

Environmental Assessment

Determinations and Compliance Findings for HUD-assisted Projects

24 CFR Part 58

Project Information

Project ID: PR-RGRW-03605

Project Name: Centinela LLC

Responsible Entity: Puerto Rico Department of Housing

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

State/Local Identifier: Puerto Rico / Municipio of Orocovis

Preparer: Heath Anderson, Deputy Program Manager

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Consultant (if applicable): SWCA Environmental Consultants

Direct Comments to: PR Department of Housing, environmentcdbg@vivienda.pr.gov

Project Location:

The proposed project, which includes the construction of a greenhouse, is located on a 10-acre parcel (Cadastral Number 245-020-034-08-000) at Carretera 569 KM 1.6, Bo Sabana, Puerto Rico, 00670 (see **Appendix A, Figure 1-** Site Location and **Figure 2-** Site Vicinity). This property is in a rural area in the southeast portion of Orocovis Municipio. Access to the project areas is provided via an existing unpaved road that runs north/south through the central portion of the property.

The applicant has identified one location for project activities related for the Intended Use of Grant Funds that are being evaluated under this Environmental Assessment (EA), also shown on Figures 1 and 2:

- Greenhouse (18.213671, -66.377845) is in the east portion of the parcel.

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

The proposed project includes construction of a new greenhouse. The proposed greenhouse is 1,200 square feet (sq ft) (40 feet [ft] by 30 ft) with a maximum height of approximately 15 ft and will be anchored to the ground using a total of eight (8), 2.5 inch (in) diameter steel poles. The poles will extend a maximum of 2 ft into the ground and the holes will be backfilled with cement. The site location for the greenhouse is relatively flat; however, minor grading may be required to ensure the ground is level. Water will be connected to the greenhouse from a pre-existing, main valve located approximately 15 ft north of the project site. Water is provided by the Puerto Rico Aqueducts and Sewers Authority (PRASA) and the connection will be made above ground at the main valve to the greenhouse with a garden hose. Electricity is not required and will not be connected to the greenhouse.

The project will have minimal ground disturbance associated with the installation of the greenhouse poles. Some vegetation clearing will occur, but no pruning or tree clearing is required for construction. The applicant owns the property; therefore, no acquisition is required. All staging areas will be limited to the 50-meter project buffer indicated on the Historical Preservation map and will only be in areas that are already cleared.

The total cost of \$9,600 is the total amount needed to construct the greenhouse that the applicant requested from the program. The remaining balance of \$2,400 will be paid for by the applicant as the award for the EA SOW was only \$7,200. The money funded by the applicant will be used to cover the remaining cost of the materials to construct the greenhouse.

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

In September of 2017, Hurricanes Irma and María produced sustained winds and intense rainfall that decimated agricultural production across the island of Puerto Rico. These hurricanes caused the loss of eighty percent of crop value island wide, exacerbating challenges to food security and agricultural business development. The Puerto Rico Department of Agriculture (PRDA) estimated seven hundred and eighty million dollars (\$780 million) worth of damages from the hurricanes to the agricultural sector of the economy.

Many properties were damaged in Hurricane Maria, resulting in struggling businesses. The Re-Grow Puerto Rico Urban-Rural Agriculture Program (Re-Grow Program) will develop

greater agricultural capacity and address the needs created by Hurricanes Irma and María with a substantial investment of Community Development Block Grant – Disaster Recovery (CDBG-DR) funds for a wide variety of viable and sustainable agricultural activities.

Agricultural capacity and strong food systems are fundamental to resiliency of economies and, as Puerto Rico's entire agriculture sector was devastated by the Hurricanes, this Program is designed to revitalize this industry. The Re-Grow Program is an integral part of the long-term expansion of jobs in the sector, food security and contributing to overall economic recovery of disaster impacted populations.

The applicant does not have the resources to purchase farming equipment and materials for their agricultural operation nor has the applicant received any other outside source of funding for the project. The new greenhouse will help increase the agricultural production of plantains. The project as a whole will support continued local agricultural production during future disasters.

Agencies consulted for the proposed project are provided in the *List of Sources, Agencies and Persons Consulted* section of this Environmental Assessment (EA). Further discussion of the environmental impacts of the proposed action and alternatives is provided in the *Cumulative Impact Analysis, Alternatives/No Action Alternative*, and *Summary of Findings and Conclusions* sections of this EA.

Existing Conditions and Trends

The proposed project is in a rural area in the west portion of Orocovis Municipio. The parcel is designated as Developed Rural Area (ARD) land use and classified as Specially Protected Rustic Land (SREP). The proposed activities are consistent with the current land use. Land use immediately surrounding the parcel consists primarily of residential development.

The proposed greenhouse site is vacant, generally flat, and has been mowed. The parcel primarily consists of bare ground, ruderal vegetation, and scattered trees. There is a stream just outside the northwest portion of the parcel that is protected by a tree barrier.

Funding Information

Grant Number	HUD Program	Funding Amount
B-17-DM-72-0001 B-18-DP-72-0001 B-19-DP-78-0002 B-18-DE-72-0001	Community Development Block Grant – Disaster Recovery (CDBG-DR)	\$11,938,162,230

Estimated Total HUD Funded Amount: \$7,200.00

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$9,600.00

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 or approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance Determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project site is not within 2,500 ft of a civil primary or commercial service airport or within 15,000 ft of a military airport. The nearest civil primary or commercial service airport, Mercedita, is located 97,106 ft (18 miles [mi]) from the project site. The nearest military airport, Luis Munoz Marin International Airport, is located 149,368 ft (28 mi) from the project site. No further evaluation is required. The project is in compliance with airport hazards requirements. The Airport Hazards Partner Worksheet and Airport Hazards Map (Figure B 1-1) are provided in Appendix B, Attachment 1 .
Coastal Barrier Resources 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"/>	The project site is not located in a Coastal Barrier Resource Systems Unit (CBRS) or Otherwise Protected Area (OPA). There are no CBRS units in Orocovis. The closest CBRS unit, Rio Descalabrado, is located 85,040 ft (16 mi) from the project site. No further evaluation is required. The project is in compliance with the Coastal Barrier Resources Act. The Coastal Barrier Resources Act Partner Worksheet and Coastal Barrier

		Resources Map (Figure B 2-1) are provided in Appendix B, Attachment 2 .
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	A review of the FEMA Flood Insurance Rate Map (FIRM), Community Panel 72000C1135H (effective date 4/19/2005), shows the project site is in Flood Zone X, which is not in a Special Flood Hazard Area (SFHA). Flood insurance is not required. No further evaluation is required. The project is in compliance with the Flood Disaster Protection Act and National Flood Insurance Reform Act. The Flood Insurance Partner Worksheet and FIRM (Figure B 3-1) are provided in Appendix B, Attachment 3 .
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.5		
Clean Air 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"/>	The project site is in Orocovis Municipio, which is within a U.S. Environmental Protection Agency (USEPA) designated attainment area. Municipios in Nonattainment or Maintenance areas include Arecibo, Bayamon, Catano, Guaynabo, Salinas, San Juan and Toa Baja. Project activities include new construction of a greenhouse. The project is not anticipated to have a negative impact on air quality Emissions associated with the proposed actions are temporary and limited to the use of small construction equipment and will be well below the Federal General Conformity Rule de minimis thresholds. No further evaluation is required. The project is in compliance with the Clean Air Act. The Air Quality Partner Worksheet, List of Non-Attainment/Maintenance Status Counties in Puerto Rico, and Clean Air Map (Figure B 4-1) are provided in Appendix B, Attachment 4 .
Coastal Zone Management	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project site is not located within the Puerto Rico Coastal Management Zone. The closest coastal zone area is located

Coastal Zone Management Act, sections 307(c) & (d)		<p>78,869 ft (15 mi) from the project site. No further evaluation is required. The project is in compliance with the Coastal Zone Management Act.</p> <p>The Coastal Zone Management Partner Worksheet and Coastal Zone Map (Figure B 5-1) are provided in Appendix B, Attachment 5.</p>
<p>Contamination and Toxic Substances</p> <p>24 CFR Part 58.5(i)(2)</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The project site was evaluated for potential contamination by conducting a field site inspection on February 15th, 2024 to identify any onsite hazards including, but not limited to, soil staining, above ground storage tanks, signs of underground storage tanks, odors, hazardous debris etc.</p> <p>The site inspection did not identify any onsite hazards (see Appendix C- Environmental Site Inspection Report).</p> <p>The project does not involve any occupied structures, and therefore, is exempt from considering radon as part of the site contamination analysis as per HUD Notice CDP- 23-103.</p> <p>In addition, a desktop review of USEPA databases, NEPAassist, and other sources was conducted to determine if the project site was located near dump sites, junk yards, landfills, hazardous waste sites, or industrial sites, including USEPA National Priorities List Sites (Superfund sites), CERCLA or state-equivalent sites, RCRA Corrective Action sites with release(s) or suspected release(s) requiring clean-up action and/or further investigation. The parcel has been used for agricultural purposes and there has been no change in land use in the last 20 years. The project is located in a rural area of Orocovis Municipio and will continue to be used for agricultural purpose.</p> <p>The desktop review did not find any of the above-listed toxic, hazardous or</p>

		<p>radioactive substances in or within 3,000 ft of the project. The project is in compliance with contamination and toxic substances requirements.</p> <p>The Contamination and Toxics Substances Partner Worksheet, Radon Agency Consultation, and Contamination and Toxic Substances Map (Figure B 6-1) are provided in Appendix B, Attachment 6.</p>
<p>Endangered Species</p> <p>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes No</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>The project involves activities that have the potential to affect protected species or habitats including but not limited to activities such as ground disturbance.</p> <p>Threatened, endangered, and migratory bird species were identified by reviewing data from the United States Fish and Wildlife Service (USFWS) Information and Planning Consultation (IPaC) Tool. In addition, critical species habitat was reviewed through the USFWS IPaC Critical Habitat Portal.</p> <p>The review identified three federally listed species (Puerto Rican broad-winged hawk [<i>Buteo platypterus brunnescens</i>], Puerto Rican parrot [<i>Amazona vittata</i>], and the Puerto Rican boa [<i>Chilabothrus inornatus</i>]) with the potential to occur within the project area. There is no designated or proposed critical habitat within the project area; the closest final designated critical habitat is located 65,315 ft (12 mi) away.</p> <p>The project activities will result in ground disturbing activities, including digging holes for anchor poles, as well as the construction of the new greenhouse. A qualified biologist reviewed the proposed activity location(s) and determined that the project will have <i>no effect</i> on the Puerto Rican parrot or designated critical habitat. Due to the generalist nature of the Puerto Rican</p>

		<p>boa, forested habitat surrounding the project areas, and dense ground cover present throughout the review area, the Puerto Rican boa may occur within the project area. The applicant will employ the conservation measures outlined in the USFWS 2024 General Project Design Guidelines for the Puerto Rican boa. As such, it is anticipated that the project <i>may affect, but is not likely to adversely affect</i> the Puerto Rican boa.</p> <p>Based on a site visit and habitat evaluations, the Puerto Rican broad-winged hawk is considered unlikely to occur within the project area due to lack of suitable habitat. It is anticipated that the project <i>may affect, but is not likely to adversely affect</i> the Puerto Rican broad-winged hawk.</p> <p>The applicant will employ conservation measures for the Puerto Rican broad-winged hawk and Puerto Rican parrot, including but not limited to issuing a stop work if a Puerto Rican boa were to occur within the project area, and contacting the Puerto Rico Department of Natural and Environmental Resources for safe capture and relocation of the individual if such action is required.</p> <p>The Endangered Species Act Partner Worksheet, Threatened and Endangered Species Technical Memorandum with IPaC, Critical Habitat Map (Figure B 7-1) are provided in Appendix B, Attachment 7.</p>
<p>Explosive and Flammable Hazards</p> <p>24 CFR Part 51 Subpart C</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The project includes the new construction of a greenhouse. The project itself is not the development of a hazardous facility nor will the project increase residential densities. No further evaluation is required. The project is in compliance with explosive and flammable hazard requirements.</p>

		The Explosive and Flammable Hazards Partner Worksheet is provided in Appendix B, Attachment 8.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>This project does not include any activities that could potentially convert agricultural land to non-agricultural use. Per the USGS/NRCS Web Soil Survey, the project area crosses three mapped soil series: DaD (Daguey clay, 1 to 20 percent slopes); the (Humatas clay, 20 to 40 percent slopes); and MoF (Maricao clay, 20 to 60 percent slopes). Farmlands of statewide importance are within the project area. Although the project includes new construction, the project is exempt from review under the Farmland Protection Policy Act (FFPA) as the project is limited to construction of on-farm structures needed for farm operations. No further review is required. The project is in compliance with the Farmland Protection Policy Act.</p> <p>The Farmlands Protection Partner Worksheet and Prime Farmland Map (Figure B 9-1) are provided in Appendix B, Attachment 9.</p>
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>An Advisory Base Flood Elevation (ABFE) map was developed by FEMA for this FIRM, which shows the project site is in Flood Zone X. The project is not located in the 100-year floodplain or ABFE special flood hazard area; therefore, no further action is required. The project is in compliance with Executive Order 11988.</p> <p>PFIRMs in Puerto Rico were only developed for certain sections of the municipalities of Carolina, Canovanas, Loiza, San Juan and Trujillo Alto. The proposed project is located in the municipality of Orocovis; therefore, PFIRM information was not available for the area and therefore not considered in the review.</p>

		<p>HUD implemented new floodplain regulations under 89 FR 30850 effective June 24, 2024 which created the Federal Flood Risk Management Standard (FFRMS). The project area lies outside of the 0.2-Percent-Annual-Chance (500-Year) Flood Approach:</p> <p>The current project comprises non-critical actions that lie outside the 0.2-percent-annual-chance (500-year flood elevation), which is the approach used for this project to comply with the FFRMS.</p> <p>The Floodplain Management Partner Worksheet and ABFE Floodplain Map (Figure B 10-1) are provided in Appendix B, Attachment 10.</p>
<p>Historic Preservation</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 project will involve new construction of greenhouses on a previously disturbed property. State Historic Preservation Office (SHPO) consultation was performed.</p> <p>No National Historic Landmark (NHL) are within or near the project area.</p> <p>A site visit was conducted on February 15, 2024 by an SOI-qualified Archaeologist. Record reviews and research were conducted at the SHPO and the Instituto de Cultura Puertorriqueña (ICP) to determine if any archaeologically sensitive resources could be present within a 0.5-mile radius.</p> <p>The results of the Record Search and the Site Inspection indicate that there are no historic properties or cultural resources within the 0.50-mile radius study area or within the project Area of Potential Effect (APE). Based on the results of the historic property identification efforts, the Program has determined that project actions will not affect historic properties that compose the APE.</p>

		<p>The determination was submitted to SHPO by PRDOH for concurrence on March 18, 2024, and SHPO concurred with the No Historic Properties Affected determination on March 20, 2024. No further evaluation is required. The project is in compliance with the National Historic Preservation Act.</p> <p>The Historic Preservation Partner Worksheet and SHPO consultation are provided in Appendix B, Attachment 11 Cultural Resources Map.</p>
<p>Noise Abatement and Control</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>The project activities are limited to the construction of a greenhouse and does not involve residential new construction or rehabilitation. No further evaluation is required. The project is in compliance with HUD's noise regulation.</p>
<p>Sole Source Aquifers</p> <p>Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>According to the USEPA's Source Water Protection, Sole Source Aquifer Protection Program, there are no sole source aquifers in Puerto Rico. No further evaluation is required. The project is in compliance with the Safe Drinking Water Act.</p> <p>The Sole Source Aquifers Partner Worksheet and Sole Source Aquifers Map (Figure B 15-1) are provided in Appendix B, Attachment 15.</p>
<p>Wetlands Protection</p> <p>Executive Order 11990, particularly sections 2 and 5</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The project site was reviewed for wetlands using the USFWS Wetland Inventory Mapper and a visual confirmation during the field site inspection. The site inspection identified a stream approximately 885 ft west of the project site outside of the parcel, but it will not be impacted by the projects due to a natural barrier of trees. No further evaluation is required. The project is in compliance with Executive Order 11990.</p> <p>The Wetlands Protection Partner Worksheet and Wetland Map (Figure B</p>

		12-1) are provided in Appendix B, Attachment 12.
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>A review of the USFWS National Wild and Scenic River mapper identified no Wild and Scenic Rivers or National Rivers Inventory (NRI) rivers present in Orocovis Municipio. The closest Wild and Scenic River segment is located 205,730 ft (39 mi) from the project site. No further evaluation is required. The project is in compliance with the Wild and Scenic Rivers Act.</p> <p>The Wild and Scenic Rivers Partner Worksheet and Wild and Scenic Rivers Map (Figure B 13-1) are provided in Appendix B, Attachment 13.</p>
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>The ReGrow Program intends to alleviate negative economic impacts to, and strengthen, the agricultural industry in Puerto Rico. The project's direct and indirect impacts are limited to a small area on a single land parcel. The project will benefit the farm owner by improving agricultural use and production. The project would not facilitate development that would negatively affect human health or result in disproportionate adverse environmental impacts to low-income or minority populations. The project is in compliance with Executive Order 12898.</p> <p>The Environmental Justice Partner Worksheet and EJSscreen Report are provided in Appendix B, Attachment 14.</p>

Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 & 1508.27] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in

support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits or approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

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

(1) Minor beneficial impact

(2) No impact anticipated

(3) Minor Adverse Impact – May require mitigation

(4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
LAND DEVELOPMENT		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	<p>Project activities include new construction of a greenhouse. The project site location is classified as Developed Rural Area (ARD). The proposed action is continued agricultural use of property, which is compatible with zoning and existing land use.</p> <p>Construction actions include minor improvements which increase the current function of the existing land use. There is no change in land use since the land will continue to be used for agriculture purposes. The project site is in a rural area of Orocovis Municipio, and project activities will not contribute to urban sprawl.</p> <p>The applicant and/or construction manager is required to obtain any necessary local and territorial building and environmental permits prior to construction activities commencing.</p>
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	<p>Project activities include new construction of a greenhouse. Soil suitability will be assessed prior to construction and will be addressed during local permitting processes. Per the USGS/NRCS Web Soil Survey, the project area crosses three mapped soil series: DaD (Daguey clay, 1 to 20 percent slopes); the</p>

		<p>(Humatas clay, 20 to 40 percent slopes); and MoF (Maricao clay, 20 to 60 percent slopes). Contractors will be required to use best management practices during construction to control erosion and prevent runoff. The soil is currently being used for agriculture purposes.</p> <p>Landslide data from the U.S. Geological Survey (USGS) indicates no landslides per square kilometer for the project area (see Appendix A, Figure 3- USGS Landslide Map). Department of Natural and Environmental Resources (DNER) authorization is required for any extraction, removal, excavation, and dredging of the components of the earth's crust.</p>
Hazards and Nuisances including Site Safety and Noise	2	<p>Project activities include new construction of a greenhouse. Contractors will be required to provide health and safety plans and monitoring during construction. Noise levels will temporarily increase during construction which may impact surrounding neighbors; however, program activities are limited to the existing farm property and will not elevate ambient noise levels long-term. Contractors will be required to comply with the applicable local noise ordinances. Noise impacts will be mitigated by restricting construction activities to daylight hours and to the hours established in the Regulation for Noise Control and Pollution in Puerto Rico. Additionally, the project does not include housing to where inhabitants would be affected.</p>

Environmental Assessment Factor	Impact Code	Impact Evaluation
SOCIOECONOMIC		
Employment and Income Patterns	2	<p>Project activities include new construction of a greenhouse. The project is not anticipated to have a significant impact on employment and income patterns; however, the project may help restore employment opportunities and income patterns by creating temporary, local jobs to complete the construction of the project.</p>
Demographic Character	2	<p>Project activities include new construction of a greenhouse. The project is a rural area in Orocovis Municipio and will not alter the demographics or character of the surrounding community. Project</p>

Changes, Displacement		activities will not result in any direct or indirect displacement of individuals or families.
Environmental Justice	2	Project activities include new construction of a greenhouse. The project's direct and indirect impacts are limited to a small area on a single land parcel. The project will benefit the farm owner by improving agricultural use and production by having a safe, designated growing space for crops. The project will not facilitate development that would negatively affect human health or result in disproportionate adverse environmental impacts to low-income or minority populations. The EJSscreen Report is provided in Appendix B, Attachment 14.

Environmental Assessment Factor	Impact Code	Impact Evaluation
COMMUNITY FACILITIES AND SERVICES		
Educational and Cultural Facilities	2	The proposed project includes the construction of a new greenhouse on private land and will not contribute to any change in educational or cultural facilities or affect access to or capacity of educational or cultural facilities.
Commercial Facilities	2	The proposed project includes the construction of a new greenhouse. The proposed project will increase agricultural production, resulting in a net positive impact to the applicant's farm commercial output and a positive benefit to surrounding commercial enterprises who purchase and sell the produce; however, the project will not put undue pressure on commercial facilities.
Health Care and Social Services	2	The proposed project includes the construction of a new greenhouse on private land and will not affect access to or capacity of health care and social services.
Solid Waste Disposal / Recycling	2	The proposed project includes the construction of a new greenhouse. The proposed project may cause an increase in short-term generation of solid waste during construction. All construction debris will be disposed of at the proper facilities for the debris type (i.e., construction waste). The project will not

		contribute to long-term needs or changes to solid waste disposal and recycling.
Wastewater / Sanitary Sewers	2	The construction of a greenhouse is not expected to result in significant changes in wastewater or sanitary sewer generation. Sewage will not be generated from the project. No new wastewater or sanitary sewer connections are required for this project.
Water Supply	2	The proposed project includes the construction of a greenhouse. The proposed project activities includes connecting the greenhouse to a water supply on the property which may increase water usage on the property. The greenhouse will be connected to municipal water provided by PRASA and all necessary permits will be obtained by the applicant.
Public Safety - Police, Fire and Emergency Medical	2	The proposed project includes the construction of a greenhouse on private land and will not affect public safety concerns such as police, fire, and emergency medical services.
Parks, Open Space and Recreation	2	The proposed project includes the construction of a greenhouse on private land and will not result in any changes to access or use of parks, open space, and recreation areas.
Transportation and Accessibility	2	The proposed project includes the construction of a greenhouse on private land and will have no relation to transportation services. The proposed activities will not result in any changes in transportation and accessibility.

Environmental Assessment Factor	Impact Code	Impact Evaluation
NATURAL FEATURES		
Unique Natural Features, Water Resources	2	The proposed project includes the construction of a greenhouse. The project is not located in proximity to unique natural features or water resources; therefore, construction activities will not affect quality or access to these resources.
Vegetation, Wildlife	2	Project activities include new construction of a greenhouse. The project area has already been previously disturbed for residential home placement

		and farm operations; therefore, the project is not anticipated to result in any new impacts to trees, vegetation, wildlife or native plant communities. No tree clearing or pruning is anticipated prior to greenhouse construction.
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Environmental Assessment Factor	Impact Code	Impact Evaluation
CLIMATE AND ENERGY		
Climate Change Impacts	2	<p>The proposed ReGrow program project aims to increase resiliency in the agricultural industry to prepare for future climate related disasters, including drought. The Climate Mapping for Resilience and Adaptation Assessment tool (https://resilience.climate.gov/#assessment-tool) provides historical and future climate data for five common climate-related hazards (extreme heat, drought, wildfires, flooding, and coastal inundation). The data model for the census tract that includes application location does not indicate a significant increase in hazard risks from climate change for drought, wildfire, or flooding, when comparing historical data (1976-2005) to future projections. The model projects a greater number of days where temperatures will exceed 90 degrees Fahrenheit after 2015, which is a systemic trend in the model across the Island.</p> <p>The specific activities proposed for this economic development project are limited in scale and land impacts. The proposed greenhouse construction activities are for individual farm use and will not result in an increase in electricity or water draw. The greenhouse used will allow the applicant to control the water to the crops and will reduce the amount needed compared to open air farming which often results in higher evapotranspiration. The equipment that will be used during construction and operation will also be limited to occasional use at this specific land parcel, and therefore will not generate a significant amount of greenhouse gas.</p>
Energy Efficiency	2	The project will not result in significant additional energy consumption as it involves only the construction of a greenhouse using self-powered

		construction equipment on an existing farm and will not require any expansion to existing power facilities.
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Additional Studies Performed:

No additional studies were performed.

Field Inspection (Date and completed by):

Field inspection completed on February 15th, 2024 by Karina Morales, SWCA Environmental Consultants.

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

Department of Natural and Environmental Resources (DNER). 2023. Puerto Rico DNER Species Ranges – under construction. Accessed February 19, 2024. Available at: <https://arcg.is/1S9aju0>.

Federal Aviation Administration (FAA). 2022. National Plan for Integrated Airport Systems 2023-2027. Accessed February 19, 2024. Available at: [National Plan of Integrated Airport Systems \(NPIAS\) 2023-2027, Appendix B: National and State Maps \(faa.gov\)](https://www.faa.gov/airports/airportsystems/npias/2023-2027/appendix-b-national-and-state-maps).

Federal Emergency Management Agency (FEMA). 2023. FEMA Flood Map Service Center - Map Panel 72000C1135H (effective 4/19/2005). Accessed February 19, 2024. Available at: <https://msc.fema.gov/portal/home>.

Institute of Puerto Rican Culture (ICP). 2023. San Juan, Puerto Rico. Data collection conducted on March 18, 2024.

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List of Permits Obtained:

No permits have been obtained.

Public Outreach [24 CFR 58.43]:

Puerto Rico Department of Agriculture has worked closely with the agricultural community. In compliance with the National Environmental Policy Act (NEPA) regulations for HUD, the public will be notified of the project through publication of the combined Finding of No Significant Impact (FONSI) – Notice of Intent to Request Release of Funds (NOI-RROF) notice with a 15-day public comment period.

Cumulative Impact Analysis [24 CFR 58.32]:

The construction of a greenhouse and utility connections at the project site is not anticipated to have a negative impact on environmental resources. None of the environmental assessment factors nor the regulations reviewed in the above checklist resulted in negative environmental impacts or the need for mitigation. Overall, the project will have a net positive impact by helping a small business increase their capacity

for agricultural production. No other planned or ongoing projects were identified in the project vicinity that could contribute to cumulative impacts of environmental resources.

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

Within the boundaries of the property, other locations could be considered for the new greenhouse. However, other locations may require greater environmental impacts such as additional ground disturbance, grading for slopes that are not suitable for installation or additional tree clearing and would result in higher costs to the applicant.

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

Under the No Action Alternative, the applicant would not receive federal funding to construct a new greenhouse. Consequently, the applicant may not be able to recover and continue agricultural production. Given the degree of need for greater agricultural capacity in Puerto Rico following Hurricanes Irma and María, the costs of foregoing the project would exceed the benefits.

Summary of Findings and Conclusions:

The proposed project would not result in any adverse impacts to the surrounding natural, historical, and water resources; generate significant air or noise pollution; or promote environmental or socioeconomic injustices. The proposed project is not located within a coastal zone or near a major water resource.

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
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	The current project activities do not involve the removal of trees. If any tree clearing is to be proposed, the project will need to be re-evaluated for impacts to threatened and endangered species. If a Puerto Rican Boa (Boa) is found in the project activity site, work shall cease until the Boa moves off site on its own. If the Boa does not move off site, the construction manager shall contact the Puerto Rico DNER to relocate the Boa.

	<p>The USFWS has developed the following conservation measures for the Boa:</p> <ol style="list-style-type: none"> 1. Inform all project personnel about the potential presence of the PR boa in areas where the proposed work will be conducted. A pre-construction meeting should be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming PR boas. An educational poster or sign with photo or illustration of the species should be displayed at the project site. 2. Prior to any construction activity, including removal of vegetation and earth movements, the boundaries of the project and areas to be excluded and protected should be clearly marked in the project plan and in the field in order to avoid further habitat degradation into forested and conservation areas. 3. Once areas are clearly marked, and prior to the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), a biologist or project personnel with experience on this species should survey the areas to be cleared to verify the presence of any PR boa within the work area. 4. If a PR boa is found within any of the working or construction areas, activities should stop at that area and information recorded (see #5). Do not capture the boa. If boas need to be moved out of harm's way, designated personnel shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #s: (787) 724-5700, (787) 230-5550, (787) 771-1124). If immediate relocation is not an option, project-related activities at that area must stop until the boa moves out of harm's way on its own. Activities at other work sites, where no boas have been found after surveying the area, may continue.
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	<p>5. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. PR boa data should also include a photo of the animal (dead or alive), site GPS coordinates, the time and date, and comments on how the animal was detected and its behavior. Last Revised: January 2024</p> <p>6. If a PR boa is captured by PRDNER personnel, record the name of that person and information on where the PR boa will be taken. This information should be reported to the Service.</p> <p>7. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal, and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal (see #4). If not possible, the animal should be left alone until it leaves the vehicle on its own.</p> <p>8. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future.</p> <p>9. If a dead PR boa is found, immediately cease all work in that area and record the information accordingly (see #5). If the PR boa was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what</p>
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	<p>actions will be taken to avoid further killings. A dead boa report should be sent by email (see contacts below) to the Service within 48 hours of the event.</p> <p>10. Projects must comply with all state laws and regulations. Please contact the PRDNER for further guidance.</p> <p>The USFWS has developed the following conservation measures for bird species in case an encounter occurs:</p> <p>1. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973, as amended. During breeding seasons (see below), nest surveys shall be conducted if a project occurs within the range of any of the species listed above and if habitat for those species will be impacted by the proposed actions. Nest searches must be conducted by qualified personnel with the appropriate permits from the Puerto Rico Department of Natural and Environmental Resources (PRDNER) prior to start of work. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 50-meter buffer around any nest(s) found within the project area. This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently.</p> <ul style="list-style-type: none"> • Breeding Seasons: • Puerto Rican parrot: February-June. • Puerto Rican broad-winged hawk: December-June. <p>2. Outside the breeding season no nest surveys are required, but if a nest is encountered, all construction activities or human disturbance must be avoided within a 50-meter buffer around that nest(s). This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. Furthermore, if any of the species indicated above is observed (e.g., foraging, resting) within the project area, avoid any disturbance to</p>
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	<p>the individual(s) and do not flush the bird until it leaves on its own.</p> <p>3. For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office at Caribbean_es@fws.gov. For questions, the Point of Contact (POC) is José Cruz-Burgos, Endangered Species Program Coordinator, and can be contacted at:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Mobile: 305-304-1386 <input type="checkbox"/> Office phone: 786-244-0081 <input type="checkbox"/> Office Direct Line: 939-320-3120 <input type="checkbox"/> Email: jose_cruz-burgos@fws.gov
<p>Historic Preservation</p> <p>National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800</p>	<p>If historic properties are discovered, unanticipated effects on historic properties are found, or cultural materials are encountered, work should cease in the immediate area; work can continue where no historic properties or cultural materials are present. Please contact PRDOH to consult on further actions that may be necessary to protect historic properties or cultural materials.</p>
<p>Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design</p>	<p>The proposed action is continued agricultural use of property, which is compatible with the existing land use.</p> <p>The applicant and/or construction manager is required to obtain any necessary local and territorial building and environmental permits prior to construction activities commencing.</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 best management practices during construction.</p>
<p>Vegetation, Wildlife</p>	<p>DNER authorization is required for tree clearing or pruning. The landowner and/or the contractor will contact the Permit Management Office to determine permits and authorizations required prior to construction.</p>
<p>Hazards and Nuisances including Site Safety and Noise</p>	<p>Contractors will be required to provide health and safety plans and monitoring during construction.</p>

	<p>Contractors will be required to comply with the applicable local noise ordinances.</p> <p>Noise impacts will be mitigated by restricting construction activities to daylight hours and to the hours established in the Regulation for Noise Control and Pollution in Puerto Rico.</p>
Solid Waste Disposal / Recycling	All construction debris will be disposed of at the proper facilities for the debris type (i.e. construction waste).
Water Supply	The applicant is required to obtain authorization or permits from PRASA and/or AAA prior to expanding water connections.

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: 2 October 2024

Name/Title/Organization: Heath Anderson, Ph.D., Deputy Program Manager

SWCA Environmental Consultants

Certifying Officer Signature:  Date: 10/02/2024

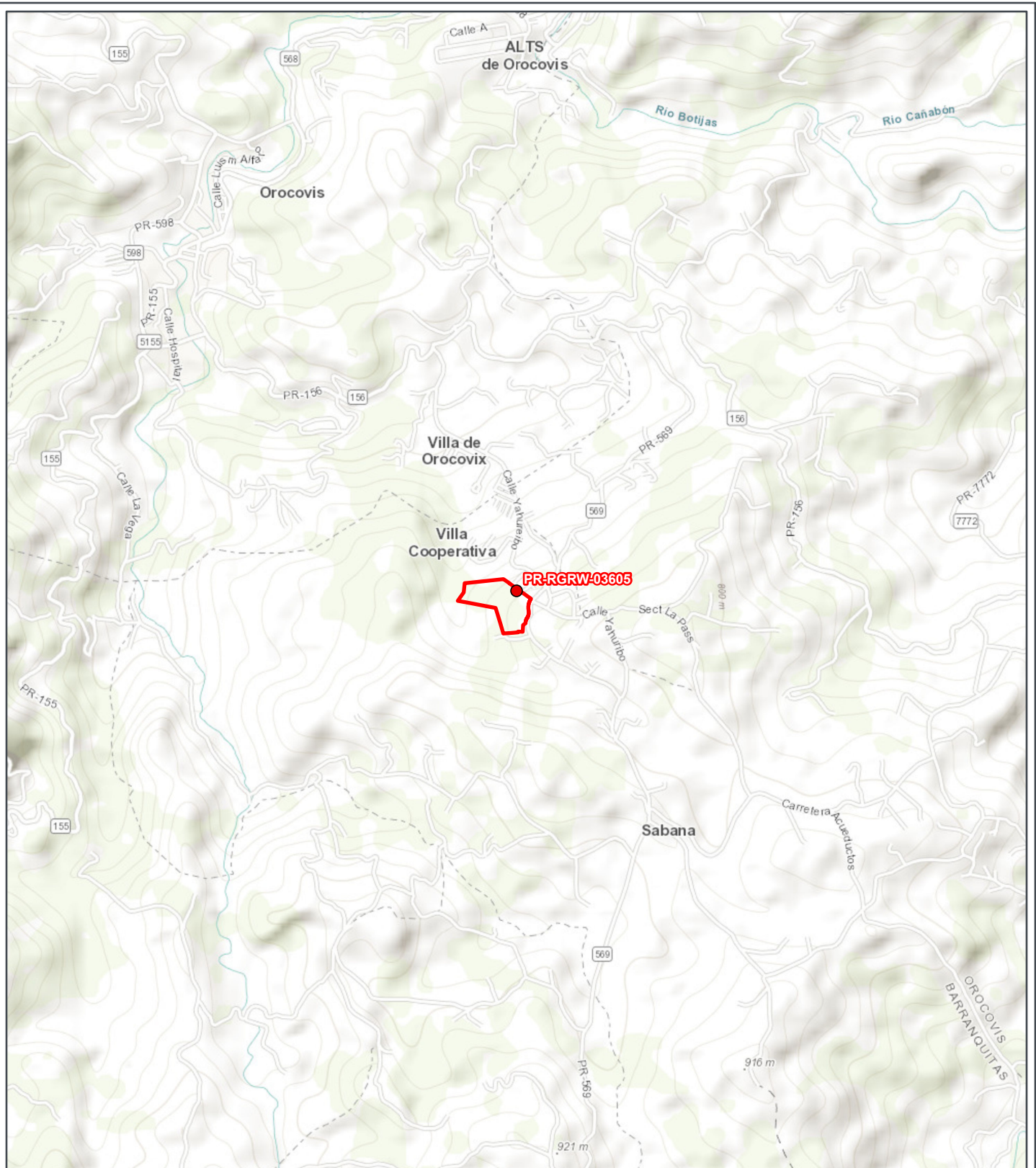
Name/Title: _____

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

Appendix A

Project Overview Figures

Figure 1
Site Location Map



REGROW PROGRAM

Figure A-1: Site Location

Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Site Location
Aprx: 72428_ReGrowTier2Maps

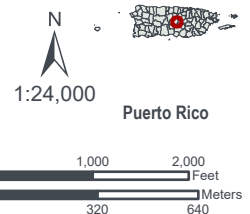


Figure 2
Site Vicinity Map



REGROW PROGRAM

Figure A-2: Site Vicinity

Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.378771°W 18.213055°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Site Vicinity
Aprx: 72428_ReGrowTier2Maps

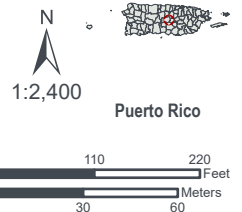


Figure 3
USGS Landslide Map



REGROW PROGRAM

Figure A-3: USGS Landslide Map

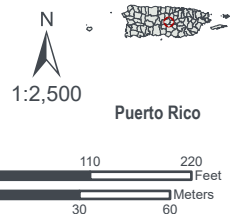
Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- ▭ Site Parcel
- ▭ Project Footprint (Option)
- ▭ Greater than 25 Landslides per sq km
- ▭ Less than 25 Landslides per sq km
- ▭ No Landslides
- ▭ Not Examined

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: https://arcgis.cuahsi.org/arcgis/rest/services/MariaRAPID/Hurricane_Maria_Landslides/MapServer
Base Map: ESRI ArcGIS Online, accessed February 2024
Updated: 2/19/2024
Layout: Landslide



Appendix B

Attachments and Supporting Documentation

Attachment 1

Airport Hazards Partner Worksheet and

Airport Hazards Map



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Airport Hazards (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/airport-hazards>

- 1. To ensure compatible land use development, you must determine your site’s proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?**

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within the applicable distances to a military or civilian airport.*

☐ Yes → *Continue to Question 2.*

- 2. Is your project located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ)?**

☐ Yes, project is in an APZ → *Continue to Question 3.*

☐ Yes, project is an RPZ/CZ → *Project cannot proceed at this location.*

☐ No, project is not within an APZ or RPZ/CZ

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Continue to the Worksheet Summary below. Provide a map showing that the site is not within either zone.*

- 3. Is the project in conformance with DOD guidelines for APZ?**

☐ Yes, project is consistent with DOD guidelines without further action.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

☐ No, the project cannot be brought into conformance with DOD guidelines and has not been approved. → *Project cannot proceed at this location.*

If mitigation measures have been or will be taken, explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

[Click here to enter text.](#)

→ Work with the RE/HUD to develop mitigation measures. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project site is not within 2,500 ft of a civil primary or commercial service airport or within 15,000 ft of a military airport. The nearest civil primary or commercial service airport, Mercedita, is located 97,106 ft (18 miles [mi]) from the project site. The nearest military airport, Luis Munoz Marin International Airport, is located 149,368 ft (28 mi) from the project site. No further evaluation is required.



REGROW PROGRAM

Figure B 1-1: Airport Hazards Map

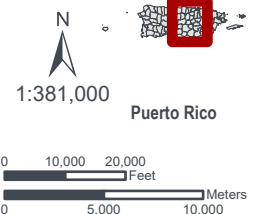
Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- ▭ Airport Runway
- ▭ Accident Potential Zones (APZ)
- ▭ Runway Protection Zones (RPZ)
- ▭ 2,500-FT Civil Airport Buffer
- ▭ 15,000-FT Military Airport Buffer

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.283941°W 18.219661°N

Data Source: <https://geodata.bts.gov/>
Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Airport Hazards
Aprx: 72428_ReGrowTier2Maps



Attachment 2

Coastal Barrier Resources Act Partner Worksheet and Coastal Barrier Resources Map



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Coastal Barrier Resources (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/coastal-barrier-resources>

Projects located in the following states must complete this form.

Alabama	Georgia	Massachusetts	New Jersey	Puerto Rico	Virgin Islands
Connecticut	Louisiana	Michigan	New York	Rhode Island	Virginia
Delaware	Maine	Minnesota	North Carolina	South Carolina	Wisconsin
Florida	Maryland	Mississippi	Ohio	Texas	

1. Is the project located in a CBRS Unit?

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a CBRS Unit.*

☐ Yes → *Continue to 2.*

Federal assistance for most activities may not be used at this location. You must either choose an alternate site or cancel the project. In very rare cases, federal monies can be spent within CBRS units for certain exempted activities (e.g., a nature trail), after consultation with the Fish and Wildlife Service (FWS) (see [16 USC 3505](#) for exceptions to limitations on expenditures).

2. Indicate your recommended course of action for the RE/HUD

- ☐ Consultation with the FWS
- ☐ Cancel the project

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

The project site is not located in a Coastal Barrier Resource Systems Unit (CBRS) or Otherwise Protected Area (OPA). There are no CBRS units in Orocovis. The closest CBRS unit, Rio Descalabrado, is located 85,040 ft (16 mi) from the project site. No further evaluation is required.



REGROW PROGRAM

Figure B 2-1: Coastal Barrier Resources Map

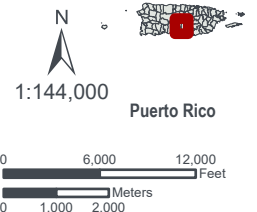
Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Otherwise Protected Area
- System Unit

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.418628°W 18.103259°N

Data Source: <https://cbrsgis.wim.usgs.gov/arcgis/rest/services/CoastalBarrierResourcesSystem/MapServer>
Base Map: ESRI ArcGIS Online, accessed February 2024
Updated: 2/19/2024
Layout: Coastal Barrier Resources System



Attachment 3

**Flood Insurance Partner Worksheet and
Flood Insurance Rate Map**



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Flood Insurance (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/flood-insurance>

1. Does this project involve mortgage insurance, refinance, acquisition, repairs, rehabilitation, or construction of a structure, mobile home, or insurable personal property?

☐ No. This project does not require flood insurance or is excepted from flood insurance.

→ Continue to the Worksheet Summary.

☒ Yes → Continue to Question 2.

2. Provide a FEMA/FIRM map showing the site.

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs).

Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?

☒ No → Continue to the Worksheet Summary.

☐ Yes → Continue to Question 3.

3. Is the community participating in the National Flood Insurance Program or has less than one year passed since FEMA notification of Special Flood Hazards?

☐ Yes, the community is participating in the National Flood Insurance Program.

Flood insurance is required. Provide a copy of the flood insurance policy declaration or a paid receipt for the current annual flood insurance premium and a copy of the application for flood insurance.

→ Continue to the Worksheet Summary.

☐ Yes, less than one year has passed since FEMA notification of Special Flood Hazards.

If less than one year has passed since notification of Special Flood Hazards, no flood Insurance is required.

→ Continue to the Worksheet Summary.

☐ No. The community is not participating, or its participation has been suspended.

Federal assistance may not be used at this location. Cancel the project at this location.

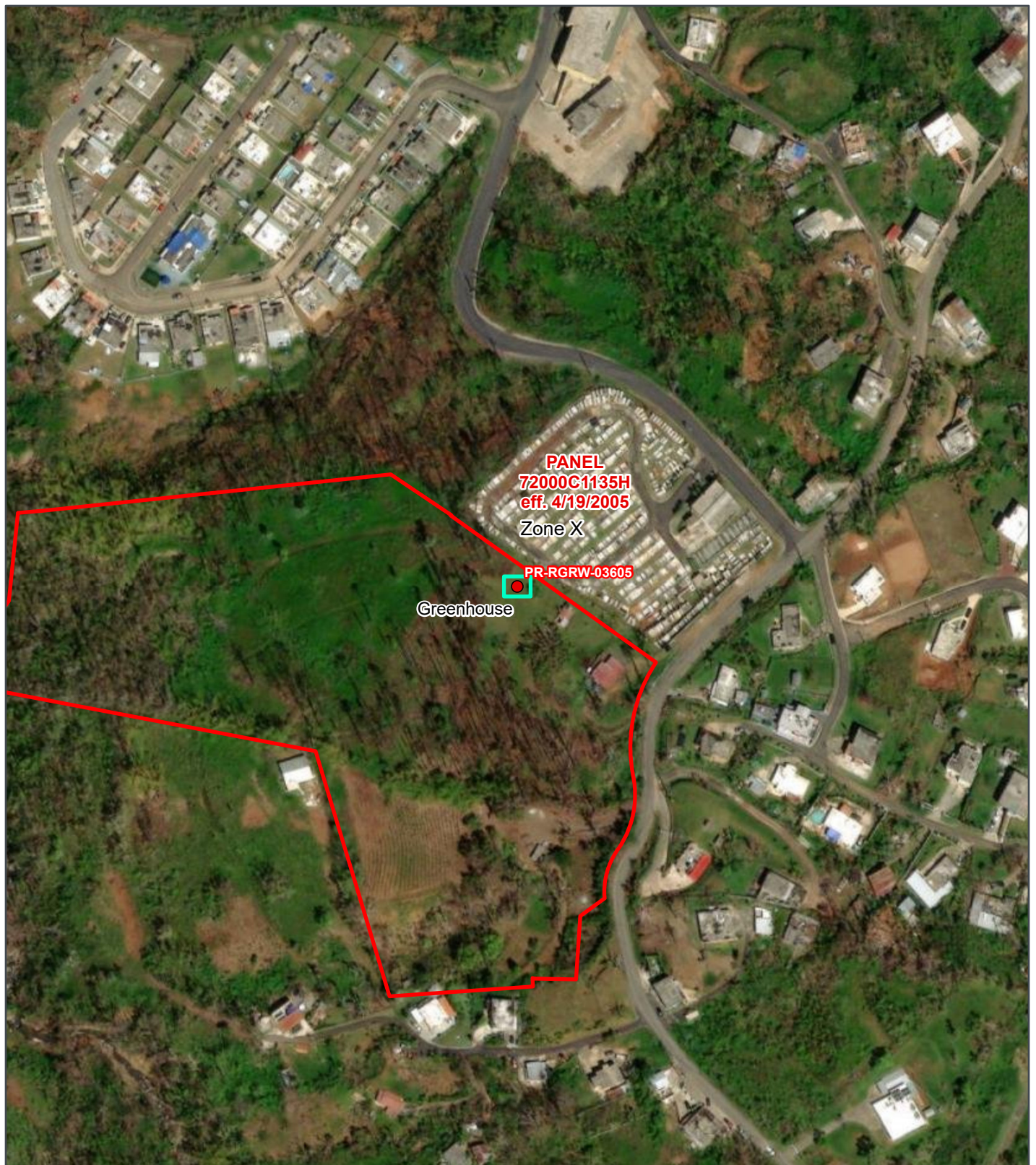
Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

A review of the FEMA Flood Insurance Rate Map (FIRM), Community Panel 72000C1135H (effective date 4/19/2005), shows the project site is in Flood Zone X, which is not in a Special Flood Hazard Area (SFHA). Flood insurance is not required. No further evaluation is required.



REGROW PROGRAM

Figure B 3-1: Flood Insurance Rate Map (FIRM)

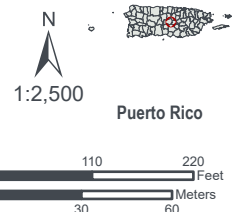
Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- | | |
|--|--|
| ● Site | Zone AO |
| Site Parcel | Zone VE |
| Project Footprint (Option) | Floodway |
| Base Flood Elevations | Zone X - Shaded (500-year floodplain) |
| Zone A | Zone X - Unshaded |
| Zone AE | Area Not Included |
| Zone AH | Open Water |

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: <https://hazards.fema.gov/gis/nfhl/rest/services/public/NFHL/MapServer>
Base Map: ESRI ArcGIS Online, accessed February 2024
Updated: 2/19/2024
Layout: Effective Floodplain
Aprx: 72428_ReGrowTier2Maps



Attachment 4

Air Quality Partner Worksheet, List of Non-Attainment/Maintenance Status Counties in Puerto Rico, and Clean Air Map



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Air Quality (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/air-quality>

- 1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?**

☐ Yes → *Continue to Question 2.*

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide any documents used to make your determination.*

- 2. Is your project’s air quality management district or county in non-attainment or maintenance status for any criteria pollutants?**

Follow the link below to determine compliance status of project county or air quality management district:

<http://www.epa.gov/oaqps001/greenbk/>

☒ No, project’s county or air quality management district is in attainment status for all criteria pollutants

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

☐ Yes, project’s management district or county is in non-attainment or maintenance status for one or more criteria pollutants. → *Continue to Question 3.*

- 3. Determine the estimated emissions levels of your project for each of those criteria pollutants that are in non-attainment or maintenance status on your project area. Will your project exceed any of the *de minimis* or *threshold* emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?**

☐ No, the project will not exceed *de minimis* or threshold emissions levels or screening levels

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Explain how you determined that the project would not exceed de minimis or threshold emissions.*

☐ Yes, the project exceeds *de minimis* emissions levels or screening levels.

→ *Continue to Question 4. Explain how you determined that the project would not exceed de minimis or threshold emissions in the Worksheet Summary.*

- 4. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

[Click here to enter text.](#)

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project site is in Orocovis Municipio, which is within a U.S. Environmental Protection Agency (USEPA) designated attainment area. Municipios in Nonattainment or Maintenance areas include Arecibo, Bayamon, Catano, Guaynabo, Salinas, San Juan and Toa Baja. Project activities include new construction of a greenhouse. Emissions associated with the proposed actions are temporary and limited to the use of small construction equipment and will be well below the Federal General Conformity Rule *de minimis* thresholds. No further evaluation is required. The project is not anticipated to have a negative impact on air quality.



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 January 31, 2024

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/m³) 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

GO

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
PUERTO RICO								
Arecibo Municipio	Lead (2008)	Arecibo, PR	1112131415161718192021222324	//		Part	32,185	72/013
Bayamon Municipio	Sulfur Dioxide (2010)	San Juan, PR	18192021222324	//		Part	22,921	72/021
Catano Municipio	Sulfur Dioxide (2010)	San Juan, PR	18192021222324	//		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	18192021222324	//		Part	23,802	72/061
Salinas Municipio	Sulfur Dioxide (2010)	Guayama-Salinas, PR	18192021222324	//		Part	23,401	72/123
San Juan Municipio	Sulfur Dioxide (2010)	San Juan, PR	18192021222324	//		Part	147,963	72/127
Toa Baja Municipio	Sulfur Dioxide (2010)	San Juan, PR	18192021222324	//		Part	52,441	72/137

Important Notes

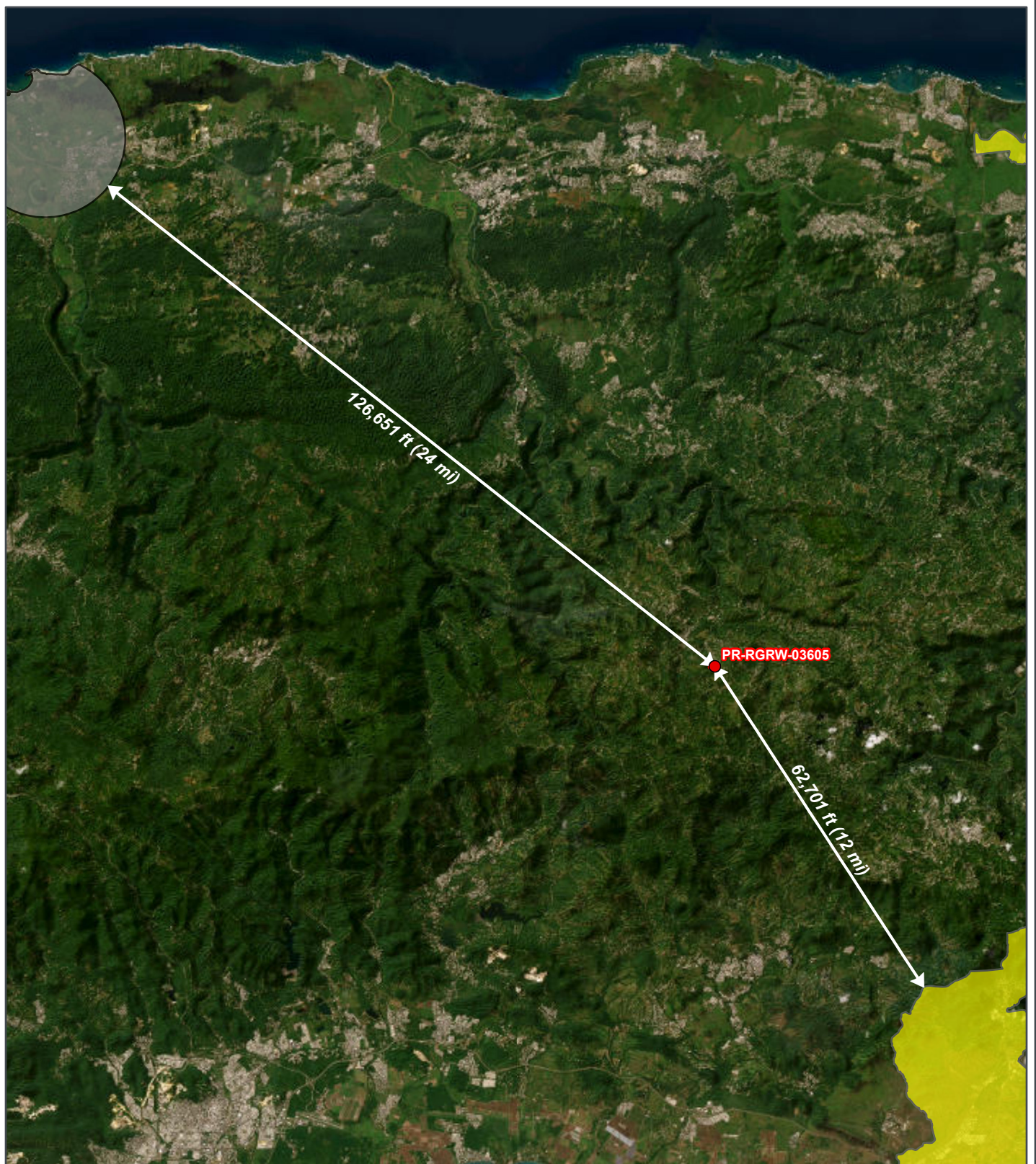
Discover.

Connect.

Ask.

Follow.

2024-01-31



REGROW PROGRAM

Figure B 4-1: Clean Air Map

Applicant ID: PR-RGRW-03605

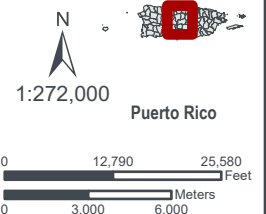


- Site
- ▨ 8-Hour Ozone (2015 Standard)*
- Lead (2008 Standard)
- PM-2.5 (2012 Standard)*
- Sulfur Dioxide (2010 Standard)

*No Data in Puerto Rico

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.471597°W 18.249606°N

Data Source: https://geopub.epa.gov/arcgis/rest/services/NEPAAssist/NEPAVELayersPublic_fgdb/MapServer
Base Map: ESRI ArcGIS Online, accessed February 2024
Updated: 2/19/2024
Layout: Clean Air
Aprx: 72428_ReGrowTier2Maps



Attachment 5

Coastal Zone Management Partner Worksheet and Coastal Zone Map



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Coastal Zone Management Act (CEST and EA) – PARTNER

<https://www.onecpd.info/environmental-review/coastal-zone-management>

Projects located in the following states must complete this form.

Alabama	Florida	Louisiana	Mississippi	Ohio	Texas
Alaska	Georgia	Maine	New Hampshire	Oregon	Virgin Islands
American Samoa	Guam	Maryland	New Jersey	Pennsylvania	Virginia
California	Hawaii	Massachusetts	New York	Puerto Rico	Washington
Connecticut	Illinois	Michigan	North Carolina	Rhode Island	Wisconsin
Delaware	Indiana	Minnesota	Northern Mariana Islands	South Carolina	

1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?

☐ Yes → Continue to Question 2.

☒ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a Coastal Zone.

2. Does this project include activities that are subject to state review?

☐ Yes → Continue to Question 3.

☐ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.

3. Has this project been determined to be consistent with the State Coastal Management Program?

☐ Yes, with mitigation. → The RE/HUD must work with the State Coastal Management Program to develop mitigation measures to mitigate the impact or effect of the project.

☐ Yes, without mitigation. → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.

☐ No → Project cannot proceed at this location.

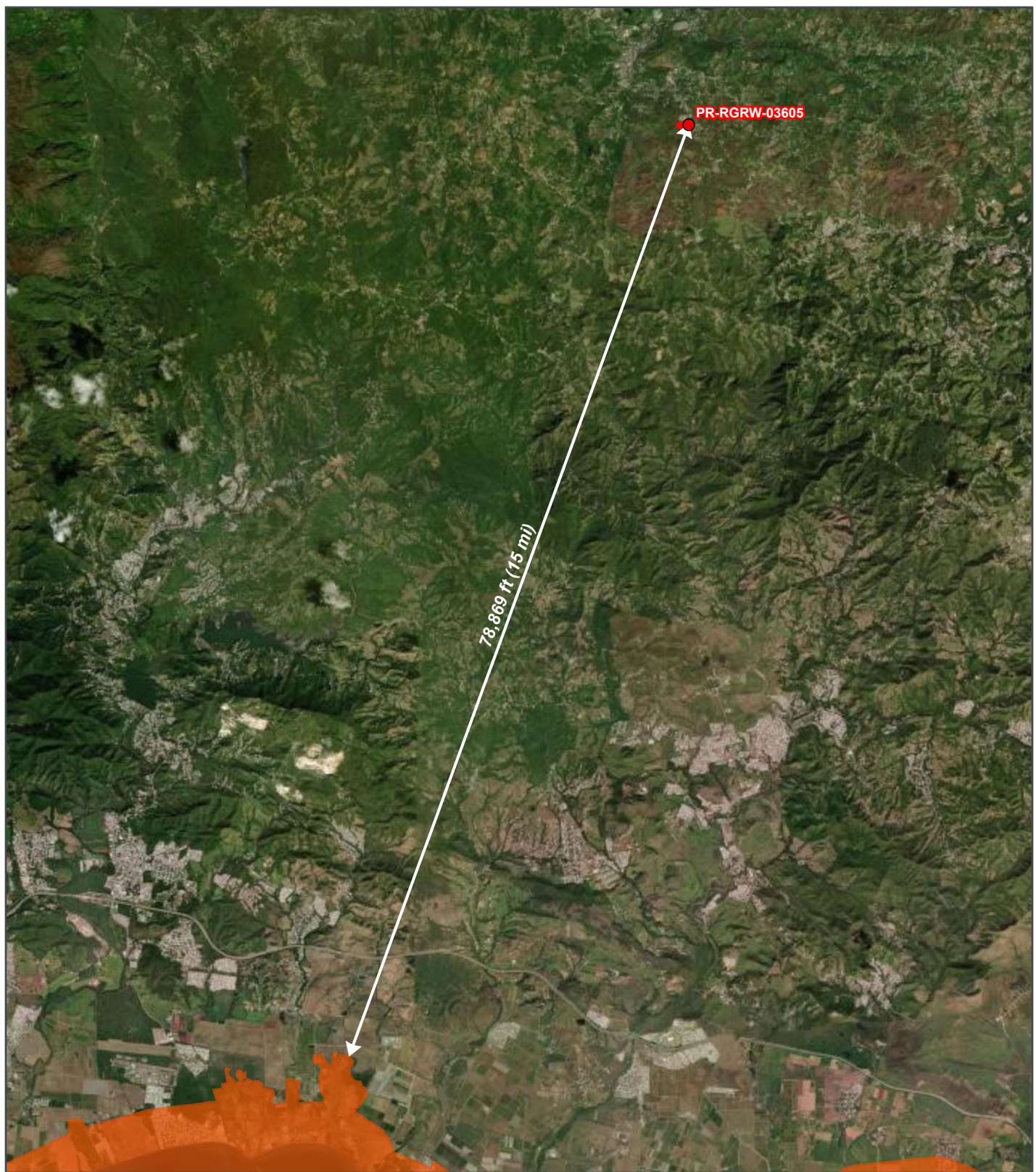
Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project site is not located within the Puerto Rico Coastal Management Zone. The closest coastal zone area is located 78,869 ft (15 mi) from the project site. No further evaluation is required.



REGROW PROGRAM

Figure B 5-1: Coastal Zone Management Map

Applicant ID: PR-RGRW-03605

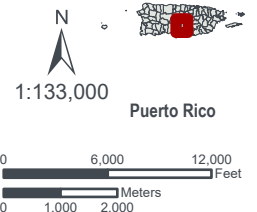
SWCA
ENVIRONMENTAL CONSULTANTS

● Site

Coastal Management Zone

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.416781°W 18.111652°N

Data Source: <https://coast.noaa.gov/arcgis/rest/services/Hosted/CoastalZoneManagementAct/BaseMap:ESRI/ArcGISOnline>
accessed February 2024
Updated: 2/19/2024
Layout: Coastal Zone Management
Aprx: 72428_ReGrowTier2Maps



Attachment 6

Contamination and Toxics Substances

Partner Worksheet, Radon

Memorandum, and Map



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Contamination and Toxic Substances (Multifamily and Non-Residential Properties) – PARTNER

<https://www.hudexchange.info/programs/environmental-review/site-contamination>

1. How was site contamination evaluated? ¹ Select all that apply.

- ☐ ASTM Phase I ESA
- ☐ ASTM Phase II ESA
- ☐ Remediation or clean-up plan
- ☐ ASTM Vapor Encroachment Screening
- ☒ None of the above

→ Provide documentation and reports and include an explanation of how site contamination was evaluated in the Worksheet Summary.

Continue to Question 2.

2. Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)

- ☒ No → Explain below.

No on-site RECs were identified during the site visit. A desktop review did not find any toxic, hazardous or radioactive substances in or within 3,000 ft of the project area that could affect the health and safety of project occupants or conflict with the intended use of the property.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

- ☐ Yes → Describe the findings, including any recognized environmental conditions (RECs), in Worksheet Summary below. Continue to Question 3.

¹ HUD regulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five or more dwelling units or non-residential property include the evaluation of previous uses of the site or other evidence of contamination on or near the site. For acquisition and new construction of multifamily and nonresidential properties HUD strongly advises the review include an ASTM Phase I Environmental Site Assessment (ESA) to meet real estate transaction standards of due diligence and to help ensure compliance with HUD’s toxic policy at 24 CFR §58.5(i) and 24 CFR §50.3(i). Also note that some HUD programs require an ASTM Phase I ESA.

3. Can adverse environmental impacts be mitigated?

☐ Adverse environmental impacts cannot feasibly be mitigated → HUD assistance may not be used for the project at this site. Project cannot proceed at this location.

☐ Yes, adverse environmental impacts can be eliminated through mitigation.

→ *Provide all mitigation requirements² and documents. Continue to Question 4.*

4. Describe how compliance was achieved. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls³, or use of institutional controls⁴.

[Click here to enter text.](#)

If a remediation plan or clean-up program was necessary, which standard does it follow?

☐ Complete removal

☐ Risk-based corrective action (RBCA)

→ *Continue to the Worksheet Summary.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

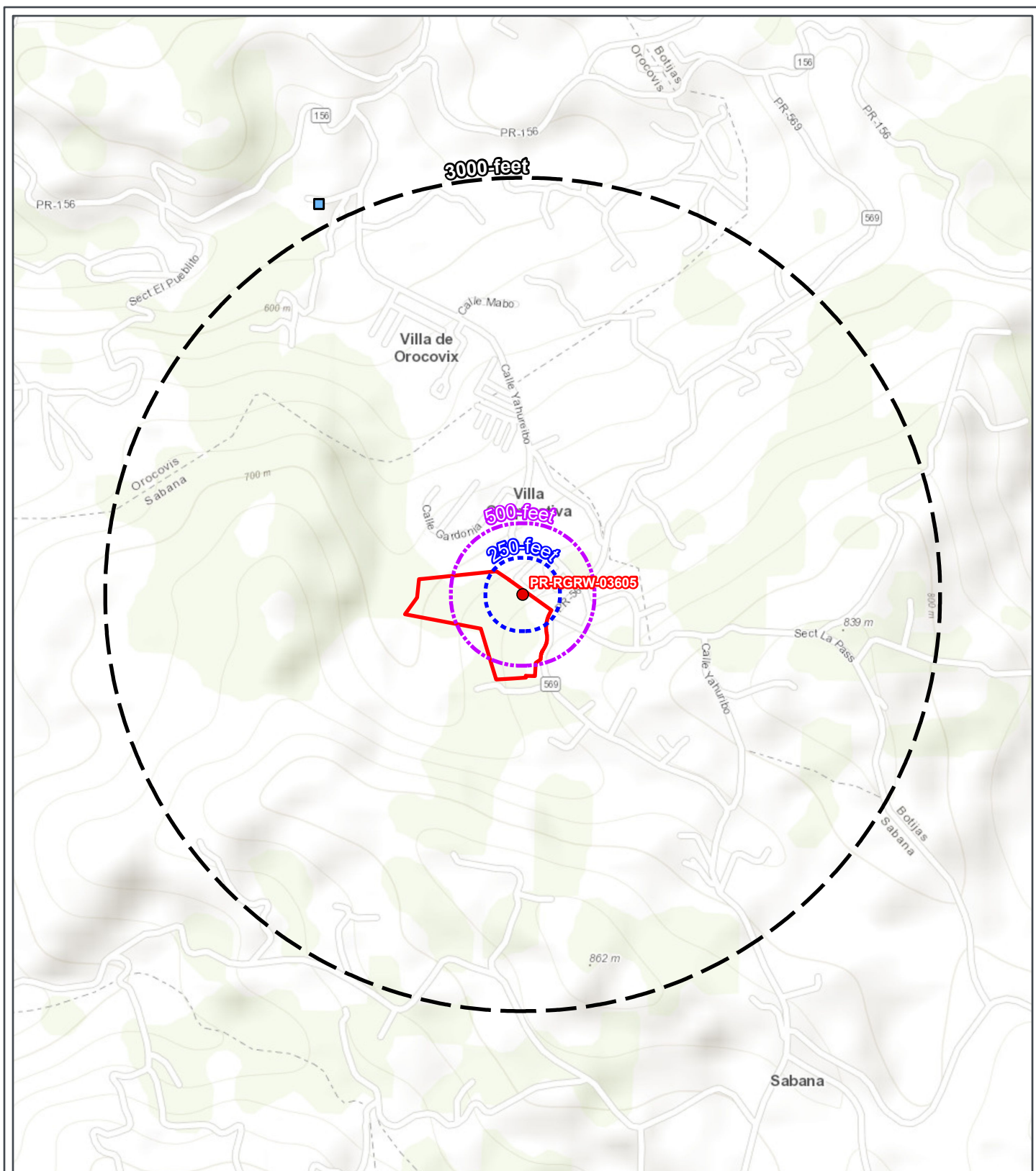
The project site was evaluated for potential contamination by conducting a field site inspection on February 15th, 2024 to identify any onsite hazards including, but not limited to, soil staining, above ground storage tanks, signs of underground storage tanks, odors, hazardous debris etc. The site inspection did not identify any onsite hazards. In addition, a desktop review of USEPA databases, NEPAassist, and other sources was conducted to determine if the project site was located near dump sites, junk yards, landfills, hazardous waste sites, or industrial sites, including USEPA National Priorities List Sites (Superfund sites), CERCLA or state-equivalent sites,

² Mitigation requirements include all clean-up actions required by applicable federal, state, tribal, or local law. Additionally, provide, as applicable, the long-term operations and maintenance plan, Remedial Action Work Plan, and other equivalent documents.

³ Engineering controls are any physical mechanism used to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls may include, without limitation, caps, covers, dikes, trenches, leachate collection systems, signs, fences, physical access controls, ground water monitoring systems and ground water containment systems including, without limitation, slurry walls and ground water pumping systems.

⁴ Institutional controls are mechanisms used to limit human activities at or near a contaminated site, or to ensure the effectiveness of the remedial action over time, when contaminants remain at a site at levels above the applicable remediation standard which would allow for unrestricted use of the property. Institutional controls may include structure, land, and natural resource use restrictions, well restriction areas, classification exception areas, deed notices, and declarations of environmental restrictions.

RCRA Corrective Action sites with release(s) or suspected release(s) requiring clean-up action and/or further investigation. The desktop review did not find any of the above-listed toxic, hazardous or radioactive substances in or within 3,000 ft of the project area that could affect the health and safety of project occupants or conflict with the intended use of the property.



REGROW PROGRAM

Figure B 6-1: Contamination and Toxic Substances Map

Applicant ID: PR-RGRW-03605

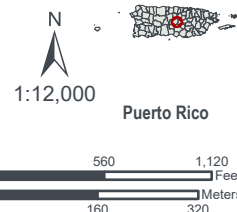
SWCA
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- Site
- ▭ Site Parcel
- ▭ Buffer (250-feet)
- ▭ Buffer (500-feet)
- ▭ Buffer (3000-feet)
- Water dischargers

- Toxic Substances Control Act
- Toxic releases
- Superfund
- Hazardous waste
- Brownfields
- Air pollution

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: <https://geopub.epa.gov/arcgis/rest/services/EMEF/lepoints/MapServer>
Base Map: ESRI ArcGIS Online, accessed February 2024
Updated: 2/19/2024
Layout: Contamination and Toxic Substances



Attachment 7

**Endangered Species Act Partner
Worksheet, Threatened and Endangered
Species Technical Memorandum,
USFWS IPaC Species List and Critical
Habitat Map**



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

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Endangered Species Act (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/endangered-species>

1. Does the project involve any activities that have the potential to affect species or habitats?

☐ No, the project will have No Effect due to the nature of the activities involved in the project.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

☐ No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office.

Explain your determination:

[Click here to enter text.](#)

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

☐ Yes, the activities involved in the project have the potential to affect species and/or habitats. → Continue to Question 2.

2. Are federally listed species or designated critical habitats present in the action area?

Obtain a list of protected species from the Services. This information is available on the [FWS Website](#).

☐ No, the project will have No Effect due to the absence of federally listed species and designated critical habitat.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation may include letters from the Services, species lists from the Services’ websites, surveys or other documents and analysis showing that there are no species in the action area.

☐ Yes, there are federally listed species or designated critical habitats present in the action area. → Continue to Question 3.

3. Recommend one of the following effects that the project will have on federally listed species or designated critical habitat:

☐ No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate.*

☐ May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

→ Partner entities should not contact the Services directly. *If the RE/HUD agrees with this recommendation, they will have to complete Informal Consultation. Provide the RE/HUD with a biological evaluation or equivalent document. They may request additional information, including surveys and professional analysis, to complete their consultation.*

☐ Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

→ Partner entities should not contact the Services directly. *If the RE/HUD agrees with this recommendation, they will have to complete Formal Consultation. Provide the RE/HUD with a biological evaluation or equivalent document. They may request additional information, including surveys and professional analysis, to complete their consultation.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

[Click here to enter text.](#)



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Caribbean Ecological Services Field Office
Bayamón | Mayagüez | Maricao | Río Grande | St Croix
P.O. Box 491
Boquerón, Puerto Rico 00622



In Reply Refer to:
FWS/R4/CESFO/72107-Gen

Submitted Via Electronic Mail: jcperez@vivienda.pr.gov

Juan Carlos Pérez-Bofill, PE, MEng.
Director – Disaster Recovery CDBG-DR Program
Puerto Rico Department of Housing
P.O. Box 21365
San Juan, P.R 00928-1365

Re: CDBG-DR PR-RGRW-03605 Centinela
LLC., Orocovis, Puerto Rico

Dear Mr. Pérez-Bofill

Thank you for your letter dated June 10, 2024, requesting informal consultation on the above referenced project. As per your request, our comments are provided under the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The Puerto Rico Department of Housing (PRDOH) is proposing the construction of a new greenhouse (40 feet (ft) x 30 feet) with a maximum height of approximately 15 ft and will be anchored to the ground using a total of eight, 2.5-inch diameter steel poles. The proposed greenhouse will be located on a 10.32-acre property on State Road PR-569 Km 1.6 (18°12'47.0"N 66°22'43.6"W) in the municipality of Orocovis. Construction of the greenhouse may require minimal vegetation removal (mowing), but no tree clearing is proposed.

Using the U.S. Fish and Wildlife Service's (Service) Information for Planning and Consultation (IPaC) system, the PRDOH has determined that the proposed project (Project code: 2024-0054254) site is located within the range of Puerto Rican boa (*Epicrates inornatus* now known as *Chilabothrus inornatus*), Puerto Rican broad-winged hawk (*Buteo platypterus brunnescens*) and Puerto Rican parrot (*Amazona vittata*).

Based on the nature of the project, scope of work, information available, and analysis of the existing habitat (relatively flat, maintained mowed lawn), PRDOH has determined that the proposed project may affect, but is not likely to adversely affect (NLAA) the Puerto Rican boa and Puerto Rican broad-winged hawk. Conservation measures developed by the Service for the Puerto Rican boa will be implemented in case an encounter with this species occur. As for the Puerto Rican parrot, PRDOH has determined that the proposed actions will have no effect (NE) on this species

due to the lack of suitable habitat, since the project area consists of an open maintained lawn.

We acknowledge receipt of PRDOH's NE determination for the Puerto Rican parrot. Currently, we do not have information to refute that determination. Because the PRDOH made a NE determination, PRDOH is not required to conduct formal or informal section 7 consultation with the Service, and the Service is not required to concur with PRDOH's NE determination.

We have reviewed the information provided and our files, and concur with PRDOH's determination that the proposed project may affect, but is not likely to adversely affect the Puerto Rican boa and Puerto Rican broad-winged hawk with the implementation of the conservation measures. Although there will be no tree removal, the Service recommends that PRDOH implement the following conservation measures for the bird species in case an encounter occurs:

1. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973, as amended. During breeding seasons (see below), nest surveys shall be conducted if a project occurs within the range of any of the species listed above and if habitat for those species will be impacted by the proposed actions. Nest searches must be conducted by qualified personnel with the appropriate permits from the Puerto Rico Department of Natural and Environmental Resources (PRDNER) prior to start of work. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 50-meter buffer around any nest(s) found within the project area. This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently.
 - Breeding Seasons:
 - Puerto Rican parrot: February-June.
 - Puerto Rican broad-winged hawk: December-June.
2. Outside the breeding season no nest surveys are required, but if a nest is encountered, all construction activities or human disturbance must be avoided within a 50-meter buffer around that nest(s). This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. Furthermore, if any of the species indicated above is observed (e.g., foraging, resting) within the project area, avoid any disturbance to the individual(s) and do not flush the bird until it leaves on its own.
3. For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office at Caribbean_es@fws.gov. For questions, the Point of Contact (POC) is José Cruz-Burgos, Endangered Species Program Coordinator, and can be contacted at:
 - Mobile: 305-304-1386
 - Office phone: 786-244-0081
 - Office Direct Line: 939-320-3120
 - Email: jose_cruz-burgos@fws.gov

In view of this, we believe that requirements of section 7 of the Endangered Species Act (Act) have been satisfied. However, obligations under section 7 of the Act must be reconsidered if: (1)

new information reveals impact of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed, or critical habitat determined that may be affected by the identified action.

Thank you for the opportunity to comment on this project. If you have any questions or require additional information, please contact us via email at caribbean_es@fws.gov or by phone at (786) 244-0081.

Sincerely,

Lourdes Mena
Field Supervisor

drr



ENVIRONMENTAL CONSULTANTS

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10245 West Little York Road, Suite 600
Houston, Texas 77040
Tel 281.617.3217 Fax 281.617.3227
www.swca.com

June 6, 2024

Robert Tawes
Division Supervisor, Environmental Review
U.S. Fish and Wildlife Service
Southeast Regional Office
1875 Century Boulevard
Atlanta, GA 30345
Email: robert_tawes@fws.gov

**Re: Federally Listed Threatened and Endangered Species Evaluation for the Puerto Rico
Department of Housing ReGrow PR-RGRW-03605 Project/ SWCA Project No. 72428**

Dear Mr. Tawes:

SWCA Environmental Consultants (SWCA), on behalf of the Puerto Rico Department of Housing, is requesting informal consultation under Section 7(a)(2) of the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 *et seq.*), and in accordance with the Fish and Wildlife Coordination Act (47 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) for the proposed ReGrow PR-RGRW-03605 Project (project). The Project is located on a 10.32-acre (ac) parcel in the municipality of Orocovis, Puerto Rico. Carretera 569 KM 1.6, Orocovis, Puerto Rico, 00720, (66.378771°W 18.213055°N).

The proposed Project involves the construction of a new greenhouse. Construction of the greenhouse may require minimal vegetation removal (mowing), but no tree clearing is proposed.

Using the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system, we have determined that the proposed project lies within the range of the following federally listed species:

Species	Listing Status
Puerto Rican Boa (<i>Chilabothrus inornatus</i>)	Endangered
Puerto Rican Broad-winged Hawk (<i>Buteo platypterus brunnescens</i>)	Endangered
Puerto Rican Parrot (<i>Amazona vittata</i>)	Endangered

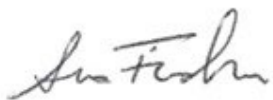
No designated or proposed critical habitat for any listed species was identified within the project area. Based on the nature of the project, scope of work, information available, and a careful analysis of the existing habitat, we have made the following effects determinations:

Species	Effect Determination	Conservation Measures to be Implemented
Puerto Rican Boa (<i>Chilabothrus inornatus</i>)	Not likely to adversely affect (NLAA)	Puerto Rican Boa General Project Design Guidelines
Puerto Rican Broad-winged Hawk (<i>Buteo platypterus brunnescens</i>)	Not likely to adversely affect (NLAA)	No Conservation Measures
Puerto Rican Parrot (<i>Amazona vittata</i>)	No effect (NE)	No Conservation Measures

In accordance with the 2024 Puerto Rican Boa General Project Design Guidelines, if a Puerto Rican Boa (PR Boa) is found in the project action site, work shall cease until the individual moves off on its own. If the PR 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 PR Boa.

In order to complete the informal consultation process, we are requesting your concurrence for the NLAA determinations included in this letter. Attached to this letter, we are including the documents used to reach our effect determinations for the listed species. If you have any questions or require any additional information, please contact me at (346) 388-1157 or susan.fischer@swca.com.

Sincerely,



Susan Fischer
Wildlife Ecologist
SWCA Environmental Consultants

Attachments: Threatened and Endangered Species Technical Memorandum



ENVIRONMENTAL CONSULTANTS

Sound Science. Creative Solutions.®

10245 West Little York Road, Suite 600
Houston, Texas 77040
Tel 281.617.3217 Fax 713.896.3189
www.swca.com

TECHNICAL MEMORANDUM

To: Caribbean Ecological Services Field Office
U.S. Fish and Wildlife Service
P.O. Box 491
Boquerón, Puerto Rico 00622

From: Susan Fischer, Project Biologist on behalf of the Puerto Rico Department of Housing

Date: June 6, 2024

Re: **Threatened and Endangered Species Evaluation for the Puerto Rico Department of Housing ReGrow PR-RGRW-03605 Project/ SWCA Project No. 72428**

Project Description

Ernie E. Ortiz Ortiz, Centinela LLC, the applicant, is proposing to construct a new greenhouse on a 10.32-acre (ac) parcel in the municipality of Orocovis, Puerto Rico. (project) (Appendix A, Figure 1). The project is located at Carretera 569 KM 1.6, Orocovis, Puerto Rico, 00720, in a rural area. The proposed greenhouse is 1,200 square feet (40 feet by 30 feet) with a maximum height of approximately 15 ft and will be anchored to the ground using a total of eight, 2.5-inch diameter steel poles. (Appendix A, Figure 2).

Existing conditions

The existing habitat conditions at the proposed greenhouse location consists of relatively flat, maintained mowed lawn. Forested areas are located west and northwest of the project location. There is one stream just west of the parcel boundary, approximately 780 ft west of the proposed greenhouse location (Appendix A, Figure 3). Minor vegetation removal/mowing may be needed but no tree clearing will be required for the project. The project will have minimal ground disturbance associated with the installation of the greenhouse poles. Representative photographs of the proposed locations are provided in Appendix B.

Federally Protected Species

SWCA obtained a federal threatened and endangered species list from the USFWS (2024a) Information for Planning and Consultation (“IPaC”) website for a 100-foot buffer around the greenhouse location (review area) (Appendix C). The IPaC automatically generates a list of species and other resources of concern, such as critical habitat, that are known or expected to be in the specified area and could potentially be directly or indirectly affected. According to the IPaC query for the project, three federally listed endangered species has the potential to occur in the review area; the Puerto Rican broad-winged hawk (*Buteo platypterus brunnescens*), Puerto Rican parrot (*Amazona vittata*) and the Puerto Rican boa (*Chilabothrus inornatus*). SWCA also evaluated the review area for potential habitat for bald eagles (*Haliaeetus leucocephalus*) and

golden eagles (*Aquila chrysaetos*) as they are protected by the Bald and Golden Eagle Protection Act of 1940 (“BGEPA”).

The bald and golden eagle’s range do not extend into Puerto Rico (Cornell Lab of Ornithology 2024); therefore, these species were eliminated from further analysis for this project. Table 1 identifies the species carried forward for further evaluation and summarizes each species’ habitat requirements, potential for occurrence in the project area, and determination of effects.

Table 1. Federally Listed Species Range and/or Habitat Requirements

Common Name (Scientific Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Project Area	Determination of Effects/Impacts
Birds				
Puerto Rican Broad-winged Hawk (<i>Buteo platypterus brunnescens</i>)	FE	The Puerto Rican broad-winged hawk occurs in elfin woodland, sierra palm, caimitillo-granadillo, and tabonuco forest types of the Río Abajo Commonwealth Forest, Carite Commonwealth Forest, and El Yunque National Forest as well as within hardwood plantations, shade coffee plantations, and mature secondary forests (USFWS 2019).	<i>Unlikely to occur.</i> The proposed project area consists of open maintained lawn.	<i>May affect, but not likely to adversely affect.</i> See discussion below.
Puerto Rican Parrot (<i>Amazona vittata</i>)	FE	The Puerto Rican parrot is a frugivorous cavity nester. It depends on mature forests with large cavity forming trees. (USFWS 2009). It is currently confined to the Maricao Forest, El Yunque National Forest, and the Río Abajo Forest (USDA Forest Service 2024).	<i>Unlikely to occur.</i> The proposed project area consists of open maintained lawn.	<i>No effect.</i> There is no suitable habitat for Puerto Rican parrots in the project area.
Reptiles				
Puerto Rican Boa (<i>Chilabothrus inornatus</i>)	FE	Considered to be a habitat generalist, the Puerto Rican boa tolerates a wide variety of terrestrial and arboreal habitats, including rocky areas, haystack hill, trees, and branches, rotting stumps, caves, plantations, various types of forested areas such as karst and mangrove forests, forested urban and rural areas, and along streams and road edges (USFWS 2011).	<i>Unlikely to occur.</i> The proposed project area consists of open maintained lawn.	<i>May affect, but not likely to adversely affect.</i> See discussion below.

*Status Definitions:
FE = Federally listed endangered

The Caribbean Determination Key (DKey) was completed for the project, which generated a *may affect* determination for the Puerto Rican boa and a *may affect, but is not likely to adversely affect* determination for the Puerto Rican broad-winged hawk (Appendix D). Based on a site visit and habitat evaluations, the Puerto Rican boa, Puerto Rican broad-winged hawk, and Puerto Rican parrot, are considered unlikely to occur due to lack of suitable habitat within the project areas. The applicant will employ the conservation measures outlined in the 2024 USFWS General Project Design Guidelines for the Puerto Rican boa (Appendix E), including but not limited to issuing a stop work if a Puerto Rican boa were to occur within the project area, and contacting the Puerto Rico Department of Natural and Environmental Resources for safe capture and relocation of the individual if such action is required. Therefore, it is anticipated that the project *may affect, but is not likely to adversely affect* the Puerto Rican boa and the Puerto Rican broad-winged hawk, and will have *no effect* on the Puerto Rican parrot.

Critical Habitat and National Wildlife Refuges

Potential effects to habitat(s) within the project area critical to endangered species must be analyzed along with the endangered species themselves, while any activity proposed on National Wildlife Refuge lands must undergo a compatibility determination conducted by the Refuge. No designated critical habitats are present within 100-feet of any of the proposed project location options (Appendix A, Figure 4) (USFWS 2024b).

LITERATURE CITED

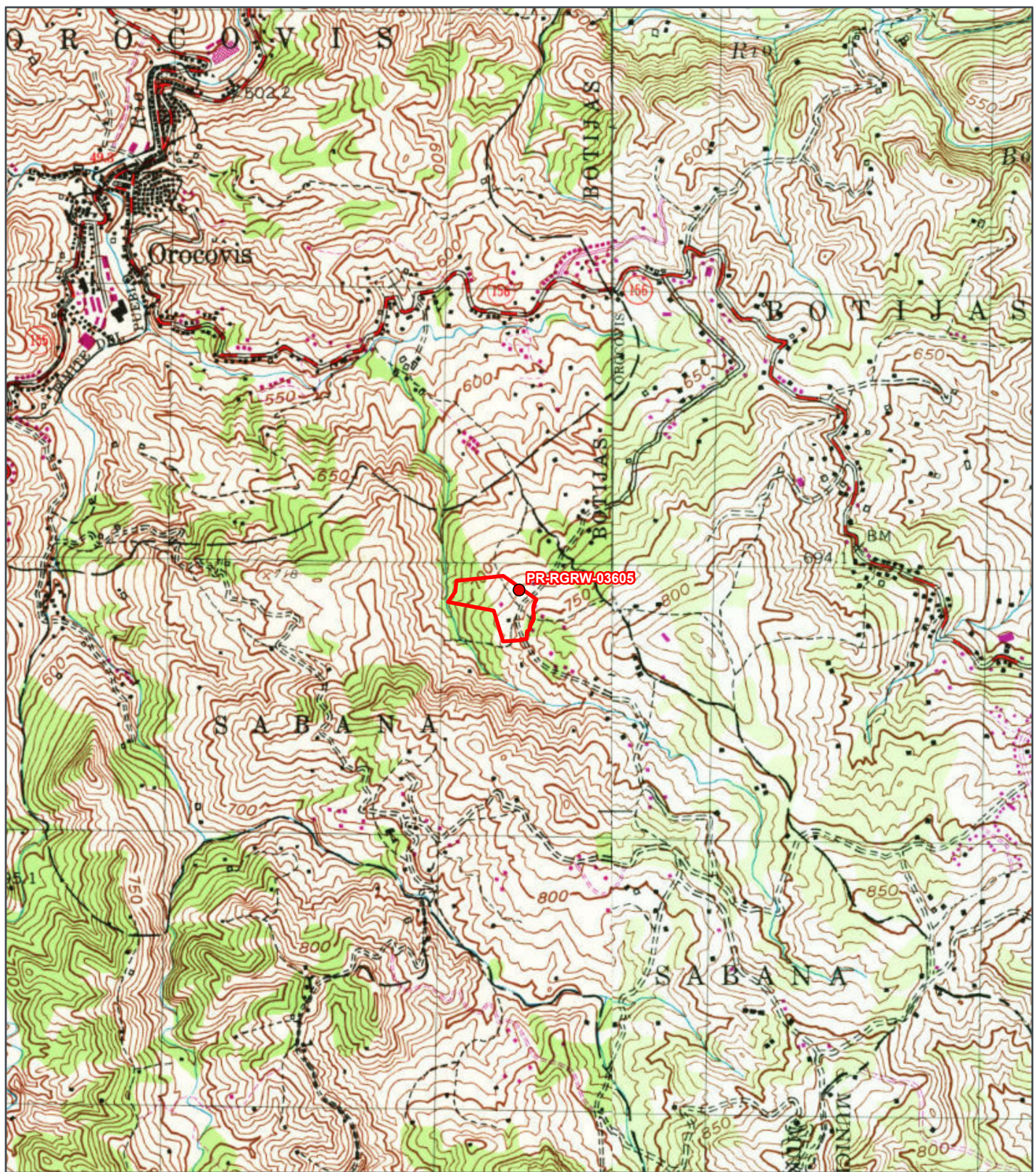
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- U.S. Department of Agriculture (USDA) Forest Service. 2024. the Iguaca, Puerto Rican Parrot. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5338966.pdf. Accessed February 2024.
- U. S. Fish and Wildlife Service (USFWS). 2011. *Puerto Rican Boa* (*Epicrates inornatus*) *5-Year Review: Summary and Evaluation*. U.S. Fish and Wildlife Service, Southeast Region. Boquerón, Puerto Rico.
- . 2019. *Puerto Rican broad-winged hawk or guaraguao de bosque* (*Buteo platypterus brunnescens*) *5-Year Review: Summary and Evaluation*. U.S. Fish and Wildlife Service, Southeast Region. Boquerón, Puerto Rico.
- . 2024a. Information for Planning and Consultation System (IPaC). Available at: <http://ecos.fws.gov/ipac/>. Accessed February 2024.
- . 2024b. Critical Habitat for Threatened & Endangered Species [USFWS]. Available at: <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>. Accessed February 2024.

APPENDIX A

Maps

Figure 1

USGS Topographic Map



REGROW PROGRAM

USGS Topographic Map

Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: USGS Topographic Map
Aprx: 72428_ReGrowTier2Maps

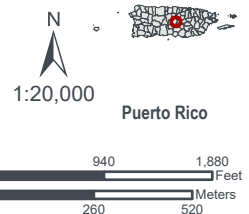


Figure 2
Site Vicinity Map



REGROW PROGRAM

Site Vicinity

Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.378771°W 18.213055°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Site Vicinity
Aprx: 72428_ReGrowTier2Maps

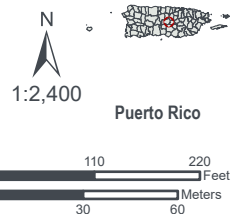
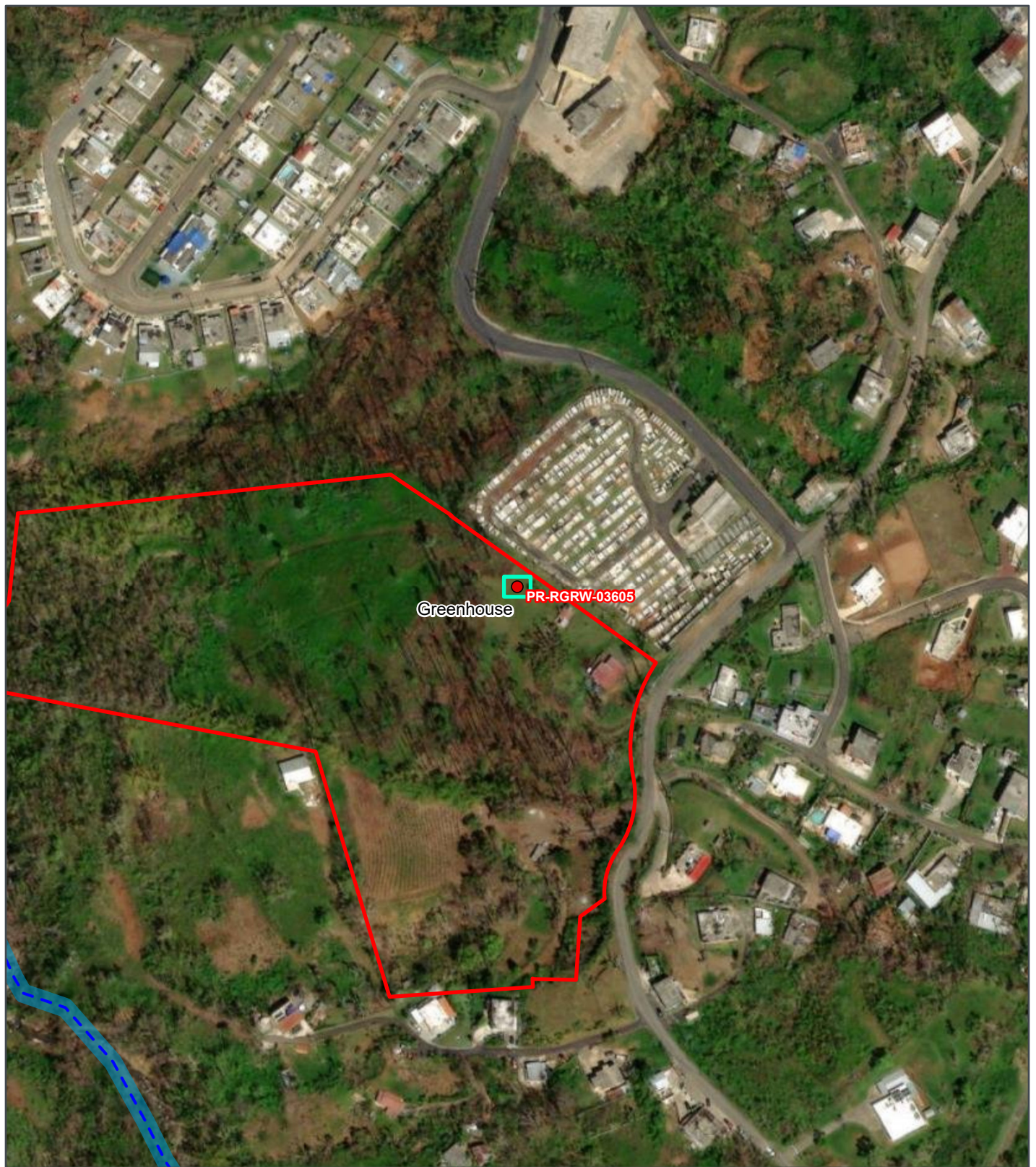


Figure 3
Wetlands Map



REGROW PROGRAM

Wetlands Protection Map

Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)
- - - NHD Stream
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: <https://apps.nationalmap.gov/downloader/#/https://www.fws.gov/program/national-wetlands-inventory/data-download>
Base Map: ESRI ArcGIS Online, accessed February 2024
Updated: 2/23/2024
Layout: Wetlands Protection

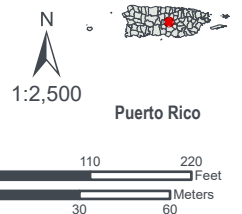
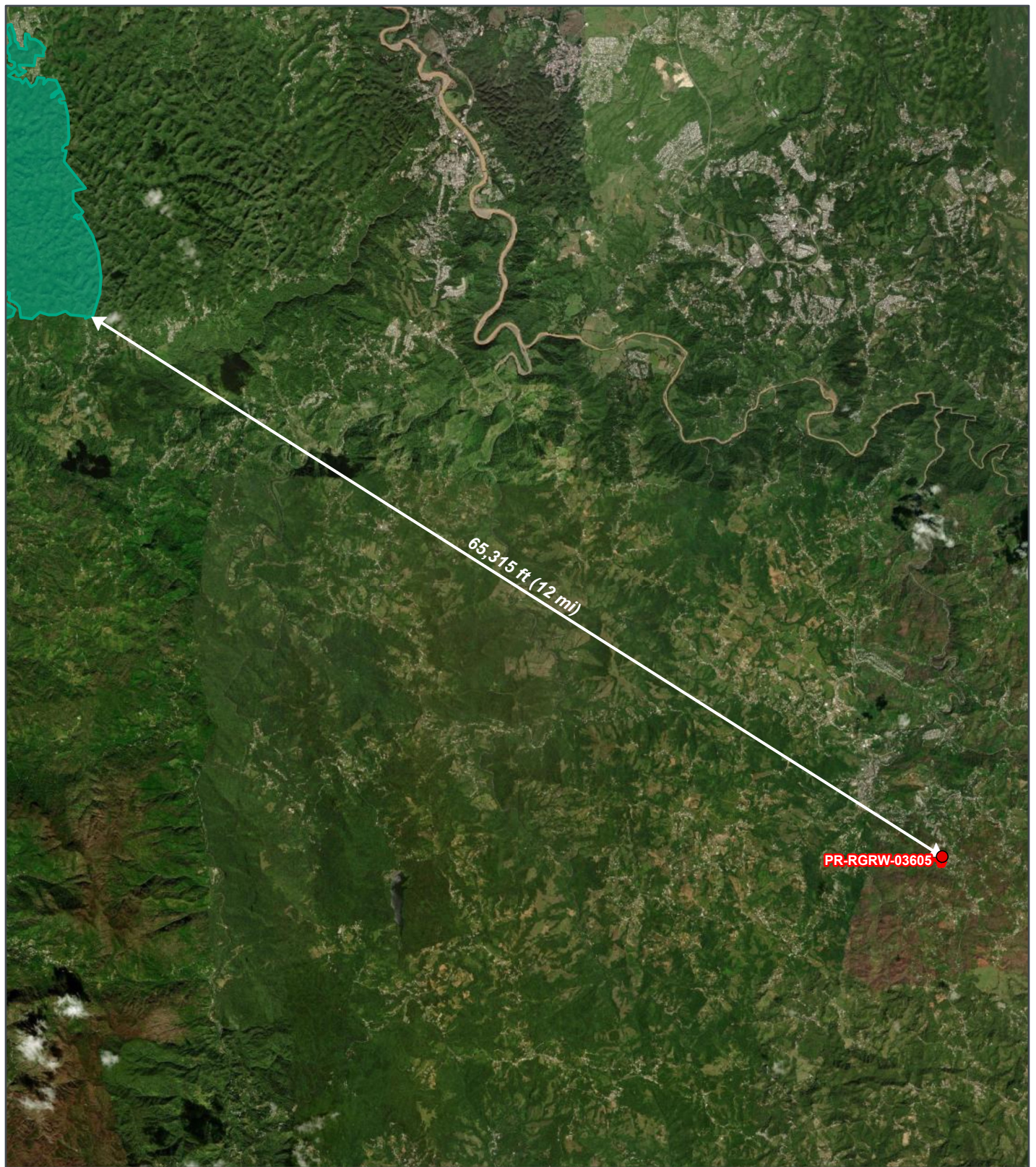


Figure 4
Critical Habitat Map



REGROW PROGRAM

Critical Habitat Map

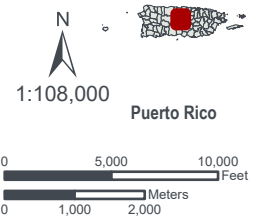
Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Critical Habitat - Final
- National Wildlife Refuges

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.457299°W 18.261877°N

Data Source: https://services.arcgis.com/QVENGdaPbd4LUkLV/arcgis/rest/services/USFWS_Critical_Habitat/Base_Map/ESRI/ArcGIS/Online,
accessed February 2024
Updated: 2/19/2024
Layout: Critical Habitat
Aprx: 72428_ReGrowTier2Maps



APPENDIX B

Photographic Log

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795



Photo #: 01	Date: 02/15/24	
Photo Direction: Northwest		
Description: This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing downhill. This is a "head on" view of where the greenhouse would be installed. In the right center portion of the photo there is a partial view of a cemetery that is adjacent to the property.		

Photo #: 02	Date: 02/15/24	
Photo Direction: South/southeast		
Description: This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing uphill. This is a "head on" view of where the greenhouse would be installed. In the upper left portion of the photo there is a partial view of a small ranch storage area and behind it is the house.		

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795

Photo #: 03	Date: 02/15/24	
Photo Direction: West		
Description: This photo is facing the western corner of the proposed 40' x 30' x 15' greenhouse from the eastern corner of the proposed greenhouse. There is a gentle downward slope beyond where the greenhouse would be installed. There is a plantain crop in the background.		

Photo #: 04	Date: 02/15/24	
Photo Direction: East		
Description: This photo is facing the eastern corner of the proposed 40' x 30' x 15' greenhouse from the western corner of the proposed greenhouse. There is a gentle upward slope beyond where the greenhouse would be installed. There is a cemetery on the other side of the fence seen here.		

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795

Photo #: 05	Date: 02/15/24
Photo Direction: West	
Description: This photo is facing downhill from where the greenhouse will be installed and shows a downward sloping plantain crop. Beyond this crop, the terrain becomes steeper and beyond what is visible is a stream (photo #06).	




Photo #: 06	Date: 02/15/24	
Photo Direction: West/close-up		
Description: This is a close-up photo of the stream that runs adjacent to property. This is not near the intended project location and will not be used as part of the project.		

APPENDIX C

USFWS Information for Planning and Consultation Species List



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



In Reply Refer To:
Project Code: 2024-0054254
Project Name: PR-RGRW-03605

February 26, 2024

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. 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

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

PROJECT SUMMARY

Project Code: 2024-0054254

Project Name: PR-RGRW-03605

Project Type: Disaster-related Grants

Project Description: Construction of a new greenhouse.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.213731799999998,-66.37782700838605,14z>



Counties: Orocovis County, Puerto Rico

ENDANGERED SPECIES ACT SPECIES

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

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

BIRDS

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

REPTILES

NAME	STATUS
Puerto Rican Boa <i>Chilabothrus inornatus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6628 General project design guidelines: https://ipac.ecosphere.fws.gov/project/URWIPPQECBCRDIKCYGTP6XW47M/documents/generated/7159.pdf	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.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

-
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 Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

-
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.

IPAC USER CONTACT INFORMATION

Agency: SWCA

Name: Kaitie Wilms

Address: 911 Hammond Drive

City: North Augusta

State: SC

Zip: 29841

Email: kaitie.wilms@swca.com

Phone: 8436930711

APPENDIX D

USFWS Consistency Letter



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



In Reply Refer To:
Project code: 2024-0054254
Project Name: PR-RGRW-03605

February 26, 2024

Subject: Consistency letter for the project named 'PR-RGRW-03605' 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 February 26, 2024, Kaitie Wilms used the Caribbean DKey; dated January 19, 2024, 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-03605'. The project is located in Orocovis County, Puerto Rico (shown below).

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.213731799999998,-66.37782700838605,14z>



The following description was provided for the project 'PR-RGRW-03605':

Construction of a new greenhouse.

Based on your answers and the assistance of the Service's Caribbean DKey, you made the following effect determination(s) for the proposed Action:

Species	Listing Status	Determination
Puerto Rican Boa (<i>Chilabothrus inornatus</i>)	Endangered	May affect
Puerto Rican Broad-winged Hawk (<i>Buteo platypterus brunnescens</i>)	Endangered	NLAA

Consultation with the Service is not complete. Further consultation with the Caribbean Ecological Services office is required for those species with a determination of "may affect" listed above. Please contact the Caribbean Ecological Services office to discuss methods to avoid or minimize potential adverse effects to those species.

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.

Action Description

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

1. Name

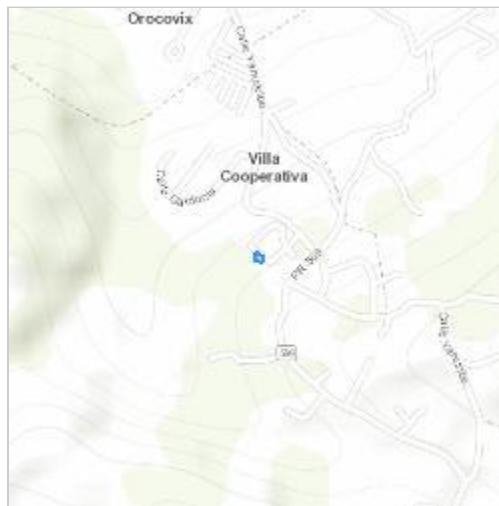
PR-RGRW-03605

2. Description

The following description was provided for the project 'PR-RGRW-03605':

Construction of a new greenhouse.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.213731799999998,-66.37782700838605,14z>



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")?

No

10. Is the proposed project adjacent or within a forested area?

Note: Examples of immediately adjacent to forested areas are rock walls and haystack hills (“mogotes”), wet montane forest, lowland wet forest, remnant coastal, mangrove forest, damp and dry limestone karst forests, pastureland with patches of exotic trees.

Yes

11. Is the project area more than 1 acre?

No

12. Is the proposed project an existing facility or the expansion of an existing facility within the footprint of the already developed area?

No

13. Is the proposed project a new facility which would require earth moving, vegetation clearing, or debris removal using heavy machinery, the use of staging areas, construction of temporary access roads?

No

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

Automatically answered

Yes

15. Will the proposed project be conducted during the Puerto Rican sharp-shinned hawk or Puerto Rican Broad-winged hawk breeding season between December and July?

No

16. If nests are detected within the project area, will the proposed project avoid any disturbance until fledging leaves the nest permanently?

Yes

17. Outside of the breeding season, in the event of a Sharp-shinned hawk nest encounter, would a buffer zone be implemented?

Note: The species or nests might be found out of the breeding season. A buffer zone is an area around the detected nests where no actions or activities can take place. The buffer zone should be clearly marked or delineated in the field and in the project plans.

Yes

18. Will the Fish and Wildlife Service and the Department of Natural Resources be notified immediately if a nest is detected?

Yes

19. Does the proposed project intersect the Puerto Rican Broad-winged hawk area of influence?

Automatically answered

Yes

IPAC USER CONTACT INFORMATION

Agency: SWCA

Name: Kaitie Wilms

Address: 911 Hammond Drive

City: North Augusta

State: SC

Zip: 29841

Email: kaitie.wilms@swca.com

Phone: 8436930711

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Housing and Urban Development

APPENDIX E

Project Design Guidelines

General Project Design Guidelines (1 Species)

Generated February 26, 2024 06:26 PM UTC, IPaC v6.105.1-rc1



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Species Document Availability	<u>1</u>
Puerto Rican Boa - Caribbean Ecological Services Field Office	<u>2</u>

Species Document Availability

Species with general design guidelines

Puerto Rican Boa *Chilabothrus inornatus*

Species without general design guidelines available

Puerto Rican Broad-winged Hawk *Buteo platypterus brunnescens*

Puerto Rican Parrot *Amazona vittata*

General Project Design Guidelines - Puerto Rican Parrot and 2 more species

Published by Caribbean Ecological Services Field Office for the following species included in your project

Puerto Rican Parrot *Amazona vittata*

Puerto Rican Boa *Chilabothrus inornatus*

Puerto Rican Broad-winged Hawk *Buteo platypterus brunnescens*



U.S. FISH AND WILDLIFE SERVICE CARIBBEAN ECOLOGICAL SERVICES FIELD OFFICE

Conservation Measures for the Puerto Rican boa (*Chilabothrus inornatus*)

Section 7 (a)(1) of the Endangered Species Act (ESA) charges Federal agencies to aid in the conservation of listed species, and section 7 (a)(2) requires the agencies, through consultation with the U.S. Fish and Wildlife Service (Service), to ensure their activities are not likely to jeopardize the continued existence of listed species or adversely modify designated critical habitats. Section 7 applies to the management of Federal lands as well as Federal actions that may affect federally listed species, such as Federal approval of private activities through the issuance of Federal funding, permits, licenses, or other actions. Any person that injures, captures, or kills a Puerto Rico boa is subject to penalties under the ESA. If Federal funds or permits are needed, the funding or permitting agency should initiate Section 7 consultation with the Service. To initiate a consultation under the Section 7 of the ESA, you must submit a project package with the established minimum requirements. These conservation measures should be incorporated into the project plans to minimize possible impacts to the species.

The endangered Puerto Rican (PR) boa (*Chilabothrus inornatus*, formerly *Epicrates inornatus*) is the largest endemic snake species that inhabits Puerto Rico. The PR boa is non-venomous and does not pose any life threatening danger to humans, but some individuals may try to bite if disturbed or during capture or handling. Its body color ranges from tan to dark brown with irregular diffuse marking on the dorsum, but some individuals lack marking and are uniformly dark. Juveniles may have a reddish color with more pronounced markings. In general, as they mature, their body color tends to darken.



The PR boa was federally listed in 1970. Currently, the species has an island-wide distribution and occurs in a wide variety of habitat types, ranging from wet montane to subtropical dry forest and can be found from mature forest to areas with different degrees of human disturbance such as roadsides or houses, especially if near their habitat in rural areas. The PR boa is considered mostly nocturnal, remaining less active, concealed or basking under the sun during the day.

The Service has developed the following conservation measures with the purpose of assisting others to avoid or minimize adverse effects to the PR boa and its habitat. These recommendations may be incorporated into new project plans and under certain circumstances into existing projects. Depending on the project, additional conservation measures can be implemented besides the ones presented in this document.

Conservation Measures:

1. Inform all project personnel about the potential presence of the PR boa in areas where the proposed work will be conducted. A pre-construction meeting should be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming PR boas. An educational poster or sign with photo or illustration of the species should be displayed at the project site.
2. Prior to any construction activity, including removal of vegetation and earth movements, the boundaries of the project and areas to be excluded and protected should be clearly marked in the project plan and in the field in order to avoid further habitat degradation into forested and conservation areas.
3. Once areas are clearly marked, and prior to the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), a biologist or project personnel with experience on this species should survey the areas to be cleared to verify the presence of any PR boa within the work area.
4. If a PR boa is found within any of the working or construction areas, activities should stop at that area and information recorded (see #5). **Do not capture the boa.** If boas need to be moved out of harm's way, designated personnel shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #s: (787) 724-5700, (787) 230-5550, (787) 771-1124). **If immediate relocation is not an option, project-related activities at that area must stop until the boa moves out of harm's way on its own.** Activities at other work sites, where no boas have been found after surveying the area, may continue.
5. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. PR boa data should also include a photo of the animal (dead or alive), site GPS coordinates, the time and date, and comments on how the animal was detected and its behavior.

6. If a PR boa is captured by PRDNER personnel, record the name of that person and information on where the PR boa will be taken. This information should be reported to the Service.
7. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal, and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal (see #4). If not possible, the animal should be left alone until it leaves the vehicle on its own.
8. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future.
9. If a dead PR boa is found, immediately cease all work in that area and record the information accordingly (see #5). If the PR boa was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what actions will be taken to avoid further killings. A dead boa report should be sent by email (see contacts below) to the Service within 48 hours of the event.
10. Projects must comply with all state laws and regulations. Please contact the PRDNER for further guidance.

If you have any questions regarding the above conservation measures, please contact the Service:

- José Cruz-Burgos, Endangered Species Program Coordinator
 - Email: jose_cruz-burgos@fws.gov
 - Office phone (305) 304-1386
- Jan Zegarra, Fish and Wildlife Biologist
 - Email: jan_zegarra@fws.gov
 - Office phone (786) 933-1451

Attachment 8

Explosive and Flammable Hazards Partner

Worksheet



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Explosive and Flammable Hazards (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities>

- 1. Does the proposed HUD-assisted project include a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?**

☒ No

→ Continue to Question 2.

☐ Yes

Explain:

[Click here to enter text.](#)

→ Continue to Question 5.

- 2. Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?**

☒ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

☐ Yes → Continue to Question 3.

- 3. Within 1 mile of the project site, are there any current *or planned* stationary aboveground storage containers:**

- Of more than 100-gallon capacity, containing common liquid industrial fuels OR
- Of any capacity, containing hazardous liquids or gases that are not common liquid industrial fuels?

☐ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide all documents used to make your determination.

☐ Yes → Continue to Question 4.

- 4. Is the Separation Distance from the project acceptable based on standards in the Regulation?**

Please visit HUD’s website for information on calculating Acceptable Separation Distance.

☐ Yes

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the “assessed tank.”

☐ No

→ Continue to Question 6.

Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the “assessed tank.”

5. Is the hazardous facility located at an acceptable separation distance from residences and any other facility or area where people may congregate or be present?

Please visit HUD’s website for information on calculating Acceptable Separation Distance.

☐ Yes

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.

☐ No

→ Continue to Question 6.

Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.

6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to make the Separation Distance acceptable, including the timeline for implementation. If negative effects cannot be mitigated, cancel the project at this location.

Note that only licensed professional engineers should design and implement blast barriers. If a barrier will be used or the project will be modified to compensate for an unacceptable separation distance, provide approval from a licensed professional engineer.

[Click here to enter text.](#)

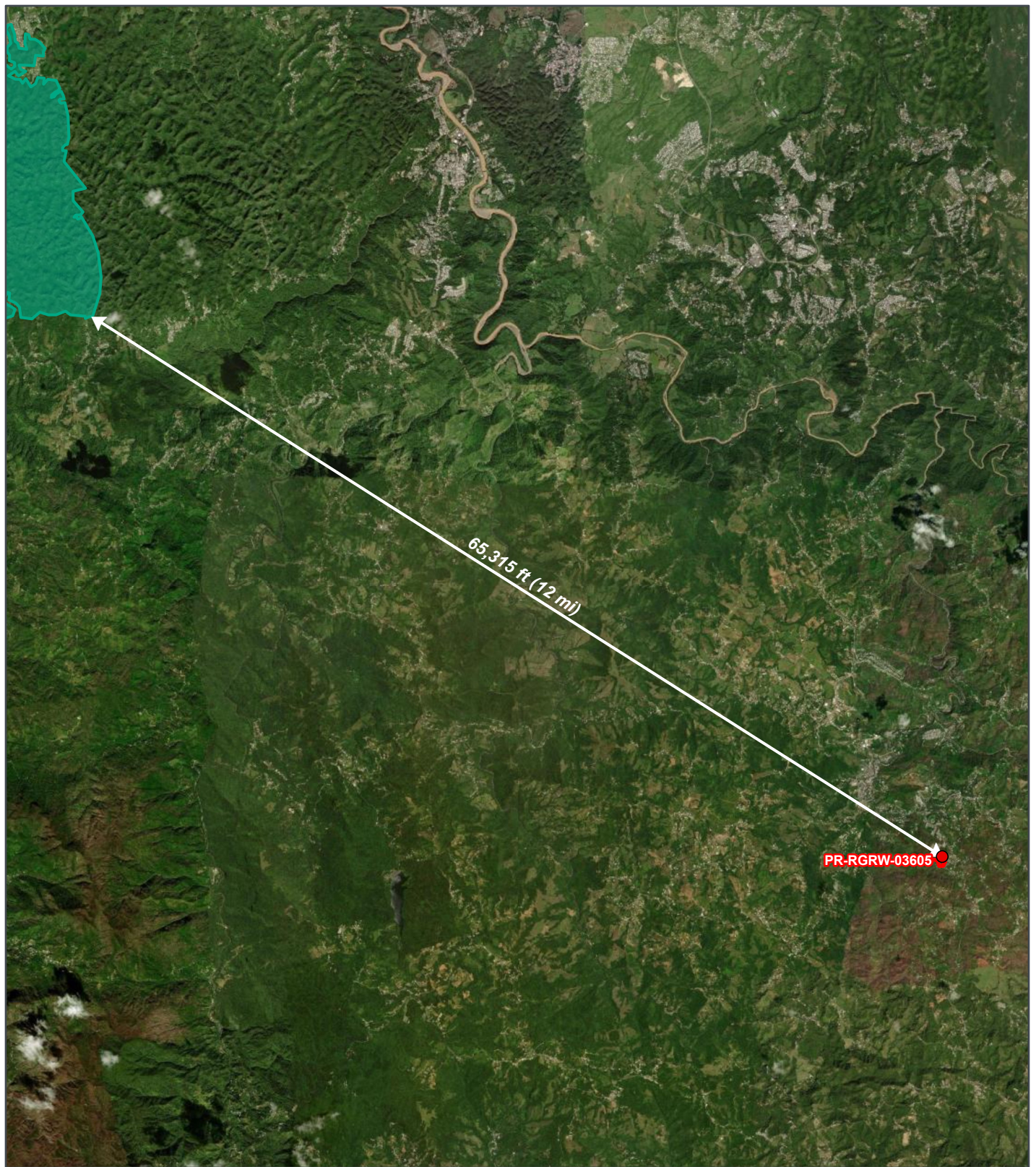
Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project includes the new construction of a greenhouse. The project itself is not the development of a hazardous facility nor will the project increase residential densities. No further evaluation is required.



REGROW PROGRAM

Figure B 7-1: Critical Habitat Map

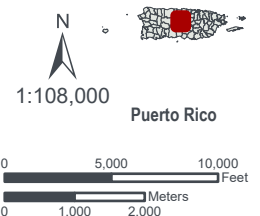
Applicant ID: PR-RGRW-03605

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- Site
- Site Parcel
- Critical Habitat - Final
- National Wildlife Refuges

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.457299°W 18.261877°N

Data Source: https://services.arcgis.com/QVENGdaPbd4LUkLV/arcgis/rest/services/USFWS_Critical_Habitat/Base_Map/ESRI/ArcGIS/Online,
accessed February 2024
Updated: 2/19/2024
Layout: Critical Habitat
Aprx: 72428_ReGrowTier2Maps



Attachment 9

**Farmlands Protection Partner Worksheet
and Prime Farmland Map**



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Farmlands Protection (CEST and EA) - PARTNER

<https://www.hudexchange.info/environmental-review/farmlands-protection>

1. Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?

☐ Yes → *Continue to Question 2.*

☒ No

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

2. Does “important farmland,” including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site?

You may use the links below to determine important farmland occurs on the project site:

- Utilize USDA Natural Resources Conservation Service’s (NRCS) Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- Check with your city or county’s planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non-agricultural does not exempt it from FPPA requirements)
- Contact NRCS at the local USDA service center <http://offices.sc.egov.usda.gov/locator/app?agency=nrcs> or your NRCS state soil scientist http://soils.usda.gov/contact/state_offices/ for assistance

☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

☐ Yes → *Continue to Question 3.*

3. Consider alternatives to completing the project on important farmland and means of avoiding impacts to important farmland.

- Complete form [AD-1006, “Farmland Conversion Impact Rating”](#) and contact the state soil scientist before sending it to the local NRCS District Conservationist.
- Work with NRCS to minimize the impact of the project on the protected farmland. When you have finished with your analysis, return a copy of form AD-1006 to the USDA-NRCS State Soil Scientist or his/her designee informing them of your determination.

Work with the RE/HUD to determine how the project will proceed. Document the conclusion:

☐ Project will proceed with mitigation.

Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

[Click here to enter text.](#)

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

☐ Project will proceed without mitigation.

Explain why mitigation will not be made here:

[Click here to enter text.](#)

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

This project does not include any activities that could potentially convert agricultural land to non-agricultural use. Per the USGS/NRCS Web Soil Survey, the project area crosses three mapped soil series: DaD (Daguey clay, 1 to 20 percent slopes); the (Humatas clay, 20 to 40 percent slopes); and MoF (Maricao clay, 20 to 60 percent slopes). Farmlands of statewide importance are within the project area. Although the project includes new construction, the project is exempt from review under the Farmland Protection Policy Act (FFPA) as the project is limited to construction of on-farm structures needed for farm operations. No further review is required.



REGROW PROGRAM

Figure B 9-1: Prime Farmland Map

Applicant ID: PR-RGRW-03605

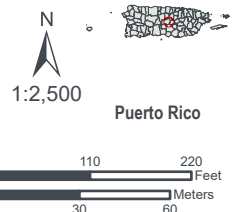
SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)
- All areas are prime farmland
- Farmland of statewide importance
- Farmland of statewide importance, if irrigated
- Prime farmland if drained

- Prime farmland if irrigated
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- /// Not prime farmland
- Not Public Information

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: <https://websoilsurvey.nrcs.usda.gov/app/BaseMap.aspx?App=EPR&BaseMap=ESRI%20ArcGIS%20Online>
accessed February 2024
Updated: 2/19/2024
Layout: Prime Farmland
Aprx: 72428_ReGrowTier2Maps



Attachment 10

Floodplain Management Partner Worksheet and Advisory Base Flood Elevation Map



This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Floodplain Management (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/floodplain-management>

1. Does [24 CFR 55.12\(c\)](#) exempt this project from compliance with HUD’s floodplain management regulations in Part 55?

☐ Yes

Provide the applicable citation at 24 CFR 55.12(c) here. If project is exempt under 55.12(c)(6) or (8), provide supporting documentation.

[Click here to enter text.](#)

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Continue to the Worksheet Summary.

☒ No → Continue to Question 2.

2. Provide a FEMA/FIRM map showing the site.

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs).

Does your project occur in a floodplain?

☒ No → Continue to the Worksheet Summary below.

☐ Yes

Select the applicable floodplain using the FEMA map or the best available information:

☐ Floodway → Continue to Question 3, Floodways

☐ Coastal High Hazard Area (V Zone) → Continue to Question 4, Coastal High Hazard Areas

☐ 500-year floodplain (B Zone or shaded X Zone) → Continue to Question 5, 500-year Floodplains

☐ 100-year floodplain (A Zone) → The 8-Step Process is required. Continue to Question 6, 8-Step Process

3. **Floodways**

Is this a functionally dependent use?

☐ Yes

The 8-Step Process is required. Work with HUD or the RE to assist with the 8-Step Process.
→ *Continue to Worksheet Summary.*

- ☐ No → *Federal assistance may not be used at this location unless an exception in 55.12(c) applies. You must either choose an alternate site or cancel the project.*

4. Coastal High Hazard Area

Is this a critical action such as a hospital, nursing home, fire station, or police station?

- ☐ Yes → *Critical actions are prohibited in coastal high hazard areas unless an exception in 55.12(c) applies. You must either choose an alternate site or cancel the project.*

- ☐ No

Does this action include new construction that is not a functionally dependent use, existing construction (including improvements), or reconstruction following destruction caused by a disaster?

- ☐ Yes, there is new construction of something that is not a functionally dependent use.
New construction must be designed to FEMA standards for V Zones at 44 CFR 60.3(e) (24 CFR 55.1(c)(3)(i)).

→ *Continue to Question 6, 8-Step Process*

- ☐ No, this action concerns only existing construction.
Existing construction must have met FEMA elevation and construction standards for a coastal high hazard area or other standards applicable at the time of construction.

→ *Continue to Question 6, 8-Step Process*

5. 500-year Floodplain

Is this a critical action?

- ☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Continue to the Worksheet Summary below.*

- ☐ Yes → *Continue to Question 6, 8-Step Process*

6. 8-Step Process.

Is this 8-Step Process required? Select one of the following options:

- ☐ 8-Step Process applies.

This project will require mitigation and may require elevating structure or structures. See the link to the HUD Exchange above for information on HUD's elevation requirements.

→ *Work with the RE/HUD to assist with the 8-Step Process. Continue to Worksheet Summary.*

- ☐ 5-Step Process is applicable per 55.12(a)(1-3).

Provide the applicable citation at 24 CFR 55.12(a) here.

[Click here to enter text.](#)

→ *Work with the RE/HUD to assist with the 5-Step Process. Continue to Worksheet Summary.*

- ☐ 8-Step Process is inapplicable per 55.12(b)(1-4).

Provide the applicable citation at 24 CFR 55.12(b) here.

Click here to enter text.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

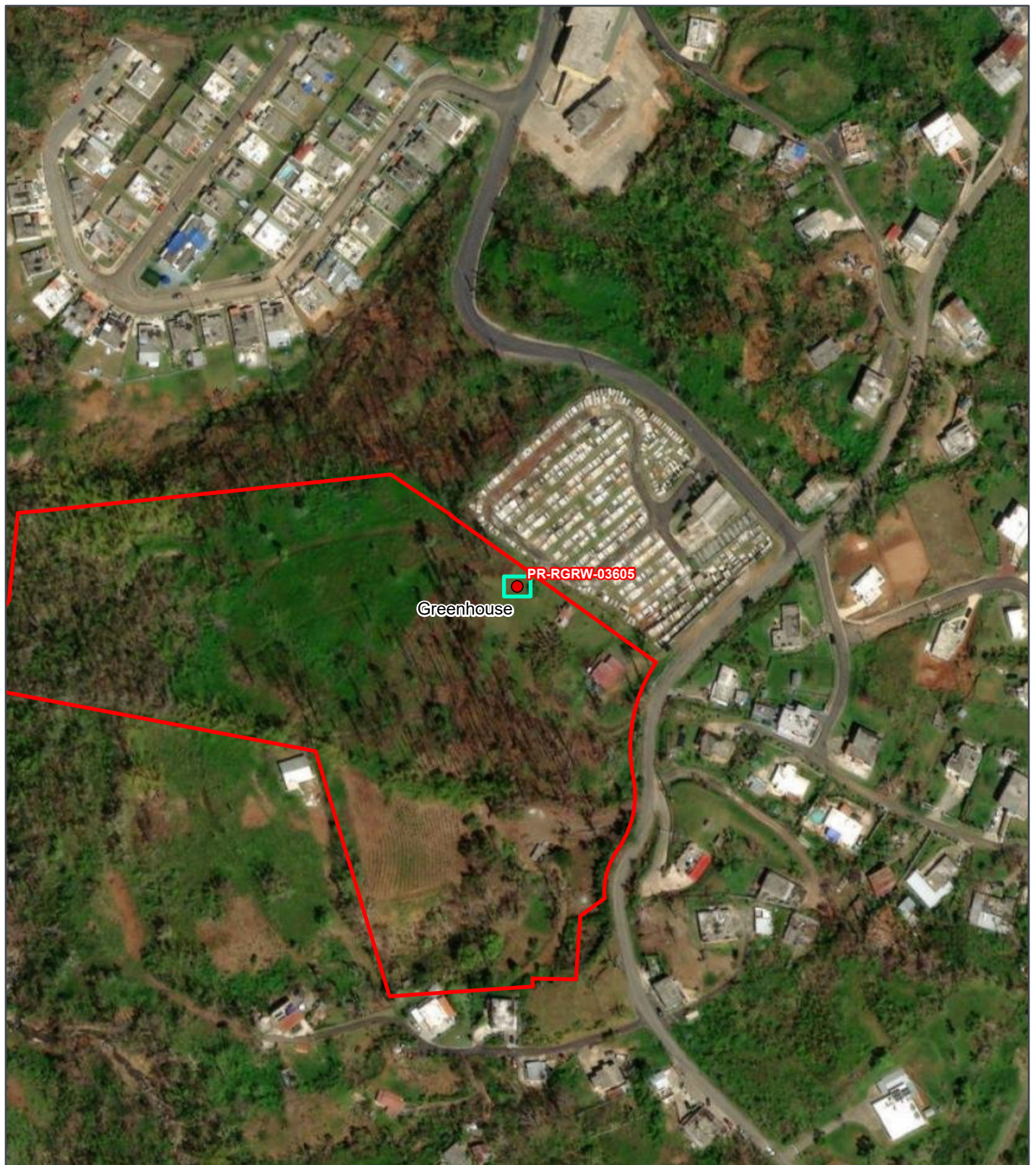
Include all documentation supporting your findings in your submission to HUD.

The FEMA FIRM, Community Panel 72000C1135H (effective date 4/19/2005), shows the project sites are in Flood Zone X. An Advisory Base Flood Elevation (ABFE) map was developed by FEMA for this FIRM, which shows the project site is in Flood Zone X. The project is not located in the 100-year floodplain or ABFE special flood hazard area; therefore, no further action is required.

PFIRMs in Puerto Rico were only developed for certain sections of the municipalities of Carolina, Canovanas, Loiza, San Juan and Trujillo Alto. The proposed project is located in the municipality of Orocovi; therefore, PFIRM information was not available for the area and therefore not considered in the review.

HUD implemented new floodplain regulations under 89 FR 30850 effective June 24, 2024 which created the Federal Flood Risk Management Standard (FFRMS). The project area lies outside of the 0.2-Percent-Annual-Chance (500-Year) Flood Approach:

The current project comprises non-critical actions that lie outside the 0.2-percent-annual-chance (500-year flood elevation), which is the approach used for this project to comply with the FFRMS.



REGROW PROGRAM

Figure B 10-1: Advisory Base Flood Elevation For 100-Year Floodplain Map

Applicant ID: PR-RGRW-03605

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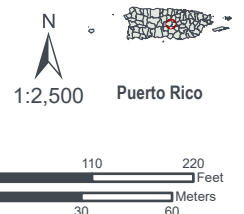
- | | |
|--|--|
| ● Site | Zone AE |
| Site Parcel | Coastal A Zone |
| Project Footprint (Option) | Coastal A Zone and Floodway |
| — Advisory Base Flood Elevation (ABFE) | Zone AE-Floodway |
| — 0.2% Annual Chance Flood | Zone AO |
| — 1% Annual Chance Flood | Zone VE |
| Zone A | Zone X (500-year floodplain) |
| Zone A-Floodway | Zone/BFE Boundary |

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: https://gis.fema.gov/arcgis/rest/services/DR/PuertoRico_ABFE_1PCT/MapServer

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: ABFE 1Pct
Aprx: 72428_ReGrowTier2Maps



Attachment 11

**Historic Preservation Partner Worksheet
and SHPO Consultation**



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Historic Preservation (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/historic-preservation>

Threshold

Is Section 106 review required for your project?

- ☐ No, because a Programmatic Agreement states that all activities included in this project are exempt. (See the [PA Database](#) to find applicable PAs.)

Either provide the PA itself or a link to it here. Mark the applicable exemptions or include the text here:

[Click here to enter text.](#)

→ *Continue to the Worksheet Summary.*

- ☐ No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].

Either provide the memo itself or a link to it here. Explain and justify the other determination here:

[Click here to enter text.](#)

→ *Continue to the Worksheet Summary.*

- ☒ Yes, because the project includes activities with potential to cause effects (direct or indirect). → *Continue to Step 1.*

The Section 106 Process

After determining the need to do a Section 106 review, HUD or the RE will initiate consultation with regulatory and other interested parties, identify and evaluate historic properties, assess effects of the project on properties listed on or eligible for the National Register of Historic Places, and resolve any adverse effects through project design modifications or mitigation.

Step 1: Initiate consultation

Step 2: Identify and evaluate historic properties

Step 3: Assess effects of the project on historic properties

Step 4: Resolve any adverse effects

Only RE or HUD staff may initiate the Section 106 consultation process. Partner entities may gather information, including from SHPO records, identify and evaluate historic properties, and make initial assessments of effects of the project on properties listed in or eligible for the National Register of Historic Place. Partners should then provide their RE or HUD with all of their analysis and documentation so that they may initiate consultation.

Step 1 - Initiate Consultation

The following parties are entitled to participate in Section 106 reviews: Advisory Council on Historic Preservation; State Historic Preservation Officers (SHPOs); federally recognized Indian tribes/Tribal Historic Preservation Officers (THPOs); Native Hawaiian Organizations (NHOs); local governments; and project grantees. The general public and individuals and organizations with a demonstrated interest in a project may participate as consulting parties at the discretion of the RE or HUD official. Participation varies with the nature and scope of a project. Refer to HUD's website for guidance on consultation, including the required timeframes for response. Consultation should begin early to enable full consideration of preservation options.

Use the [When To Consult With Tribes checklist](#) within [Notice CPD-12-006: Process for Tribal Consultation](#) to determine if the RE or HUD should invite tribes to consult on a particular project. Use the [Tribal Directory Assessment Tool \(TDAT\)](#) to identify tribes that may have an interest in the area where the project is located. Note that only HUD or the RE may initiate consultation with Tribes. Partner entities may prepare a draft letter for the RE or HUD to use to initiate consultation with tribes, but may not send the letter themselves.

List all organizations and individuals that you believe may have an interest in the project here:
SHPO

→ Continue to Step 2.

Step 2 - Identify and Evaluate Historic Properties

Provide a preliminary definition of the Area of Potential Effect (APE), either by entering the address(es) or providing a map depicting the APE. Attach an additional page if necessary.
Map attached

Gather information about known historic properties in the APE. Historic buildings, districts and archeological sites may have been identified in local, state, and national surveys and registers, local historic districts, municipal plans, town and county histories, and local history websites. If not already listed on the National Register of Historic Places, identified properties are then evaluated to see if they are eligible for the National Register. Refer to HUD's website for guidance on identifying and evaluating historic properties.

In the space below, list historic properties identified and evaluated in the APE.

Every historic property that may be affected by the project should be listed. For each historic property or district, include the National Register status, whether the SHPO has concurred with the finding, and whether information on the site is sensitive. Attach an additional page if necessary.

N/A

Provide the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination.

Was a survey of historic buildings and/or archeological sites done as part of the project?

If the APE contains previously unsurveyed buildings or structures over 50 years old, or there is a likely presence of previously unsurveyed archeological sites, a survey may be necessary. For Archeological surveys, refer to HP Fact Sheet #6, [Guidance on Archeological Investigations in HUD Projects](#).

☐ Yes → *Provide survey(s) and report(s) and continue to Step 3.*

Additional notes:

[Click here to enter text.](#)

☒ No → *Continue to Step 3.*

Step 3 - Assess Effects of the Project on Historic Properties

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. ([36 CFR 800.5](#)) Consider direct and indirect effects as applicable as per HUD guidance.

Choose one of the findings below to recommend to the RE or HUD.

Please note: this is a recommendation only. It is **not the official finding, which will be made by the RE or HUD, but only your suggestion as a Partner entity.**

☒ No Historic Properties Affected

Document reason for finding:

☒ No historic properties present.

☐ Historic properties present, but project will have no effect upon them.

☐ No Adverse Effect

Document reason for finding and provide any comments below.

Comments may include recommendations for mitigation, monitoring, a plan for unanticipated discoveries, etc.

[Click here to enter text.](#)

☐ Adverse Effect

Document reason for finding:

Copy and paste applicable Criteria into text box with summary and justification.

Criteria of Adverse Effect: [36 CFR 800.5](#)]

[Click here to enter text.](#)

Provide any comments below:

Comments may include recommendations for avoidance, minimization, and/or mitigation.

The project will involve new construction of greenhouses on a previously disturbed property. State Historic Preservation Office (SHPO) consultation was performed.

No National Historic Landmark (NHL) are within or near the project area.

A site visit was conducted on February 15, 2024 by an SOI-qualified Archaeologist. Record reviews and research were conducted at the SHPO and the Instituto de Cultura Puertorriqueña (ICP) to determine if any archaeologically sensitive resources could be present within a 0.5-mile radius.

The results of the Record Search and the Site Inspection indicate that there are no historic properties or cultural resources within the 0.50-mile radius study area or within the project Area

of Potential Effect (APE). Based on the results of the historic property identification efforts, the Program has determined that project actions will not affect historic properties that compose the APE.

The determination was submitted to SHPO by PRDOH for concurrence on March 18, 2024, and SHPO concurred with the No Historic Properties Affected determination on March 20, 2024. No further evaluation is required.

Remember to provide all documentation that justifies your National Register Status determination and recommendations along with this worksheet.



GOVERNMENT OF PUERTO RICO

STATE HISTORIC PRESERVATION OFFICE

Executive Director | Carlos A. Rubio Cancela | carubio@prshpo.pr.gov

Wednesday, March 20, 2024

Lauren B Poche

269 Avenida Ponce de Leon, San Juan, PR, 00917

SHPO-CF-03-17-24-08 PR-RGRW-03605 (Orocovis), Centinela LLC

Ms. Poche,

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

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

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

Sincerely,

Carlos A. Rubio Cancela

State Historic Preservation Officer

CARC/GMO/ OJR



Cuartel de Ballajá (Tercer Piso), Calle Norzagaray, Esq. Beneficencia, Viejo San Juan, PR 00901 | PO Box 9023935, San Juan, PR 00902-3935

March 18, 2024

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-03605 – Centinela LLC – Carr 569 Km 1.6, Bo. Sabana, Orocovis, 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 were 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 Centinela LLC located at Carr 569 Km 1.6, Bo Sabana, in the municipality of Orocovis. The undertaking for this project includes the construction of a new greenhouse. The proposed greenhouse is 1,200 square feet (sq ft) (40 feet [ft] by 30 ft) with a maximum height of approximately 15 ft and will be anchored to the ground using a total of eight (8), 2.5-inch (in) diameter steel poles. The poles will extend a maximum of 2 ft into the ground and the holes will be backfilled with cement. The site location for the greenhouse is relatively flat; however, minor grading may be required to ensure the ground is level. Water will be connected to the greenhouse from a pre-existing, main valve located approximately 15 ft north of the project site.

Water is provided by the Puerto Rico Aqueducts and Sewers Authority (PRASA) and the connection will be above ground at the main valve to the greenhouse with a garden hose. Electricity is not required and will not be connected to the greenhouse.

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 or phone at 225-405-7676 with any questions or concerns.


Kindest regards,



Lauren Bair Poche, M.A.

Architectural Historian, EHP Senior Manager
LBP/JLE

Attachments

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination		
Applicant: Centinela LLC		
Case ID: PR-RGRW-03605	City: Orocovis	

Project Location: CARR 569 KM 1.6, BO SABANA, Orocovis, PR 00720	
Project Coordinates: 18.213244, -66.377795 (as provided by applicant during field visit)	
TPID (Número de Catastro): 245-020-034-08-000	
Type of Undertaking: <input type="checkbox"/> Substantial Repair/Improvements <input checked="" type="checkbox"/> New Construction	
Construction Date (AH est.): ca. 2000	Property Size (acres): 10.32 acres total Greenhouse: 0.027548 acre (1,200 sq. ft)

SOI-Qualified Architect/Architectural Historian: Julia Russ, M.U.R.P. and Erin Edwards, MPS
Date Reviewed: February 21, 2024
SOI-Qualified Archaeologist: Brian McNamara, M.A., R.P.A.
Date Reviewed: February 20, 2024

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 project includes construction of a new greenhouse. The proposed greenhouse is 1,200 square feet (sq ft) (40 feet [ft] by 30 ft) with a maximum height of approximately 15 ft and will be anchored to the ground using a total of eight (8), 2.5 inch (in) diameter steel poles. The poles will extend a maximum of 2 ft into the ground and the holes will be backfilled with cement. The site location for the greenhouse is relatively flat; however, minor grading may be required to ensure the ground is level. Water will be connected to the greenhouse from a pre-existing, main valve located approximately 15 ft north of the project site. Water is provided by the Puerto Rico Aqueducts and Sewers Authority (PRASA) and the connection will be made above ground at the main valve to the greenhouse with a garden hose. Electricity is not required and will not be connected to the greenhouse.

The project will have minimal ground disturbance associated with the installation of the greenhouse poles. Some vegetation clearing will occur, but no pruning or tree clearing is required for construction. The applicant owns the property; therefore, no acquisition is required.

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

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination	 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Applicant: Centinela LLC	
Case ID: PR-RGRW-03605	City: Orocovis


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 steel and concrete base plus a 15-meter horizontal buffer to allow for some variation in final placement during construction 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 archaeologist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) who searched the records at the SHPO and the Instituto de Cultura Puertorriqueña which shows that there are no previously recorded archaeological sites within a half-mile (mi) radius of the project location. Archaeological site SHPO#OR-01 was recorded in 1938 as being located on a Plateau along the Sabana River, however it was not relocated during a 2008 site inspection. The location SHPO last had recorded for this site was 0.62 mi (0.99 kilometer [km]) southwest of the project area, outside of the half mile radius considered for this Project.

Three archaeological evaluations and three Section 106 studies have been conducted within the 0.5-mi review radius with no cultural resources found. Phase IA/IB survey SHPO#04-29-80-01 was conducted in 1980 by Antonino Ramos Ramirez. This survey area is located 0.05 mi (0.08 km) north of the project location. SHPO#02-11-87-02-0 was a Phase IA/IB survey conducted by Juan Gonzalez Colón in 1981 located 0.17 mi (0.27 km) north of the project area. SHPO#08-07-81-01 was a Phase IA/IB survey conducted in 1981 by Miguel Rodriguez Lápez located 0.25 mi (0.4 km) north of the project site. Section 106 study SHPO#08-07-15-02 is located 0.25 mi (0.4 km) north of the project site and was carried out in 2016. SHPO#06-04-09-17 was a Section 106 study conducted 0.42 mi (0.68 km) northwest of the project location in 2009. Finally, Section 106 study SHPO#06-04-09-14 is 0.44 mi (0.71 km) north of the project site and was undertaken in 2009.

The proposed project is located in the central region of Puerto Rico, at an elevation of 2,394 ft (730 meters [m]) above mean sea level. Per the USGS/NRCS Web Soil Survey, the project area crosses three mapped soil series: DaD (Daguey clay, 1 to 20 percent slopes); the (Humatas clay, 20 to 40 percent slopes); and MoF (Maricao clay, 20 to 60 percent slopes). The project area APE is in the northern region of Sabana. The general project area is located on a flat forested valley within the central mountain region, adjacent to a residential setting. The closest freshwater source is an unnamed freshwater stream located 0.18 mi (0.28

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination		 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Applicant: Centinela LLC		
Case ID: PR-RGRW-03605	City: Orocovis	

kilometers [km]) west of the project area. The Atlantic coast is approximately 19 mi (30.5 km) north of the project area.

Identification of Historic Properties - Architecture

Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information, by a Program contracted Historic Preservation Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) shows that the project area is not within the boundaries of the National Register of Historic Places (NRHP)-eligible or listed Traditional Urban Center or Historic District. Three previous Section 106 evaluations (viz. SHPO#06-04-09-17, 06-04-09-14, and 08-07-15-02) have been conducted within the 0.5-mi review radius with no cultural resources found. These studies are discussed in the preceding section.


The property is in a mountainous, rural area with dense vegetation. Historic Aerials (<https://www.historicaerials.com/viewer>) imagery from 1958 indicates no development in the area, and no built structures on the parcel. Earth Explorer imagery (<https://earthexplorer.usgs.gov/>) from 1977 shows the beginning of development in the area, but not directly associated with the project parcel. 1995 imagery from Google Earth Pro indicates development near the parcel, but not of a historic age. Thus, the project will have no impact to cultural properties in the area.

Determination


The following historic properties have been identified within the APE:

- Direct Effect:
 - None
- Indirect Effect:
 - None

Based on the results of our historic property identification efforts, the Program has determined that no previously identified historic properties are located within or adjacent to the Area of Potential Effect. 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 is no reported archaeological materials or significant cultural properties within a half-mile radius of the proposed project location. 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-03065 is located. The closest freshwater body is approximately 0.18 mi (0.28 km) west of the project area. The size of the proposed project activities is very small (0.027548 acre) and

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination	 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Applicant: Centinela LLC	
Case ID: PR-RGRW-03605	City: Orocovi

construction of public roads/residential structures/agricultural infrastructure has impacted the surrounding terrain. Therefore, no historic properties will be affected by the proposed project activities.

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination		 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Applicant: Centinela LLC		
Case ID: PR-RGRW-03605		City: Orocovis

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"/> Concurs with the information provided. <input type="checkbox"/> Does not concur with the information provided.	
Comments: 	
Carlos Rubio-Cancela State Historic Preservation Officer	Date:

Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

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



REGROW PROGRAM

**Project Location
Area of Potential
Effects (APE) Map**

Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

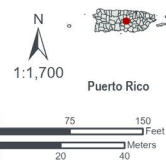
- Site
- Site Parcel
- Project Footprint (Option)
- APE (Buffer (15-meters))

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024

Layout: APE
Aprx: 72428_ReGrowTier2Maps

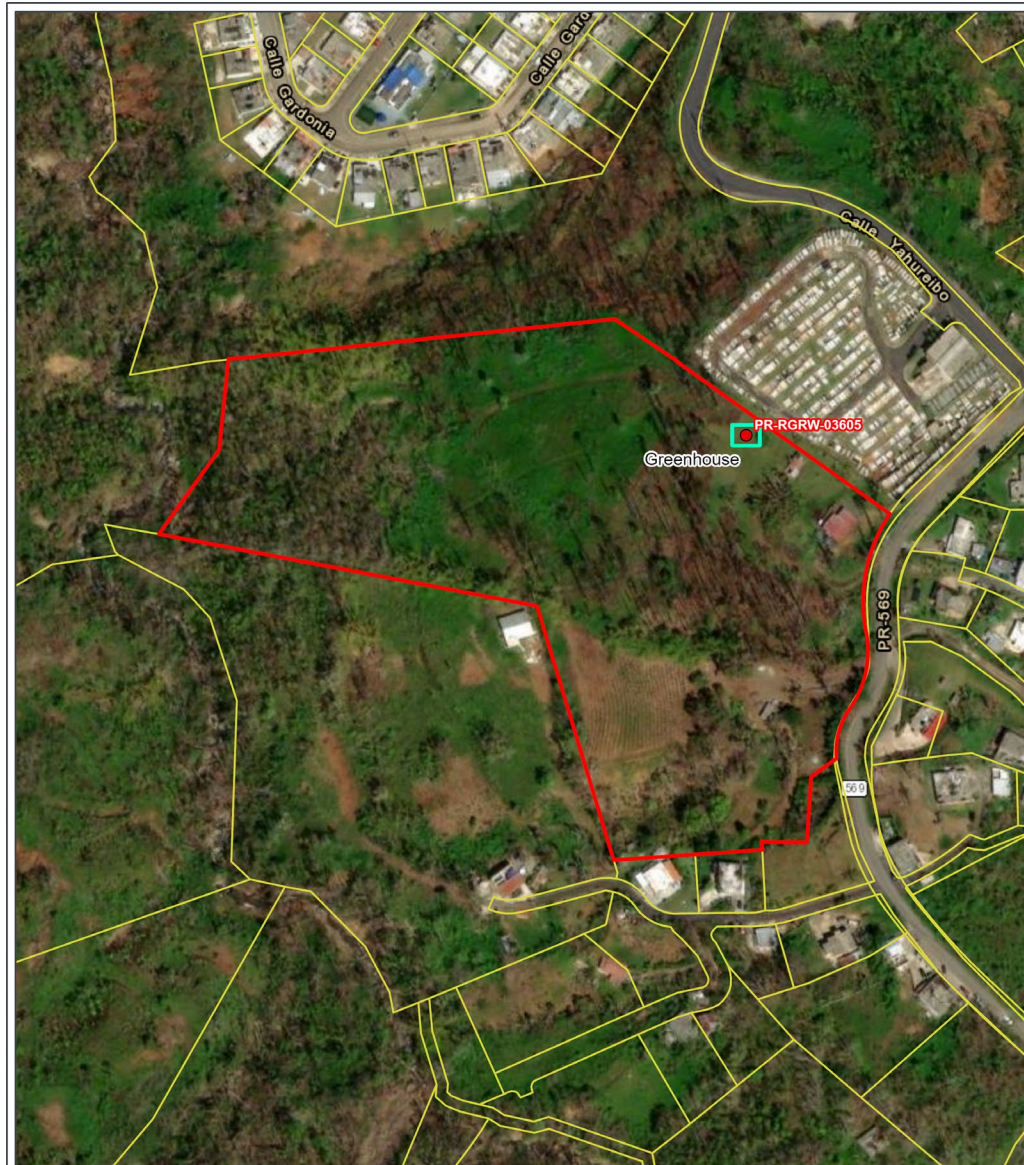


Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Project (Parcel) Location - Aerial Map



REGROW PROGRAM

**Figure A-2:
Site Vicinity**

Applicant ID: PR-RGRW-03605

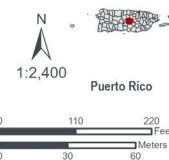
SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.378771°W 18.213055°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Site Vicinity
Aprx: 72428_ReGrowTier2Maps

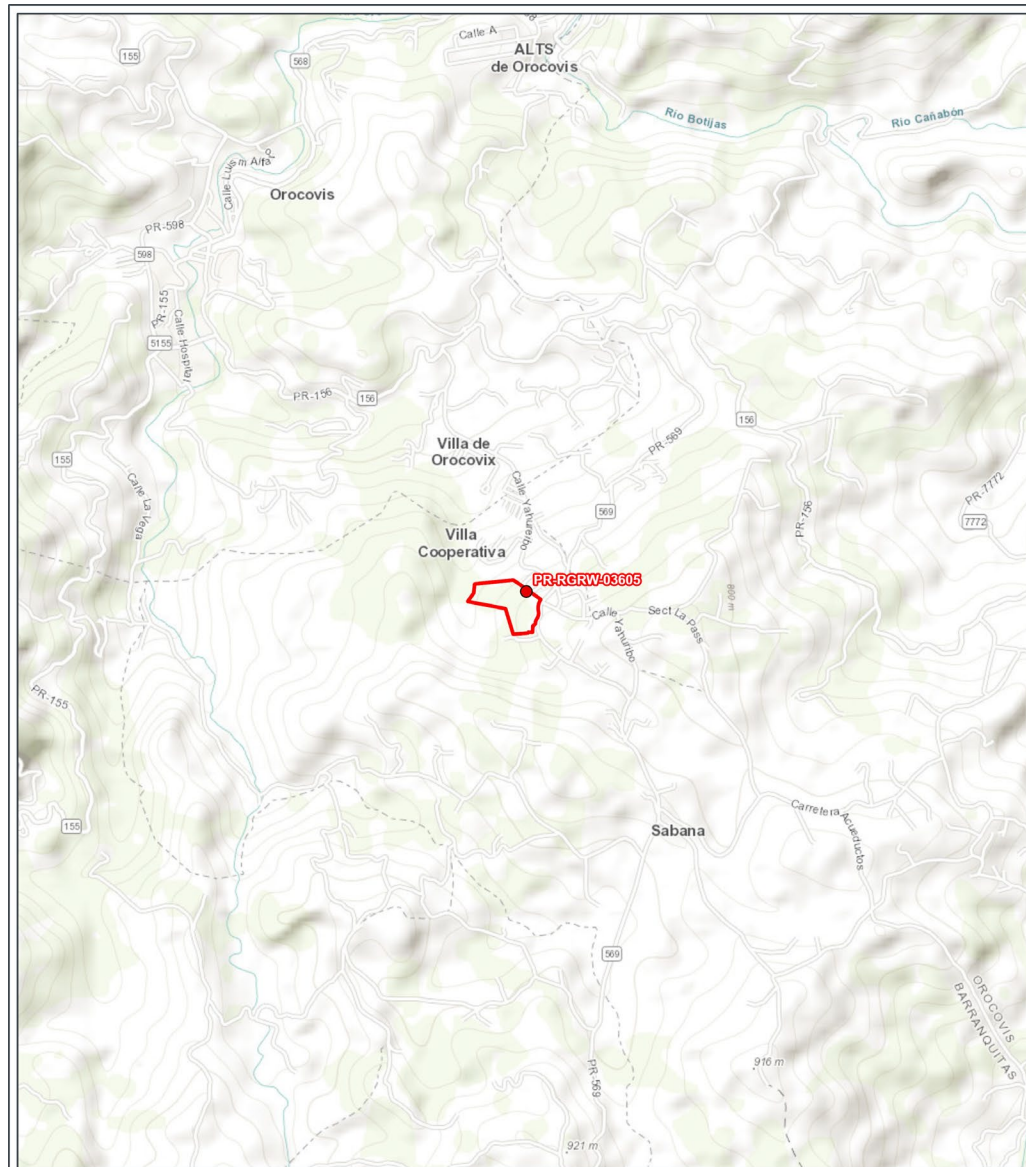


Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Project (Parcel) Location - USGS Topographic Map



REGROW PROGRAM

Figure A-1:
Site Location

Applicant ID: PR-RGRW-03605

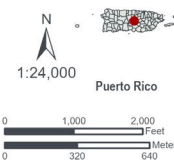
SWCA
ENVIRONMENTAL CONSULTANTS

● Site
□ Site Parcel

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Site Location
Aprx: 72428_ReGrowTier2Maps



Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Project (Parcel) Location – Soils Map

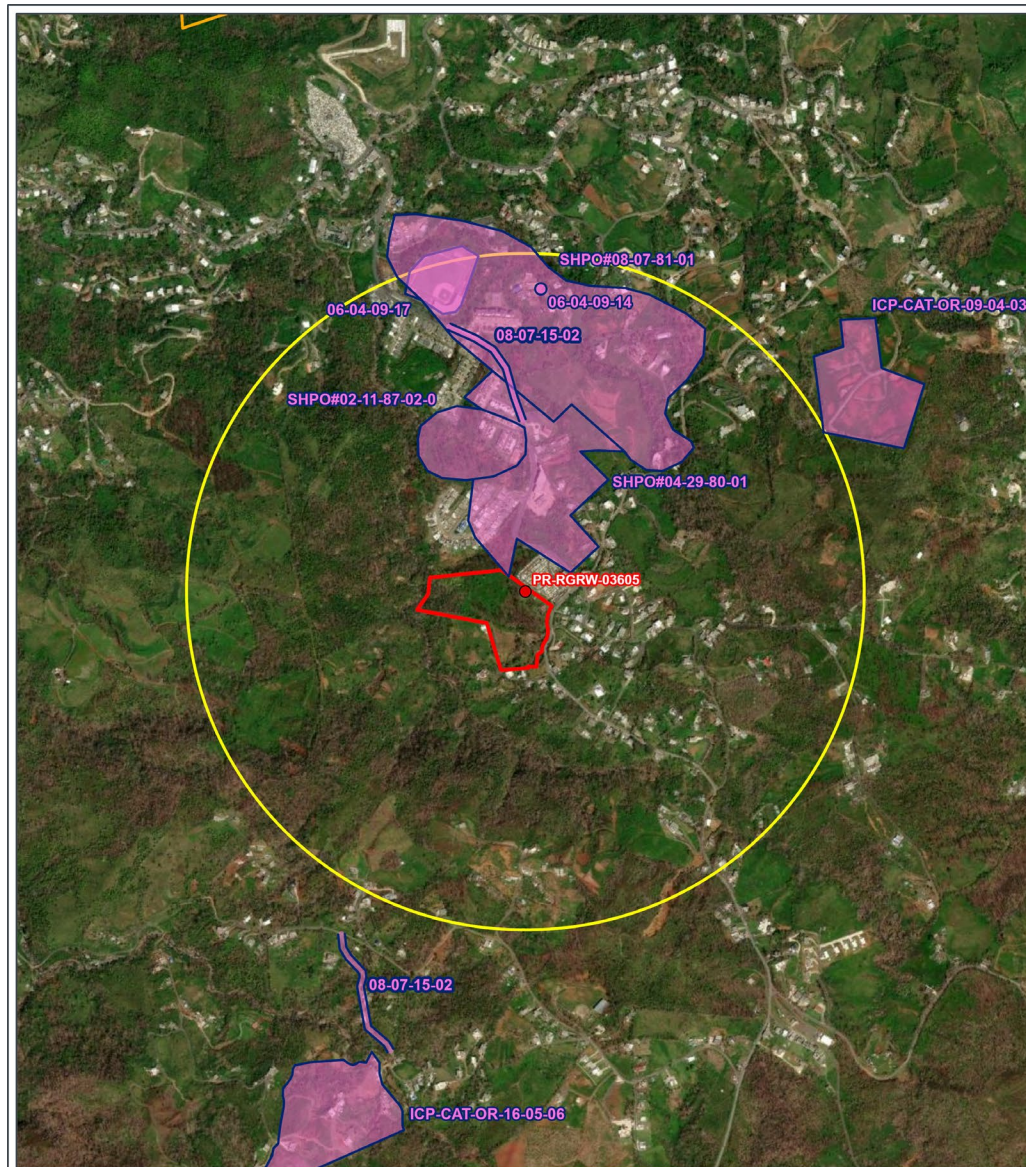


Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Project (Parcel) Location with Previous Investigations - Aerial Map



REGROW PROGRAM

Previous Investigation Map

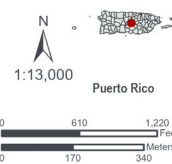
Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

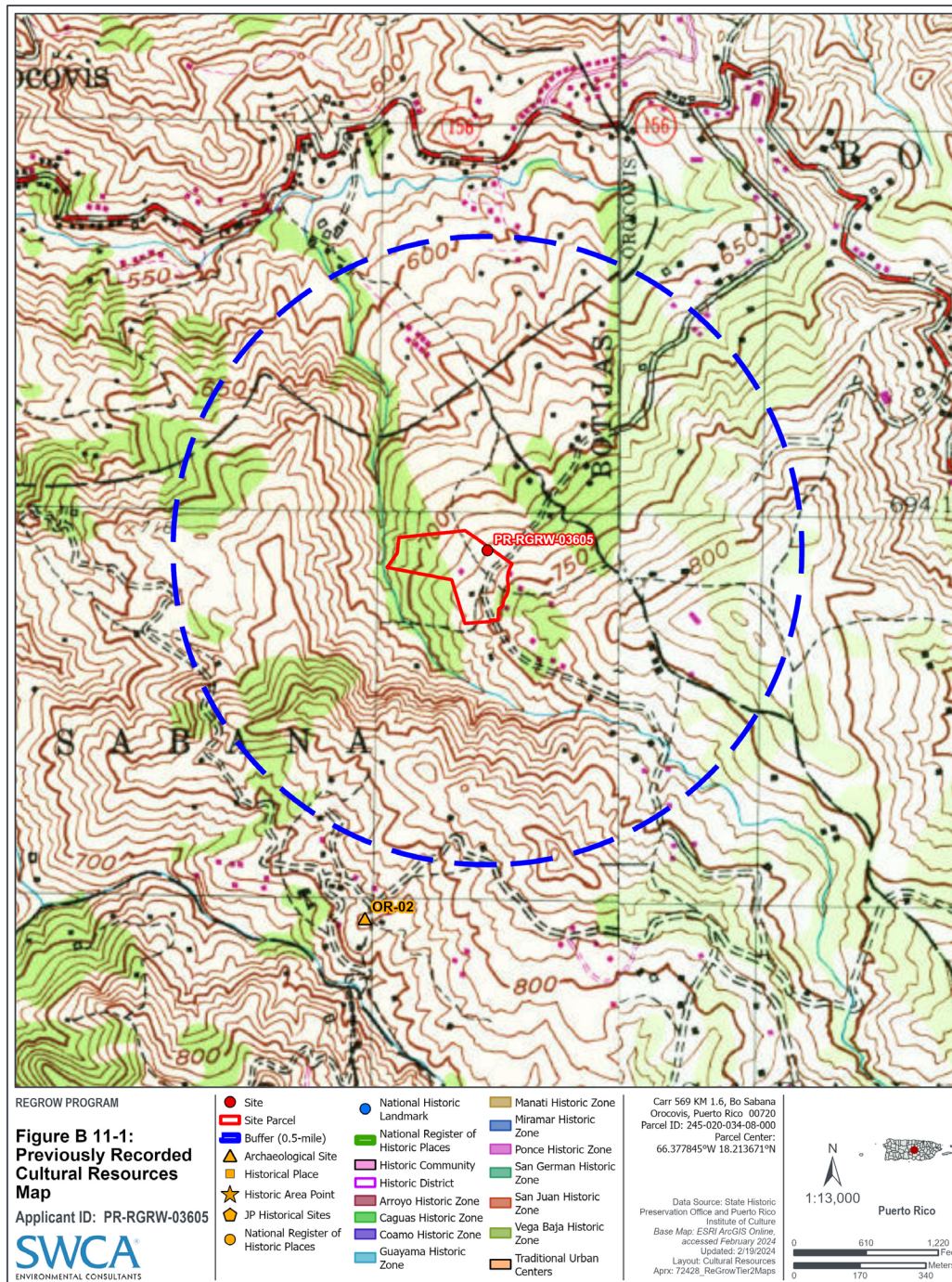
- Site
- ▭ Site Parcel
- ▭ Project Footprint (Option)
- ▭ Buffer (0.5-mile)
- ▭ Previously Recorded Survey
- ▭ MIPR Arqueologia
- ▭ Traditional Urban Centers

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: State Historic
Preservation Office and Puerto Rico
Institute of Culture
Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/15/2024
Layout: Previous Investigation
Aprx: 72428_ReGrowTier2Maps



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



Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Photograph Key



Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Photo #: 01	Date: 02/12/2024	
Photo Direction: Northwest		
Description: This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing downhill. This is a "head on" view of where the greenhouse would be installed. In the right center portion of the photo there is a partial view of a cemetery that is adjacent to the property.		
Photo #: 02	Date: 02/12/2024	
Photo Direction: South/Southeast		
Description: This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing uphill. This is a "head on" view of where the greenhouse would be installed. In the upper left portion of the photo there is a partial view of a small ranch storage area and behind it is the house.		




PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination		 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Applicant: Centinela LLC		
Case ID: PR-RGRW-03605		City: Orocovis

Photo #: 03	Date: 02/12/2024	
Photo Direction: West		
Description: This photo is facing the western corner of the proposed 40' x 30' x 15' greenhouse from the eastern corner of the proposed greenhouse. There is a gentle downward slope beyond where the greenhouse would be installed. There is a plantain crop in the background.		
Photo #: 04	Date: 02/12/2024	
Photo Direction: East		
Description: This photo is facing the eastern corner of the proposed 40' x 30' x 15' greenhouse from the western corner of the proposed greenhouse. There is a gentle upward slope beyond where the greenhouse would be installed. There is a cemetery on the other side of the fence seen here.		


PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination		 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Applicant: Centinela LLC		
Case ID: PR-RGRW-03605		City: Orocovis

Photo #: 05	Date: 02/12/2024
-----------------------	----------------------------

Photo Direction:
West

Description:

This photo is facing downhill from where the greenhouse will be installed and shows a downward sloping plantain crop. Beyond this crop, the terrain becomes steeper and beyond what is visible is a stream (photo #06).



Photo #: 06	Date: 02/12/2024
-----------------------	----------------------------

Photo Direction:
West

Description:

This is a close-up photo of the stream that runs adjacent to property. This is not near the intended project location and will not be used as part of the project.



Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Photo #:
07

Date:
02/12/2024

Photo Direction:
Close-up

Description:

This is a close-up photo of the waterline that is currently in place (above-ground PVC pipe coming from the applicant's house to the south) that will be used to connect water for greenhouse use. See photo #08.



Photo #:
08

Date:
02/12/2024

Photo Direction:
East

This photo shows where the PVC pipe/water connection shown in photo # 07 is located. There is a cemetery on the other side of the fence.



PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM

ReGROW PUERTO RICO PROGRAM

Section 106 NHPA Effect Determination



GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Photo #:
09

Date:
02/12/2024

Photo Direction:

North

Photo of house and
ranch, adjacent to
road.





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,


Juan C. Pérez Bofill, P.E. M.Eng
Director of Disaster Recovery
CDBG DR-MIT

Attachment 12

**Wetlands Protection Partner Worksheet
and Map**



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Wetlands (CEST and EA) – Partner

<https://www.hudexchange.info/environmental-review/wetlands-protection>

1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building’s footprint, or ground disturbance?

The term "new construction" includes draining, dredging, channelizing, filling, diking, impounding, and related activities and construction of any any structures or facilities.

☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

☒ Yes → *Continue to Question 2.*

2. Will the new construction or other ground disturbance impact a wetland as defined in E.O. 11990?

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map or any other relevant documentation to explain your determination.*

☐ Yes → *Work with HUD or the RE to assist with the 8-Step Process.* *Continue to Question 3.*

3. Does Section 55.12 state that the 8-Step Process is not required?

☐ No, the 8-Step Process applies.

This project will require mitigation and may require elevating structure or structures. See the link to the HUD Exchange above for information on HUD’s elevation requirements.

→ *Work with the RE/HUD to assist with the 8-Step Process. Continue to Worksheet Summary.*

☐ 5-Step Process is applicable per 55.12(a).

Provide the applicable citation at 24 CFR 55.12(a) here.

[Click here to enter text.](#)

→ *Work with the RE/HUD to assist with the 5-Step Process. This project may require mitigation or alternations. Continue to Worksheet Summary.*

☐ 8-Step Process is inapplicable per 55.12(b).

Provide the applicable citation at 24 CFR 55.12(b) here.

[Click here to enter text.](#)

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to Worksheet Summary.

☐ 8-Step Process is inapplicable per 55.12(c).

Provide the applicable citation at 24 CFR 55.12(c) here.

[Click here to enter text.](#)

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to Worksheet Summary.

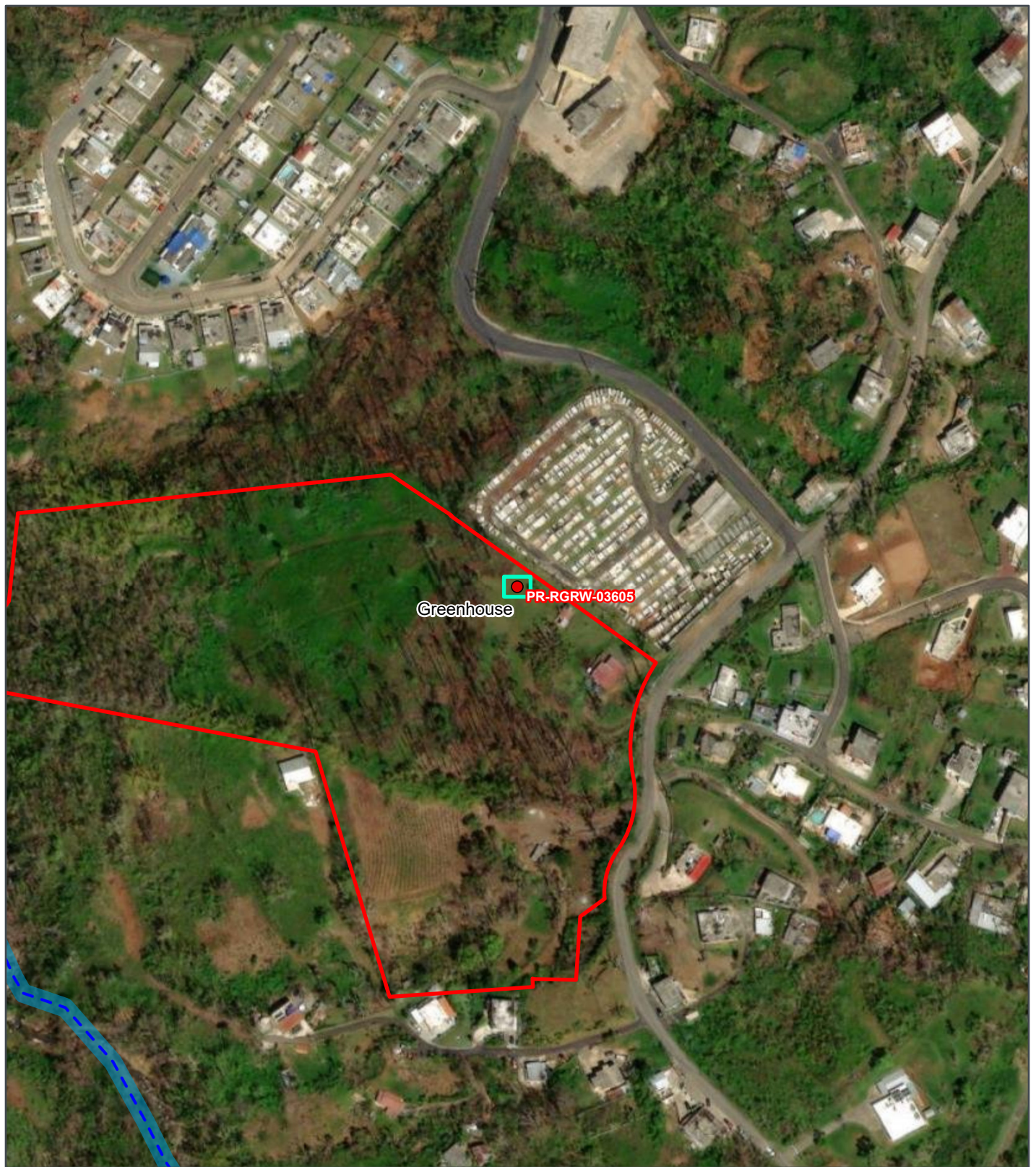
Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project site was reviewed for wetlands using the USFWS Wetland Inventory Mapper and a visual confirmation during the field site inspection. The site inspection identified a stream approximately 885 ft west of the project site outside of the parcel, but it will not be impacted by the projects due to a natural barrier of trees. No further evaluation is required.



REGROW PROGRAM

Figure B 12-1: Wetlands Protection Map

Applicant ID: PR-RGRW-03605

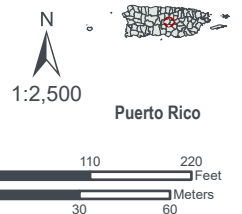
SWCA
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- Site
- Site Parcel
- Project Footprint (Option)
- - - NHD Stream
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: <https://apps.nationalmap.gov/downloader/#/https://www.fws.gov/program/national-wetlands-inventory/data-download>
Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Wetlands Protection



Attachment 13

Wild and Scenic Rivers Partner Worksheet and Wild and Scenic Rivers Map

Wild and Scenic Rivers (CEST and EA) – PARTNER

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

General requirements	Legislation	Regulation
The Wild and Scenic Rivers Act provides federal protection for certain free-flowing, wild, scenic and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS) from the effects of construction or development.	The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287), particularly section 7(b) and (c) (16 U.S.C. 1278(b) and (c))	36 CFR Part 297
References		
https://www.hudexchange.info/environmental-review/wild-and-scenic-rivers		

1. Is your project within proximity of a NWSRS river as defined below?

Wild & Scenic Rivers: These rivers or river segments have been designated by Congress or by states (with the concurrence of the Secretary of the Interior) as wild, scenic, or recreational

Study Rivers: These rivers or river segments are being studied as a potential component of the Wild & Scenic River system.

Nationwide Rivers Inventory (NRI): The National Park Service has compiled and maintains the NRI, a register of river segments that potentially qualify as national wild, scenic, or recreational river areas

☒ No

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide documentation used to make your determination, such as a map identifying the project site and its surrounding area or a list of rivers in your region in the Screen Summary at the conclusion of this screen.

☐ Yes, the project is in proximity of a Nationwide Rivers Inventory (NRI) River.

→ Continue to Question 2.

2. Could the project do *any* of the following?

- Have a direct and adverse effect within Wild and Scenic River Boundaries,
- Invade the area or unreasonably diminish the river outside Wild and Scenic River Boundaries, or
- Have an adverse effect on the natural, cultural, and/or recreational values of a NRI segment.

Consultation with the appropriate federal/state/local/tribal Managing Agency(s) is required, pursuant to Section 7 of the Act, to determine if the proposed project may have an adverse effect on a Wild & Scenic River or a Study River and, if so, to determine the appropriate avoidance or mitigation measures.

Note: Concurrence may be assumed if the Managing Agency does not respond within 30 days; however, you are still obligated to avoid or mitigate adverse effects on the rivers identified in the NWSRS

- ☐ No, the Managing Agency has concurred that the proposed project will not alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

- ☐ Yes, the Managing Agency was consulted and the proposed project may alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *The RE/HUD must work with the Managing Agency to identify mitigation measures to mitigate the impact or effect of the project on the river.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

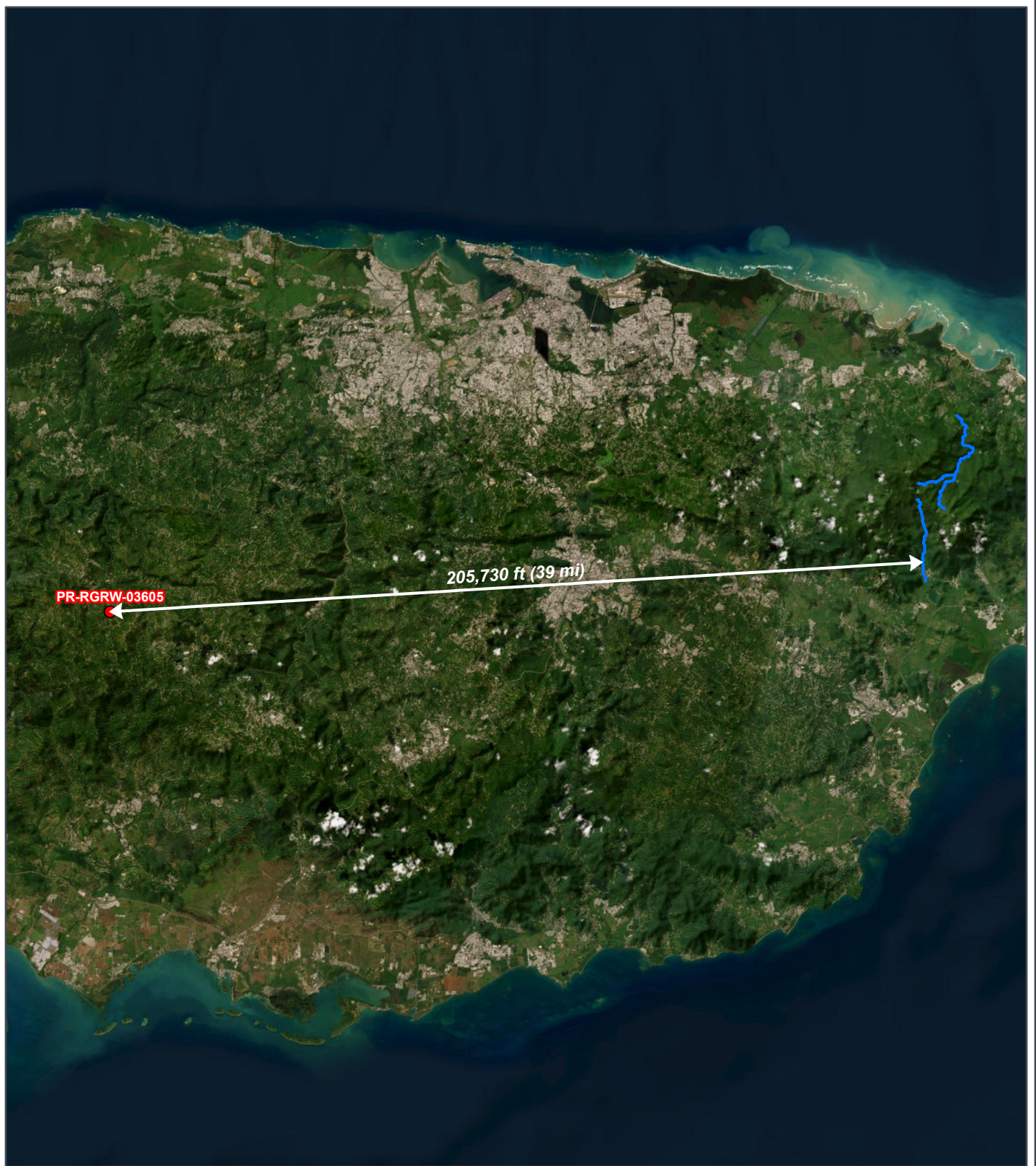
- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

A review of the USFWS National Wild and Scenic River mapper identified no Wild and Scenic Rivers or National Rivers Inventory (NRI) rivers present in Orocovis Municipio. The closest Wild and Scenic River segment is located 205,730 ft (39 mi) from the project site. No further evaluation is required.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No



REGROW PROGRAM

Figure B 13-1: National Wild and Scenic River Map

Applicant ID: PR-RGRW-03605

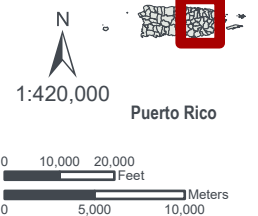
SWCA
ENVIRONMENTAL CONSULTANTS

● Site

— National Wild and Scenic River

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.08195°W 18.230623°N

Data Source: https://apps.fs.usda.gov/arcx/rest/services/EDW/EDW_WildScenicRiverSegments_01/mapserver
Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024



Attachment 14
Environmental Justice Partner Worksheet
and EJScreen Report



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Environmental Justice (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/environmental-justice>

HUD strongly encourages starting the Environmental Justice analysis only after all other laws and authorities, including Environmental Assessment factors if necessary, have been completed.

1. Were any adverse environmental impacts identified in any other compliance review portion of this project’s total environmental review?

☐ Yes → *Continue to Question 2.*

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

2. Were these adverse environmental impacts disproportionately high for low-income and/or minority communities?

☐ Yes

Explain:

[Click here to enter text.](#)

→ *The RE/HUD must work with the affected low-income or minority community to decide what mitigation actions, if any, will be taken. Provide any supporting documentation.*

☐ No

Explain:

[Click here to enter text.](#)

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The ReGrow Program intends to alleviate negative economic impacts to, and strengthen, the agricultural industry in Puerto Rico. The project's direct and indirect impacts are limited to a small area on a single land parcel. The project will benefit the farm owner by improving agricultural use and production. The project would not facilitate development that would negatively affect human health or result in disproportionate adverse environmental impacts to low-income or minority populations.

Attachment 15

**Sole Source Aquifer Partner Worksheet
and Map**



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Sole Source Aquifers (CEST and EA) - PARTNER

<https://www.hudexchange.info/environmental-review/sole-source-aquifers>

1. Is the project located on a sole source aquifer (SSA)¹?

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map of your project or jurisdiction in relation to the nearest SSA.*

☐ Yes → *Continue to Question 2.*

2. Does the project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?

☐ Yes → *The review is in compliance with this section. Continue to the Worksheet Summary below.*

☐ No → *Continue to Question 3.*

3. Does your region have a memorandum of understanding (MOU) or other working agreement with EPA for HUD projects impacting a sole source aquifer?

Contact your Field or Regional Environmental Officer or visit the HUD webpage at the link above to determine if an MOU or agreement exists in your area.

☐ Yes → *Continue to Question 4.*

☐ No → *Continue to Question 5.*

4. Does your MOU or working agreement exclude your project from further review?

☐ Yes → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination and document where your project fits within the MOU or agreement.*

☐ No → *Continue to Question 5.*

5. Will the proposed project contaminate the aquifer and create a significant hazard to public health?

Consult with your Regional EPA Office. Your consultation request should include detailed information about your proposed project and its relationship to the aquifer and associated streamflow source area.

¹ A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

EPA will also want to know about water, storm water and waste water at the proposed project. Follow your MOU or working agreement or contact your Regional EPA office for specific information you may need to provide. EPA may request additional information if impacts to the aquifer are questionable after this information is submitted for review.

- ☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide your correspondence with the EPA and all documents used to make your determination.*
- ☐ Yes → *The RE/HUD will work with EPA to develop mitigation measures. If mitigation measures are approved, attach correspondence with EPA and include the mitigation measures in your environmental review documents and project contracts. If EPA determines that the project continues to pose a significant risk to the aquifer, federal financial assistance must be denied. Continue to Question 6.*

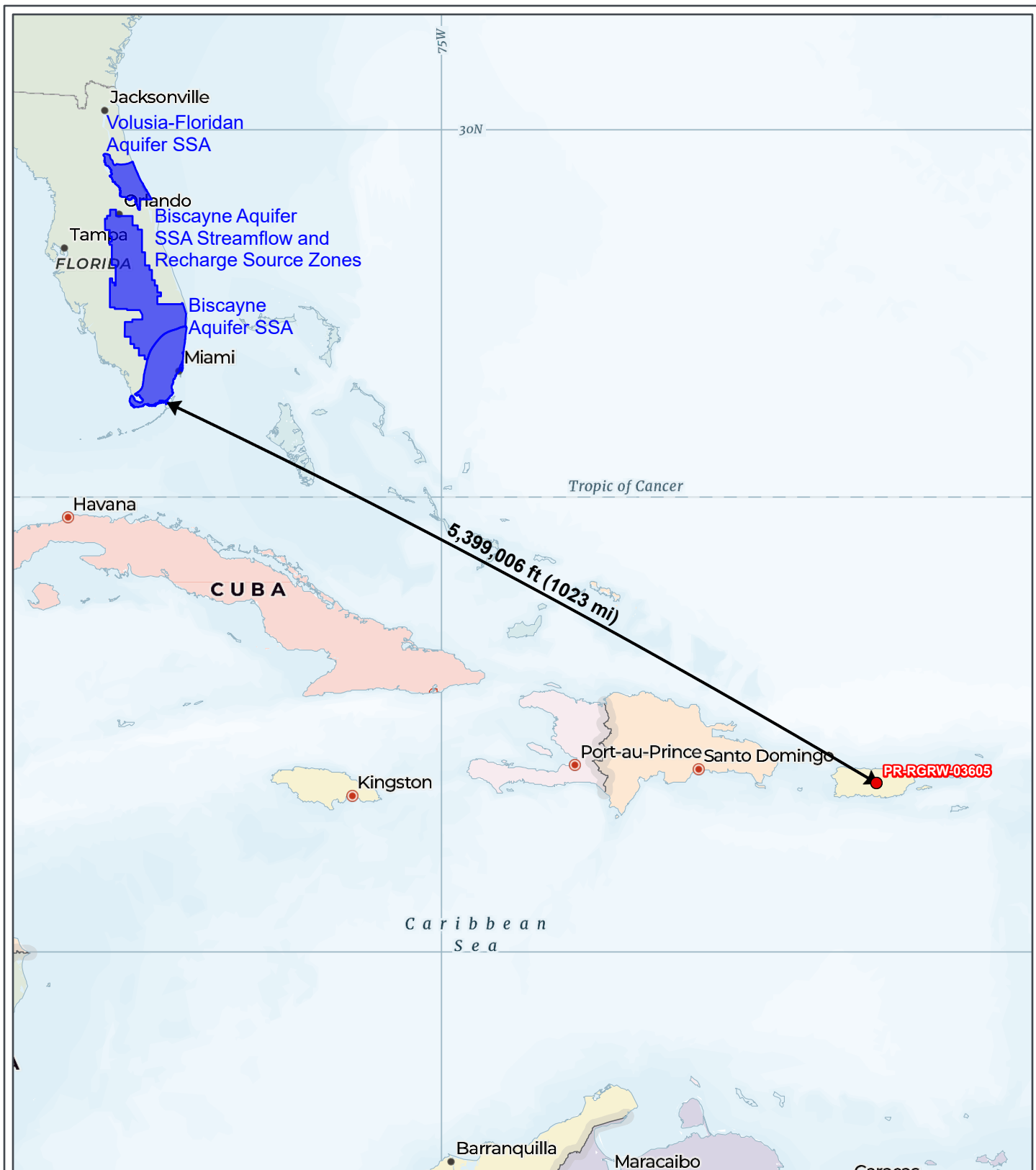
Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

According to the USEPA's Source Water Protection, Sole Source Aquifer Protection Program, there are no sole source aquifers in Puerto Rico. No further evaluation is required. The project is in compliance with the Safe Drinking Water Act.



REGROW PROGRAM

Figure 12-1: Sole Source Aquifers Map

Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

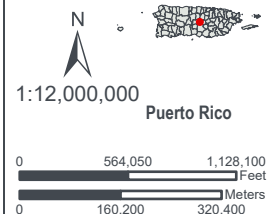
● Site

■ Sole Source Aquifers

*There are no Sole Source Aquifers in Puerto Rico.

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
73.384602°W 21.744281°N

Data Source: <https://services.arcgis.com/cJ9YHowT8TU7DUyn/arcgis/rest/services/SoleSourceAquifers/FeatureServer>
Base Map: ESRI ArcGIS Online, accessed February 2024
Updated: 2/23/2024
Layout: Sole Source Aquifers
Aprx: 72428_ReGrowTier2Maps





EJScreen Community Report

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

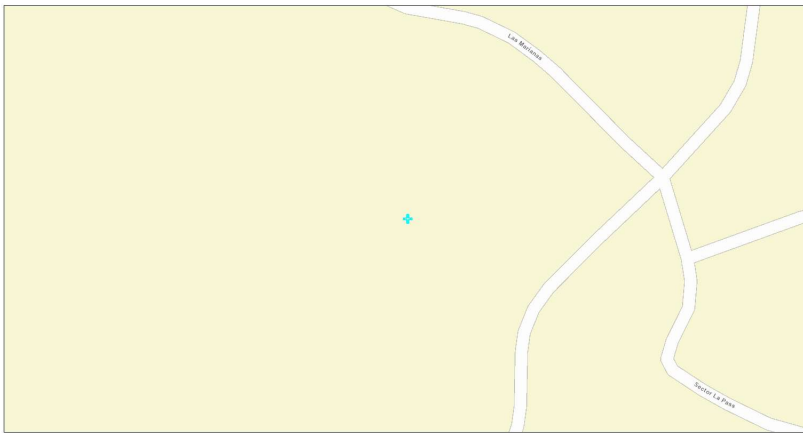
Orocovis Municipio, PR

1 mile Ring Centered at 18.213670,-66.377844

Population: 2,752

Area in square miles: 3.14

A3 Landscape



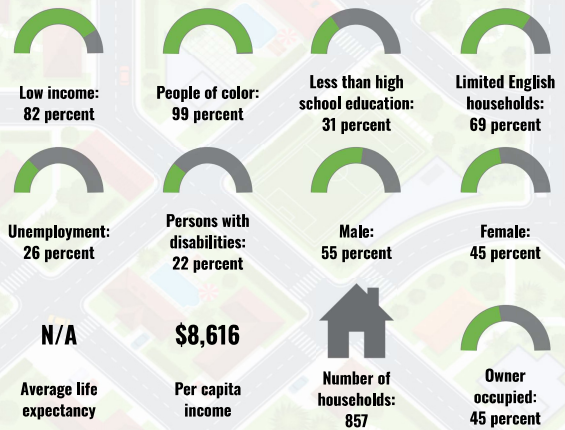
February 21, 2024

Search Result (point)

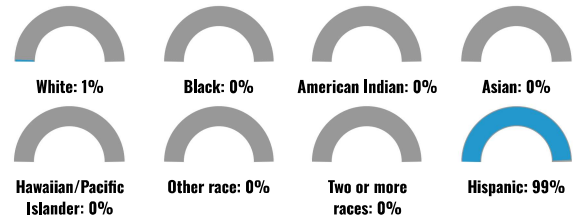
1:1,128
0 0.01 0.02 0.04 0.08 mi
0 0.02 0.04 0.08 km

EPA Community Maps Contribution: Esri, TomTom, Garmin, Panasonic, Garmin, GeoTechnologies, Inc., METRAGIS, USGS, NPS, US Census Bureau, USFWS

COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	7%
Spanish	93%
Total Non-English	93%

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

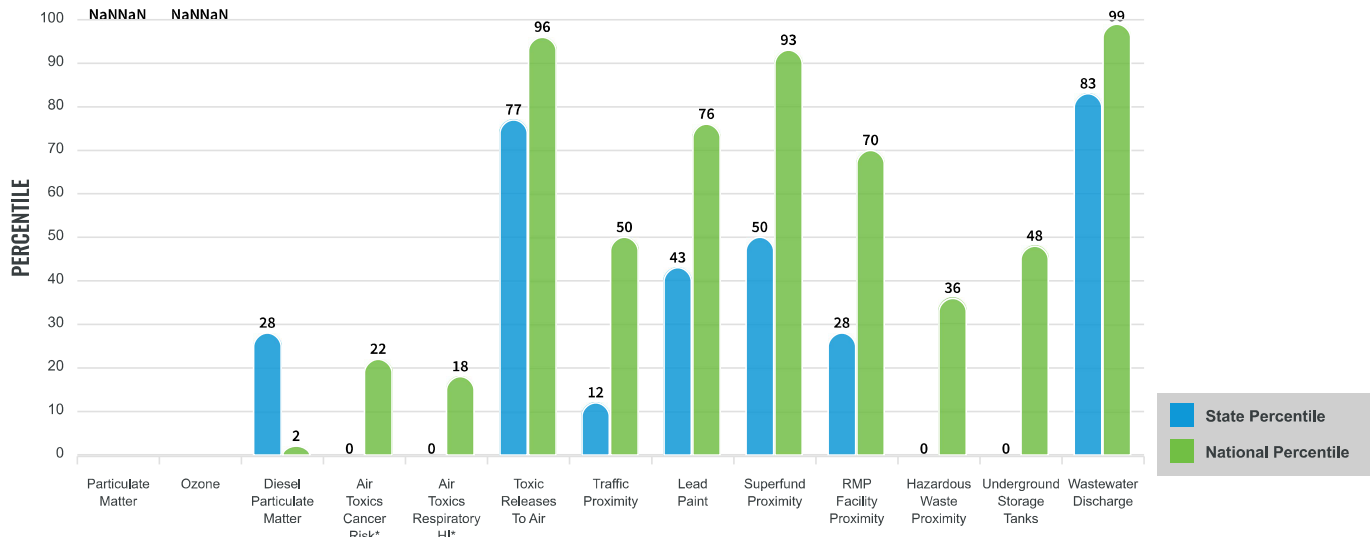
Environmental Justice & Supplemental Indexes

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

EJ INDEXES

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

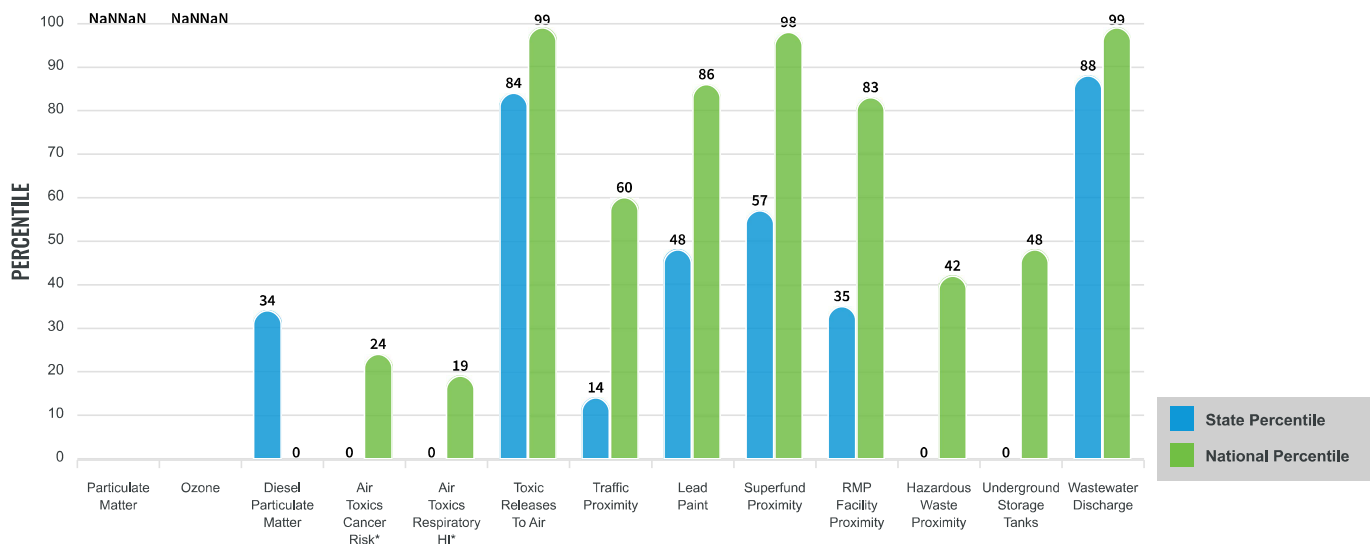
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

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

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



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

Report for 1 mile Ring Centered at 18.213670,-66.377844

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
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 ($\mu\text{g}/\text{m}^3$)	0.0214	0.0667	27	0.261	1
Air Toxics Cancer Risk* (lifetime risk per million)	10	20	0	25	1
Air Toxics Respiratory HI*	0.1	0.19	0	0.31	1
Toxic Releases to Air	1,600	4,300	74	4,600	68
Traffic Proximity (daily traffic count/distance to road)	9.7	180	12	210	16
Lead Paint (% Pre-1960 Housing)	0.081	0.16	46	0.3	32
Superfund Proximity (site count/km distance)	0.076	0.15	46	0.13	57
RMP Facility Proximity (facility count/km distance)	0.095	0.47	27	0.43	27
Hazardous Waste Proximity (facility count/km distance)	0.045	0.76	0	1.9	8
Underground Storage Tanks (count/km ²)	0.33	1.7	61	3.9	35
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.18	2.3	76	22	85
SOCIOECONOMIC INDICATORS					
Demographic Index	90%	83%	63	35%	98
Supplemental Demographic Index	52%	43%	73	14%	99
People of Color	99%	96%	22	39%	96
Low Income	82%	70%	64	31%	97
Unemployment Rate	26%	15%	81	6%	97
Limited English Speaking Households	69%	67%	48	5%	99
Less Than High School Education	31%	21%	77	12%	92
Under Age 5	10%	4%	94	6%	86
Over Age 64	13%	22%	16	17%	38
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>.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	0
Water Dischargers	2
Air Pollution	0
Brownfields	0
Toxic Release Inventory	0

Other community features within defined area:

Schools	1
Hospitals	0
Places of Worship	0

Other environmental data:

Air Non-attainment	No
Impaired Waters	Yes

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

Report for 1 mile Ring Centered at 18.213670,-66.377844

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	N/A	N/A	N/A	20%	N/A
Heart Disease	N/A	N/A	N/A	6.1	N/A
Asthma	N/A	N/A	N/A	10	N/A
Cancer	N/A	N/A	N/A	6.1	N/A
Persons with Disabilities	19.9%	21.6%	39	13.4%	85

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	N/A	N/A	N/A	12%	N/A
Wildfire Risk	N/A	N/A	N/A	14%	N/A

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	28%	32%	46	14%	86
Lack of Health Insurance	5%	7%	34	9%	36
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	No	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for 1 mile Ring Centered at 18.213670,-66.377844

Attachment 15

**Sole Source Aquifer Partner Worksheet
and Map**



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Sole Source Aquifers (CEST and EA) - PARTNER

<https://www.hudexchange.info/environmental-review/sole-source-aquifers>

1. Is the project located on a sole source aquifer (SSA)¹?

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map of your project or jurisdiction in relation to the nearest SSA.*

☐ Yes → *Continue to Question 2.*

2. Does the project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?

☐ Yes → *The review is in compliance with this section. Continue to the Worksheet Summary below.*

☐ No → *Continue to Question 3.*

3. Does your region have a memorandum of understanding (MOU) or other working agreement with EPA for HUD projects impacting a sole source aquifer?

Contact your Field or Regional Environmental Officer or visit the HUD webpage at the link above to determine if an MOU or agreement exists in your area.

☐ Yes → *Continue to Question 4.*

☐ No → *Continue to Question 5.*

4. Does your MOU or working agreement exclude your project from further review?

☐ Yes → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination and document where your project fits within the MOU or agreement.*

☐ No → *Continue to Question 5.*

5. Will the proposed project contaminate the aquifer and create a significant hazard to public health?

Consult with your Regional EPA Office. Your consultation request should include detailed information about your proposed project and its relationship to the aquifer and associated streamflow source area.

¹ A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

EPA will also want to know about water, storm water and waste water at the proposed project. Follow your MOU or working agreement or contact your Regional EPA office for specific information you may need to provide. EPA may request additional information if impacts to the aquifer are questionable after this information is submitted for review.

- ☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide your correspondence with the EPA and all documents used to make your determination.*
- ☐ Yes → *The RE/HUD will work with EPA to develop mitigation measures. If mitigation measures are approved, attach correspondence with EPA and include the mitigation measures in your environmental review documents and project contracts. If EPA determines that the project continues to pose a significant risk to the aquifer, federal financial assistance must be denied. Continue to Question 6.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

According to the USEPA's Source Water Protection, Sole Source Aquifer Protection Program, there are no sole source aquifers in Puerto Rico. No further evaluation is required. The project is in compliance with the Safe Drinking Water Act.

Appendix C

Environmental Site Inspection Report



❖ **Site-Visit Form**

❖ **General Site Conditions and Field Notes:**

Does the address match the parcel location?	Yes	Does the lat/long match the parcel location?	Yes
Comments on location:			
<u>Question</u>	<u>Yes /No</u>	<u>Comments:</u>	
Was property accessible by vehicle?	Yes		
Were there any access issues? Examples of access issues: Dogs, Locked gate, Traffic hazards, Uncooperative residents, Confrontational Neighbors, *If no access issues please indicate with "None"	No		
Are water wells present? *please include lat/long of water well so it can be denoted on the sitemap	No		
Are creeks or ponds present? *please include lat/long of water well so it can be denoted on the sitemap	Yes	About 700 ft. west of intended greenhouse location. GPS point and photo provided.	
Are any potential wetlands on-site or visible on adjacent parcel? *please include lat/long of water well so it can be denoted on the sitemap	No		
<p align="center">❖ Parcel Conditions</p> <p align="center">Note – for Any Yes answers specify type, contents, and location (get photo points) (These questions are mostly concerned with contamination – all HUD activities must be “free and clear of contamination” and while it’s important to be able to show there is no site-contamination we also have to keep in mind what the HUD funded project is and the regulatory requirements of the activity)</p>			
Are commercial or industrial hazardous facilities at parcel or within visual sight?	No		



Are there signs of underground storage tanks?	No	
Are any above-ground tanks (relevant to the activities in the IUGF *unless they are a source of contamination) >10 gallons present? If yes, what are the contents and conditions of each tank?	No	
Are 55-gallon drums present? If yes, what are the content and conditions of each tank?	No	
Are abandoned vehicles or electrical equipment present?	No	
Are there any signs of illegal dumping within or next to the applicant parcel?	No	
Is other potential environmentally hazardous debris on the parcel?	No	
Is there non-environmentally hazardous debris on the parcel?	No	
Are any leaks, soil stains, or stressed vegetation present? If yes, what is the source of the staining/stress?	No	
Are there any pungent, foul or noxious odors?	No	
Other Components Related to Project (e.g., gas tanks, cisterns, water tanks, abandoned vehicles, etc.)		
Type	Details	



ENVIRONMENTAL SITE REVIEW AND INSPECTION FORM
ReGrow

Are there any potentially hazardous trees that could fall?	No	
Are any bird nests visible?	No	None evident—lots of avian activity
Are there any animal burrows visible?	No	None evident
Are there any signs of potential/preferred T&E habitat in the area?	Yes	Potential/preferred habitat for Puerto Rican Broad-winged Hawk, Puerto Rican Parrot, and Puerto Rican Boa—no individuals or evidence of individuals noted.

Natural Resources (e.g., endemic plants, endangered species, water bodies, wetlands, etc.) {include the ones inside the property and in direct sight view of the site location}	
Type or Species	Description
Stream	Located ~700 ft. west of proposed project location and will not be used.

Are there any buildings in direct visual sight of the project locations? Take photo and ask applicant when the structure was built)	Yes	There are two structures that would have a view of the greenhouse (aside from the cemetery, photo #01) and both belong to the applicant (photo #02)—these are a ranch storage area and the applicant's house.
--	-----	---

Structures (e.g., residences, commercial buildings, etc.) {include the ones inside the property and in direct sight view of the site location}	
Built Date	Type of Construction
Over 50 years ago	Residential- wood and galvanized steel
Over 50 years ago	Ranch- metal, zinc, wood

❖ Additional Environmental Hazards Analysis
--



<p>Based on the above findings, does additional information need to be obtained from the applicant to determine whether an environmental hazard is present?</p>	<p>No</p>	
--	-----------	--

☒ I verify that I have physically visited this property and that the findings outlined above are accurate.

Karina Morales

Karina Morales

February 15th, 2024

Following pages are used for:

Location Map with parcel boundaries and building point (Aerial base with streets labelled)

Photos taken during inspection, with Date / Type / Direction associated with the photo

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795

Frame #	View	Description
01	NW	This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing downhill. This is a "head on" view of where the greenhouse would be installed. In the right center portion of the photo there is a partial view of a cemetery that is adjacent to the property.
02	S/SE	This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing uphill. This is a "head on" view of where the greenhouse would be installed. In the upper left portion of the photo there is a partial view of a small ranch storage area and behind it is the house.
03	W	This photo is facing the western corner of the proposed 40' x 30' x 15' greenhouse from the eastern corner of the proposed greenhouse. There is a gentle downward slope beyond where the greenhouse would be installed. There is a plantain crop in the background.
04	E	This photo is facing the eastern corner of the proposed 40' x 30' x 15' greenhouse from the western corner of the proposed greenhouse. There is a gentle upward slope beyond where the greenhouse would be installed. There is a cemetery on the other side of the fence seen here.
05	W	This photo is facing downhill from where the greenhouse will be installed and shows a downward sloping plantain crop. Beyond this crop, the terrain becomes steeper and beyond what is visible is a stream (photo #06).
06	W/Close-up	This is a close-up photo of the stream that runs adjacent to property. This is not near the intended project location and will not be used as part of the project.
07	Close-up	This is a close-up photo of the waterline that is currently in place (above-ground PVC pipe coming from the applicant's house to the south) that will be used to connect water for greenhouse use. See photo #08.
08	E	This photo shows where the PVC pipe/water connection shown in photo # 07 is located. There is a cemetery on the other side of the fence.

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795



Photo #: 01	Date: 02/15/24	
Photo Direction: Northwest		
Description: This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing downhill. This is a "head on" view of where the greenhouse would be installed. In the right center portion of the photo there is a partial view of a cemetery that is adjacent to the property.		

Photo #: 02	Date: 02/15/24	
Photo Direction: South/southeast		
Description: This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing uphill. This is a "head on" view of where the greenhouse would be installed. In the upper left portion of the photo there is a partial view of a small ranch storage area and behind it is the house.		

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795

Photo #: 03	Date: 02/15/24
Photo Direction: West	
Description: This photo is facing the western corner of the proposed 40' x 30' x 15' greenhouse from the eastern corner of the proposed greenhouse. There is a gentle downward slope beyond where the greenhouse would be installed. There is a plantain crop in the background.	



A wide-angle photograph of a grassy field with a line of tall pine trees in the background under a blue sky with scattered clouds. The field is a vibrant green, and the trees are tall and slender, with some showing signs of age or damage. The sky is a clear blue with a few white clouds. The overall scene is a natural, outdoor setting.

Photo #: 04	Date: 02/15/24	
Photo Direction: East		
Description: This photo is facing the eastern corner of the proposed 40' x 30' x 15' greenhouse from the western corner of the proposed greenhouse. There is a gentle upward slope beyond where the greenhouse would be installed. There is a cemetery on the other side of the fence seen here.		

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795

Photo #: 05	Date: 02/15/24
Photo Direction: West	
Description: This photo is facing downhill from where the greenhouse will be installed and shows a downward sloping plantain crop. Beyond this crop, the terrain becomes steeper and beyond what is visible is a stream (photo #06).	


A wide-angle photograph of a grassy field with several tall, thin trees in the foreground and a dense forest of green trees in the background under a blue sky with white clouds. The field is covered in green grass with some shadows cast by the trees. In the background, there are rolling hills and a valley visible through the trees. The sky is bright blue with scattered white clouds.

Photo #: 06	Date: 02/15/24	
Photo Direction: West/close-up		
Description: This is a close-up photo of the stream that runs adjacent to property. This is not near the intended project location and will not be used as part of the project.		

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795

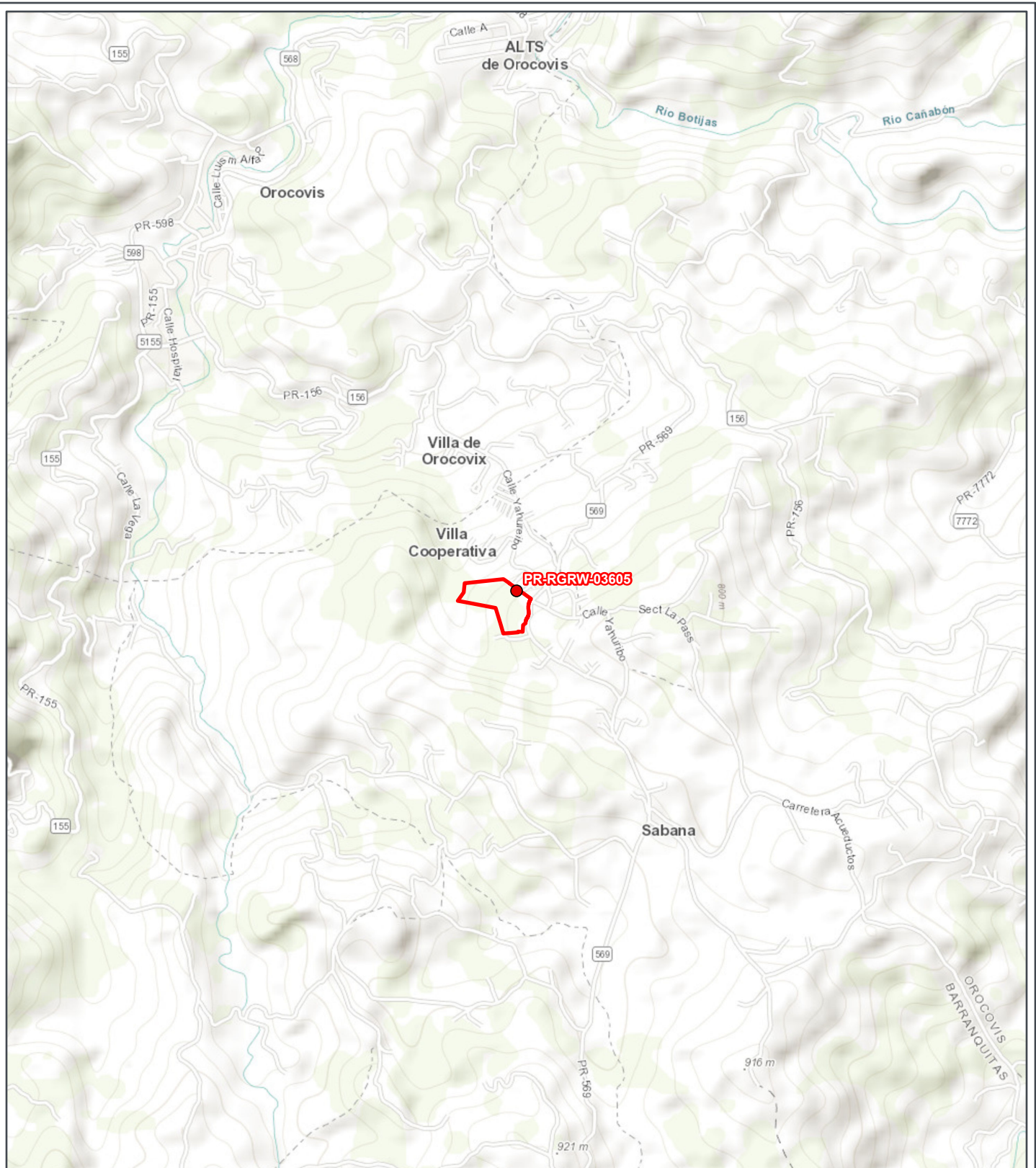
Photo #: 07	Date: 02/15/24	
Photo Direction: Close-up		
Description: This is a close-up photo of the waterline that is currently in place (above-ground PVC pipe coming from the applicant's house to the south) that will be used to connect water for greenhouse use. See photo #08.		

Photo #: 08	Date: 02/15/24	
Photo Direction: East		
Description: This photo shows where the PVC pipe/water connection shown in photo # 07 is located. There is a cemetery on the other side of the fence.		

Appendix A

Project Overview Figures

Figure 1
Site Location Map



REGROW PROGRAM

Figure A-1: Site Location

Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Site Location
Aprx: 72428_ReGrowTier2Maps

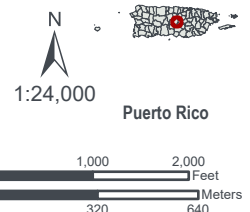


Figure 2
Site Vicinity Map



REGROW PROGRAM

Figure A-2: Site Vicinity

Applicant ID: PR-RGRW-03605

SWCA[®]
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.378771°W 18.213055°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Site Vicinity
Aprx: 72428_ReGrowTier2Maps

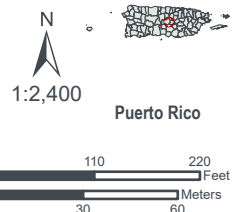


Figure 3
USGS Landslide Map



REGROW PROGRAM

Figure A-3: USGS Landslide Map

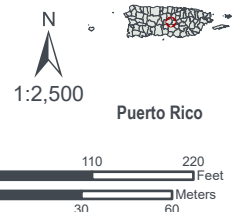
Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- ▭ Site Parcel
- ▭ Project Footprint (Option)
- ▭ Greater than 25 Landslides per sq km
- ▭ Less than 25 Landslides per sq km
- ▭ No Landslides
- ▭ Not Examined

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: https://arcgis.cuahsi.org/arcgis/rest/services/MariaRAPID/Hurricane_Maria_Landslides/MapServer
Base Map: ESRI ArcGIS Online, accessed February 2024
Updated: 2/19/2024
Layout: Landslide



Appendix B

Attachments and Supporting Documentation

Attachment 1

Airport Hazards Partner Worksheet and

Airport Hazards Map



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Airport Hazards (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/airport-hazards>

- 1. To ensure compatible land use development, you must determine your site’s proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?**

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within the applicable distances to a military or civilian airport.*

☐ Yes → *Continue to Question 2.*

- 2. Is your project located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ)?**

☐ Yes, project is in an APZ → *Continue to Question 3.*

☐ Yes, project is an RPZ/CZ → *Project cannot proceed at this location.*

☐ No, project is not within an APZ or RPZ/CZ

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Continue to the Worksheet Summary below. Provide a map showing that the site is not within either zone.*

- 3. Is the project in conformance with DOD guidelines for APZ?**

☐ Yes, project is consistent with DOD guidelines without further action.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

☐ No, the project cannot be brought into conformance with DOD guidelines and has not been approved. → *Project cannot proceed at this location.*

If mitigation measures have been or will be taken, explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

[Click here to enter text.](#)

→ Work with the RE/HUD to develop mitigation measures. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project site is not within 2,500 ft of a civil primary or commercial service airport or within 15,000 ft of a military airport. The nearest civil primary or commercial service airport, Mercedita, is located 97,106 ft (18 miles [mi]) from the project site. The nearest military airport, Luis Munoz Marin International Airport, is located 149,368 ft (28 mi) from the project site. No further evaluation is required.



REGROW PROGRAM

Figure B 1-1: Airport Hazards Map

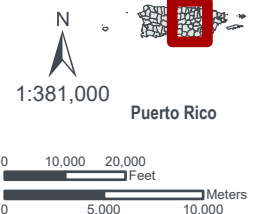
Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- ▭ Airport Runway
- ▭ Accident Potential Zones (APZ)
- ▭ Runway Protection Zones (RPZ)
- ▭ 2,500-FT Civil Airport Buffer
- ▭ 15,000-FT Military Airport Buffer

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.283941°W 18.219661°N

Data Source: <https://geodata.bts.gov/>
Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Airport Hazards
Aprx: 72428_ReGrowTier2Maps



Attachment 2

Coastal Barrier Resources Act Partner Worksheet and Coastal Barrier Resources Map



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Coastal Barrier Resources (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/coastal-barrier-resources>

Projects located in the following states must complete this form.

Alabama	Georgia	Massachusetts	New Jersey	Puerto Rico	Virgin Islands
Connecticut	Louisiana	Michigan	New York	Rhode Island	Virginia
Delaware	Maine	Minnesota	North Carolina	South Carolina	Wisconsin
Florida	Maryland	Mississippi	Ohio	Texas	

1. Is the project located in a CBRS Unit?

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a CBRS Unit.*

☐ Yes → *Continue to 2.*

Federal assistance for most activities may not be used at this location. You must either choose an alternate site or cancel the project. In very rare cases, federal monies can be spent within CBRS units for certain exempted activities (e.g., a nature trail), after consultation with the Fish and Wildlife Service (FWS) (see [16 USC 3505](#) for exceptions to limitations on expenditures).

2. Indicate your recommended course of action for the RE/HUD

- ☐ Consultation with the FWS
- ☐ Cancel the project

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

The project site is not located in a Coastal Barrier Resource Systems Unit (CBRS) or Otherwise Protected Area (OPA). There are no CBRS units in Orocovis. The closest CBRS unit, Rio Descalabrado, is located 85,040 ft (16 mi) from the project site. No further evaluation is required.



REGROW PROGRAM

Figure B 2-1: Coastal Barrier Resources Map

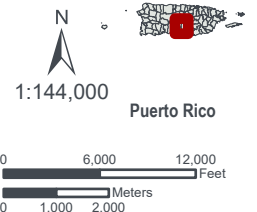
Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Otherwise Protected Area
- System Unit

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.418628°W 18.103259°N

Data Source: <https://cbrsgis.wim.usgs.gov/arcgis/rest/services/CoastalBarrierResourcesSystem/MapServer>
Base Map: ESRI ArcGIS Online, accessed February 2024
Updated: 2/19/2024
Layout: Coastal Barrier Resources System



Attachment 3

**Flood Insurance Partner Worksheet and
Flood Insurance Rate Map**



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Flood Insurance (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/flood-insurance>

1. Does this project involve mortgage insurance, refinance, acquisition, repairs, rehabilitation, or construction of a structure, mobile home, or insurable personal property?

☐ No. This project does not require flood insurance or is excepted from flood insurance.

→ Continue to the Worksheet Summary.

☒ Yes → Continue to Question 2.

2. Provide a FEMA/FIRM map showing the site.

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs).

Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?

☒ No → Continue to the Worksheet Summary.

☐ Yes → Continue to Question 3.

3. Is the community participating in the National Flood Insurance Program or has less than one year passed since FEMA notification of Special Flood Hazards?

☐ Yes, the community is participating in the National Flood Insurance Program.

Flood insurance is required. Provide a copy of the flood insurance policy declaration or a paid receipt for the current annual flood insurance premium and a copy of the application for flood insurance.

→ Continue to the Worksheet Summary.

☐ Yes, less than one year has passed since FEMA notification of Special Flood Hazards.

If less than one year has passed since notification of Special Flood Hazards, no flood Insurance is required.

→ Continue to the Worksheet Summary.

☐ No. The community is not participating, or its participation has been suspended.

Federal assistance may not be used at this location. Cancel the project at this location.

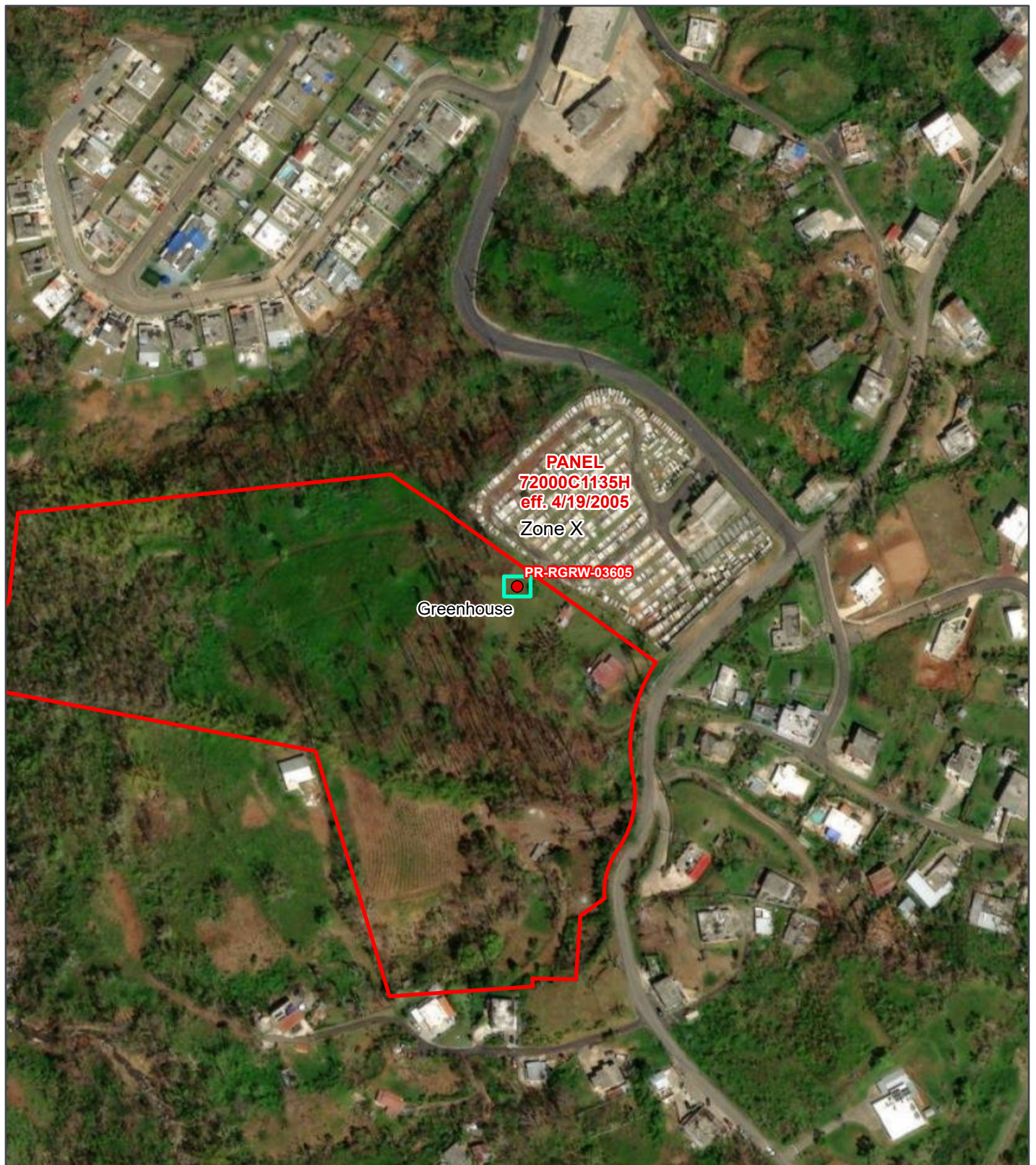
Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

A review of the FEMA Flood Insurance Rate Map (FIRM), Community Panel 72000C1135H (effective date 4/19/2005), shows the project site is in Flood Zone X, which is not in a Special Flood Hazard Area (SFHA). Flood insurance is not required. No further evaluation is required.



REGROW PROGRAM

Figure B 3-1: Flood Insurance Rate Map (FIRM)

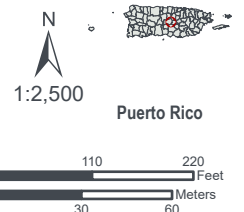
Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- | | |
|---|---|
| ● Site | Zone AO |
| Site Parcel | Zone VE |
| Project Footprint (Option) | Floodway |
| Base Flood Elevations | Zone X - Shaded (500-year floodplain) |
| Zone A | Zone X - Unshaded |
| Zone AE | Area Not Included |
| Zone AH | Open Water |

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: <https://hazards.fema.gov/gis/nfhl/rest/services/public/NFHL/MapServer>
Base Map: ESRI ArcGIS Online, accessed February 2024
Updated: 2/19/2024
Layout: Effective Floodplain
Aprx: 72428_ReGrowTier2Maps



Attachment 4

Air Quality Partner Worksheet, List of Non-Attainment/Maintenance Status Counties in Puerto Rico, and Clean Air Map



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Air Quality (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/air-quality>

1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?

☐ Yes → Continue to Question 2.

☒ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide any documents used to make your determination.

2. Is your project’s air quality management district or county in non-attainment or maintenance status for any criteria pollutants?

Follow the link below to determine compliance status of project county or air quality management district:

<http://www.epa.gov/oaqps001/greenbk/>

☒ No, project’s county or air quality management district is in attainment status for all criteria pollutants

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

☐ Yes, project’s management district or county is in non-attainment or maintenance status for one or more criteria pollutants. → Continue to Question 3.

3. Determine the estimated emissions levels of your project for each of those criteria pollutants that are in non-attainment or maintenance status on your project area. Will your project exceed any of the *de minimis* or *threshold* emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?

☐ No, the project will not exceed *de minimis* or threshold emissions levels or screening levels

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Explain how you determined that the project would not exceed *de minimis* or threshold emissions.

☐ Yes, the project exceeds *de minimis* emissions levels or screening levels.

→ *Continue to Question 4. Explain how you determined that the project would not exceed de minimis or threshold emissions in the Worksheet Summary.*

- 4. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

[Click here to enter text.](#)

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project site is in Orocovis Municipio, which is within a U.S. Environmental Protection Agency (USEPA) designated attainment area. Municipios in Nonattainment or Maintenance areas include Arecibo, Bayamon, Catano, Guaynabo, Salinas, San Juan and Toa Baja. Project activities include new construction of a greenhouse. Emissions associated with the proposed actions are temporary and limited to the use of small construction equipment and will be well below the Federal General Conformity Rule *de minimis* thresholds. No further evaluation is required. The project is not anticipated to have a negative impact on air quality.



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 January 31, 2024

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/m³) 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

▼

GO

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
PUERTO RICO								
Arecibo Municipio	Lead (2008)	Arecibo, PR	<div>1112131415161718192021222324</div>	//		Part	32,185	72/013
Bayamon Municipio	Sulfur Dioxide (2010)	San Juan, PR	<div>18192021222324</div>	//		Part	22,921	72/021
Catano Municipio	Sulfur Dioxide (2010)	San Juan, PR	<div>18192021222324</div>	//		Whole	28,140	72/033
Guaynabo Municipio	PM-10 (1987)	Mun. of Guaynabo, PR	<div>929394959697989900010203040506070809</div>	02/11/2010	Moderate	Part	90,470	72/061
Guaynabo Municipio	Sulfur Dioxide (2010)	San Juan, PR	<div>18192021222324</div>	//		Part	23,802	72/061
Salinas Municipio	Sulfur Dioxide (2010)	Guayama-Salinas, PR	<div>18192021222324</div>	//		Part	23,401	72/123
San Juan Municipio	Sulfur Dioxide (2010)	San Juan, PR	<div>18192021222324</div>	//		Part	147,963	72/127
Toa Baja Municipio	Sulfur Dioxide (2010)	San Juan, PR	<div>18192021222324</div>	//		Part	52,441	72/137

Important Notes

Discover.

Connect.

Ask.

Follow.

2024-01-31



REGROW PROGRAM

Figure B 4-1: Clean Air Map

Applicant ID: PR-RGRW-03605

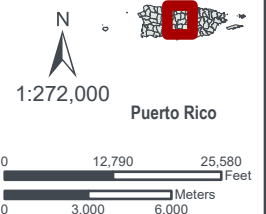
SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- ▨ 8-Hour Ozone (2015 Standard)*
- Lead (2008 Standard)
- PM-2.5 (2012 Standard)*
- Sulfur Dioxide (2010 Standard)

*No Data in Puerto Rico

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.471597°W 18.249606°N

Data Source: https://geopub.epa.gov/arcgis/rest/services/NEPAAssist/NEPAVELayersPublic_fgdb/MapServer
Base Map: ESRI ArcGIS Online, accessed February 2024
Updated: 2/19/2024
Layout: Clean Air
Aprx: 72428_ReGrowTier2Maps



Attachment 5

Coastal Zone Management Partner Worksheet and Coastal Zone Map



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Coastal Zone Management Act (CEST and EA) – PARTNER

<https://www.onecpd.info/environmental-review/coastal-zone-management>

Projects located in the following states must complete this form.

Alabama	Florida	Louisiana	Mississippi	Ohio	Texas
Alaska	Georgia	Maine	New Hampshire	Oregon	Virgin Islands
American Samoa	Guam	Maryland	New Jersey	Pennsylvania	Virginia
California	Hawaii	Massachusetts	New York	Puerto Rico	Washington
Connecticut	Illinois	Michigan	North Carolina	Rhode Island	Wisconsin
Delaware	Indiana	Minnesota	Northern Mariana Islands	South Carolina	

1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?

- ☐ Yes → Continue to Question 2.
- ☒ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a Coastal Zone.

2. Does this project include activities that are subject to state review?

- ☐ Yes → Continue to Question 3.
- ☐ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.

3. Has this project been determined to be consistent with the State Coastal Management Program?

- ☐ Yes, with mitigation. → The RE/HUD must work with the State Coastal Management Program to develop mitigation measures to mitigate the impact or effect of the project.
- ☐ Yes, without mitigation. → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.
- ☐ No → Project cannot proceed at this location.

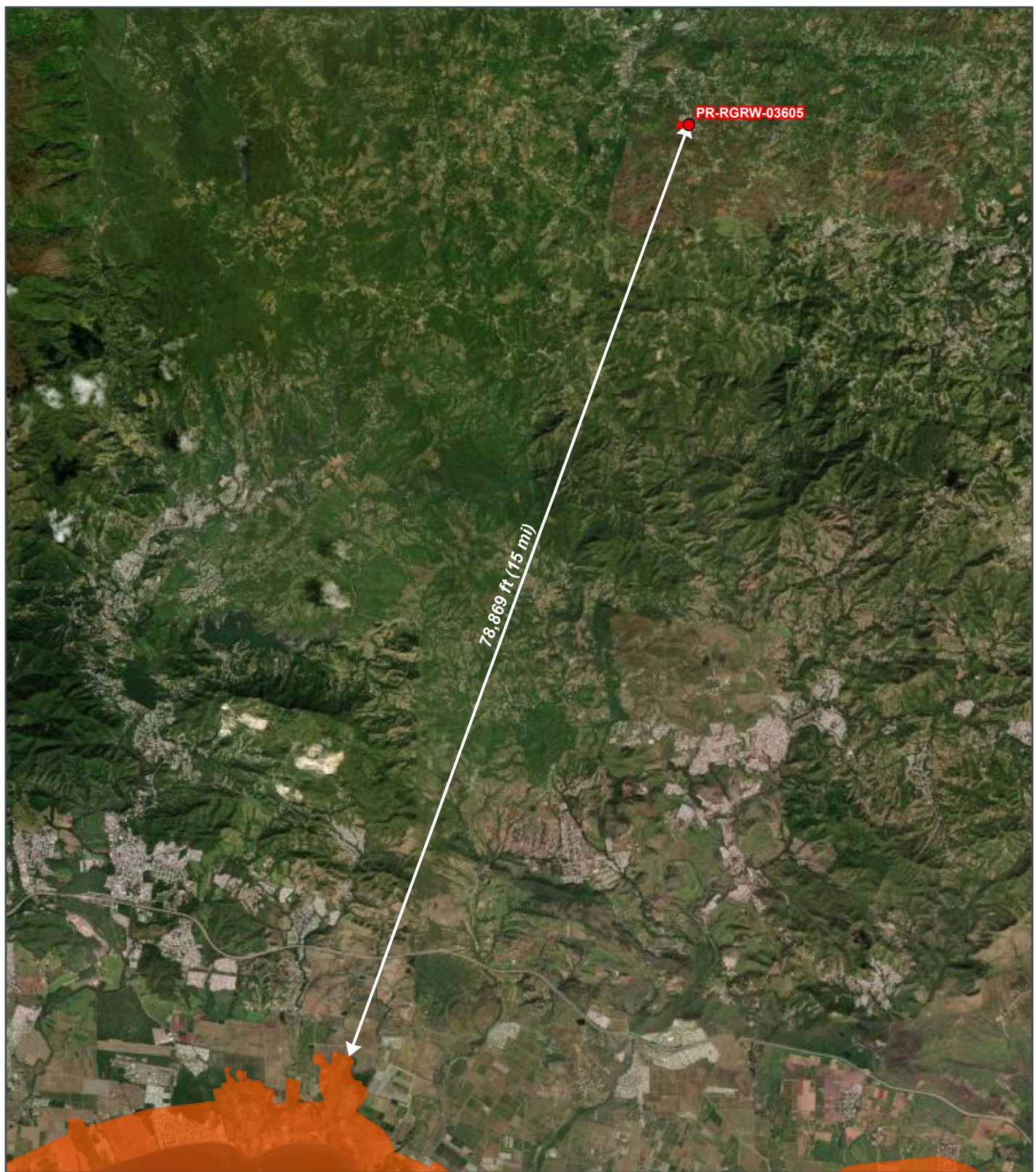
Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project site is not located within the Puerto Rico Coastal Management Zone. The closest coastal zone area is located 78,869 ft (15 mi) from the project site. No further evaluation is required.



REGROW PROGRAM

Figure B 5-1: Coastal Zone Management Map

Applicant ID: PR-RGRW-03605

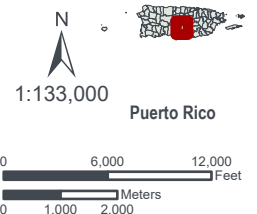
SWCA
ENVIRONMENTAL CONSULTANTS

● Site

Coastal Management Zone

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.416781°W 18.111652°N

Data Source: <https://coast.noaa.gov/arcgis/rest/services/Hosted/CoastalZoneManagementAct/BaseMap:ESRI/ArcGISOnline>
accessed February 2024
Updated: 2/19/2024
Layout: Coastal Zone Management
Aprx: 72428_ReGrowTier2Maps



Attachment 6

Contamination and Toxics Substances

Partner Worksheet, Radon Agency

Consultation, and Map



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Contamination and Toxic Substances (Multifamily and Non-Residential Properties) – PARTNER

<https://www.hudexchange.info/programs/environmental-review/site-contamination>

1. How was site contamination evaluated? ¹ Select all that apply.

- ☐ ASTM Phase I ESA
- ☐ ASTM Phase II ESA
- ☐ Remediation or clean-up plan
- ☐ ASTM Vapor Encroachment Screening
- ☒ None of the above

→ Provide documentation and reports and include an explanation of how site contamination was evaluated in the Worksheet Summary.

Continue to Question 2.

2. Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)

- ☒ No → Explain below.

No on-site RECs were identified during the site visit. A desktop review did not find any toxic, hazardous or radioactive substances in or within 3,000 ft of the project area that could affect the health and safety of project occupants or conflict with the intended use of the property.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

- ☐ Yes → Describe the findings, including any recognized environmental conditions (RECs), in Worksheet Summary below. Continue to Question 3.

¹ HUD regulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five or more dwelling units or non-residential property include the evaluation of previous uses of the site or other evidence of contamination on or near the site. For acquisition and new construction of multifamily and nonresidential properties HUD strongly advises the review include an ASTM Phase I Environmental Site Assessment (ESA) to meet real estate transaction standards of due diligence and to help ensure compliance with HUD’s toxic policy at 24 CFR §58.5(i) and 24 CFR §50.3(i). Also note that some HUD programs require an ASTM Phase I ESA.

3. Can adverse environmental impacts be mitigated?

☐ Adverse environmental impacts cannot feasibly be mitigated → HUD assistance may not be used for the project at this site. Project cannot proceed at this location.

☐ Yes, adverse environmental impacts can be eliminated through mitigation.

→ *Provide all mitigation requirements² and documents. Continue to Question 4.*

4. Describe how compliance was achieved. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls³, or use of institutional controls⁴.

[Click here to enter text.](#)

If a remediation plan or clean-up program was necessary, which standard does it follow?

☐ Complete removal

☐ Risk-based corrective action (RBCA)

→ *Continue to the Worksheet Summary.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project site was evaluated for potential contamination by conducting a field site inspection on February 15th, 2024 to identify any onsite hazards including, but not limited to, soil staining, above ground storage tanks, signs of underground storage tanks, odors, hazardous debris etc. The site inspection did not identify any onsite hazards. In addition, a desktop review of USEPA databases, NEPAassist, and other sources was conducted to determine if the project site was located near dump sites, junk yards, landfills, hazardous waste sites, or industrial sites, including USEPA National Priorities List Sites (Superfund sites), CERCLA or state-equivalent sites,

² Mitigation requirements include all clean-up actions required by applicable federal, state, tribal, or local law. Additionally, provide, as applicable, the long-term operations and maintenance plan, Remedial Action Work Plan, and other equivalent documents.

³ Engineering controls are any physical mechanism used to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls may include, without limitation, caps, covers, dikes, trenches, leachate collection systems, signs, fences, physical access controls, ground water monitoring systems and ground water containment systems including, without limitation, slurry walls and ground water pumping systems.

⁴ Institutional controls are mechanisms used to limit human activities at or near a contaminated site, or to ensure the effectiveness of the remedial action over time, when contaminants remain at a site at levels above the applicable remediation standard which would allow for unrestricted use of the property. Institutional controls may include structure, land, and natural resource use restrictions, well restriction areas, classification exception areas, deed notices, and declarations of environmental restrictions.

RCRA Corrective Action sites with release(s) or suspected release(s) requiring clean-up action and/or further investigation. The desktop review did not find any of the above-listed toxic, hazardous or radioactive substances in or within 3,000 ft of the project area that could affect the health and safety of project occupants or conflict with the intended use of the property.



GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

Memorandum to File

Date: September 30, 2024

From: Heath Anderson, Ph.D.
Deputy Program Manager
CDBG-DR Program
Re-Grow PR Urban-Rural Agriculture Program, Grant number B-17-DM-72-0001 &
B-18-DP-72-0001
Puerto Rico Department of Housing

Application Number: PR-RGRW-03605

Project: Centinela LLC

Re: Justification for the Infeasibility and Impracticability of Radon Testing

After reviewing Application Number PR-RGRW-03605 under the Re-Grow PR Urban-Rural Agriculture Program, administered by the Puerto Rico Department of Housing (**PRDOH**), to complete the property's contamination analysis in accordance with 24 C.F.R. § 50.3(i) and 24 C.F.R. § 58.5(i), we have determined that testing the property's radon levels is infeasible and impracticable.

Per the U.S. Department of Housing and Urban Development's (**HUD**) CPD Notice 23-103, the recommended best practices and alternative options for radon testing are infeasible and impracticable in this case due to the following reasons:

- As required by the CPD Notice 23-103, the scientific data reviewed in lieu of testing must consist of a minimum of ten documented test results over the previous ten years. If there are less than ten documented results over this period, it is understood that there is a lack of scientific data. The latest report for radon testing in Puerto Rico was prepared in 1995 by the U.S. Department of the Interior in Cooperation with the U.S. Environmental Protection Agency. No other completed studies and reports on radon testing are available in Puerto Rico.
- There is no available science-based or state-generated information for Puerto Rico for the last ten years that can be used to determine whether the project site is in a high-risk area. The Department of Health and Human Services, Centers for

Disease Control and Prevention (**CDC**), National Environmental Public Health Tracking, and Radon Testing map do not include Puerto Rico data.

- There are only two (2) licensed professionals in Puerto Rico who can conduct radon testing using the American National Standards Institute/American Association of Radon Scientists and Technologists (**ANSI/AARST**) testing standards, which makes it difficult, time-consuming, and highly expensive to coordinate and secure a site visit for the contamination evaluation.
- Do-it-yourself (**DIY**) radon test kits are known to be unreliable in assuring and controlling the quality of the test results; they are not readily available in Puerto Rico, and the cost and time required for purchasing and sending them for analysis are unreasonable when weighed against the results' reliability and the need for prompt results.
- Local authorities in Puerto Rico do not have the specialized radon monitoring equipment or trained staff needed to conduct the radon testing analysis and ensure proper quality control and quality assurance practices are adhered to. We also do not have a radiation laboratory certified for radon testing.
- The project does not involve any occupied structures, and therefore, is exempt from considering radon as part of the site contamination analysis as per HUD Notice CDP- 23-103.

As part of the evaluation for this determination, PRDOH sent information requests to six (6) local agencies at the state and federal levels. We received responses from the following agencies:

- United States Geological Survey;
- Centers for Disease Control and Prevention;
- Puerto Rico Department of Health; and
- United States Environmental Protection Agency.

The agencies mentioned above confirmed the lack of scientific data on Radon testing for Puerto Rico and the technical difficulties that we face to comply with HUD's Radon testing requirement. For the above-mentioned reasons, Radon testing is infeasible and impracticable for this property, and no further consideration of Radon is needed for the environmental review.

Radon Attachments



August 20, 2024

Mrs. Carmen R. Guerrero Pérez
Director
Caribbean Environmental Protection Division
City View Plaza II – Suite 7000
#48 Rd. 165 km 1.2
Guaynabo, PR 00968-8069

Via email: guerrero.carmen@epa.gov

RE: Request for information regarding available data on radon testing and levels within Puerto Rico

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

This Notice emphasizes the importance of radon testing and mitigation in ensuring safe living environments, particularly in HUD-assisted properties. PRDOH, as the grantee of the Community Development Block Grant for Disaster Recovery and Mitigation (CDBG-DR/MIT), is responsible for ensuring compliance with environmental requirements under CDBG-DR/MIT programs. To fulfill our obligations under this Notice, we must compile comprehensive and up-to-date information on radon levels, testing practices, and any mitigation efforts within the islands of Puerto Rico.

Specifically, we are seeking for possible availability of the following information:

Radon testing data – Results from radon testing conducted within your agency's purview, including details on location, testing methods, and recorded radon levels.

Barbosa Ave. #606, Building Juan C. Cordero Davila, Rio Piedras, PR 00981 | PO Box 21365 San Juan, PR 00928-1365
Tel: (787) 274-2527 | www.usenda.pr.gov



August 20, 2024

Dr. Silvina Cancelos
Professor
College of Engineering
University of Puerto Rico – Mayagüez Campus
259 Norte Blvd. Alfonso Valdés Cobián
Mayagüez, Puerto Rico

Via email: silvina.cancelos@upr.edu

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Reports and assessments – Any reports, studies, or assessments your agency has produced or commissioned that address radon testing or mitigation.

Policies and guidelines – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

Historical data – If available, historical data or trends in radon levels within the regions you monitor that may impact HUD-assisted housing.

This information is vital to ensure that our radon management strategies are practical and compliant with federal requirements. If some of this information may be sensitive or confidential, we are prepared to discuss any necessary agreements or protocols for sharing this data securely.

Please let us know if you require additional details or have any questions regarding this request. We would greatly appreciate your response by September 15, 2024, so we can incorporate this data into our ongoing compliance efforts.

Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

Sincerely,

William O. Rodríguez Rodríguez, Esq.
Secretary

Cc: Mr. Oleg Pavetko, Pavetko.Oleg@epa.gov
Mr. Matthew Laitila, laitila.matthew@epa.gov

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Sincerely,

William O. Rodríguez Rodríguez, Esq.
Secretary

Cc: Dr. Carlos Marín, carlos.marin3@upr.edu



August 20, 2024

Dr. Jessica Izárry
Director
Office of Island Affairs
U.S. Centers for Disease Control and Prevention
1324 Cll Canada, San Juan, 00920
Guaynabo, PR 00968-8069

Via email: OIA@cdc.gov

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Tel. (787) 274-2527 | www.viviendap.rg.pr.gov

CDBG-DR/MIT Program
Request for Information in relation with HUD CPD-23-103 for Puerto Rico
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Sincerely,


William O. Rodríguez Rodríguez, Esq.
Secretary



August 20, 2024

Mrs. Anais Rodríguez
Secretary
Puerto Rico Department of Natural Resources
Carretera 8838, km. 6.3, Sector El Cinco,
Río Piedras San Juan, PR 00926

Via email: anais.rodriguez@dma.pr.gov

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Sincerely,


William O. Rodríguez Rodríguez, Esq.
Secretary

Cc: Mr. Luis Márquez, secretariogaire@dma.pr.gov
Eng. Amarilis Rosario, aire@dma.pr.gov
Mrs. Elid Ortega, ortega@dma.pr.gov



GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

August 20, 2024

Dr. Carlos R. Mellado López
Secretary
Puerto Rico Department of Health
PO Box 70184
San Juan, PR 00936-8184

Via email: dr.carlos.mellado@salud.pr.gov

RE: Request for Information regarding available data on radon testing and levels within Puerto Rico

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GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

August 20, 2024

Mrs. Holly Weyers
Regional Director, Southeast – Puerto Rico
US Geological Survey
3916 Sunset Ridge Road
Raleigh, NC 27607

Via email: hweyers@usgs.gov

RE: Request for Information regarding available data on radon testing and levels within Puerto Rico

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CDBG-DR/MIT Program
Request for Information in relation with HUD CPD-23-103 for Puerto Rico
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William O. Rodríguez Rodríguez, Esq.
Secretary

Cc: Mr. Raúl Hernández Dabla, rhernandez2@salud.pr.gov

CDBG-DR/MIT Program
Request for Information in relation with HUD CPD-23-103 for Puerto Rico
Page 2 / 2

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William O. Rodríguez Rodríguez, Esq.
Secretary

Cc: Mr. R. Randall Schumann, rschumann@usgs.gov

From: Charp, Paul (CDC/NCEH/DEHSP) <pac4@cdc.gov>
Sent: Tuesday, September 3, 2024 6:36 AM
To: Miranda, Sandra (CDC/PHIC/DPS); Irizarry, Jessica (CDC/PHIC/DPS); Rzeszutarski, Peter (CDC/NCEH/DEHSP); Vinson, D. Aaron (CDC/NCEH/DEHSP)
Cc: Kostak, Liana (CDC/PHIC/DPS); Vazquez, Germaine (CDC/NCEH/DEHSP)
Subject: RE: REHi: Puerto Rico Request for Information- Randon testing and levels

Good morning, Sandra and others,

In response to the request from Mr. William Rodriguez of the Department of Housing, Government of Puerto Rico, I have reviewed all the available data within the CDC National Environmental Public Health Tracking Network system for data related to radon in Puerto Rico. In addition to the tracking data available on the internet, I also reached out to Mr. Aaron Vinson of the NCEH Tracking Branch.

I was not able to find any data in the CDC systems and this was confirmed by Mr. Vinson. We also reached out the US Environmental Protection Agency who indicated they had no radon data in their systems. Please relay this information to Mr. Rodriguez in your response to his requests

If you have any additional questions, please contact me.

Thank you and best regards,

Paul A. Charp, Ph.D., Fellow, HPS
Senior Health Physicist
Emerging Environmental Hazards and Health Effects Branch (EEHHEB)
Division of Environmental Health Science and Practice (DEHSP)
National Center for Environmental Health (NCEH)
Centers for Disease Control and Prevention (CDC)
pcharp@cdc.gov
770-488-0723 office
404.388.0614 Cell



From: Schumann, R. Randall <rschumann@usgs.gov>
Sent: Wednesday, August 21, 2024 4:39 PM
To: Melanie Medina Smaine <mmedina@vivienda.pr.gov>; Weyers, Holly S <hsweyers@usgs.gov>
Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez <aarivera@vivienda.pr.gov>
Subject: RE: Request for Information- Radon testing and levels

Dear Ms. Medina Smaine,

In the early 1990s the U.S. Geological Survey (USGS) conducted geologic assessments of radon potential for all 50 states and the territories of Guam and Puerto Rico, in collaboration with the U.S. EPA. I conducted the geologic radon potential assessment for Puerto Rico. The PDF file of the report is too large to attach to this message but it can be obtained at <https://pubs.usgs.gov/of/1993/0292k/report.pdf>. The USGS did not conduct indoor radon testing and we did not conduct field studies associated with this assessment; it was based on existing data. Mr. David Saldana of the Puerto Rico Department of Health kindly provided us with data for 610 homes that were tested for indoor radon by his agency between 1993 and 1995, which are summarized in the report. I am not aware of any other radon-related geologic studies conducted in the Commonwealth of Puerto Rico by the U.S. Geological Survey.

Best regards,

R. Randall Schumann
Scientist Emeritus
U.S. Geological Survey
Geosciences and Environmental Change Science Center
Denver, Colorado, USA
rschumann@usgs.gov
<https://www.usgs.gov/staff-profiles/r-randall-schumann>

From: Raul Hernandez Doble <rhernandez2@salud.pr.gov>
Sent: Wednesday, August 21, 2024 2:13:31 PM
To: Melanie Medina Smaine <mmedina@vivienda.pr.gov>; Dr. Carlos Mellado <drcarlos.mellado@salud.pr.gov>
Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez <aarivera@vivienda.pr.gov>; Mayra Toro Tirado <mtoro@salud.pr.gov>
Subject: RE: [EXTERNAL] Request for Information- Radon testing and levels

Good afternoon. Ms. Medina

I regret to inform that we do not have any recent information on radon testing, since we do not have a certified radiation laboratory certified for radon testing. There are companies that sell test kits available online that can be done and mailed to a testing laboratory. There are also lists of radon contractors and these companies that process radon testing cartridges with instructions, on the Environmental Protection Agency Indoor air Quality web page. The last radon study in Puerto Rico done by the PR Department of Health was done on the year 1993.

Raul Hernandez Doble
Director, Seccion Salud Radiologica
Division de Salud Ambiental
Secretaria Auxiliar para la Vigilancia y la Proteccion de la Salud Publica
rhernandez2@salud.gov.pr
Phone: (787)765-2929 ext. 3210

From: Reyes, Brenda <Reyes.Brenda@epa.gov>
Sent: Wednesday, September 18, 2024 11:48 AM
To: Cesar O Rodriguez Santos <cesarrodriguez@drna.pr.gov>; Maritza Rosa Olivares <maritzarosaolivares@drna.pr.gov>; Silvina Cancelos Mancini <silvina.cancelos@upr.edu>; Melanie Medina Smaine <mmedina@vivienda.pr.gov>
Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez <aarivera@vivienda.pr.gov>; Povetko, Oleg (he/him/his) <Povetko.Oleg@epa.gov>
Subject: RE: Request for Information- Randon testing and levels

Saludos.

La EPA esta trabajando una respuesta a su petición. Se sometió borrador a la directora y el subdirector para su aprobación y firma.

Brenda Reyes Tomassini
Public Affairs
U.S. EPA
Region 2
Caribbean Environmental Protection Division
(787) 977-5869/(787) 977-5865
Mobile: 202-834-1290

From: Silvina Cancelos Mancini <silvina.cancelos@upr.edu>
Sent: Friday, September 6, 2024 15:04
To: Melanie Medina Smaine <mmedina@vivienda.pr.gov>
Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez <aarivera@vivienda.pr.gov>; Maritza Rosa Olivares <maritzarosaolivares@drna.pr.gov>; Reyes, Brenda <Reyes.Brenda@epa.gov>; Povetko, Oleg <Povetko.Oleg@epa.gov>
Subject: Re: Request for Information- Randon testing and levels

Estimada Melanie Medina

Quería dejarle saber que recibimos su correo el 21 de agosto al igual que el de Maritza Rosa el pasado 4 de septiembre. Ya las personas involucradas de EPA, junto conmigo y el Dr. Marín estamos al tanto del asunto y estamos trabajando para poder enviarles la información.

Atentamente

Silvina Cancelos
Professor
Associate Director
Mechanical Engineering Department
University of Puerto Rico - Mayaguez
Call BOX 9000 Mayaguez PR 00680
Tel: 787-832-4040 ext 5956
email: silvina.cancelos@upr.edu



Bubble Dynamics Lab
University of Puerto Rico - Mayaguez



EPA REGION 2
CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION

September 23, 2024

VIA EMAIL

William O. Rodríguez Rodríguez, Esq.
Secretary
Puerto Rico Department of Housing
Barbosa Ave. 606 Building Juan C. Cordero
San Juan, PR 00917
Email: W.Rodriguez@vivienda.pr.gov

RE: EPA Response to August 20, 2024 request for information of data on radon testing and levels in Puerto Rico

Dear Honorable Secretary Rodríguez Rodríguez:

This communication is in response to your letter of August 20, 2024 addressed to the Puerto Rico Department of Natural and Environmental Resources (DNER) and referred to the U.S. Environmental Protection Agency (EPA) regarding available data on radon testing and levels within Puerto Rico.

EPA's National Radon Action Plan 2021–2025 sets a goal for the nation to find, fix and prevent high indoor radon levels in 8 million buildings by 2025 and prevent 3,500 lung cancer deaths per year. Under this Plan, leaders from across multiple sectors are working together to plan, guide, and sustain nationwide action to prevent exposure to radon.

Due to the lack of data in Puerto Rico, EPA undertook an investigation in collaboration with the University of Puerto Rico-Mayaguez (UPRM) Campus, Departments of Civil Engineering and Surveying and Mechanical Engineering, to find out if radon presented a problem in Puerto Rico. Up until 2021, the only data we had for Puerto Rico was a 1993-1995 mail-in radon screening study referred to by the U.S. Geological Survey report (USGS, 1995) in which the USGS concluded that several areas of Puerto Rico have the geologic potential to generate indoor radon levels exceeding the EPA Action Level of 4 pCi/L (picocuries per liter), perhaps locally reaching very high levels above 50 pCi/L, if a house construction and

ventilation allow for soil-gas radon to enter and concentrate within the structure.¹ According to the USGS report, most of these areas are located in the northwest part of the island. Please note that the actual 1993-1995 study documentation is not available to the EPA.

Typical radon testing technology used in mainland United States (charcoal canisters or electric-powered devices) are impractical in Puerto Rico because of high humidity and power outages. The recovery and rebuilding of communities following the aftermath of 2017 Hurricanes Irma and Maria presented an opportunity to develop radon prevention and mitigation strategies in 2019. Initially, EPA sampled indoor radon air in over 170 single-family residences in the municipalities of San Sebastián, Lares, Ciales, Arecibo, Morovis, Camuy, and Hatillo and later expanded the project to other municipalities such as Rincon, Aguada, Aguadilla, Isabela, Quebradillas, Barceloneta and Vega Baja. The quality assurance protocols were anchored in American National Standards Institute/American Association of Radon Scientists and Technologists (ANSI/AARST) standards of practice (ANSI/AARS, 2019). The sampling was designed in two stages: scoping and confirmatory sampling. The scoping sampling was conducted using Corentium Home (CH) electronic monitors and E-Perm systems. Locations measuring above the EPA Action Level of 4 pCi/L with CH were measured at the second stage of the sampling using RAD7 and Corentium Pro Continuous Radon Monitors (CRMs). Nationally certified radon sampling professionals led by one such professional from the UPRM conducted confirmatory sampling in the second stage. Also, during the study, the nationally certified radon mitigation professionals inspected several homes with elevated indoor radon levels.

Mapping radon in Puerto Rico proved to be a complicated endeavor given the COVID-19 pandemic in 2020. EPA and UPRM continue to work on the project, however, results have not been finalized, and no scientific report has been published yet. Unfortunately, EPA cannot share preliminary data at this time because it contains privileged information. Nevertheless, preliminary data from the study does show homes with levels over 4 pCi/L (EPA Action Level) that might need mitigation to protect the health of their inhabitants.

Although many states have developed laws and regulations governing radon disclosure, certification, and mitigation, Puerto Rico lacks legislation or mandatory radon testing provisions for new construction, remodeling, selling or buying homes. Given this loophole and aiming to answer your request, the EPA can provide information on Best Management Practices for sampling indoor radon in Puerto Rico.

¹ Reference: USGS. Geologic Radon Potential of Guam and Puerto Rico, Report 93-292-K. Washington, DC: USGS. Retrieved 9/11/2024, from <https://pubs.usgs.gov/of/1993/0292k/report.pdf>.

CITY VIEW PLAZA II BUILDING, 7TH FLOOR
ROUTE 185 GUAYNABO, PR 00988

2

If you have any questions or need any additional information, please contact me at 787-977-5865 or guerrero.carmen@epa.gov or have your staff contact Reyes, Brenda at reyes.brenda@epa.gov or (787) 977-5869.

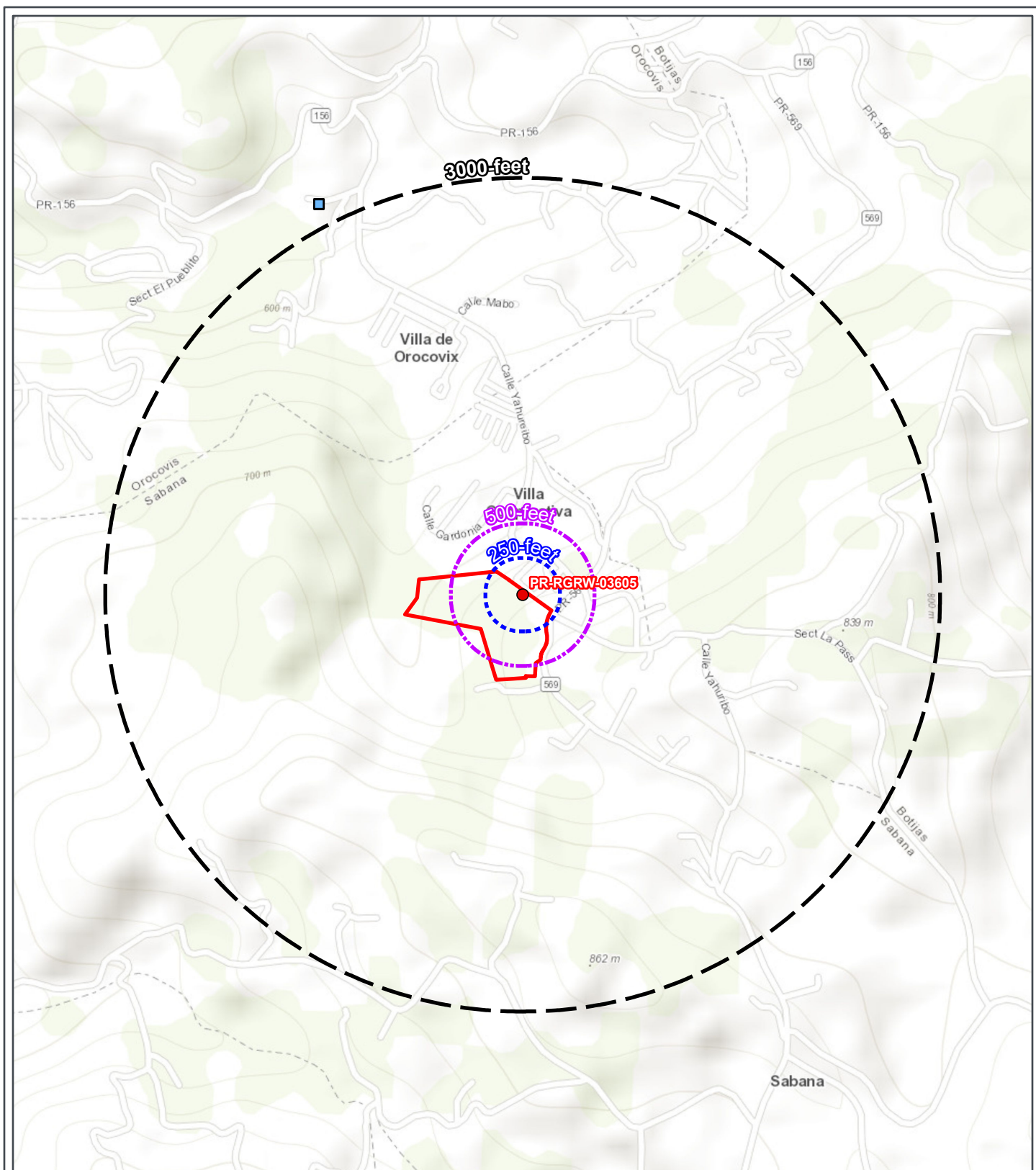
Sincerely,

CARMEN
GUERRERO
PEREZ

Carmen R. Guerrero Pérez
Director

Digitally signed by
CARMEN GUERRERO PEREZ
Date: 2024.09.23 09:41:39
-04'00'

cc: Roberto Mendez, Esq (Acting Secretary, PR Department of Natural and Env. Resources)
Melany Medina: mmedina@vivienda.pr.gov
Elaine Dume Mejia: Edume@vivienda.pr.gov
Luz S Colon Ortiz: Lcolon@vivienda.pr.gov
Aldo A. Rivera-Vazquez: arivera@vivienda.pr.gov
Cesar O. Rodriguez: cesarrodriiguez@drna.pr.gov
Marita Rosa Olivares: maritzarosaolivares@drna.pr.gov



REGROW PROGRAM

Figure B 6-1: Contamination and Toxic Substances Map

Applicant ID: PR-RGRW-03605

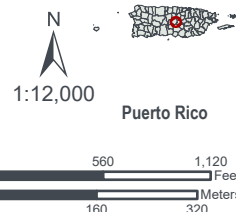
SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Buffer (250-feet)
- Buffer (500-feet)
- Buffer (3000-feet)
- Water dischargers

- Toxic Substances Control Act
- Toxic releases
- Superfund
- Hazardous waste
- Brownfields
- Air pollution

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: <https://geopub.epa.gov/arcgis/rest/services/EMEF/lepoints/MapServer>
Base Map: ESRI ArcGIS Online, accessed February 2024
Updated: 2/19/2024
Layout: Contamination and Toxic Substances



Attachment 7

Endangered Species Act Partner Worksheet, Threatened and Endangered Species Technical Memorandum, USFWS IPaC Species List and Critical Habitat Map



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Endangered Species Act (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/endangered-species>

1. Does the project involve any activities that have the potential to affect species or habitats?

☐ No, the project will have No Effect due to the nature of the activities involved in the project.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

☐ No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office.

Explain your determination:

[Click here to enter text.](#)

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

☐ Yes, the activities involved in the project have the potential to affect species and/or habitats. → Continue to Question 2.

2. Are federally listed species or designated critical habitats present in the action area?

Obtain a list of protected species from the Services. This information is available on the [FWS Website](#).

☐ No, the project will have No Effect due to the absence of federally listed species and designated critical habitat.

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation may include letters from the Services, species lists from the Services’ websites, surveys or other documents and analysis showing that there are no species in the action area.

☐ Yes, there are federally listed species or designated critical habitats present in the action area. → Continue to Question 3.

3. Recommend one of the following effects that the project will have on federally listed species or designated critical habitat:

☐ No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate.*

☐ May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

→ Partner entities should not contact the Services directly. *If the RE/HUD agrees with this recommendation, they will have to complete Informal Consultation. Provide the RE/HUD with a biological evaluation or equivalent document. They may request additional information, including surveys and professional analysis, to complete their consultation.*

☐ Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

→ Partner entities should not contact the Services directly. *If the RE/HUD agrees with this recommendation, they will have to complete Formal Consultation. Provide the RE/HUD with a biological evaluation or equivalent document. They may request additional information, including surveys and professional analysis, to complete their consultation.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

[Click here to enter text.](#)



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Caribbean Ecological Services Field Office
Bayamón | Mayagüez | Maricao | Río Grande | St Croix
P.O. Box 491
Boquerón, Puerto Rico 00622



In Reply Refer to:
FWS/R4/CESFO/72107-Gen

Submitted Via Electronic Mail: jcperez@vivienda.pr.gov

Juan Carlos Pérez-Bofill, PE, MEng.
Director – Disaster Recovery CDBG-DR Program
Puerto Rico Department of Housing
P.O. Box 21365
San Juan, P.R 00928-1365

Re: CDBG-DR PR-RGRW-03605 Centinela
LLC., Orocovis, Puerto Rico

Dear Mr. Pérez-Bofill

Thank you for your letter dated June 10, 2024, requesting informal consultation on the above referenced project. As per your request, our comments are provided under the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The Puerto Rico Department of Housing (PRDOH) is proposing the construction of a new greenhouse (40 feet (ft) x 30 feet) with a maximum height of approximately 15 ft and will be anchored to the ground using a total of eight, 2.5-inch diameter steel poles. The proposed greenhouse will be located on a 10.32-acre property on State Road PR-569 Km 1.6 (18°12'47.0"N 66°22'43.6"W) in the municipality of Orocovis. Construction of the greenhouse may require minimal vegetation removal (mowing), but no tree clearing is proposed.

Using the U.S. Fish and Wildlife Service's (Service) Information for Planning and Consultation (IPaC) system, the PRDOH has determined that the proposed project (Project code: 2024-0054254) site is located within the range of Puerto Rican boa (*Epicrates inornatus* now known as *Chilabothrus inornatus*), Puerto Rican broad-winged hawk (*Buteo platypterus brunnescens*) and Puerto Rican parrot (*Amazona vittata*).

Based on the nature of the project, scope of work, information available, and analysis of the existing habitat (relatively flat, maintained mowed lawn), PRDOH has determined that the proposed project may affect, but is not likely to adversely affect (NLAA) the Puerto Rican boa and Puerto Rican broad-winged hawk. Conservation measures developed by the Service for the Puerto Rican boa will be implemented in case an encounter with this species occur. As for the Puerto Rican parrot, PRDOH has determined that the proposed actions will have no effect (NE) on this species

due to the lack of suitable habitat, since the project area consists of an open maintained lawn.

We acknowledge receipt of PRDOH's NE determination for the Puerto Rican parrot. Currently, we do not have information to refute that determination. Because the PRDOH made a NE determination, PRDOH is not required to conduct formal or informal section 7 consultation with the Service, and the Service is not required to concur with PRDOH's NE determination.

We have reviewed the information provided and our files, and concur with PRDOH's determination that the proposed project may affect, but is not likely to adversely affect the Puerto Rican boa and Puerto Rican broad-winged hawk with the implementation of the conservation measures. Although there will be no tree removal, the Service recommends that PRDOH implement the following conservation measures for the bird species in case an encounter occurs:

1. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973, as amended. During breeding seasons (see below), nest surveys shall be conducted if a project occurs within the range of any of the species listed above and if habitat for those species will be impacted by the proposed actions. Nest searches must be conducted by qualified personnel with the appropriate permits from the Puerto Rico Department of Natural and Environmental Resources (PRDNER) prior to start of work. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 50-meter buffer around any nest(s) found within the project area. This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently.
 - Breeding Seasons:
 - Puerto Rican parrot: February-June.
 - Puerto Rican broad-winged hawk: December-June.
2. Outside the breeding season no nest surveys are required, but if a nest is encountered, all construction activities or human disturbance must be avoided within a 50-meter buffer around that nest(s). This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. Furthermore, if any of the species indicated above is observed (e.g., foraging, resting) within the project area, avoid any disturbance to the individual(s) and do not flush the bird until it leaves on its own.
3. For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office at Caribbean_es@fws.gov. For questions, the Point of Contact (POC) is José Cruz-Burgos, Endangered Species Program Coordinator, and can be contacted at:
 - Mobile: 305-304-1386
 - Office phone: 786-244-0081
 - Office Direct Line: 939-320-3120
 - Email: jose_cruz-burgos@fws.gov

In view of this, we believe that requirements of section 7 of the Endangered Species Act (Act) have been satisfied. However, obligations under section 7 of the Act must be reconsidered if: (1)

new information reveals impact of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed, or critical habitat determined that may be affected by the identified action.

Thank you for the opportunity to comment on this project. If you have any questions or require additional information, please contact us via email at caribbean_es@fws.gov or by phone at (786) 244-0081.

Sincerely,

Lourdes Mena
Field Supervisor

drr



ENVIRONMENTAL CONSULTANTS

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Tel 281.617.3217 Fax 281.617.3227
www.swca.com

June 6, 2024

Robert Tawes
Division Supervisor, Environmental Review
U.S. Fish and Wildlife Service
Southeast Regional Office
1875 Century Boulevard
Atlanta, GA 30345
Email: robert_tawes@fws.gov

**Re: Federally Listed Threatened and Endangered Species Evaluation for the Puerto Rico
Department of Housing ReGrow PR-RGRW-03605 Project/ SWCA Project No. 72428**

Dear Mr. Tawes:

SWCA Environmental Consultants (SWCA), on behalf of the Puerto Rico Department of Housing, is requesting informal consultation under Section 7(a)(2) of the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 *et seq.*), and in accordance with the Fish and Wildlife Coordination Act (47 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) for the proposed ReGrow PR-RGRW-03605 Project (project). The Project is located on a 10.32-acre (ac) parcel in the municipality of Orocovis, Puerto Rico. Carretera 569 KM 1.6, Orocovis, Puerto Rico, 00720, (66.378771°W 18.213055°N).

The proposed Project involves the construction of a new greenhouse. Construction of the greenhouse may require minimal vegetation removal (mowing), but no tree clearing is proposed.

Using the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system, we have determined that the proposed project lies within the range of the following federally listed species:

Species	Listing Status
Puerto Rican Boa (<i>Chilabothrus inornatus</i>)	Endangered
Puerto Rican Broad-winged Hawk (<i>Buteo platypterus brunnescens</i>)	Endangered
Puerto Rican Parrot (<i>Amazona vittata</i>)	Endangered

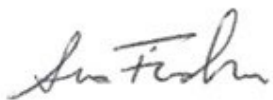
No designated or proposed critical habitat for any listed species was identified within the project area. Based on the nature of the project, scope of work, information available, and a careful analysis of the existing habitat, we have made the following effects determinations:

Species	Effect Determination	Conservation Measures to be Implemented
Puerto Rican Boa (<i>Chilabothrus inornatus</i>)	Not likely to adversely affect (NLAA)	Puerto Rican Boa General Project Design Guidelines
Puerto Rican Broad-winged Hawk (<i>Buteo platypterus brunnescens</i>)	Not likely to adversely affect (NLAA)	No Conservation Measures
Puerto Rican Parrot (<i>Amazona vittata</i>)	No effect (NE)	No Conservation Measures

In accordance with the 2024 Puerto Rican Boa General Project Design Guidelines, if a Puerto Rican Boa (PR Boa) is found in the project action site, work shall cease until the individual moves off on its own. If the PR 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 PR Boa.

In order to complete the informal consultation process, we are requesting your concurrence for the NLAA determinations included in this letter. Attached to this letter, we are including the documents used to reach our effect determinations for the listed species. If you have any questions or require any additional information, please contact me at (346) 388-1157 or susan.fischer@swca.com.

Sincerely,



Susan Fischer
Wildlife Ecologist
SWCA Environmental Consultants

Attachments: Threatened and Endangered Species Technical Memorandum



ENVIRONMENTAL CONSULTANTS

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10245 West Little York Road, Suite 600
Houston, Texas 77040
Tel 281.617.3217 Fax 713.896.3189
www.swca.com

TECHNICAL MEMORANDUM

To: Caribbean Ecological Services Field Office
U.S. Fish and Wildlife Service
P.O. Box 491
Boquerón, Puerto Rico 00622

From: Susan Fischer, Project Biologist on behalf of the Puerto Rico Department of Housing

Date: June 6, 2024

Re: **Threatened and Endangered Species Evaluation for the Puerto Rico Department of Housing ReGrow PR-RGRW-03605 Project/ SWCA Project No. 72428**

Project Description

Ernie E. Ortiz Ortiz, Centinela LLC, the applicant, is proposing to construct a new greenhouse on a 10.32-acre (ac) parcel in the municipality of Orocovis, Puerto Rico. (project) (Appendix A, Figure 1). The project is located at Carretera 569 KM 1.6, Orocovis, Puerto Rico, 00720, in a rural area. The proposed greenhouse is 1,200 square feet (40 feet by 30 feet) with a maximum height of approximately 15 ft and will be anchored to the ground using a total of eight, 2.5-inch diameter steel poles. (Appendix A, Figure 2).

Existing conditions

The existing habitat conditions at the proposed greenhouse location consists of relatively flat, maintained mowed lawn. Forested areas are located west and northwest of the project location. There is one stream just west of the parcel boundary, approximately 780 ft west of the proposed greenhouse location (Appendix A, Figure 3). Minor vegetation removal/mowing may be needed but no tree clearing will be required for the project. The project will have minimal ground disturbance associated with the installation of the greenhouse poles. Representative photographs of the proposed locations are provided in Appendix B.

Federally Protected Species

SWCA obtained a federal threatened and endangered species list from the USFWS (2024a) Information for Planning and Consultation ("IPaC") website for a 100-foot buffer around the greenhouse location (review area) (Appendix C). The IPaC automatically generates a list of species and other resources of concern, such as critical habitat, that are known or expected to be in the specified area and could potentially be directly or indirectly affected. According to the IPaC query for the project, three federally listed endangered species has the potential to occur in the review area; the Puerto Rican broad-winged hawk (*Buteo platypterus brunnescens*), Puerto Rican parrot (*Amazona vittata*) and the Puerto Rican boa (*Chilabothrus inornatus*). SWCA also evaluated the review area for potential habitat for bald eagles (*Haliaeetus leucocephalus*) and

golden eagles (*Aquila chrysaetos*) as they are protected by the Bald and Golden Eagle Protection Act of 1940 (“BGEPA”).

The bald and golden eagle’s range do not extend into Puerto Rico (Cornell Lab of Ornithology 2024); therefore, these species were eliminated from further analysis for this project. Table 1 identifies the species carried forward for further evaluation and summarizes each species’ habitat requirements, potential for occurrence in the project area, and determination of effects.

Table 1. Federally Listed Species Range and/or Habitat Requirements

Common Name (Scientific Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Project Area	Determination of Effects/Impacts
Birds				
Puerto Rican Broad-winged Hawk (<i>Buteo platypterus brunnescens</i>)	FE	The Puerto Rican broad-winged hawk occurs in elfin woodland, sierra palm, caimitillo-granadillo, and tabonuco forest types of the Río Abajo Commonwealth Forest, Carite Commonwealth Forest, and El Yunque National Forest as well as within hardwood plantations, shade coffee plantations, and mature secondary forests (USFWS 2019).	<i>Unlikely to occur.</i> The proposed project area consists of open maintained lawn.	<i>May affect, but not likely to adversely affect.</i> See discussion below.
Puerto Rican Parrot (<i>Amazona vittata</i>)	FE	The Puerto Rican parrot is a frugivorous cavity nester. It depends on mature forests with large cavity forming trees. (USFWS 2009). It is currently confined to the Maricao Forest, El Yunque National Forest, and the Río Abajo Forest (USDA Forest Service 2024).	<i>Unlikely to occur.</i> The proposed project area consists of open maintained lawn.	<i>No effect.</i> There is no suitable habitat for Puerto Rican parrots in the project area.
Reptiles				
Puerto Rican Boa (<i>Chilabothrus inornatus</i>)	FE	Considered to be a habitat generalist, the Puerto Rican boa tolerates a wide variety of terrestrial and arboreal habitats, including rocky areas, haystack hill, trees, and branches, rotting stumps, caves, plantations, various types of forested areas such as karst and mangrove forests, forested urban and rural areas, and along streams and road edges (USFWS 2011).	<i>Unlikely to occur.</i> The proposed project area consists of open maintained lawn.	<i>May affect, but not likely to adversely affect.</i> See discussion below.

*Status Definitions:
FE = Federally listed endangered

The Caribbean Determination Key (DKey) was completed for the project, which generated a *may affect* determination for the Puerto Rican boa and a *may affect, but is not likely to adversely affect* determination for the Puerto Rican broad-winged hawk (Appendix D). Based on a site visit and habitat evaluations, the Puerto Rican boa, Puerto Rican broad-winged hawk, and Puerto Rican parrot, are considered unlikely to occur due to lack of suitable habitat within the project areas. The applicant will employ the conservation measures outlined in the 2024 USFWS General Project Design Guidelines for the Puerto Rican boa (Appendix E), including but not limited to issuing a stop work if a Puerto Rican boa were to occur within the project area, and contacting the Puerto Rico Department of Natural and Environmental Resources for safe capture and relocation of the individual if such action is required. Therefore, it is anticipated that the project *may affect, but is not likely to adversely affect* the Puerto Rican boa and the Puerto Rican broad-winged hawk, and will have *no effect* on the Puerto Rican parrot.

Critical Habitat and National Wildlife Refuges

Potential effects to habitat(s) within the project area critical to endangered species must be analyzed along with the endangered species themselves, while any activity proposed on National Wildlife Refuge lands must undergo a compatibility determination conducted by the Refuge. No designated critical habitats are present within 100-feet of any of the proposed project location options (Appendix A, Figure 4) (USFWS 2024b).

LITERATURE CITED

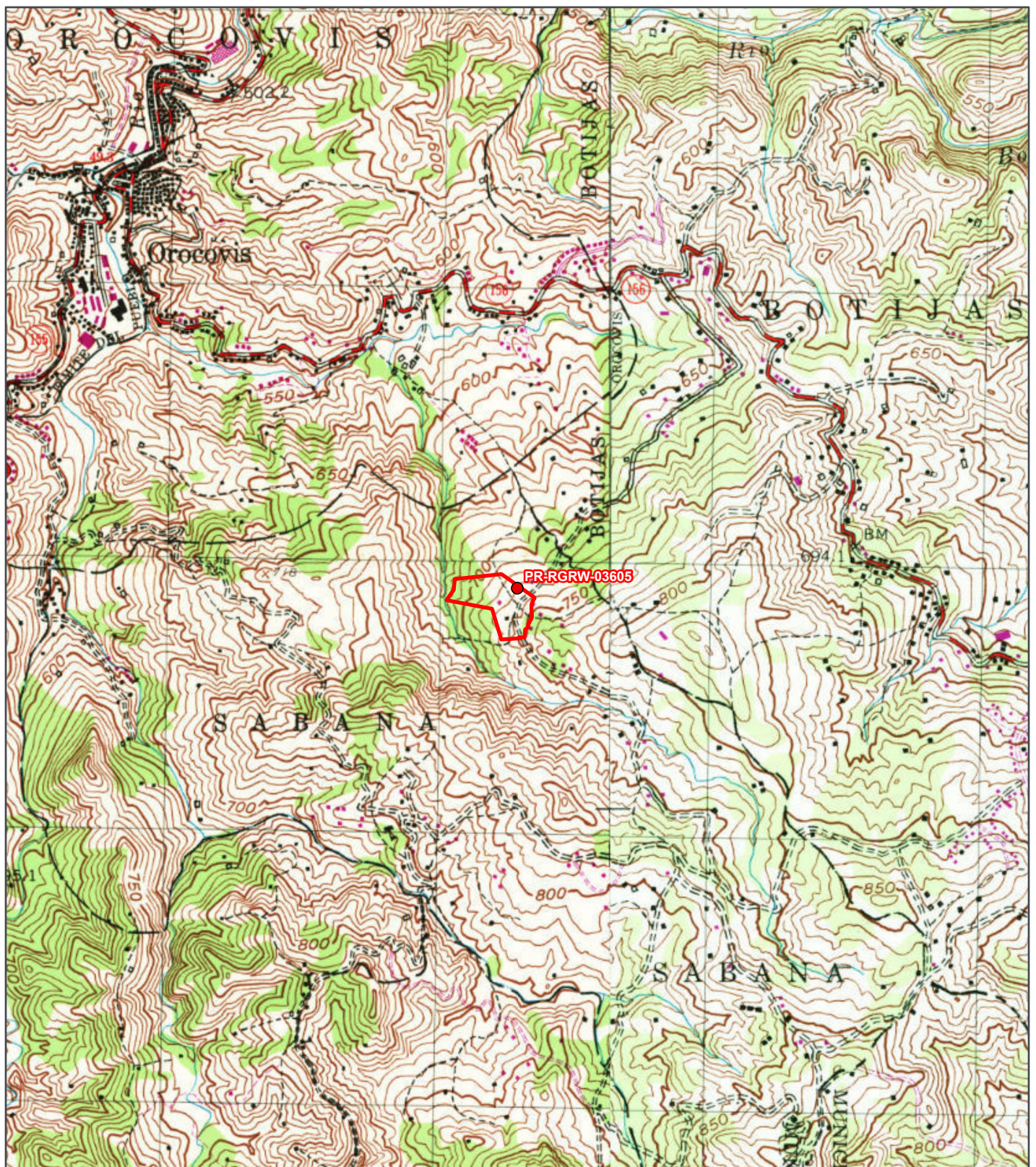
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- U. S. Fish and Wildlife Service (USFWS). 2011. *Puerto Rican Boa* (*Epicrates inornatus*) *5-Year Review: Summary and Evaluation*. U.S. Fish and Wildlife Service, Southeast Region. Boquerón, Puerto Rico.
- . 2019. *Puerto Rican broad-winged hawk or guaraguao de bosque* (*Buteo platypterus brunnescens*) *5-Year Review: Summary and Evaluation*. U.S. Fish and Wildlife Service, Southeast Region. Boquerón, Puerto Rico.
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- . 2024b. Critical Habitat for Threatened & Endangered Species [USFWS]. Available at: <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>. Accessed February 2024.

APPENDIX A

Maps

Figure 1

USGS Topographic Map



REGROW PROGRAM

USGS Topographic Map

Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: USGS Topographic Map
Aprx: 72428_ReGrowTier2Maps

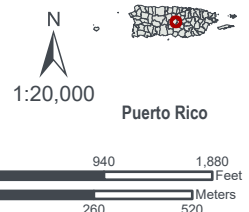


Figure 2
Site Vicinity Map



REGROW PROGRAM

Site Vicinity

Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.378771°W 18.213055°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Site Vicinity
Aprx: 72428_ReGrowTier2Maps

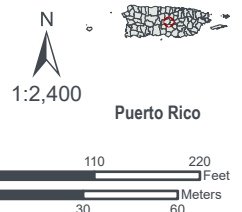
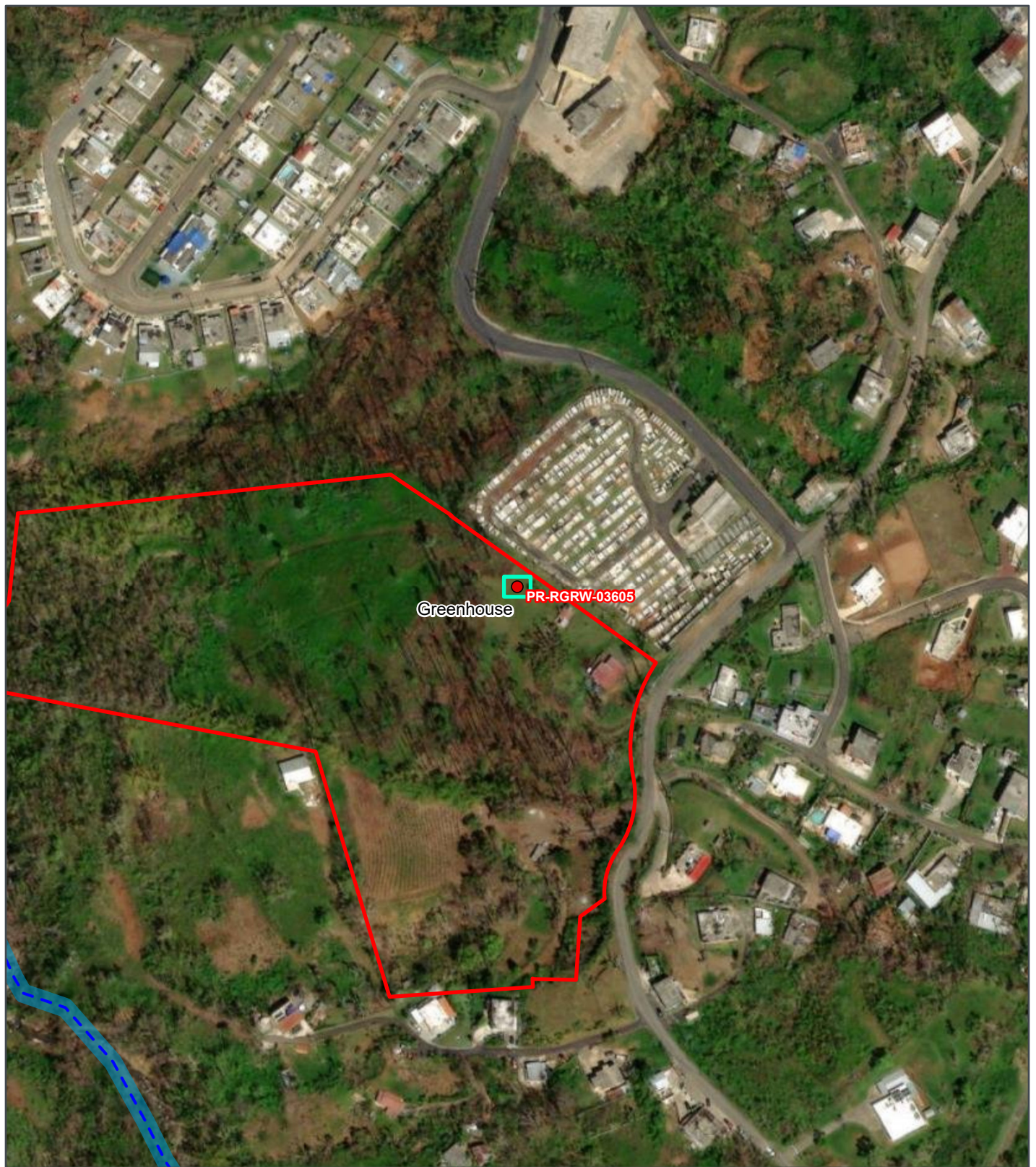


Figure 3
Wetlands Map



REGROW PROGRAM

Wetlands Protection Map

Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)
- - - NHD Stream
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: <https://apps.nationalmap.gov/downloader/#/>
<https://www.fws.gov/program/national-wetlands-inventory/data-download>
Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/23/2024
Layout: Wetlands Protection

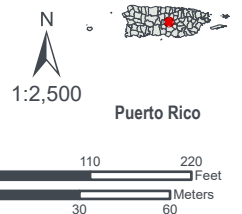
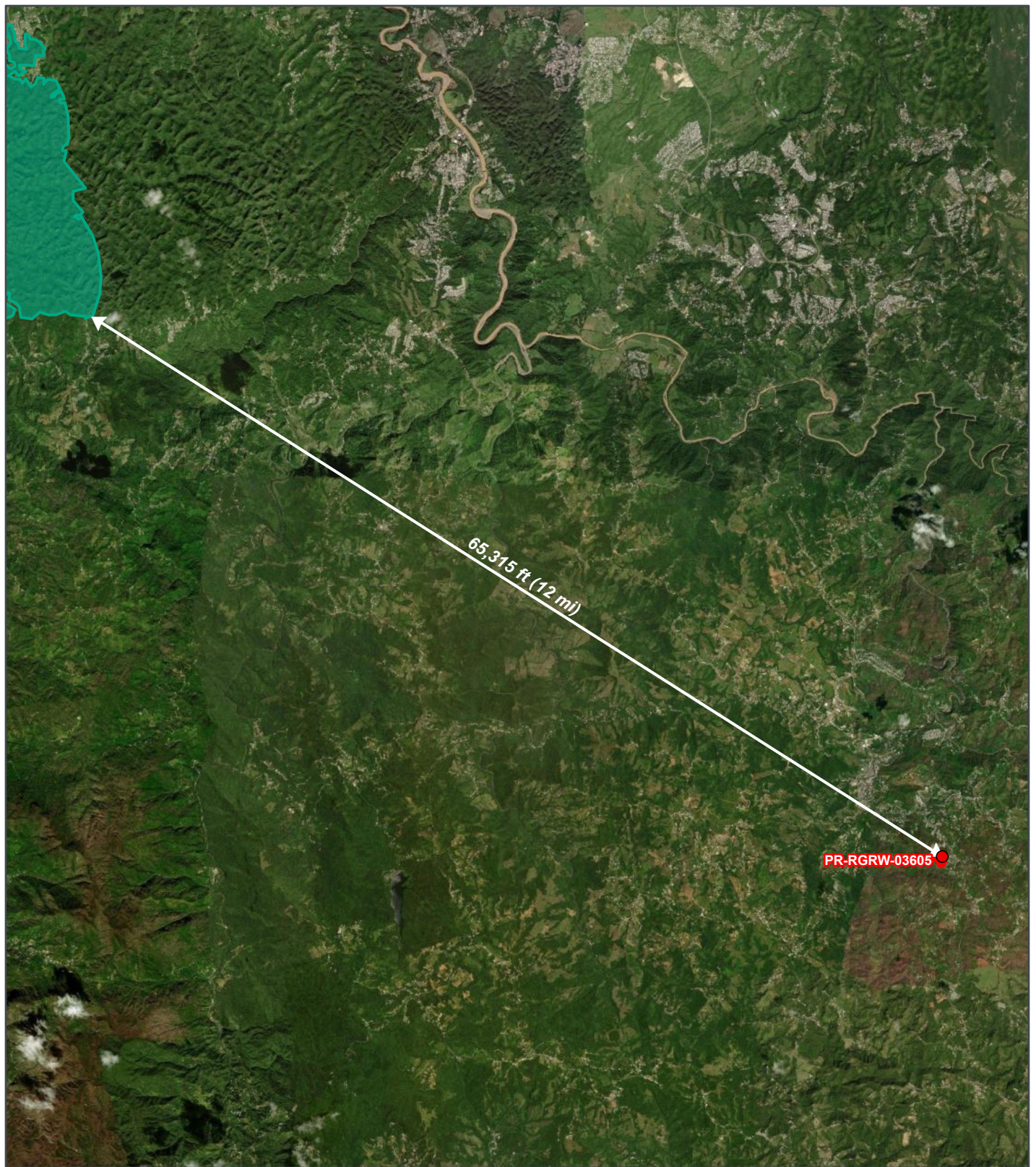


Figure 4
Critical Habitat Map



REGROW PROGRAM

Critical Habitat Map

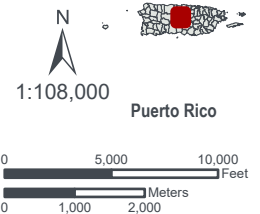
Applicant ID: PR-RGRW-03605



- Site
- Site Parcel
- Critical Habitat - Final
- National Wildlife Refuges

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.457299°W 18.261877°N

Data Source: https://services.arcgis.com/QVENGdaPbd4LUkLV/arcgis/rest/services/USFWS_Critical_Habitat/Base_Map/ESRI/ArcGIS/Online,
accessed February 2024
Updated: 2/19/2024
Layout: Critical Habitat
Aprx: 72428_ReGrowTier2Maps



APPENDIX B

Photographic Log

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795



Photo #: 01	Date: 02/15/24	
Photo Direction: Northwest		
Description: This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing downhill. This is a "head on" view of where the greenhouse would be installed. In the right center portion of the photo there is a partial view of a cemetery that is adjacent to the property.		

Photo #: 02	Date: 02/15/24	
Photo Direction: South/southeast		
Description: This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing uphill. This is a "head on" view of where the greenhouse would be installed. In the upper left portion of the photo there is a partial view of a small ranch storage area and behind it is the house.		

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795

Photo #: 03	Date: 02/15/24	
Photo Direction: West		
Description: This photo is facing the western corner of the proposed 40' x 30' x 15' greenhouse from the eastern corner of the proposed greenhouse. There is a gentle downward slope beyond where the greenhouse would be installed. There is a plantain crop in the background.		

Photo #: 04	Date: 02/15/24	
Photo Direction: East		
Description: This photo is facing the eastern corner of the proposed 40' x 30' x 15' greenhouse from the western corner of the proposed greenhouse. There is a gentle upward slope beyond where the greenhouse would be installed. There is a cemetery on the other side of the fence seen here.		

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795

Photo #: 05	Date: 02/15/24
Photo Direction: West	
Description: This photo is facing downhill from where the greenhouse will be installed and shows a downward sloping plantain crop. Beyond this crop, the terrain becomes steeper and beyond what is visible is a stream (photo #06).	




Photo #: 06	Date: 02/15/24	
Photo Direction: West/close-up		
Description: This is a close-up photo of the stream that runs adjacent to property. This is not near the intended project location and will not be used as part of the project.		

APPENDIX C

USFWS Information for Planning and Consultation Species List



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



In Reply Refer To:
Project Code: 2024-0054254
Project Name: PR-RGRW-03605

February 26, 2024

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. 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

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

PROJECT SUMMARY

Project Code: 2024-0054254

Project Name: PR-RGRW-03605

Project Type: Disaster-related Grants

Project Description: Construction of a new greenhouse.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.213731799999998,-66.37782700838605,14z>



Counties: Orocovis County, Puerto Rico

ENDANGERED SPECIES ACT SPECIES

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

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

BIRDS

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

REPTILES

NAME	STATUS
Puerto Rican Boa <i>Chilabothrus inornatus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6628 General project design guidelines: https://ipac.ecosphere.fws.gov/project/URWIPPQECBCRDIKCYGTP6XW47M/documents/generated/7159.pdf	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.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

-
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 Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

-
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.

IPAC USER CONTACT INFORMATION

Agency: SWCA

Name: Kaitie Wilms

Address: 911 Hammond Drive

City: North Augusta

State: SC

Zip: 29841

Email: kaitie.wilms@swca.com

Phone: 8436930711

APPENDIX D

USFWS Consistency Letter



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

In Reply Refer To:
Project code: 2024-0054254
Project Name: PR-RGRW-03605

February 26, 2024

Subject: Consistency letter for the project named 'PR-RGRW-03605' 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 February 26, 2024, Kaitie Wilms used the Caribbean DKey; dated January 19, 2024, 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-03605'. The project is located in Orocovis County, Puerto Rico (shown below).

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.213731799999998,-66.37782700838605,14z>



The following description was provided for the project 'PR-RGRW-03605':

Construction of a new greenhouse.

Based on your answers and the assistance of the Service's Caribbean DKey, you made the following effect determination(s) for the proposed Action:

Species	Listing Status	Determination
Puerto Rican Boa (<i>Chilabothrus inornatus</i>)	Endangered	May affect
Puerto Rican Broad-winged Hawk (<i>Buteo platypterus brunnescens</i>)	Endangered	NLAA

Consultation with the Service is not complete. Further consultation with the Caribbean Ecological Services office is required for those species with a determination of "may affect" listed above. Please contact the Caribbean Ecological Services office to discuss methods to avoid or minimize potential adverse effects to those species.

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.

Action Description

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

1. Name

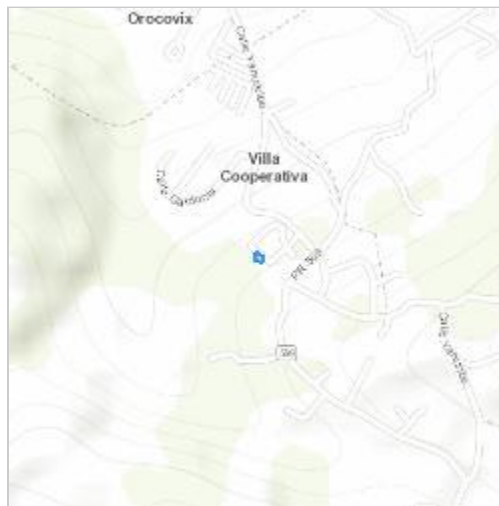
PR-RGRW-03605

2. Description

The following description was provided for the project 'PR-RGRW-03605':

Construction of a new greenhouse.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.213731799999998,-66.37782700838605,14z>



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")?

No

10. Is the proposed project adjacent or within a forested area?

Note: Examples of immediately adjacent to forested areas are rock walls and haystack hills (“mogotes”), wet montane forest, lowland wet forest, remnant coastal, mangrove forest, damp and dry limestone karst forests, pastureland with patches of exotic trees.

Yes

11. Is the project area more than 1 acre?

No

12. Is the proposed project an existing facility or the expansion of an existing facility within the footprint of the already developed area?

No

13. Is the proposed project a new facility which would require earth moving, vegetation clearing, or debris removal using heavy machinery, the use of staging areas, construction of temporary access roads?

No

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

Automatically answered

Yes

15. Will the proposed project be conducted during the Puerto Rican sharp-shinned hawk or Puerto Rican Broad-winged hawk breeding season between December and July?

No

16. If nests are detected within the project area, will the proposed project avoid any disturbance until fledging leaves the nest permanently?

Yes

17. Outside of the breeding season, in the event of a Sharp-shinned hawk nest encounter, would a buffer zone be implemented?

Note: The species or nests might be found out of the breeding season. A buffer zone is an area around the detected nests where no actions or activities can take place. The buffer zone should be clearly marked or delineated in the field and in the project plans.

Yes

18. Will the Fish and Wildlife Service and the Department of Natural Resources be notified immediately if a nest is detected?

Yes

19. Does the proposed project intersect the Puerto Rican Broad-winged hawk area of influence?

Automatically answered

Yes

IPAC USER CONTACT INFORMATION

Agency: SWCA

Name: Kaitie Wilms

Address: 911 Hammond Drive

City: North Augusta

State: SC

Zip: 29841

Email: kaitie.wilms@swca.com

Phone: 8436930711

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Housing and Urban Development

APPENDIX E

Project Design Guidelines

General Project Design Guidelines (1 Species)

Generated February 26, 2024 06:26 PM UTC, IPaC v6.105.1-rc1

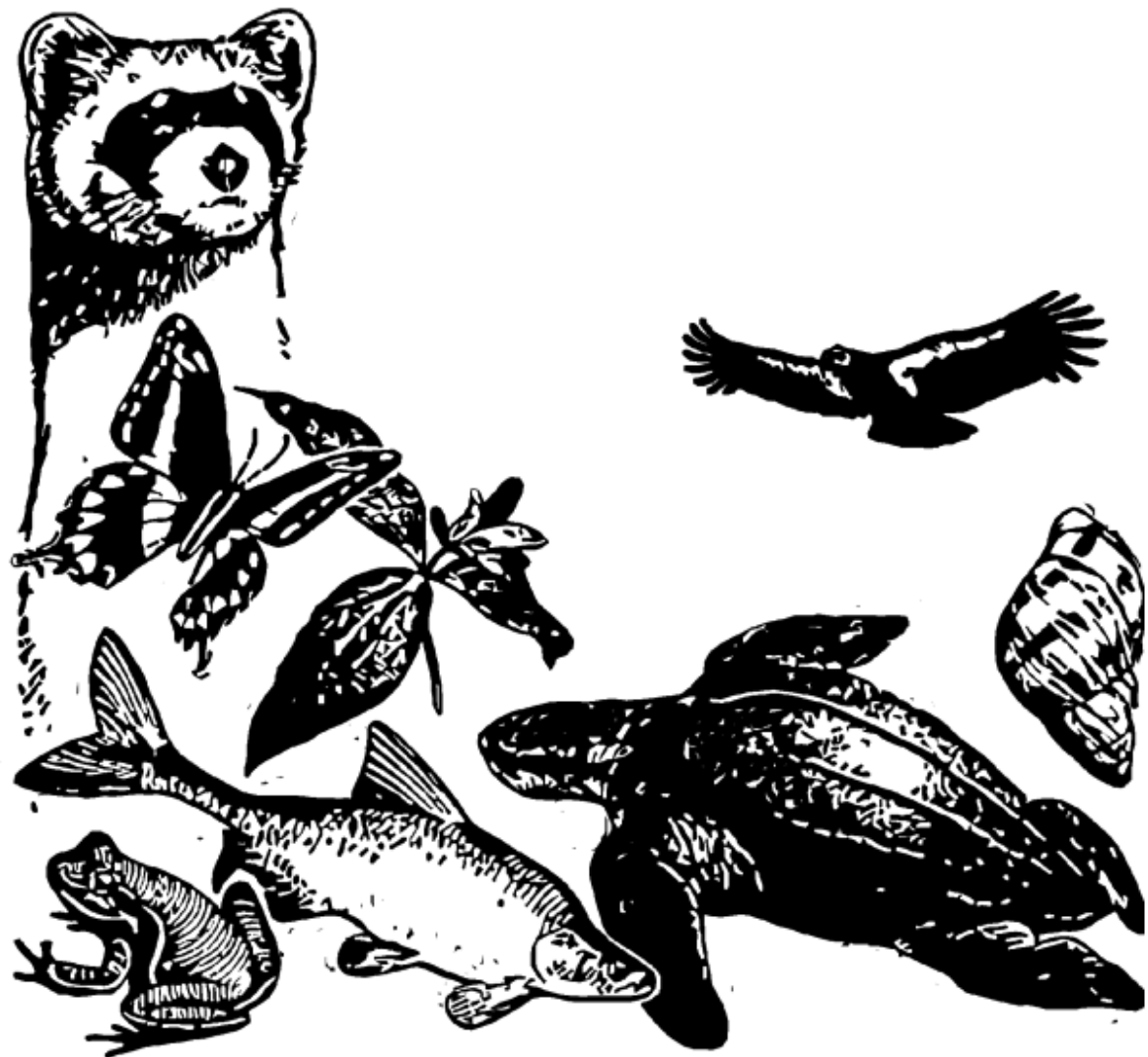


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Puerto Rican Boa - Caribbean Ecological Services Field Office	2

Species Document Availability

Species with general design guidelines

Puerto Rican Boa *Chilabothrus inornatus*

Species without general design guidelines available

Puerto Rican Broad-winged Hawk *Buteo platypterus brunnescens*

Puerto Rican Parrot *Amazona vittata*

General Project Design Guidelines - Puerto Rican Parrot and 2 more species

Published by Caribbean Ecological Services Field Office for the following species included in your project

Puerto Rican Parrot *Amazona vittata*

Puerto Rican Boa *Chilabothrus inornatus*

Puerto Rican Broad-winged Hawk *Buteo platypterus brunnescens*



U.S. FISH AND WILDLIFE SERVICE CARIBBEAN ECOLOGICAL SERVICES FIELD OFFICE

Conservation Measures for the Puerto Rican boa (*Chilabothrus inornatus*)

Section 7 (a)(1) of the Endangered Species Act (ESA) charges Federal agencies to aid in the conservation of listed species, and section 7 (a)(2) requires the agencies, through consultation with the U.S. Fish and Wildlife Service (Service), to ensure their activities are not likely to jeopardize the continued existence of listed species or adversely modify designated critical habitats. Section 7 applies to the management of Federal lands as well as Federal actions that may affect federally listed species, such as Federal approval of private activities through the issuance of Federal funding, permits, licenses, or other actions. Any person that injures, captures, or kills a Puerto Rico boa is subject to penalties under the ESA. If Federal funds or permits are needed, the funding or permitting agency should initiate Section 7 consultation with the Service. To initiate a consultation under the Section 7 of the ESA, you must submit a project package with the established minimum requirements. These conservation measures should be incorporated into the project plans to minimize possible impacts to the species.

The endangered Puerto Rican (PR) boa (*Chilabothrus inornatus*, formerly *Epicrates inornatus*) is the largest endemic snake species that inhabits Puerto Rico. The PR boa is non-venomous and does not pose any life threatening danger to humans, but some individuals may try to bite if disturbed or during capture or handling. Its body color ranges from tan to dark brown with irregular diffuse marking on the dorsum, but some individuals lack marking and are uniformly dark. Juveniles may have a reddish color with more pronounced markings. In general, as they mature, their body color tends to darken.



The PR boa was federally listed in 1970. Currently, the species has an island-wide distribution and occurs in a wide variety of habitat types, ranging from wet montane to subtropical dry forest and can be found from mature forest to areas with different degrees of human disturbance such as roadsides or houses, especially if near their habitat in rural areas. The PR boa is considered mostly nocturnal, remaining less active, concealed or basking under the sun during the day.

The Service has developed the following conservation measures with the purpose of assisting others to avoid or minimize adverse effects to the PR boa and its habitat. These recommendations may be incorporated into new project plans and under certain circumstances into existing projects. Depending on the project, additional conservation measures can be implemented besides the ones presented in this document.

Conservation Measures:

1. Inform all project personnel about the potential presence of the PR boa in areas where the proposed work will be conducted. A pre-construction meeting should be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming PR boas. An educational poster or sign with photo or illustration of the species should be displayed at the project site.
2. Prior to any construction activity, including removal of vegetation and earth movements, the boundaries of the project and areas to be excluded and protected should be clearly marked in the project plan and in the field in order to avoid further habitat degradation into forested and conservation areas.
3. Once areas are clearly marked, and prior to the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), a biologist or project personnel with experience on this species should survey the areas to be cleared to verify the presence of any PR boa within the work area.
4. If a PR boa is found within any of the working or construction areas, activities should stop at that area and information recorded (see #5). **Do not capture the boa.** If boas need to be moved out of harm's way, designated personnel shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #s: (787) 724-5700, (787) 230-5550, (787) 771-1124). **If immediate relocation is not an option, project-related activities at that area must stop until the boa moves out of harm's way on its own.** Activities at other work sites, where no boas have been found after surveying the area, may continue.
5. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. PR boa data should also include a photo of the animal (dead or alive), site GPS coordinates, the time and date, and comments on how the animal was detected and its behavior.

6. If a PR boa is captured by PRDNER personnel, record the name of that person and information on where the PR boa will be taken. This information should be reported to the Service.
7. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal, and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal (see #4). If not possible, the animal should be left alone until it leaves the vehicle on its own.
8. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future.
9. If a dead PR boa is found, immediately cease all work in that area and record the information accordingly (see #5). If the PR boa was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what actions will be taken to avoid further killings. A dead boa report should be sent by email (see contacts below) to the Service within 48 hours of the event.
10. Projects must comply with all state laws and regulations. Please contact the PRDNER for further guidance.

If you have any questions regarding the above conservation measures, please contact the Service:

- José Cruz-Burgos, Endangered Species Program Coordinator
 - Email: jose_cruz-burgos@fws.gov
 - Office phone (305) 304-1386
- Jan Zegarra, Fish and Wildlife Biologist
 - Email: jan_zegarra@fws.gov
 - Office phone (786) 933-1451

Attachment 8

Explosive and Flammable Hazards Partner

Worksheet



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Explosive and Flammable Hazards (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities>

- 1. Does the proposed HUD-assisted project include a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?**

☒ No

→ Continue to Question 2.

☐ Yes

Explain:

[Click here to enter text.](#)

→ Continue to Question 5.

- 2. Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?**

☒ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

☐ Yes → Continue to Question 3.

- 3. Within 1 mile of the project site, are there any current *or planned* stationary aboveground storage containers:**

- Of more than 100-gallon capacity, containing common liquid industrial fuels OR
- Of any capacity, containing hazardous liquids or gases that are not common liquid industrial fuels?

☐ No → If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide all documents used to make your determination.

☐ Yes → Continue to Question 4.

- 4. Is the Separation Distance from the project acceptable based on standards in the Regulation?**

Please visit HUD’s website for information on calculating Acceptable Separation Distance.

☐ Yes

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the “assessed tank.”

☐ No

→ Continue to Question 6.

Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the “assessed tank.”

5. Is the hazardous facility located at an acceptable separation distance from residences and any other facility or area where people may congregate or be present?

Please visit HUD’s website for information on calculating Acceptable Separation Distance.

☐ Yes

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.

Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.

☐ No

→ Continue to Question 6.

Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.

6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to make the Separation Distance acceptable, including the timeline for implementation. If negative effects cannot be mitigated, cancel the project at this location.

Note that only licensed professional engineers should design and implement blast barriers. If a barrier will be used or the project will be modified to compensate for an unacceptable separation distance, provide approval from a licensed professional engineer.

[Click here to enter text.](#)

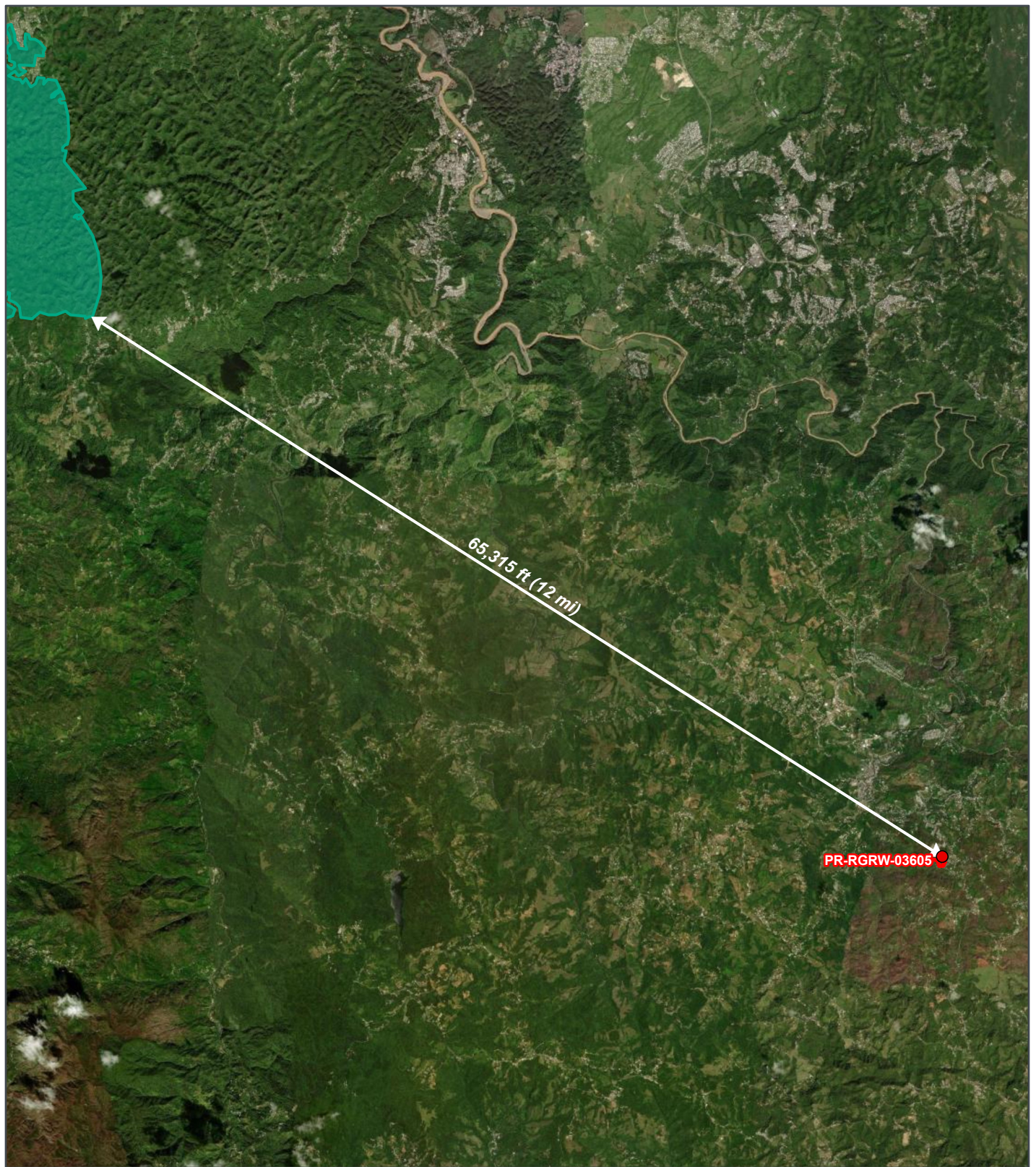
Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project includes the new construction of a greenhouse. The project itself is not the development of a hazardous facility nor will the project increase residential densities. No further evaluation is required.



REGROW PROGRAM

Figure B 7-1: Critical Habitat Map

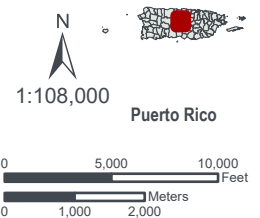
Applicant ID: PR-RGRW-03605

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- Site
- Site Parcel
- Critical Habitat - Final
- National Wildlife Refuges

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.457299°W 18.261877°N

Data Source: https://services.arcgis.com/QVENGdaPbd4LUkLV/arcgis/rest/services/USFWS_Critical_Habitat/Base_Map/ESRI/ArcGIS/Online,
accessed February 2024
Updated: 2/19/2024
Layout: Critical Habitat
Aprx: 72428_ReGrowTier2Maps



Attachment 9

**Farmlands Protection Partner Worksheet
and Prime Farmland Map**



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Farmlands Protection (CEST and EA) - PARTNER

<https://www.hudexchange.info/environmental-review/farmlands-protection>

1. Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?

☐ Yes → *Continue to Question 2.*

☒ No

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

2. Does “important farmland,” including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site?

You may use the links below to determine important farmland occurs on the project site:

- Utilize USDA Natural Resources Conservation Service’s (NRCS) Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- Check with your city or county’s planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non-agricultural does not exempt it from FPPA requirements)
- Contact NRCS at the local USDA service center <http://offices.sc.egov.usda.gov/locator/app?agency=nrcs> or your NRCS state soil scientist http://soils.usda.gov/contact/state_offices/ for assistance

☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

☐ Yes → *Continue to Question 3.*

3. Consider alternatives to completing the project on important farmland and means of avoiding impacts to important farmland.

- Complete form [AD-1006, “Farmland Conversion Impact Rating”](#) and contact the state soil scientist before sending it to the local NRCS District Conservationist.
- Work with NRCS to minimize the impact of the project on the protected farmland. When you have finished with your analysis, return a copy of form AD-1006 to the USDA-NRCS State Soil Scientist or his/her designee informing them of your determination.

Work with the RE/HUD to determine how the project will proceed. Document the conclusion:

☐ Project will proceed with mitigation.

Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

[Click here to enter text.](#)

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

☐ Project will proceed without mitigation.

Explain why mitigation will not be made here:

[Click here to enter text.](#)

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

This project does not include any activities that could potentially convert agricultural land to non-agricultural use. Per the USGS/NRCS Web Soil Survey, the project area crosses three mapped soil series: DaD (Daguey clay, 1 to 20 percent slopes); the (Humatas clay, 20 to 40 percent slopes); and MoF (Maricao clay, 20 to 60 percent slopes). Farmlands of statewide importance are within the project area. Although the project includes new construction, the project is exempt from review under the Farmland Protection Policy Act (FFPA) as the project is limited to construction of on-farm structures needed for farm operations. No further review is required.



REGROW PROGRAM

Figure B 9-1: Prime Farmland Map

Applicant ID: PR-RGRW-03605

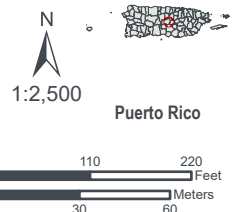
SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)
- All areas are prime farmland
- Farmland of statewide importance
- Farmland of statewide importance, if irrigated
- Prime farmland if drained

- Prime farmland if irrigated
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- /// Not prime farmland
- Not Public Information

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: <https://websoilsurvey.nrcs.usda.gov/app/>
Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Prime Farmland
Aprx: 72428_ReGrowTier2Maps



Attachment 10

**Floodplain Management Partner Worksheet
and Advisory Base Flood Elevation Map**



This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Floodplain Management (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/floodplain-management>

1. Does [24 CFR 55.12\(c\)](#) exempt this project from compliance with HUD’s floodplain management regulations in Part 55?

☐ Yes

Provide the applicable citation at 24 CFR 55.12(c) here. If project is exempt under 55.12(c)(6) or (8), provide supporting documentation.

[Click here to enter text.](#)

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Continue to the Worksheet Summary.

☒ No → Continue to Question 2.

2. Provide a FEMA/FIRM map showing the site.

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs).

Does your project occur in a floodplain?

☒ No → Continue to the Worksheet Summary below.

☐ Yes

Select the applicable floodplain using the FEMA map or the best available information:

☐ Floodway → Continue to Question 3, Floodways

☐ Coastal High Hazard Area (V Zone) → Continue to Question 4, Coastal High Hazard Areas

☐ 500-year floodplain (B Zone or shaded X Zone) → Continue to Question 5, 500-year Floodplains

☐ 100-year floodplain (A Zone) → The 8-Step Process is required. Continue to Question 6, 8-Step Process

3. **Floodways**

Is this a functionally dependent use?

☐ Yes

The 8-Step Process is required. Work with HUD or the RE to assist with the 8-Step Process.
→ *Continue to Worksheet Summary.*

- ☐ No → *Federal assistance may not be used at this location unless an exception in 55.12(c) applies. You must either choose an alternate site or cancel the project.*

4. Coastal High Hazard Area

Is this a critical action such as a hospital, nursing home, fire station, or police station?

- ☐ Yes → *Critical actions are prohibited in coastal high hazard areas unless an exception in 55.12(c) applies. You must either choose an alternate site or cancel the project.*

- ☐ No

Does this action include new construction that is not a functionally dependent use, existing construction (including improvements), or reconstruction following destruction caused by a disaster?

- ☐ Yes, there is new construction of something that is not a functionally dependent use.
New construction must be designed to FEMA standards for V Zones at 44 CFR 60.3(e) (24 CFR 55.1(c)(3)(i)).

→ *Continue to Question 6, 8-Step Process*

- ☐ No, this action concerns only existing construction.

Existing construction must have met FEMA elevation and construction standards for a coastal high hazard area or other standards applicable at the time of construction.

→ *Continue to Question 6, 8-Step Process*

5. 500-year Floodplain

Is this a critical action?

- ☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Continue to the Worksheet Summary below.*

- ☐ Yes → *Continue to Question 6, 8-Step Process*

6. 8-Step Process.

Is this 8-Step Process required? Select one of the following options:

- ☐ 8-Step Process applies.

This project will require mitigation and may require elevating structure or structures. See the link to the HUD Exchange above for information on HUD's elevation requirements.

→ *Work with the RE/HUD to assist with the 8-Step Process. Continue to Worksheet Summary.*

- ☐ 5-Step Process is applicable per 55.12(a)(1-3).

Provide the applicable citation at 24 CFR 55.12(a) here.

[Click here to enter text.](#)

→ *Work with the RE/HUD to assist with the 5-Step Process. Continue to Worksheet Summary.*

- ☐ 8-Step Process is inapplicable per 55.12(b)(1-4).

Provide the applicable citation at 24 CFR 55.12(b) here.

Click here to enter text.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

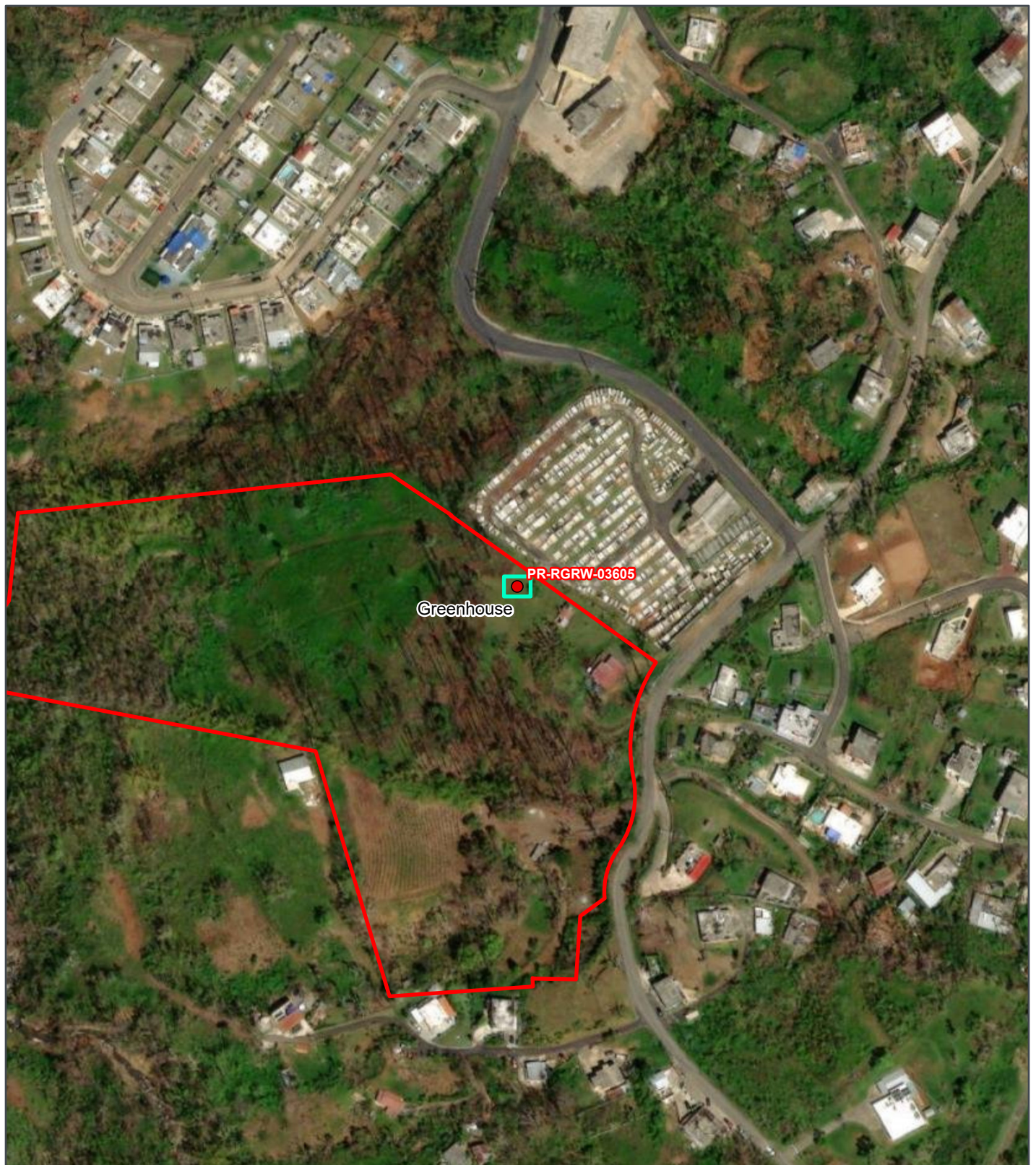
Include all documentation supporting your findings in your submission to HUD.

The FEMA FIRM, Community Panel 72000C1135H (effective date 4/19/2005), shows the project sites are in Flood Zone X. An Advisory Base Flood Elevation (ABFE) map was developed by FEMA for this FIRM, which shows the project site is in Flood Zone X. The project is not located in the 100-year floodplain or ABFE special flood hazard area; therefore, no further action is required.

PFIRMs in Puerto Rico were only developed for certain sections of the municipalities of Carolina, Canovanas, Loiza, San Juan and Trujillo Alto. The proposed project is located in the municipality of Orocovi; therefore, PFIRM information was not available for the area and therefore not considered in the review.

HUD implemented new floodplain regulations under 89 FR 30850 effective June 24, 2024 which created the Federal Flood Risk Management Standard (FFRMS). The project area lies outside of the 0.2-Percent-Annual-Chance (500-Year) Flood Approach:

The current project comprises non-critical actions that lie outside the 0.2-percent-annual-chance (500-year flood elevation), which is the approach used for this project to comply with the FFRMS.



REGROW PROGRAM

Figure B 10-1: Advisory Base Flood Elevation For 100-Year Floodplain Map

Applicant ID: PR-RGRW-03605

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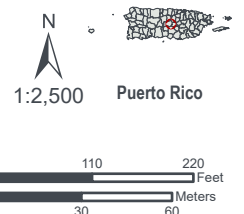
- | | |
|---|---|
| ● Site | ■ Zone AE |
| Site Parcel | Coastal A Zone |
| Project Footprint (Option) | Coastal A Zone and Floodway |
| ~ Advisory Base Flood Elevation (ABFE) | Zone AE-Floodway |
| — 0.2% Annual Chance Flood | Zone AO |
| — 1% Annual Chance Flood | Zone VE |
| Zone A | Zone X (500-year floodplain) |
| Zone A-Floodway | Zone/BFE Boundary |

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: https://gis.fema.gov/arcgis/rest/services/DR/PuertoRico_ABFE_1PCT/MapServer

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: ABFE 1Pct
Aprx: 72428_ReGrowTier2Maps



Attachment 11

**Historic Preservation Partner Worksheet
and SHPO Consultation**



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Historic Preservation (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/historic-preservation>

Threshold

Is Section 106 review required for your project?

- ☐ No, because a Programmatic Agreement states that all activities included in this project are exempt. (See the [PA Database](#) to find applicable PAs.)

Either provide the PA itself or a link to it here. Mark the applicable exemptions or include the text here:

[Click here to enter text.](#)

→ *Continue to the Worksheet Summary.*

- ☐ No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].

Either provide the memo itself or a link to it here. Explain and justify the other determination here:

[Click here to enter text.](#)

→ *Continue to the Worksheet Summary.*

- ☒ Yes, because the project includes activities with potential to cause effects (direct or indirect). → *Continue to Step 1.*

The Section 106 Process

After determining the need to do a Section 106 review, HUD or the RE will initiate consultation with regulatory and other interested parties, identify and evaluate historic properties, assess effects of the project on properties listed on or eligible for the National Register of Historic Places, and resolve any adverse effects through project design modifications or mitigation.

Step 1: Initiate consultation

Step 2: Identify and evaluate historic properties

Step 3: Assess effects of the project on historic properties

Step 4: Resolve any adverse effects

Only RE or HUD staff may initiate the Section 106 consultation process. Partner entities may gather information, including from SHPO records, identify and evaluate historic properties, and make initial assessments of effects of the project on properties listed in or eligible for the National Register of Historic Place. Partners should then provide their RE or HUD with all of their analysis and documentation so that they may initiate consultation.

Step 1 - Initiate Consultation

The following parties are entitled to participate in Section 106 reviews: Advisory Council on Historic Preservation; State Historic Preservation Officers (SHPOs); federally recognized Indian tribes/Tribal Historic Preservation Officers (THPOs); Native Hawaiian Organizations (NHOs); local governments; and project grantees. The general public and individuals and organizations with a demonstrated interest in a project may participate as consulting parties at the discretion of the RE or HUD official. Participation varies with the nature and scope of a project. Refer to HUD's website for guidance on consultation, including the required timeframes for response. Consultation should begin early to enable full consideration of preservation options.

Use the [When To Consult With Tribes checklist](#) within [Notice CPD-12-006: Process for Tribal Consultation](#) to determine if the RE or HUD should invite tribes to consult on a particular project. Use the [Tribal Directory Assessment Tool \(TDAT\)](#) to identify tribes that may have an interest in the area where the project is located. Note that only HUD or the RE may initiate consultation with Tribes. Partner entities may prepare a draft letter for the RE or HUD to use to initiate consultation with tribes, but may not send the letter themselves.

List all organizations and individuals that you believe may have an interest in the project here:
SHPO

→ Continue to Step 2.

Step 2 - Identify and Evaluate Historic Properties

Provide a preliminary definition of the Area of Potential Effect (APE), either by entering the address(es) or providing a map depicting the APE. Attach an additional page if necessary.
Map attached

Gather information about known historic properties in the APE. Historic buildings, districts and archeological sites may have been identified in local, state, and national surveys and registers, local historic districts, municipal plans, town and county histories, and local history websites. If not already listed on the National Register of Historic Places, identified properties are then evaluated to see if they are eligible for the National Register. Refer to HUD's website for guidance on identifying and evaluating historic properties.

In the space below, list historic properties identified and evaluated in the APE.

Every historic property that may be affected by the project should be listed. For each historic property or district, include the National Register status, whether the SHPO has concurred with the finding, and whether information on the site is sensitive. Attach an additional page if necessary.

N/A

Provide the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination.

Was a survey of historic buildings and/or archeological sites done as part of the project?

If the APE contains previously unsurveyed buildings or structures over 50 years old, or there is a likely presence of previously unsurveyed archeological sites, a survey may be necessary. For Archeological surveys, refer to HP Fact Sheet #6, [Guidance on Archeological Investigations in HUD Projects](#).

☐ Yes → *Provide survey(s) and report(s) and continue to Step 3.*

Additional notes:

[Click here to enter text.](#)

☒ No → *Continue to Step 3.*

Step 3 - Assess Effects of the Project on Historic Properties

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. ([36 CFR 800.5](#)) Consider direct and indirect effects as applicable as per HUD guidance.

Choose one of the findings below to recommend to the RE or HUD.

Please note: this is a recommendation only. It is **not the official finding, which will be made by the RE or HUD, but only your suggestion as a Partner entity.**

☒ No Historic Properties Affected

Document reason for finding:

☒ No historic properties present.

☐ Historic properties present, but project will have no effect upon them.

☐ No Adverse Effect

Document reason for finding and provide any comments below.

Comments may include recommendations for mitigation, monitoring, a plan for unanticipated discoveries, etc.

[Click here to enter text.](#)

☐ Adverse Effect

Document reason for finding:

Copy and paste applicable Criteria into text box with summary and justification.

Criteria of Adverse Effect: [36 CFR 800.5](#)]

[Click here to enter text.](#)

Provide any comments below:

Comments may include recommendations for avoidance, minimization, and/or mitigation.

The project will involve new construction of greenhouses on a previously disturbed property. State Historic Preservation Office (SHPO) consultation was performed.

No National Historic Landmark (NHL) are within or near the project area.

A site visit was conducted on February 15, 2024 by an SOI-qualified Archaeologist. Record reviews and research were conducted at the SHPO and the Instituto de Cultura Puertorriqueña (ICP) to determine if any archaeologically sensitive resources could be present within a 0.5-mile radius.

The results of the Record Search and the Site Inspection indicate that there are no historic properties or cultural resources within the 0.50-mile radius study area or within the project Area

of Potential Effect (APE). Based on the results of the historic property identification efforts, the Program has determined that project actions will not affect historic properties that compose the APE.

The determination was submitted to SHPO by PRDOH for concurrence on March 18, 2024, and SHPO concurred with the No Historic Properties Affected determination on March 20, 2024. No further evaluation is required.

Remember to provide all documentation that justifies your National Register Status determination and recommendations along with this worksheet.



GOVERNMENT OF PUERTO RICO

STATE HISTORIC PRESERVATION OFFICE

Executive Director | Carlos A. Rubio Cancela | carubio@prshpo.pr.gov

Wednesday, March 20, 2024

Lauren B Poche

269 Avenida Ponce de Leon, San Juan, PR, 00917

SHPO-CF-03-17-24-08 PR-RGRW-03605 (Orocovis), Centinela LLC

Ms. Poche,

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

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

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

Sincerely,

Carlos A. Rubio Cancela

State Historic Preservation Officer

CARC/GMO/ OJR



Cuartel de Ballajá (Tercer Piso), Calle Norzagaray, Esq. Beneficencia, Viejo San Juan, PR 00901 | PO Box 9023935, San Juan, PR 00902-3935

March 18, 2024

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-03605 – Centinela LLC – Carr 569 Km 1.6, Bo. Sabana, Orocovis, 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 were 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 Centinela LLC located at Carr 569 Km 1.6, Bo Sabana, in the municipality of Orocovis. The undertaking for this project includes the construction of a new greenhouse. The proposed greenhouse is 1,200 square feet (sq ft) (40 feet [ft] by 30 ft) with a maximum height of approximately 15 ft and will be anchored to the ground using a total of eight (8), 2.5-inch (in) diameter steel poles. The poles will extend a maximum of 2 ft into the ground and the holes will be backfilled with cement. The site location for the greenhouse is relatively flat; however, minor grading may be required to ensure the ground is level. Water will be connected to the greenhouse from a pre-existing, main valve located approximately 15 ft north of the project site.

Water is provided by the Puerto Rico Aqueducts and Sewers Authority (PRASA) and the connection will be above ground at the main valve to the greenhouse with a garden hose. Electricity is not required and will not be connected to the greenhouse.

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 or phone at 225-405-7676 with any questions or concerns.


Kindest regards,



Lauren Bair Poche, M.A.

Architectural Historian, EHP Senior Manager
LBP/JLE

Attachments

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination		
Applicant: Centinela LLC		
Case ID: PR-RGRW-03605	City: Orocovis	

Project Location: CARR 569 KM 1.6, BO SABANA, Orocovis, PR 00720	
Project Coordinates: 18.213244, -66.377795 (as provided by applicant during field visit)	
TPID (Número de Catastro): 245-020-034-08-000	
Type of Undertaking: <input type="checkbox"/> Substantial Repair/Improvements <input checked="" type="checkbox"/> New Construction	
Construction Date (AH est.): ca. 2000	Property Size (acres): 10.32 acres total Greenhouse: 0.027548 acre (1,200 sq. ft)

SOI-Qualified Architect/Architectural Historian: Julia Russ, M.U.R.P. and Erin Edwards, MPS
Date Reviewed: February 21, 2024
SOI-Qualified Archaeologist: Brian McNamara, M.A., R.P.A.
Date Reviewed: February 20, 2024

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 project includes construction of a new greenhouse. The proposed greenhouse is 1,200 square feet (sq ft) (40 feet [ft] by 30 ft) with a maximum height of approximately 15 ft and will be anchored to the ground using a total of eight (8), 2.5 inch (in) diameter steel poles. The poles will extend a maximum of 2 ft into the ground and the holes will be backfilled with cement. The site location for the greenhouse is relatively flat; however, minor grading may be required to ensure the ground is level. Water will be connected to the greenhouse from a pre-existing, main valve located approximately 15 ft north of the project site. Water is provided by the Puerto Rico Aqueducts and Sewers Authority (PRASA) and the connection will be made above ground at the main valve to the greenhouse with a garden hose. Electricity is not required and will not be connected to the greenhouse.

The project will have minimal ground disturbance associated with the installation of the greenhouse poles. Some vegetation clearing will occur, but no pruning or tree clearing is required for construction. The applicant owns the property; therefore, no acquisition is required.

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

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination	 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Applicant: Centinela LLC	
Case ID: PR-RGRW-03605	City: Orocovis


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 steel and concrete base plus a 15-meter horizontal buffer to allow for some variation in final placement during construction 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 archaeologist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) who searched the records at the SHPO and the Instituto de Cultura Puertorriqueña which shows that there are no previously recorded archaeological sites within a half-mile (mi) radius of the project location. Archaeological site SHPO#OR-01 was recorded in 1938 as being located on a Plateau along the Sabana River, however it was not relocated during a 2008 site inspection. The location SHPO last had recorded for this site was 0.62 mi (0.99 kilometer [km]) southwest of the project area, outside of the half mile radius considered for this Project.

Three archaeological evaluations and three Section 106 studies have been conducted within the 0.5-mi review radius with no cultural resources found. Phase IA/IB survey SHPO#04-29-80-01 was conducted in 1980 by Antonino Ramos Ramirez. This survey area is located 0.05 mi (0.08 km) north of the project location. SHPO#02-11-87-02-0 was a Phase IA/IB survey conducted by Juan Gonzalez Colón in 1981 located 0.17 mi (0.27 km) north of the project area. SHPO#08-07-81-01 was a Phase IA/IB survey conducted in 1981 by Miguel Rodriguez Lápez located 0.25 mi (0.4 km) north of the project site. Section 106 study SHPO#08-07-15-02 is located 0.25 mi (0.4 km) north of the project site and was carried out in 2016. SHPO#06-04-09-17 was a Section 106 study conducted 0.42 mi (0.68 km) northwest of the project location in 2009. Finally, Section 106 study SHPO#06-04-09-14 is 0.44 mi (0.71 km) north of the project site and was undertaken in 2009.

The proposed project is located in the central region of Puerto Rico, at an elevation of 2,394 ft (730 meters [m]) above mean sea level. Per the USGS/NRCS Web Soil Survey, the project area crosses three mapped soil series: DaD (Daguey clay, 1 to 20 percent slopes); the (Humatas clay, 20 to 40 percent slopes); and MoF (Maricao clay, 20 to 60 percent slopes). The project area APE is in the northern region of Sabana. The general project area is located on a flat forested valley within the central mountain region, adjacent to a residential setting. The closest freshwater source is an unnamed freshwater stream located 0.18 mi (0.28

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination		 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Applicant: Centinela LLC		
Case ID: PR-RGRW-03605	City: Orocovis	

kilometers [km]) west of the project area. The Atlantic coast is approximately 19 mi (30.5 km) north of the project area.

Identification of Historic Properties - Architecture

Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information, by a Program contracted Historic Preservation Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) shows that the project area is not within the boundaries of the National Register of Historic Places (NRHP)-eligible or listed Traditional Urban Center or Historic District. Three previous Section 106 evaluations (viz. SHPO#06-04-09-17, 06-04-09-14, and 08-07-15-02) have been conducted within the 0.5-mi review radius with no cultural resources found. These studies are discussed in the preceding section.


The property is in a mountainous, rural area with dense vegetation. Historic Aerials (<https://www.historicaerials.com/viewer>) imagery from 1958 indicates no development in the area, and no built structures on the parcel. Earth Explorer imagery (<https://earthexplorer.usgs.gov/>) from 1977 shows the beginning of development in the area, but not directly associated with the project parcel. 1995 imagery from Google Earth Pro indicates development near the parcel, but not of a historic age. Thus, the project will have no impact to cultural properties in the area.

Determination


The following historic properties have been identified within the APE:

- Direct Effect:
 - None
- Indirect Effect:
 - None

Based on the results of our historic property identification efforts, the Program has determined that no previously identified historic properties are located within or adjacent to the Area of Potential Effect. 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 is no reported archaeological materials or significant cultural properties within a half-mile radius of the proposed project location. 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-03065 is located. The closest freshwater body is approximately 0.18 mi (0.28 km) west of the project area. The size of the proposed project activities is very small (0.027548 acre) and

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination	 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Applicant: Centinela LLC	
Case ID: PR-RGRW-03605	City: Orocovi

construction of public roads/residential structures/agricultural infrastructure has impacted the surrounding terrain. Therefore, no historic properties will be affected by the proposed project activities.

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination		 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Applicant: Centinela LLC		
Case ID: PR-RGRW-03605		City: Orocovis

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"/> Concurs with the information provided. <input type="checkbox"/> Does not concur with the information provided.	
Comments:	
Carlos Rubio-Cancela State Historic Preservation Officer	Date:

Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

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



REGROW PROGRAM

Project Location Area of Potential Effects (APE) Map

Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

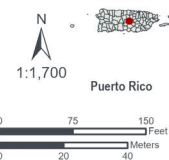
- Site
- ▭ Site Parcel
- ▭ Project Footprint (Option)
- ▭ APE (Buffer (15-meters))

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024

Layout: APE
Aprx: 72428_ReGrowTier2Maps

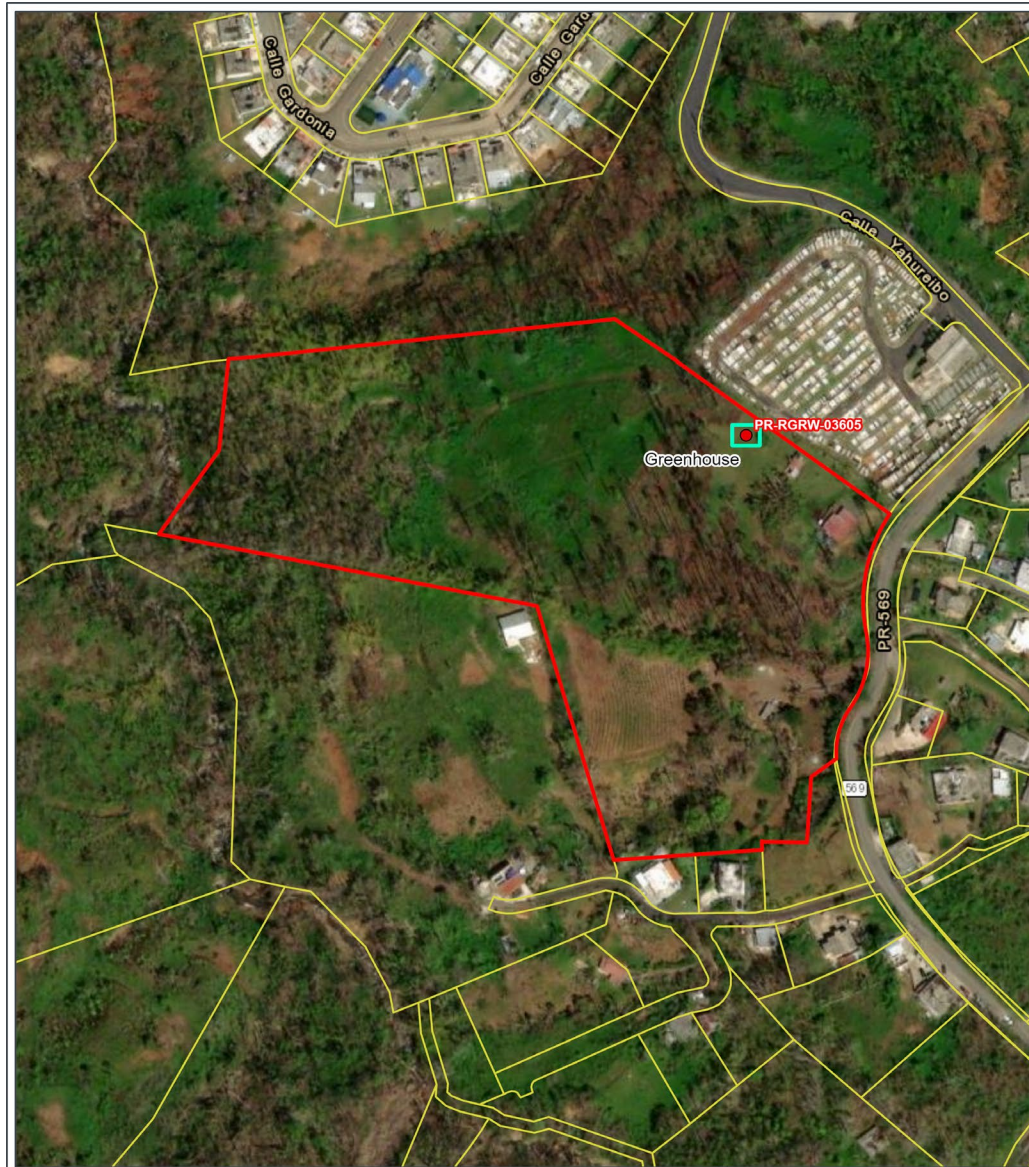


Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Project (Parcel) Location - Aerial Map



REGROW PROGRAM

**Figure A-2:
Site Vicinity**

Applicant ID: PR-RGRW-03605

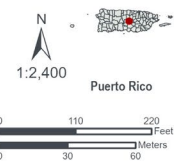
SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.378771°W 18.213055°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Site Vicinity
Aprx: 72428_ReGrowTier2Maps

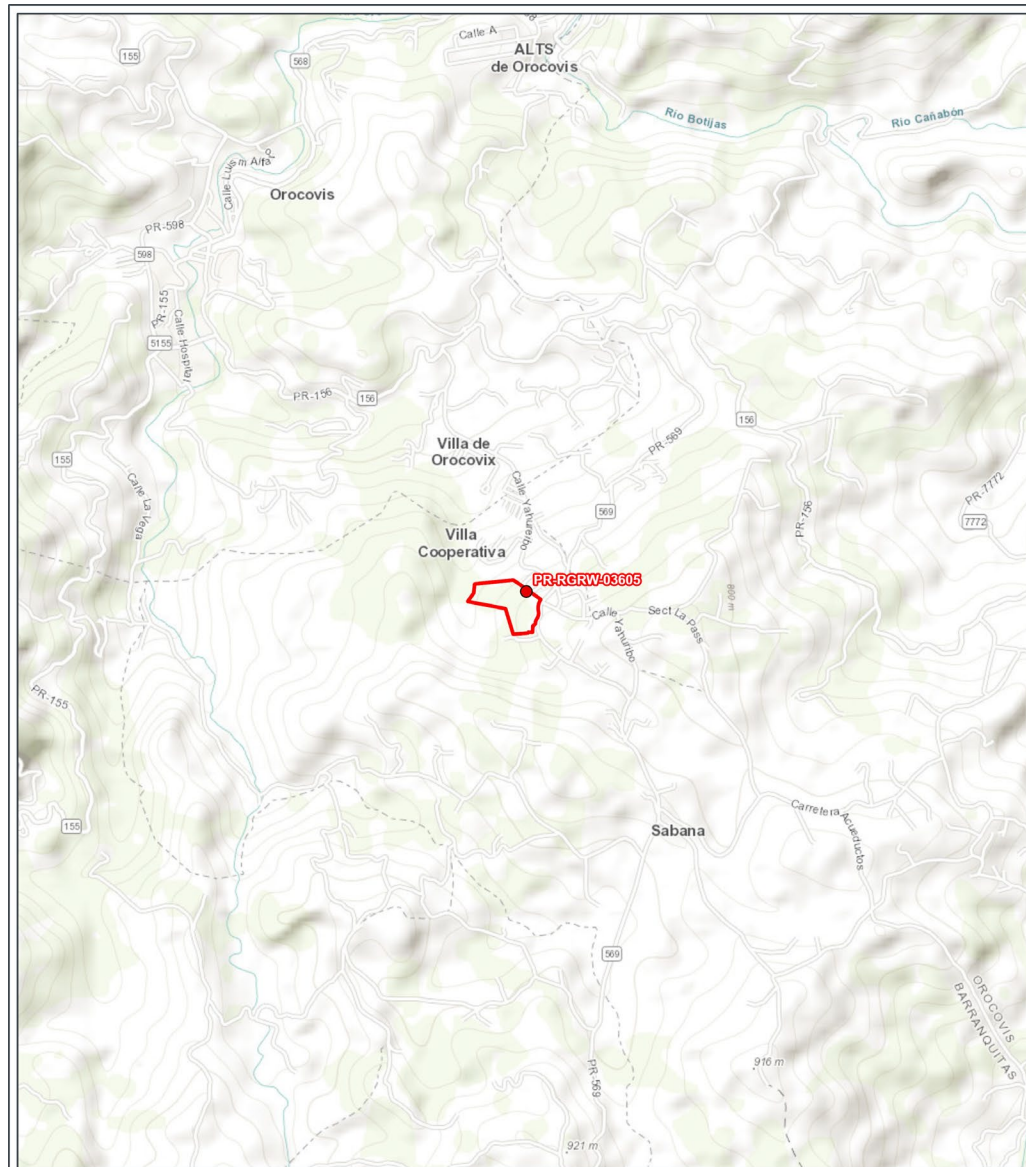


Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Project (Parcel) Location - USGS Topographic Map



REGROW PROGRAM

Figure A-1:
Site Location

Applicant ID: PR-RGRW-03605

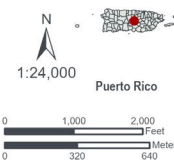
SWCA
ENVIRONMENTAL CONSULTANTS

● Site
□ Site Parcel

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720

Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Site Location
Aprx: 72428_ReGrowTier2Maps



Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Project (Parcel) Location – Soils Map

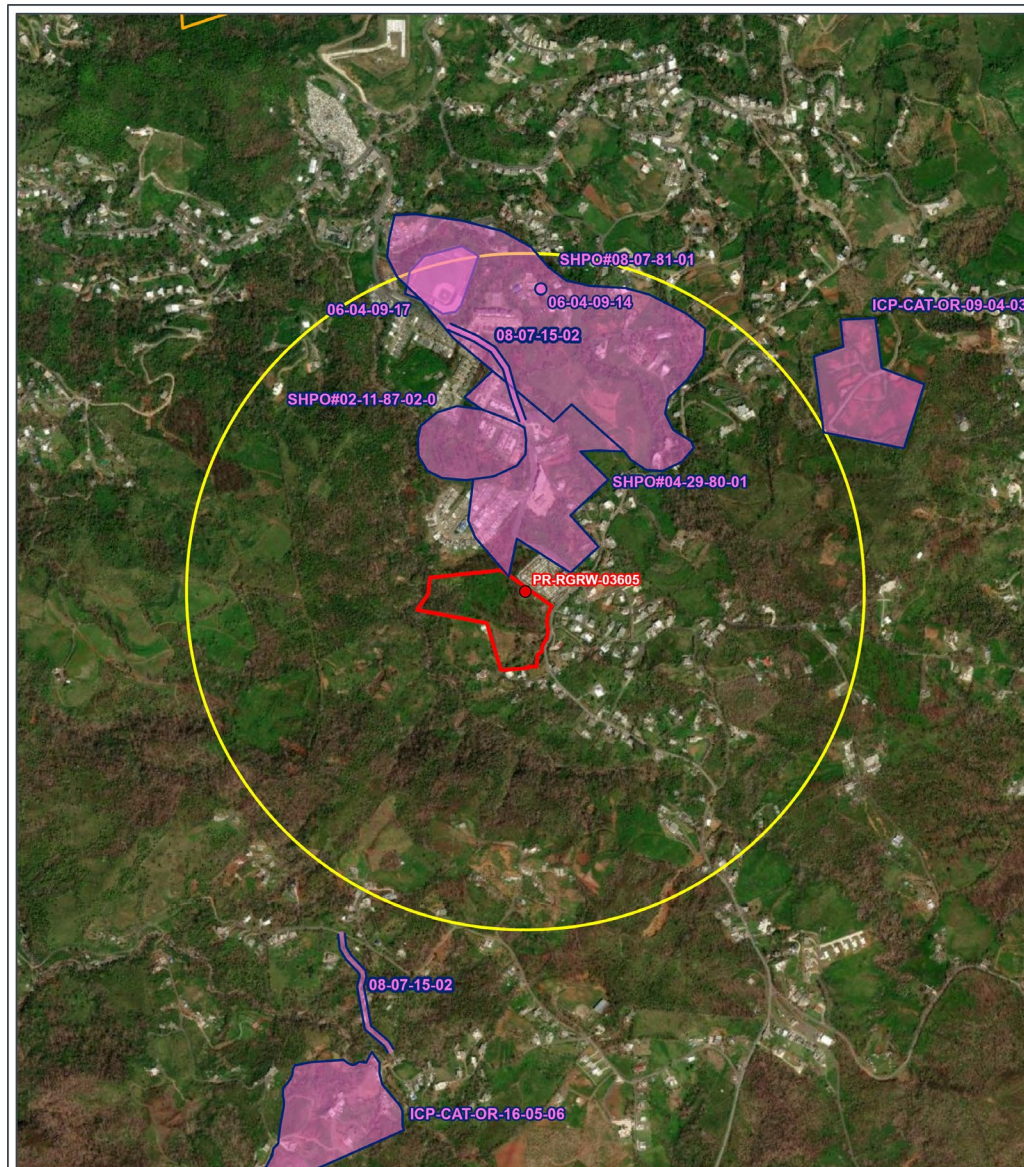


Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Project (Parcel) Location with Previous Investigations - Aerial Map



REGROW PROGRAM

Previous Investigation Map

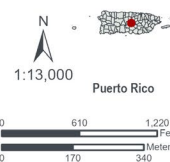
Applicant ID: PR-RGRW-03605

SWCA
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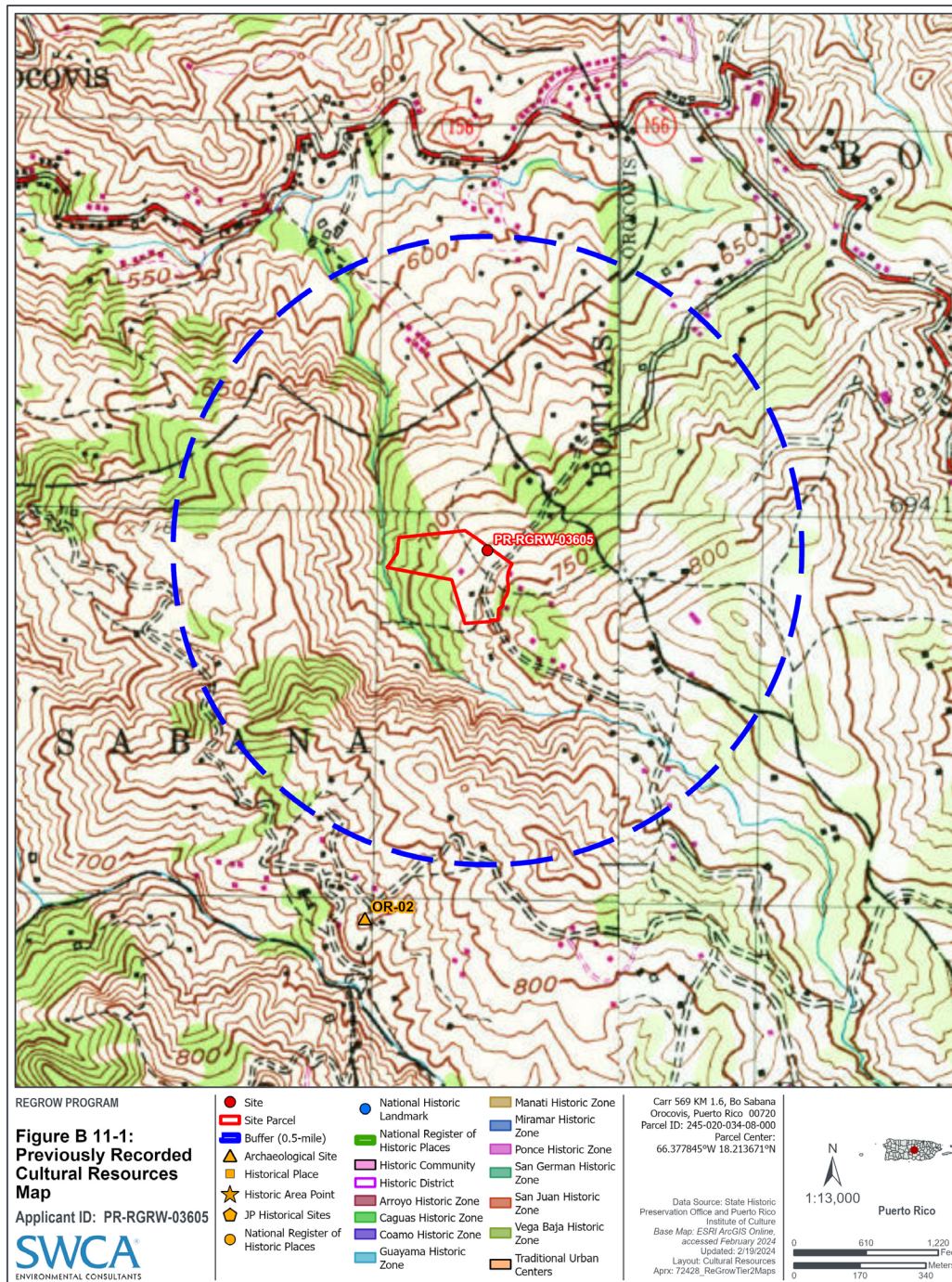
- Site
- ▭ Site Parcel
- ▭ Project Footprint (Option)
- ▭ Buffer (0.5-mile)
- ▭ Previously Recorded Survey
- ▭ MIPR Arqueologia
- ▭ Traditional Urban Centers

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: State Historic
Preservation Office and Puerto Rico
Institute of Culture
Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/15/2024
Layout: Previous Investigation
Aprx: 72428_ReGrowTier2Maps



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



Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Photograph Key



Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Photo #: 01	Date: 02/12/2024	
Photo Direction: Northwest		
Description: This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing downhill. This is a "head on" view of where the greenhouse would be installed. In the right center portion of the photo there is a partial view of a cemetery that is adjacent to the property.		
Photo #: 02	Date: 02/12/2024	
Photo Direction: South/Southeast		
Description: This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing uphill. This is a "head on" view of where the greenhouse would be installed. In the upper left portion of the photo there is a partial view of a small ranch storage area and behind it is the house.		




PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination		 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Applicant: Centinela LLC		
Case ID: PR-RGRW-03605		City: Orocovis

Photo #: 03	Date: 02/12/2024	
Photo Direction: West		
Description: This photo is facing the western corner of the proposed 40' x 30' x 15' greenhouse from the eastern corner of the proposed greenhouse. There is a gentle downward slope beyond where the greenhouse would be installed. There is a plantain crop in the background.		
Photo #: 04	Date: 02/12/2024	
Photo Direction: East		
Description: This photo is facing the eastern corner of the proposed 40' x 30' x 15' greenhouse from the western corner of the proposed greenhouse. There is a gentle upward slope beyond where the greenhouse would be installed. There is a cemetery on the other side of the fence seen here.		


PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination		 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Applicant: Centinela LLC		
Case ID: PR-RGRW-03605		City: Orocovis

Photo #: 05	Date: 02/12/2024
-----------------------	----------------------------

Photo Direction:
West

Description:

This photo is facing downhill from where the greenhouse will be installed and shows a downward sloping plantain crop. Beyond this crop, the terrain becomes steeper and beyond what is visible is a stream (photo #06).



Photo #: 06	Date: 02/12/2024
-----------------------	----------------------------

Photo Direction:
West

Description:

This is a close-up photo of the stream that runs adjacent to property. This is not near the intended project location and will not be used as part of the project.



Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Photo #:
07

Date:
02/12/2024

Photo Direction:
Close-up

Description:

This is a close-up photo of the waterline that is currently in place (above-ground PVC pipe coming from the applicant's house to the south) that will be used to connect water for greenhouse use. See photo #08.



Photo #:
08

Date:
02/12/2024

Photo Direction:
East

This photo shows where the PVC pipe/water connection shown in photo # 07 is located. There is a cemetery on the other side of the fence.



PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM

ReGROW PUERTO RICO PROGRAM

Section 106 NHPA Effect Determination



GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

Applicant: Centinela LLC

Case ID: PR-RGRW-03605

City: Orocovis

Photo #:
09

Date:
02/12/2024

Photo Direction:

North

Photo of house and
ranch, adjacent to
road.





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,


Juan C. Pérez Bofill, P.E. M.Eng
Director of Disaster Recovery
CDBG DR-MIT

Attachment 12

**Wetlands Protection Partner Worksheet
and Map**



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Wetlands (CEST and EA) – Partner

<https://www.hudexchange.info/environmental-review/wetlands-protection>

1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building’s footprint, or ground disturbance?

The term "new construction" includes draining, dredging, channelizing, filling, diking, impounding, and related activities and construction of any any structures or facilities.

☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

☒ Yes → *Continue to Question 2.*

2. Will the new construction or other ground disturbance impact a wetland as defined in E.O. 11990?

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map or any other relevant documentation to explain your determination.*

☐ Yes → *Work with HUD or the RE to assist with the 8-Step Process.* *Continue to Question 3.*

3. Does Section 55.12 state that the 8-Step Process is not required?

☐ No, the 8-Step Process applies.

This project will require mitigation and may require elevating structure or structures. See the link to the HUD Exchange above for information on HUD’s elevation requirements.

→ *Work with the RE/HUD to assist with the 8-Step Process. Continue to Worksheet Summary.*

☐ 5-Step Process is applicable per 55.12(a).

Provide the applicable citation at 24 CFR 55.12(a) here.

[Click here to enter text.](#)

→ *Work with the RE/HUD to assist with the 5-Step Process. This project may require mitigation or alternations. Continue to Worksheet Summary.*

☐ 8-Step Process is inapplicable per 55.12(b).

Provide the applicable citation at 24 CFR 55.12(b) here.

[Click here to enter text.](#)

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to Worksheet Summary.

☐ 8-Step Process is inapplicable per 55.12(c).

Provide the applicable citation at 24 CFR 55.12(c) here.

[Click here to enter text.](#)

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to Worksheet Summary.

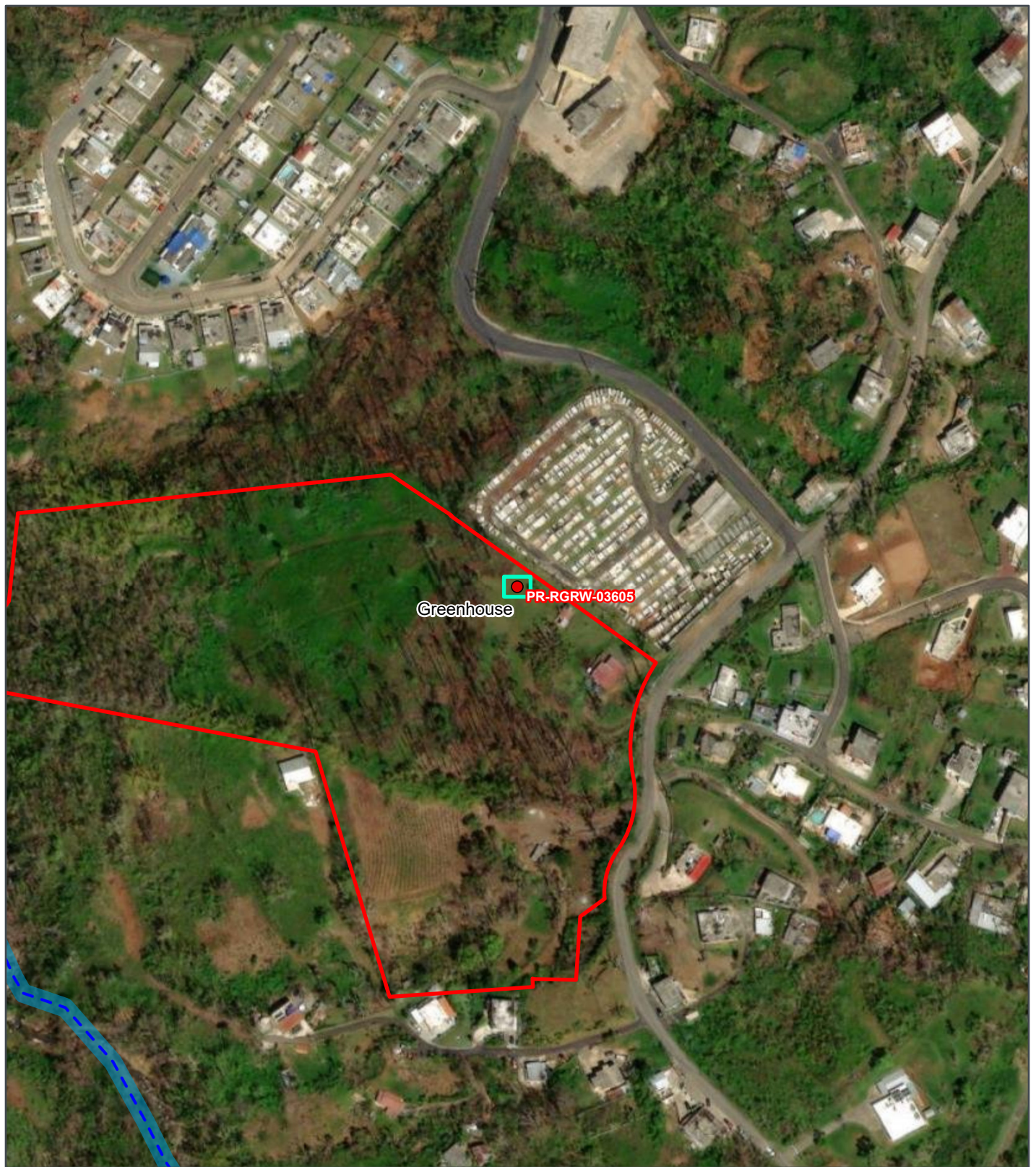
Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The project site was reviewed for wetlands using the USFWS Wetland Inventory Mapper and a visual confirmation during the field site inspection. The site inspection identified a stream approximately 885 ft west of the project site outside of the parcel, but it will not be impacted by the projects due to a natural barrier of trees. No further evaluation is required.



REGROW PROGRAM

Figure B 12-1: Wetlands Protection Map

Applicant ID: PR-RGRW-03605

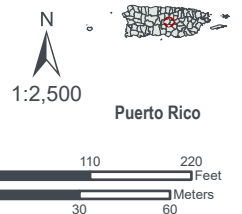
SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)
- - - NHD Stream
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.377845°W 18.213671°N

Data Source: <https://apps.nationalmap.gov/downloader/#/https://www.fws.gov/program/national-wetlands-inventory/data-download>
Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024
Layout: Wetlands Protection



Attachment 13

Wild and Scenic Rivers Partner Worksheet and Wild and Scenic Rivers Map

Wild and Scenic Rivers (CEST and EA) – PARTNER

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

General requirements	Legislation	Regulation
The Wild and Scenic Rivers Act provides federal protection for certain free-flowing, wild, scenic and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS) from the effects of construction or development.	The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287), particularly section 7(b) and (c) (16 U.S.C. 1278(b) and (c))	36 CFR Part 297
References		
https://www.hudexchange.info/environmental-review/wild-and-scenic-rivers		

1. Is your project within proximity of a NWSRS river as defined below?

Wild & Scenic Rivers: These rivers or river segments have been designated by Congress or by states (with the concurrence of the Secretary of the Interior) as wild, scenic, or recreational

Study Rivers: These rivers or river segments are being studied as a potential component of the Wild & Scenic River system.

Nationwide Rivers Inventory (NRI): The National Park Service has compiled and maintains the NRI, a register of river segments that potentially qualify as national wild, scenic, or recreational river areas

☒ No

→ If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide documentation used to make your determination, such as a map identifying the project site and its surrounding area or a list of rivers in your region in the Screen Summary at the conclusion of this screen.

☐ Yes, the project is in proximity of a Nationwide Rivers Inventory (NRI) River.

→ Continue to Question 2.

2. Could the project do *any* of the following?

- Have a direct and adverse effect within Wild and Scenic River Boundaries,
- Invade the area or unreasonably diminish the river outside Wild and Scenic River Boundaries, or
- Have an adverse effect on the natural, cultural, and/or recreational values of a NRI segment.

Consultation with the appropriate federal/state/local/tribal Managing Agency(s) is required, pursuant to Section 7 of the Act, to determine if the proposed project may have an adverse effect on a Wild & Scenic River or a Study River and, if so, to determine the appropriate avoidance or mitigation measures.

Note: Concurrence may be assumed if the Managing Agency does not respond within 30 days; however, you are still obligated to avoid or mitigate adverse effects on the rivers identified in the NWSRS

- ☐ No, the Managing Agency has concurred that the proposed project will not alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

- ☐ Yes, the Managing Agency was consulted and the proposed project may alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *The RE/HUD must work with the Managing Agency to identify mitigation measures to mitigate the impact or effect of the project on the river.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

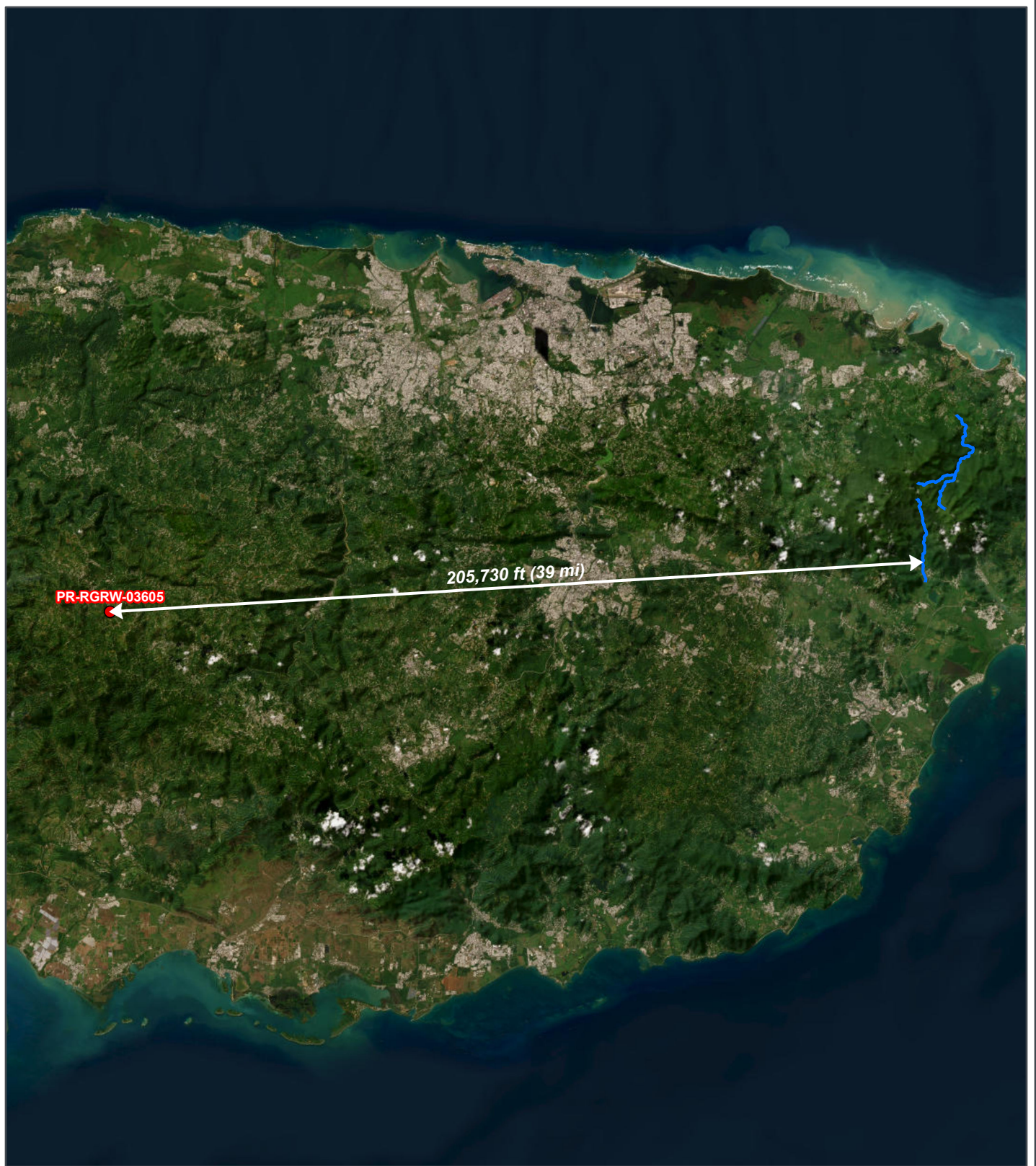
- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

A review of the USFWS National Wild and Scenic River mapper identified no Wild and Scenic Rivers or National Rivers Inventory (NRI) rivers present in Orocovis Municipio. The closest Wild and Scenic River segment is located 205,730 ft (39 mi) from the project site. No further evaluation is required.

Are formal compliance steps or mitigation required?

☐ Yes

☒ No



REGROW PROGRAM

Figure B 13-1: National Wild and Scenic River Map

Applicant ID: PR-RGRW-03605

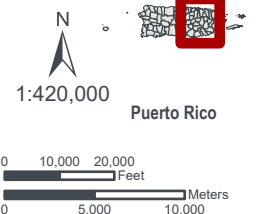
SWCA
ENVIRONMENTAL CONSULTANTS

● Site

— National Wild and Scenic River

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
66.08195°W 18.230623°N

Data Source: https://apps.fs.usda.gov/arcx/rest/services/EDW/EDW_WildScenicRiverSegments_01/mapserver
Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/19/2024



Attachment 14
Environmental Justice Partner Worksheet
and EJScreen Report



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Environmental Justice (CEST and EA) – PARTNER

<https://www.hudexchange.info/environmental-review/environmental-justice>

HUD strongly encourages starting the Environmental Justice analysis only after all other laws and authorities, including Environmental Assessment factors if necessary, have been completed.

1. Were any adverse environmental impacts identified in any other compliance review portion of this project’s total environmental review?

☐ Yes → *Continue to Question 2.*

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

2. Were these adverse environmental impacts disproportionately high for low-income and/or minority communities?

☐ Yes

Explain:

[Click here to enter text.](#)

→ *The RE/HUD must work with the affected low-income or minority community to decide what mitigation actions, if any, will be taken. Provide any supporting documentation.*

☐ No

Explain:

[Click here to enter text.](#)

→ *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

The ReGrow Program intends to alleviate negative economic impacts to, and strengthen, the agricultural industry in Puerto Rico. The project's direct and indirect impacts are limited to a small area on a single land parcel. The project will benefit the farm owner by improving agricultural use and production. The project would not facilitate development that would negatively affect human health or result in disproportionate adverse environmental impacts to low-income or minority populations.

Attachment 15

**Sole Source Aquifer Partner Worksheet
and Map**



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Sole Source Aquifers (CEST and EA) - PARTNER

<https://www.hudexchange.info/environmental-review/sole-source-aquifers>

1. Is the project located on a sole source aquifer (SSA)¹?

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map of your project or jurisdiction in relation to the nearest SSA.*

☐ Yes → *Continue to Question 2.*

2. Does the project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?

☐ Yes → *The review is in compliance with this section. Continue to the Worksheet Summary below.*

☐ No → *Continue to Question 3.*

3. Does your region have a memorandum of understanding (MOU) or other working agreement with EPA for HUD projects impacting a sole source aquifer?

Contact your Field or Regional Environmental Officer or visit the HUD webpage at the link above to determine if an MOU or agreement exists in your area.

☐ Yes → *Continue to Question 4.*

☐ No → *Continue to Question 5.*

4. Does your MOU or working agreement exclude your project from further review?

☐ Yes → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination and document where your project fits within the MOU or agreement.*

☐ No → *Continue to Question 5.*

5. Will the proposed project contaminate the aquifer and create a significant hazard to public health?

Consult with your Regional EPA Office. Your consultation request should include detailed information about your proposed project and its relationship to the aquifer and associated streamflow source area.

¹ A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

EPA will also want to know about water, storm water and waste water at the proposed project. Follow your MOU or working agreement or contact your Regional EPA office for specific information you may need to provide. EPA may request additional information if impacts to the aquifer are questionable after this information is submitted for review.

- ☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide your correspondence with the EPA and all documents used to make your determination.*
- ☐ Yes → *The RE/HUD will work with EPA to develop mitigation measures. If mitigation measures are approved, attach correspondence with EPA and include the mitigation measures in your environmental review documents and project contracts. If EPA determines that the project continues to pose a significant risk to the aquifer, federal financial assistance must be denied. Continue to Question 6.*

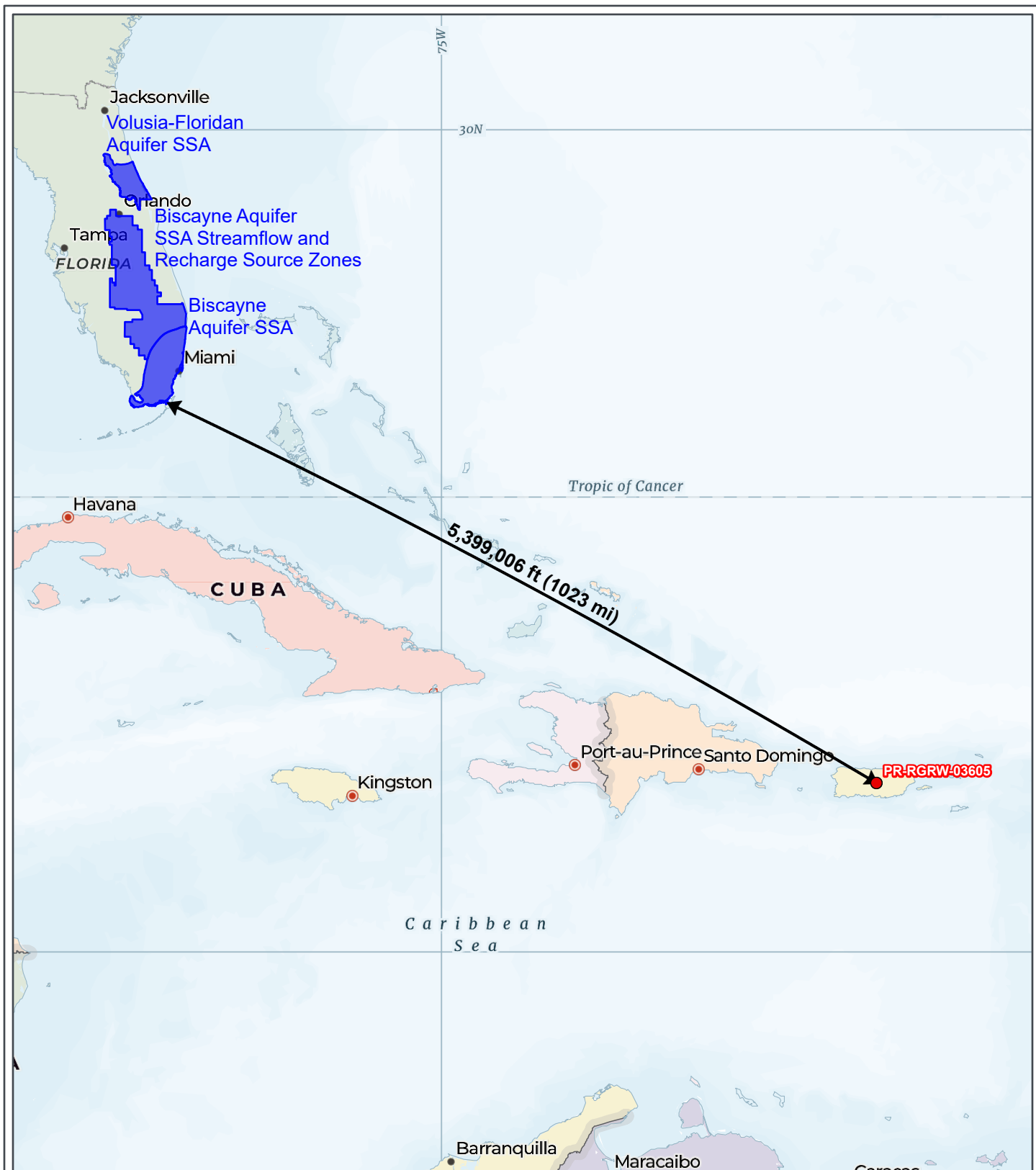
Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

According to the USEPA's Source Water Protection, Sole Source Aquifer Protection Program, there are no sole source aquifers in Puerto Rico. No further evaluation is required. The project is in compliance with the Safe Drinking Water Act.



REGROW PROGRAM

Figure 12-1: Sole Source Aquifers Map

Applicant ID: PR-RGRW-03605

SWCA
ENVIRONMENTAL CONSULTANTS

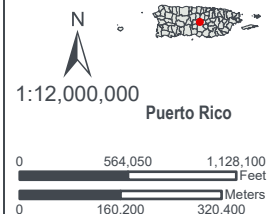
● Site

■ Sole Source Aquifers

*There are no Sole Source Aquifers in Puerto Rico.

Carr 569 KM 1.6, Bo Sabana
Orocovis, Puerto Rico 00720
Parcel ID: 245-020-034-08-000
Parcel Center:
73.384602°W 21.744281°N

Data Source: <https://services.arcgis.com/cJ9YHowT8TU7DUyn/arcgis/rest/services/SoleSourceAquifers/FeatureServer>
Base Map: ESRI ArcGIS Online, accessed February 2024
Updated: 2/23/2024
Layout: Sole Source Aquifers
Aprx: 72428_ReGrowTier2Maps





EJScreen Community Report

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

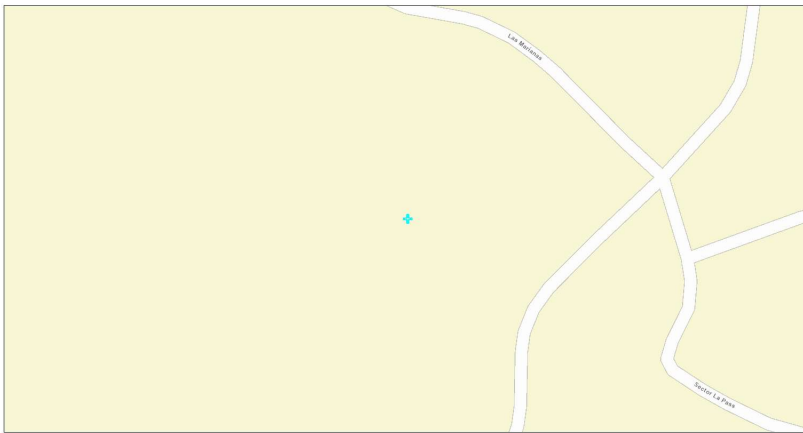
Orocovis Municipio, PR

1 mile Ring Centered at 18.213670,-66.377844

Population: 2,752

Area in square miles: 3.14

A3 Landscape



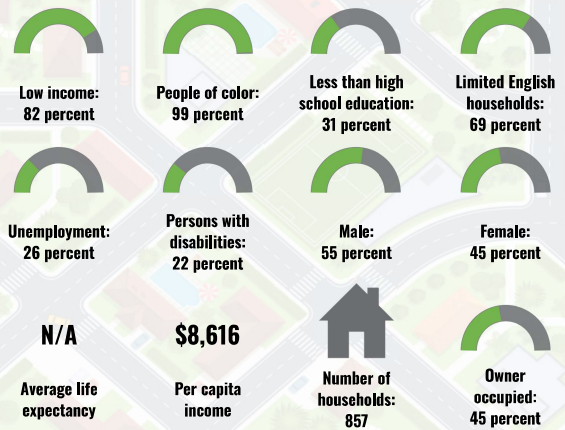
February 21, 2024

Search Result (point)

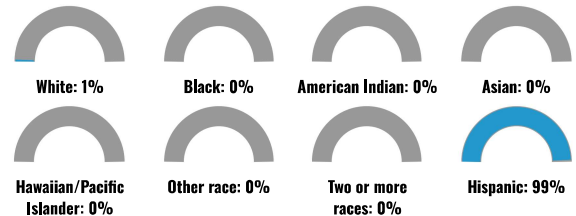
1:1,128
0 0.01 0.02 0.04 0.08 mi
0 0.02 0.04 0.08 km

EPA Community Maps Contribution: Esri, TomTom, Garmin, Panasonic, Garmin, GeoTechnologies, Inc. METRAGIS, USGS, NPS, US Census Bureau, USFWS

COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	7%
Spanish	93%
Total Non-English	93%

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

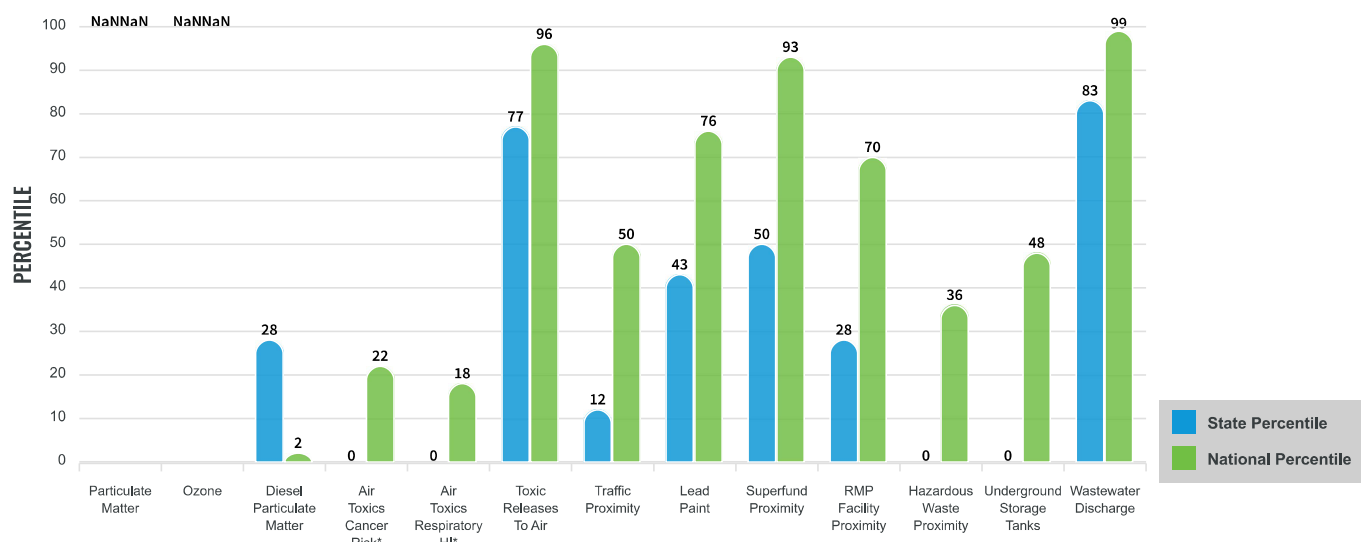
Environmental Justice & Supplemental Indexes

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

EJ INDEXES

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

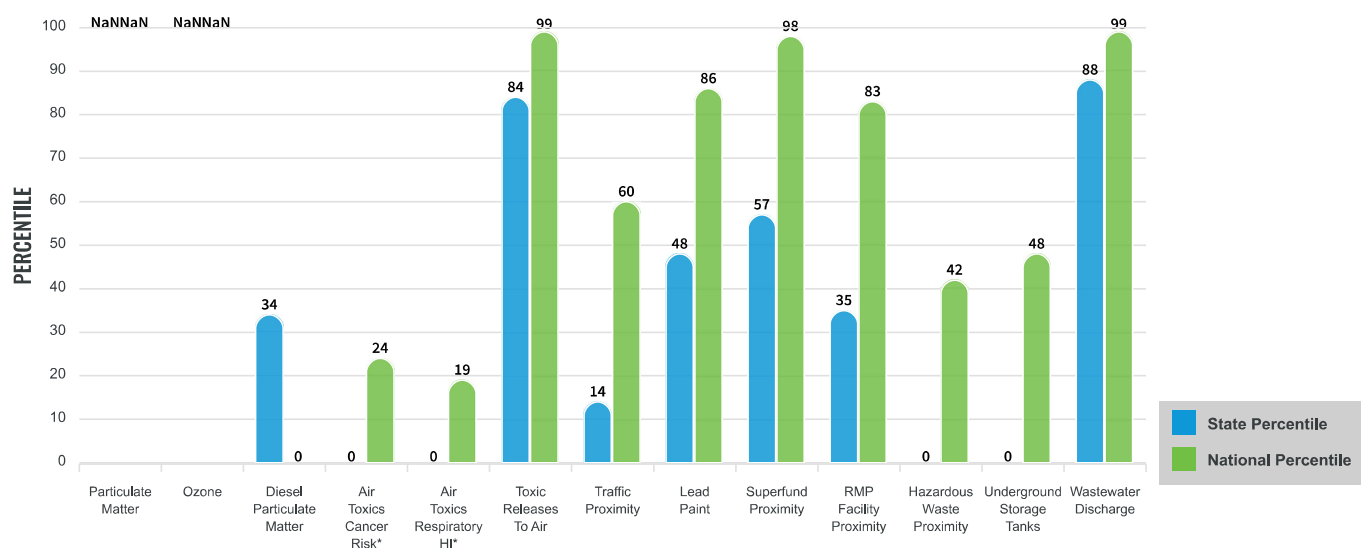
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

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

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



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

Report for 1 mile Ring Centered at 18.213670,-66.377844

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
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 ($\mu\text{g}/\text{m}^3$)	0.0214	0.0667	27	0.261	1
Air Toxics Cancer Risk* (lifetime risk per million)	10	20	0	25	1
Air Toxics Respiratory HI*	0.1	0.19	0	0.31	1
Toxic Releases to Air	1,600	4,300	74	4,600	68
Traffic Proximity (daily traffic count/distance to road)	9.7	180	12	210	16
Lead Paint (% Pre-1960 Housing)	0.081	0.16	46	0.3	32
Superfund Proximity (site count/km distance)	0.076	0.15	46	0.13	57
RMP Facility Proximity (facility count/km distance)	0.095	0.47	27	0.43	27
Hazardous Waste Proximity (facility count/km distance)	0.045	0.76	0	1.9	8
Underground Storage Tanks (count/km ²)	0.33	1.7	61	3.9	35
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.18	2.3	76	22	85
SOCIOECONOMIC INDICATORS					
Demographic Index	90%	83%	63	35%	98
Supplemental Demographic Index	52%	43%	73	14%	99
People of Color	99%	96%	22	39%	96
Low Income	82%	70%	64	31%	97
Unemployment Rate	26%	15%	81	6%	97
Limited English Speaking Households	69%	67%	48	5%	99
Less Than High School Education	31%	21%	77	12%	92
Under Age 5	10%	4%	94	6%	86
Over Age 64	13%	22%	16	17%	38
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>.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	0
Water Dischargers	2
Air Pollution	0
Brownfields	0
Toxic Release Inventory	0

Other community features within defined area:

Schools	1
Hospitals	0
Places of Worship	0

Other environmental data:

Air Non-attainment	No
Impaired Waters	Yes

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

Report for 1 mile Ring Centered at 18.213670,-66.377844

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	N/A	N/A	N/A	20%	N/A
Heart Disease	N/A	N/A	N/A	6.1	N/A
Asthma	N/A	N/A	N/A	10	N/A
Cancer	N/A	N/A	N/A	6.1	N/A
Persons with Disabilities	19.9%	21.6%	39	13.4%	85

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	N/A	N/A	N/A	12%	N/A
Wildfire Risk	N/A	N/A	N/A	14%	N/A

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	28%	32%	46	14%	86
Lack of Health Insurance	5%	7%	34	9%	36
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	No	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for 1 mile Ring Centered at 18.213670,-66.377844

Attachment 15

**Sole Source Aquifer Partner Worksheet
and Map**



U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those “Partners” (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Sole Source Aquifers (CEST and EA) - PARTNER

<https://www.hudexchange.info/environmental-review/sole-source-aquifers>

1. Is the project located on a sole source aquifer (SSA)¹?

☒ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map of your project or jurisdiction in relation to the nearest SSA.*

☐ Yes → *Continue to Question 2.*

2. Does the project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?

☐ Yes → *The review is in compliance with this section. Continue to the Worksheet Summary below.*

☐ No → *Continue to Question 3.*

3. Does your region have a memorandum of understanding (MOU) or other working agreement with EPA for HUD projects impacting a sole source aquifer?

Contact your Field or Regional Environmental Officer or visit the HUD webpage at the link above to determine if an MOU or agreement exists in your area.

☐ Yes → *Continue to Question 4.*

☐ No → *Continue to Question 5.*

4. Does your MOU or working agreement exclude your project from further review?

☐ Yes → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination and document where your project fits within the MOU or agreement.*

☐ No → *Continue to Question 5.*

5. Will the proposed project contaminate the aquifer and create a significant hazard to public health?

Consult with your Regional EPA Office. Your consultation request should include detailed information about your proposed project and its relationship to the aquifer and associated streamflow source area.

¹ A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

EPA will also want to know about water, storm water and waste water at the proposed project. Follow your MOU or working agreement or contact your Regional EPA office for specific information you may need to provide. EPA may request additional information if impacts to the aquifer are questionable after this information is submitted for review.

- ☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide your correspondence with the EPA and all documents used to make your determination.*
- ☐ Yes → *The RE/HUD will work with EPA to develop mitigation measures. If mitigation measures are approved, attach correspondence with EPA and include the mitigation measures in your environmental review documents and project contracts. If EPA determines that the project continues to pose a significant risk to the aquifer, federal financial assistance must be denied. Continue to Question 6.*

Worksheet Summary

Provide a full description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your program or region

Include all documentation supporting your findings in your submission to HUD.

According to the USEPA's Source Water Protection, Sole Source Aquifer Protection Program, there are no sole source aquifers in Puerto Rico. No further evaluation is required. The project is in compliance with the Safe Drinking Water Act.

Appendix C

Environmental Site Inspection Report



❖ **Site-Visit Form**

❖ **General Site Conditions and Field Notes:**

Does the address match the parcel location?	Yes	Does the lat/long match the parcel location?	Yes
Comments on location:			
<u>Question</u>	<u>Yes /No</u>	<u>Comments:</u>	
Was property accessible by vehicle?	Yes		
Were there any access issues? Examples of access issues: Dogs, Locked gate, Traffic hazards, Uncooperative residents, Confrontational Neighbors, *If no access issues please indicate with "None"	No		
Are water wells present? *please include lat/long of water well so it can be denoted on the sitemap	No		
Are creeks or ponds present? *please include lat/long of water well so it can be denoted on the sitemap	Yes	About 700 ft. west of intended greenhouse location. GPS point and photo provided.	
Are any potential wetlands on-site or visible on adjacent parcel? *please include lat/long of water well so it can be denoted on the sitemap	No		
<p align="center">❖ Parcel Conditions</p> <p align="center">Note – for Any Yes answers specify type, contents, and location (get photo points) (These questions are mostly concerned with contamination – all HUD activities must be “free and clear of contamination” and while it’s important to be able to show there is no site-contamination we also have to keep in mind what the HUD funded project is and the regulatory requirements of the activity)</p>			
Are commercial or industrial hazardous facilities at parcel or within visual sight?	No		



ENVIRONMENTAL SITE REVIEW AND INSPECTION FORM
ReGrow

Are there signs of underground storage tanks?	No	
Are any above-ground tanks (relevant to the activities in the IUGF *unless they are a source of contamination) >10 gallons present? If yes, what are the contents and conditions of each tank?	No	
Are 55-gallon drums present? If yes, what are the content and conditions of each tank?	No	
Are abandoned vehicles or electrical equipment present?	No	
Are there any signs of illegal dumping within or next to the applicant parcel?	No	
Is other potential environmentally hazardous debris on the parcel?	No	
Is there non-environmentally hazardous debris on the parcel?	No	
Are any leaks, soil stains, or stressed vegetation present? If yes, what is the source of the staining/stress?	No	
Are there any pungent, foul or noxious odors?	No	
Other Components Related to Project (e.g., gas tanks, cisterns, water tanks, abandoned vehicles, etc.)		
Type	Details	



ENVIRONMENTAL SITE REVIEW AND INSPECTION FORM
ReGrow

Are there any potentially hazardous trees that could fall?	No	
Are any bird nests visible?	No	None evident—lots of avian activity
Are there any animal burrows visible?	No	None evident
Are there any signs of potential/preferred T&E habitat in the area?	Yes	Potential/preferred habitat for Puerto Rican Broad-winged Hawk, Puerto Rican Parrot, and Puerto Rican Boa—no individuals or evidence of individuals noted.

Natural Resources (e.g., endemic plants, endangered species, water bodies, wetlands, etc.) {include the ones inside the property and in direct sight view of the site location}	
Type or Species	Description
Stream	Located ~700 ft. west of proposed project location and will not be used.

Are there any buildings in direct visual sight of the project locations? Take photo and ask applicant when the structure was built)	Yes	There are two structures that would have a view of the greenhouse (aside from the cemetery, photo #01) and both belong to the applicant (photo #02)—these are a ranch storage area and the applicant's house.
--	-----	---

Structures (e.g., residences, commercial buildings, etc.) {include the ones inside the property and in direct sight view of the site location}	
Built Date	Type of Construction
Over 50 years ago	Residential- wood and galvanized steel
Over 50 years ago	Ranch- metal, zinc, wood

❖ Additional Environmental Hazards Analysis
--



<p>Based on the above findings, does additional information need to be obtained from the applicant to determine whether an environmental hazard is present?</p>	<p>No</p>	
--	-----------	--

☒ I verify that I have physically visited this property and that the findings outlined above are accurate.

Karina Morales

Karina Morales

February 15th, 2024

Following pages are used for:

Location Map with parcel boundaries and building point (Aerial base with streets labelled)

Photos taken during inspection, with Date / Type / Direction associated with the photo

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795

Frame #	View	Description
01	NW	This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing downhill. This is a "head on" view of where the greenhouse would be installed. In the right center portion of the photo there is a partial view of a cemetery that is adjacent to the property.
02	S/SE	This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing uphill. This is a "head on" view of where the greenhouse would be installed. In the upper left portion of the photo there is a partial view of a small ranch storage area and behind it is the house.
03	W	This photo is facing the western corner of the proposed 40' x 30' x 15' greenhouse from the eastern corner of the proposed greenhouse. There is a gentle downward slope beyond where the greenhouse would be installed. There is a plantain crop in the background.
04	E	This photo is facing the eastern corner of the proposed 40' x 30' x 15' greenhouse from the western corner of the proposed greenhouse. There is a gentle upward slope beyond where the greenhouse would be installed. There is a cemetery on the other side of the fence seen here.
05	W	This photo is facing downhill from where the greenhouse will be installed and shows a downward sloping plantain crop. Beyond this crop, the terrain becomes steeper and beyond what is visible is a stream (photo #06).
06	W/Close-up	This is a close-up photo of the stream that runs adjacent to property. This is not near the intended project location and will not be used as part of the project.
07	Close-up	This is a close-up photo of the waterline that is currently in place (above-ground PVC pipe coming from the applicant's house to the south) that will be used to connect water for greenhouse use. See photo #08.
08	E	This photo shows where the PVC pipe/water connection shown in photo # 07 is located. There is a cemetery on the other side of the fence.

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795



Photo #: 01	Date: 02/15/24	
Photo Direction: Northwest		
Description: This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing downhill. This is a "head on" view of where the greenhouse would be installed. In the right center portion of the photo there is a partial view of a cemetery that is adjacent to the property.		

Photo #: 02	Date: 02/15/24	
Photo Direction: South/southeast		
Description: This is an overview photo of the proposed location for a 40' x 30' x 15' greenhouse, facing uphill. This is a "head on" view of where the greenhouse would be installed. In the upper left portion of the photo there is a partial view of a small ranch storage area and behind it is the house.		

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795

Photo #: 03	Date: 02/15/24
Photo Direction: West	
Description: This photo is facing the western corner of the proposed 40' x 30' x 15' greenhouse from the eastern corner of the proposed greenhouse. There is a gentle downward slope beyond where the greenhouse would be installed. There is a plantain crop in the background.	



A wide-angle photograph of a grassy field with a line of tall pine trees in the background under a blue sky with scattered clouds. The field is a vibrant green, and the trees are tall and slender, with some showing signs of age or damage. The sky is a clear blue with a few white clouds. The overall scene is a natural, outdoor setting.

Photo #: 04	Date: 02/15/24	
Photo Direction: East		
Description: This photo is facing the eastern corner of the proposed 40' x 30' x 15' greenhouse from the western corner of the proposed greenhouse. There is a gentle upward slope beyond where the greenhouse would be installed. There is a cemetery on the other side of the fence seen here.		

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795

Photo #: 05	Date: 02/15/24
Photo Direction: West	
Description: This photo is facing downhill from where the greenhouse will be installed and shows a downward sloping plantain crop. Beyond this crop, the terrain becomes steeper and beyond what is visible is a stream (photo #06).	


A wide-angle photograph of a grassy field with several tall, thin trees in the foreground and a dense forest of green trees in the background under a blue sky with white clouds. The field is covered in green grass with some shadows cast by the trees. In the background, there are more trees and a glimpse of a valley or stream in the distance. The sky is bright blue with scattered white clouds.

Photo #: 06	Date: 02/15/24	
Photo Direction: West/close-up		
Description: This is a close-up photo of the stream that runs adjacent to property. This is not near the intended project location and will not be used as part of the project.		

Project #: PR-RGRW-03605	Photographer: Karina Morales
Location Address: Carr 569 KM 1.6, Bo Sabana	Coordinates: 18.213244, -66.377795

Photo #: 07	Date: 02/15/24	
Photo Direction: Close-up		
Description: This is a close-up photo of the waterline that is currently in place (above-ground PVC pipe coming from the applicant's house to the south) that will be used to connect water for greenhouse use. See photo #08.		

Photo #: 08	Date: 02/15/24	
Photo Direction: East		
Description: This photo shows where the PVC pipe/water connection shown in photo # 07 is located. There is a cemetery on the other side of the fence.		