimpr.net/cdprpc/>



Applicant: AR Farm LLC

Case ID: PR-RGRW-01658

City: Morovis

### Project (PR-RGRW-01658) Location - USGS Topographic Map

**BYA** BEHAR-YBARRA & ASSOCIATES LLC  
CONSULTING ENGINEERS, ARCHITECTS AND PLANNERS  
Corre. Serie 1 Suite A-3, Calle Pinaro 55-6, Alamo, San Juan, P.R. 00920 Tel: (787)783-0260

Application ID: PR-RGRW-01658

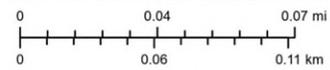
AR Farm LLC  
Carr 159 Km 1.9  
Int Bo Unibon Patron  
Morovis PR 00687  
Catastro: 110-000-006-20  
Lat: 18.343256, Lon: -66.375685

## Location: USGS Topographic Map

Puerto Rico Department of Housing ReGrow



- Legend**
- PR-RGRW-01658
  - PR-RGRW-01658 Parcel



Service Layer Credits: World Street Map: Esri, HERE, Garmin, NGA, USGS



**Source**  
United States Geological Survey (USGS)  
National Geologic Map Database  
[https://ngmdb.usgs.gov/ngmdb/ngmdb\\_home.html](https://ngmdb.usgs.gov/ngmdb/ngmdb_home.html)

Applicant: AR Farm LLC

Case ID: PR-RGRW-01658

City: Morovis

### Project (PR-RGRW-01658) Location – Soils Map

**BYA** BEHAR-YBARRA & ASSOCIATES LLC  
CONSULTING ENGINEERS, ARCHITECTS AND PLANNERS  
Corred. Ibernia 1, Suite J-3, Calle Pinar 554, Atarés, San Juan, P.R. 00920 784.757.753-0290

Application ID: PR-RGRW-01658

AR Farm LLC

Carr 159 Km 1.9

Int Bo Unibon Patron

Morovis PR 00687

Catastro: 110-000-006-20

Lat: 18.343256, Lon: -66.375685

## Soils Map

Puerto Rico Department of Housing ReGrow

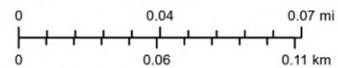


#### Legend

- PR-RGRW-01658
- PR-RGRW-01658 Parcel
- Soil Map Unit Symbol

#### Soil Map Unit Symbol

- CmF2 - Colinas cobbly clay loam, 20 to 60 percent slopes, eroded
- MoD2 - Moca clay, 12 to 20 percent slopes, eroded
- SrF - Soller-Rock outcrop complex, 5 to 60 percent slopes



Service Layer Credits: World Imagery: Maxar  
Google Satellite: © OpenStreetMap (and) contributors,  
CC-BY-SA  
World Street Map: Esri, HERE, Garmin, NGA, USGS  
and Google Earth



#### Source

Natural Resources Conservation Service (NRCS)  
Gridded Soil Survey Geographic Database (gSSURGO)  
<https://data.nal.usda.gov/dataset/soil-survey-geographic-database-ssurgo>



Applicant: AR Farm LLC

Case ID: PR-RGRW-01658

City: Morovis

### Project (PR-RGRW-01658) Location with Previous Investigations - Aerial Map

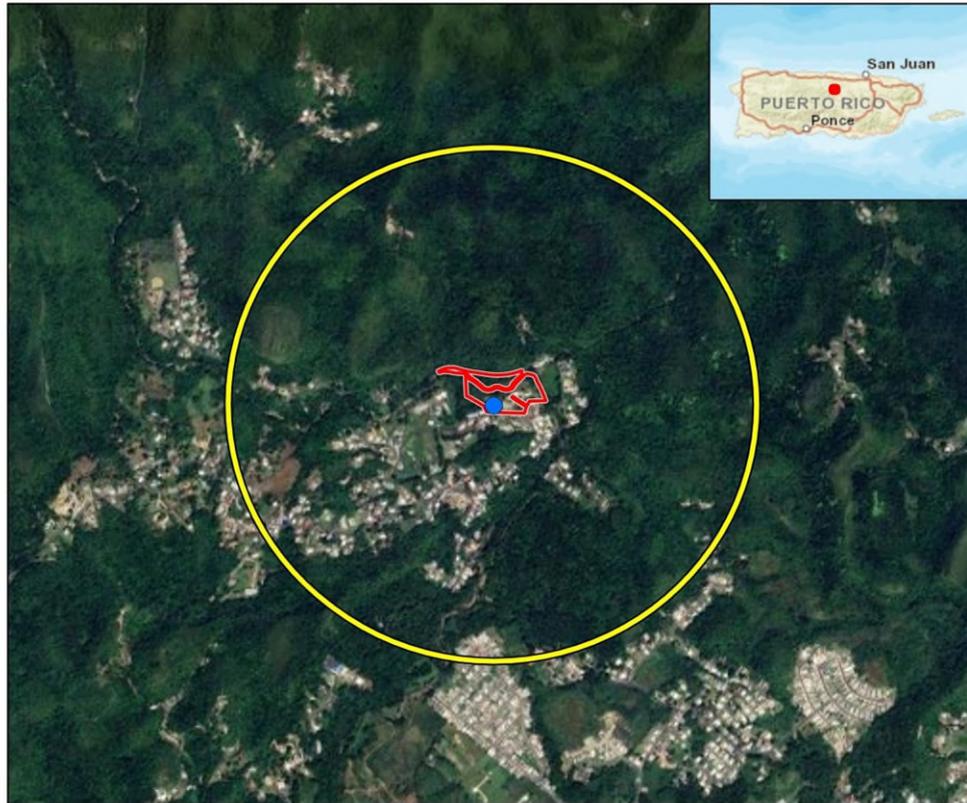
**BYA** BEHAR-YBARRA & ASSOCIATES LLC  
CONSULTING ENGINEERS, ARCHITECTS AND PLANNERS  
Corporation, Suite 1 Suite J-3, Calle Ponce 554, Arroyo, San Juan, P.R. 00920 Tel: (787)713-0295

Application ID: PR-RGRW-01658

AR Farm LLC  
Carr 159 Km 1.9  
Int Bo Unibon Patron  
Morovis PR 00687  
Catastro: 110-000-006-20  
Lat: 18.343256, Lon: -66.375685

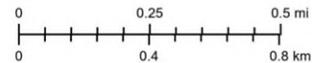
## Previous Investigations: Aerial Map

Puerto Rico Department of Housing ReGrow



**Legend**

- PR-RGRW-01658
- PR-RGRW-01658 Parcel
- 0.50 Mile (0.80 km) Buffer



Service Layer Credits: World Imagery: Maxar  
Google Satellite: © OpenStreetMap (and) contributors,  
CC-BY-SA  
World Street Map: Esri, HERE, Garmin, NGA, USGS  
and Google Earth



**Source**

United States Geological Survey (USGS)  
National Geologic Map Database  
[https://ngmdb.usgs.gov/ngmdb/ngmdb\\_home.html](https://ngmdb.usgs.gov/ngmdb/ngmdb_home.html)

Applicant: AR Farm LLC

Case ID: PR-RGRW-01658

City: Morovis

### Project (PR-RGRW-01658) Location with Previous Investigations - Topographic Map

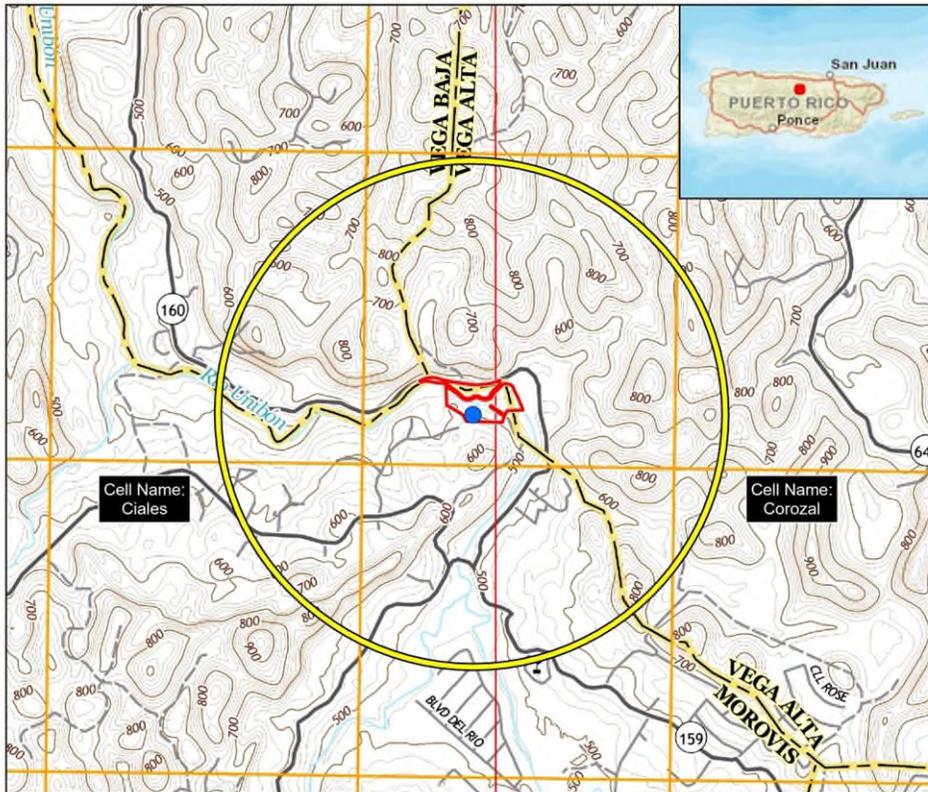
**BYA** BEHAR-YBARRA & ASSOCIATES LLC  
CONSULTING ENGINEERS, ARCHITECTS AND PLANNERS  
Corporación, Suite 1 Suite 218, Calle Ponce 55A, Arroyo, San Juan, P.R. 00920 Tel: (787)759-0292

Application ID: PR-RGRW-01658

AR Farm LLC  
Carr 159 Km 1.9  
Int Bo Unibon Patron  
Morovis PR 00687  
Catastro: 110-000-006-20  
Lat: 18.343256, Lon: -66.375685

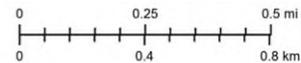
#### Previous Investigations: USGS Topographic Map

Puerto Rico Department of Housing ReGrow



**Legend**

- PR-RGRW-01658
- PR-RGRW-01658 Parcel
- 0.50 Mile (0.80 km) Buffer



Service Layer Credits: World Street Map: Esri, HERE, Garmin, NGA, USGS



**Source**

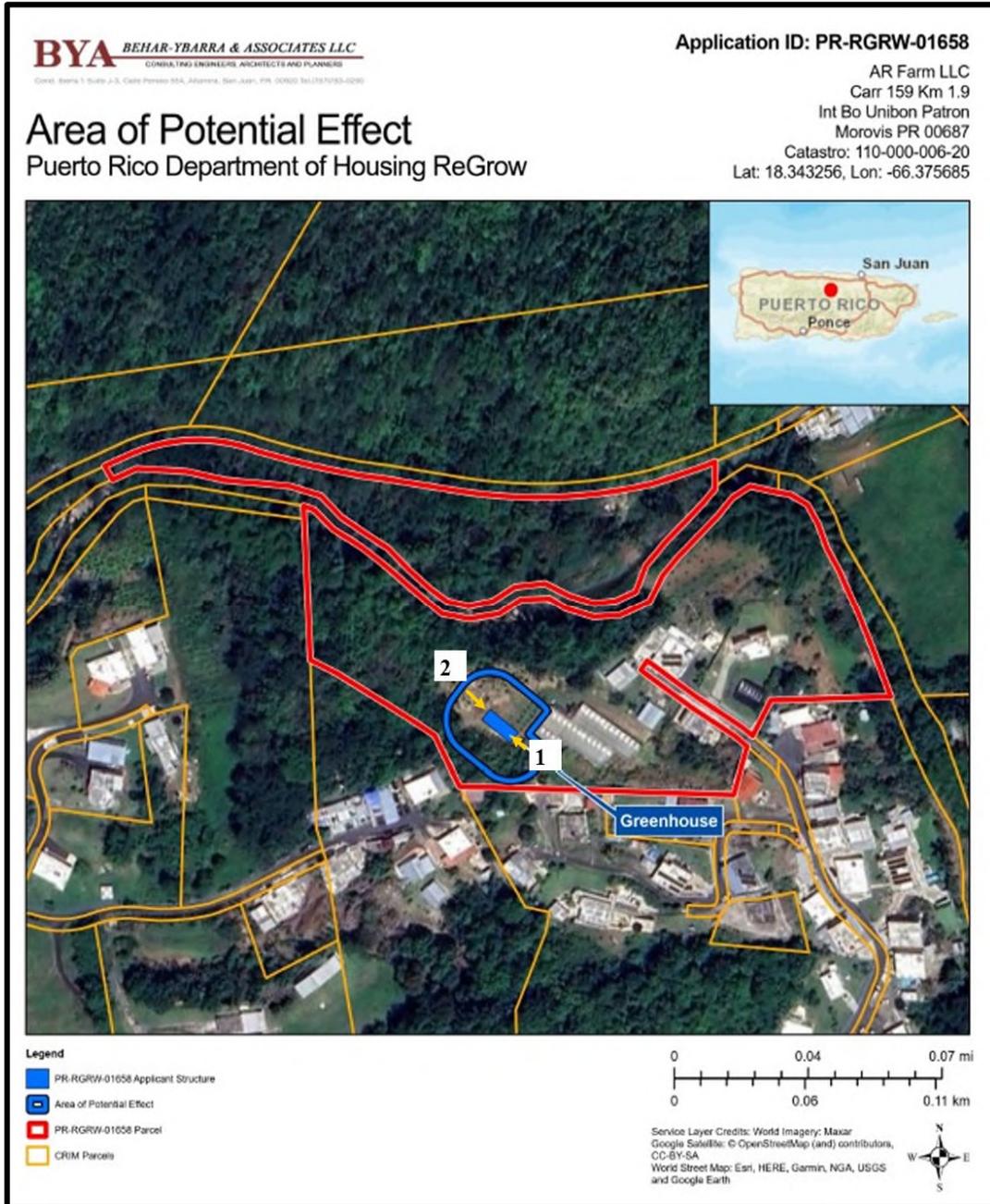
United States Geological Survey (USGS)  
National Geologic Map Database  
[https://ngmdb.usgs.gov/ngmdb/ngmdb\\_home.html](https://ngmdb.usgs.gov/ngmdb/ngmdb_home.html)

Applicant: AR Farm LLC

Case ID: PR-RGRW-01658

City: Morovis

### Photograph Key





Applicant: AR Farm LLC

Case ID: PR-RGRW-01658

City: Morovis



Photo #: 1

Description (include direction): General area where the greenhouse will be installed, looking northwest.

Date: September 18, 2023



Photo #: 2

Description (include direction): General area where the greenhouse be installed, looking southeast.

Date: September 18 ,2023



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

## **Appendix 2**



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 March 31, 2023

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

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

Change the State:

PUERTO RICO

Important Notes

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

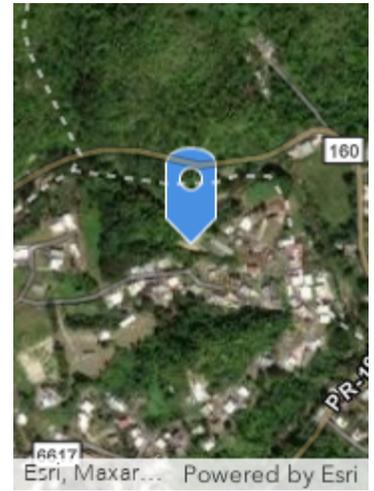
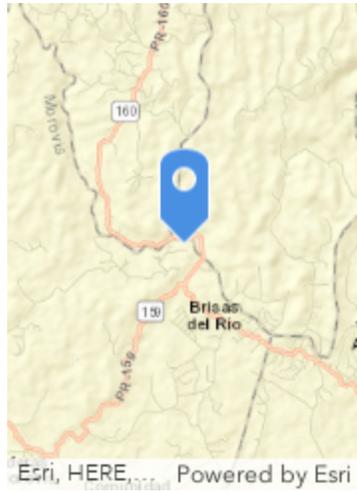
County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or Part County	Population (2010)	State/County FIPS Codes
<b>PUERTO RICO</b>								
Arecibo Municipio	Lead (2008)	Arecibo, PR	11121314151617181920212223	//		Part	32,185	72/013
Bayamon Municipio	Sulfur Dioxide (2010)	San Juan, PR	181920212223	//		Part	22,921	72/021
Catano Municipio	Sulfur Dioxide (2010)	San Juan, PR	181920212223	//		Whole	28,140	72/033
Guaynabo Municipio	PM-10 (1987)	Mun. of Guaynabo, PR	929394959697989900010203040506070809	02/11/2010	Moderate	Part	90,470	72/061
Guaynabo Municipio	Sulfur Dioxide (2010)	San Juan, PR	181920212223	//		Part	23,802	72/061
Salinas Municipio	Sulfur Dioxide (2010)	Guayama-Salinas, PR	181920212223	//		Part	23,401	72/123
San Juan Municipio	Sulfur Dioxide (2010)	San Juan, PR	181920212223	//		Part	147,963	72/127
Toa Baja Municipio	Sulfur Dioxide (2010)	San Juan, PR	181920212223	//		Part	52,441	72/137

Important Notes

## **Appendix 3**

**APPLICANT/LOCATION INFORMATION**

Applicant ID:	PR-RGRW-01658
Name:	Reina Michelle Roman Ibañez
Parcel ID:	110-000-006-20
Latitude:	18.343256058591933
Longitude:	-66.37568459705382
Elevation:	
Development	
Street Address:	Carr 159 Km 1.9 Int Bo Unibon Patron
Municipio:	Morovis
Zip Code:	00687
Site Inspector:	Danally Cruz
Date of Visit:	September 2, 2023
Time of Visit:	13:00



**FIELD OBSERVATIONS**

Question	Answer	Notes
1. Is the structure in use?	No	
2. Is the structure a greenhouse?	Yes	
3. Is Electricity connected? (Utilities or Well)	Yes	LUMA
4. Is water connected? (Utilities or Well)	Yes	PRASA
5. Are there signs of poor housekeeping on site? (mounds of rubble, garbage, strom debris, solid waste, petroleum products, paint, pesticides, cleaning fluids, vehicle batteries, abandoned vehicles, pits, pools, ponds of hazardous substances, etc.)	Yes	
Are there any 55-gallon drums visible on site? If yes, are they leaking?	Yes	
6. Are there any (or signs of any) underground storage tanks on the property?	No	
7. Are there signs of AST on the parcel or adjacent parcel? If yes, list approximate size and contents, if known.	No	
Is there any stained soil or pavement on the parcel?	No	
8. Is a water drainage system in use?	No	
9. Is a warehouse in use for storage of Fertilizer or Pesticides?	No	
10. Are there any groundwater monitoring wells on the site or adjacent parcel?	No	
11. Is there evidence of a faulty septic system?	No	
12. Is there distressed vegetation on the parcel?	No	
13. Is there any visible indication of mold?	No	
14. Is there any visible evidence of asbestos, chipping, and flaking or peeling paint, or hazardous materials present in or on the structure?	No	
15. Are any additional site hazards observed?	No	
16. Is there any permanent standing water, such as a pond or stream, located on the site(do not include ponding from recent rain / weather events)?	No	
17. Does the subject property have water frontage?	No	
18. Is there any indication of the presence of wetlands?	No	
19. Are there any obvious signs of animals or birds nesting on or near the site?	No	
20. Is the applicant aware of any significant historcal event or persons associated with the structure, or of it being located in a historic district/ area?	No	

Front of Structure

Photo Direction: N/A

Comments: Facing where greenhouse will be



Facing Away from Front

Photo Direction: N/A

Comments:



Side #1 of Structure

Photo Direction: N/A

Comments: Left



Facing Away From Side #1

Photo Direction: N/A

Comments:



**Back of Structure**

Photo Direction: N/A

Comments:



**Facing Away from Back**

Photo Direction: N/A

Comments:



Side #2 of Structure

Photo Direction: N/A

Comments:



Facing Away from Side #2

Photo Direction: N/A

Comments:

**Streetscape #1**

Photo Direction: N/A

Comments:



**Streetscape #2**

Photo Direction: N/A

Comments:



Evidence Photo 1

Photo Direction: N/A

Photo Description: Behind where greenhouse will be



Evidence Photo 2

Photo Direction: N/A

Photo Description:



Evidence Photo 3

Photo Direction: N/A

Photo Description:



Evidence Photo 4

Photo Direction: N/A

Photo Description:



Evidence Photo 5

Photo Direction: N/A

Photo Description:



Evidence Photo 6

Photo Direction: N/A

Photo Description: W



Evidence Photo 7

Photo Direction: N/A

Photo Description: 1000 gal



Evidence Photo 8

Photo Direction: N/A

Photo Description: 250 gal



Evidence Photo 9

Photo Direction: N/A

Photo Description:



Evidence Photo 10

Photo Direction: N/A

Photo Description:



Evidence Photo 11

Photo Direction: N/A

Photo Description:



Evidence Photo 12

Photo Direction: N/A

Photo Description:

# EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
<b>POLLUTION AND SOURCES</b>					
Particulate Matter ( $\mu\text{g}/\text{m}^3$ )	N/A	N/A	N/A	8.08	N/A
Ozone (ppb)	N/A	N/A	N/A	61.6	N/A
Diesel Particulate Matter ( $\mu\text{g}/\text{m}^3$ )	0.0494	0.0667	59	0.261	4
Air Toxics Cancer Risk* (lifetime risk per million)	20	20	15	25	5
Air Toxics Respiratory HI*	0.2	0.19	17	0.31	4
Toxic Releases to Air	1,700	4,300	76	4,600	70
Traffic Proximity (daily traffic count/distance to road)	18	180	21	210	23
Lead Paint (% Pre-1960 Housing)	0.056	0.16	36	0.3	27
Superfund Proximity (site count/km distance)	0.11	0.15	64	0.13	69
RMP Facility Proximity (facility count/km distance)	0.34	0.47	66	0.43	69
Hazardous Waste Proximity (facility count/km distance)	0.092	0.76	14	1.9	18
Underground Storage Tanks (count/km <sup>2</sup> )	0	1.7	0	3.9	0
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.016	2.3	61	22	71
<b>SOCIOECONOMIC INDICATORS</b>					
Demographic Index	87%	83%	46	35%	98
Supplemental Demographic Index	44%	43%	46	14%	99
People of Color	100%	96%	31	39%	98
Low Income	73%	70%	45	31%	95
Unemployment Rate	18%	15%	67	6%	94
Limited English Speaking Households	63%	67%	33	5%	99
Less Than High School Education	24%	21%	61	12%	86
Under Age 5	3%	4%	51	6%	30
Over Age 64	16%	22%	27	17%	53
Low Life Expectancy	N/A	N/A%	N/A	20%	N/A

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

## **Appendix 4**

January 3, 2024

For: Puerto Rico Department of Housing  
CDBG-DR & CDBG-MIT Program  
ReGrow Environmental Assessment

From: Behar Ybarra & Associates

***RE: Threatened and Endangered Species Review for Case PR-RGRW-01658 located at Carr 159 Km. 1.9, Morovis, PR 00687.***

This Threatened and Endangered Species Review evaluates a greenhouse installation at the coordinates: latitude 18.343256, longitude -66.375685 on Carr 159 Km. 1.9, Morovis, PR 00687, see Figure 1: Location Map and Figure 2: Topographic Map. The project is part of the Re-Grow Puerto Rico Urban-Rural Agriculture Program (RGRW) that aims to increase agricultural capacity while promoting and increasing food security inland wide. This Program will enhance and expand agricultural production related to economic revitalization and sustainable development activities.

The proposed activities for PR-RGRW-01658 consist of the purchase and installation of a greenhouse (25' x 50'), a Ford Transit 250 and Vehicle Cargo Cooling System. The installation of a greenhouse will require ground disturbance. The new greenhouse will be anchored to 8' spaced supports buried 2 feet deep. The water needed for the greenhouse will be provided by an existing cistern that is supplied from a PRASA intake on the property. The power needed to operate the water pump will be provided by an existing PREPA/LUMA connection on the property. The project area is located at Carr 159 Km. 1.9, Morovis, PR 00687. Based on a review of historical aerial imagery, the general area has been used for agricultural purposes for the past 7 years. The Area of Potential Effect (APE) has been defined as the area potentially impacted by ground disturbing activities related to the installation of the greenhouse, see Figure 3: Area of Potential Effect.

#### **Existing Conditions and Trends:**

The proposed project parcel 110-000-006-20 is designated as Not Prime Farmland, See Figure 4: PR-RGRW-01658 Farmland Protection Map. The area where the greenhouse will be placed has a flat topography. On the surface we observed grasses, bushes and stones, refer to Photo 1 and Photo 2. The visibility is good in spite of the vegetation. The soil in the project area has been classified as Colinas cobbly clay loam, 20 to 60 percent slopes, eroded (CmF2). This soil is moderately deep, steep to very steep, and well drained. The land has been used for agricultural uses for the past 7 years and the proposed project will not change the land use associated with these placements. In addition, the closer Final Critical Habitat is located at 55,744 feet from the project location, see Figure 5 PR-RGRW-01658 Critical Habitats Map.

Using the Information for Planning and Consultation (IPaC) system (See Exhibit B), we have determined that the proposed project lies within the range of the following federally listed species and critical habitats:

Name of species	Threatened/Endangered/Candidate
<b>Reptiles</b>	
Puerto Rican boa ( <i>Chilabothrus inornatus</i> )	Endangered
<b>Critical Habitat</b>	
There are no critical habitats within the project area.	

The nature of the project, scope of work, information available, a careful analysis of the IpaC, the Puerto Rico Boa conservation measures, the Caribbean Dkey dated October 12, 2023, in the US Fish and Wildlife Service’s online IPaC application, and the observations during the field visit, were used to evaluate the potential impacts to federally listed species from this project. Based on that information and the answer inputted into the Dkey, it was determined that the proposed action will have “No Effect” determination on the Puerto Rican Boa, see Exhibit B.

Name of the species	Effect Determination	Conservation Measures that will be implemented
Puerto Rican boa ( <i>Chilabothrus inornatus</i> )	No Effect (NE)	USFWS Puerto Rico Boa Conservation Measures 2020
<b>Critical Habitats</b>		
There are no critical habitats within the project area.		

If a Puerto Rican Boa is found in the project activity site, work shall cease until the Boa moves off on its own. If the Boa does not move off, the Construction Manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask for them to relocate the Boa.

For any questions or concerns, we can be reached by phone 787-783-0290 or email (patricia.carmenatty@byaea.com).

Patricia Carmenatty Santiago



B.S. Biologist, Behar Ybarra & Associates

**References:**

**Puerto Rican boa (*Chilabothrus inornatus*)**

<https://ecos.fws.gov/ecp/species/6628>

USFWS Puerto Rican boa Conservation Measures

## **Exhibit A: Figures**

Application ID: PR-RGRW-01658

AR Farm LLC  
Carr 159 Km 1.9  
Int Bo Unibon Patron  
Morovis PR 00687  
Catastro: 110-000-006-20  
Lat: 18.343256, Lon: -66.375685

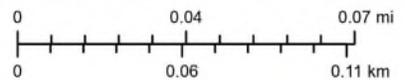
# Location: Aerial Map

Puerto Rico Department of Housing ReGrow



**Legend**

- PR-RGRW-01658
- ▭ PR-RGRW-01658 Parcel
- ▭ CRIM Parcels



Service Layer Credits: World Imagery: Maxar  
Google Satellite: © OpenStreetMap (and) contributors,  
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World Street Map: Esri, HERE, Garmin, NGA, USGS  
and Google Earth



**Source**

Centro de Recaudación de Ingresos Municipales (CRIM)  
<https://catastro.crimpr.net/cdprpc/>

Figure 1: PR-RGRW-01658 Location Map

Application ID: PR-RGRW-01658

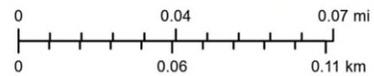
AR Farm LLC  
Carr 159 Km 1.9  
Int Bo Unibon Patron  
Morovis PR 00687  
Catastro: 110-000-006-20  
Lat: 18.343256, Lon: -66.375685

# Location: USGS Topographic Map Puerto Rico Department of Housing ReGrow



**Legend**

- PR-RGRW-01658
- ▭ PR-RGRW-01658 Parcel



Service Layer Credits: World Street Map: Esri, HERE, Garmin, NGA, USGS



**Source**

United States Geological Survey (USGS)  
National Geologic Map Database  
[https://ngmdb.usgs.gov/ngmdb/ngmdb\\_home.html](https://ngmdb.usgs.gov/ngmdb/ngmdb_home.html)

Figure 2: PR-RGRW-01658 Topographic Map

Application ID: PR-RGRW-01658

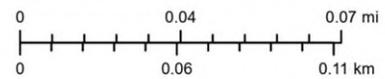
AR Farm LLC  
Carr 159 Km 1.9  
Int Bo Unibon Patron  
Morovis PR 00687  
Catastro: 110-000-006-20  
Lat: 18.343256, Lon: -66.375685

# Area of Potential Effect

Puerto Rico Department of Housing ReGrow



- Legend**
- PR-RGRW-01658 Applicant Structure
  - Area of Potential Effect
  - PR-RGRW-01658 Parcel
  - CRIM Parcels



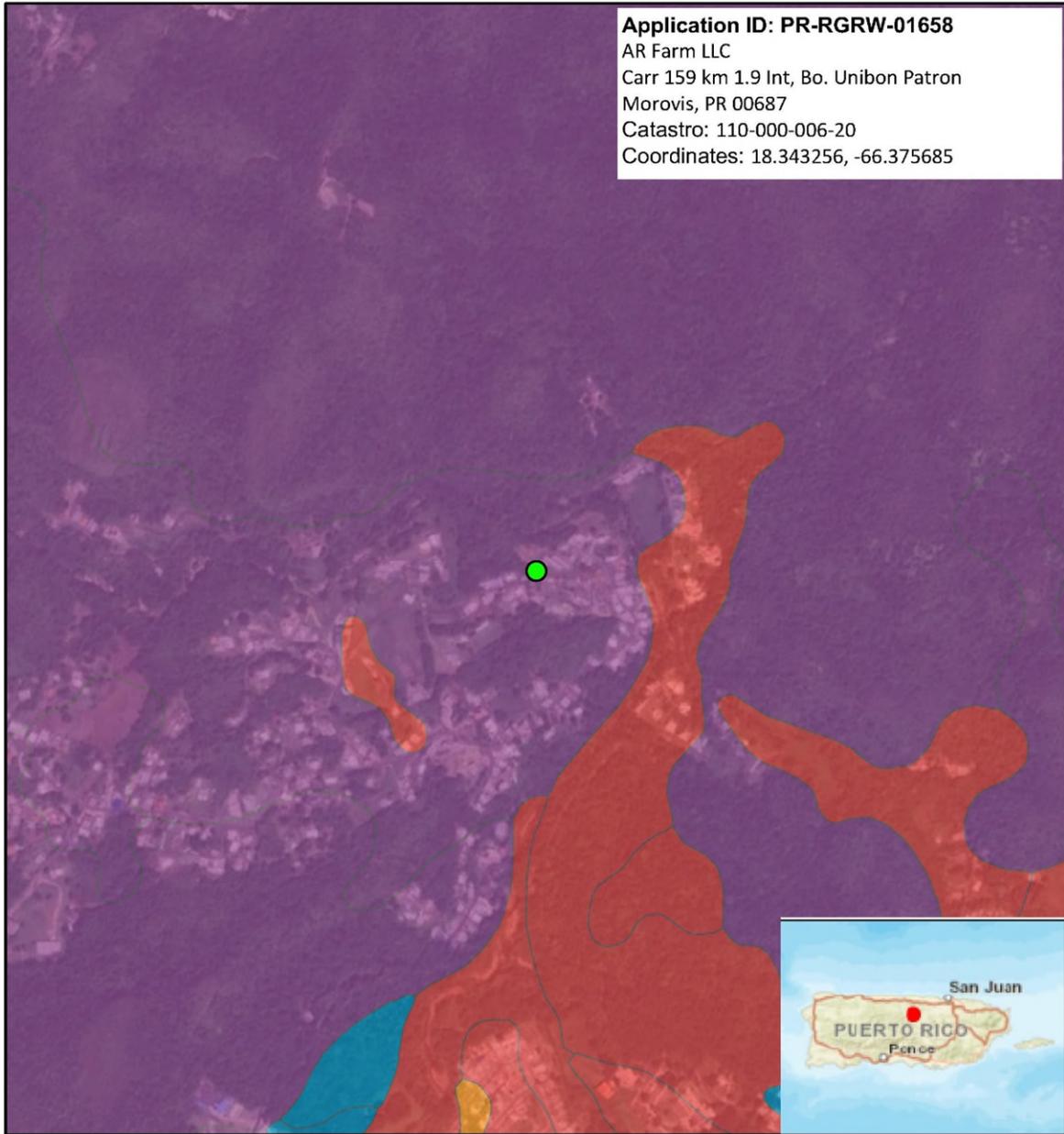
Service Layer Credits: World Imagery: Maxar  
Google Satellite: © OpenStreetMap (and) contributors,  
CC-BY-SA  
World Street Map: Esri, HERE, Garmin, NGA, USGS  
and Google Earth



**Source**  
Centro de Recaudación de Ingresos Municipales (CRIM)  
<https://catastro.crimpr.net/cdprpc/>

Figure 3: PR-RGRW-01658 Area of Potential Effect Map

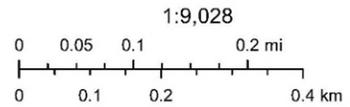
Cond. Iberia 1 Suite J-3, Calle Ponce 554, Aterrima, San Juan, PR. 00960 Tel (787)63-0290



**Application ID: PR-RGRW-01658**  
 AR Farm LLC  
 Carr 159 km 1.9 Int, Bo. Unibon Patron  
 Morovis, PR 00687  
 Catastro: 110-000-006-20  
 Coordinates: 18.343256, -66.375685

10/12/2023, 3:21:16 PM

- Farmland Protection**
- PR-RGRW-01658
  - All areas are prime farmland
  - Farmland of statewide importance
  - Not prime farmland
  - Prime farmland if drained



**Source**  
 Natural Resources Conservation Service (NRCS)  
 Gridded Soil Survey Geographic Database (gSSURGO)  
<https://data.nal.usda.gov/dataset/soil-survey-geographic-database-ssurgo>

Maxar | Google Earth Image 2021 © Maxar Technologies; © Image 2021 CNES/Airbus | GoogleEarth | SGS National Map 3D Elevation Program (3DEP). July 18, 2023. | FEMA | US Forest Service BYA

**Figure 4: PR-RGRW-01658 Farmland Protection Map**



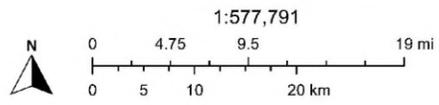
**Application ID: PR-RGRW-01658**  
 AR Farm LLC  
 Carr 159 km 1.9 Int, Bo. Unibon Patron  
 Morovis, PR 00687  
 Catastro: 110-000-006-20  
 Coordinates: 18.343256, -66.375685

Length: 55,744 feet

10/12/2023, 3:22:49 PM

**Critical Habitat for Threatened & Endangered Species**

- Final
- Proposed
- USFWS Critical Habitat - Final
- PR-RGRW-01658



**Source**  
 National Oceanic and Atmospheric Administration (NOAA)  
 Office of Response and Restoration  
<https://response.restoration.noaa.gov/>

BYA  
 Earthstar Geographics | Google Earth Image 2021 © Maxar Technologies; © Image 2021 CNES/Airbus | GoogleEarth | SGS National Map 3D Elevation Program (3DEP). July 18, 2023. | FEMA | US

**Figure 5: PR-RGRW-01658 Critical Habitats Map**

**Exhibit B: Information for Planning and Consultation (IPaC)**



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Caribbean Ecological Services Field Office  
Post Office Box 491  
Boqueron, PR 00622-0491  
Phone: (787) 834-1600 Fax: (787) 851-7440  
Email Address: [CARIBBEAN\\_ES@FWS.GOV](mailto:CARIBBEAN_ES@FWS.GOV)

In Reply Refer To:  
Project Code: 2024-0004305  
Project Name: PR-RGRW-01658

October 12, 2023

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

To Whom It May Concern:

**\*THE FOLLOWING SPECIES LIST IS NOT A SECTION 7 CONSULTATION. PLEASE CONTACT OUR OFFICE TO COMPLETE THE CONSULTATION PROCESS\***

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

Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action". The enclosed species list provides information to assist with the U.S. Fish and Wildlife Service (Service) consultation process under section 7 of the Act. However, **the enclosed species list does not complete the required consultation process.** The species list identifies threatened, endangered, proposed and candidate species, as well as proposed and designated critical habitats, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. A discussion between the Federal agency and the Service should include what types of listed species may occur in the proposed action area and what effect the proposed action may have on those species. This process initiates informal consultation.

Once a species list is obtained for the proposed project, an effect determination for endangered and threatened species should be made. The applicant could make an effect determination by using available keys on IPaC for specific species. For species with no determination keys, the applicant should request concurrence from the Service by sending a project package

to [caribbean\\_es@fws.gov](mailto:caribbean_es@fws.gov). To obtain guidance for completing this process and the minimum requirements for project packages, please visit:

<https://www.fws.gov/sites/default/files/documents/consultation-under-section-7-of-the-endangered-species-act-with-the-caribbean-ecological%20Services-field-office-template-letter.pdf>

When a federal agency, after discussions with the Service, determines that the proposed action is not likely to adversely affect any listed species, or adversely modify any designated critical habitat, and the Service concurs, the informal consultation is complete, and the proposed project moves ahead. If the proposed action is suspected to affect a listed species or modify designated critical habitat, the Federal agency may then prepare a Biological Assessment (B.A.) to assist in its determination of the project's effects on species and their habitat. However, a B.A. is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a B.A. where the agency provides the Service with an evaluation on the likely effects of the action to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a B.A. are described at 50 CFR 402.12.

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

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species.

This list is provided pursuant to Section 7 of the Endangered Species Act and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action". Please use this list to determine whether your project requires consultation and to make your effects determination. For more guidance, use the Guideline for Consultation under Section 7 of the Endangered Species Act with the Caribbean Ecological Services Field Office by clicking [here](#).

This species list is provided by:

---

Caribbean Ecological Services Field Office

[caribbean\\_es@fws.gov](mailto:caribbean_es@fws.gov)

Post Office Box 491

Boqueron, PR 00622-0491

(786) 244-0081

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

## OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Caribbean Ecological Services Field Office**

Post Office Box 491

Boqueron, PR 00622-0491

(787) 834-1600

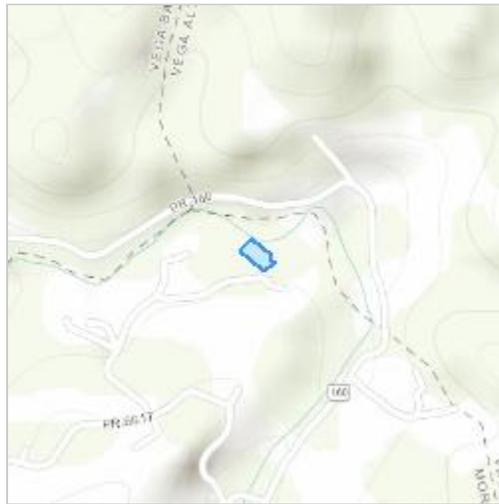
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## PROJECT SUMMARY

Project Code: 2024-0004305  
Project Name: PR-RGRW-01658  
Project Type: Restoration / Enhancement - Agricultural  
Project Description: Project Location: Carr 159 Km. 1.9, Morovis  
Project Coordinates: 18.343256 -66.375685  
TPID (Número de Catastro): 110-000-006-20

### Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.34340785,-66.37588177511549,14z>



Counties: Morovis County, Puerto Rico

---

## ENDANGERED SPECIES ACT SPECIES

There is a total of 1 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## REPTILES

NAME	STATUS
Puerto Rican Boa <i>Chilabothrus inornatus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6628">https://ecos.fws.gov/ecp/species/6628</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/6IBEQVHT4BER7PMBVAHW73GFQQ/documents/generated/6941.pdf">https://ipac.ecosphere.fws.gov/project/6IBEQVHT4BER7PMBVAHW73GFQQ/documents/generated/6941.pdf</a>	Endangered

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

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

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

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## BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act<sup>1</sup> and the Migratory Bird Treaty Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats<sup>3</sup>, should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

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

THERE ARE NO BALD AND GOLDEN EAGLES WITHIN THE VICINITY OF YOUR PROJECT AREA.

## 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<sup>3</sup> should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

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

THERE ARE NO FWS MIGRATORY BIRDS OF CONCERN WITHIN THE VICINITY OF YOUR PROJECT AREA.

## WETLANDS

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

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

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

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

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## United States Department of the Interior



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

In Reply Refer To:  
Project code: 2024-0004305  
Project Name: PR-RGRW-01658

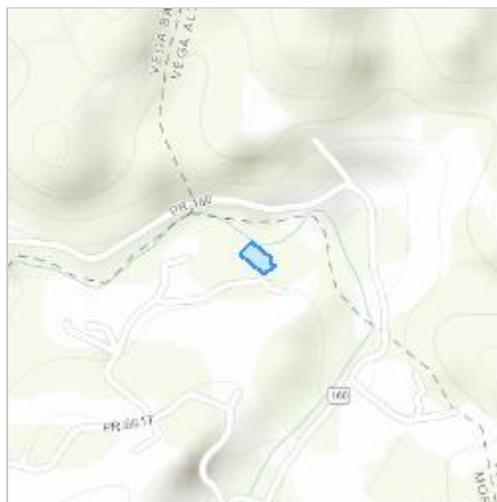
October 12, 2023

Subject: Consistency letter for the project named 'PR-RGRW-01658' for specified threatened and endangered species, that may occur in your proposed project location, pursuant to the IPaC determination key titled Caribbean Determination Key (DKey).

Dear Applicant:

Thank you for using the assisted evaluation keys in IPaC. This letter is provided pursuant to the Service's authority under the Endangered Species Act of 1973, as amended (ESA) (87 Stat. 884; 16 U.S.C. 1531et seq.). On October 12, 2023, Yazmin Acevedo used the Caribbean DKey; dated September 28, 2023, in the U.S. Fish and Wildlife Service's online [IPaC application](#) to evaluate potential impacts to federally listed species, from a project named 'PR-RGRW-01658'. The project is located in Morovis County, Puerto Rico (shown below).

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.34340785,-66.37588177511549,14z>



The following description was provided for the project 'PR-RGRW-01658':

Project Location: Carr 159 Km. 1.9, Morovis  
 Project Coordinates: 18.343256 -66.375685  
 TPID (Número de Catastro): 110-000-006-20

Based on your answers and the assistance of the Service's Caribbean DKey, you determined the proposed Action will have "No Effect" on the following species:

<b>Species</b>	<b>Listing Status</b>	<b>Determination</b>
Puerto Rican Boa ( <i>Chilabothrus inornatus</i> )	Endangered	No effect

Thank you for informing the Service of your "No Effect" determination(s) for this project. No further consultation/coordination for this project is required for these species. However, be aware that reinitiation of consultation may be necessary if later modifications are made to the project so that it no longer meets the criteria or outcome described above, or if new information reveals effects of the action that could affect listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed.

This letter serves as documentation of your consideration of the federally listed species as required under section 7 of the ESA. However, effects to the other federally listed species or critical habitat as listed below from the "IPaC print-out for the project" (see below) should be considered as part of your ESA review for the project.

The Service will notify you within 30 calendar days if we determine that this proposed Action does not meet the criteria for a "No Effect" (NE) determination for Federally listed species in the Caribbean. If we do not notify you within that timeframe, you may proceed with the Action under the terms of the NE concurrence provided here. This verification period allows the Caribbean Ecological Services Field Office to apply local knowledge to evaluate the Action, as we may identify a small subset of actions having unanticipated impacts. In such instances, the Caribbean Ecological Services Field Office may request additional information to verify the effects determination reached through the DKey.

**Note:** Projects located within the range of the Puerto Rican boa or the Virgin Islands tree boa might encounter these species during project activities. **This letter does not provide take to handle or move these species.** If relocation of the species is needed, please contact either the Puerto Rico Department of Natural Resources (DNER) at 787-724-5700, 787-230-5550, or 787-771-1124 for projects in Puerto Rico, or the Virgin Islands Department of Planning and Natural Resources, Division of Fish and Wildlife (DFW) at 340-775-6762 for projects in the Virgin Islands. Otherwise, contact the Caribbean Ecological Services Field Office ([caribbean\\_es@fws.gov](mailto:caribbean_es@fws.gov)) to determine whether the consultation needs to be reinitiated.

If the proposed project is located within species range where a DKey has not been developed for those species, please follow the established guidance for initiating section 7 consultation Caribbean Ecological Services Field Office.

We appreciate your interest in protecting endangered species and their habitats. It is the Service's mission to work with others to conserve, protect, and enhance fish, wildlife, and plants and their

habitats for the continuing benefit of our people. If you have any questions or require additional information, please contact our office at [Caribbean\\_es@fws.gov](mailto:Caribbean_es@fws.gov).

---

**Action Description**

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

**1. Name**

PR-RGRW-01658

**2. Description**

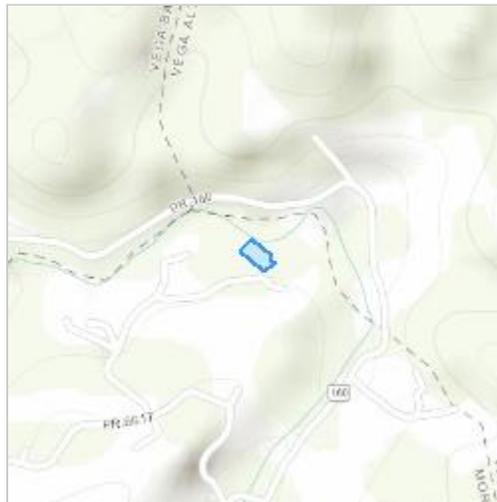
The following description was provided for the project 'PR-RGRW-01658':

Project Location: Carr 159 Km. 1.9, Morovis

Project Coordinates: 18.343256 -66.375685

TPID (Número de Catastro): 110-000-006-20

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.34340785,-66.37588177511549,14z>



## QUALIFICATION INTERVIEW

1. Is the proposed project an EPA Multi-Sector General Permit (MSGP) renewal for an existing project? ([MSGP Fact Sheet](#))

*No*

2. Is the proposed project within an urban developed area? (i.e., cities, downtowns, shopping malls etc.)

**Note:** Urban and developed areas has one or more of the following characteristics: Presence of existing buildings, residential areas, and commercial establishments. Well-established infrastructure including roads, utilities, and urban facilities. High population density. Established neighborhoods and urban amenities ("urbanizaciones"). Developed landscape with paved surfaces, parking lots, and industrial areas. Signs of human activity and urbanization, such as shopping centers and recreational facilities. Location within the boundaries of a city or town ("casco urbano"). High concentration of built-up structures and limited open spaces. Aerial imagery might be requested to the applicant. .

*No*

3. Does the proposed project consist of rehabilitation or demolition of existing single-family homes and buildings?

*No*

4. Does the proposed project consist of improvements to existing facilities?

**Note:** Examples of facilities are occupied single family homes, and buildings; existing recreational facilities, including the installation of roofs to existing basketball courts, etc.

*No*

5. Does the proposed project consist of repavement or repair of existing roads and installing transit signage or guardrails?

*No*

6. Does the proposed project consist of the construction of gutters and/or sidewalks along existing roads, and developments?

*No*

7. Does the proposed project consist of replacement or repair of existing bridges which include cutting vegetation or earth movement?

*No*

8. Does the proposed project consist of activities within existing Right of Ways (ROWs) along roads which include cutting vegetation or earth movement?

*No*

9. Is the proposed project located within a rural area covered by grassland (pasture lands "pastos")?

*Yes*

---

10. [Hidden Semantic] Does the proposed project intersect the Puerto Rican boa area of influence?

**Automatically answered**

*Yes*

---

**Exhibit C: Field Visit Photos**



**Photo #: 1**

**Date: September 18, 2023**

**Description (include direction):** General area where the greenhouse will be installed, looking northwest.



**Photo #: 2**

**Date: September 18, 2023**

**Description (include direction):** General area where the greenhouse be installed, looking southeast.