



U.S. Department of Housing and Urban Development

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Washington, DC 20410
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Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5

Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: PR-ESP-00119 Colmado El Moroco Robin Rodriguez

Responsible Entity: Puerto Rico Department of Housing

Grant Recipient: Department of Economic Development and Commerce (DEDC)

State/Local Identifier: Puerto Rico / Lajas, PR

Preparer: Patricia Carmenatty Santiago, Environmental Specialist

Behar Ybarra & Associates LLC

patricia.carmenatty@byaea.com

787-783-0290

Certifying Officer Name and Title: Permit and Environmental Compliance Officers:

Aldo A. Rivera Vazquez, PE - Director, Permits and Environmental Compliance Division

Angel G. López Guzmán - Deputy Director, Permits and Environmental Compliance Division

Maria T. Torres-Bregón - Permits and Environmental Compliance Manager

Permits and Environmental Compliance Specialist: Sally Z. Acevedo-Cosme, Limary Vélez Marrero, Ivelisse Lorenzo Torres, Mónica Machuca Rios, Janette I. Cambrelen, Santa Ramírez Lebrón, Abdul Feliciano Plaza, Pedro de León Rodriguez, Javier Mercado Barrera, Priscilla Toro Rivera

Consultant (if applicable): Behar Ybarra & Associates LLC

Direct Comments to: Puerto Rico Department of Housing:

comentariosambiental@vivienda.pr.gov

Project Location: Carr 303 Km. 3.2 Bo. Olivares, Lajas PR 00667

Coordinates: 18.002324, -67.068464

Parcel cadastral: 381-000-010-11-000

Description of the Proposed Project [24 CFR 50.21 & 58.32]:

The subject property is a commercial building located in Lajas, PR serving as a local grocery store. The project is located at Carr 303 Km. 3.2 Bo. Olivares, Lajas PR 00667; Latitude: 18.002324, Longitude: -67.068464. A Site Map is included in Figure 1 in Appendix 1, illustrating the location of the building. The northern and southern boundaries are residences. The northern and western boundaries are undeveloped vacant lots.

A field visit was conducted on March 25, 2025, to document existing conditions of the project site. The Field Visit Report is included in Appendix 2.

The project scope includes the installation of a photovoltaic (solar) panel system and appurtenant storage system (batteries) on the existing commercial building's roof, with all improvements limited to the roof, floors, and walls of the existing structure. The batteries will be installed at the right side of the building. The proposed system includes 56 Solar Panels (400 Watts) and 2 lithium batteries – 18.5 kWh. Battery storage system with a capacity of approximately 37 kWh. The system will be interconnected with the LUMA Energy distribution network under the Net Metering Program. The proposed project Scope of Work quote is included in Appendix 3.

Level of Environmental Review Determination:

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5: 58.35(a) [3(iii)]. In the case of non-residential structures, including commercial, industrial, and public buildings: (A) The facilities and improvements are in place and will not be changed in size or capacity by more than 20 percent; and (B) The activity does not involve a change in land use, such as from non-residential to residential, commercial to industrial, or from one industrial use to another.

Funding Information

Grant Number	HUD Program	Funding Amount
B-18-DE-72-0001	Community Development Block Grant (CDBG-DR): Electrical Power Reliability and Resilience Program (ER2) (Energy Support Incentive Program 2.0 Set-Aside)	Energy Support Incentive Program 2.0 Set-Aside - \$30,000,000 set aside from ER2 Total – \$1,316,406,180.00.

Estimated Total HUD Funded Amount: \$49,172.74

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$81,954.57

Privately funded by the applicant: \$ 32,781.83

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

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

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 50.4 & 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The site is located 98,156 feet from the nearest civil airport, Eugenio Maria de Hostos in Mayaguez and 398,092 feet from the nearest military airport, Luis Muñoz Marín International Airport in San Juan. This topic is in compliance with HUD's Airport Hazard Regulations without further evaluation. Refer to Airports Map Zone, Figure 2 included in Appendix 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"/>	This project is not located in a CBRS Unit. The project is located 9,434 feet southeast of the nearest Coastal Barrier Resource System, PR-65P. Therefore, this project has no potential to impact on a CBRS Unit and is in compliance with the Coastal Barrier Resources Act. Refer to Coastal Barrier Resource System Map, Figure 3 included in Appendix 1.
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"/>	As per FEMA's FIRM Panel 72000C1565H, effective April 19, 2005, this project is located within Zone X. The project does not require flood insurance or is excepted from flood insurance. The project is in compliance with the Flood Insurance section without further evaluation.

		Refer to Flood Insurance Rate Map, Figure 4 included in Appendix 1.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 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"/>	<p>The project is not located in a non-attainment municipality. This project includes the installation of a photovoltaic (solar) panel system and appurtenant storage system (batteries) on the existing commercial building's roof located in the Municipio of Lajas. The project activities do not create new sources of air pollution. As described, the project does not involve new construction or a change in land use to facilitate the development of public, commercial, or industrial facilities, nor does it involve five or more dwelling units. Accordingly, under HUD's environmental review procedures, the project is presumed to result in emissions below de minimis levels and is considered compliant with the Clean Air Act (CAA).</p> <p>The project is located 195,651 feet from the nearest Non-attainment area. The proposed project activities will not create new air emission generator sources. Furthermore, under Puerto Rico's air quality regulations, the project meets the exemption criteria outlined in Rule 206 of the RCAP (1995), Regulation No. 5300, and is therefore in compliance with the Clean Air Act and all applicable federal, state, and local air quality standards. The installation and operation of this project will have no impact and is in compliance with the Clean Air Act without further evaluation.</p> <p>See attached published list of Puerto Rico Nonattainment/Maintenance Status for each country by year for all criteria pollutants in Appendix 4.</p> <p>Refer to Clean Air Map, Figure 5 included in Appendix 1.</p>
Coastal Zone Management	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The project is located 4,352 feet from the nearest Coastal Zone Management Area and

Coastal Zone Management Act, sections 307(c) & (d)		<p>does not affect a Coastal Zone as defined in the state Coastal Management Plan. The project is in compliance with the Coastal Zone Management Act.</p> <p>Refer to CZMA map, Figure 6 included in Appendix 1.</p>
<p>Contamination and Toxic Substances</p> <p>24 CFR Part 50.3(i) & 58.5(i)(2)</p>	<p>Yes No</p> <p><input checked="" type="checkbox"/> <input type="checkbox"/></p>	<p>This project includes the installation of a photovoltaic (solar) panel system and appurtenant storage system (batteries) on the existing commercial building's roof. The project site was evaluated for potential contamination by conducting a field inspection on March 25, 2025, to identify any onsite hazards including, but not limited to, soil staining, above ground storage tanks, signs of underground storage tanks, odors, hazardous debris, potential contamination regarding lead-based paint or asbestos, etc. The site inspection did not identify any onsite hazards.</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 desktop review did not find any of the above listed toxic, hazardous or radioactive substances in or within 3,000 feet of the project area that could affect the health and safety of project occupants or conflict with the intended use of the property.</p> <p>The lead-based paint review is subject to the Lead Safe Housing Rule (LSHR) under 24 CFR Part 35, the EPA's Renovation, Repair and Painting (RRP) Rule under 40 CFR Part 745 Subpart E, and Puerto Rico DNER Regulation 9098. A lead-based paint inspection and/or risk assessment is not required if the building was constructed after January 1, 1978. The subject property was</p>

		<p>built circa 1970; therefore, it is required to perform a screen for lead-based paint prior to starting the work.</p> <ul style="list-style-type: none"> • The work must be performed by RRP Certified Renovation Firm. • At least one RRP-Certified Renovator must be at the job site or available when work is being done. • Workers at the job site must receive on-the-job training from the Certified Renovator. • Lead Safe Work Practices are recommended if paint disturbance is "di minimis". • Lead Safe Work Practices are required if paint disturbance exceeds "di minimis" but not EPA's minor repair and maintenance threshold. • Property Risk Assessment and abatement of all lead-based paint hazards is required prior to commencing work if paint disturbance is significant. <p>The proposed activities are minor in scope and involve limited surface penetration (e.g., drilling to mount equipment). They do not include demolition or renovation activities that would disturb significant quantities of ACM. The systems being installed have been consistently evaluated as non-invasive and do not trigger permitting thresholds under NESHAP.</p> <p>While minimal dust or particulate emissions may result from surface drilling, these emissions are expected to remain well below de minimis thresholds and do not result in the release of regulated asbestos fibers. Additionally, the program does not include new construction or land conversion.</p> <p>Under Puerto Rico's air quality regulations, these activities qualify for permitting exemptions under Rule 206 of the Regulation for the Control of Atmospheric Pollution (RCAP), Regulation No. 5300, confirming compliance with the Clean Air Act and all</p>
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	<p>applicable federal, state, and local air quality standards.</p> <p>The Energy Support Incentive Program 2.0 – Set-Aside Program, funded through CDBG-DR, does not involve construction activities that would require a building or use permit. According to Planning Board Joint Regulation 9473, approved on June 16, 2023, Section 9.4.1.3.a.1 states: “Photovoltaic solar installations that are installed on the roofs of structures and whose capacity is up to one megawatt do not require a construction or use permit. Nor will a building permit be required for systems up to one hundred kilowatts above ground.”</p> <p>As such, the proposed activities do not trigger construction permit requirements and do not involve regulated asbestos disturbance. No renovation or demolition activities that would exceed ACM thresholds are included in the program.</p> <p>On January 11, 2024, HUD issued Notice CPD-23-103, Departmental Policy for Addressing Radon in the Environmental Review Process, which requires the Responsible Entity (RE) to consider radon as part of the site contamination analysis for projects subject to HUD’s contamination regulations at 24 CFR 58.5(i), unless the project qualifies for an exemption. According to the notice, radon must be addressed in environmental reviews for projects involving structures that are or will be occupied for at least four (4) hours per day. The eligible business activities under the Energy Support Incentive Program 2.0 – Set-Aside Program are expected to meet this occupancy threshold and thus would typically require radon consideration as part of the environmental review. However, there is currently no large-scale dataset available for Puerto Rico that meets HUD’s standards for determining radon hazard levels. On March 6, 2024, the Puerto Rico Department of Housing (PRDOH) formally consulted with HUD to</p>
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	<p>document the absence of reliable scientific data and to explain that radon testing in Puerto Rico would be impractical and infeasible. This determination was based on prior research efforts that lacked adequate laboratory support, making it difficult to obtain accurate or consistent results.</p> <p>Additionally, there is a limited number of trained radon testing professionals on the island, which presents another barrier to compliance with HUD's testing requirements. In response, on May 15, 2024, HUD requested that PRDOH consult with relevant agencies—including the Environmental Protection Agency (EPA), United States Geological Survey (USGS), University of Puerto Rico – Mayagüez Campus, and the Puerto Rico Department of Natural and Environmental Resources (DNER)—to further document the lack of scientific data, as outlined in Section III.C. of Notice CPD-23-103. On August 20, 2024, PRDOH conducted formal consultations with the above-mentioned agencies and submitted information requests to state and federal entities. Responses were received from the following: United States Geological Survey (USGS); Centers for Disease Control and Prevention (CDC); Puerto Rico Department of Health; United States Environmental Protection Agency (EPA).</p> <p>All responding agencies confirmed the absence of reliable, large-scale radon data for Puerto Rico and acknowledged the technical and logistical challenges associated with radon testing on the island. Based on these consultations and findings, radon testing is deemed infeasible and impracticable for the Energy Support Incentive Program 2.0 – Set-Aside Program. Therefore, no further consideration or evaluation of radon is required as part of the environmental review, in accordance with HUD Notice CPD-23-103. Supporting documentation is provided in Appendix 5. In conclusion, after reviewing the program in the context of the site</p>
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		<p>contamination analysis requirements under 24 CFR 58.5(i), PRDOH has determined that radon testing is impractical and infeasible, and no further evaluation is required for radon.</p> <p>The project is in compliance with Contamination and Toxic Substances requirements with conditions to LBP potential hazards.</p> <p>Refer to Contamination and Toxic Substances, Figure 7 included in Appendix 1.</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 type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>After reviewing data from the United States Fish and Wildlife Service (USFWS) Information and Planning Consultation (IPaC), the Puerto Rican boa (<i>Chilabothrus inornatus</i>) and the Yellow-shouldered Blackbird (<i>Agelaius xanthomus</i>) could be found in the project area. The scope of work includes the installation of a photovoltaic (solar) panel system and appurtenant storage system (batteries) on the existing commercial building's roof. Since the work to be carried out is limited to the roof of the structure, it does not involve any type of ground disturbance or removal of vegetation. The nature of the project, scope of work, information available, a careful analysis of the IPaC, the Caribbean Dkey in the US Fish and Wildlife Service's online IPaC application, and the observations during the field visit on March 25, 2025, were used to evaluate the potential impacts to federally listed species from this project. Based on the answers provided, a consistency letter was obtained for the Puerto Rican boa which determined that the proposed actions for this project would have "No Effect" (NE) for this species.</p> <p>The specie Yellow-shouldered Blackbird (<i>Agelaius xanthomus</i>) was not addressed in the Dkey responses but based on the Field visit carried out on March 25, 2025, the Yellow-shouldered Blackbird was not observed in the project site vicinity.</p>

		<p>The Critical Habitat for Yellow-shouldered Blackbird is within the project area. However, it was concluded that the project would have 'No Effect' determination on the species, as all proposed improvements will be limited to the roof, floors, and walls of the existing building. There will be no ground disturbance, vegetation clearing, or tree removal associated with the project, and the area is fully developed and does not contain a suitable habitat for the species. Agency consultation was submitted on May 8, 2025 and response was received on May 13, 2025. The project is in compliance with the Endangered Species Act of 1973.</p> <p>If a Puerto Rican Boa is found in the project activity site, work shall cease until the Boa moves off on its own. If the Boa does not move off, the Construction Manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask them to relocate the Boa. As established by the USFWS Puerto Rican Boa Conservation Measures Guideline. https://ipac.ecosphere.fws.gov/guideline/design/population/156/office/41430.pdf</p> <p>Refer to Threatened and Endangered Species Map, Figure 8 included in Appendix 1.</p> <p>See USFWS “No Effect” Memo and supporting documentation in Appendix 6.</p>
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>This project includes the installation of photovoltaic (solar) panel system and appurtenant storage system (batteries) on the existing commercial building’s roof and will not result in increased densities, conversion to residential uses, or making a vacant building habitable.</p> <p>The project itself is not the development of a hazardous facility, nor will the project increase residential densities or result in land conversion. The project is in compliance with HUD Explosive and Flammable Hazards.</p>
Farmlands Protection	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>This project does not include any activities that could potentially convert agricultural</p>

<p>Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>		<p>land to non-agricultural use. The project is in an area designated as a Farmland of statewide importance. The project is in compliance with the Farmland Protection Policy Act.</p> <p>Refer to Farmland Protection Map, Figure 9 included in Appendix 1.</p>
<p>Floodplain Management</p> <p>Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>PFIRMs in Puerto Rico was only developed for certain sections of the municipalities of Carolina, Canovanas, Loiza, San Juan, Trujillo Alto and Rio Grande. The proposed project is located in the municipality of Lajas; therefore, PFIRM information was not available for the area and considered in the review.</p> <p>As per the FEMA Advisory Based Flood Elevation Maps (ABFE), the project site is located within Zone X (area of minimal flood hazard). As the project site is not located within the FEMA-designated Special Flood Hazard Areas for the 1 percent (100-year) or 0.2 percent (500-year) flood zones, it is not classified as being within the floodplain. The project is in compliance with the HUD Floodplain Management Regulations and the Executive Order 11988.</p> <p>Refer to Advisory Base Flood Elevation Map, Figure 10 included in Appendix 1.</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 State Historic Preservation Office reviewed the proposed project location in accordance with 54 U.S.C. 306108 (commonly known as Section 106 of the National Historic Preservation Act) and 36 CFR Part 800: Protection of Historic Properties. Documentation with photographs and maps was subsequently submitted to SHPO (attached Appendix 7). In response from PR SHPO dated June 17, 2025, SHPO concurred with a finding of “No Historic Properties Affected” within the project’s Area of Potential Effects. The property is not considered historic or contributing to an historic district (See attached Historic map, Figure 11). Therefore, this activity is in</p>

		<p>compliance with the National Historic Preservation Act.</p> <p>Refer to Historic Preservation Map, Figure 11 included in Appendix 1.</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>This project includes the installation of a photovoltaic (solar) panel system and appurtenant storage system (batteries) on the existing commercial building's roof. The project does not include new construction for residential use or rehabilitation of an existing residential property. The site is urban developed and there will be no impact to or from the surrounding area from a noise perspective. This topic is in compliance with Noise abatement and Control without further evaluation.</p> <p>Refer to Noise Abatement and Control Map, Figure 12 included in Appendix 1.</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. Therefore, the proposed project site is not located within a sole source aquifer, nor will it directly or indirectly impact one. Therefore, the project is in compliance with the Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 C.F.R. Part 149 without further evaluation.</p> <p>Refer to Sole Source Aquifer Map, Figure 13 included in Appendix 1</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 does not involve new constructions and/or activities that may have a direct or indirect adverse impact on any on site wetlands, there are no wetlands within or in the vicinity of the project area. The closest wetland is located 62 feet from the project the Project Site. The project does not have the potential to impact wetlands. The project is in compliance with E.O. 11990.</p> <p>Refer to Wetlands Map, Figure 14 included in Appendix 1.</p>
<p>Wild and Scenic Rivers</p>	<p>Yes No</p>	<p>This project is not within proximity of the NWSRS river. The project is located 453,786</p>

Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	<input type="checkbox"/> <input checked="" type="checkbox"/>	feet from the nearest Wild and Scenic River (De la Mina River). The project is in compliance with the Wild and Scenic Rivers Act. Refer to Wild and Scenic Rivers Map, Figure 15 included in Appendix 1.
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Field Inspection: March 25, 2025, by Egon Gonzalez and Patricia Carmenatty.

Summary of Findings and Conclusions: The proposed activity has been found to not have any adverse effects on the environment nor is there a requirement for further consultation with any agency. There are no environmental review topics addressed that result in the need for formal compliance steps or the requirement for mitigation.

Mitigation Measures and Conditions

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
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	<p>The subject property was built circa 1970; therefore, it is required to perform a screen for lead-based paint prior to starting the work.</p> <ul style="list-style-type: none">• The work must be performed by RRP Certified Renovation Firm.• At least one RRP-Certified Renovator must be at the job site or available when work is being done.• Workers at the job site must receive on-the-job training from the Certified Renovator.• Lead Safe Work Practices are recommended if paint disturbance is "di minimis".• Lead Safe Work Practices are required if paint disturbance exceeds "di minimis" but not EPA's minor repair and maintenance threshold.• Property Risk Assessment and abatement of all lead-based paint hazards is required prior to commencing work if paint disturbance is significant.

Determination:

- ☐ This categorically excluded activity/project converts to Exempt, per 58.34(a)(12) because there are no circumstances which require compliance with any of the federal laws and authorities cited at §58.5. **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR
- ☒ This categorically excluded activity/project cannot convert to Exempt because there are circumstances which require compliance with one or more federal laws and authorities cited at §58.5. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain “Authority to Use Grant Funds”** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR
- ☐ This project is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature:



Date: 7/18/2025

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

Responsible Entity Agency Official Signature:

8/12/2025
Date: _____

Name/Title: Abdul X. Feliciano Plaza, Permits and Environmental Specialist

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

Appendices

List of Appendices

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4	EPA's published Summary of Nonattainment Area Population Exposure 1 Report. This is a summary of the 2010 population living in an area that is in nonattainment for at least one of the National Ambient Air Quality Standards (NAAQS). EPA's Published Status of Puerto Rico Designated Areas. This is a summary of Puerto Rico's designated areas by NAAQS and year
5	RADON - Memorandum to File and Supporting documentation
6	USFWS "No Effect" Memo and supporting documentation
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Appendix 1: Figures

List of Figures

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11	Historic Preservation Map
12	Noise Abatement and Control Map
13	Sole Source Aquifer
14	Wetlands Map
15	Wild and Scenic Rivers Map

Colmado El Moroco

Carr 303 Km 3.2

Bo. Olivares,

Lajas PR 00667

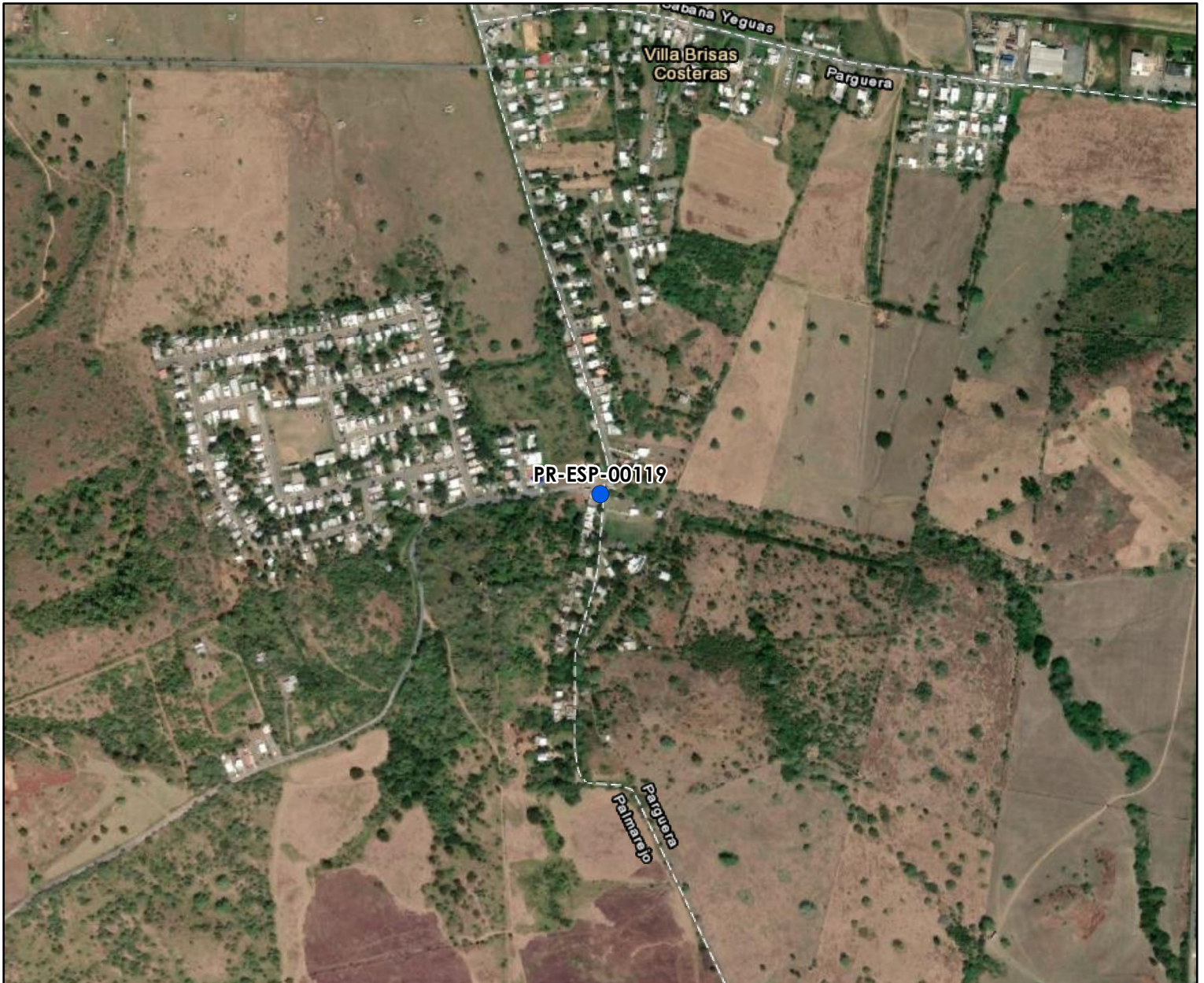
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Lat: 18.002324, Lon: -67.068464

Figure 1

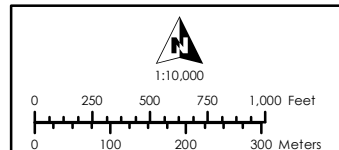
Location: Aerial Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:

● PR-ESP-00119



Service Layer Credits:

Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

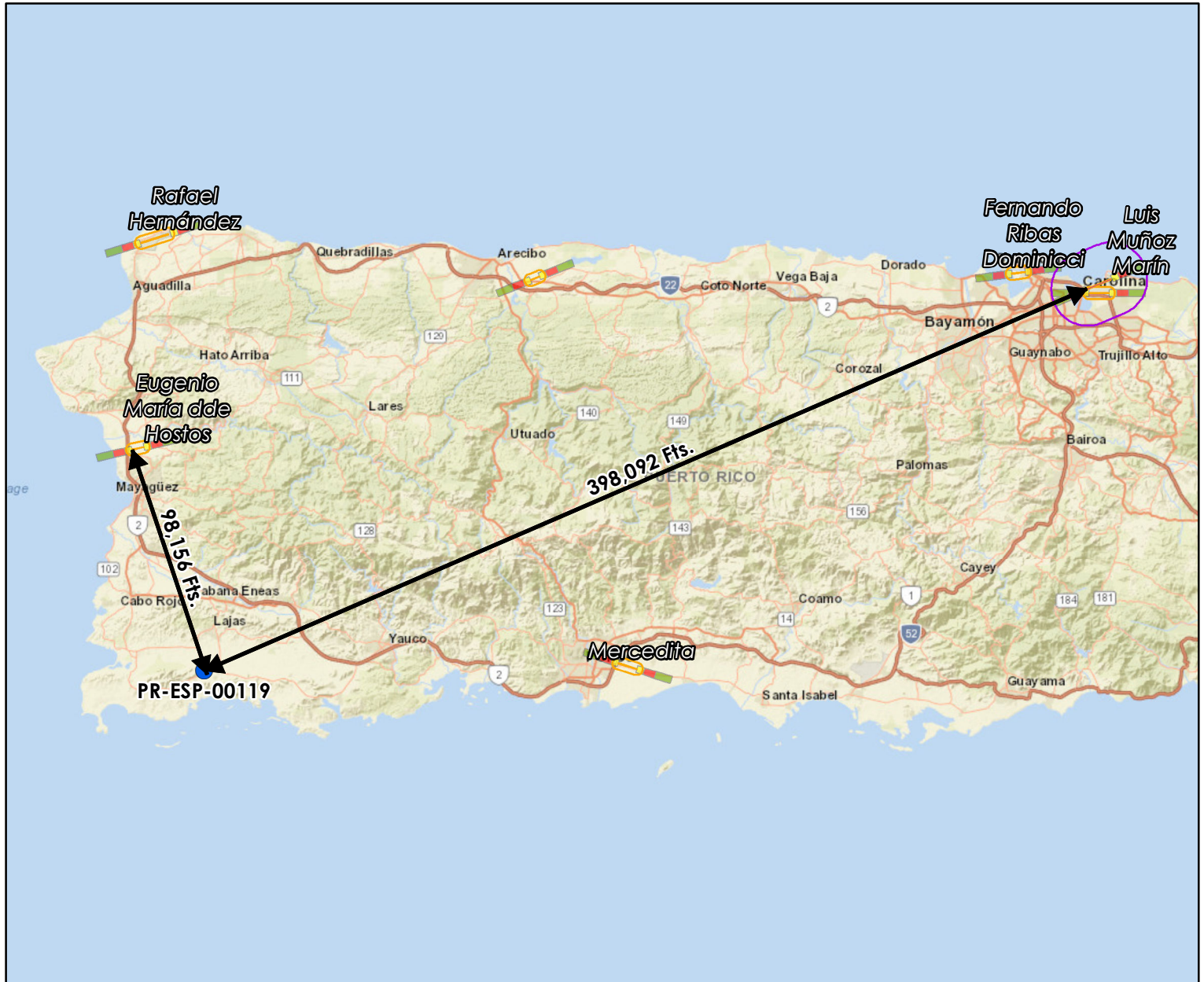
Source:

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

Figure 2

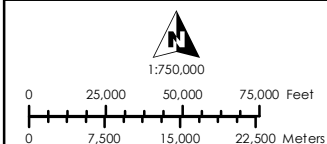
Airports Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:

- | | |
|--|---|
| ● PR-ESP-00119 | |
| SJU Military Runaway | Accident Potential Zone |
| SJU Civil Runaway | APZ 1 |
| Military Airport Buffer (15,000 Fts.) | APZ 2 |
| Civil Airport Buffer (2,500 Fts.) | Clear Zone |



Service Layer Credits:
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

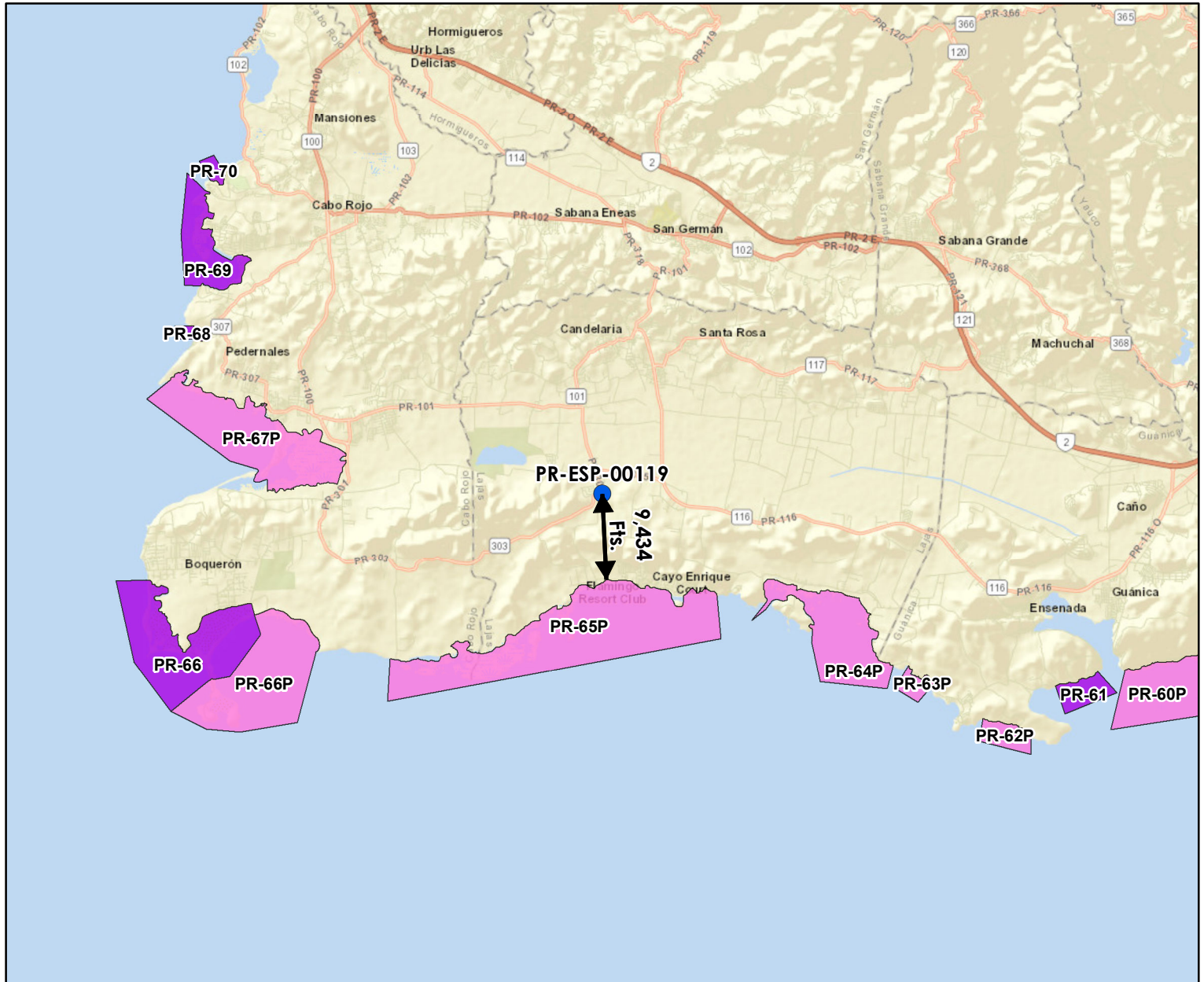
Source:
Federal Aviation Administration (FAA)
<https://adds-faa.opendata.arcgis.com/>
The Environmental Protection Agency
<https://www.epa.gov/nepa/nepassist>

Colmado El Moroco
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Figure 3

Coastal Barrier Resource System Map

Electrical Power Reliability and Resilience Program (ER2)



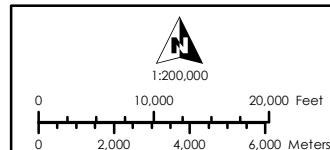
Legend:

● PR-ESP-00119

Coastal Barrier Resources System

Otherwise Protected Area

System Unit



Service Layer Credits:

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:

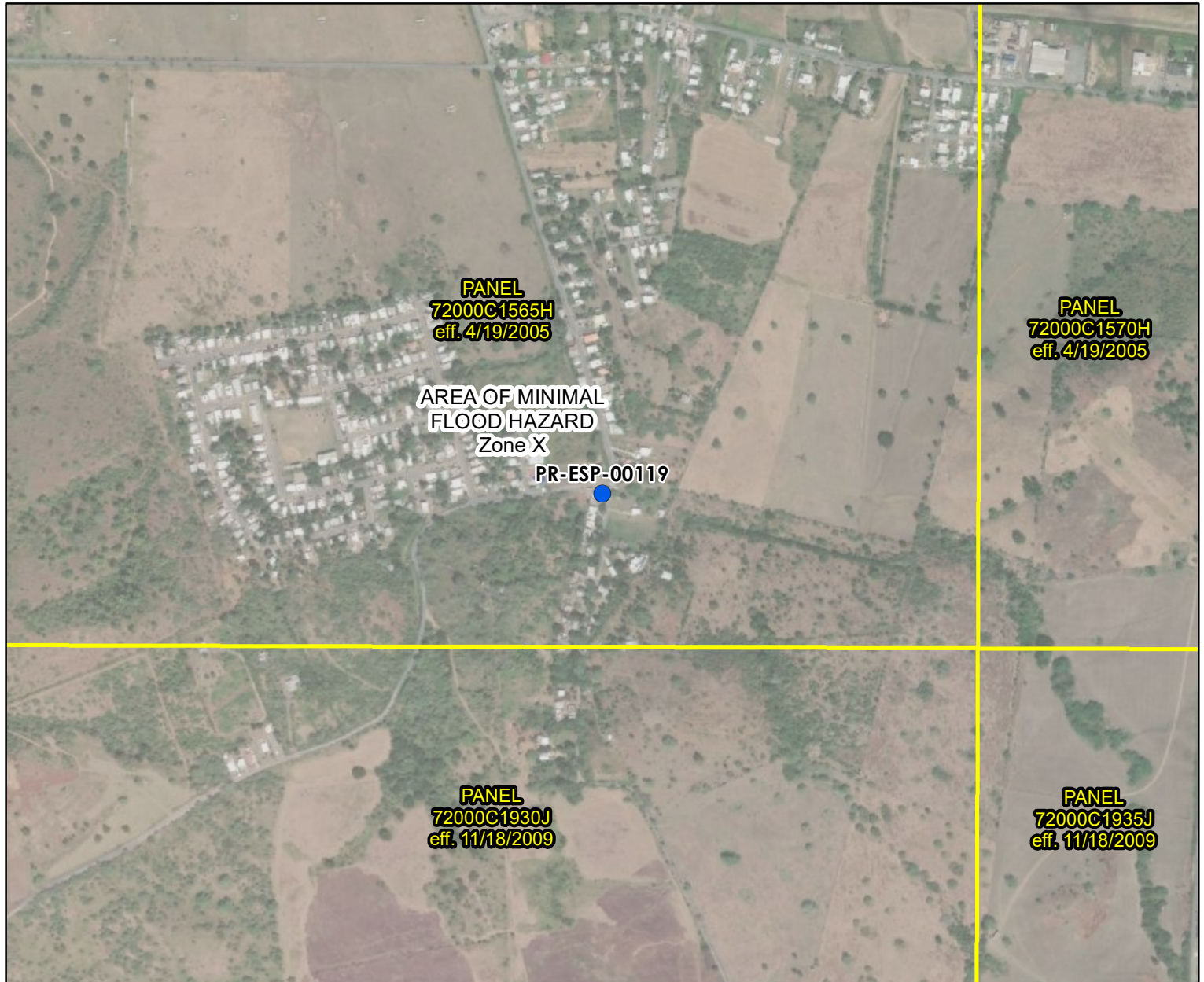
U.S. Fish and Wildlife Service (FWS)
<https://www.fws.gov/program/coastal-barrier-resources-act>

Colmado El Moroco
 Carr 303 Km 3.2
 Bo. Olivares,
 Lajas PR 00667
 Catastro: 381-000-010-11-002
 Lat: 18.002324, Lon: -67.068464

Figure 4

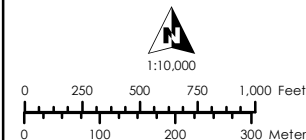
Flood Insurance Rate Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:

- | | |
|---|---|
| ● PR-ESP-00119 | Zone A |
| FIRM Panel | Zone AE |
| Floodway | Zone AH |
| 0.2% Annual Chance Flood Hazard | Zone AO |
| Zone D Area of Undetermined Flood Hazard | Zone VE |
| | Zone X |



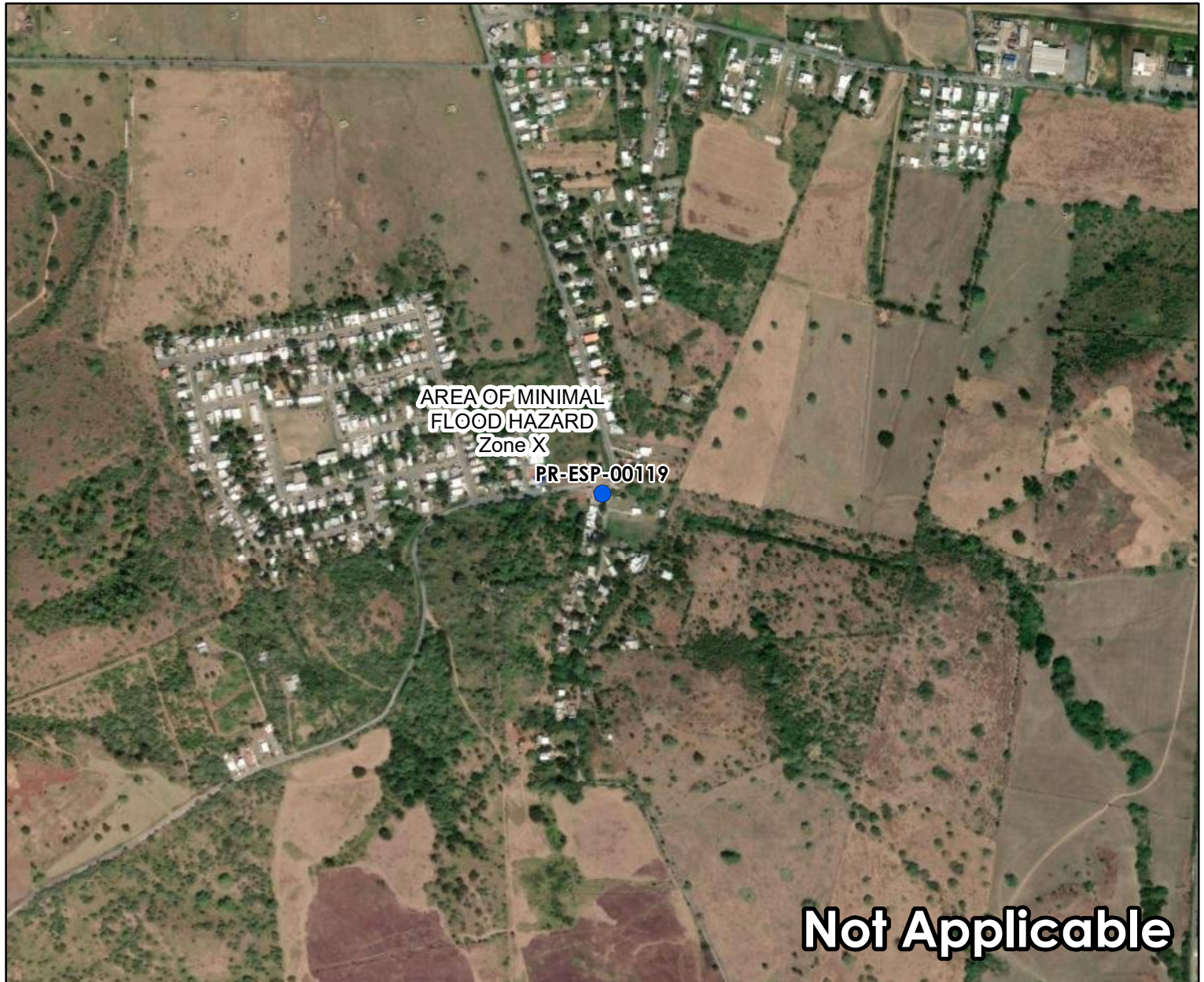
Service Layer Credits:
 Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
 Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:
 Federal Emergency Management Agency (FEMA)
<https://msc.fema.gov/portal/home>













Figure 4-A

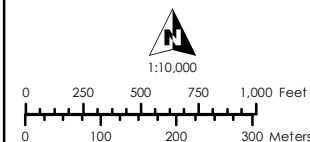
Preliminary Flood Insurance Rate Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:

- | | |
|--|---|
|  PR-ESP-00119 |  Zone A |
|  Preliminary FIRM Panel |  Zone AE |
|  Floodway |  Zone AH |
|  Profile Baseline |  Zone AO |
|  Base Flood Elevation (m) |  Zone VE |
|  0.2% Annual Chance Flood Hazard (Zone X) |  Zone X |



Service Layer Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

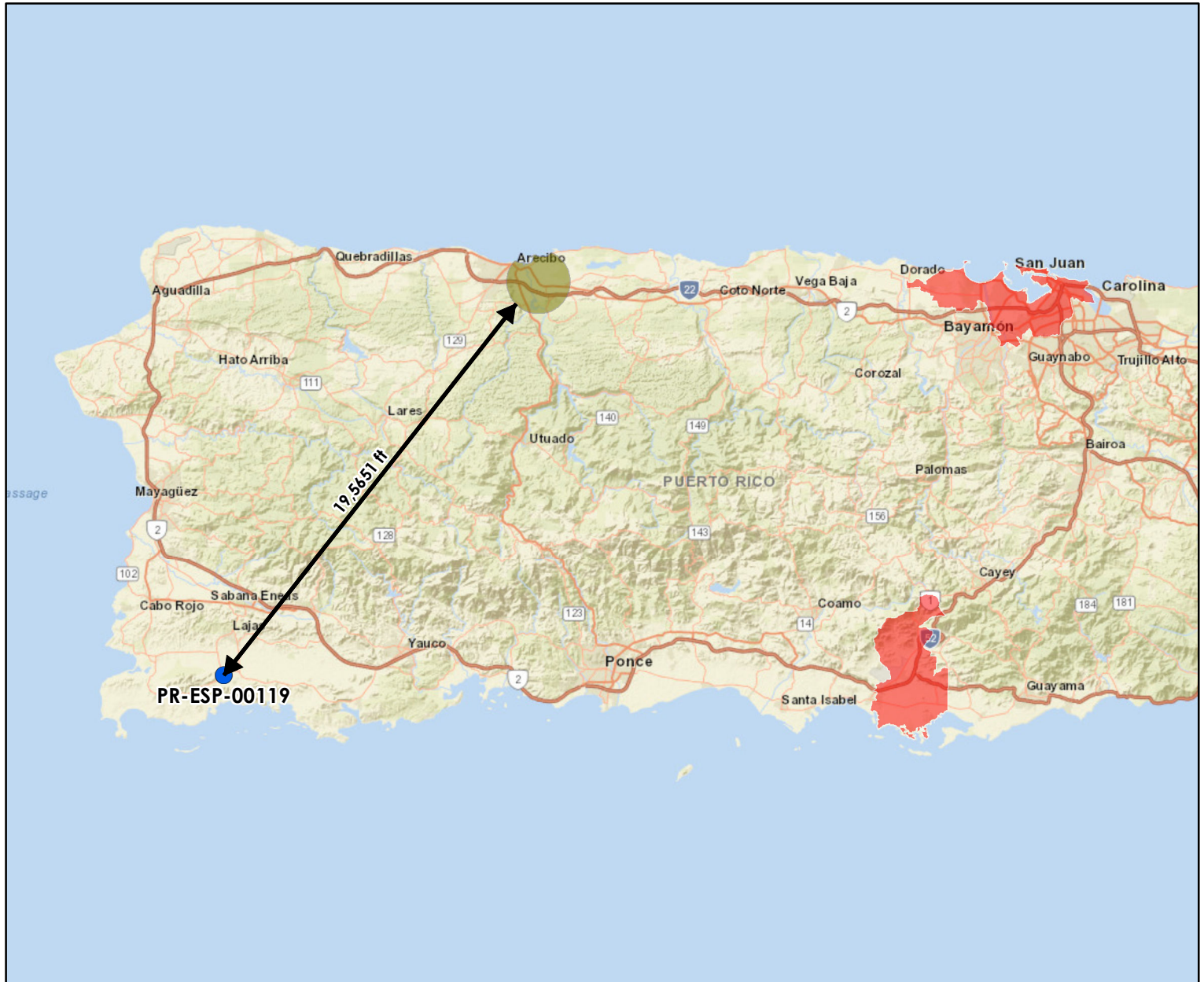
Source:

Federal Emergency Management Agency (FEMA)
<https://msc.fema.gov/portal/home>

Figure 5

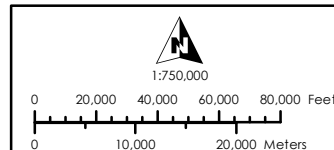
Clean Air Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:

- PR-ESP-00119
- Clean Air Areas - SO₂
- Clean Air Areas - Lead



Service Layer Credits:
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:
U.S. Geological Survey (USGS)
<https://pubs.er.usgs.gov>

Colmado El Moroco

Carr 303 Km 3.2

Bo. Olivares,

Lajas PR 00667

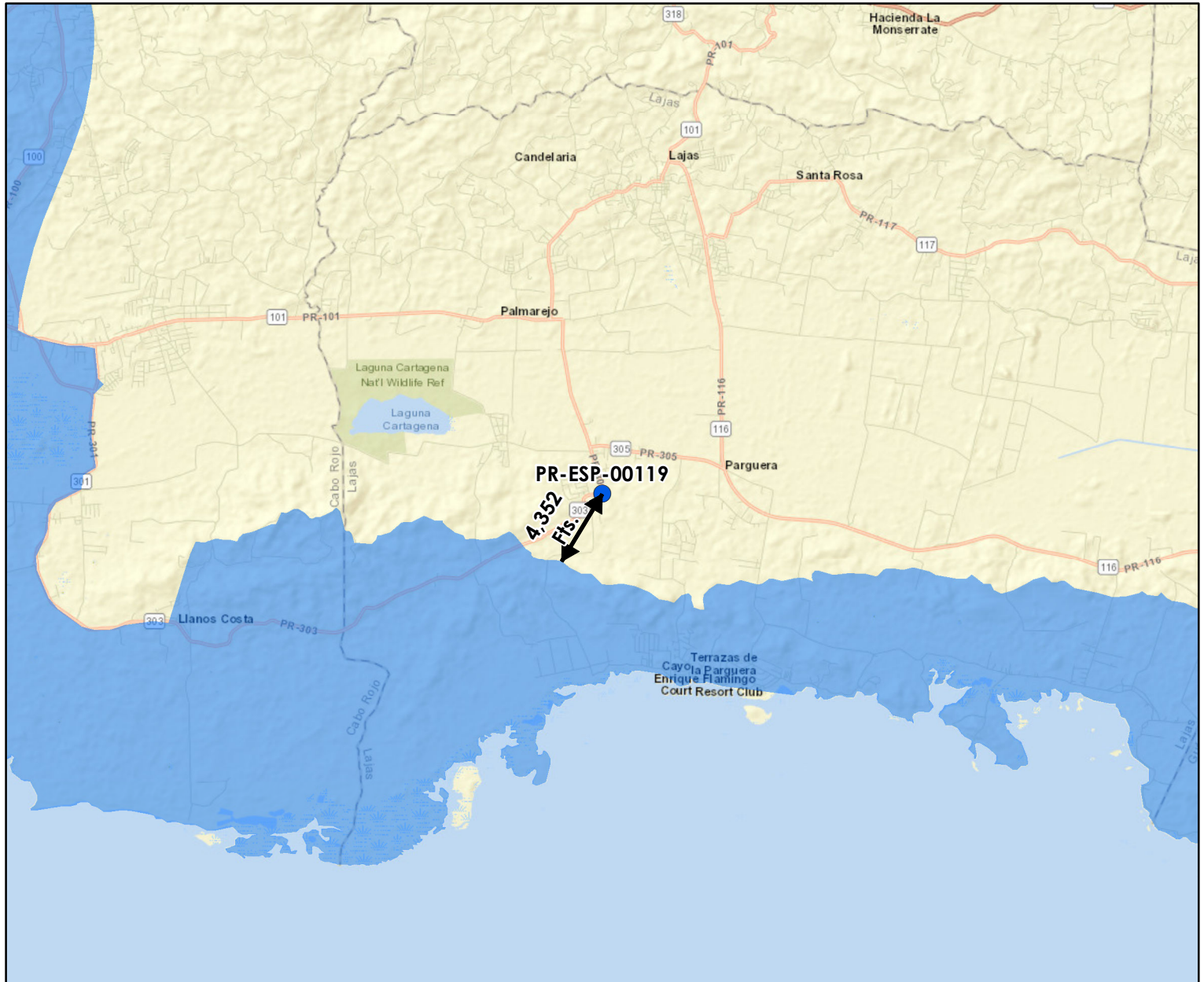
Catastro: 381-000-010-11-002

Lat: 18.002324, Lon: -67.068464

Figure 6

Coastal Zone Management Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:



PR-ESP-00119



Coastal Zone Management Act Boundary



1:100,000

0 2,000 4,000 6,000 8,000 10,000 Feet
0 1,000 2,000 3,000 Meters



Service Layer Credits:

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:

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

Colmado El Moroco
 Carr 303 Km 3.2
 Bo. Olivares,
 Lajas PR 00667
 Catastro: 381-000-010-11-002
 Lat: 18.002324, Lon: -67.068464

Figure 7

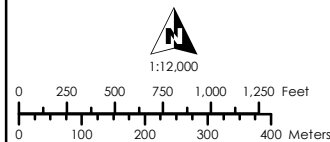
Toxic and Hazardous Facilities Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:

- | | |
|--|--|
| ● PR-ESP-00119 | ⬠ NPDES - Major |
| Buffer (500 Fts.) | ⚠ RADINFO |
| Buffer (3,000 Fts.) | ▲ RCRA |
| ⚡ AIR | ▲ RCRA - Active |
| ⬠ NPDES | ▲ RCRA - Inactive |
| | ▼ TRI |

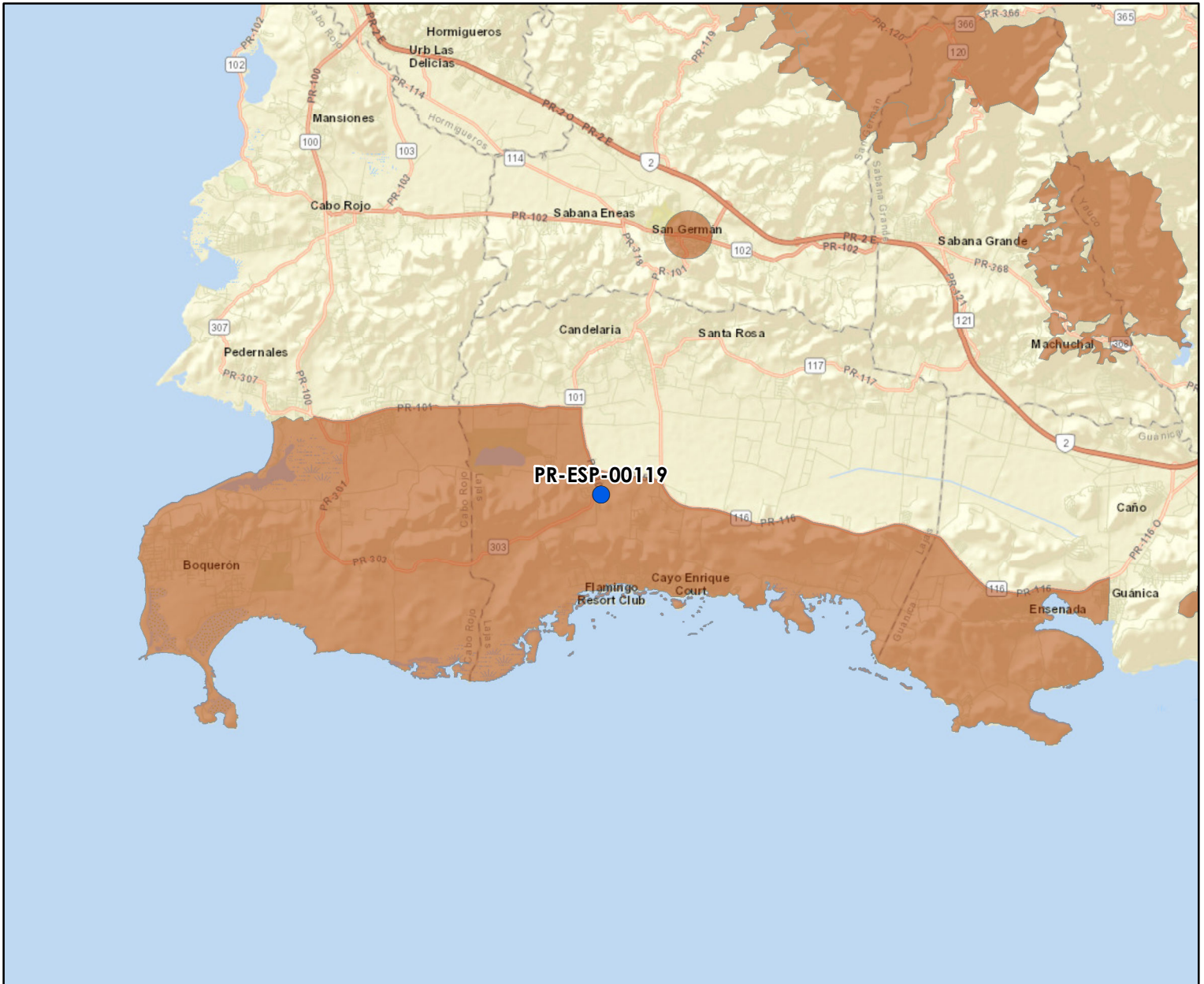


Service Layer Credits:
 Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
 Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:
 EPA Facility Registry Service (FRS)
<https://www.epa.gov/frs>

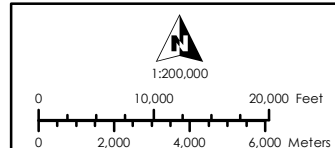
Colmado El Moroco
Carr 303 Km 3.2
Bo. Olivares,
Lajas PR 00667
Catastro: 381-000-010-11-002
Lat: 18.002324, Lon: -67.068464

Figure 8
Threatened and Endangered Species Map
Electrical Power Reliability and Resilience Program (ER2)



Legend:

- PR-ESP-00119
- Critical Habitat



Service Layer Credits:
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:
NOAA Office of Response and Restoration
<https://response.restoration.noaa.gov/>

Figure 9

Farmland Protection

Electrical Power Reliability and Resilience Program (ER2)

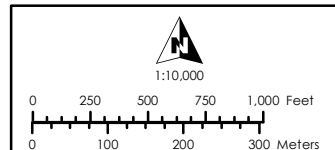


Legend:

● PR-ESP-00119

Farm Class

- Farmland of statewide importance
- Not prime farmland
- Prime farmland if irrigated



Service Layer Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
 Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

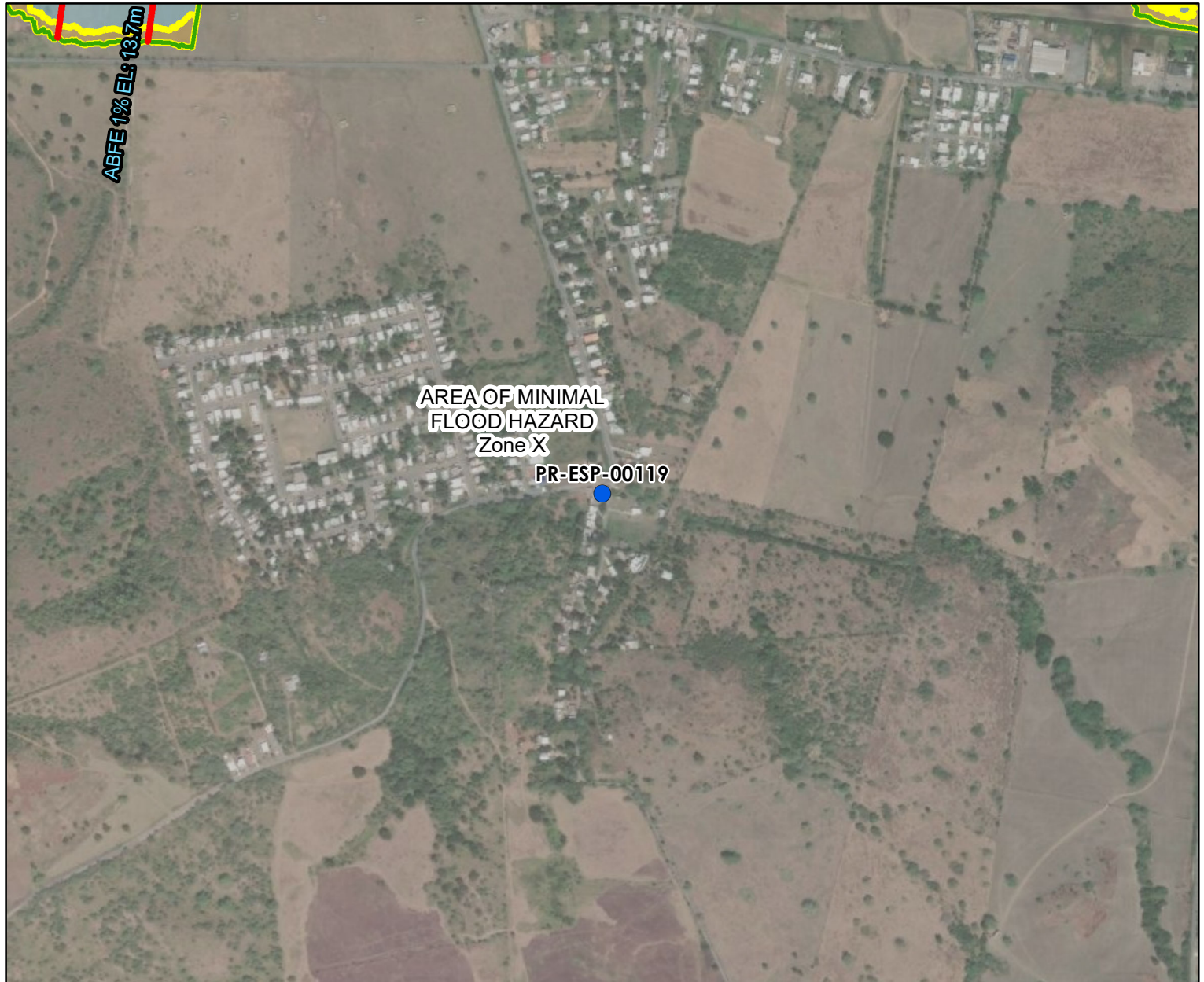
Source:

Underground Storage Tanks (USTs)
<https://www.epa.gov/ust>

Figure 10

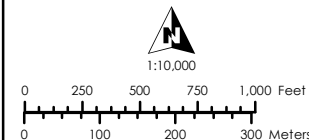
Advisory Base Flood Elevation Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:

- | | |
|--|---|
| ● PR-ESP-00119 | Zone A |
| Area Potential Effect (Building Footprint) | Zone AE |
| CRIM-Parcel | Zone AO |
| Advisory Base Flood Elevations (ABFE) | Zone VE |
| 0.2 % Annual Chance Flood | Zone X - Area of Minimal Flood Hazard |
| 1 % Annual Chance Flood | 0.2 % Annual Chance Flood |
| | Floodway |



Service Layer Credits:
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

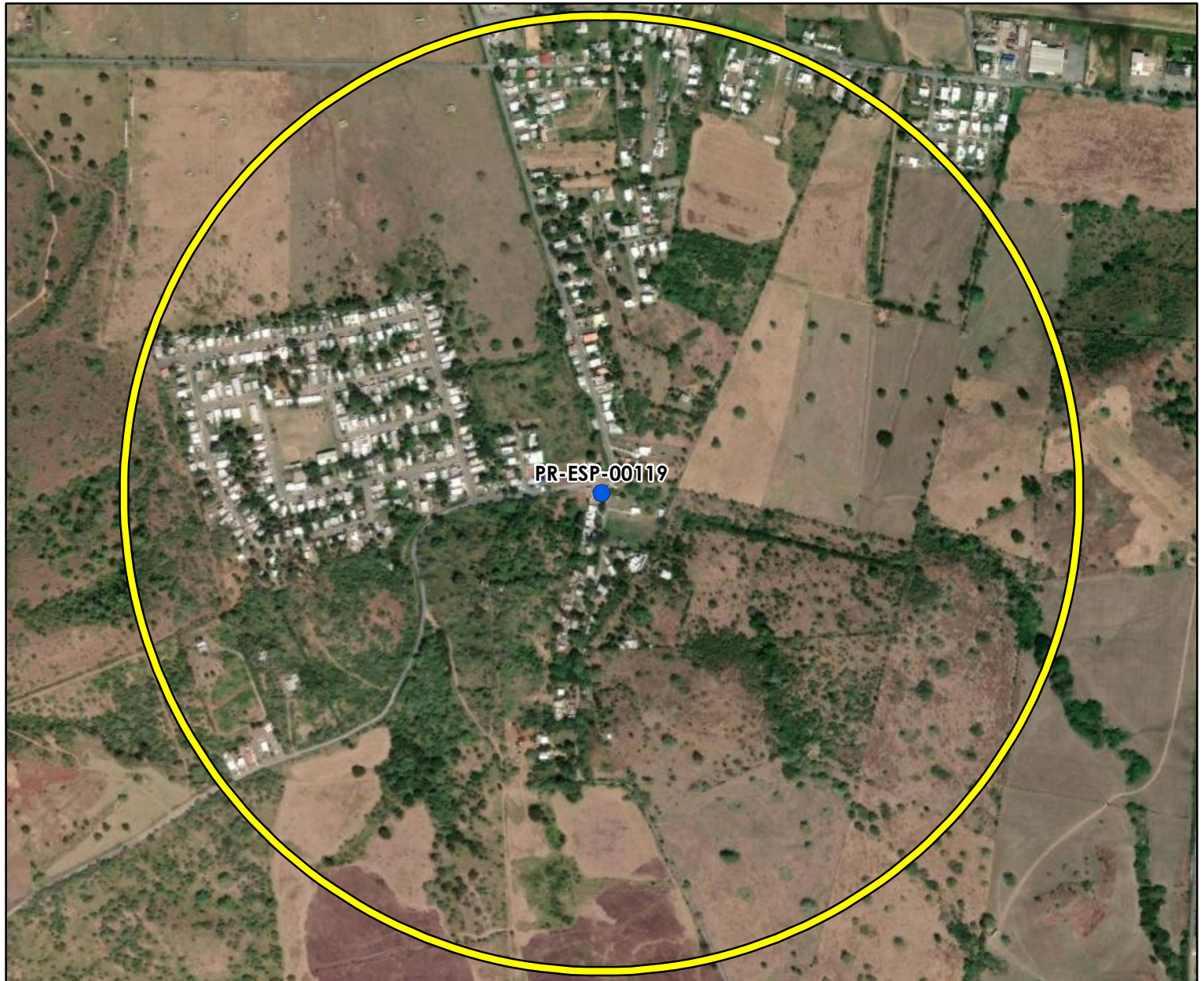
Source:
Federal Emergency Management Agency (FEMA),
<https://gis-r2-fema.hub.arcgis.com/>
Junta de Planificacion de Puerto Rico (JP), <https://maps.jp.pr.gov/>
Mapas de Niveles de Inundacion Base Recomendados

Colmado El Moroco
 Carr 303 Km 3.2
 Bo. Olivares,
 Lajas PR 00667
 Catastro: 381-000-010-11-002
 Lat: 18.002324, Lon: -67.068464

Figure 11

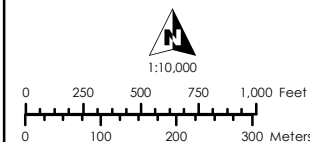
Historic Preservation Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:

- | | |
|--|--|
| ● PR-ESP-00119 | Historic Centers |
| Buffer (0.5 Mile) | Cultural Resource District |
| Building | Sensitive Archaeological Zones |
| Cultural Resource Structure | Archaeological Resource Zones |
| Cultural Resource Object | Historic Communities |
| Cultural Resource Site | Traditional Urban Center |



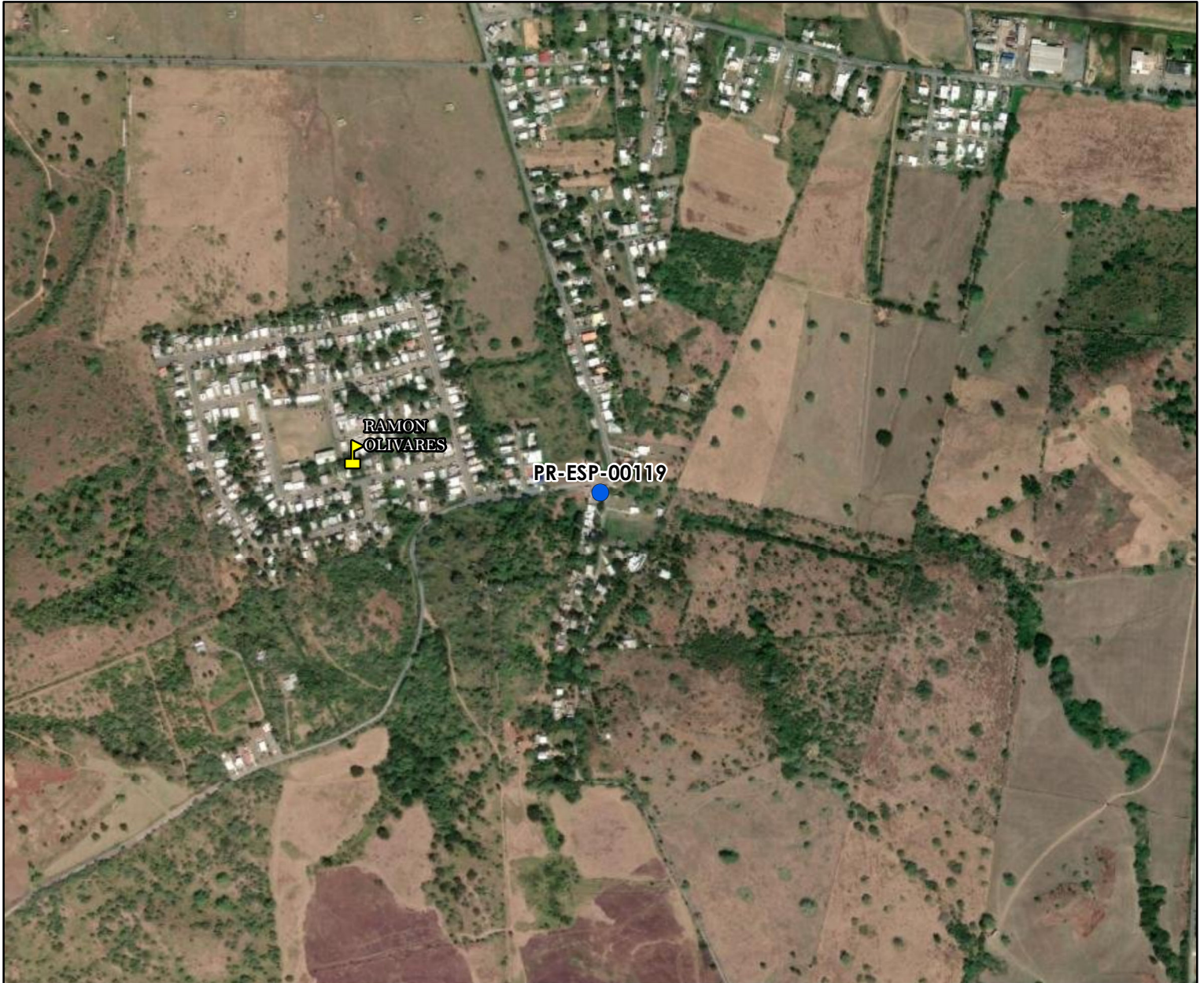
Service Layer Credits:
 Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
 Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

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






Figure 12

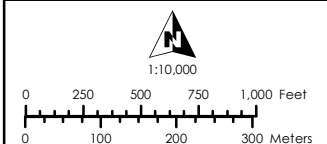
Noise Abatement and Control Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:

-  PR-ESP-00119
-  University
-  School
-  Hospital
-  Emergency Hospital



Service Layer Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:

U.S. Geological Survey (USGS)
<https://pubs.er.usgs.gov/publication/ofr20201022>

Colmado El Moroco

Carr 303 Km 3.2

Bo. Olivares,

Lajas PR 00667

Catastro: 381-000-010-11-002

Lat: 18.002324, Lon: -67.068464

Figure 13

EPA Sole Source Aquifers

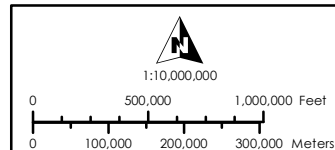
Electrical Power Reliability and Resilience Program (ER2)



PR-ESP-00119

Legend:

- PR-ESP-00119
- EPA Sole Source Aquifers



Service Layer Credits:
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

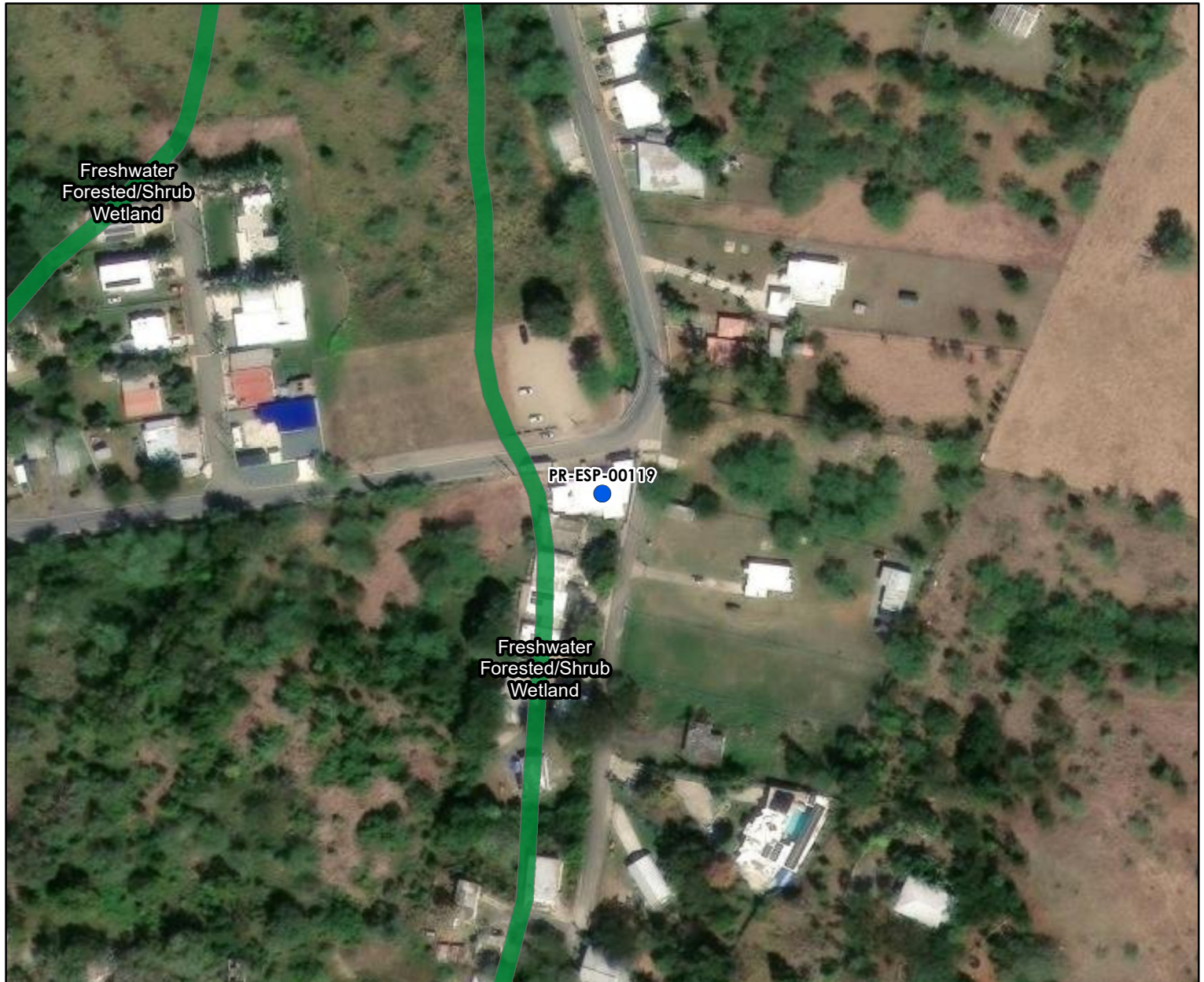
Source:
U.S. Environmental Protection Agency
<https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b>

Colmado El Moroco
Carr 303 Km 3.2
Bo. Olivares,
Lajas PR 00667
Catastro: 381-000-010-11-002
Lat: 18.002324, Lon: -67.068464

Figure 14

Wetlands Map

Electrical Power Reliability and Resilience Program (ER2)

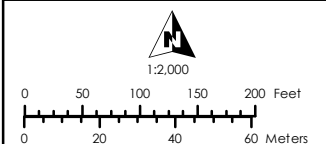


Legend:

● PR-ESP-00119

National Wetlands Inventory

	Estuarine and Marine Deepwater		Freshwater Pond
	Estuarine and Marine Wetland		Lake
	Freshwater Emergent Wetland		Riverine
	Freshwater Forested/Shrub Wetland		



Service Layer Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:

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

Colmado El Moroco

Carr 303 Km 3.2

Bo. Olivares,

Lajas PR 00667

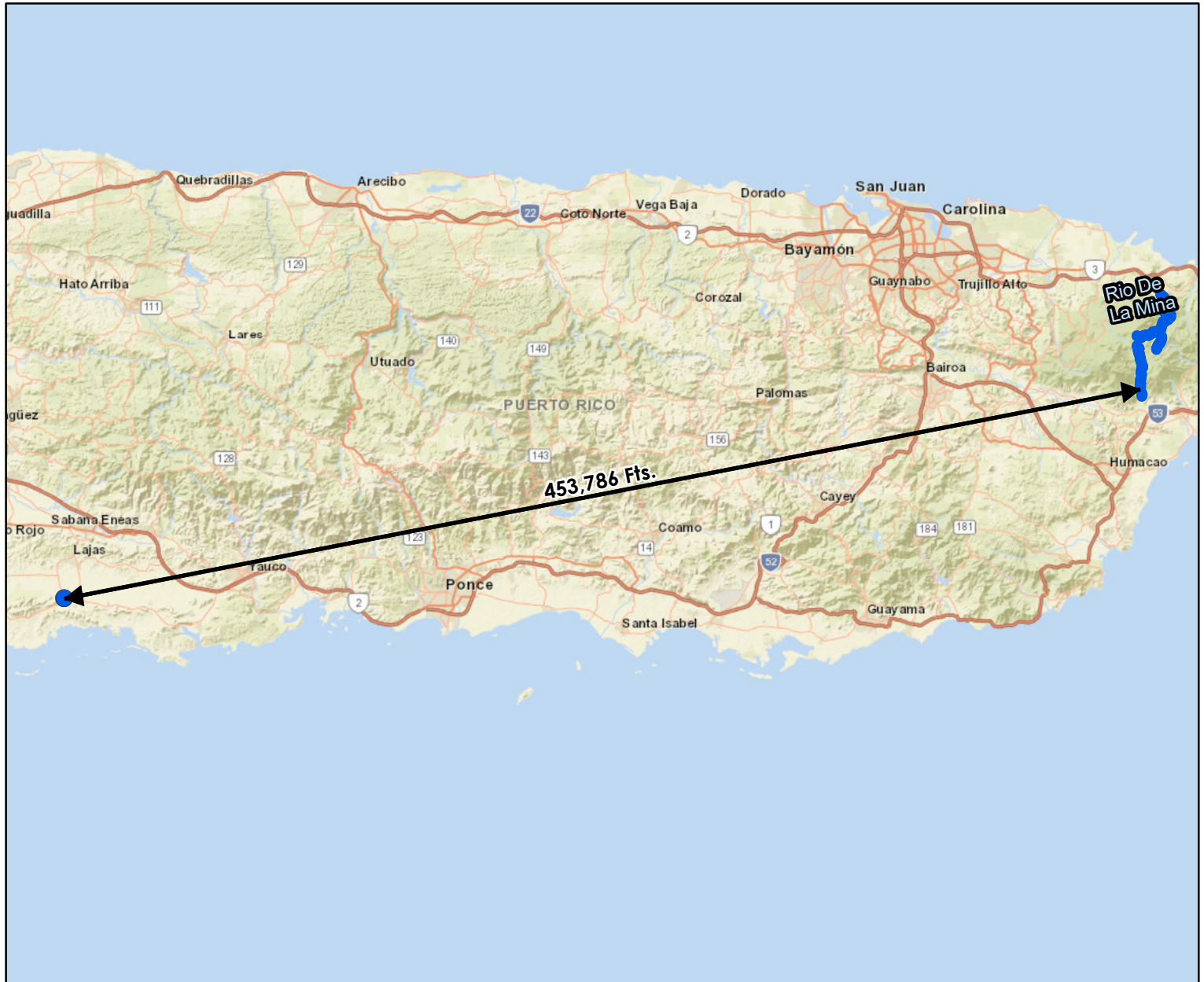
Catastro: 381-000-010-11-002

Lat: 18.002324, Lon: -67.068464

Figure 15

Wild and Scenic Rivers Map

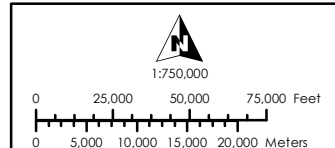
Electrical Power Reliability and Resilience Program (ER2)



Legend:

● PR-ESP-00119

— Wild and Scenic Rivers



Service Layer Credits:

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:

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

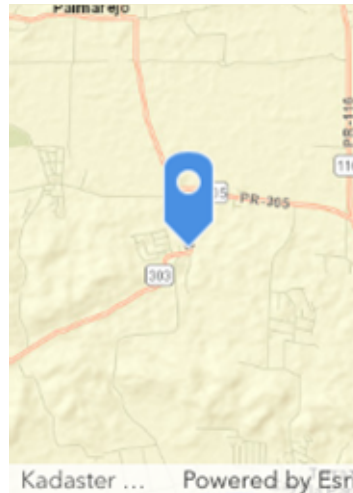
Appendix 2: Field Visit Report



Environmental Field Assessment Form - PR-ESP-00119

APPLICANT/LOCATION INFORMATION

Applicant ID:	PR-ESP-00119
Applicant Name:	Colmado El Moroco
Parcel ID:	381-000-010-11-002
Coordinates:	18.002324, -67.068464
Street Address:	Carr 303 Km 3.2 Bo. Olivares
Municipio:	Lajas
Zip Code:	00667
Site Inspector:	Egon Gonzalez
Date of Visit:	March 25, 2025
Time of Visit:	10:55
Year Built:	circa 1955



Building Information

Question	Answer	Notes
1. Location verified:	Yes	18.002324, -67.068464
2. Is the building correct on GIS?	Yes	Building is correct on GIS
3. Building Type:	Commercial	
4. # of Stories:	1	
5. Building Foundation:	Concrete Slab	
6. Is the building in use?	Yes	Building is in use
7. Does the building have a detached garage / carport present?	No	
8. Is the electricity connected?	Yes	Electricity is connected
9. Is the water connected?	Yes	Water is connected
10. Are there signs of poor housekeeping on site? (mounds of rubble, garbage, storm debris, solid waste, petroleum products, paint, pesticides, cleaning fluids, vehicle batteries, abandoned vehicles, pits, pools, ponds of hazardous substances, electrical equipment etc.)	No	
11. Is a septic system present? If Yes report apparent condition.	No	Septic tank is in working condition
12. Are there any obvious signs of animals, birds nesting or burrows near the site?	No	



Parcel Conditions		
Question	Answer	Notes
1) Are there any 55-gallon drums visible on site? If yes, are they leaking?	Yes	(1) 55gal Drum used for cooking oil located at back of structure
2) Are there any (or signs of any) underground storage tanks on the property?	No	
3) Are there signs of AST on the parcel or adjacent parcel? If yes, list approximate size and contents, if known.	Yes	(32) 25lbs Propane tank located at right side of structure, (1) 300lbs Propane tank located at back of structure
4) Is there any stained soil or pavement on the parcel?	No	
5) Are there any potentially hazardous trees that could fall?	No	
6) Are there any groundwater monitoring wells on the site or adjacent parcel?	No	
7) Is there distressed vegetation on the parcel?	No	
8) Are any additional environmental or non-environmental site hazards observed?	No	
9) Is there any permanent standing water, such as a pond or stream, located on the site(do not include ponding from recent rain / weather events)?	No	
10) Does the subject property have water frontage?	No	
11) Is the applicant aware of any significant historical event or persons associated with the structure, or of it being located in a historic district/ area?	No	
12) Is a historic marker present?	No	
13) Based on the above finding, does additional information need to be obtained from the applicant to determine whether an environmental hazard is present?	No	



Building Environmental Conditions		
Question	Answer	Notes
1. Is there any visible evidence of asbestos, chipping, and flaking or peeling paint, or hazardous materials present in or on the structure?	No	
2. Is there any visible indication of mold?	No	
3. Are there any pungent, foul or noxious odors?	No	

Additional Needs Analysis		
Question	Answer	Notes
Based on the above findings, does additional information need to be obtained from the applicant to determine whether an environmental hazard is present?	No	

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

Inspector Signature

Egon Gonzalez

March 25, 2025

Front of Structure

Photo Direction: South

Comments:



Facing Away from Front

Photo Direction: North

Comments:



Side #1 of Structure

Photo Direction: Northeast

Comments:



Facing Away From Side #1

Photo Direction: North

Comments:



Back of Structure

Photo Direction: East

Comments:



Facing Away from Back

Photo Direction: East

Comments:



Side #2 of Structure

Photo Direction: East

Comments:



Facing Away from Side #2

Photo Direction: West

Comments:



Streetscape #1

Photo Direction: East

Comments:



Streetscape #2

Photo Direction: West

Comments:



Address

Photo Direction: South

Comments:



Architectural Details 1

Photo Direction:

Photo Description: Electricity is connected



Architectural Details 2

Photo Direction:

Photo Description: Water is connected



Architectural Details 3

Photo Direction:

Photo Description: Septic tank is in working condition



Architectural Details 4

Photo Direction:

Photo Description: General interior view



Architectural Details 5

Photo Direction:

Photo Description: General interior view



Architectural Details 6

Photo Direction:

Photo Description: Additional overview



Architectural Details 7

Photo Direction:

Photo Description: (18) 25lbs
Propane Tanks located on right side
of structure



Architectural Details 8

Photo Direction:

Photo Description: (18) 25lbs
Propane Tanks located on right side
of structure



Architectural Details 9

Photo Direction:

Photo Description: 55gal Drum used to store used cooking oil



Architectural Details 10

Photo Direction:

Photo Description: (1) 300lbs Propane tank located at back of structure



Architectural Details 11

Photo Direction:

Photo Description: Road landslide near structure



Architectural Details 12

Photo Direction:

Photo Description: Road landslide near structure



Appendix 3: Scope of Work Quote

"Sé dueño de tu energía"

Carr 111, Km 11.7
Bo. Capá
Moca, PR 00676
Tel. 787.239.9836

Dirección Postal:
2053 Pedro Albizu Ave
Suite 2 PMB #134
Aguadilla, PR 00603

Fecha: August 6, 2024
Estimado #: L224099-REV
Para: *Sistema
Fotovoltaico*

Para: Robin G. Rodríguez Acosta / Colmado El Moroco
Lajas, PR

Válido por: 30 días

Consumo anual: 83,436 kWh
Coordenadas: 18.002366, -67.068529

Comentarios o instrucciones especiales:

Estimado para Apoyo Energético 2.0. Basado en instalación estándar de 40 pies, sobre techo. No incluye: trabajos por problemas eléctricos existentes, conexión a planta eléctrica, lavado ni sellado de techo. Medición neta: no incluye *application fee*, ni el pago de estudios suplementarios o costos asociados, de ser requeridos por LUMA.

DESCRIPCION			TOTAL
Sistema de energía fotovoltaico nuevo con una producción estimada de 22.4 kWh* el cual posee lo siguiente:			
Sistema Fotovoltaico:			
Equipo	Descripción	Cantidad	
• Paneles Solares	JAM72D10-400/MB**	56	
• Materiales Eléctricos	AC y DC	1	\$ 23,255.48
• Montura para Paneles Solares	Frame	1	
• Tigo	TS4-A-2F	28	
Sistema de almacenamiento de batería con una capacidad aproximada de 37 kWh el cual posee lo siguiente:			
Battery Storage System:			\$ 44,815.09
• Batería de Litio	Fortress eVault 18.5kWh	2	
• Inversor	Fortress FP-Envy-12k	2	
• Instalación Eléctrica	Labor	1	\$ 13,350.00
Sub Total			\$ 81,420.57
B2B Tax			\$ 534.00
Costo Total			\$ 81,954.57
Incentivo estimado			\$ (48,852.34)
Aportación estimada			\$ 33,102.23

Notas:

- Consumo promedio anual: 83,436.00 kWh
- Producción de sistema propuesto basado en PVWatts: 35,156 kWh
- Porcentaje del Consumo Cubierto: 42.13%
- Producción basada en el techo disponible

* Sujeto a disponibilidad. De no haber disponible se usará uno similar aprobado y certificado por OGPe.

Firma: _____

Si tiene preguntas sobre este estimado, contacte a Yamitza Méndez, al teléfono (787) 239-9836,
E-mail: fusionenergypr@gmail.com.

THANK YOU FOR YOUR BUSINESS!

PROYECTO:

Sketch of Photovoltaic Panels
Propiedad Colmado El Moroco
Car 303 Km 3.9 Lajas PR 00667



Coordenadas: 18.002366, -67.068529



"Sé dueño de tu energía"

Annual Energy Consumption Calculation

Robin G. Rodríguez Acosta / Colmado El Moroco
Lajas, PR

DATE	kWh
Jan-23	6517
feb	5700
mar	5998
abr	6846
may	6685
jun	7775
jul	6927
ago	7392
sep	7752
oct	7652
nov	7172
December-23	7020

Total Annual 83,436.00

Average 6953.00

Daily 231.77

Hr 51.50



Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at //sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

Disclaimer: The PVWatts® Model ("Model") is provided by the National Renewable Energy Laboratory ("NREL"), which is operated by the Alliance for Sustainable Energy, LLC ("Alliance") for the U.S. Department Of Energy ("DOE") and may be used for any purpose whatsoever.

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The energy output range is based on analysis of 30 years of historical weather data, and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

RESULTS

35,156 kWh/Year*

Month	Solar Radiation (kWh / m ² / day)	AC Energy (kWh)
January	5.39	2,799
February	5.81	2,730
March	6.10	3,161
April	6.18	3,036
May	6.30	3,198
June	6.25	3,097
July	6.06	3,100
August	6.11	3,121
September	5.71	2,809
October	5.51	2,822
November	5.15	2,585
December	5.18	2,698

Annual	5.81	35,156
--------	------	--------

User Comments

Robin G. Rodríguez Acosta / Colmado El Morocco

Location and Station Identification

Requested Location	Lajas, PR
Weather Data Source	Lat, Lng: 18.01, -67.06 1.3 mi
Latitude	18.01° N
Longitude	67.06° W

PV System Specifications

DC System Size	22.4 kW
Module Type	Standard
Array Type	Fixed (roof mount)
System Losses	15%
Array Tilt	10°
Array Azimuth	180°
DC to AC Size Ratio	1.2
Inverter Efficiency	96%
Ground Coverage Ratio	0.4
Albedo	From weather file
Bifacial	No (0)
Monthly Irradiance Loss	Jan Feb Mar Apr May June

	0%	0%	0%	0%	0%	0%
	July	Aug	Sept	Oct	Nov	Dec
	0%	0%	0%	0%	0%	0%
Performance Metrics						
DC Capacity Factor	17.9%					

Nota Relacionada al Plomo

En las **propiedades construidas antes del 1ero de enero de 1978**, estos proyectos están regulados por la Regla de Renovación, Reparación y Pintura (RRP) de la Agencia de Protección Ambiental de los Estados Unidos (EPA). Dependiendo de algunos factores, es posible que estas propiedades requieran que se siga un proceso especial establecido por la EPA.

Según explicado en las guías del programa Nueva Energía, "una "alteración mínima" es una actividad que no altera más de dos (2) pies cuadrados de pintura por habitación interior o veinte (20) pies cuadrados de pintura en el exterior, 24 CFR §35.1350(d). Una "actividad de reparación y mantenimiento menor" es una actividad que interrumpe más que el nivel "de minimis" pero no más de seis (6) pies cuadrados de pintura por habitación interior o veinte (20) pies cuadrados de pintura en el exterior, 40 CFR §745.83. Actividades de pintura a base de plomo" significa inspección, evaluación de riesgos y reducción, 40 C.F.R. §745.223.

Debido a los requerimientos de plomo, hay unos gastos administrativos y de pruebas de plomo los cuales tienen un costo de \$500.00 no incluidos en este estimado. Si se requiere que se trabaje siguiendo todo el procedimiento de protección en el caso de propiedades con plomo, esto tendría un costo de \$2,000.00 adicionales al precio presentado en el estimado del sistema fotovoltaico y/o *battery storage system*.

Appendix 4: EPA's Published Summary of Non-attainment Areas Population Exposure Report & Status of Puerto Rico Designated Areas

EPA's Published Summary of Nonattainment Areas
Population Exposure Report & Status of Puerto Rico
Designated Areas

Summary Nonattainment Area Population Exposure Report

Data is current as of May 31, 2023

Ordered by state(s)

The NO₂ nonattainment area became a maintenance area on September 22, 1998. All Carbon Monoxide areas were redesignated to maintenance areas as of September 27, 2010. 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.

State(s)	General Area Name (see note)	2010 Population in 1000s (area count)									
		8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)	PM-10 (1987)	SO ₂ (2010)	SO ₂ (1971)	Lead (2008)	Lead (1978)
AK	Fairbanks				87(1)						
AZ	Douglas/Paul Spur (Cochise County)						17(1)				
AZ	Hayden/Miami						26(2)	20(2)	5(1)	5(1)	
AZ	Nogales						30(1)				
AZ	Phoenix-Mesa	3,945(1)	3,850(1)				3,853(1)				
AZ	Rillito (Pima County)						1(1)				
AZ	West Pinal				52(1)		283(1)				
AZ	Yuma	87(1)					101(1)				

State(s)	General Area Name (see note)	2010 Population in 1000s (area count)									
		8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)	PM-10 (1987)	SO ₂ (2010)	SO ₂ (1971)	Lead (2008)	Lead (1978)
CA	Amador and Calaveras Cos (Central Mountain Cos)	84(2)	46(1)								
CA	Chico	220(1)	220(1)								
CA	Imperial County	175(1)	175(1)	154(1)	154(1)						
CA	Los Angeles-South Coast Air Basin	15,704(3)	15,723(3)	15,716(1)	15,716(1)	15,716(1)				9,437(1)	
CA	Mariposa and Tuolumne Cos (Southern Mountain Cos)	74(2)	18(1)								
CA	Mono County						0(1)				
CA	Nevada County (Western Part)	82(1)	82(1)								
CA	Owens Valley						7(1)				
CA	Plumas County			6(1)							

State(s)	General Area Name (see note)	2010 Population in 1000s (area count)									
		8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)	PM-10 (1987)	SO ₂ (2010)	SO ₂ (1971)	Lead (2008)	Lead (1978)
CA	Sacramento Metro	2,240(1)	2,241(1)		2,206(1)						
CA	San Diego	3,077(1)	3,095(1)								
CA	San Francisco-Bay Area	6,969(1)	6,973(1)		6,971(1)						
CA	San Joaquin Valley	3,937(2)	3,938(2)	3,842(1)	3,842(1)	3,842(1)	126(1)				
CA	San Luis Obispo	1(1)	2(1)								
CA	Searles Valley						4(1)				
CA	Southeast Desert Modified AQMA	1,292(2)	1,294(2)				495(2)				
CA	Tuscan Buttes	0(1)	0(1)								
CA	Ventura County	821(1)	823(1)								
CA	Yuba City	0(1)									
CO	Denver-Boulder-Greeley-Ft. Collins-Loveland	3,331(1)	3,330(1)								

State(s)	General Area Name (see note)	2010 Population in 1000s (area count)									
		8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)	PM-10 (1987)	SO ₂ (2010)	SO ₂ (1971)	Lead (2008)	Lead (1978)
CT	Greater Connecticut	1,629(1)	1,629(1)								
DC-MD-VA	Washington	5,136(1)									
GU	Piti-Cabras							6(1)	1(1)		
GU	Tanguisson Power Plant								1(1)		
IA	Muscatine County							30(1)			
ID	Pocatello						1(1)				
IL-IN-WI	Chicago-Joliet-Napier	9,075(1)									
IN	Fort Wayne-Huntington-Auburn							21(1)			
KS	Salina									0(1)	
KY	Henderson-Webster Counties							7(1)			
KY-IN	Louisville	876(1)									
LA	Evangeline Parish							0(1)			

State(s)	General Area Name (see note)	2010 Population in 1000s (area count)									
		8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)	PM-10 (1987)	SO ₂ (2010)	SO ₂ (1971)	Lead (2008)	Lead (1978)
OR	Klamath Falls				47(1)						
PA	Clearfield and Indiana Counties							93(1)			
PA	Lancaster		519(1)								
PA	Pittsburgh-New Castle		2,356(1)	1,223(1)	21(1)	21(1)		142(2)	5(1)	18(1)	
PA	Reading		411(1)							49(2)	
PA	Warren County							18(1)			
PA-NJ	Allentown-Bethlehem-Easton		712(1)						109(1)		
PA-NJ-DE-MD	Philadelphia-Wilmington-Atlantic City	7,437(1)	7,634(2)								
PR	Arecibo									32(1)	
PR	Guayama-Salinas							23(1)			
PR	San Juan							275(1)			
TN	Johnson City-							15(1)			

[illegible]

State(s)	General Area Name (see note)	2010 Population in 1000s (area count)									
		8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)	PM-10 (1987)	SO ₂ (2010)	SO ₂ (1971)	Lead (2008)	Lead (1978)
UT	Uinta Basin	47(1)									
VA	Giles County							0(1)			
WA	Whatcom County							0(1)			
WI	Milwaukee-Racine	1,648(1)									
WI	Sheboygan	68(1)									
WV-OH	Parkersburg-Marietta							4(1)			
WY	Upper Green River Basin		11(1)								
		2010 Population in 1000s (area count) by Pollutant									
Total Estimated 2010 Population in Nonattainment Areas (1000's) Across All Criteria Pollutants: 121,456		8-Hour Ozone (2015)	8-Hour Ozone (2008)	PM-2.5 (2012)	PM-2.5 (2006)	PM-2.5 (1997)	PM-10 (1987)	SO ₂ (2010)	SO ₂ (1971)	Lead (2008)	Lead (1978)
		115,329 (47)	90,288 (34)	20,942 (5)	31,280 (11)	19,589 (4)	5,605 (20)	2,022 (30)	1,214 (8)	9,561 (11)	3 (1)

The Summary Population Exposure Report is a summary of the population living in an area that is in nonattainment for at least one of the NAAQS.

Area Name:

The "State(s) Area Name" column contains a common or general name for the nonattainment areas on the row but may not reflect the exact name of any area on the row. This column cannot be exact since the nonattainment area for one pollutant may not contain the same counties, cities, or states as the nonattainment area for another pollutant on the same row. The abbreviations listed in the "State(s)" column reflect all states identified in row. However, some states on a row may be nonattainment for some pollutants and not for others in the general area. A multi-state area with states that have not all been redesignated to maintenance is counted as a nonattainment area until all of the states in the area are redesignated, with the whole area population displayed.

Puerto Rico CO (1971) Areas

[Return to map](#)

No designated areas for this pollutant.

Puerto Rico Lead (1978) Areas

[Return to map](#)

Top of page

No designated areas for this pollutant.

Puerto Rico Lead (2008) Areas

[Return to map](#)

Top of page

Click on
the Area
name
to view
SIP
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Elemen
ts

Area	Status	Designation Date	Classification	2010 Population (state portion)	Meets NAAQS Basis	Design Value Annual ($\mu\text{g}/\text{m}^3$) (entire area)	Meets NAAQS	SIP Requirements Original/Approved	Clean Air Determination Citation Effective Date Click to view FR notice	Redesignation Request Date	Redesignation Citation Effective Date Click to view FR notice
Arecibo	Nonattainment	12/31/2011		32,185	2017-2019	0.18	No	6 / 6			

Puerto Rico NO₂ (1971) Areas

[Return to map](#)

Top of page

No designated areas for this pollutant.

Puerto Rico Ozone-1Hr (1979) Areas

[Return to map](#)

Top of page

No designated areas for this pollutant.

Puerto Rico Ozone-8Hr (1997) Areas [Return to map](#) [Top of page](#)

No designated areas for this pollutant.

Puerto Rico Ozone-8Hr (2008) Areas [Return to map](#) [Top of page](#)

No designated areas for this pollutant.

Puerto Rico Ozone-8Hr (2015) Areas [Return to map](#) [Top of page](#)

No designated areas for this pollutant.

Puerto Rico PM-10 (1987) Areas [Return to map](#) [Top of page](#)

Click on the Area name to view SIP Requirements Area	Status	Designation Date	Classification	2010 Population (state portion)	Meets NAAQS Basis	Average Estimated Exceedances (est. exc.) (entire area)	Meets NAAQS	SIP Requirements Original/Approved	Clean Air Determination Citation Effective Date Click to view FR notice	Redesignation Request Date	Redesignation Citation Effective Date Click to view FR notice
Guaynabo County	Maintenance	11/15/1990	Moderate	90,470	2017-2019		Insufficient Data	3 / 3		03/31/2009	02/11/2010 75 FR 1543

Puerto Rico PM-2.5 (1997) Areas [Return to map](#) [Top of page](#)

No designated areas for this pollutant.

Puerto Rico PM-2.5 (2006) Areas [Return to map](#) [Top of page](#)

No designated areas for this pollutant.

Puerto Rico PM-2.5 (2012) Areas [Return to map](#) [Top of page](#)

No designated areas for this pollutant.

Puerto Rico SO2 (1971) Areas [Return to map](#) [Top of page](#)

No designated areas for this pollutant.

Puerto Rico SO2 (2010) Areas [Return to map](#) [Top of page](#)

Click on the Area name to view SIP Required Elements	Area	Status	Designation Date	Classification	2010 Population (state portion)	Meets NAAQS Basis	3 Year 1-Hour Design Value (ppb) (entire area)	Meets NAAQS	SIP Requirements Original/ Approved	Clean Air Determination Citation Effective Date Click to view FR notice	Redesignation Request Date	Redesignation Citation Effective Date Click to view FR notice
Guayama-Salinas		Nonattainment	04/09/2018		23,401	2017-2019		No Data	6 / 0			
San Juan		Nonattainment	04/09/2018		275,267	2017-2019		No Data	6 / 0			

We have made our best effort to ensure that the data contained in these reports is accurate. We note that there may be brief delays in updating the reports as we receive new state submissions and we take rulemaking action on plans. In order to assist us in providing accurate information, we request that you contact us by clicking on the "Contact Us" link near the top of this page with any comments regarding or corrections to the posted information, including concerns about whether the entries reflect the most recent status.

Current and historical design value data can be found on the [EPA Air Quality Design Values website](#) and the [EPA Green Book](#) contains comprehensive nonattainment area, designation status, and historical information.

The level of the 1-hour NAAQS for sulfur dioxide is 75 parts per billion (ppb) calculated as the 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour average concentrations.

Appendix 5: RADON Memo to file and supporting documentations



DEPARTMENT OF

HOUSING

GOVERNMENT OF PUERTO RICO



Memorandum to File

Date: July 1, 2025

From: Patricia Carmenatty Santiago
Environmental Specialist
Behar Ybarra & Associates LLC
CDBG-DR Program
Electrical Power Reliability and Resilience Program (ER2)
Puerto Rico Department of Housing

Application Number: PR-ESP-00119

Project: El Moroco

Re: Justification for the Infeasibility and Impracticability of Radon Testing

After reviewing Application Number PR-ESP-00119 under the Electrical Power Reliability and Resilience Program (ER2), 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.
- 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.

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.



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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Tel: (787) 274-2527 | www.usenda.pr.gov

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

RE: Request for Information regarding available data on radon testing and levels within Puerto Rico

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Barbosa Ave. #606, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 | PO Box 21365 San Juan, PR 00928-1365
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
Page 2 / 2

Reports and assessments – Any reports, studies, or assessments your agency has produced or commissioned that address radon testing or mitigation.

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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

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.

Reports and assessments – Any reports, studies, or assessments your agency has produced or commissioned that address radon testing or mitigation.

Barbosa Ave. #606, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 | PO Box 21365 San Juan, PR 00928-1365
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
Page 2 / 2

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. 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

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Barbosa Ave. #606, Building Juan C. Cordero Dávila, Río Piedras, PR 00981 | PO Box 21365 San Juan, PR 00928-1365
Tel. (787) 274-2527 | www.cdh.pr.gov



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 CDP-23-103 for Puerto Rico
Page 2 / 2

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Sincerely,


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 CDP-23-103 for Puerto Rico
Page 2 / 2

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Sincerely,


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. Rodriguez Rodriguez, 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 Rodriguez Rodriguez:

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 Sebastian, 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: maritazarosaolivares@drna.pr.gov

Appendix *: USFWS “No Effect” Memo and supporting documentations

Date: May 8, 2025

Applicant ID: PR-ESP-00119

Street Address: Carr 303 Km 3.2 Bo. Olivares, Lajas PR, 00667

Municipality: Lajas

RE: No Effect Determination for PR-ESP-00119

Executive Summary

Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure the actions that they authorize, fund, or carry out shall not jeopardize the continued existence of federally listed plants and animals or result in the adverse modification or destruction of designated critical habitat. Where their actions may affect resources protected by the ESA, agencies must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service ("FWS" and "NMFS" or "the Services").

This memo serves to document the proposed project, PR-ESP-00119, located at Carr 303 Km 3.2 Bo. Olivares, Lajas PR, 00667 (Parcel ID# 381-000-010-11-002) was reviewed in accordance with Section 7 of the Endangered Species Act of 1973 (16 USC 1536) as well as the Fish and Wildlife Coordination Act (47 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) by a qualified Biologist, resulting in a 'No Effect' determination.

The CDBG-DR Energy Electrical Power Reliability and Resilience (ER2) Program's objective is to enhance electric system reliability, affordability, and resiliency through the development and interconnection of projects that qualify as electric system enhancements or improvements.

Project Description

The subject property is a Commercial building located in Lajas, PR. The project scope includes the installation of a photovoltaic (solar) panel system and appurtenant storage system (batteries) on the existing commercial building's roof and will be built at Latitude: 18.002324, Longitude: -67.068464 (see Site Map at Appendix A, Figure 1). All improvements will be limited to the roof, floors, and walls of existing commercial buildings. The Field Observation Form and Environmental Screening Checklist depicting and clarifying the extent and location of project activities are included in Appendix B.

As indicated by the Official Species List obtained from the Information for Planning and Consultation (IPaC) system (Appendix C) and USFWS Critical Habitat data (Appendix A, Figure 2), the proposed project lies within the ranges of the following federally listed species and critical habitats:

Species	Status
Puerto Rican Boa (<i>Chilabothrus inornatus</i>)	Endangered
Yellow-shouldered Blackbird (<i>Agelaius xanthomus</i>)	Endangered

Critical Habitat
The Critical Habitat for Yellow-shouldered Blackbird is within the project area.

Existing Conditions:

The area where the activities will be taking place consists of approximately 0.09-acres of land located at Carr 303 Km 3.2 Bo. Olivares, Lajas PR, 00667. The Critical Habitat for Yellow-shouldered Blackbird is within the project area (see Appendix A, Figure 2). According to the U.S. Geological Survey National Land Cover Database (NLCD) (Appendix A, Figure 4) the majority of the project area consists of medium intensity developed land. A structure matching project orientation and footprint is present on the 1967 Earth Explorer, earliest imagery available. The building construction date is circa 1955. A topographic map is included (see Appendix A, Figure 3). The project is located in Zone X on the FEMA Flood map and ABFE map, panel number 72000C1565H dated 4/19/2005 (see Flood Map Appendix A, Figure 5 and ABFE map Appendix A, Figure 6). A Preliminary FIRM has not been developed for this area. There is a mapped NWI freshwater shrub wetland approximately 62 feet west from where the building is located. However, according to what was observed during the field visit, it is understood that the project activities will not occur within a natural or manmade wetlands and no direct or indirect impacts are anticipated as a result of the project activities (see wetlands map Appendix A, Figure 7).

Effect Determination:

Based on a review of site photos and other information gathered during a site visit on March 25, 2025, none of the species listed above were observed in the vicinity of the proposed project activities and no critical habitat was identified within the proposed project area. Having carefully analyzed the project site and the information available, including the IPaC species list and available Dkey(s), critical habitat data, nature of the project, previous site disturbance, and scope of project activities, the following effect determinations have been made:

Species	Effect Determination	Conservation Measures to be Implemented (if needed)
Puerto Rican Boa (<i>Chilabothrus inornatus</i>)	No Effect	None required
Yellow-shouldered Blackbird (<i>Agelaius xanthomus</i>)	No Effect	None required

SPECIES ANALYSIS

Puerto Rican Boa (*Chilabothrus inornatus*)

Considered to be a habitat generalist, the Puerto Rican Boa tolerates a wide variety terrestrial and arboreal habitat, 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. The IPaC Determination Key (Dkey) for the Puerto Rican Boa, dated May 8, 2025, was used to evaluate the potential impacts to federally listed species from this project. Based on the Dkey responses, it was determined that the proposed project will have 'No Effect' on the Puerto Rican Boa (Appendix C).

If a Puerto Rican Boa is found in the project activity site, work shall cease until the Boa moves

off on its own. If the Boa does not move off, the Construction Manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask them to relocate the Boa.

Yellow-shouldered Blackbird (*Agelaius xanthomus*)

The yellow-shouldered blackbird *Agelaius xanthomus*, endemic to Puerto Rico and Mona Island. Blackbirds readily accept nest boxes, and breeding populations can be established in otherwise unusable sites and can be concentrated in mangrove habitats, where they are more easily protected by cowbird removal.

Despite the property being located within a critical habitat zone for the Yellow-shouldered Blackbird, the proposed project will have 'No Effect' determination on the species. This conclusion stems from the fact that all proposed improvements will be limited to the roof, floors, and walls of the existing building. There will be no ground disturbance, vegetation clearing, or tree removal associated with the project. Furthermore, the area is fully developed and does not currently provide suitable habitat for the yellow-shouldered Blackbird. Therefore, the project ensures a minimal impact on the species' habitat and population.



Patricia Carmenatty / Senior Biologist

May 8, 2025

Date

Appendix A: Figures

Colmado El Moroco

Carr 303 Km 3.2

Bo. Olivares,

Lajas PR 00667

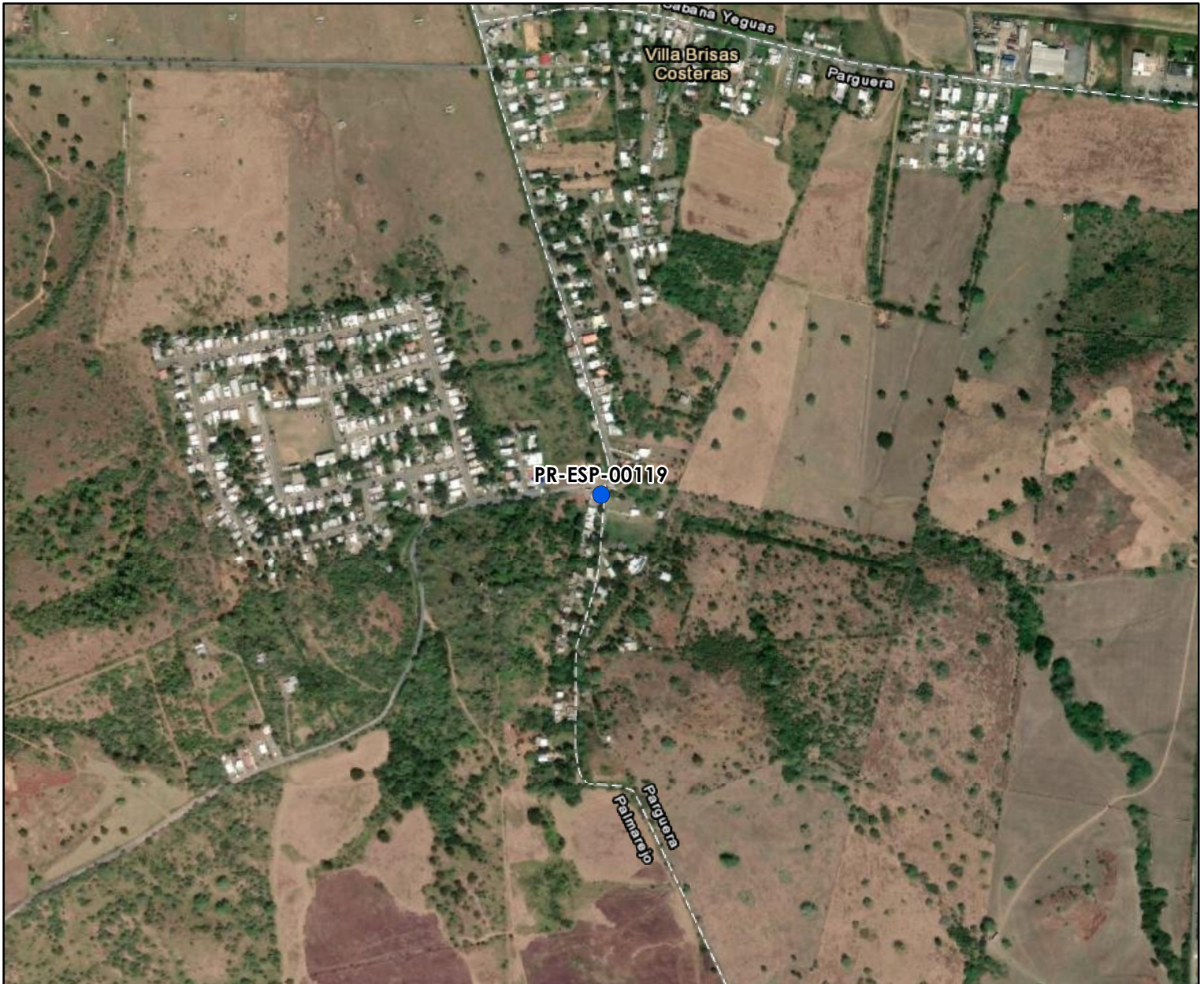
Catastro: 381-000-010-11-002

Lat: 18.002324, Lon: -67.068464

Figure 1

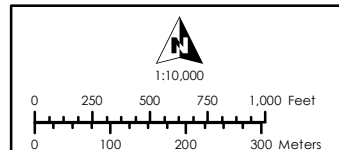
Location: Aerial Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:

● PR-ESP-00119



Service Layer Credits:

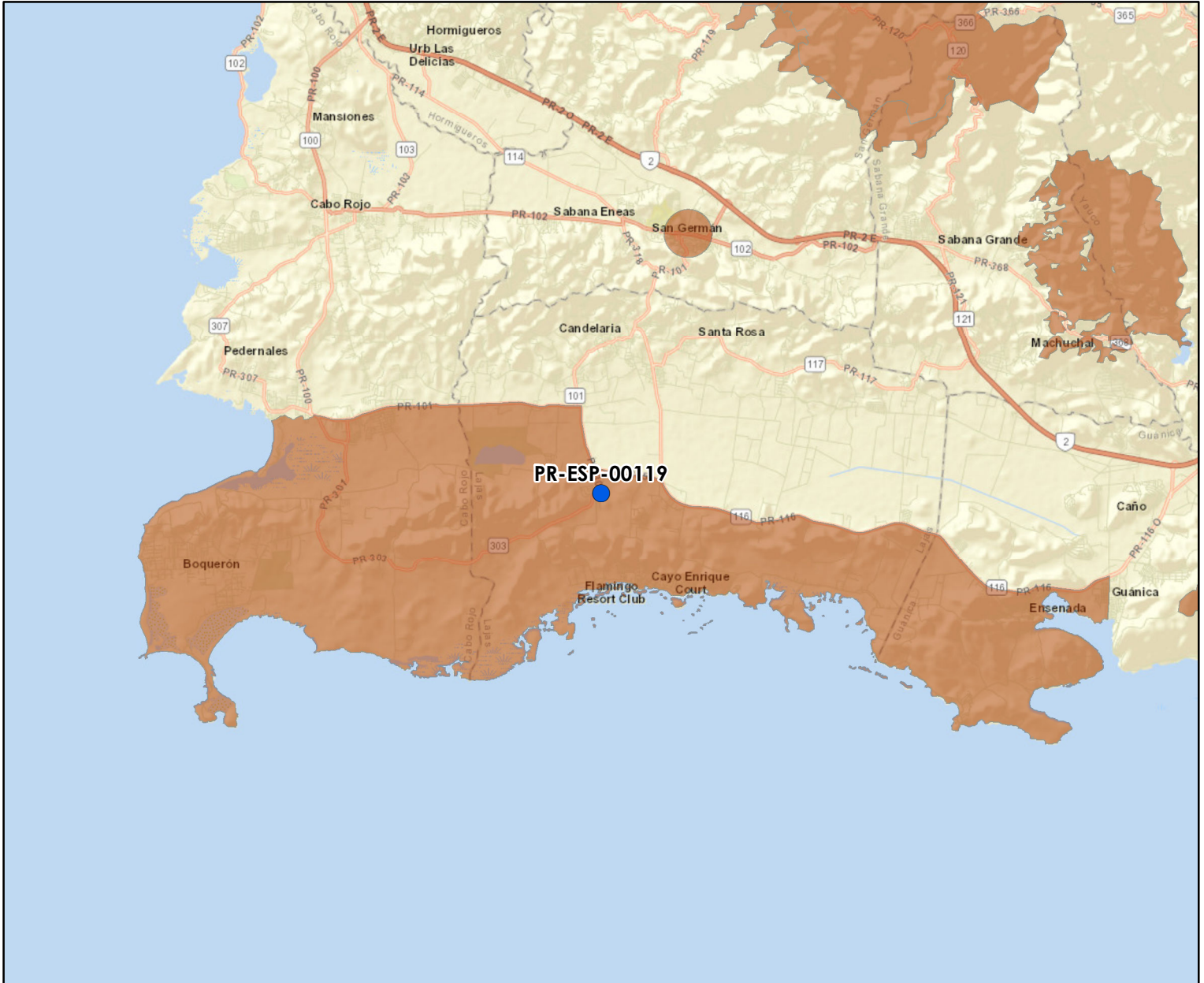
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:

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

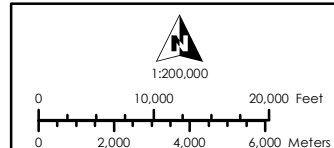
Colmado El Moroco
Carr 303 Km 3.2
Bo. Olivares,
Lajas PR 00667
Catastro: 381-000-010-11-002
Lat: 18.002324, Lon: -67.068464

Figure 2
Threatened and Endangered Species Map
Electrical Power Reliability and Resilience Program (ER2)



Legend:

- PR-ESP-00119
- Critical Habitat



Service Layer Credits:
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

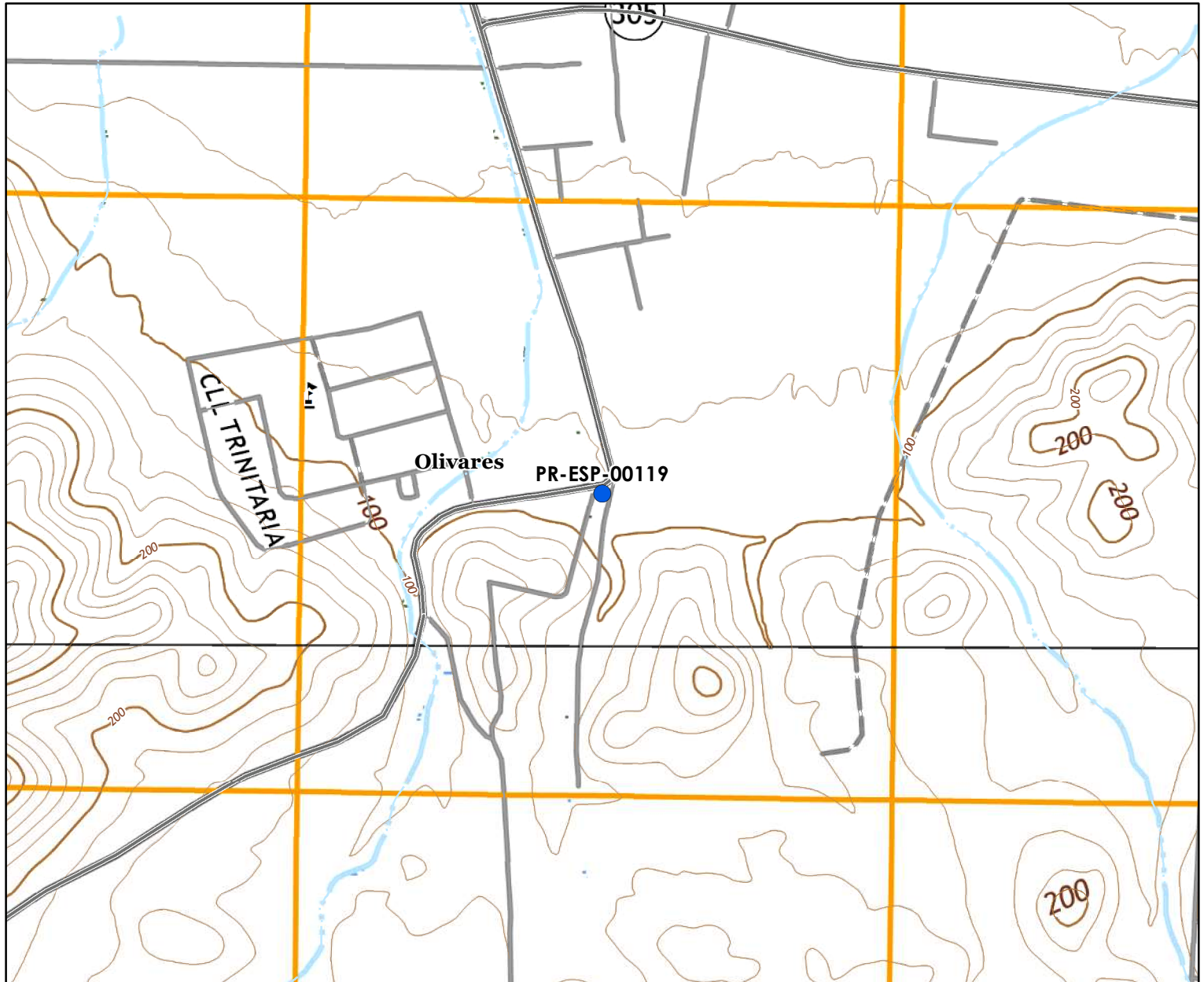
Source:
NOAA Office of Response and Restoration
<https://response.restoration.noaa.gov/>

Colmado El Moroco
Carr 303 Km 3.2
Bo. Olivares,
Lajas PR 00667
Catastro: 381-000-010-11-002
Lat: 18.002324, Lon: -67.068464

Figure 3

Location: Topographic Map

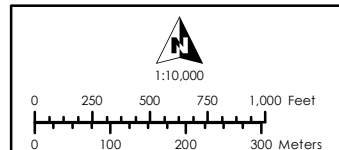
Electrical Power Reliability and Resilience Program (ER2)



Legend:

- PR-ESP-00119
- Elev_Contour

Quadrangle: San Germán y Parguera



Service Layer Credits:
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

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

Colmado El Moroco
Carr 303 Km 3.2
Bo. Olivares,
Lajas PR 00667
Catastro: 381-000-010-11-002
Lat: 18.002324, Lon: -67.068464

Figure 4

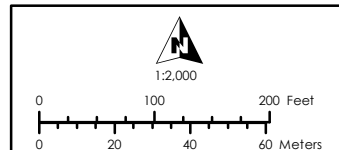
Land Cover Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:

- PR-ESP-00119
- Developed Open Space
- Low Intensity Developed
- Medium Intensity Developed
- Mixed Forest
- Pasture/Hay
- Scrub/Shrub



Service Layer Credits:
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

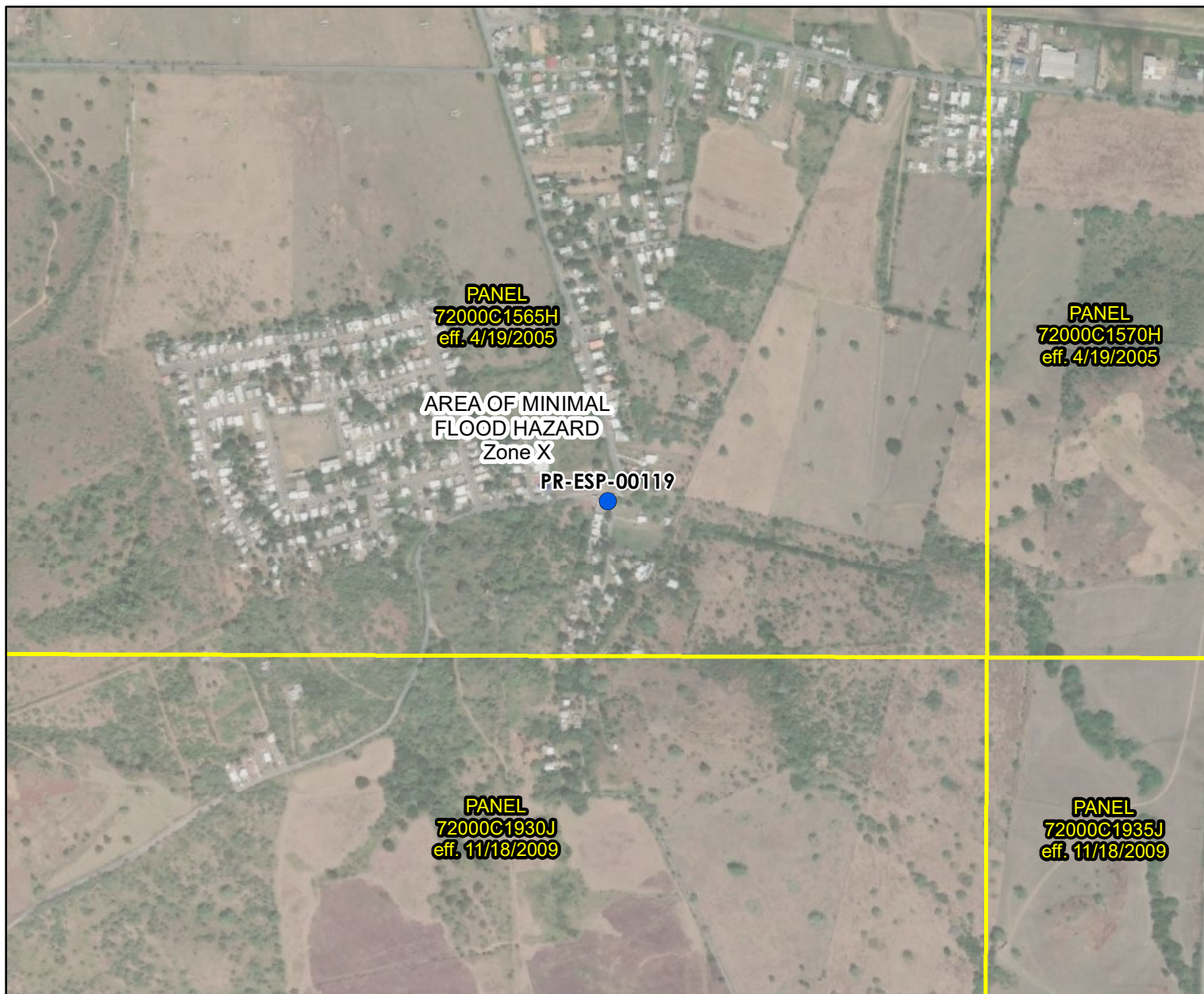
Source:
Multi-Resolution Land Characteristics (MRLC) Consortium
<https://www.mrlc.gov/viewer/>

Colmado El Moroco
Carr 303 Km 3.2
Bo. Olivares,
Lajas PR 00667
Catastro: 381-000-010-11-002
Lat: 18.002324, Lon: -67.068464

Figure 5

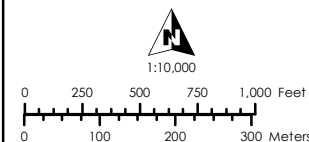
Flood Insurance Rate Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:

- | | |
|---|---|
| ● PR-ESP-00119 | Zone A |
| FIRM Panel | Zone AE |
| Floodway | Zone AH |
| 0.2% Annual Chance Flood Hazard | Zone AO |
| Zone D Area of Undetermined Flood Hazard | Zone VE |
| | Zone X |



Service Layer Credits:
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:
Federal Emergency Management Agency (FEMA)
<https://msc.fema.gov/portal/home>

Figure 6

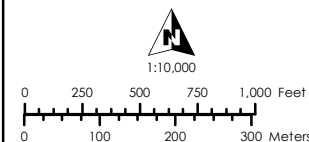
Advisory Base Flood Elevation Map

Electrical Power Reliability and Resilience Program (ER2)



Legend:

- | | |
|--|---|
| ● PR-ESP-00119 | Zone A |
| Area Potential Effect (Building Footprint) | Zone AE |
| CRIM-Parcel | Zone AO |
| Advisory Base Flood Elevations (ABFE) | Zone VE |
| 0.2 % Annual Chance Flood | Zone X - Area of Minimal Flood Hazard |
| 1 % Annual Chance Flood | 0.2 % Annual Chance Flood |
| | Floodway |



Service Layer Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
 Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:

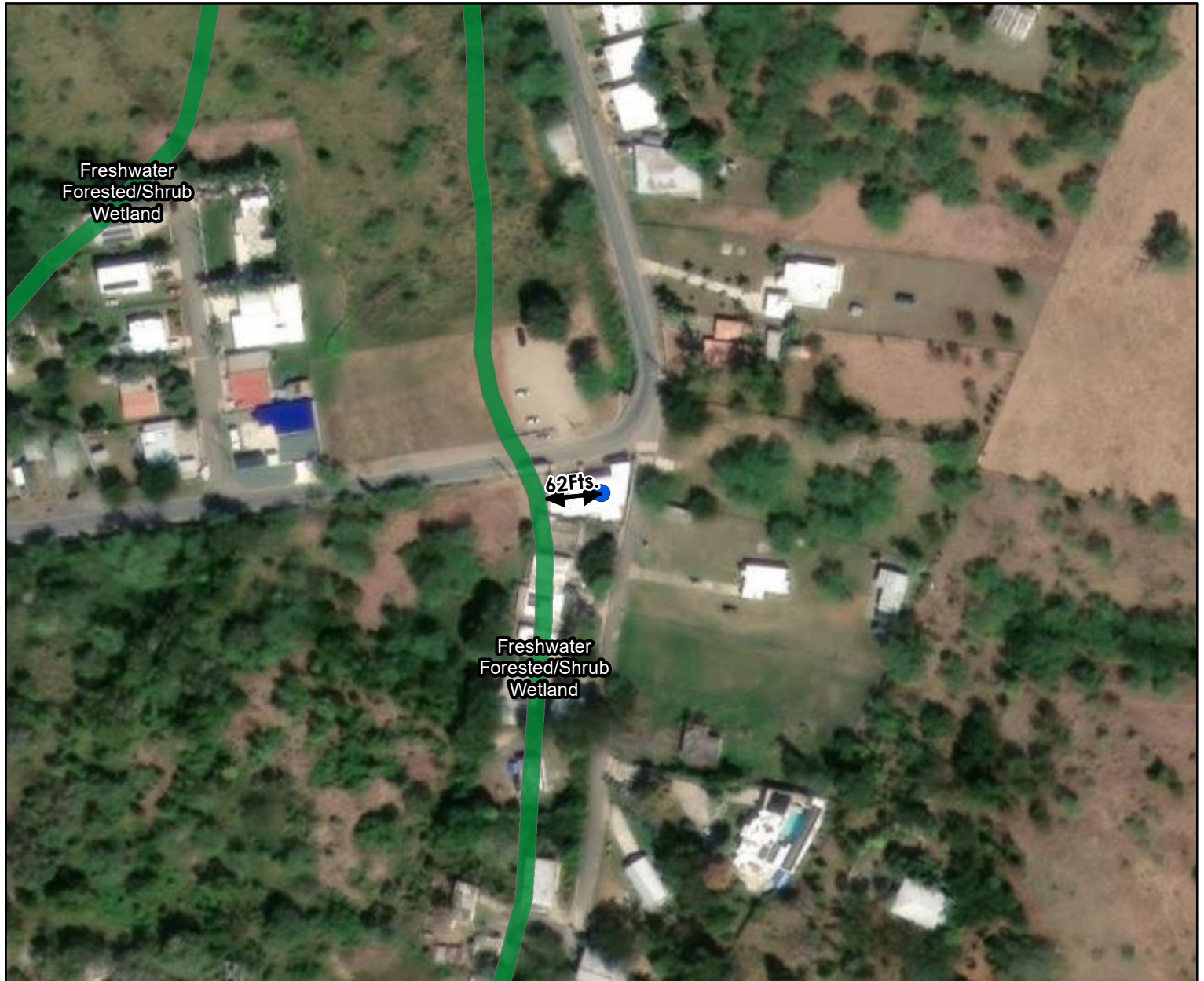
Federal Emergency Management Agency (FEMA),
<https://gis-r2-fema.hub.arcgis.com/>
 Junta de Planificacion de Puerto Rico (JP), <https://maps.jp.pr.gov/Mapas de Niveles de Inundacion Base Recomendados>

Colmado El Moroco
Carr 303 Km 3.2
Bo. Olivares,
Lajas PR 00667
Catastro: 381-000-010-11-002
Lat: 18.002324, Lon: -67.068464

Figure 7

Wetlands Map

Electrical Power Reliability and Resilience Program (ER2)

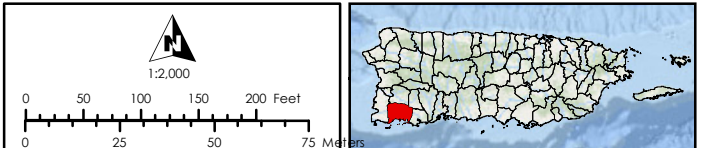


Legend:

● PR-ESP-00119

National Wetlands Inventory

	Estuarine and Marine Deepwater		Freshwater Pond
	Estuarine and Marine Wetland		Lake
	Freshwater Emergent Wetland		Riverine
	Freshwater Forested/Shrub Wetland		



Service Layer Credits:

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Source:

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

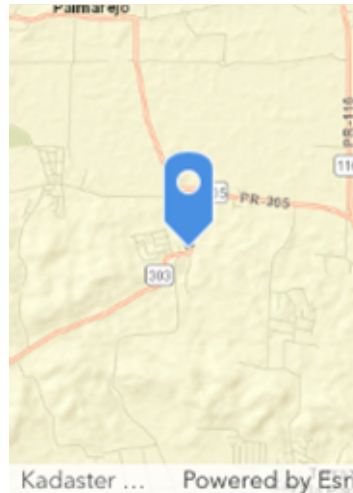
Appendix B: Field Observation Form and Environmental Screening Checklist



Environmental Field Assessment Form - PR-ESP-00119

APPLICANT/LOCATION INFORMATION

Applicant ID:	PR-ESP-00119
Applicant Name:	Colmado El Moroco
Parcel ID:	381-000-010-11-002
Coordinates:	18.002324, -67.068464
Street Address:	Carr 303 Km 3.2 Bo. Olivares
Municipio:	Lajas
Zip Code:	00667
Site Inspector:	Egon Gonzalez
Date of Visit:	March 25, 2025
Time of Visit:	10:55
Year Built:	circa 1955



Building Information

Question	Answer	Notes
1. Location verified:	Yes	18.002324, -67.068464
2. Is the building correct on GIS?	Yes	Building is correct on GIS
3. Building Type:	Commercial	
4. # of Stories:	1	
5. Building Foundation:	Concrete Slab	
6. Is the building in use?	Yes	Building is in use
7. Does the building have a detached garage / carport present?	No	
8. Is the electricity connected?	Yes	Electricity is connected
9. Is the water connected?	Yes	Water is connected
10. Are there signs of poor housekeeping on site? (mounds of rubble, garbage, storm debris, solid waste, petroleum products, paint, pesticides, cleaning fluids, vehicle batteries, abandoned vehicles, pits, pools, ponds of hazardous substances, electrical equipment etc.)	No	
11. Is a septic system present? If Yes report apparent condition.	No	Septic tank is in working condition
12. Are there any obvious signs of animals, birds nesting or burrows near the site?	No	



Parcel Conditions		
Question	Answer	Notes
1) Are there any 55-gallon drums visible on site? If yes, are they leaking?	Yes	(1) 55gal Drum used for cooking oil located at back of structure
2) Are there any (or signs of any) underground storage tanks on the property?	No	
3) Are there signs of AST on the parcel or adjacent parcel? If yes, list approximate size and contents, if known.	Yes	(32) 25lbs Propane tank located at right side of structure, (1) 300lbs Propane tank located at back of structure
4) Is there any stained soil or pavement on the parcel?		
5) Are there any potentially hazardous trees that could fall?		
6) Are there any groundwater monitoring wells on the site or adjacent parcel?	No	
7) Is there distressed vegetation on the parcel?		
8) Are any additional environmental or non-environmental site hazards observed?		
9) Is there any permanent standing water, such as a pond or stream, located on the site(do not include ponding from recent rain / weather events)?	No	
10) Does the subject property have water frontage?	No	
11) Is the applicant aware of any significant historical event or persons associated with the structure, or of it being located in a historic district/ area?	No	
12) Is a historic marker present?	No	
13) Based on the above finding, does additional information need to be obtained from the applicant to determine whether an environmental hazard is present?	No	



Building Environmental Conditions

Question	Answer	Notes
1. Is there any visible evidence of asbestos, chipping, and flaking or peeling paint, or hazardous materials present in or on the structure?	No	
2. Is there any visible indication of mold?	No	
3. Are there any pungent, foul or noxious odors?	No	

Additional Needs Analysis

Question	Answer	Notes
Based on the above findings, does additional information need to be obtained from the applicant to determine whether an environmental hazard is present?	No	

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

Inspector Signature

Egon Gonzalez

March 25, 2025

Front of Structure

Photo Direction: South

Comments:



Facing Away from Front

Photo Direction: North

Comments:



Side #1 of Structure

Photo Direction: Northeast

Comments:



Facing Away From Side #1

Photo Direction: North

Comments:



Back of Structure

Photo Direction: East

Comments:



Facing Away from Back

Photo Direction: East

Comments:



Side #2 of Structure

Photo Direction: East

Comments:



Facing Away from Side #2

Photo Direction: West

Comments:



Streetscape #1

Photo Direction: East

Comments:



Streetscape #2

Photo Direction: West

Comments:





Address

Photo Direction: South

Comments:



Architectural Details 1

Photo Direction:

Photo Description: Electricity is connected



Architectural Details 2

Photo Direction:

Photo Description: Water is connected



Architectural Details 3

Photo Direction:

Photo Description: Septic tank is in working condition



Architectural Details 4

Photo Direction:

Photo Description: General interior view



Architectural Details 5

Photo Direction:

Photo Description: General interior view



Architectural Details 6

Photo Direction:

Photo Description: Additional overview



Architectural Details 7

Photo Direction:

Photo Description: (18) 25lbs
Propane Tanks located on right side
of structure



Architectural Details 8

Photo Direction:

Photo Description: (18) 25lbs
Propane Tanks located on right side
of structure



Architectural Details 9

Photo Direction:

Photo Description: 55gal Drum used to store used cooking oil



Architectural Details 10

Photo Direction:

Photo Description: (1) 300lbs Propane tank located at back of structure



Architectural Details 11

Photo Direction:

Photo Description: Road landslide near structure



Architectural Details 12

Photo Direction:

Photo Description: Road landslide near structure



Appendix C: Information for Planning and Consultation (IPaC) system



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Caribbean Ecological Services Field Office
Post Office Box 491
Boqueron, PR 00622-0491
Phone: (939) 320-3135 Fax: (787) 851-7440
Email Address: CARIBBEAN_ES@FWS.GOV

In Reply Refer To:

05/08/2025 20:06:33 UTC

Project Code: 2025-0093978

Project Name: PR-ESP-00119

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

(939) 320-3135

PROJECT SUMMARY

Project Code: 2025-0093978

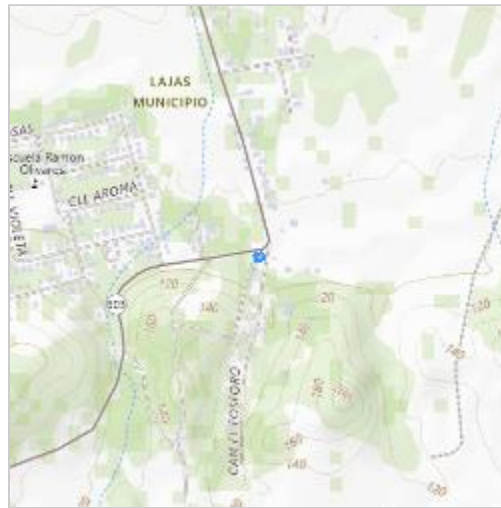
Project Name: PR-ESP-00119

Project Type: Power Gen - Solar

Project Description: Commercial Name: Colmado El Moroco. The subject property is a Commercial building located in Lajas, PR. The project scope includes the installation of a photovoltaic (solar) panel system and appurtenant storage system, BSS, on the existing commercial building's roof and will be built at Latitude: 18.002324, Longitude: -67.068464.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.002319999999997,-67.06849029062634,14z>



Counties: Lajas County, Puerto Rico

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 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
Yellow-shouldered Blackbird <i>Agelaius xanthomus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7383	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/TAXXQTEVNVG3DIIGETY4NXEMKM/documents/generated/7159.pdf	Endangered

CRITICAL HABITATS

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Yellow-shouldered Blackbird <i>Agelaius xanthomus</i> https://ecos.fws.gov/ecp/species/7383#crithab	Final

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 Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

-
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)

BALD & GOLDEN EAGLES INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

-
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)

MIGRATORY BIRD INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

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: Private Entity
Name: Patricia Carmenatty
Address: Perseo St. 554 Cond. Iberia Suite J-3
City: San Juan
State: PR
Zip: 00920
Email: patricia.carmenatty@byaea.com
Phone: 7877830290



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Caribbean Ecological Services Field Office
Post Office Box 491
Boqueron, PR 00622-0491
Phone: (939) 320-3135 Fax: (787) 851-7440
Email Address: CARIBBEAN_ES@FWS.GOV

In Reply Refer To:
Project code: 2025-0093978
Project Name: PR-ESP-00119

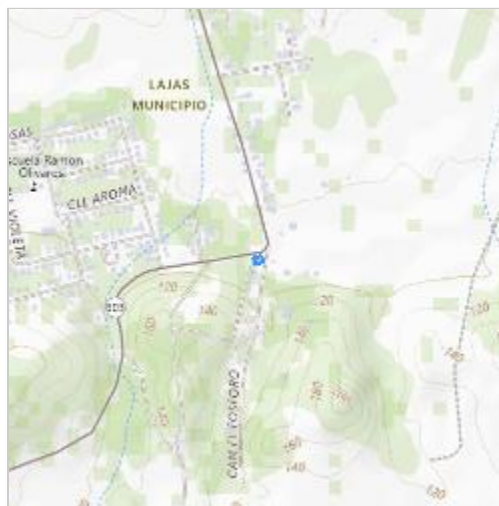
05/08/2025 20:11:54 UTC

Subject: Technical Assistance letter for the project named 'PR-ESP-00119' 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 May 08, 2025, Patricia Carmenatty used the Caribbean DKey; dated January 03, 2025, 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-ESP-00119'. The project is located in Lajas County, Puerto Rico (shown below).

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.002319999999997,-67.06849029062634,14z>



The following description was provided for the project 'PR-ESP-00119':

Commercial Name: Colmado El Moroco. The subject property is a Commercial building located in Lajas, PR. The project scope includes the installation of a photovoltaic (solar) panel system and appurtenant storage system, BSS, on the existing commercial building's roof and will be built at Latitude: 18.002324, Longitude: -67.068464.

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

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

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

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

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

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

In addition to the species listed above, the following species and/or critical habitats may also occur in your project area and **are not** covered by this conclusion. Effects to the other federally listed species or critical habitat as listed below should be considered as part of your ESA review for the project.

- Yellow-shouldered Blackbird *Agelaius xanthomus* Endangered

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

We appreciate your interest in protecting endangered species and their habitats. It is the Service's mission to work with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of our people. If you have any questions or require additional information, please contact our office at Caribbean_es@fws.gov.

Action Description

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

1. Name

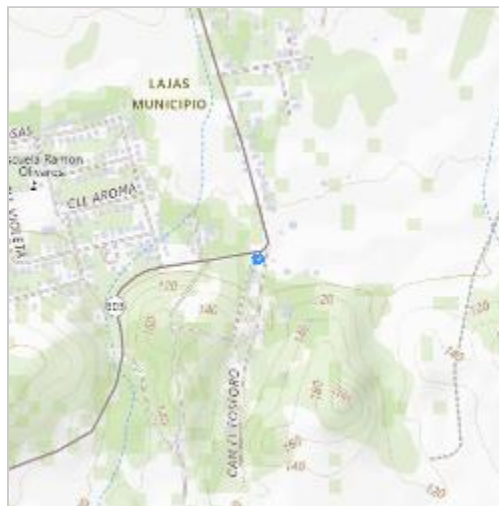
PR-ESP-00119

2. Description

The following description was provided for the project 'PR-ESP-00119':

Commercial Name: Colmado El Moroco. The subject property is a Commercial building located in Lajas, PR. The project scope includes the installation of a photovoltaic (solar) panel system and appurtenant storage system, BSS, on the existing commercial building's roof and will be built at Latitude: 18.002324, Longitude: -67.068464.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.002319999999997,-67.06849029062634,14z>



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. .

Yes

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

Automatically answered

Yes

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Patricia Carmenatty
Address: Perseo St. 554 Cond. Iberia Suite J-3
City: San Juan
State: PR
Zip: 00920
Email: patricia.carmenatty@byaea.com
Phone: 7877830290

Appendix D: USFWS Species Analysis



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

Appendix 7: SECTION 106 CONSULTATION PACKAGE



OFICINA ESTATAL DE

CONSERVACIÓN HISTÓRICA

GOBIERNO DE PUERTO RICO

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

Tuesday, June 17, 2025

Kristin Sanders

Historic Preservation Manager

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

SHPO-CF-06-04-25-01 PRDOH CDBG-DR_ESP Program_20250604_17
Improvements_NHPA

Dear Ms. Sanders,

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

Our records support your finding of "no historic properties affected" within the following properties' Area of Potential Effects (APE):

Aguadilla PR-ESP-00208 Bo. Caimital Abajo Carr 2 Km 121.6

Aibonito PR-ESP-00132 Carretera 14 Km 46.7 Bo. Asomante

Bayamón PR-ESP-00154 Ave. Santa Juanita AK6 Urb. Santa Juanita

Bayamón PR-ESP-00217 MARGINAL A-3 URB FOREST HILLS BAY

Bayamón PR-ESP-00230 URB MIRAFLORES 3-9 CALLE 2

Bayamón PR-ESP-00362 REPARTO TERESITA AL-2 CALLE 23

Caguas PR-ESP-00128 Ave Gautier Benitez B-13 Urb Villa Carmen

Lajas **PR-ESP-00119** Carr 303 Km 3.2 Bo. Olivares

Lajas PR-ESP-00212 CARR 102 KM 17.2 INT SECTOR PALMER #8

Manatí PR-ESP-00139 1 D2 Villa Maria

Moca PR-ESP-00229 CARR 125 KM 3.5

San Juan PR-ESP-00125 V3-22 AVE SAN ALFONSO

San Juan PR-ESP-00200 Urb Monte Carlos 1265 Ave Monte Carlos

San Juan PR-ESP-00257 773 AVE SAN PATRICIO

San Juan PR-ESP-00264 CALLE 15 1265 EXT SAN AGUSTIN

San Juan PR-ESP-00356 1727 Avenida Jesus T. Pinero

Villalba PR-ESP-00149 CARR. 149 ESQUINA BORINQUEN #44

If you have any questions regarding our comments, please do not hesitate to contact our Office.



OFICINA ESTATAL DE
CONSERVACIÓN HISTÓRICA
OFICINA DEL GOBERNADOR

STATE HISTORIC
PRESERVATION OFFICE
OFFICE OF THE GOVERNOR

Sincerely,



Carlos A. Rubio Cancela

State Historic Preservation Officer

CARC/GMO/ SG



OFICINA ESTATAL DE
CONSERVACIÓN HISTÓRICA
OFICINA DEL GOBERNADOR

STATE HISTORIC
PRESERVATION OFFICE
OFFICE OF THE GOVERNOR

June 4, 2025

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

PUERTO RICO DISASTER RECOVERY, CDBG-DR PROGRAM: ENERGY POWER RELIABILITY AND RESILIENCE/DDEC ENERGY SUPPORT PROGRAM (ESP)

SECTION 106 NHPA EFFECT DETERMINATION SUBMITTAL – SEVENTEEN (17) NON-HISTORIC CASE(S) – *NO HISTORIC PROPERTIES AFFECTED*

Dear Architect Rubio Cancela,

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

The purpose of the ESP is to benefit Puerto Rican communities by funding projects that enhance electric system reliability, affordability, and resiliency. The Program's design will be carried out through the development and interconnection of microgrids and distributed energy resources, including renewable energy generation, combined heat and power (CHP) systems, photovoltaic systems (PVS), and battery storage systems (BSS), among other eligible project types.

On behalf of PRDOH, we are submitting the following seventeen (17) cases for Section 106 consultation as it cannot be cleared with Programmatic Agreement allowances. These cases consist of the installation of PV systems with battery backup systems. The prepared excel file presents all information for these properties for your review including the ESP Case ID, locational data, photographs, a link to the google map, key dates and supporting imagery, and the PRDOH Eligibility and Effect Determinations.

MUNICIPALITY	CASE ID	ADDRESS
Aguadilla	PR-ESP-00208	Bo. Caimital Abajo Carr 2 Km 121.6
Aibonito	PR-ESP-00132	Carretera 14 Km 46.7 Bo. Asomante
Bayamón	PR-ESP-00154	Ave. Santa Juanita AK6 Urb. Santa Juanita
Bayamón	PR-ESP-00217	MARGINAL A-3 URB FOREST HILLS BAY
Bayamón	PR-ESP-00230	URB MIRAFLORES 3-9 CALLE 2
Bayamón	PR-ESP-00362	REPARTO TERESITA AL-2 CALLE 23
Caguas	PR-ESP-00128	Ave Gautier Benitez B-13 Urb Villa Carmen
Lajas	PR-ESP-00119	Carr 303 Km 3.2 Bo. Olivares
Lajas	PR-ESP-00212	CARR 102 KM 17.2 INT SECTOR PALMER #8
Manatí	PR-ESP-00139	1 D2 Villa Maria
Moca	PR-ESP-00229	CARR 125 KM 3.5
San Juan	PR-ESP-00125	V3-22 AVE SAN ALFONSO
San Juan	PR-ESP-00200	Urb Monte Carlos 1265 Ave Monte Carlos
San Juan	PR-ESP-00257	773 AVE SAN PATRICIO
San Juan	PR-ESP-00264	CALLE 15 1265 EXT SAN AGUSTIN
San Juan	PR-ESP-00356	1727 Avenida Jesus T. Pinero
Villalba	PR-ESP-00149	CARR. 149 ESQUINA BORINQUEN #44

The properties are not individually eligible, listed in the National Register of Historic Places (NRHP) or located within or adjacent to an eligible or listed Historic District. A recommendation of "No Historic Properties Affected", pursuant to 36 CFR 800.4(d)(1), has been made for these proposed projects.

We look forward to your review and concurrence. Please contact me with any questions or concerns by email at kristin.sanders@horne.com or phone at 225-276-2109.

















Kindest regards,



Kristin P. Sanders

Historic Preservation Manager

Enclosures

<div><div><div><div>DEPARTMENT OF HOUSING</div><div>GOBIERNO DE PUERTO RICO</div></div></div><div><div>FUERTO RICO DEPARTMENT OF HOUSING CD9G-DR ENERGY POWER RELIABILITY AND RESILIENCE/DDEC ENERGY SUPPORT PROGRAM (ESP) IMPROVEMENTS TO NON-HISTORIC PROPERTIES: PROPERTIES 45 YEARS OR GREATER, NOT INDIVIDUALLY ELIGIBLE OR LISTED IN THE NATIONAL REGISTER OF HISTORIC PLACES (NRHP), AND NEITHER ADJACENT TO NOR LOCATED WITHIN AN ELIGIBLE OR LISTED NRHP HISTORIC DISTRICT PROPOSED UNDERTAKINGS CONSIST OF THE INSTALLATION OF PHOTOVOLTAIC SYSTEMS (PVS) AND A BATTERY STORAGE SYSTEMS (BSS) ON THE ROOF OF THE SUBJECT BUILDING SUBMISSION DATE: JUNE 4, 2025 - 17 CASES</div></div></div>																				
PROPERTY INFORMATION																				
CASE ID	STREET ADDRESS	MUNICIPALITY	PARCEL ID	LATITUDE	LONGITUDE	ACREAGE	ESTIMATE FUNDING	PHOTO (CURRENT AERIAL IMAGERY AND UP TO 3 PHOTOS: FRONT, RIGHT, LEFT)				LINK TO GOOGLE MAP	KEY DATES VERIFIED BY GOOGLE STREET VIEW, AERIAL PHOTO AND USGS MAPS	NATIONAL REGISTER ELIGIBILITY	PEPCON ELIGIBILITY DETERMINATION	SRPO CONCURRENCE (SRPO USE ONLY)	PEPCON EFFECT DETERMINATION	DETERMINATION OF EFFECT	SUPO COMMENTS	
																		PREPARED BY AND DATE / APPROVER AND DATE		
PR-ESP-00204	CALLE 16 1385 EXT SAN AGUSTIN	San Juan	087-045-849-11-012 / 087-045-849-12-000	18.393973	-66.028338	0.24	\$50,000					https://www.google.com/maps/@18.393973,-66.028338,15z	Circa 1950	Structure is present in 1952 aerial imagery (earliest imagery available)		ineligible	Select Eligibility	No Historic Properties Affected	Select Effect	Prepared by Jorge L Lizaral Pollock, PhD on 5/1/2025 and approved by Elizabeth Adams, M.A./Susan Pouché, M.A. on 6/2/2025.
PR-ESP-00356	1727 Avenida Jesús T. Piñero	San Juan	080-024-401-06-001	18.397422	-66.069553	0.09	\$31,317					https://www.google.com/maps/@18.397422,-66.069553,15z	Circa 1960	Structure is present in 1962 aerial imagery (earliest available imagery)		ineligible	Select Eligibility	No Historic Properties Affected	Select Effect	Prepared by Jorge L Lizaral Pollock, PhD on 5/1/2025 and approved by Elizabeth Adams, M.A./Susan Pouché, M.A. on 5/19/2025.
PR-ESP-00449	CALLE 145 ESQUINA BORNHOLM #44	Villalba	204-081-0351-09-001	18.127703	-66.494476	0.20	\$33,654					https://www.google.com/maps/@18.127703,-66.494476,15z	Circa 1972	Structure is present in 1977 aerial imagery but absent on 1967 aerial imagery.		ineligible	Select Eligibility	No Historic Properties Affected	Select Effect	Prepared by Jorge L Lizaral Pollock, PhD on 5/1/2025 and approved by Elizabeth Adams, M.A./Susan Pouché, M.A. on 5/19/2025.



GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

April 30, 2024

Arch. Carlos A. Rubio Cancela

Executive Director

Puerto Rico State Historic Preservation Office

Cuartel de Ballajá, Third Floor

San Juan, Puerto Rico 00901

Re: Authorization to Submit Documents for Consultation

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 review services, among others, that will support the objectives of the agenda for both CDBG-DR and CDBG -MIT Programs.

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,

Aldo A. Rivera Vázquez, PE

Director

Division of Environmental Permitting and Compliance

Office of Disaster Recovery