



U.S. Department of Housing and Urban  
Development  
451 Seventh Street, SW  
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-RGRW-01327-W-RE

**HEROS Number:** 900000010365406

**Start Date:** 11/14/2023

**State / Local Identifier:**

**Project Location:** , Barranquitas, PR 00794

### **Additional Location Information:**

Coordinates: Greenhouse location: latitude 18.237132, longitude -66.347909 Cistern 1 location: latitude 18.238488, longitude -66.347243 Cistern 2 location: latitude 18.238762, longitude -66.347711 Electric generator: latitude 18.236635, longitude -66.348323 Parcel cadastral # 220-035-230-83; 220-035-230-81 Coordinates: Fence location: latitude 18.214155, longitude -66.399803; latitude 18.213738, longitude -66.399313 Parcel cadastral # 245-017-109-16; 245-007-109-03

### **Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:**

This project (PR-RGRW-01327-W-RE) entails the award of a grant to Miguel Marrero Torres/ DBA Finca Sector Los Marrero, an agricultural business, at Carr. 772 Km. 7.8 Interior Bo. Canabon, Sector Los Marrero, Barranquitas /Carretera 155, KM 23.7 Int, Barrio Saltos, Sector Los Rosados, Orocovis, PR. Tax ID Numbers: Barranquitas: 220-035-230-83, 220-035-230-81; Orocovis: 245-017-109-16, 245-007-109-03. Project Coordinates: Barranquitas: 18.237132 -66.347909, 18.238488 -66.347243, 18.238762 -66.347711; Orocovis: 18.214155 -66.399803, 18.213738, -66.399313. This project had an original CENST review which included the purchase of farm equipment including a sprayer, fertilizers, yam seeds, plow, plow blades and oxen yoke for project cost of \$30,139.55. See attached CENST environmental review. This review includes scope items previously considered as an EA level of review (cisterns, agricultural equipment, agricultural infrastructure, greenhouse, generator) which are now evaluated as CEST level of review in accordance with FR-6492-N-01 with a project cost of \$19,161.55. The proposed activities consist of the purchase and installation of a 20' x 20' greenhouse, two 1,000-gallon cisterns, an electric inverter generator, agricultural equipment and agricultural infrastructure. The agricultural equipment includes: Prunell PPT 2620, Blower PB 9010, thread rolls, mesh masks, plastics mesh, telescopic manual bar, aprons, one gallon of mixture, Arnett STHIL and caps. The agricultural infrastructure includes treated posts, barbed wire, hole making machine, augers, a saw and PVC tubes and they will be used for the construction of a fence. The greenhouse measures 20' x 20' and will be anchored to 10' spaced supports buried 2 feet deep, and will be built with aluminum pillars and arches and a plastic cover on the roof. The proposed area for the installation of the greenhouse will be leveled. The water needed for the greenhouse will come from the new cisterns and all pipes will be above

ground. The two cisterns will be installed on plastic pallets on bare soil provided by the applicant and it will not be necessary to construct a concrete slab. The water needed to fill the cisterns will be provided by an existing communal water well and transported via above ground pipes. The electric inverter generator is to pump water into the cisterns, and it does not require a transfer switch. No new connections will be necessary. The new generator is a SUA 8000iE - 8000 Watt (10.7 hp) and will be stored in an existing structure. The generator will be moved depending on where it would be needed. The proposed activities in the Municipality of Orocovis involve the installation of a barbed wire fence as a pig enclosure with 10-12 inches wide posts buried 6-8 inches deep. The fence will measure approximately 3,300 linear feet. No water or electricity connections will be necessary. The project Miguel Marrero Torres/ DBA Finca Sector Los Marrero, PR-RGRW-01327-W-RE has been evaluated in accordance with FR-6492-N-01. The activities identified CE: #6 - 6. 7 CFR 799.32 (d) (3) (i): Fence installation and replacement. HUD Level of Review: CENST. Potential application to HUD activities: Fence installation and replacement that support agricultural needs, without ground disturbance, CE: #7 - 7. 7 CFR 799.32(e) (2) (iii): Construction of a new farm storage facility. HUD Level of Review: CEST. Potential application to HUD activities: Construction of a new farm storage facility with ground disturbance, and CE: #10 - 10. 7 CFR 799.32(e) (2) (xxvii): Watering tank or trough installation, if in areas not previously disturbed. HUD Level of Review: CEST. Potential application to HUD activities: Agricultural watering tank or trough installation that includes new ground disturbance have been classified as CENST and CEST under the waiver.

**Level of Environment Review Determination:**

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5: 58.35(a)(3)(iii)

**Funding Information**

Grant Number	HUD Program	Program Name	
B-17-DM-72-0001	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)	\$0.00
B-18-DE-72-0001	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)	\$0.00
B-18-DP-72-0001	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)	\$0.00
B-19-DP-78-0002	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)	\$0.00

**Estimated Total HUD Funded Amount:** \$19,161.55

**Estimated Total Project Cost [24 CFR 58.2 (a) (5)]:** \$19,161.55

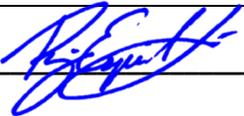
**Mitigation Measures and Conditions [CFR 1505.2(c)]:**

Summarized below are 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.

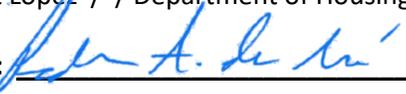
Law, Authority, or Factor	Mitigation Measure or Condition	Comments on Completed Measures	Complete
Endangered Species Act	<p>The United States Fish and Wildlife Service (USFWS) Caribbean Ecological Services Field Office reviewed the information provided and their files, and on January 10, 2025 concurred with the determination that the proposed project actions will have May Affect, but is Not Likely to Adversely Affect (NLAA) the Puerto Rican Boa, Puerto Rican Parrot, and Puerto Rican Broad-Winged Hawk. The USFWS NLAA concurrence is conditioned to the following: (1) if a Boa is encountered, the Conservation Measures will be in accordance with the USFWS Puerto Rican Boa Conservation Measures 2024, (2) if a Puerto Rican Parrot is encountered on the site, the USFWS Caribbean Office will be notified immediately and (3) if a Puerto Rican Broad-winged Hawk is encountered on the site, the USFWS Caribbean Office will be notified immediately. Obligations under section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed, or critical habitat determined that may be affected by the identified action. In conclusion, the USFWS concurred with the CDBG-DR/MIT Permits and Environmental Compliance Division NLAA determination. However, the applicant must be informed about the conditions of the determination of concurrence and implement them as described.</p>	N/A	

**Determination:**

<input type="checkbox"/>	This categorically excluded activity/project converts to <b>EXEMPT</b> per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; <b>Funds may be committed and drawn down after certification of this part</b> for this (now) EXEMPT project; OR
<input checked="" type="checkbox"/>	This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, <b>publish NOI/RROF and obtain "Authority to Use Grant Funds"</b> (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR
<input type="checkbox"/>	This project is not categorically excluded OR, if originally categorically excluded, 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: April 11, 2025

Name / Title/ Organization: Ricardo Espiet Lopez / / Department of Housing - Puerto Rico

Responsible Entity Agency Official Signature:  Date: 4/11/2025

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

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

**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-RGRW-01327-W-RE

**HEROS Number:** 900000010365406

**Start Date:** 11/14/2023

**Responsible Entity (RE):** Department of Housing - Puerto Rico, P.O. Box 21365 San  
Juan PR, 00928

**State / Local Identifier:**

**RE Preparer:** Ricardo Espiet Lopez

**Certifying Office  
r:**

**Grant Recipient (if different than Responsible Ent  
ity):**

**Point of Contact:**

**Point of Contact:** Justin Neely

**Consultant (if applicable):** HORNE LLP

40 CFR 1506.5(b)(4): The lead agency or, where appropriate, a cooperating agency shall prepare a disclosure statement for the contractor's execution specifying that the contractor has no financial or other interest in the outcome of the action. Such statement need not include privileged or confidential trade secrets or other confidential business information.

- ✓ By checking this box, I attest that as a preparer, I have no financial or other interest in the outcome of the undertaking assessed in this environmental review.

**Project Location:** , Barranquitas, PR 00794

**Additional Location Information:**

Coordinates: Greenhouse location: latitude 18.237132, longitude - 66.347909 Cistern 1 location: latitude 18.238488, longitude -66.347243 Cistern 2 location: latitude 18.238762, longitude -66.347711 Electric generator: latitude 18.236635, longitude - 66.348323 Parcel cadastral # 220-035-230-83; 220-035-230-81 Coordinates: Fence location: latitude 18.214155, longitude -66.399803; latitude 18.213738, longitude - 66.399313 Parcel cadastral # 245-017-109-16; 245-007-109-03

**Direct Comments to:** environmentcdbg@vivienda.pr.gov

**Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:**

This project (PR-RGRW-01327-W-RE) entails the award of a grant to Miguel Marrero Torres/ DBA Finca Sector Los Marrero, an agricultural business, at Carr. 772 Km. 7.8 Interior Bo. Canabon, Sector Los Marrero, Barranquitas /Carretera 155, KM 23.7 Int, Barrio Saltos, Sector Los Rosados, Orocovis, PR. Tax ID Numbers: Barranquitas: 220-035-230-83, 220-035-230-81; Orocovis: 245-017-109-16, 245-007-109-03. Project Coordinates: Barranquitas: 18.237132 - 66.347909, 18.238488 -66.347243, 18.238762 -66.347711; Orocovis: 18.214155 -66.399803, 18.213738, -66.399313. This project had an original CENST review which included the purchase of farm equipment including a sprayer, fertilizers, yam seeds, plow, plow blades and oxen yoke for project cost of \$30,139.55. See attached CENST environmental review. This review includes scope items previously considered as an EA level of review (cisterns, agricultural equipment, agricultural infrastructure, greenhouse, generator) which are now evaluated as CEST level of review in accordance with FR-6492-N-01 with a project cost of \$19,161.55. The proposed activities consist of the purchase and installation of a 20' x 20' greenhouse, two 1,000-gallon cisterns, an electric inverter generator, agricultural equipment and agricultural infrastructure. The agricultural equipment includes: Prunell PPT 2620, Blower PB 9010, thread rolls, mesh masks, plastics mesh, telescopic manual bar, aprons, one gallon of mixture, Arnett STHIL and caps. The agricultural infrastructure includes treated posts, barbed wire, hole making machine, augers, a saw and PVC tubes and they will be used for the construction of a fence. The greenhouse measures 20' x 20' and will be anchored to 10' spaced supports buried 2 feet deep, and will be built with aluminum pillars and arches and a plastic cover on the roof. The proposed area for the installation of the greenhouse will be leveled. The water needed for the greenhouse will come from the new cisterns and all pipes will be above ground. The two cisterns will be installed on plastic pallets on bare soil provided by the applicant and it will not be necessary to construct a concrete slab. The water needed to fill the cisterns will be provided by an existing communal water well and transported via above ground pipes. The electric inverter generator is to pump water into the cisterns, and it does not require a transfer switch. No new connections will be necessary. The new generator is a

SUA 8000iE - 8000 Watt (10.7 hp) and will be stored in an existing structure. The generator will be moved depending on where it would be needed. The proposed activities in the Municipality of Orocovis involve the installation of a barbed wire fence as a pig enclosure with 10-12 inches wide posts buried 6-8 inches deep. The fence will measure approximately 3,300 linear feet. No water or electricity connections will be necessary. The project Miguel Marrero Torres/ DBA Finca Sector Los Marrero, PR-RGRW-01327-W-RE has been evaluated in accordance with FR-6492-N-01. The activities identified CE: #6 - 6. 7 CFR 799.32 (d) (3) (i): Fence installation and replacement. HUD Level of Review: CENST. Potential application to HUD activities: Fence installation and replacement that support agricultural needs, without ground disturbance, CE: #7 - 7. 7 CFR 799.32(e) (2) (iii): Construction of a new farm storage facility. HUD Level of Review: CEST. Potential application to HUD activities: Construction of a new farm storage facility with ground disturbance, and CE: #10 - 10. 7 CFR 799.32(e) (2) (xxxvii): Watering tank or trough installation, if in areas not previously disturbed. HUD Level of Review: CEST. Potential application to HUD activities: Agricultural watering tank or trough installation that includes new ground disturbance have been classified as CENST and CEST under the waiver.

**Maps, photographs, and other documentation of project location and description:**

- [PR-RGRW-01327-W-RE IUGF CEST.pdf](#)
- [ReEvaluation Memo .docx](#)
- [PR-RGRW-01327-W-RE Site Map 2.pdf](#)
- [PR-RGRW-01327-W-RE Site Map 1.pdf](#)
- [PR-RGRW-01327 CENST ERR.pdf](#)
- [PRDOH Regrow Puerto Rico Program - 5836 Waiver \(002\).pdf](#)
- [Farm Service Agency Adopted Categorical Exclusions Identified in FR-6492-N-01.pdf](#)
- [PR-RGRW-01327-W-RE EFOR.pdf](#)

**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)

**Determination:**

	This categorically excluded activity/project converts to <b>EXEMPT</b> per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; <b>Funds may be committed and drawn down after certification of this part</b> for this (now) EXEMPT project; OR
✓	This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, <b>publish NOI/RROF and obtain "Authority to Use Grant Funds"</b> (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

	This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).
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**Approval Documents:**

[01327-SIG-PAGE\(1\).pdf](#)

**7015.15 certified by Certifying Officer**

on:

**7015.16 certified by Authorizing Officer**

on:

**Reevaluation of a Completed Review**

The environmental findings of a completed environmental review were re-evaluated to determine if the original findings are still valid for all of the three scenarios below:

- a. Substantial changes in the nature, magnitude, or extent of the project, including adding new activities not anticipated in the original scope of the project are proposed.
- b. There are new circumstances and environmental conditions which may affect the project or have a bearing on its impact, such as concealed or unexpected conditions discovered during the implementation of the project, or
- c. The selection of an alternative not in the original finding is proposed.

It was determined that the original findings were still valid.

**Statement or memo documenting determination:**

The project Miguel Marrero Torres/ DBA Finca Sector Los Marrero, PR-RGRW-01327-W-RE has been evaluated in accordance with FR-6492-N-01. The activities identified CE: #6 - 6. 7 CFR 799.32 (d) (3) (i): Fence installation and replacement. HUD Level of Review: CENST. Potential application to HUD activities: Fence installation and replacement that support agricultural needs, without ground disturbance, CE: #7 - 7. 7 CFR 799.32(e) (2) (iii): Construction of a new farm storage facility. HUD Level of Review: CEST. Potential application to HUD activities: Construction of a new farm storage facility with ground disturbance, and CE: #10 - 10. 7 CFR 799.32(e) (2) (xxxvii): Watering tank or trough installation, if in areas not previously disturbed. HUD Level of Review: CEST. Potential application to HUD activities: Agricultural watering tank

or trough installation that includes new ground disturbance have been classified as CENST and CEST under the waiver.

[ReEvaluation Memo \(1\).docx](#)

[PR-RGRW-01327 CENST ERR\(1\).pdf](#)

[PRDOH Regrow Puerto Rico Program - 5836 Waiver \(002\)\(1\).pdf](#)

[Farm Service Agency Adopted Categorical Exclusions Identified in FR-6492-N-01\(1\).pdf](#)

**Funding Information**

Grant / Project Identification Number	HUD Program	Program Name	Funding Amount
B-17-DM-72-0001	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)	\$0.00
B-18-DE-72-0001	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)	\$0.00
B-18-DP-72-0001	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)	\$0.00
B-19-DP-78-0002	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)	\$0.00

**Estimated Total HUD Funded, Assisted or Insured Amount:** \$19,161.55

**Estimated Total Project Cost:** \$19,161.55

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

<b>Compliance Factors:</b> Statutes, Executive Orders, and Regulations listed at 24 CFR §50.4, §58.5, and §58.6	Are formal compliance steps or mitigation required?	Compliance determination (See Appendix A for source determinations)
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 &amp; § 58.6</b>		
<b>Airport Hazards</b> Clear Zones and Accident Potential Zones; 24 CFR Part 51 Subpart D	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The site of the proposed greenhouse and cisterns are located 110,284 feet from the nearest major civil airport (Mercedita International Airport in Ponce) and 136,350 feet from

		<p>the nearest military airport (Luis Munoz Marin International Airport in San Juan). The site of the proposed fence unit is located 92,650 feet from the nearest major civil airport (Mercedita International Airport in Ponce) and 156,036 feet from the nearest military airport (Luis Munoz Marin International Airport in San Juan).The project is in compliance with Airport Hazards requirements.</p>
<p><b>Coastal Barrier Resources Act</b> Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>This project is not located in a CBRS Unit. The proposed greenhouse and cisterns are located 84,585 feet southeast of the nearest Coastal Barrier Resource System, PR-83. The proposed fence is located 83,133 feet northeast of the nearest Coastal Barrier Resource System, PR-51. Therefore, this project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act.</p>
<p><b>Flood Insurance</b> Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>The proposed greenhouse and cisterns are located in Zone X, Panel 72000C1155H, 4/19/2005 on the FEMA FIRM. The proposed fence is located in Zone X, Panel 72000C1135H, 4/19/2005 on the FEMA FIRM. The structure or insurable property is not located in a FEMA-designated Special Flood Hazard Area. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance requirements.</p>
<p><b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 &amp; § 58.5</b></p>		
<p><b>Air Quality</b> Clean Air Act, as amended, particularly section 176(c) &amp; (d); 40 CFR Parts 6, 51, 93</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>Based on the project description, this project includes no activities that would require further evaluation under the Clean Air Act. The project is in compliance with the Clean Air Act.</p>

<p><b>Coastal Zone Management Act</b> Coastal Zone Management Act, sections 307(c) &amp; (d)</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>This project is not located in or does not affect a Coastal Zone as defined in the state Coastal Management Plan. The proposed greenhouse and cisterns are located 79,281 feet and the fence is located 76,763 feet from the nearest Coastal Zone Management Area. The project is in compliance with the Coastal Zone Management Act.</p>
<p><b>Contamination and Toxic Substances</b> 24 CFR 50.3(i) &amp; 58.5(i)(2)]</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>Site contamination was evaluated as follows: None of the above. On-site or nearby toxic, hazardous, or radioactive substances that could affect the health and safety of project occupants or conflict with the intended use of the property were not found. The project is in compliance with contamination and toxic substances requirements. At the time of this review, this section has not been updated in HEROS to include questions regarding radon. A review of science-based radon data offered a lack of data for the project site and radon testing was determined to be infeasible or impracticable. See attached radon documents.</p>
<p><b>Endangered Species Act</b> Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>This project May Affect, but is Not Likely to Adversely Affect, listed species, and informal consultation was conducted. With mitigation, identified in the mitigation section of this review, the project will be in compliance with the Endangered Species Act.</p>
<p><b>Explosive and Flammable Hazards</b> Above-Ground Tanks)[24 CFR Part 51 Subpart C</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>Based on the project description the project includes no activities that would require further evaluation under this section. The project is in compliance with explosive and flammable hazard requirements.</p>
<p><b>Farmlands Protection</b> Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>This project does not include any activities that could potentially convert agricultural land to a non-agricultural use. The project is in compliance with the Farmland Protection Policy Act.</p>

<p><b>Floodplain Management</b> Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>The proposed greenhouse and cisterns are located in Zone X, Panel 72000C1155H, 4/19/2005 on the FEMA FIRM. The proposed fence is located in Zone X, Panel 72000C1135H, 4/19/2005 on the FEMA FIRM This project does not occur in a floodplain. The project is in compliance with Executive Order 11988. PFIRMS in Puerto Rico was only developed for certain sections of the municipalities of Carolina, Canovanas, Loiza, San Juan and Trujillo Alto. The proposed project is located in the municipalities of Orocovis and Barranquitas; therefore, PFIRM information was not available for the area and therefore not considered in the review. At the time of this review, this section has not been updated in HEROS to include questions regarding FFRMS. This project does not occur in the FFRMS floodplain. The project is in compliance with Executive Orders 11988 and 13690.</p>
<p><b>Historic Preservation</b> National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>Based on Section 106 consultation there are No Historic Properties Affected because there are no historic properties present. The project is in compliance with Section 106.</p>
<p><b>Noise Abatement and Control</b> Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>Based on the project description, this project includes no activities that would require further evaluation under HUD's noise regulation. The project is in compliance with HUD's Noise regulation.</p>
<p><b>Sole Source Aquifers</b> Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>The project is not located on a sole source aquifer area. According to EPA, there are no sole source aquifers in Puerto Rico. The project is in compliance with Sole Source Aquifer requirements.</p>
<p><b>Wetlands Protection</b> Executive Order 11990, particularly sections 2 and 5</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>Based on the project description this project includes no activities that would require further evaluation under this section. The project is in compliance with Executive Order 11990. This</p>

		project does not involve new construction, so a visual wetlands survey was not conducted.
<b>Wild and Scenic Rivers Act</b> Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project is not within proximity of a NWSRS river. The proposed greenhouse and cisterns are located 194,795 feet and the proposed fence is located 213,341 feet from the nearest Wild and Scenic River. The project is in compliance with the Wild and Scenic Rivers Act.
<b>HUD HOUSING ENVIRONMENTAL STANDARDS</b>		
<b>ENVIRONMENTAL JUSTICE</b>		
<b>Environmental Justice</b> Executive Order 12898	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No adverse environmental impacts were identified in the project's total environmental review. The project is in compliance with Executive Order 12898. On January 21, 2025, President Donald Trump issued the Executive Order 14173 titled "Ending Illegal Discrimination and Restoring Merit-Based Opportunity", which revoked Executive Order 12898 and eliminated federal mandates requiring agencies to assess environmental justice impacts. Consequently, there is no longer a federal requirement to address environmental justice concerns in the environmental compliance review process.

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

Summarized below are 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 or Condition	Comments on Completed Measures	Mitigation Plan	Complete
Endangered Species Act	The United States Fish and Wildlife Service (USFWS)	N/A		

	<p>Caribbean Ecological Services Field Office reviewed the information provided and their files, and on January 10, 2025 concurred with the determination that the proposed project actions will have May Affect, but is Not Likely to Adversely Affect (NLAA) the Puerto Rican Boa, Puerto Rican Parrot, and Puerto Rican Broad-Winged Hawk. The USFWS NLAA concurrence is conditioned to the following: (1) if a Boa is encountered, the Conservation Measures will be in accordance with the USFWS Puerto Rican Boa Conservation Measures 2024, (2) if a Puerto Rican Parrot is encountered on the site, the USFWS Caribbean Office will be notified immediately and (3) if a Puerto Rican Broad-winged Hawk is encountered on the site, the USFWS Caribbean Office will be notified immediately. Obligations under section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed, or critical habitat determined that may be affected by the identified action. In conclusion, the USFWS concurred with the CDBG-DR/MIT Permits and Environmental Compliance Division NLAA determination. However, the applicant must be informed about the conditions of the</p>			
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	determination of concurrence and implement them as described.			
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**Project Mitigation Plan**

Should new ground disturbance occur the Karst zone must be evaluated and when necessary DNER must be consulted prior to construction activities. In accordance with Puerto Rican Permit requirements any generator above 10HP requires an Emergency Generators General Permit of the Puerto Rico Natural and Environmental Resources Department prior to installation. The United States Fish and Wildlife Service (USFWS) Caribbean Ecological Services Field Office reviewed the information provided and their files, and on January 10, 2025 concurred with the determination that the proposed project actions will have May Affect, but is Not Likely to Adversely Affect (NLAA) the Puerto Rican Boa, Puerto Rican Parrot, and Puerto Rican Broad-Winged Hawk. The USFWS NLAA concurrence is conditioned to the following: (1) if a Boa is encountered, the Conservation Measures will be in accordance with the USFWS Puerto Rican Boa Conservation Measures 2024, (2) if a Puerto Rican Parrot is encountered on the site, the USFWS Caribbean Office will be notified immediately and (3) if a Puerto Rican Broad-winged Hawk is encountered on the site, the USFWS Caribbean Office will be notified immediately. Obligations under section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed, or critical habitat determined that may be affected by the identified action. In conclusion, the USFWS concurred with the CDBG-DR/MIT Permits and Environmental Compliance Division NLAA determination. However, the applicant must be informed about the conditions of the determination of concurrence and implement them as described.

**Supporting documentation on completed measures**

## APPENDIX A: Related Federal Laws and Authorities

### Airport Hazards

General policy	Legislation	Regulation
It is HUD's policy to apply standards to prevent incompatible development around civil airports and military airfields.		24 CFR Part 51 Subpart D

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

✓ No

Based on the response, the review is in compliance with this section. Document and upload the map showing that the site is not within the applicable distances to a military or civilian airport below

Yes

### Screen Summary

#### Compliance Determination

The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The site of the proposed greenhouse and cisterns are located 110,284 feet from the nearest major civil airport (Mercedita International Airport in Ponce) and 136,350 feet from the nearest military airport (Luis Munoz Marin International Airport in San Juan). The site of the proposed fence unit is located 92,650 feet from the nearest major civil airport (Mercedita International Airport in Ponce) and 156,036 feet from the nearest military airport (Luis Munoz Marin International Airport in San Juan). The project is in compliance with Airport Hazards requirements.

#### Supporting documentation

[PR-RGRW-01327-W-RE Airports 2.pdf](#)

[PR-RGRW-01327-W-RE Airports 1.pdf](#)

Are formal compliance steps or mitigation required?

Yes

✓ No



## Coastal Barrier Resources

General requirements	Legislation	Regulation
HUD financial assistance may not be used for most activities in units of the Coastal Barrier Resources System (CBRS). See 16 USC 3504 for limitations on federal expenditures affecting the CBRS.	Coastal Barrier Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501)	

**1. Is the project located in a CBRS Unit?**

No

Document and upload map and documentation below.

Yes

### Screen Summary

#### **Compliance Determination**

This project is not located in a CBRS Unit. The proposed greenhouse and cisterns are located 84,585 feet southeast of the nearest Coastal Barrier Resource System, PR-83. The proposed fence is located 83,133 feet northeast of the nearest Coastal Barrier Resource System, PR-51. Therefore, this project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act.

#### **Supporting documentation**

[PR-RGRW-01327-W-RE CBRS 2.pdf](#)

[PR-RGRW-01327-W-RE CBRS 1.pdf](#)

#### **Are formal compliance steps or mitigation required?**

Yes

No

## Flood Insurance

General requirements	Legislation	Regulation
Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained.	Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128)	24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.1(b).

**1. Does this project involve financial assistance for construction, rehabilitation, or acquisition of a mobile home, building, or insurable personal property?**

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

✓ Yes

**2. Upload a FEMA/FIRM map showing the site here:**

[PR-RGRW-01327-W-RE FIRM 2\(1\).pdf](#)

[PR-RGRW-01327-W-RE FIRM 1\(1\).pdf](#)

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site. Provide FEMA/FIRM floodplain zone designation, panel number, and date within your documentation.

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

✓ No

Based on the response, the review is in compliance with this section.

Yes

**4. While flood insurance is not mandatory for this project, HUD strongly recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). Will flood insurance be required as a mitigation measure or condition?**

Yes

✓ No

### **Screen Summary**

#### **Compliance Determination**

The proposed greenhouse and cisterns are located in Zone X, Panel 72000C1155H, 4/19/2005 on the FEMA FIRM. The proposed fence is located in Zone X, Panel 72000C1135H, 4/19/2005 on the FEMA FIRM. The structure or insurable property is not located in a FEMA-designated Special Flood Hazard Area. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance requirements.

#### **Supporting documentation**

##### **Are formal compliance steps or mitigation required?**

Yes

✓ No

## Air Quality

General requirements	Legislation	Regulation
The Clean Air Act is administered by the U.S. Environmental Protection Agency (EPA), which sets national standards on ambient pollutants. In addition, the Clean Air Act is administered by States, which must develop State Implementation Plans (SIPs) to regulate their state air quality. Projects funded by HUD must demonstrate that they conform to the appropriate SIP.	Clean Air Act (42 USC 7401 et seq.) as amended particularly Section 176(c) and (d) (42 USC 7506(c) and (d))	40 CFR Parts 6, 51 and 93

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

Yes

No

Based on the response, the review is in compliance with this section.

### Screen Summary

#### **Compliance Determination**

Based on the project description, this project includes no activities that would require further evaluation under the Clean Air Act. The project is in compliance with the Clean Air Act.

#### **Supporting documentation**

#### **Are formal compliance steps or mitigation required?**

Yes

No

## Coastal Zone Management Act

General requirements	Legislation	Regulation
Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans.	Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d))	15 CFR Part 930

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

Yes

No

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

### Screen Summary

#### **Compliance Determination**

This project is not located in or does not affect a Coastal Zone as defined in the state Coastal Management Plan. The proposed greenhouse and cisterns are located 79,281 feet and the fence is located 76,763 feet from the nearest Coastal Zone Management Area. The project is in compliance with the Coastal Zone Management Act.

#### **Supporting documentation**

[PR-RGRW-01327-W-RE CZM 2.pdf](#)

[PR-RGRW-01327-W-RE CZM 1.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

No

## Contamination and Toxic Substances

General Requirements	Legislation	Regulations
It is HUD policy that all properties that are being proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of the occupants or conflict with the intended utilization of the property.		24 CFR 58.5(i)(2) 24 CFR 50.3(i)
<b>Reference</b>		
<a href="https://www.onecpd.info/environmental-review/site-contamination">https://www.onecpd.info/environmental-review/site-contamination</a>		

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

ASTM Phase I ESA

ASTM Phase II ESA

Remediation or clean-up plan

ASTM Vapor Encroachment Screening.

None of the above

\* HUD regulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five or more dwelling units or non-residential property include the evaluation of previous uses of the site or other evidence of contamination on or near the site.

For acquisition and new construction of multifamily and nonresidential properties HUD strongly advises the review include an ASTM Phase I Environmental Site Assessment (ESA) to meet real estate transaction standards of due diligence and to help ensure compliance with HUD's toxic policy at 24 CFR §58.5(i) and 24 CFR §50.3(i). Also note that some HUD programs require an ASTM Phase I ESA.

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

No

Explain:

There are no toxic sites within 3,000 feet of the applicant location. The environmental field observation did not note any items of concern. See the attached environmental field observation report. A google earth review of the area shows no visible hazards. The past land use for the last 10-15 year is agricultural.

Yes

### **Screen Summary**

#### **Compliance Determination**

Site contamination was evaluated as follows: None of the above. On-site or nearby toxic, hazardous, or radioactive substances that could affect the health and safety of project occupants or conflict with the intended use of the property were not found. The project is in compliance with contamination and toxic substances requirements. At the time of this review, this section has not been updated in HEROS to include questions regarding radon. A review of science-based radon data offered a lack of data for the project site and radon testing was determined to be infeasible or impracticable. See attached radon documents.

#### **Supporting documentation**

[Radon Attachments.pdf](#)

[PR-RGRW-01327-W-RE Toxics 2.pdf](#)

[PR-RGRW-01327-W-RE Toxics 1.pdf](#)

[PR-RGRW-01327-W-RE Radon Memo.docx](#)

[PR-RGRW-01327-W-RE EFOR\(1\).pdf](#)

#### **Are formal compliance steps or mitigation required?**

Yes

✓ No

## Endangered Species

General requirements	ESA Legislation	Regulations
Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure that 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”).	The Endangered Species Act of 1973 (16 U.S.C. 1531 <i>et seq.</i> ); particularly section 7 (16 USC 1536).	50 CFR Part 402

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

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

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

- ✓ Yes, the activities involved in the project have the potential to affect species and/or habitats.

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

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

- ✓ Yes, there are federally listed species or designated critical habitats present in the action area.

**3. What effects, if any, will your project have on federally listed species or designated critical habitat?**

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

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

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

**4. Informal Consultation is required**

Section 7 of ESA (16 USC. 1536) mandates consultation to resolve potential impacts to endangered and threatened species and critical habitats. If a HUD-assisted project may affect any federally listed endangered or threatened species or critical habitat, then compliance is required with Section 7. See 50 CFR Part 402 Subpart B Consultation Procedures.

**Did the Service(s) concur with the finding that the project is Not Likely to Adversely Affect?**

- ✓ Yes, the Service(s) concurred with the finding.

Based on the response, the review is in compliance with this section. Document and upload the following below:

- (1) A biological evaluation or equivalent document
- (2) Concurrence(s) from FWS and/or NMFS
- (3) Any other documentation of informal consultation

Exception: If finding was made based on procedures provided by a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office, provide whatever documentation is mandated by that agreement.

No, the Service(s) did not concur with the finding.

6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation. This information will be automatically included in the Mitigation summary for the environmental review. If negative effects cannot be mitigated, cancel the project using the button at the bottom of this screen.

✓ Mitigation as follows will be implemented:

The United States Fish and Wildlife Service (USFWS) Caribbean Ecological Services Field Office reviewed the information provided and their files, and on January 10, 2025 concurred with the determination that the proposed project actions will have May Affect, but is Not Likely to Adversely Affect (NLAA) the Puerto Rican Boa, Puerto Rican Parrot, and Puerto Rican Broad-Winged Hawk. The USFWS NLAA concurrence is conditioned to the following: (1) if a Boa is encountered, the Conservation Measures will be in accordance with the USFWS Puerto Rican Boa Conservation Measures 2024, (2) if a Puerto Rican Parrot is encountered on the site, the USFWS Caribbean Office will be notified immediately and (3) if a Puerto Rican Broad-winged Hawk is encountered on the site, the USFWS Caribbean Office will be notified immediately. Obligations under section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed, or critical habitat determined that may be affected by the identified action. In conclusion, the USFWS concurred with the CDBG-DR/MIT Permits and Environmental Compliance Division NLAA determination. However, the applicant must be informed about the conditions of the determination of concurrence and implement them as described.

No mitigation is necessary.

#### **Screen Summary**

##### **Compliance Determination**

This project May Affect, but is Not Likely to Adversely Affect, listed species, and informal consultation was conducted. With mitigation, identified in the mitigation

section of this review, the project will be in compliance with the Endangered Species Act.

**Supporting documentation**

[PR-RGRW-01327-W-RE USFWS Consultation Package.pdf](#)  
[PR-RGRW-01327-W-RE USFWS Conservation Measures.pdf](#)  
[PR-RGRW-01327-W-RE USFWS Concurrence Letter.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

No

## Explosive and Flammable Hazards

General requirements	Legislation	Regulation
HUD-assisted projects must meet Acceptable Separation Distance (ASD) requirements to protect them from explosive and flammable hazards.	N/A	24 CFR Part 51 Subpart C

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

No

Yes

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

No

Based on the response, the review is in compliance with this section.

Yes

### Screen Summary

#### **Compliance Determination**

Based on the project description the project includes no activities that would require further evaluation under this section. The project is in compliance with explosive and flammable hazard requirements.

#### **Supporting documentation**

**Are formal compliance steps or mitigation required?**

Yes

No

**Farmlands Protection**

General requirements	Legislation	Regulation
The Farmland Protection Policy Act (FPPA) discourages federal activities that would convert farmland to nonagricultural purposes.	Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.)	<a href="#">7 CFR Part 658</a>

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

Yes

No

If your project includes new construction, acquisition of undeveloped land or conversion, explain how you determined that agricultural land would not be converted:

The proposed area for the greenhouse and cisterns is discontinued agricultural use of property which is compatible with a zoning code of A-G (General Agriculture) and R-G (General rural) with existing land use of SREP-A (Specially Protected Agricultural Rustic Land). The proposed action for the fence is continued agricultural use of property which is compatible with a zoning code of R-G (General rural) and existing land use of SRC (Common Rustic Land).

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

**Screen Summary**

**Compliance Determination**

This project does not include any activities that could potentially convert agricultural land to a non-agricultural use. The project is in compliance with the Farmland Protection Policy Act.

**Supporting documentation**

[PR-RGRW-01327-W-RE Farmlands 2.pdf](#)

[PR-RGRW-01327-W-RE Farmlands 1.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Floodplain Management

General Requirements	Legislation	Regulation
Executive Order 11988, Floodplain Management, requires federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable.	Executive Order 11988	24 CFR 55

**1. Do any of the following exemptions apply? Select the applicable citation? [only one selection possible]**

- 55.12(c)(3)
- 55.12(c)(4)
- 55.12(c)(5)
- 55.12(c)(6)
- 55.12(c)(7)
- 55.12(c)(8)
- 55.12(c)(9)
- 55.12(c)(10)
- 55.12(c)(11)

None of the above

**2. Upload a FEMA/FIRM map showing the site here:**

[PR-RGRW-01327-W-RE FIRM 2\(1\).pdf](#)  
[PR-RGRW-01327-W-RE FIRM 1\(1\).pdf](#)

The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use **the best available information** to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site.

**Does your project occur in a floodplain?**

No

Based on the response, the review is in compliance with this section.

Yes

### **Screen Summary**

#### **Compliance Determination**

The proposed greenhouse and cisterns are located in Zone X, Panel 72000C1155H, 4/19/2005 on the FEMA FIRM. The proposed fence is located in Zone X, Panel 72000C1135H, 4/19/2005 on the FEMA FIRM. This project does not occur in a floodplain. The project is in compliance with Executive Order 11988. PFIRMs in Puerto Rico was only developed for certain sections of the municipalities of Carolina, Canovanas, Loiza, San Juan and Trujillo Alto. The proposed project is located in the municipalities of Orocovis and Barranquitas; therefore, PFIRM information was not available for the area and therefore not considered in the review. At the time of this review, this section has not been updated in HEROS to include questions regarding FFRMS. This project does not occur in the FFRMS floodplain. The project is in compliance with Executive Orders 11988 and 13690.

#### **Supporting documentation**

[PR-RGRW-01327-W-RE ABFE 2.pdf](#)

[PR-RGRW-01327-W-RE ABFE 1.pdf](#)

#### **Are formal compliance steps or mitigation required?**

Yes

✓ No

**Historic Preservation**

General requirements	Legislation	Regulation
Regulations under Section 106 of the National Historic Preservation Act (NHPA) require a consultative process to identify historic properties, assess project impacts on them, and avoid, minimize, or mitigate adverse effects	Section 106 of the National Historic Preservation Act (16 U.S.C. 470f)	36 CFR 800 “Protection of Historic Properties” <a href="https://www.govinfo.gov/content/pkg/CFR-2012-title36-vol3/pdf/CFR-2012-title36-vol3-part800.pdf">https://www.govinfo.gov/content/pkg/CFR-2012-title36-vol3/pdf/CFR-2012-title36-vol3-part800.pdf</a>

**Threshold**

**Is Section 106 review required for your project?**

No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA ). (See the PA Database to find applicable PAs.)  
 No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].

- ✓ Yes, because the project includes activities with potential to cause effects (direct or indirect).

**Step 1 – Initiate Consultation**

**Select all consulting parties below (check all that apply):**

- ✓ State Historic Preservation Offer (SHPO) Completed

Indian Tribes, including Tribal Historic Preservation Officers (THPOs) or Native Hawaiian Organizations (NHOs)

Other Consulting Parties

**Describe the process of selecting consulting parties and initiating consultation here:**

Only SHPO was consulted as No Historic Properties Affected was determined and no Tribal Lands were identified.

Document and upload all correspondence, notices and notes (including comments and objections received below).

**Was the Section 106 Lender Delegation Memo used for Section 106 consultation?**

- Yes
- No

**Step 2 – Identify and Evaluate Historic Properties**

1. Define the Area of Potential Effect (APE), either by entering the address(es) or uploading a map depicting the APE below:

In the chart below, list historic properties identified and evaluated in the APE. Every historic property that may be affected by the project should be included in the chart.

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

Address / Location / District	National Register Status	SHPO Concurrence	Sensitive Information
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**Additional Notes:**

No Historic Properties present within the APE

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

- Yes
- ✓ No

**Step 3 –Assess Effects of the Project on Historic Properties**

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

per guidance on direct and indirect effects.

**Choose one of the findings below - No Historic Properties Affected, No Adverse Effect, or Adverse Effect; and seek concurrence from consulting parties.**

No Historic Properties Affected

Based on the response, the review is in compliance with this section. Document and upload concurrence(s) or objection(s) below.

**Document reason for finding:**

No historic properties present.

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

No Adverse Effect

Adverse Effect

**Screen Summary**

**Compliance Determination**

Based on Section 106 consultation there are No Historic Properties Affected because there are no historic properties present. The project is in compliance with Section 106.

**Supporting documentation**

[PR-RGRW-01327-W-RE SHPO Consultation Package.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

No

## Noise Abatement and Control

General requirements	Legislation	Regulation
HUD's noise regulations protect residential properties from excessive noise exposure. HUD encourages mitigation as appropriate.	Noise Control Act of 1972  General Services Administration Federal Management Circular 75-2: "Compatible Land Uses at Federal Airfields"	Title 24 CFR 51 Subpart B

**1. What activities does your project involve? Check all that apply:**

New construction for residential use

Rehabilitation of an existing residential property

A research demonstration project which does not result in new construction or reconstruction

An interstate land sales registration

Any timely emergency assistance under disaster assistance provision or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster

None of the above

### **Screen Summary**

#### **Compliance Determination**

Based on the project description, this project includes no activities that would require further evaluation under HUD's noise regulation. The project is in compliance with HUD's Noise regulation.

#### **Supporting documentation**

#### **Are formal compliance steps or mitigation required?**

Yes

No



## Sole Source Aquifers

General requirements	Legislation	Regulation
<b>The Safe Drinking Water Act of 1974 protects drinking water systems which are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health.</b>	Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300f et seq., and 21 U.S.C. 349)	40 CFR Part 149

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

Yes

No

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

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

< No

Based on the response, the review is in compliance with this section. Document and upload documentation used to make your determination, such as a map of your project (or jurisdiction, if appropriate) in relation to the nearest SSA and its source area, below.

Yes

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

Yes

No

**Screen Summary****Compliance Determination**

The project is not located on a sole source aquifer area. According to EPA, there are no sole source aquifers in Puerto Rico. The project is in compliance with Sole Source Aquifer requirements.

**Supporting documentation**

[PR-RGRW-01327-W-RE Sole Source Aquifers 2.pdf](#)

[PR-RGRW-01327-W-RE Sole Source Aquifers 1.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Wetlands Protection

General requirements	Legislation	Regulation
Executive Order 11990 discourages direct or indirect support of new construction impacting wetlands wherever there is a practicable alternative. The Fish and Wildlife Service's National Wetlands Inventory can be used as a primary screening tool, but observed or known wetlands not indicated on NWI maps must also be processed. Off-site impacts that result in draining, impounding, or destroying wetlands must also be processed.	Executive Order 11990	24 CFR 55.20 can be used for general guidance regarding the 8 Step Process.

1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance? The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order

No

Based on the response, the review is in compliance with this section.

Yes

### Screen Summary

#### Compliance Determination

Based on the project description this project includes no activities that would require further evaluation under this section. The project is in compliance with Executive Order 11990. This project does not involve new construction, so a visual wetlands survey was not conducted.

#### Supporting documentation

[PR-RGRW-01327-W-RE Wetlands 2.pdf](#)

[PR-RGRW-01327-W-RE Wetlands 1.pdf](#)

Are formal compliance steps or mitigation required?

Yes

No

## Wild and Scenic Rivers Act

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

### 1. Is your project within proximity of a NWSRS river?

No

Yes, the project is in proximity of a Designated Wild and Scenic River or Study Wild and Scenic River.

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

### Screen Summary

#### **Compliance Determination**

This project is not within proximity of a NWSRS river. The proposed greenhouse and cisterns are located 194,795 feet and the proposed fence is located 213,341 feet from the nearest Wild and Scenic River. The project is in compliance with the Wild and Scenic Rivers Act.

#### **Supporting documentation**

[PR-RGRW-01327-W-RE Wild and Scenic 2.pdf](#)

[PR-RGRW-01327-W-RE Wild and Scenic 1.pdf](#)

#### **Are formal compliance steps or mitigation required?**

Yes

No

## Environmental Justice

General requirements	Legislation	Regulation
Determine if the project creates adverse environmental impacts upon a low-income or minority community. If it does, engage the community in meaningful participation about mitigating the impacts or move the project.	Executive Order 12898	

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

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

Yes

No

Based on the response, the review is in compliance with this section.

### Screen Summary

#### **Compliance Determination**

No adverse environmental impacts were identified in the project's total environmental review. The project is in compliance with Executive Order 12898. On January 21, 2025, President Donald Trump issued the Executive Order 14173 titled "Ending Illegal Discrimination and Restoring Merit-Based Opportunity", which revoked Executive Order 12898 and eliminated federal mandates requiring agencies to assess environmental justice impacts. Consequently, there is no longer a federal requirement to address environmental justice concerns in the environmental compliance review process.

#### **Supporting documentation**

**Are formal compliance steps or mitigation required?**

Yes

No





## United States Department of the Interior

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



In Reply Refer to:  
FWS/R4/CESFO/72153-Gen

Submitted Via Electronic Mail: [jcperez@vivienda.pr.gov](mailto:jcperez@vivienda.pr.gov)

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

Re: CDBG-DR PR-RGRW-04170 José Feliciano  
García, Yauco, Puerto Rico

Dear Mr. Pérez-Bofill

Thank you for your letter dated August 21, 2024, requesting informal consultation on the above referenced project. As per your request, our comments are provided under the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The Puerto Rico Department of Housing (PRDOH) is proposing the installation of a new pre-manufactured storage container (20 feet (ft) long x 8 ft wide x 9.5 ft high). The proposed structure will be located on a 6.07-acre property on State Road PR-365, Km. 8.3, Bo. Rubias, La Culata Sector (18°07'42.9"N 66°53'19.6"W) in the municipality of Yauco. No tree clearing or vegetation removal will be required.

Using the U.S. Fish and Wildlife Service's (Service) Information for Planning and Consultation (IPaC) system, the PRDOH has determined that the proposed project site is located within the range of Puerto Rican boa (*Chilabothrus inornatus*), Puerto Rican broad-winged hawk (*Buteo platypterus brunnescens*), Puerto Rican sharp-shinned hawk (*Accipiter striatus venator*), Puerto Rican parrot (*Amazona vittata*) and Puerto Rican harlequin butterfly (*Atlantea tulita*).

PRDOH used the Caribbean Determination Key (DKey) in the IPaC application to evaluate the potential impacts of the proposed project on federally listed species (Project code: 2024-017112). Based on the answers provided, a consistency letter was obtained for the Puerto Rican boa, Puerto Rican broad-winged hawk and Puerto Rican sharp-shinned hawk, which determined that the proposed actions for this project may affect, but is likely to adversely affect (MLAA) these species.

Based on the nature of the project, scope of work, information available, and analysis of the existing habitat (low grasses and ruderal vegetation with adjacent forested areas), PRDOH has determined that the proposed project may affect, but is not likely to adversely affect (NLAA) the Puerto Rican boa, Puerto Rican broad-winged hawk and Puerto Rican sharp-shinned hawk instead of the MLAA obtained by using the DKey. Conservation measures will be implemented in case an encounter with this species occur. As for the Puerto Rican parrot and Puerto Rican harlequin butterfly, PRDOH has determined that the proposed actions will NLAA these species with the implementation of conservation measures.

We have reviewed the information provided and our files, and concur with PRDOH's determination that the proposed project may affect, but is not likely to adversely affect the above mentioned species with the implementation of the conservation measures.

In view of this, we believe that requirements of section 7 of the Endangered Species Act (Act) have been satisfied. However, obligations under section 7 of the Act must be reconsidered if: (1) new information reveals impact of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed, or critical habitat determined that may be affected by the identified action.

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

Sincerely,

LOURDES  
MENA

Digitally signed by  
LOURDES MENA  
Date: 2024.09.13  
11:54:58 -04'00'

Lourdes Mena  
Field Supervisor

drr

cc:  
SWCA  
HUD

February 2, 2024

Carlos A. Rubio Cancela  
State Historic Preservation Officer  
Puerto Rico State Historic Preservation Office  
Cuartel de Ballajá (Tercer Piso)  
San Juan, PR 00902-3935

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

**Section 106 NHPA Effect Determination Submittal: PR-RGRW-01327 – Miguel Marrero Torres/ DBA Finca Sector Los Marrero – Carr. 772 Km. 7.8 Interior Bo. Canabón, Sector Los Marrero, Barranquitas, Puerto Rico and Carretera 155, KM 23.7 Int, Barrio Saltos, Sector Los Rosados, Orocovis, Puerto Rico – No Historic Properties Affected**

Dear Architect Rubio Cancela,

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

On behalf of PRDOH and the subrecipient, the Puerto Rico Department of Agriculture, HORNE is submitting documentation for activities proposed by Miguel Marrero Torres/ DBA Finca Sector Los Marrero located at Carr. 772 Km. 7.8 Interior Bo. Canabón, Sector Los Marrero, in the municipality of Barranquitas and at Carretera 155, KM 23.7 Int, Barrio Saltos, Sector Los Rosados, in the municipality of Orocovis. The undertaking for this project includes the purchase and installation of a 20' x 20' greenhouse, two 1,000-gallon cisterns, an electric generator, agricultural equipment, fence materials, sprinklers, ñame supplies, fertilizer, and a plow. For the proposed activities in the Municipality of Barranquitas the greenhouse and the two cisterns will require ground disturbance. The greenhouse will be anchored to 10' spaced supports buried 2 feet deep, and the proposed installation area will be leveled. The two cisterns will be installed on plastic pallets provided by the applicant. The water needed

will be provided by an existing communal water well and transported via above ground pipes. The proposed activities in the Municipality of Orocovis involve the installation of a barbed wire fence as a pig enclosure with 10-12 inches wide posts buried 6-8 inches deep.

Based on the submitted documentation, the Program requests a concurrence that a finding of no historic properties affected is appropriate for this proposed project.

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

Kindest regards,

A handwritten signature in cursive script that reads 'Lauren B. Poche'.

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

Architectural Historian, EHP Senior Manager  
LBP/JLE

Attachments

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b>		
<b>ReGROW PUERTO RICO PROGRAM</b>		
<b>Section 106 NHPA Effect Determination</b>		
<b>Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero</b>		
<b>Case ID: PR-RGRW-01327</b>	<b>City: Barranquitas/Orocovis</b>	

<b>Project Location:</b> Carr. 772 Km. 7.8 Interior Bo. Canabón, Sector Los Marrero, Barranquitas / Carretera 155, KM 23.7 Int, Barrio Saltos, Sector Los Rosados, Orocovis, PR	
<b>Project Coordinates:</b> Barranquitas: 18.237132 -66.347909, 18.238488 -66.347243, 18.238762 -66.347711; Orocovis: 18.214155 -66.399803, 18.213738, -66.399313	
<b>TPID (Número de Catastro):</b> Barranquitas: 220-035-230-83, 220-035-230-81; Orocovis: 245-017-109-16, 245-007-109-03	
<b>Type of Undertaking:</b> <input type="checkbox"/> Substantial Repair/Improvements <input checked="" type="checkbox"/> New Construction	
<b>Construction Date (AH est.):</b> n/a	<b>Property Size (acres):</b> 18.5-Baranquitas; 8.24-Orocovis

<b>SOI-Qualified Archaeologist:</b> Jaqueline López Meléndez
<b>Date Reviewed:</b> October 17, 2023; November 7, 2023

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

### Project Description (Undertaking)

The proposed activities for PR-RGRW-01327 consist of the purchase and installation of a 20' x 20' greenhouse, two 1,000-gallon cisterns, an electric generator, agricultural equipment, fence materials, sprinklers, ñame supplies, fertilizer, and a plow. For the proposed activities in the Municipality of Barranquitas the greenhouse and the two cisterns will require ground disturbance. The greenhouse will be anchored to 10' spaced supports buried 2 feet deep, and the proposed installation area will be leveled. The two cisterns will be installed on plastic pallets provided by the applicant. The water needed will be provided by an existing communal water well and transported via above ground pipes. The project area for the proposed greenhouse and cisterns is located at Carr. 772 Km 7.8, Interior, Bo. Canabón, Sector Los Marrero within the Municipality of Barranquitas.

The proposed activities in the Municipality of Orocovis involve the installation of a barbed wire fence as a pig enclosure with 10-12 inches wide posts buried 6-8 inches deep. The project area for the proposed fence is located at Bo Salto, Carr 155, PR, Puerto Rico, 00720, within the Municipality of Orocovis.

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>REgROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>	 <small>GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING</small>
<b>Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero</b>	
<b>Case ID: PR-RGRW-01327</b>	<b>City: Barranquitas/Orocovis</b>

### **Area of Potential Effects**

As defined in 36 CFR §800.16(d), the area of potential effects (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such properties exist. Based on this definition and the nature and scope of the Undertaking, the Program has determined that the direct APE in Barranquitas is the location of the greenhouse and the two cisterns, plus a 15-meter buffer. The direct APE in Orocovis is the location of the barbed wire fence plus a 15-meter buffer. The visual APE includes the viewsheds of the proposed project locations in Barranquitas and Orocovis.

### **Identification of Historic Properties – Archaeology**

#### **Municipality of Barranquitas**

Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information by a Program contracted Historic Preservation Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61), shows that there are no reported archaeological sites, archaeological materials of significant cultural properties within a half-mile (0.50 miles) radius of the project location. The closest reported archaeological site to the PR-RGRW-01327 project area is the Pre-Columbian site Botijas I (SHPO: OR0100030) located 0.59 miles southwest. The proposed project is located in Barranquitas, at an elevation between 1,804 and 1,968 feet above sea level. Per the USGS/NRCS Web Soil Survey, the project area is within mapped soil series: Múcara and Humatas. The project area APE is in MxF and HtF. The nearest bodies of water are: an unnamed creek, located 0.24 miles northwest and Cañabón river, located 0.38 miles southwest. The coast is approximately 16.90 miles north from the project area.

There are no cultural resource studies within a half-mile radius of the property.

The cisterns will be installed in an area with MxF soils and the greenhouse where we have HtF soils. The soil Múcara clay, 40 to 60 percent slopes (MxF) is a very steep, moderately deep, well-drained soil on side slopes and rounded hilltops of strongly dissected uplands. The soil Humatas clay, 40 to 60 percent slopes (HtF) is a deep soil, very steep, and well drained. It is on the side slopes and ridgetops of humid volcanic uplands. The permeability and available water capacity of this Humatas soil are moderate. Runoff is very rapid, and fertility is medium. Slope and an erosion hazard make this soil poorly suited for cultivated crops.

The project area does not have cultural resources that are listed either on the National Register of Historic Places (NRHP) or in a Traditional Urban Center or Historic District. On

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>REGROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>	 <small>GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING</small>
<b>Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero</b>	
<b>Case ID: PR-RGRW-01327</b>	<b>City: Barranquitas/Orocovis</b>

October 16, 2023, we visually inspected the project area. The project area is located in the rural area of Barranquitas, in a property with variable topography.

**Municipality of Orocovis**

Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information by a Program contracted Historic Preservation Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61), shows that there are no reported archaeological sites, archaeological materials of significant cultural properties within a half-mile (0.50 miles) radius of the project location. The closest reported archaeological site to the PR-RGRW-01327 project area is the Pre-Columbian site OR-19/OR-20 (SHPO: OR0100021) located 0.51 miles northeast. The proposed project is located in Orocovis, at an elevation between 2,231 and 2,428 feet above sea level. Per the USGS/NRCS Web Soil Survey, the project area is within mapped soil series: Maricao. The project area APE is in MxF. The nearest body of water is: Los Saltos creek, located 0.26 miles west. The coast is approximately 15.88 miles southwest from the project area.

There are no cultural resource studies within a half-mile radius of the property.

There is one (1) archaeological study within 0.50 miles radius of the project area, with negative results.

The fence will be installed in an area with MxF and MoF soils. The soil Maricao clay, 20 to 60 percent slopes (MoF) is a steep to very steep, well-drained soil on side slopes and narrow hilltops of the strongly dissected uplands. Permeability and the available water capacity are moderate. Runoff is very rapid, and erosion is a hazard. This soil is difficult to work because it is steep to very steep and because of the stickiness and plasticity of the clay.

The project area does not have cultural resources that are listed either on the National Register of Historic Places (NRHP) or in a Traditional Urban Center or Historic District. On November 3, 2023, we visually inspected the project area. The project area is located in the rural area of Orocovis, in a property with variable topography.

**Determination**

The project area in the Municipality of Barranquitas is not within or adjacent to the boundaries of a National Register of Historic Places (NRHP)-eligible or listed historic district or Traditional Urban Center. There are no reported archaeological materials or significant cultural properties within a half-mile radius of the proposed project location. There are no known archaeological sites or NRHP listed/eligible historic properties are within or adjacent to the property or the parcel in which the Area of Potential Effect of case PR-RGRW-01327 is located. The construction of public roads and agricultural infrastructure has minimally impacted the surrounding terrain.

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>ReGROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>	 <small>GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING</small>
<b>Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero</b>	
<b>Case ID: PR-RGRW-01327</b>	<b>City: Barranquitas/Orocovis</b>

The project area in the Municipality of Orocovis is not within or adjacent to the boundaries of a National Register of Historic Places (NRHP)-eligible or listed historic district or Traditional Urban Center. There are no reported archaeological materials or significant cultural properties within a half-mile radius of the proposed project location. There are no known archaeological sites or NRHP listed/eligible historic properties are within or adjacent to the property or the parcel in which the Area of Potential Effect of case PR-RGRW-01327 is located. The construction of public roads and agricultural infrastructure has minimally impacted the surrounding terrain.

Therefore, no historic properties will be affected by the proposed project activities in Barranquitas and Orocovis.

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

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

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

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

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

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>RE-grow PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>		 <small>GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING</small>
<b>Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero</b>		
<b>Case ID: PR-RGRW-01327</b>	<b>City: Barranquitas/Orocovis</b>	

**Table 1: Municipality of Barranquitas**

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

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

**Table 2: Municipality of Orocovis**

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

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

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

Author	Phase/Title	Year	SHPO / IPRC code	Results	Distance/Direction
Juan González	IA-IB/ Improvements to the water supply system of Orocovis and Barranquitas	1995	ICP/CAT-OR-95-02-02, SHPO: 03-14-95-04	Negative	0.12 mi E



Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Case ID: PR-RGRW-01327

City: Barranquitas/Orocovis

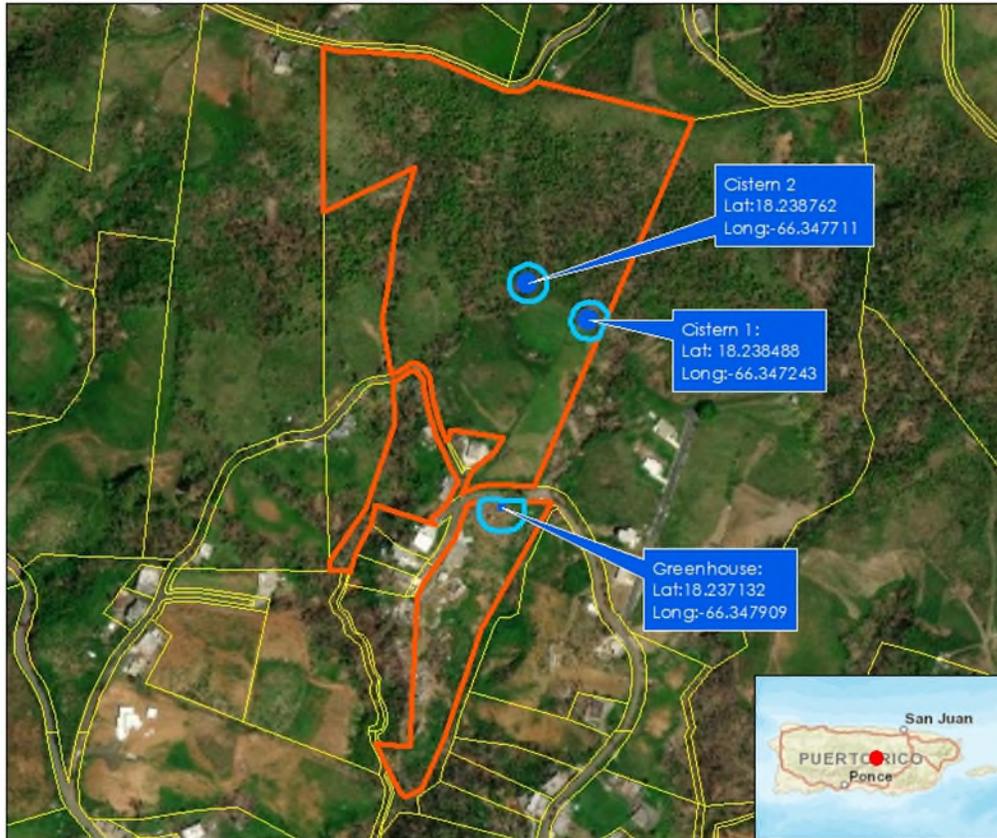
Project (PR-RGRW-01327) Location – Barranquitas: Area of Potential Effect Map (Aerial)



Application ID: PR-RGRW-01327

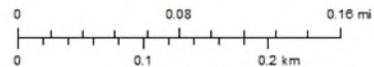
Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carr. 772 Km 7.8 Interior,  
Ba Canabón, Sect. Los Marrero,  
Barranquitas, PR 00794  
Catastro: 220-035-230-83 / 220-035-230-81  
Lat:18.237132, Long:-66.347909

Area of Potential Effect  
Puerto Rico Department of Housing ReGrow



Legend:

- Applicant Structures
- Area of Potential Effect
- Parcels
- CRIM Parcels



Service Layer Credits: Sources: Esri, HERE, Garmin, LEOS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community  
Source: Esri, Maxar, Swire, GeoGraphics, and the GIS User Community and Google Earth



Source

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



Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Case ID: PR-RGRW-01327

City: Barranquitas/Orocovis

### Project (PR-RGRW-01327) Location – Orocovis: Area of Potential Effect Map (Aerial)

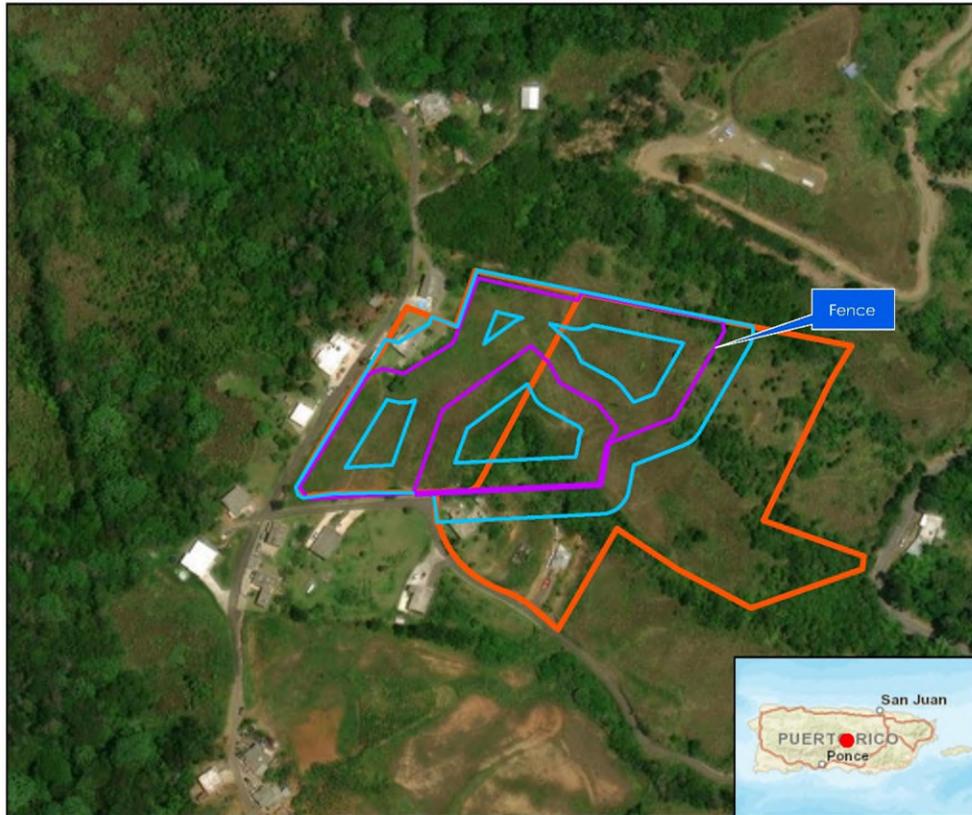
**BYA** BEHAR-YBARRA & ASSOCIATES LLC  
CONSULTING ENGINEERS, ARCHITECTS AND PLANNERS  
Ciudad, Avenida 1 Suite 2-01, Calle Ponce SSA, Arecibo, San Juan, PR 00920 Tel: (787)703-0280

Application ID: PR-RGRW-01327

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carretera 155, KM 23.7 Int.  
Bo. Saltos, Sector Los Rosados,  
Orocovis, PR, 00720  
Catastro: 245-017-109-16 / 245-007-109-03  
Lat: 18.214155, Long: -66.399803 /  
Lat: 18.213738, Log: -66.399313

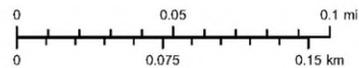
## Area of Potential Effect

Puerto Rico Department of Housing ReGrow



### Legend:

- PR-RGRW-01327
- Area of Potential Effect (15Mt)
- Fences
- Parcels-Orocovis



Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, Increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), Swire, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community  
Sources: Esri, Maxar, Earthstar Geographics, and the GIS User Community and Google Earth



1:2,500

### Source

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



Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Case ID: PR-RGRW-01327

City: Barranquitas/Orocovis

### Project (PR-RGRW-01327) Location – Orocovis: Aerial Map

**BYA** BEHAR-YBARRA & ASSOCIATES LLC  
CONSULTING ENGINEERS, ARCHITECTS AND PLANNERS  
Corral, Torre 1 Suite 2-3, Calle Ponce 504, Aguadilla, San Juan, P.R. 00923 TEL:787783-0290

Application ID: PR-RGRW-01327

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carretera 155, KM 23.7 Int,  
Bo. Saltos, Sector Los Rosados,  
Orocovis, PR. 00720  
Catastro: 245-017-109-16 / 245-007-109-03  
Lat:18.214155, Long: -66.399803  
Lat: 18.213738, Log: -66.399313

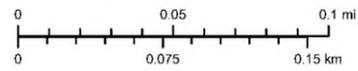
### Location: Aerial Map

Puerto Rico Department of Housing ReGrow



**Legend:**

- PR-RGRW-01327
- Fences
- Parcels-Orocovis
- CRIM Parcels



Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community  
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community and Google Earth



1:2,500

**Source**

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



Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Case ID: PR-RGRW-01327

City: Barranquitas/Orocovis

### Project (PR-RGRW-01327) Location – Barranquitas: USGS Topographic Map

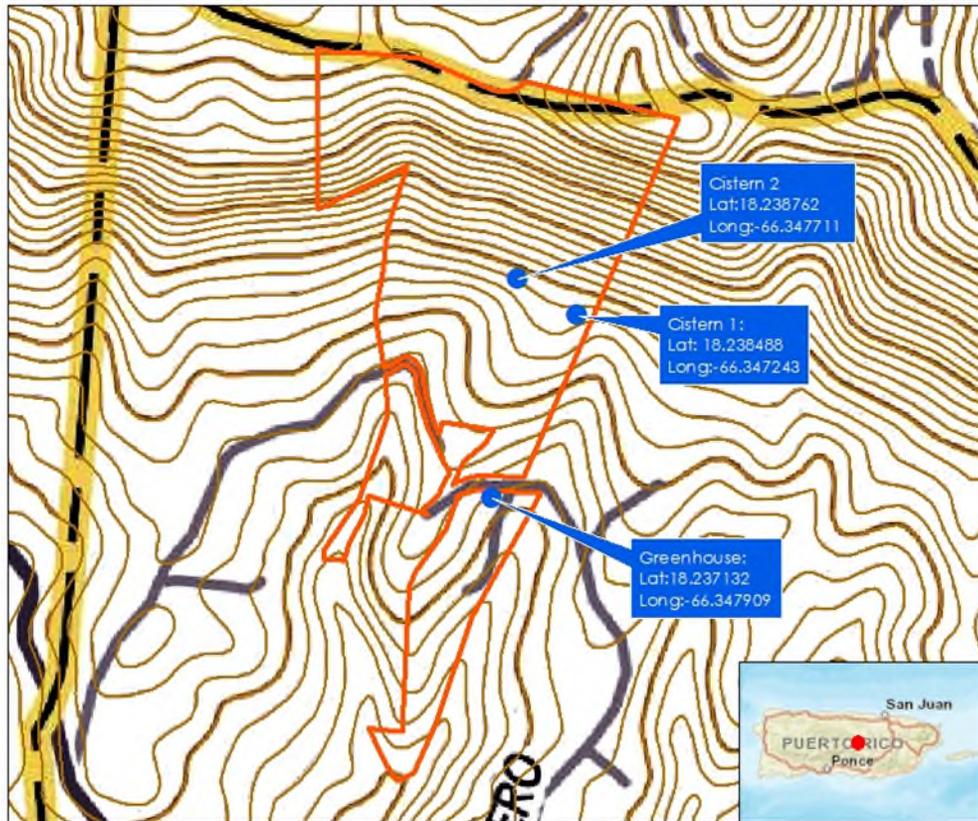


Application ID: PR-RGRW-01327

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carr. 772 Km 7.8 Interior,  
Bo Canabón, Sect. Los Marrero,  
Barranquitas, PR 00794  
Catastro: 220-035-230-83 / 220-035-230-81  
Lat:18.237132, Long:-66.347909

### Location: USGS Topographic Map

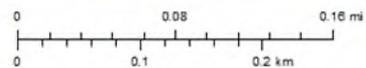
Puerto Rico Department of Housing ReGrow



**Legend:**

- Applicant Structures
- Parcels
- Contour Interval 20 Feet

Quadrangle: Barranquitas



Service Layer Credits Sources: Esri, HERE, Garmin, IIGL, Intermap, INCREMENT P, NGC, Esri, Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community and Google Earth



**Source**

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

### Project (PR-RGRW-01327) Location – Orocovis: USGS Topographic Map

**BYA** BEHAR-YBARRA & ASSOCIATES LLC  
CONSULTING ENGINEERS, ARCHITECTS AND PLANNERS  
Corral, Avenida 1 Suite J-3, Calle Pinaros 25A, Arecibo, San Juan, P.R. 00923 Tel:787-273-0292

Application ID: PR-RGRW-01327

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carretera 155, KM 23.7 Int,  
Bo. Saltos, Sector Los Rosados,  
Orocovis, PR, 00720  
Catastro: 245-017-109-16 / 245-007-109-03  
Lat:18.214155, Long: -66.399803  
Lat: 18.213738, Log: -66.399313

### Location: USGS Topographic Map

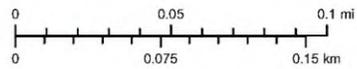
Puerto Rico Department of Housing ReGrow



**Legend:**

- PR-RGRW-01327
- Fences
- Parcels-Orocovis
- Contour Interval 20 Feet

**Quadrangle: Orocovis**



Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, Incorpant P Corp., NRCAN, Esri Japor, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community and Google Earth



1:2,500

**Source**

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



Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Case ID: PR-RGRW-01327

City: Barranquitas/Orocovis

### Project (PR-RGRW-01327) Location – Barranquitas: Soils Map



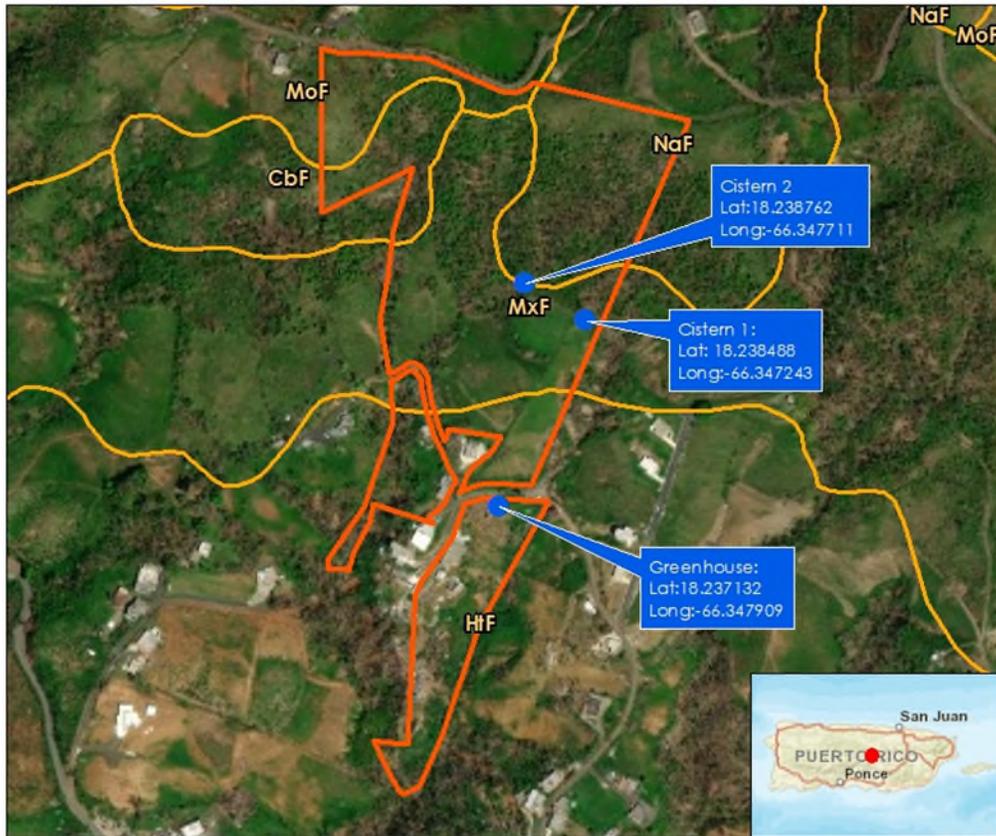
Consulting ENGINEERS, ARCHITECTS AND PLANNERS  
Carretera, 1000, 2da. Etapa, P.O. Box 184, Alamo, San Juan, PR, 00909 Tel: (787) 483-3000

Application ID: PR-RGRW-01327

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carr. 772 Km 7.8 Interior,  
Bo Canabón, Sect. Los Marrero,  
Barranquitas, PR 00794  
Catastro: 220-035-230-83 / 220-035-230-81  
Lat:18.237132, Long:-66.347909

## Soils Map

Puerto Rico Department of Housing ReGrow

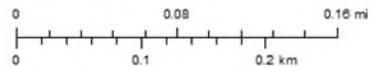


**Legend:**

- Applicant Structures
- Parcels
- Soil Map Unit Symbol

**Soil Map Unit Symbol**

- CbF - Caguaba-Rock outcrop complex, 20 to 60 percent slopes
- HtF - Humatas clay, 40 to 60 percent slopes
- MoF - Maricao clay, 20 to 60 percent slopes
- MxF - Mucara clay, 40 to 60 percent slopes
- NaF - Naranjito silty clay loam, 40 to 60 percent slopes



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  
Source: Esri, Fabian, Earthstar Geographics, and the GIS User Community and Google Earth



**Source**

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



Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Case ID: PR-RGRW-01327

City: Barranquitas/Orocovis

### Project (PR-RGRW-01327) Location – Orocovis: Soils Map

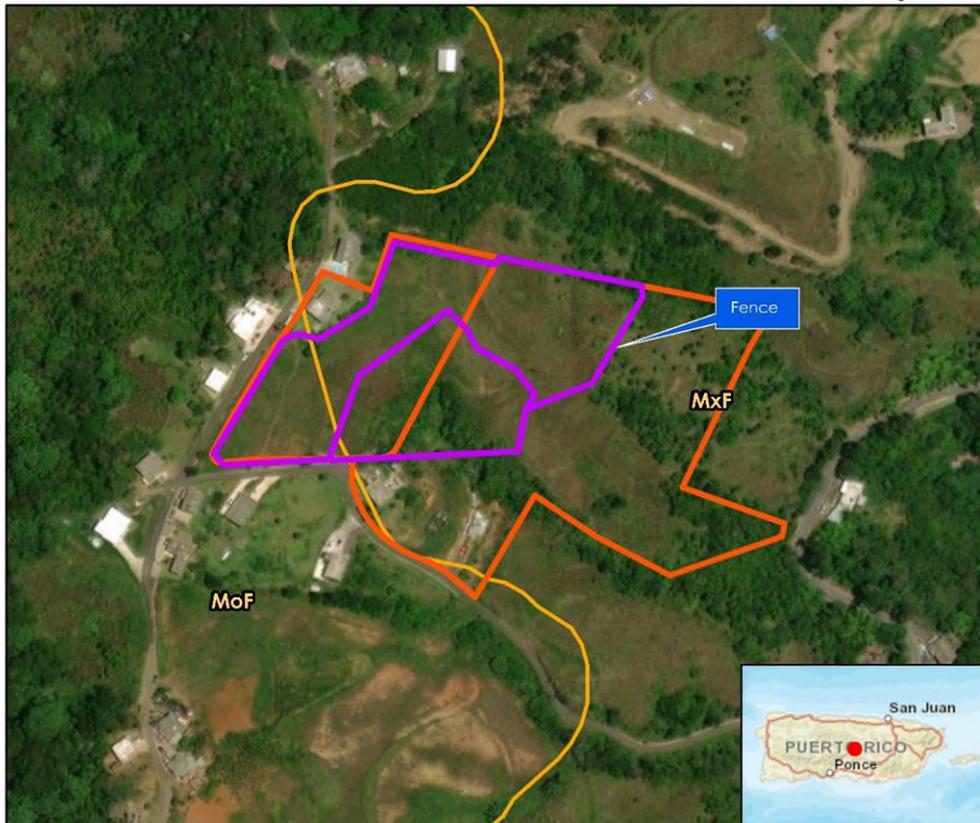


## Soils Map

Puerto Rico Department of Housing ReGrow

Application ID: PR-RGRW-01327

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carretera 155, KM 23.7 Int,  
Bo. Saltos, Sector Los Rosados,  
Orocovis, PR. 00720  
Catastro: 245-017-109-16 / 245-007-109-03  
Lat:18.214155, Long: -66.399803  
Lat: 18.213738, Log: -66.399313

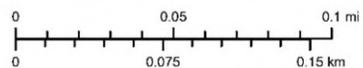


**Legend:**

- PR-RGRW-01327
- Fences
- Parcels-Orocovis
- Soil Map Unit Symbol

**Soil Map Unit Symbol**

MoF - Maricao clay, 20 to 60 percent slopes  
MxE - Mucara clay, 20 to 40 percent slopes  
MxF - Mucara clay, 40 to 60 percent slopes



Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), Swire, Mapbox, © OpenStreetMap contributors, and the GIS User Community  
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community and Google Earth



1:2,500

**Source**

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



Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Case ID: PR-RGRW-01327

City: Barranquitas/Orocovis

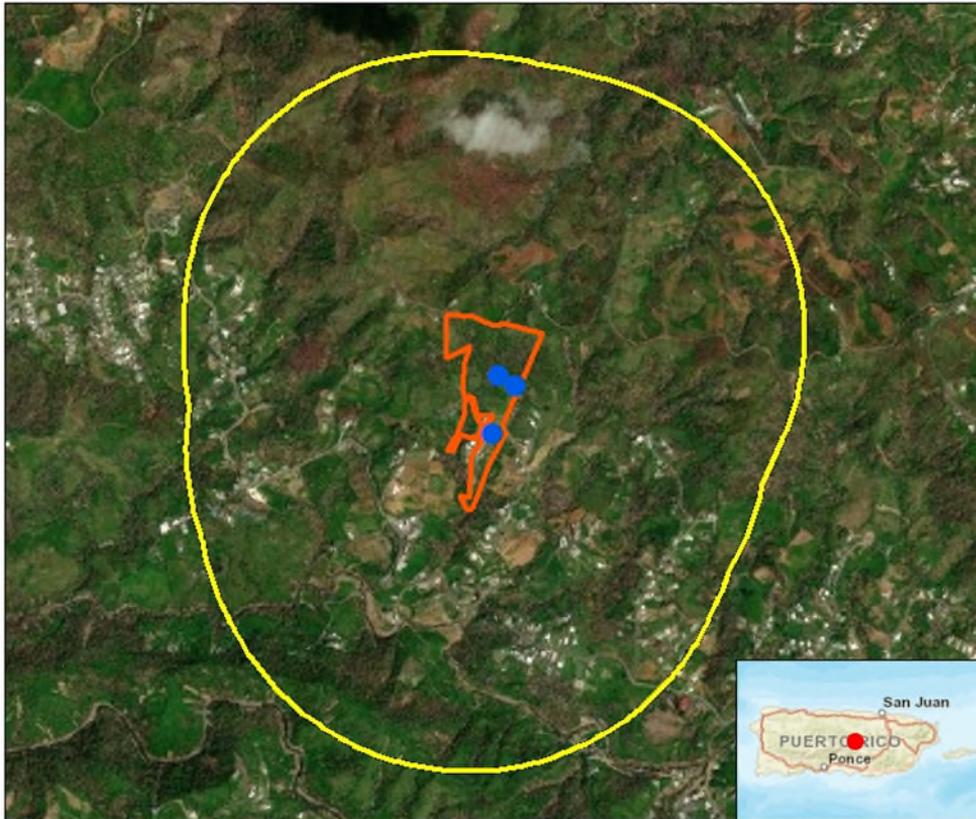
**Project (PR-RGRW-01327) Location – Barranquitas: Previous Investigations - Aerial Map**



Application ID: PR-RGRW-01327

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carr. 772 Km 7.8 Interior,  
Bo Canabón, Sect. Los Marrero,  
Barranquitas, PR 00794  
Catastro: 220-035-230-83 /220-035-230-81  
Lat:18.237132. Long:-66.347909

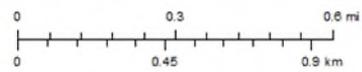
**Previous Investigations: Aerial Map**  
Puerto Rico Department of Housing ReGrow



Cistem 1	Lat: 18.238488	Long -66.347243
Cistem 2	Lat: 18.238762	Long:-66.347711
Greenhouse	Lat: 18.237132	Long: -66.347909

**Legend:**

- Applicant Structures
- Applicant Structures
- 0.5 Mile (0.8Km) Buffer
- Parcels



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  
Source: Esri, Mapbox, Earthstar Geographics, and the GIS User Community and Google Earth



**Source**

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



Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Case ID: PR-RGRW-01327

City: Barranquitas/Orocovis

### Project (PR-RGRW-01327) Location – Orocovis: Previous Investigations – Aerial Map

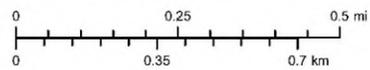
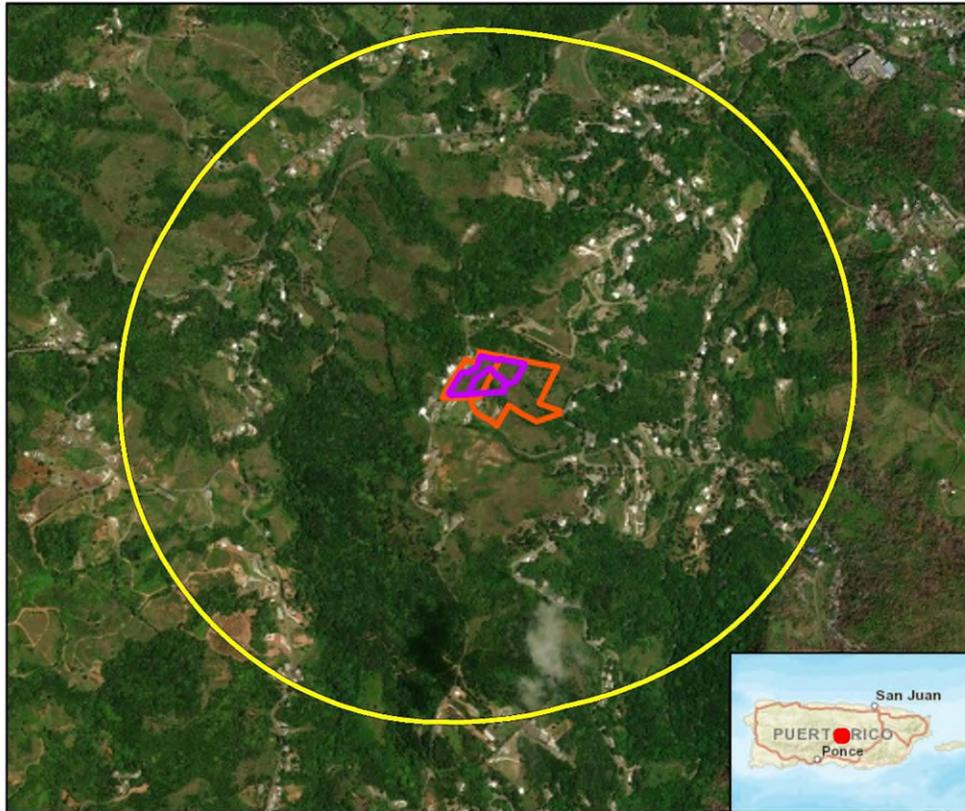
**BYA** BEHAR-YBARRA & ASSOCIATES LLC  
CONSULTING ENGINEERS, ARCHITECTS AND PLANNERS  
Carretera 1 Suite 203, Calle Ponce 254, Aibonito, San Juan, P.R. 00922 Tel: (787) 763-0280

Application ID: PR-RGRW-01327

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carretera 155, KM 23.7 Int.  
Bo. Saltos, Sector Los Rosados,  
Orocovis, PR, 00720  
Catastro: 245-017-109-16 / 245-007-109-0  
3Lat: 18.214155, Long: -66.399803  
Lat: 18.213738, Log: -66.399313

## Previous Investigations: Aerial Map

Puerto Rico Department of Housing ReGrow



Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, Mapbox, and OpenStreetMap contributors, and the GIS User Community  
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community and Google Earth



1:12,000

**Legend:**

-  Parcels-Orocovis
-  0.5 Mile (0.8Km) Buffer
-  Fences

**Source**

Centro de Recaudación de Ingresos Municipales (CRIM)  
<http://catastro.crim.net/cadiprc/>

Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Case ID: PR-RGRW-01327

City: Barranquitas/Orocovis

**Project (PR-RGRW-01327) Location - Barranquitas: Previous Investigations –Topographic Map**

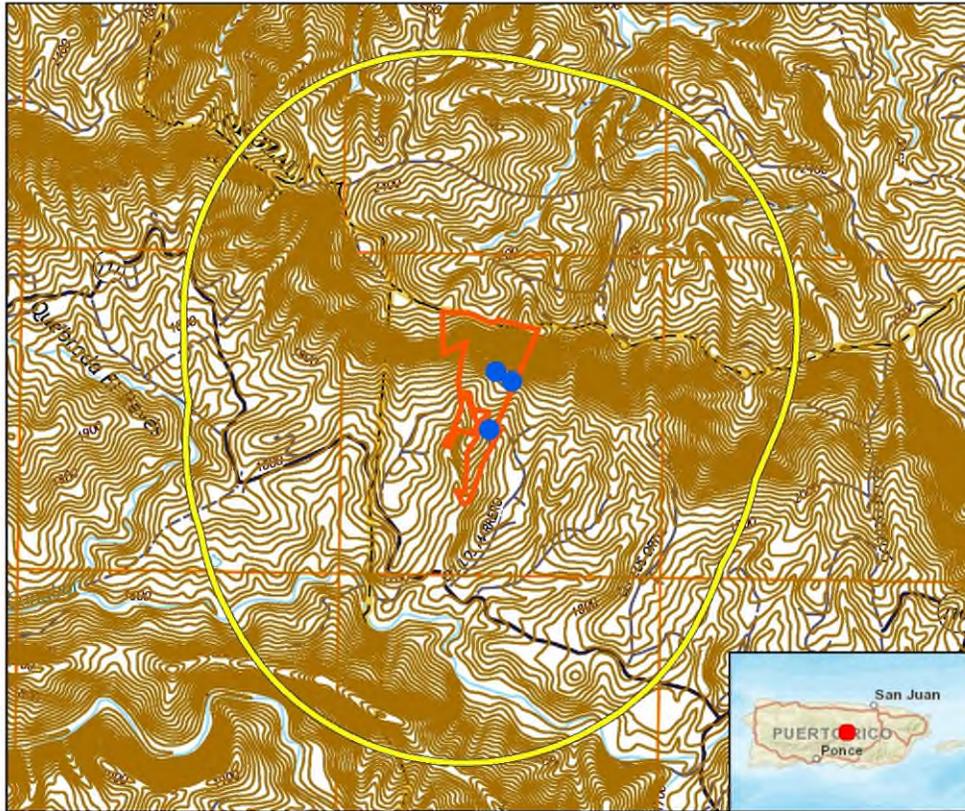
**BYA** BEHAR-YBARRA & ASSOCIATES LLC  
CONSULTING ENGINEERS, ARCHITECTS AND PLANNERS  
Carroll Avenue 1 Suite 103, Caguas Puerto Rico, 00986, San Juan, PR 00925 Tel: 787-723-0290

Application ID: PR-RGRW-01327

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Car. 772 Km 7.8 Interior,  
Bo Canabón, Sect. Los Marrero,  
Barranquitas, PR 00794  
Catastro: 220-035-230-83 /220-035-230-81  
Lat:18.237132, Long:-66.347909

**Previous Investigations: USGS Topographic Map**

Puerto Rico Department of Housing ReGrow

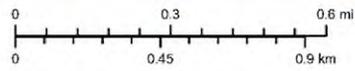


Cistern 1	Lat: 18.238488	Long -66.347243
Cistern 2	Lat: 18.238762	Long:-66.347711
Greenhouse	Lat: 18.237132	Long: -66.347909

**Legend:**

- Applicant Structures
- 0.5 Mile (0.8Km) Buffer
- Parcels
- Contour Interval 20 Feet

**Quadrangle: Barranquitas**



Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, Mapbox, Mapbox, OpenStreetMap contributors, and the GIS User Community and Google Earth



**Source**

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

### Project (PR-RGRW-01327) Location – Orocovis: Previous Investigations – Topographic Map

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

Application ID: PR-RGRW-01327

Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Carretera 155, KM 23.7 Int,

Bo. Saltos, Sector Los Rosados,

Orocovis, PR, 00720

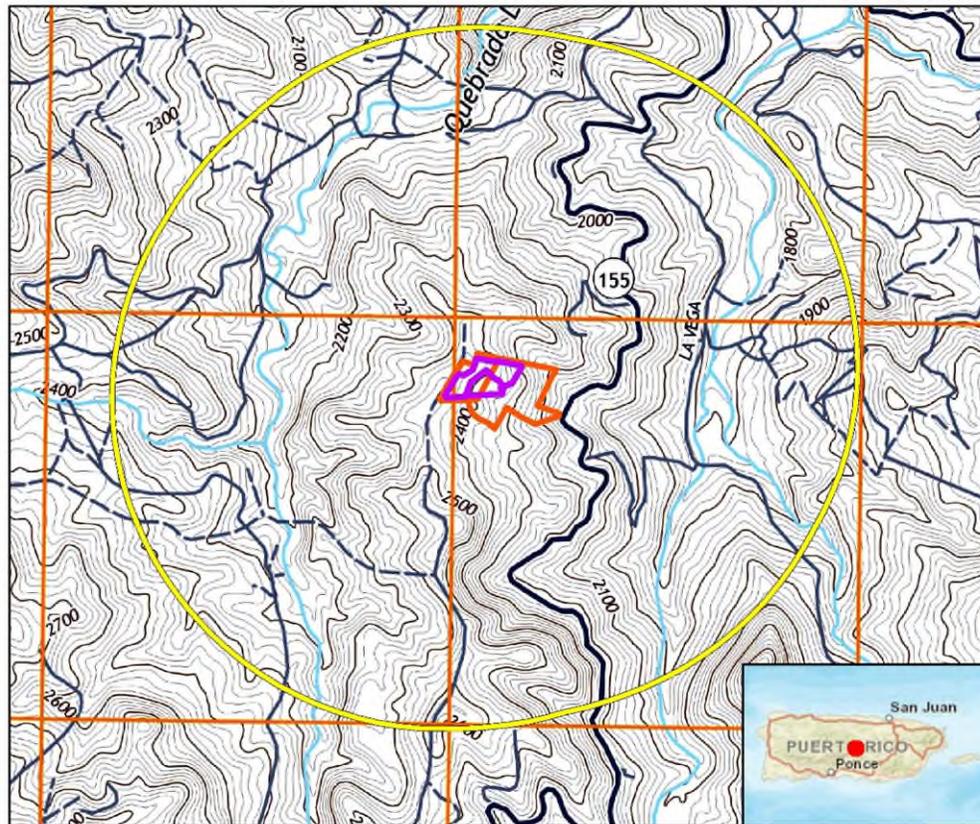
Catastro: 245-017-109-16 / 245-007-109-0

3Lat:18.214155, Long: -66.399803

Lat: 18.213738, Log: -66.399313

### Previous Investigations: USGS Topographic Map

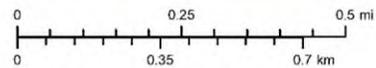
Puerto Rico Department of Housing ReGrow



**Legend:**

-  Parcels-Orocovis
-  Contour Interval 20 Feet
-  0.5 Mile (0.8Km) Buffer
-  Fences

**Quadrangle: Orocovis**



Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community and Google Earth



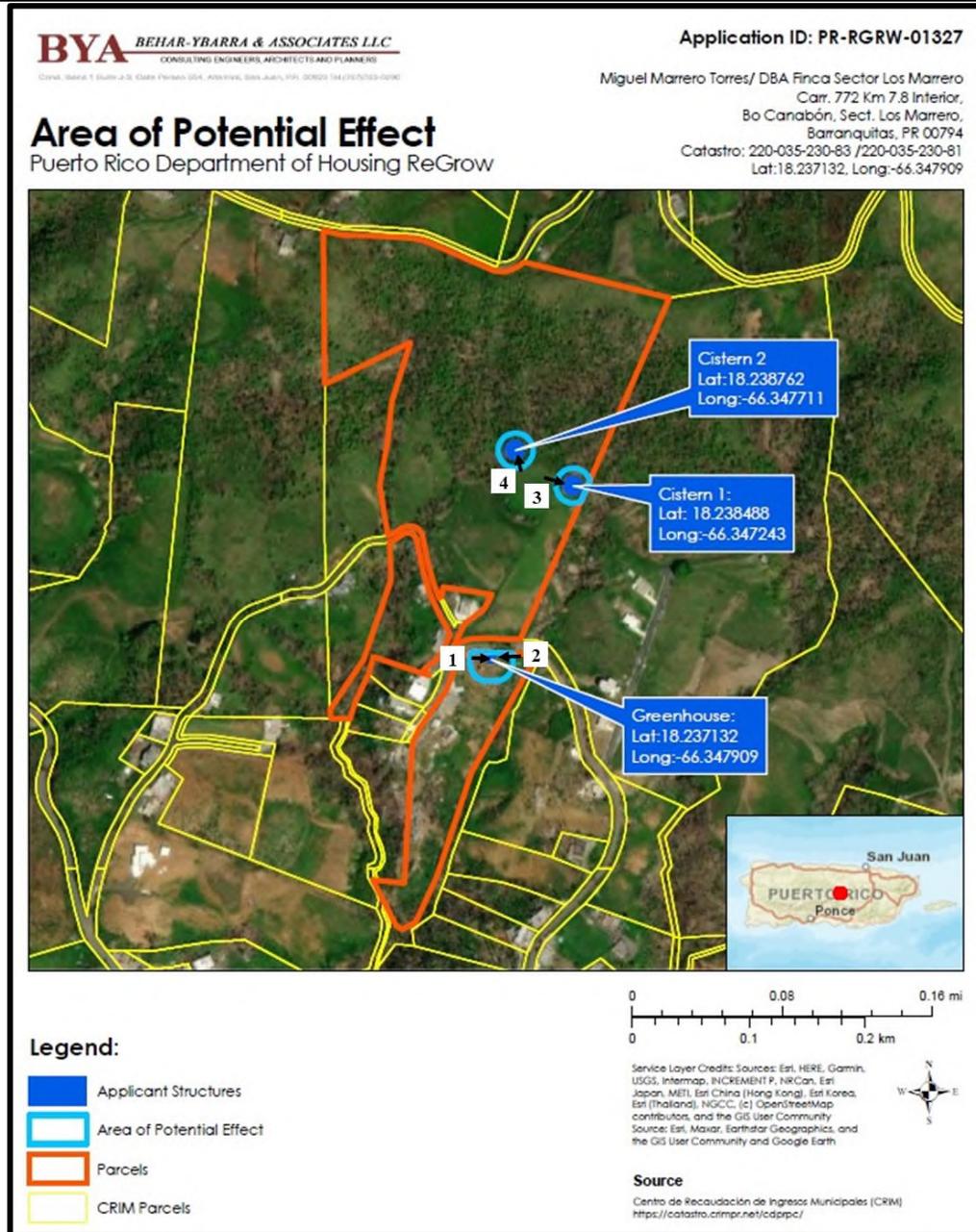
1:12,000

**Source**

United States Geological Survey (USGS)  
National Geographic Map Database  
[http://ngmdb.usgs.gov/ngmdb/ngmdb\\_home.htm](http://ngmdb.usgs.gov/ngmdb/ngmdb_home.htm)



### Photograph Key Barranquitas





Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Case ID: PR-RGRW-01327

City: Barranquitas/Orocovis

### Photograph Key- Orocovis

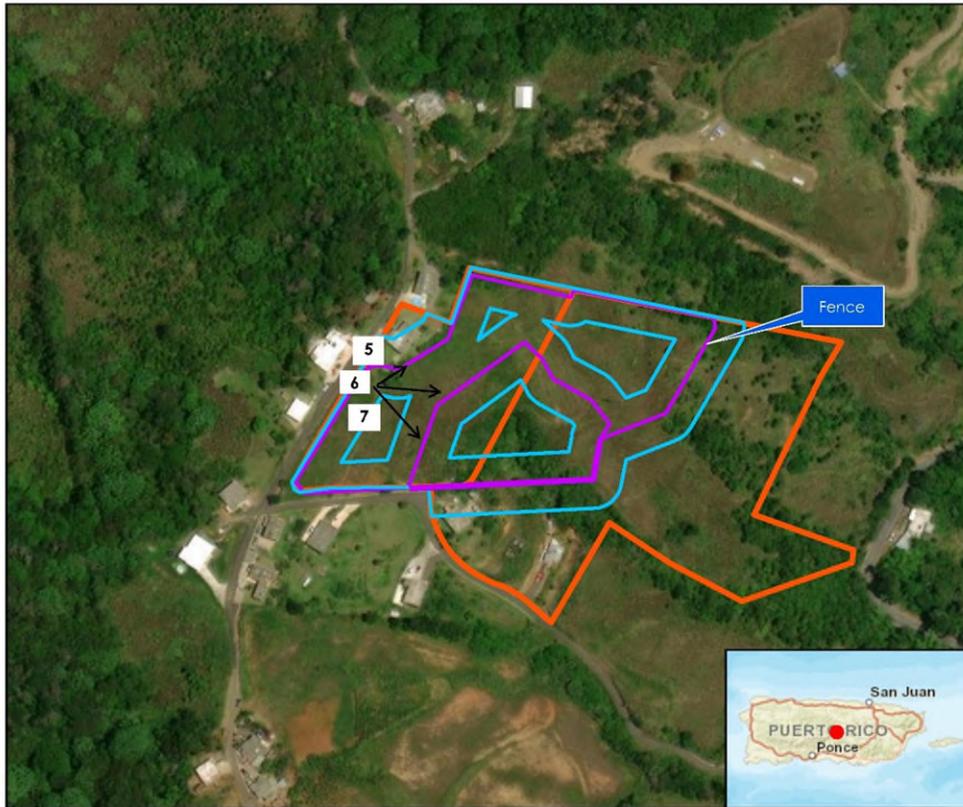
**BYA** BEHAR-YBARRA & ASSOCIATES LLC  
CONSULTING ENGINEERS, ARCHITECTS AND PLANNERS  
Oficina: Ibera 1 Suite 2-3, Calle Ponce 554, Altavilla, San Juan, P.R. 00920 Tel: (787) 763-0290

Application ID: PR-RGRW-01327

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carretera 155, KM 23.7 Int,  
Bo. Saltos, Sector Los Rosados,  
Orocovis, PR, 00720  
Catastro: 245-017-109-16 / 245-007-109-03  
Lat: 18.214155, Long: -66.399803 /  
Lat: 18.213738, Log: -66.399313

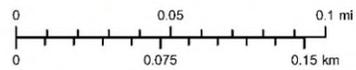
## Area of Potential Effect

Puerto Rico Department of Housing ReGrow



### Legend:

- PR-RGRW-01327
- Area of Potential Effect (15Mt)
- Fences
- Parcels-Orocovis



Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community  
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community and Google Earth



**Source**  
Centro de Recaudación de Ingresos Municipales (CRIM)  
<http://catastro.crimpr.ro/cdripr/>



Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Case ID: PR-RGRW-01327

City: Barranquitas/Orocovis



Photo #: 1

Description (include direction): General area where the greenhouse will be installed, looking east. Municipality of Barranquitas.

Date: October 16, 2023



Photo #: 2

Description (include direction): General area where the greenhouse be installed, looking west. Municipality of Barranquitas.

Date: October 16, 2023



Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Case ID: PR-RGRW-01327

City: Barranquitas/Orocovis



Photo #: 3

Description (include direction): General area where the Cistern 1 will be installed, looking southeast. Municipality of Barranquitas.

Date: October 16, 2023



Photo #: 4

Description (include direction): General area where the Cistern 2 be installed, looking northwest. Municipality of Barranquitas.

Date: October 16, 2023



Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero

Case ID: PR-RGRW-01327

City: Barranquitas/Orocovis



Photo #: 5

Description (include direction): General area where the fence will be installed, looking northeast. Municipality of Orocovis.

Date: November 3, 2023



Photo #: 6

Description (include direction): General area where the fence be installed, looking east. Municipality of Orocovis.

Date: November 3, 2023

**PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM**

**REGROW PUERTO RICO PROGRAM**

**Section 106 NHPA Effect Determination**



GOVERNMENT OF PUERTO RICO  
DEPARTMENT OF HOUSING

**Applicant: Miguel Marrero Torres/ DBA Finca Sector Los Marrero**

**Case ID: PR-RGRW-01327**

**City: Barranquitas/Orocovis**



**Photo #: 7**

**Date: November 3, 2023**

**Description (include direction): General area where the fence will be installed, looking southeast. Municipality of Orocovis.**



## GOVERNMENT OF PUERTO RICO

STATE HISTORIC PRESERVATION OFFICE

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

February 6, 2024

### Lauren Bair Poche

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

SHPO: CF-02-02-24-08 PRDOH – DR RE-GROW PROGRAM – PR – RGRW – 01327 FINCA SECTOR LOS MARRERO – CARR 772 KM. 7.8 INTERIOR BO. CANABON, SECTOR LOS MARRERO, BARRANQUITAS PUERTO RICO AND CARRETERA 155, KM BARRIO SALTOS, SECTOR LOS ROSADOS, OROCOVIS PUERTO RICO

Ms. Bair Poche,

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

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

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

Sincerely,

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





October 20, 2022

**Arch. Carlos A. Rubio Cancela**

Executive Director

State Historic Preservation Officer

Cuartel de Ballajá Bldg.

San Juan, Puerto Rico

**Re: Authorization to Submit Documents**

Dear Arch. Rubio Cancela:

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

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

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

Cordially,

Juan C. Pérez Bofill, P.E. M.Eng

Director of Disaster Recovery

CDBG DR-MIT



DEPARTMENT OF

# HOUSING

GOVERNMENT OF PUERTO RICO



## Memorandum to File

**Date:** 4/10/2025

**From:** Justin Neely  
Environmental Manager  
CDBG-DR Program  
Regrow Puerto Rico Program  
Puerto Rico Department of Housing

**Application Number:** PR-RGRW-01327-W-RE

**Project:** Miguel Marrero Torres/ DBA Finca Sector Los Marrero

### **Re: Justification for the Infeasibility and Impracticability of Radon Testing**

After reviewing Application Number PR-RGRW-01327-W-RE under the Regrow Puerto Rico Program, administered by the Puerto Rico Department of Housing (**PRDOH**), to complete the property's contamination analysis in accordance with 24 C.F.R. § 50.3(i) and 24 C.F.R. § 58.5(i), we have determined that testing the property's radon levels is infeasible and impracticable.

Per the U.S. Department of Housing and Urban Development's (**HUD**) CPD Notice 23-103, the recommended best practices and alternative options for radon testing are infeasible and impracticable in this case due to the following reasons:

- As required by the CPD Notice 23-103, the scientific data reviewed in lieu of testing must consist of a minimum of ten documented test results over the previous ten years. If there are less than ten documented results over this

period, it is understood that there is a lack of scientific data. The latest report for radon testing in Puerto Rico was prepared in 1995 by the U.S. Department of the Interior in Cooperation with the U.S. Environmental Protection Agency. No other completed studies and reports on radon testing are available in Puerto Rico.

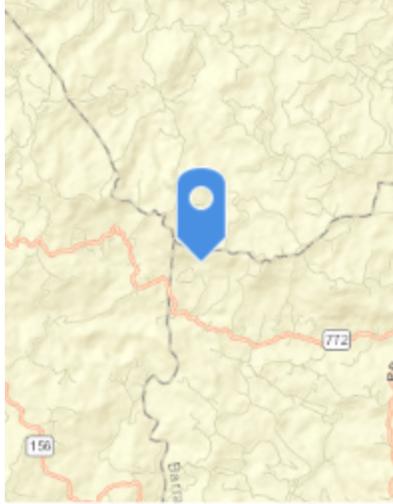
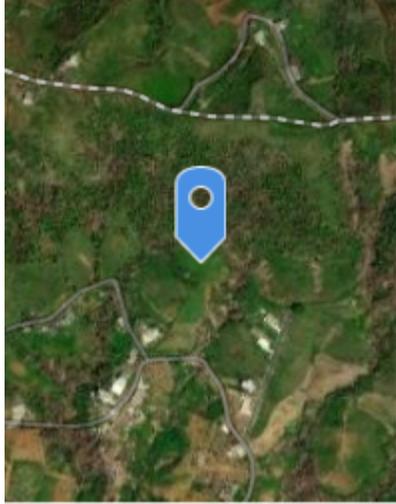
- There is no available science-based or state-generated information for Puerto Rico for the last ten years that can be used to determine whether the project site is in a high-risk area. The Department of Health and Human Services, Centers for Disease Control and Prevention (**CDC**), National Environmental Public Health Tracking, and Radon Testing map do not include Puerto Rico data.
- There are only two (2) licensed professionals in Puerto Rico who can conduct radon testing using the American National Standards Institute/American Association of Radon Scientists and Technologists (**ANSI/AARST**) testing standards, which makes it difficult, time-consuming, and highly expensive to coordinate and secure a site visit for the contamination evaluation.
- Do-it-yourself (**DIY**) radon test kits are known to be unreliable in assuring and controlling the quality of the test results; they are not readily available in Puerto Rico, and the cost and time required for purchasing and sending them for analysis are unreasonable when weighed against the results' reliability and the need for prompt results.
- Local authorities in Puerto Rico do not have the specialized radon monitoring equipment or trained staff needed to conduct the radon testing analysis and ensure proper quality control and quality assurance practices are adhered to. We also do not have a radiation laboratory certified for radon testing.

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.

**APPLICANT/LOCATION INFORMATION**

Applicant ID:	PR-RGRW-01327	 <p>Esri, HERE, Ga... Powered by Esri</p>  <p>Esri, Maxar, Ea... Powered by Esri</p>
Applicant Name:	Miguel Marrero Torres/ DBA Finca Sector Los Marrero	
Parcel ID:	Barranquitas: 220-035-230-83, 220-035-230-81; Orocovis: 245-017-109-16, 245-007-109-03	
Latitude:	18.238354	
Longitude:	-66.347507	
Street Address:	CARR 772 KM 7.8 Interior Barrio Cañabon, Sector Los Marreros	
Municipio:	Comerio / Orocovis	
Zip Code:	00794	
Site Inspector:	Egon Gonzalez	
Date of Visit:	September 28, 2023	
Time of Visit:	11:19	
Building Type:		

**FIELD OBSERVATIONS**

Question	Answer	Notes
A. Is the structure in use?	No	
B. Is the structure a greenhouse?	Yes	Structure will be a greenhouse
C. Is Electricity connected? (Utilities or Well)	Yes	Electricity provided by Electric company LUMA
D. Is water connected? (Utilities or Well)	Yes	Water provided from community water well
1. Are there signs of poor housekeeping on site? (mounds of rubble, garbage, strom debris, solid waste, petroleum products, paint, pesticides, cleaning fluids, vehicle batteries, abandoned vehicles, pits, pools, ponds of hazardous substances, etc.)	Yes	
2. Are there any 55-gallon drums visible on site? If yes, are they leaking?	Yes	Herbicide Gly Star Plus
3. Are there any (or signs of any) underground storage tanks on the property?	No	
4. Are there signs of AST on the parcel or adjacent parcel? If yes, list approximate size and contents, if known.	No	
5. Is there any stained soil or pavement on the parcel?	No	
6. Is a water drainage system in use?	No	
7. Is a warehouse in use for storage of Fertilizer or Pesticides?	No	
8. Are there any groundwater monitoring wells on the site or adjacent parcel?	Yes	Ground monitoring well near parcel
9. Is there evidence of a faulty septic system?	No	
10. Is there distressed vegetation on the parcel?	No	
11. Is there any visible indication of mold?	No	
12. Is there any visible evidence of asbestos, chipping, and flaking or peeling paint, or hazardous materials present in or on the structure?	No	
13. Are any additional site hazards observed?	No	
14. 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	
15. Does the subject property have water frontage?	No	
16. Is there any indication of the presence of wetlands?	No	
17. Are there any obvious signs of animals or birds nesting on or near the site?	No	
18. Is the applicant aware of any signifcant historcal event or persons associated with the structure, or of it being located in a historic district/ area?	No	

19. Is a historic marker present?	No	
-----------------------------------	----	--

Front of Structure

Photo Direction: Barranquitas

Comments: Greenhouse: 18ft x 25ft  
Coordinates: 18.237132, -66.347909



Facing Away from Front

Photo Direction:

Comments:



Side #1 of Structure

Photo Direction:

Comments:



Facing Away From Side #1

Photo Direction:

Comments:



Back of Structure

Photo Direction:

Comments:



Facing Away from Back

Photo Direction:

Comments:



Side #2 of Structure

Photo Direction:

Comments:



Facing Away from Side #2

Photo Direction:

Comments:



Streetscape #1

Photo Direction:

Comments:



Streetscape #2

Photo Direction:

Comments:



Address

Photo Direction:

Comments:



Architectural Details 1

Photo Direction:

Photo Description: Water cistern #1 will go over plastic pallets and will be 500gal or 1000gal Coordinates: 18.238488, -66.347243



Architectural Details 2

Photo Direction:

Photo Description: Water cistern #1



Architectural Details 3

Photo Direction:

Photo Description: Water cistern #1



Architectural Details 4

Photo Direction:

Photo Description: Water pipes laid over ground



Architectural Details 5

Photo Direction:

Photo Description: Water fed from stream by gravity



Architectural Details 6

Photo Direction:

Photo Description: Water cistern #2  
500gal or 1000gal Coordinates:  
18.238762, -66.347711



Architectural Details 7

Photo Direction:

Photo Description: Water cistern #2  
water will be provided by community  
water well



Architectural Details 8

Photo Direction:

Photo Description: Water cistern #2



Architectural Details 9

Photo Direction:

Photo Description: Water cistern #2



Architectural Details 10

Photo Direction:

Photo Description: Overview  
Greenhouse



Architectural Details 11

Photo Direction:

Photo Description: Generator, fertilizer and pesticide storage



Architectural Details 12

Photo Direction:

Photo Description: Generator, fertilizer and pesticide storage



Architectural Details 13

Photo Direction:

Photo Description: Pig farm



Architectural Details 14

Photo Direction:

Photo Description: Electricity provided by electric company



Architectural Details 15

Photo Direction:

Photo Description: Pig farm



Architectural Details 16

Photo Direction:

Photo Description: Pig farm



Architectural Details 17

Photo Direction:

Photo Description: Herbicide 55Gal drum Gly star Plus



Architectural Details 18

Photo Direction:

Photo Description: Abandoned ehicle



Architectural Details 19

Photo Direction:

Photo Description: Water monitoring well



Architectural Details 20

Photo Direction: Orocovis

Photo Description: Proposed fence



Architectural Details 21

Photo Direction:

Photo Description:



Architectural Details 22

Photo Direction:

Photo Description:



# DEPARTAMENTO DE LA VIVIENDA

GOBIERNO DE PUERTO RICO

Secretaría | Hon. Ciary Pérez Peña

February 6, 2025

**TO: José M. Olmo Terrasa, Esq.**

Deputy Director for Economic Recovery Grant Management  
Re-Grow PR Urban Rural Agriculture Program

**RE: Endangered Species Concurrence - Conservation Measures Implementation  
Miguel Marrero Torres DBA Finca (PR-RGRW-01327)**

Dear Mr. Olmo:

This memorandum is to notify the CDBG-DR Re-Grow PR Urban-Rural Agriculture Program (Re-Grow Program) that on October 28, 2024, for the case **PR-RGRW-01327**, the CDBG-DR/MIT Permits and Environmental Compliance Division submitted an informal consultation under Section 7 (a)(2) of the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 et seq.), and in accordance with the Fish and Wildlife Coordination Act (47 Stat. 401, as amended; 16 U.S.C. 661 et seq.) for the proposed project of the construction of a fence and to acquire agricultural infrastructure, for Miguel Marrero Torres DBA Finca, an agricultural business, located at PR-155 Km 23.7, Saltos Ward, Los Rosados Sector, Orocovis, PR 00720; longitude 18.214155, latitude - 66.399803.

Using the Information for Planning and Consultation (IPaC) system, the proponent has determined that the proposed project lies within the range of the following federally listed species:

Name of Species	Status
Puerto Rican Boa	Endangered
Puerto Rican Parrot	Endangered
Puerto Rican Broad-Winged Hawk	Endangered
Critical Habitat	
There were no Critical Habitats noted within the project area.	

The United States Fish and Wildlife Service (USFWS) Caribbean Ecological Services Field Office reviewed the information provided and their files, and on January 10, 2025 concurred with the determination that the proposed project actions will have **May Affect, but is Not Likely to Adversely Affect (NLAA)** the Puerto Rican Boa, Puerto Rican Parrot, and Puerto Rican Broad-Winged Hawk.

The USFWS NLAA concurrence is conditioned to the following: (1) if a Boa is encountered, the Conservation Measures will be in accordance with the USFWS Puerto Rican Boa Conservation Measures 2024, (2) if a Puerto Rican Parrot is encountered on the site, the USFWS Caribbean Office will be notified immediately and (3) if a Puerto Rican Broad-winged Hawk is encountered on the site, the USFWS Caribbean Office will be notified immediately.

Obligations under section 7 of the Act must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner that was not previously considered; (2) this action is subsequently modified in a manner not previously considered in this assessment; or, (3) a new species is listed, or critical habitat determined that may be affected by the identified action.

In conclusion, the USFWS concurred with the CDBG-DR/MIT Permits and Environmental Compliance Division NLAA determination. However, **the applicant must be informed about the conditions of the determination of concurrence and implement them as described.**

In order to facilitate the species identification, please, find attached the Caribbean Endangered and Threatened Animals Fact Sheets for: the Puerto Rican Boa, Puerto Rican Parrot, and Puerto Rican Broad-Winged Hawk.

USFWS Caribbean Ecological Services Field Office key contact information:

- José Cruz-Burgos, Endangered Species Coordinator  
Office phone (786) 244-0081 or mobile (305) 304-1386  
Email: [jose\\_cruz-burgos@fws.gov](mailto:jose_cruz-burgos@fws.gov)

Sincerely,

Permits and Environmental Compliance Division  
Disaster Recovery Office

# Caribbean ES Puerto Rican Boa

## *Puerto Rican Boa*

Generated August 01, 2024 02:11 PM UTC, IPaC v6.112.0-rc2





## 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 #: (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.

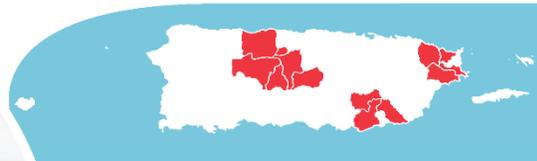
6. If a PR boa is captured by PRDNER personnel, record the name of that person and information on where the PR boa will be taken. This information should be reported to the Service.
7. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on 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](mailto:jose_cruz-burgos@fws.gov)
  - Office phone (305) 304-1386
- Jan Zegarra, Fish and Wildlife Biologist
  - Email: [jan\\_zegarra@fws.gov](mailto:jan_zegarra@fws.gov)
  - Office phone (786) 933-1451

# Guaraguao de bosque

*Buteo platypterus brunnescens*



Distribución ■

## Información biológica

### Reproducción

Esta especie anida en bosques secundarios maduros y plantaciones antiguas. En el Bosque Estatal de Río Abajo (RACF, por sus siglas en inglés), los sitios de anidación están caracterizados por la presencia de árboles tales como el palo María (*Calophyllum antillanum*), la teca (*Tectona grandis*), la caoba hondureña (*Swietenia macrophylla*) y la majagua (*Hibiscus elatus*). Los guaraguao de bosque colocan sus nidos en la parte superior de árboles grandes que sobrepasan la cubierta forestal. Información recientemente recopilada sobre la abundancia y características demográficas del guaraguao de bosque en RACF indica un alto nivel de fidelidad entre parejas; una tasa de sobrevivencia en nidos de 0.67 a través de la temporada de reproducción; y una productividad de 1.1 crías por nido. Entre los años 2001 a 2003, se marcaron con radio transmisores y se colocaron bandas en las patas a varias crías de guaraguao en el RACF. En 2013, al visitar el área donde se marcaron, se documentó que seguían vivas (Llerandi-Román and Ríos-Cruz pers. comm.). Por ejemplo, una hembra joven que fue marcada entre el 2001 al 2003 en el RACF fue documentada anidando exitosamente entre los años 2007 al 2009. (Ríos-Cruz pers. comm.)

### Hábitat

Esta especie habita en bosques enanos, bosques de palmas de sierra, de caimitillo-granadillo y de tabonuco. Estos bosques se encuentran en las reservas forestales del Bosque Estatal de Carite, Bosque Estatal Toro Negro, Bosque Los Tres Picachos y el Bosque Nacional El Yunque. También habita en

**Familia:** Accipitridae  
**Orden:** Falconiformes

## Descripción

El guaraguao de bosque de Puerto Rico o guaraguaito es de color marrón oscuro con barras blancas y rojizas en la parte ventral. Es una subespecie endémica de Puerto Rico de tamaño mediano, que mide aproximadamente 39 centímetros (15.5 pulgadas). Es más pequeño que el *Buteo platypterus platypterus* pero más grande que la subespecie que ocurre en las Antillas Menores. El guaraguao de bosque es la subespecie de halcón de ala ancha más oscuro. En los adultos, la cola es de un color negro claro con bandas blancas horizontales en la base, medio y extremo de la cola, y esto, junto con el pecho rojizo, caracteriza a la especie. Los machos y las hembras son muy similares en apariencia, pero las hembras son un poco más grandes. Las aves juveniles tienen barras oscuras en el pecho y no tienen las bandas distintivas en la cola. La población del guaraguao de bosque de Puerto Rico oscila cerca de los 125 individuos.

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plantaciones madereros maduros, en cafetales bajo sombra y en bosques secundarios maduros del área de carso al norte-central de Puerto Rico dentro y cerca del Bosque Estatal de Río Abajo y el área de Río Encantado entre los pueblos de Florida y Ciales. La topografía húmeda de los bosques del carso le provee al guaraguao de bosque otra alternativa como área para anidar. En estudios recientes, se han documentado miembros de una especie similar de guaraguao (guaraguao de cola roja; *Buteo jamaicensis jamaicensis*) anidando en las laderas del carso adyacentes al RACF.

### Distribución

El guaraguao de bosque es un ave de rapiña poco común y extremadamente localizado, que se encuentra en los bosques montañosos de tierra alta de Puerto Rico. Las poblaciones existentes se hallan principalmente dentro de cinco bosques: el RACF, el Bosque Estatal Carite, el Bosque Estatal Toro Negro, el Bosque Los Tres Picachos y el Bosque Nacional El Yunque. Llerandi-Román (2006) halló trece territorios de guaraguao de bosque justo fuera de los límites de RACF, en seis sitios diferentes con hábitat apropiado para los guaraguao de bosque. Los territorios se encuentran a lo largo del valle del Río Tanamá, al noroeste del RACF

### Amenazas

La abundancia y la distribución del guaraguao de bosque es limitada. Cualquier amenaza que atente contra su población y su hábitat puede resultar en detrimento para esta especie. De forma natural, los huracanes constituyen una amenaza ya que destruyen su hábitat debido a las intensas lluvias y a los fuertes vientos. No obstante, existe una gran variedad de actividades humanas que también amenazan las poblaciones de esta especie. La construcción de instalaciones recreativas, de estructuras para energía y comunicaciones y de carreteras contribuye a la destrucción y fragmentación de su hábitat. De igual manera, la caza ilegal, las malas prácticas de manejo y la carencia de planes de manejo para los bosques públicos también afectan las poblaciones del guaraguao de bosque. Los bajos números poblacionales de esta especie pueden, por sí mismos, estar afectando la población ya que se pierde la variación genética de esta.

### Medidas de conservación

El guaraguao de bosque está incluido en la lista de especies amenazadas desde el 1994. La Ley Federal de Especies en Peligro de Extinción de 1973, según enmendada, prohíbe matar, dañar, molestar, atrapar, comprar o vender una especie, así como partes o productos derivados de ellas. El tener la especie en la lista federal fomenta y ayuda a crear acciones de conservación por las agencias federales, estatales, privadas, y por grupos e individuos particulares. La Ley de Especies En Peligro fomenta la compra de terrenos y la cooperación con el Estado, y requiere que se ejecuten acciones de recuperación en relación a todas las especies listadas. Entre las medidas esenciales para proteger el hábitat y fomentar el crecimiento de las poblaciones existentes están: la protección de los sitios de anidamiento y alimento en las áreas públicas y privadas, el mejoramiento de los hábitats, la reforestación en áreas abiertas, la actualización de la información acerca de la distribución y la identificación o creación de corredores biológicos entre poblaciones cercanas (tales como RACF, Los Tres Picachos y Toro Negro) con tal de facilitar el movimiento de los guaraguao de bosque entre los bosques.

### Referencias

- Delannoy, C.A. 1992. Status surveys of the Puerto Rican sharp-shinned hawk (*Accipiter striatus venator*) and Puerto Rican broad-winged hawk (*Buteo platypterus brunnescens*). Final report submitted to the U.S. Fish and Wildlife Service as specified in work contract no. 14-16-0004-91-031.
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- Hernández, E. 1980. Estudio de aves, reptiles y anfibios en la reserva forestal de Carite. Informe presentado como requisito del curso Ciencias Naturales 306, Programa de Mantenimiento Ambiental. Facultad de Ciencias Naturales, Universidad de Puerto Rico, Recinto de Río Piedras, Río Piedras, Puerto Rico.
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Vilella F.J. & D.W. Hengstenberg. 2006. Broad-Winged Hawk (*Buteo platypterus brunneus*) movement and habitat use in a moist limestone forest of Puerto Rico. *Ornitología Neotropical*. 17: 563-579

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## Información adicional

Oficina de Servicios Ecológicos del Caribe  
Dirección: PO Box 491, Boquerón, PR 00622  
Teléfono: 787-851-7297 / Fax: 787-851-7440  
Internet: [www.fws.gov/caribbean](http://www.fws.gov/caribbean)



AMENAZADA

# Cotorra puertorriqueña

*Amazona vittata vittata*



Distribución ■

**Familia:** Psittacidae  
**Orden:** Psittaciformes

## Descripción

La cotorra puertorriqueña o Iguaca, como la llamaban los indios taínos, es un ave verde brillante con una mancha roja en la frente, un anillo blanco alrededor del ojo y plumas primarias azules. Su pico es color marfil y el borde de su cola es redondo. Los juveniles son bastante parecidos a los adultos. Tanto hembras como machos son parecidos y miden cerca de doce pulgadas (aprox. 30 centímetros). A veces, la franja roja en la frente es más ancha en los machos que en las hembras. Mientras vuela emite un fuerte y ruidoso “kar...kar.” Este sonido se escucha a gran distancia. Emite otros sonidos para comunicarse con otras cotorras y para defender su territorio.

## Información biológica

### Reproducción

La cotorra puertorriqueña alcanza su edad reproductiva entre los 3 a 5 años. Las cotorras usualmente forman

parejas que perduran por mucho tiempo, normalmente de por vida. Las parejas permanecen juntas casi todo el año, excepto cuando la hembra está incubando y el macho asume la responsabilidad de proveer alimento. La cotorra usa como nido las cavidades que se encuentran en árboles de gran tamaño como el palo colorado (*Cyrilla racemiflora*), entre otros. De ser necesario, también podría anidar en las cavidades de roca caliza. El anidamiento comienza en los meses de febrero y marzo, hasta junio. Tradicionalmente, la anidación coincide con el período más seco del año y durante el período de fructificación (producir frutos) de plantas cuyas semillas, frutas y hojas le sirven de alimento.

### Dieta

La cotorra come plantas tales como: palma de sierra, palma real, maricao, maria, guaba, cupey, guaraguao y yagrumo, entre otros árboles.

### Distribución

La cotorra puertorriqueña, ave endémica a Puerto Rico fue abundante en Puerto Rico, incluyendo las islas de Culebra, Vieques y Mona. Esta cotorra es la última especie de psitácidos existentes y originaria en territorio de los Estados Unidos. Los psitácidos son la familia de aves, en su mayoría tropicales, con plumas de colores vivos y pico corto, alto y muy encorvado (ej. guacamayo y cotorra). La población silvestre de cotorras puertorriqueñas se limita actualmente a la Sierra de Luquillo, mayormente en el Bosque Nacional El Yunque, al este de Puerto Rico y en el Bosque Estatal de Río Abajo, en el norte central de Puerto Rico, entre Arecibo y Utuado. Al menos tres de las cotorras liberadas en Río Abajo se han dispersado y en 2012 fueron vistas entre Morovis, Vega Baja y Manatí.

EN PELIGRO

## Amenazas

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Además de tener una población pequeña y una distribución limitada, la especie también se ve afectada por el zorzal pardo (*Margarops fuscatus*) quien mata los huevos y pichones de la cotorra para usar el nido. El guaraguao colirojo (*Buteo jamaicensis*), el guaraguaito de bosque (*Buteo platypterus brunnescens*) y las ratas (*Rattus rattus* y *R. norvegicus*) son depredadores mortales de cotorras juveniles y adultas. Las moscas parasíticas (*Philornis pici*) depositan sus larvas en los pichones de aves para completar su ciclo de desarrollo. Estas moscas enferman y matan a los pichones. Las abejas europeas y africanas (*Apis mellifera*) invaden los nidos de la cotorra para formar adentro sus colmenas. También pueden matar a los pichones. Los huracanes y otros eventos climatológicos pueden afectar la estabilidad de la especie en su estado natural. La pérdida de hábitat por la deforestación es una amenaza que siempre está presente y limita las opciones de lugares aptos para reintroducir la cotorra a la vida silvestre.

## Medidas de conservación

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La cotorra puertorriqueña fue designada como especie en peligro de extinción en el año 1967, antes de que la Ley de Especies en Peligro de Extinción de 1973 entrara en vigor. Existe un Acuerdo Cooperativo entre el Servicio Federal de Pesca y Vida Silvestre, el Departamento de Recursos Naturales y Ambientales y el Servicio Forestal de los Estados Unidos para manejar de forma conjunta la recuperación de la cotorra puertorriqueña. Las tres agencias constituyen el Comité de Recuperación de la Cotorra Puertorriqueña. Inicialmente, se estableció un programa de propagación en cautiverio que, con el tiempo, ha crecido para incluir liberaciones de cotorras al estado silvestre, monitoreo de las poblaciones silvestres, manejo del hábitat e investigación. Otras entidades privadas y académicas se han unido a los esfuerzos para realizar investigaciones y educar.

El Comité realiza censos de cotorras periódicamente y estima que existen entre 18 a 22 cotorras en El Yunque y cerca de 60 a 70 en Río Abajo. Los biólogos de campo utilizan múltiples estrategias para manejar el hábitat. La escasez de árboles maduros con cavidades

requiere que se construyan e instalen nidos artificiales para que la cotorra puertorriqueña anide. También, los expertos controlan las poblaciones de las especies depredadoras, cuando es necesario, para asegurar el desarrollo normal de los huevos y de los pichones.

La población en cautiverio se mantiene para varios propósitos: reproducir cotorras y aumentar su número, asegurar poblaciones adicionales, particularmente en el caso de una catástrofe natural tal como un huracán, y para, eventualmente, poder proveer aves para reintroducirlas a los bosques donde habitaban. En los aviarios, se utilizan técnicas avanzadas para diagnosticar enfermedades y proveer tratamiento. Actualmente, hay cerca de 350 cotorras entre el Aviario Iguaca, manejado por el Servicio Federal de Pesca y Vida Silvestre en El Yunque, y en el Aviario José L. Vivaldi, manejado por el Departamento de Recursos Naturales y Ambientales de Puerto Rico, en el Bosque Estatal Río Abajo.

La Ley Federal de Especies en Peligro de Extinción de 1973, según enmendada, prohíbe matar, dañar, molestar, atrapar, comprar o vender una especie, así como partes o productos derivados de ellas

## Referencias

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Snyder, N.F., J.W. Wiley, and C.B. Kepler. 1987. The parrots of Luquillo: Natural history and conservation of the Puerto Rican parrot. West. Found. Vet. Zool., Los Angeles.

U.S. Fish and Wildlife Service. 2009. Revisión final al Plan de Recuperación para la Cotorra Puertorriqueña (*Amazona vittata*).

Thomas H. White, Jr. and Fernando Núñez-García. "From Cage to Rainforest" U. S. Fish and Wildlife Service. 2008-06-04

## Información adicional

---

Oficina de Servicios Ecológicos del Caribe  
Dirección: PO Box 491, Boquerón, PR 00622  
Teléfono: 787-851-7297 / Fax: 787-851-7440  
Internet: [www.fws.gov/caribbean](http://www.fws.gov/caribbean)



EN PELIGRO

October 17, 2024

Lourdes Mena  
Field Supervisor  
Caribbean Ecological Services Field Office  
U.S. Fish and Wildlife Service  
Office Park I, Suite 303  
State Road #2 Km 156.5  
Mayagüez, Puerto Rico 00680  
Email: Caribbean\_es@fws.gov;  
Lourdes\_Mena@fws.gov

***RE: Informal Consultation for PR-RGRW-01327 at Carr. 772 Km. 7.8 Interior Bo. Canabón, Sector Los Marrero in Barranquitas, PR, 00794.***

Dear Ms. Mena:

The Puerto Rico Department of Housing is requiring informal consultation under Section 7 (a)(2) of the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 et seq.), and in accordance with the Fish and Wildlife Coordination Act (47 Stat. 401, as amended; 16 U.S.C. 661 et seq.) for the proposed project PR-RGRW-01327. The project scope of work (SOW) is divided between two locations. In the municipality of Barranquitas, the plan includes the installation of a greenhouse, two cisterns, and the purchase of an electric generator and agricultural equipment. For the municipality of Orocovis, it involves acquiring agricultural infrastructure for the construction of a fence. This consultation will focus on the town of Barranquitas, located at coordinates for the two water cisterns: 18.238762, -66.347711; 18.238488, -66.347243 and greenhouse at: 18.237132, -66.347909 on Carr. 772 Km. 7.8 Interior Bo. Canabón, Sector Los Marrero in Barranquitas, PR, 00794, see Figure 1: Location Map and Figure 2: Topographic Map. The project is part of the Re-Grow Puerto Rico Urban-Rural Agriculture Program (RGRW) that aims to increase agricultural capacity while promoting and increasing food security inland wide. This Program will enhance and expand agricultural production related to economic revitalization and sustainable development activities.

The proposed activities for PR-RGRW-01327 in the municipality of Barranquitas consist of the purchase and installation of a 20' x 20' greenhouse, two 1,000-gallon cisterns, an electric inverter generator and agricultural equipment. The agricultural equipment includes: Prunell PPT 2620, Blower PB 9010, thread rolls, mesh masks, plastics mesh, telescopic manual bar, aprons, one gallon of mixture, Arnett STHIL and caps. The greenhouse measures 20' x 20' and will be anchored to 10' spaced supports buried 2 feet deep, and will be built with aluminum pillars and arches and a plastic cover on the roof. The proposed area for the greenhouse installation will be leveled, requiring the removal of vegetation such as grass, but no tree cutting will be necessary. The greenhouse will be installed directly on bare soil and will remain that way. The water needed for the greenhouse will come from the new cisterns and all pipes will be above ground. The two cisterns will be installed on plastic pallets on bare soil and the area will be leveled, also requiring the removal of vegetation such as grass, but no tree cutting will be necessary. The water needed to fill the cisterns will be provided by an existing community water well and transported via above ground pipes. The electric inverter generator is to pump water into the cisterns, and it does not require a transfer switch. No new connections will be necessary. The new generator will

be stored in an existing structure. This structure is a storage facility right next to the farm owner’s residence. The generator will be moved depending on where it would be needed. The generator is equipped with wheels, making it portable and not permanently fixed to the ground. The Area of Potential Effect (APE) has been defined as the area potentially impacted by ground disturbing activities related to the installation of the cisterns and the greenhouse, see Figure 3: Area of Potential Effect.

**Existing Conditions and Trends:**

The proposed project parcel 220-035-230-83 and 220-035-230-81, the areas are designated as not prime farmland, See Figure 4: Farmland Protection Map. The project location is in a rural area of Barranquitas. This location has a variable topography and the area where the greenhouse and cisterns will be placed is covered in grass, refer to Photo 1 to 4. The ground in the area will need to be leveled slightly, which will require the removal of some vegetation, like grass, but no trees will be cut. Per the USGS/NRCS Web Soil Survey, the project area is within mapped soil series: Múcara (MxF) and Humatas (HtF). The land has been used for agricultural uses for over 20 years and the proposed project will not change the land use associated with these placements. The closer Final Critical Habitat is located 70,675 feet from the project location, see Figure 5: Critical Habitats Map. There are no wetlands located on or near the project activity area, see Figure 6: Wetlands Map.

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

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

The nature of the project, scope of work, information available, a careful analysis of the IpaC, the Puerto Rico Boa conservation measures, the Caribbean Dkey dated October 15, 2024, in the US Fish and Wildlife Service’s online IPaC application, and the observations during the field visit, were used to evaluate the potential impacts to federally listed species from this project. Based on that information and the answer inputted into the Dkey and since ground disturbance will occur, it was determined that the proposed action will have “May affect, but not likely to adversely affect” determination on the Puerto Rican Boa, see Exhibit B.

<b>Name of the species</b>	<b>Effect Determination</b>	<b>Conservation Measures that will be implemented</b>
Puerto Rican boa ( <i>Chilabothrus inornatus</i> )	May Affect, but is Not Likely to Adversely Affect (NLAA)	Puerto Rican Boa Conservation Measures 2024
<b>Critical Habitats</b>		
There are no critical habitats within the project area.		

In order to complete the informal consultation process, we are requesting your concurrence for the NLAA determination for the Puerto Rican Boa. Attached to this letter, we are including the documents used to reach our effect determinations for the listed species. See Exhibit D for conservation measures for the NLAA species. Should you require any additional information, please contact Paige Pilkinton at [paige.pilkinton@horne.com](mailto:paige.pilkinton@horne.com).

**References:**

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

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

USFWS Puerto Rican boa Conservation Measures

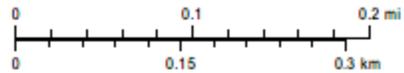
## **Exhibit A: Figures**

**Location: Aerial Map**  
Puerto Rico Department of Housing ReGrow

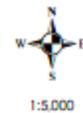


**Legend:**

- Applicant Structures
- fence
- Parcels
- CRIM Parcels



Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, MEL, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community  
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community and Google Earth



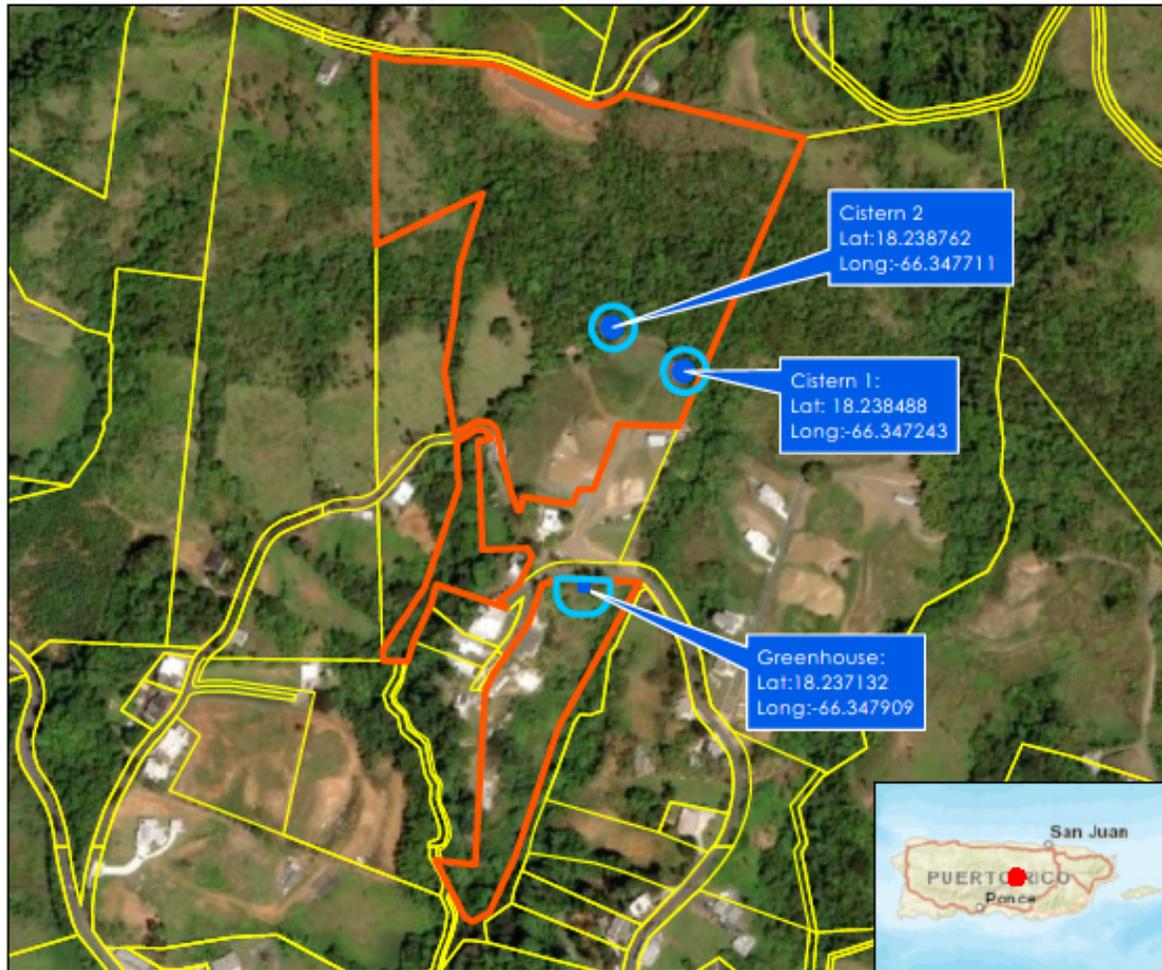
**Source**

Centro de Recaudación de Ingresos Municipales (CRM)  
<https://catastro.cimprnet/cdprpc/>

Figure 1: PR-RGRW-01327 Location Map

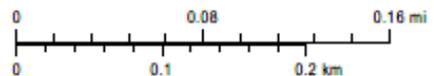


**Area of Potential Effect**  
Puerto Rico Department of Housing ReGrow



**Legend:**

- Applicant Structures
- Area of Potential Effect
- Parcels
- CRIM Parcels



Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, MEL, Esri China (Hong Kong), Esri Korea, Esri (Ireland), NGCC, (c) OpenStreetMap contributors, and the GS User Community  
Source: Esri, Maxar, Earthstar Geographics, and the GS User Community and Google Earth



**Source**

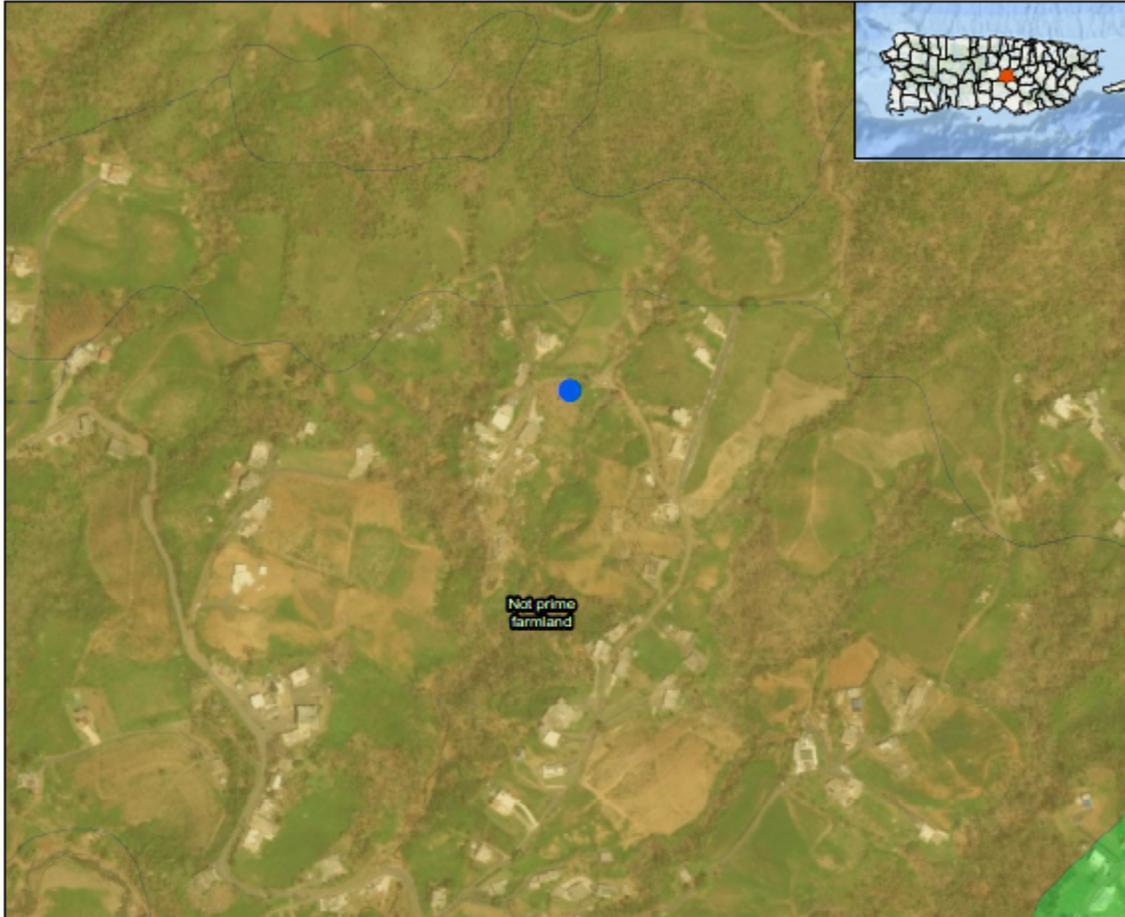
Centro de Recaudación de Ingresos Municipales (CRIM)  
<https://catastro.crimpr.net/cdprpc/>

Figure 3: PR-RGRW-01327 Area of Potential Effect Map

Miguel Marrero Torres / DBA Finca Sector Los Marrero  
Carr. 772 Km 7.8 Interior,  
Bo Canabón, Sect. Los Marrero,  
Barranquitas, PR 00794  
Catastro: 220-035-230-83 / 220-035-230-81  
Lat: 18.237132, Long: -66.347909

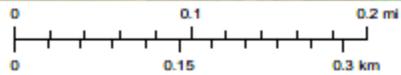
# Farmland Protection

Puerto Rico Department of Housing ReGrow

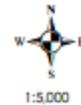


### Legend:

-  PR-RGRW-01327
- Farm Class**
-  Farmland of statewide importance
-  Not prime farmland



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



### Source

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

Figure 4: PR-RGRW-01327 Farmland Protection Map

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Car. 772 Km 7.8 Interior,  
Bo Canabón, Sect. Los Marrero,  
Barranquitas, PR 00794  
Catastro: 220-035-230-83 /220-035-230-81  
Lat:18.237132, Long:-66.347909

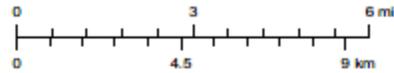
# Threatened and Endangered Species

Puerto Rico Department of Housing ReGrow



**Legend:**

- Applicant Structures
- Critical Habitat



Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Ireland), MapmyIndia, © 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 5: PR-RGRW-01327 Critical Habitats Map

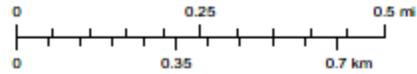
# Wetlands

Puerto Rico Department of Housing ReGrow



## Legend:

-  PR-RGRW-01327
- National Wetlands Inventory**
-  Riverine



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



1:12,000

## Source

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

Figure 6: PR-RGRW-01327 Wetlands Map

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



## United States Department of the Interior



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

In Reply Refer To:

10/15/2024 16:42:07 UTC

Project Code: 2024-0047017

Project Name: PR-RGRW-01327 Barranquitas

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

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

This species list is provided by:

Caribbean Ecological Services Field Office

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

Post Office Box 491

Boqueron, PR 00622-0491

(786) 244-0081

Attachment(s):

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

## OFFICIAL SPECIES LIST

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

This species list is provided by:

**Caribbean Ecological Services Field Office**

Post Office Box 491

Boqueron, PR 00622-0491

(939) 320-3135

## PROJECT SUMMARY

Project Code: 2024-0047017

Project Name: PR-RGRW-01327 Barranquitas

Project Type: New Constr - Above Ground

Project Description: The proposed activities for PR-RGRW-01327 consist of the purchase and installation of a 20' x 20' greenhouse, two 1,000-gallon cisterns, an electric generator, agricultural equipment, fence materials, sprinklers, ñame supplies, fertilizer, and a plow. For the proposed activities in the Municipality of Barranquitas the greenhouse and the two cisterns will require ground disturbance. The greenhouse will be anchored to 10' spaced supports buried 2 feet deep, and the proposed installation area will be leveled. The two cisterns will be installed on plastic pallets provided by the applicant. The water needed will be provided by an existing communal water well and transported via above ground pipes. The project area for the proposed greenhouse and cisterns is located at Carr. 772 Km 7.8, Interior, Bo. Canabón, Sector Los Marrero within the Municipality of Barranquitas.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.23792375,-66.34781256100206,14z>



Counties: Barranquitas County, Puerto Rico

## ENDANGERED SPECIES ACT SPECIES

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

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

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

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

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

## REPTILES

NAME	STATUS
Puerto Rican Boa <i>Chilabothrus inornatus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6628">https://ecos.fws.gov/ecp/species/6628</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/5WZ2F5DG2BERXLGSHOQJOS7IGI/documents/generated/7159.pdf">https://ipac.ecosphere.fws.gov/project/5WZ2F5DG2BERXLGSHOQJOS7IGI/documents/generated/7159.pdf</a>	Endangered

## CRITICAL HABITATS

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

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

## USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

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

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

## BALD & GOLDEN EAGLES

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

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats<sup>3</sup>, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

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

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

## MIGRATORY BIRDS

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

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats<sup>3</sup> should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

---

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

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

## WETLANDS

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

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

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

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

## **IPAC USER CONTACT INFORMATION**

Agency: 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](mailto:CARIBBEAN_ES@FWS.GOV)

In Reply Refer To:

10/15/2024 16:49:51 UTC

Project code: 2024-0047017

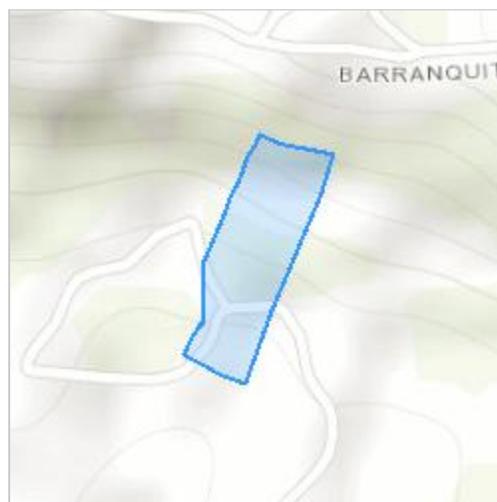
Project Name: PR-RGRW-01327 Barranquitas

Subject: Consistency letter for the project named 'PR-RGRW-01327 Barranquitas' for specified threatened and endangered species, that may occur in your proposed project location, pursuant to the IPaC determination key titled Caribbean Determination Key (DKey).

Dear Applicant:

Thank you for using the assisted evaluation keys in IPaC. This letter is provided pursuant to the Service's authority under the Endangered Species Act of 1973, as amended (ESA) (87 Stat. 884; 16 U.S.C. 1531et seq.). On October 15, 2024, Patricia Carmenatty used the Caribbean DKey; dated April 03, 2024, in the U.S. Fish and Wildlife Service's online [IPaC application](#) to evaluate potential impacts to federally listed species, from a project named 'PR-RGRW-01327 Barranquitas'. The project is located in Barranquitas County, Puerto Rico (shown below).

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.23792375,-66.34781256100206,14z>



The following description was provided for the project 'PR-RGRW-01327 Barranquitas':

The proposed activities for PR-RGRW-01327 consist of the purchase and installation of a 20' x 20' greenhouse, two 1,000-gallon cisterns, an electric generator, agricultural equipment, fence materials, sprinklers, ñame supplies, fertilizer, and a plow. For the proposed activities in the Municipality of Barranquitas the greenhouse and the two cisterns will require ground disturbance. The greenhouse will be anchored to 10' spaced supports buried 2 feet deep, and the proposed installation area will be leveled. The two cisterns will be installed on plastic pallets provided by the applicant. The water needed will be provided by an existing communal water well and transported via above ground pipes. The project area for the proposed greenhouse and cisterns is located at Carr. 772 Km 7.8, Interior, Bo. Canabón, Sector Los Marrero within the Municipality of Barranquitas.

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

Species	Listing Status	Determination
Puerto Rican Boa ( <i>Chilabothrus inornatus</i> )	Endangered	NLAA

**Consultation with the Service is not complete.** The above effect determination(s) becomes applicable when the lead federal action agency or designated non-federal representative submits them as a request to the Service to rely on the Caribbean DKey in order to satisfy the agency's consultation requirements for this project.

Please provide this consistency letter to the lead federal action agency or its designated non-federal representative with a request for its review, and as the agency deems appropriate, to submit for concurrence verification through the IPaC system. The lead federal action agency or designated non-federal representative should log into IPaC using their agency email account and click "Search by record locator." They will need to enter the record locator **161-151082244**

**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.

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

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

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

## Action Description

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

### 1. Name

PR-RGRW-01327 Barranquitas

### 2. Description

The following description was provided for the project 'PR-RGRW-01327 Barranquitas':

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The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.23792375,-66.34781256100206,14z>



## QUALIFICATION INTERVIEW

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

*No*

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

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

*No*

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

*No*

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

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

*No*

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

*No*

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

*No*

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

*No*

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

*No*

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

*No*

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

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

*No*

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

*No*

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

*Yes*

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

**Automatically answered**

*Yes*

14. Will the proposed project implement the U.S. Fish and Wildlife [Puerto Rican boa Conservation Measures](#)?

*Yes*

15. Are you the Federal agency or designated non-federal representative for the proposed action?

*No*

## **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

**Exhibit C: Field Visit Photos**



**Photo #: 1**

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

**Date: October 16, 2023**



**Photo #: 2**

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

**Date: October 16, 2023**



**Photo #: 3**

**Description (include direction):** General area where the Cistern 1 will be installed, looking southeast.

**Date:** October 16, 2023



**Photo #: 4**

**Description (include direction):** General area where the Cistern 2 be installed, looking northwest.

**Date:** October 16, 2023

## **Exhibit D: Conservation Measures**

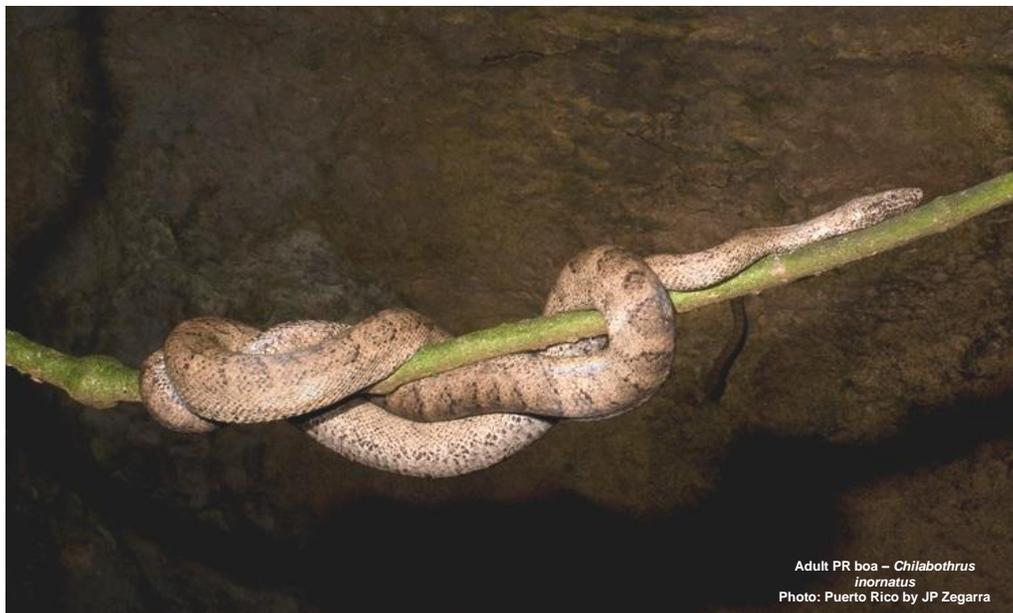


## U.S. FISH AND WILDLIFE SERVICE CARIBBEAN ECOLOGICAL SERVICES FIELD OFFICE

### 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 #: (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](mailto:jose_cruz-burgos@fws.gov)
  - Office phone (305) 304-1386
- Jan Zegarra, Fish and Wildlife Biologist
  - Email: [jan\\_zegarra@fws.gov](mailto:jan_zegarra@fws.gov)
  - Office phone (786) 933-1451

# **Radon Attachments**



August 20, 2024

Mrs. Carmen R. Guerrero Pérez  
Director  
Caribbean Environmental Protection Division  
City View Plaza II – Suite 7000  
#48 Rd. 165 km 1.2  
Guaynabo, PR 00968-8069

Via email: [guerrero.carmen@epa.gov](mailto: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.

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**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 Povelko, [Povelko.Oleg@epa.gov](mailto:Povelko.Oleg@epa.gov)  
Mr. Matthew Lantia, [lantia.matthew@epa.gov](mailto:lantia.matthew@epa.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](mailto:silvina.cancelos@upr.edu)

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Sincerely,

William O. Rodríguez Rodríguez, Esq.  
Secretary

Cc: Dr. Carlos Marín, [carlos.marin3@upr.edu](mailto:carlos.marin3@upr.edu)



GOVERNMENT OF PUERTO RICO  
DEPARTMENT OF HOUSING

August 20, 2024

Dr. Jessica Izarry  
Director  
Office of Island Affairs  
U.S. Centers for Disease Control and Prevention  
1324 CII Canada, San Juan, 00920  
Guaynabo, PR 00968-8069

Via email: [OIA@cdc.gov](mailto:OIA@cdc.gov)

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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.viviendapr.gov](http://www.viviendapr.gov)

CDBG-DR/MIT Program  
Request for Information in relation with HUD CPD-23-103 for Puerto Rico  
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William O. Rodríguez Rodríguez, Esq.  
Secretary



GOVERNMENT OF PUERTO RICO  
DEPARTMENT OF HOUSING

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](mailto:anais.rodriguez@dma.pr.gov)

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William O. Rodríguez Rodríguez, Esq.  
Secretary

Cc: Mr. Luis Márquez, [secretariogaire@dma.pr.gov](mailto:secretariogaire@dma.pr.gov)  
Eng. Amarilys Rosario, [aire@dma.pr.gov](mailto:aire@dma.pr.gov)  
Mrs. Elid Ortegá, [ortega@dma.pr.gov](mailto:ortega@dma.pr.gov)



August 20, 2024

Dr. Carlos R. Mellado López  
Secretary  
Puerto Rico Department of Health  
PO Box 70184  
San Juan, PR 00936-8184

Via email: [drCarlos.mellado@salud.pr.gov](mailto:drCarlos.mellado@salud.pr.gov)

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William O. Rodríguez Rodríguez, Esq.  
Secretary

Cc: Mr. Raúl Hernández Dabla, [rahernandez2@salud.pr.gov](mailto:rahernandez2@salud.pr.gov)



August 20, 2024

Mrs. Holly Weyers  
Regional Director, Southeast – Puerto Rico  
US Geological Survey  
3916 Sunset Ridge Road  
Raleigh, NC 27607

Via email: [hsweyers@usgs.gov](mailto:hsweyers@usgs.gov)

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William O. Rodríguez Rodríguez, Esq.  
Secretary

Cc: Mr. R. Randall Schumann, [rschumann@usgs.gov](mailto: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); Rzeszotarski, 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](mailto: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](mailto: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](mailto:silvina.cancelos@upr.edu)>  
**Sent:** Friday, September 6, 2024 15:04  
**To:** Melanie Medina Smaine <[mmedina@vivienda.pr.gov](mailto:mmedina@vivienda.pr.gov)>  
**Cc:** Elaine Dume Mejia <[Edume@vivienda.pr.gov](mailto:Edume@vivienda.pr.gov)>; Luz S Colon Ortiz <[Lcolon@vivienda.pr.gov](mailto:Lcolon@vivienda.pr.gov)>; Aldo A. Rivera-Vazquez <[aarivera@vivienda.pr.gov](mailto:aarivera@vivienda.pr.gov)>; Maritza Rosa Olivares <[maritzarosaolivares@drna.pr.gov](mailto:maritzarosaolivares@drna.pr.gov)>; Reyes, Brenda <[Reyes.Brenda@epa.gov](mailto:Reyes.Brenda@epa.gov)>; Povetko, Oleg <[Povetko.Oleg@epa.gov](mailto:Povetko.Oleg@epa.gov)>  
**Subject:** Re: Request for Information- Randon testing and levels

Estimada Melanie Medina  
Quería dejarte 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](mailto: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.<sup>1</sup> 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.

<sup>1</sup> 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, 7<sup>TH</sup> 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](mailto:guerrero.carmen@epa.gov) or have your staff contact Reyes, Brenda at [reyes.brenda@epa.gov](mailto: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'

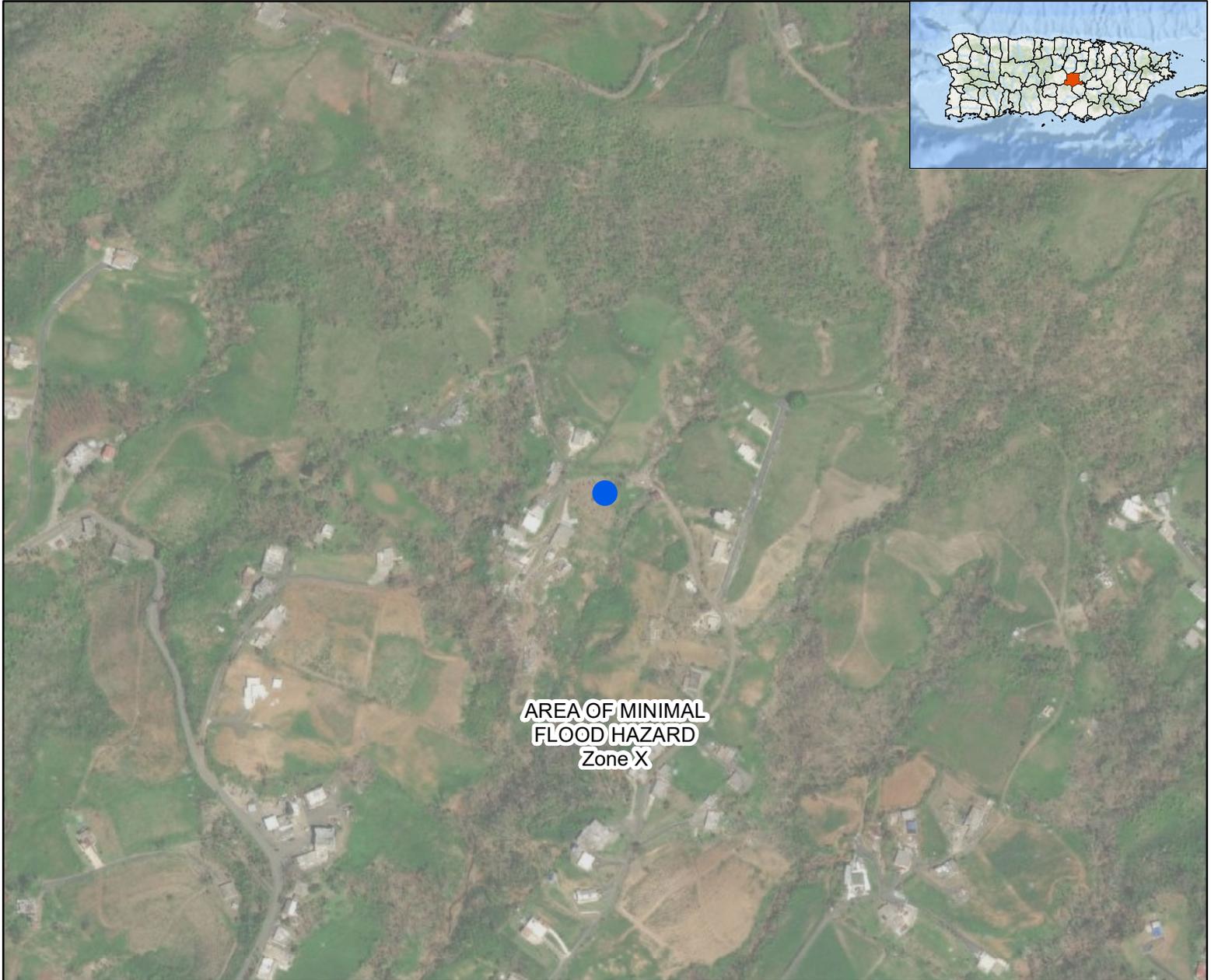
cc: Roberto Mendez, Esq (Acting Secretary, PR Department of Natural and Env. Resources)  
Melany Medina: [mmedina@vivienda.pr.gov](mailto:mmedina@vivienda.pr.gov)  
Elaine Dume Mejia: [Edume@vivienda.pr.gov](mailto:Edume@vivienda.pr.gov)  
Luz S Colon Ortiz: [Lcolon@vivienda.pr.gov](mailto:Lcolon@vivienda.pr.gov)  
Aldo A. Rivera-Vazquez: [aarivera@vivienda.pr.gov](mailto:aarivera@vivienda.pr.gov)  
Cesar O. Rodriguez: [cesarrodriquez@drna.pr.gov](mailto:cesarrodriquez@drna.pr.gov)  
Marita Rosa Olivares: [maritzarosaolivares@drna.pr.gov](mailto:maritzarosaolivares@drna.pr.gov)

Figure 9.1

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carr. 772 Km 7.8 Interior,  
 Bo Canabón, Sect. Los Marrero,  
 Baranquitas, PR 00794  
 Catastro: 220-035-230-83 /220-035-230-81  
 Lat:18.237132, Long:-66.347909

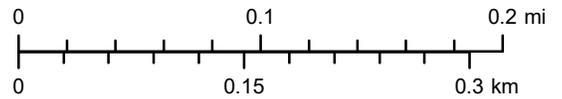
# Advisory Base Flood Elevation Map

Puerto Rico Department of Housing ReGrow



## Legend:

- PR-RGRW-01327
- Area of Minimal Flood Hazard *Zone X*
- Flood Zone**
- A
- 0.2% Annual Chance Flood
- Floodway
- Floodway
- Area of Minimal Flood Hazard *Zone X*



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



1:5,000

## Source

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

Figure 9.2

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carretera 155, KM 23.7 Int,  
 Bo. Saltos, Sector Los Rosados,  
 Orocovis, PR, 00720  
 Catastro: 245-017-109-16 / 245-007-109-03  
 Lat:18.214155, Long: -66.399803

# Advisory Base Flood Elevation Map

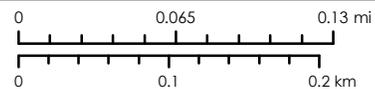
Puerto Rico Department of Housing ReGrow



## Legend:

- PR-RGRW-01327
- Area of Minimal Flood Hazard

- Flood Zone**
- A
  - 0.2% Annual Chance Flood
  - Floodway
  - Floodway
  - Area of Minimal Flood Hazard 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),  
 Junta de Planificacion de Puerto Rico (JP),  
 Mapas de Niveles de Inundacion Base Recomendados,  
<https://maps.jp.pr.gov/>



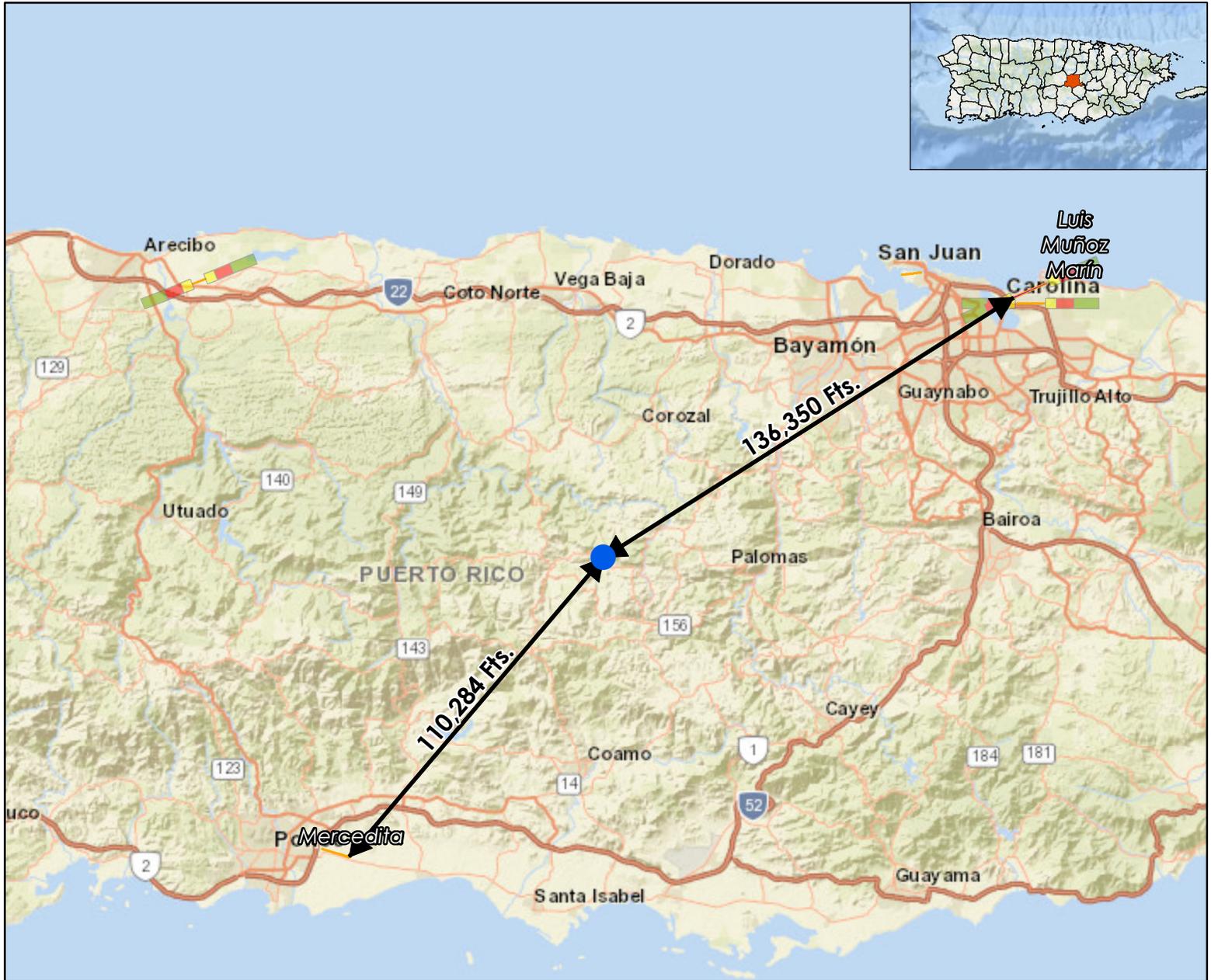
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Figure 2.1

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carr. 772 Km 7.8 Interior,  
 Bo Canabón, Sect. Los Marrero,  
 Baranquitas, PR 00794  
 Catastro: 220-035-230-83 /220-035-230-81  
 Lat:18.237132, Long:-66.347909

# Airports Map

Puerto Rico Department of Housing ReGrow

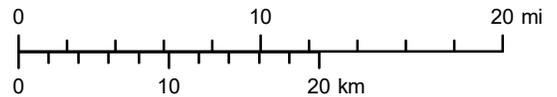


## Legend:

- PR-RGRW-01327
- SJU Military Runaway
- PR Airport Runaway

## ZONE

- APZ 1
- APZ 2
- Clear Zone



Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community  
 Esri, Garmin, GEBCO, NOAA NGDC, and other contributors and Google Earth



1:500,000

## Source

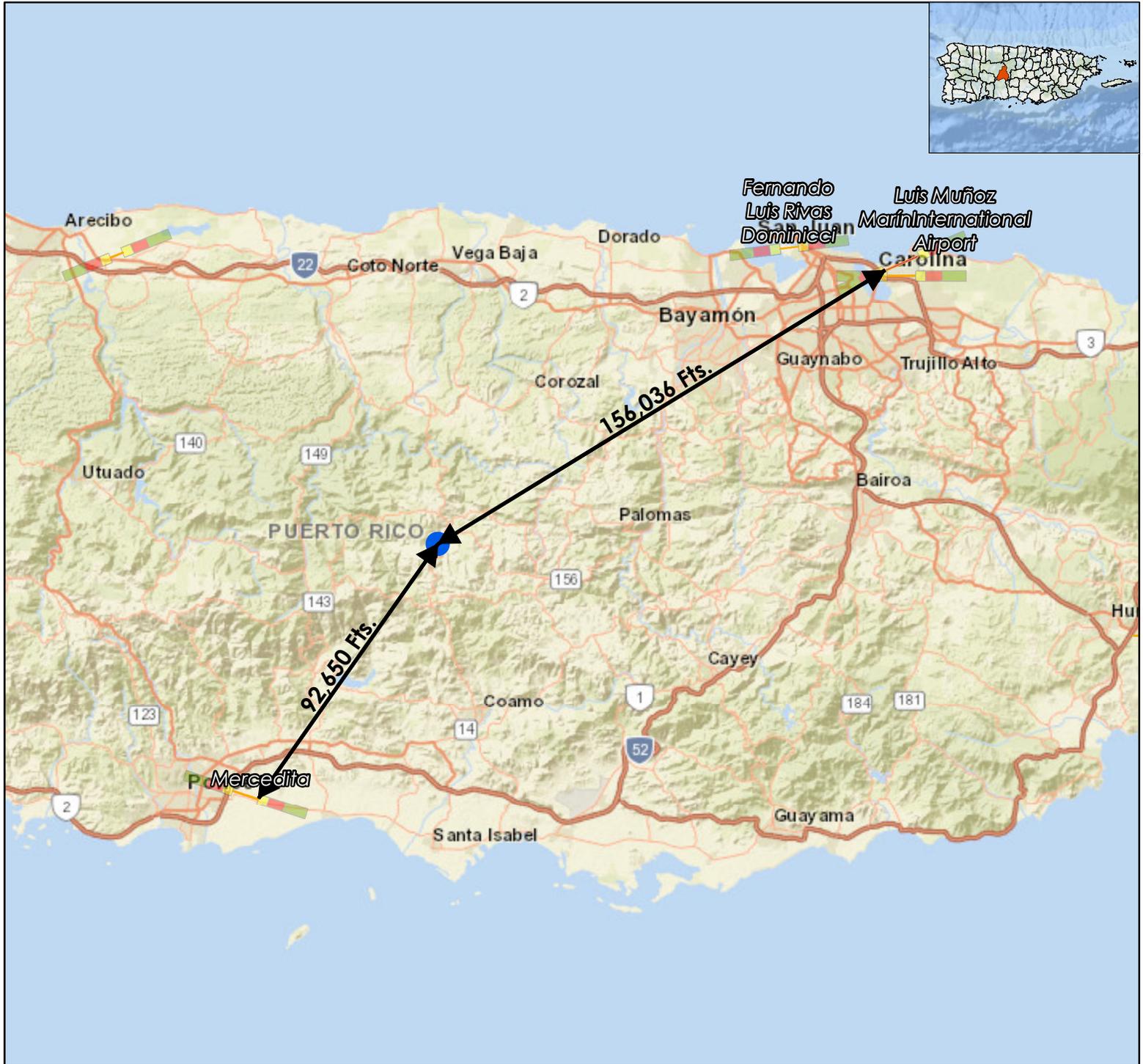
Federal Aviation Administration (FAA)  
<https://adds-faa.opendata.arcgis.com/>

Figure 2.2

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carretera 155, KM 23.7 Int,  
 Bo. Saltos, Sector Los Rosados,  
 Orocovis, PR, 00720  
 Catastro: 245-017-109-16 / 245-007-109-03  
 Lat:18.214155, Long: -66.399803

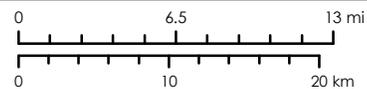
# Airports Map

Puerto Rico Department of Housing ReGrow



## Legend:

- |                                                                                    |                      |                                                                                                |
|------------------------------------------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------|
|  | PR-RGRW-01327        | <b>Accident Potential Zone</b>                                                                 |
|  | SJU Military Runaway |  APZ 1      |
|  | Civil Runaway        |  APZ 2      |
|                                                                                    |                      |  Clear Zone |



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### Source

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



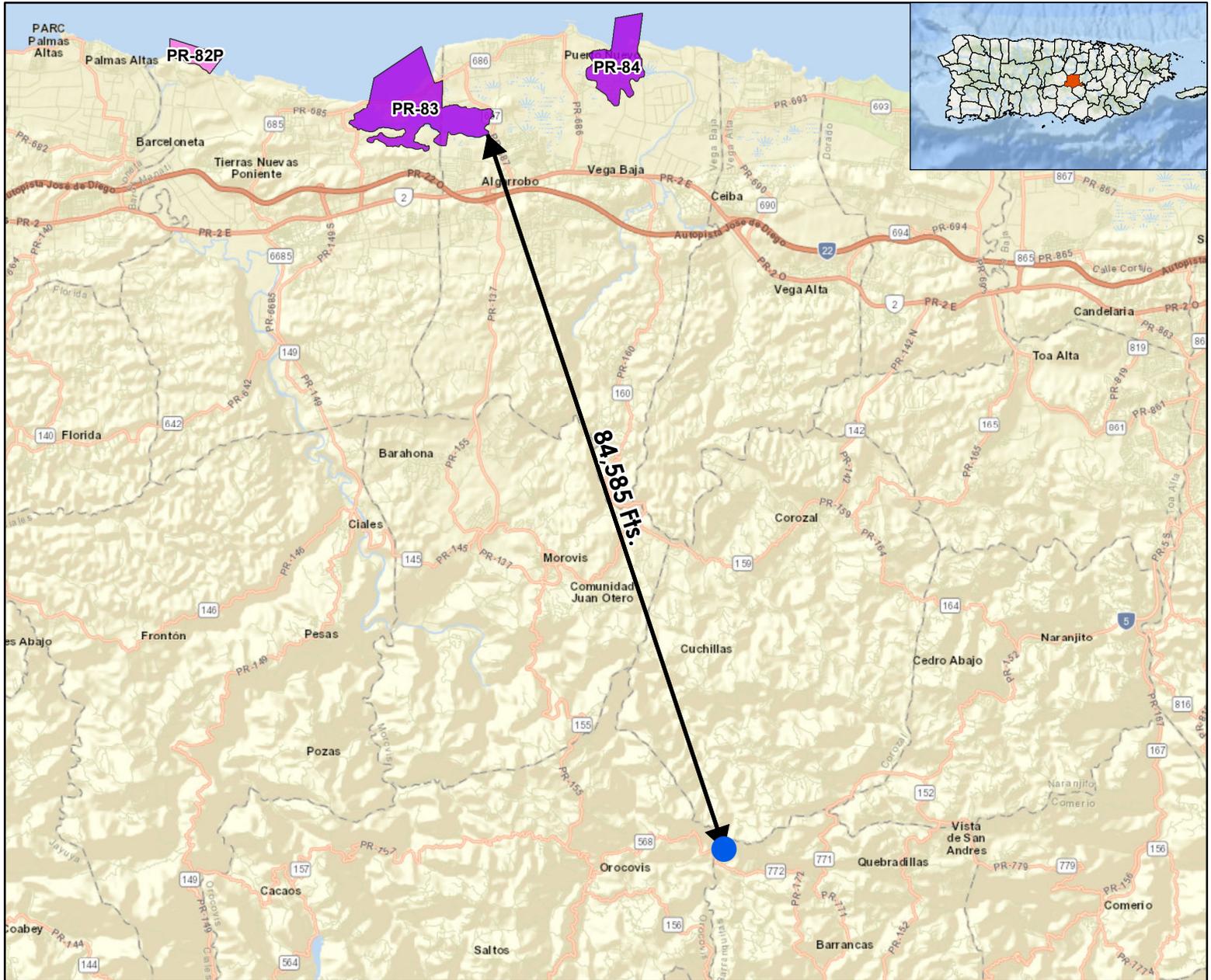
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Figure 3.1

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carr. 772 Km 7.8 Interior,  
 Bo Canabón, Sect. Los Marrero,  
 Baranquitas, PR 00794  
 Catastro: 220-035-230-83 /220-035-230-81  
 Lat:18.237132, Long:-66.347909

# Coastal Barrier Resources System

Puerto Rico Department of Housing ReGrow



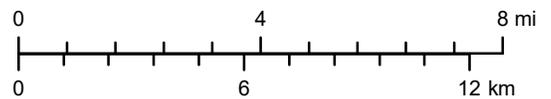
**Legend:**

● PR-RGRW-01327

**Coastal Barrier Resources System (CBRS)**

Otherwise Protected Area

System Unit



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 Esri, Garmin, GEBCO, NOAA NGDC, and other contributors



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**Source**

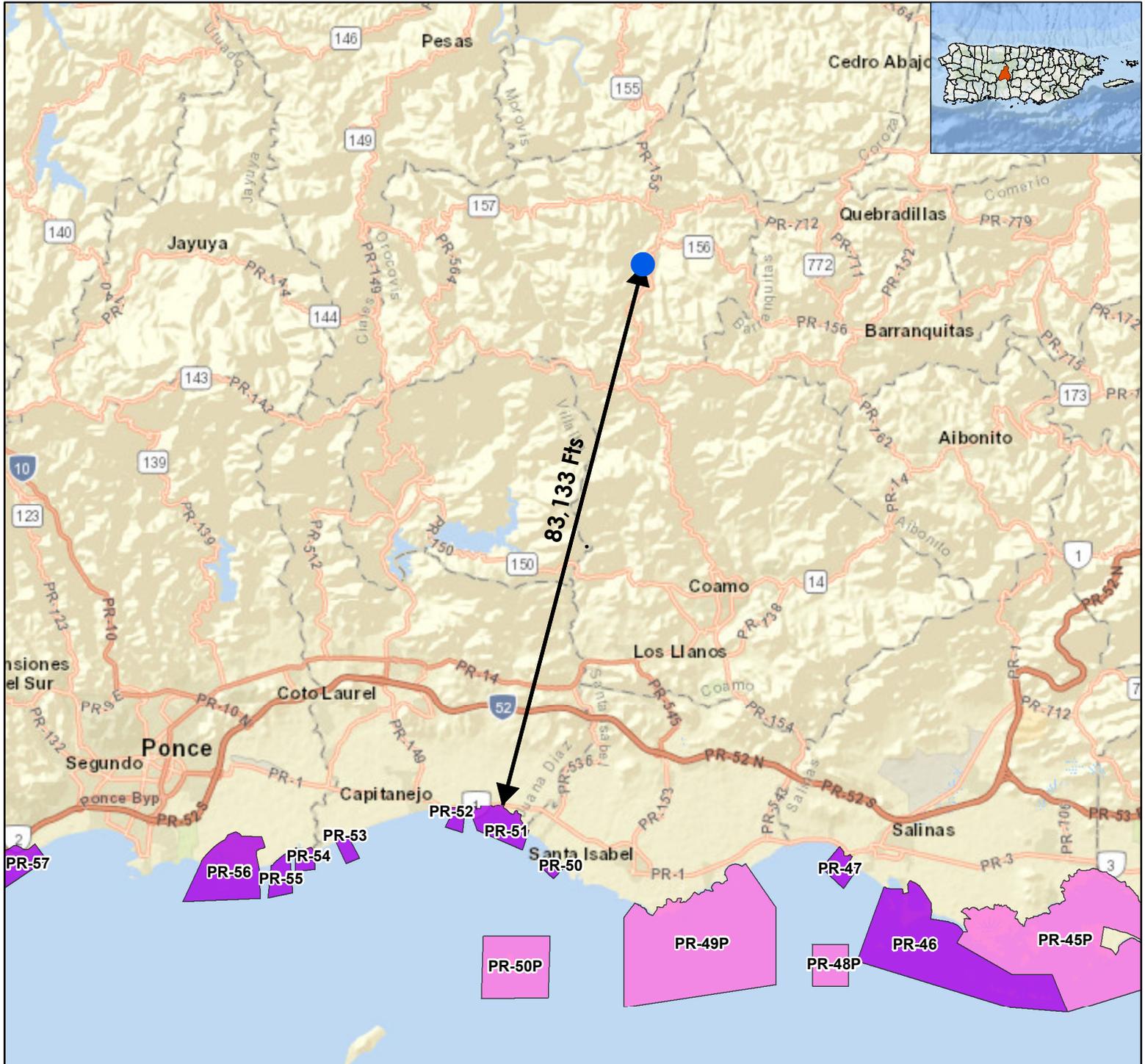
NOAA Office for Coastal Management (NOAA/OCM)  
<https://www.fisheries.noaa.gov/inport/item/53132>

Figure 3.2

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carretera 155, KM 23.7 Int,  
 Bo. Saltos, Sector Los Rosados,  
 Orocovis, PR, 00720  
 Catastro: 245-017-109-16 / 245-007-109-03  
 Lat:18.214155, Long: -66.399803

# Coastal Barrier Resources System Map

Puerto Rico Department of Housing ReGrow



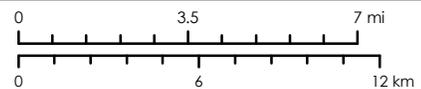
## Legend:

● PR-RGRW-01327

### Coastal Barrier Resources System (CBRS)

◻ Otherwise Protected Area

◻ System Unit



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### Source

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



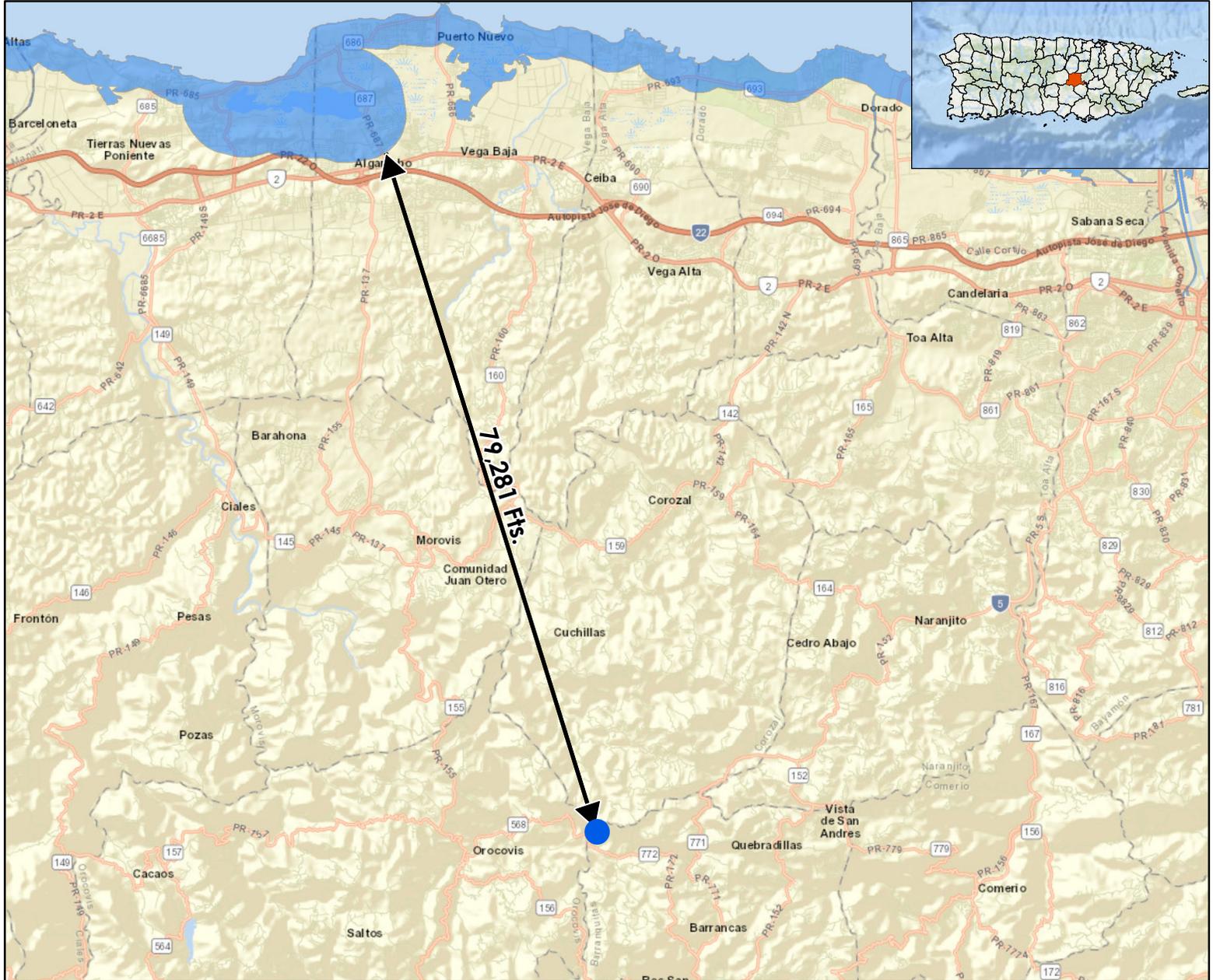
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Figure 5.1

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carr. 772 Km 7.8 Interior,  
 Bo Canabón, Sect. Los Marrero,  
 Baranquitas, PR 00794  
 Catastro: 220-035-230-83 /220-035-230-81  
 Lat:18.237132, Long:-66.347909

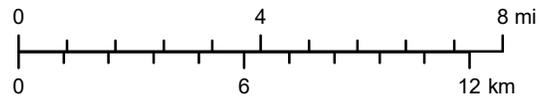
# Coastal Zone Management

Puerto Rico Department of Housing ReGrow



## Legend:

- PR-RGRW-01327
- Coastal Zone Management



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1:200,000

## Source

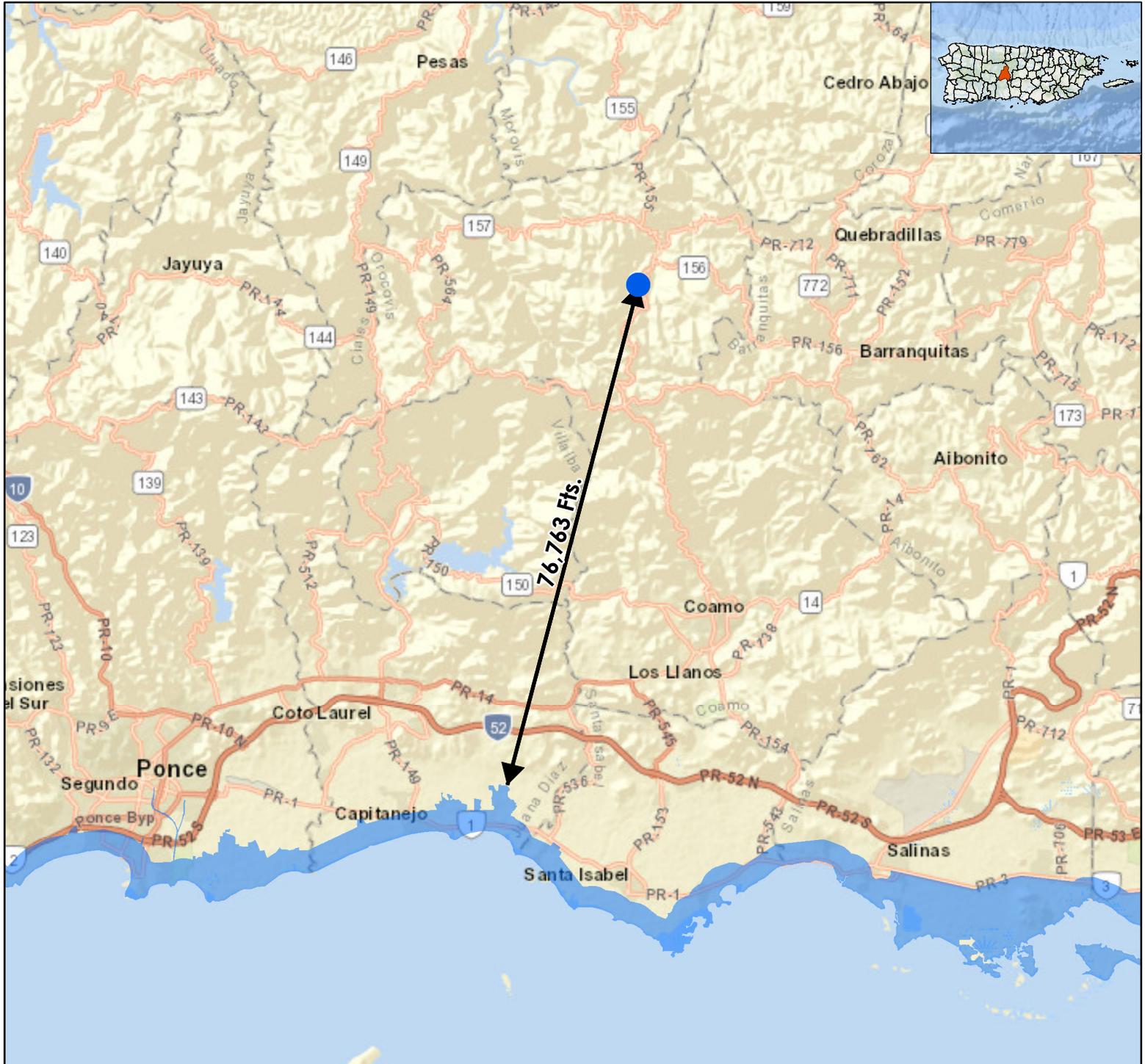
NOAA Office for Coastal Management (NOAA/OCM)  
<https://www.fisheries.noaa.gov/inport/item/53132>

Figure 5.2

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carretera 155, KM 23.7 Int,  
 Bo. Saltos, Sector Los Rosados,  
 Orocovis, PR, 00720  
 Catastro: 245-017-109-16 / 245-007-109-03  
 Lat:18.214155, Long: -66.399803

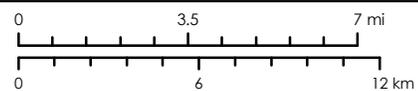
# Coastal Zone Management

Puerto Rico Department of Housing ReGrow



**Legend:**

- PR-RGRW-01327
- Coastal Zone Management Act Boundary



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**Source**

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



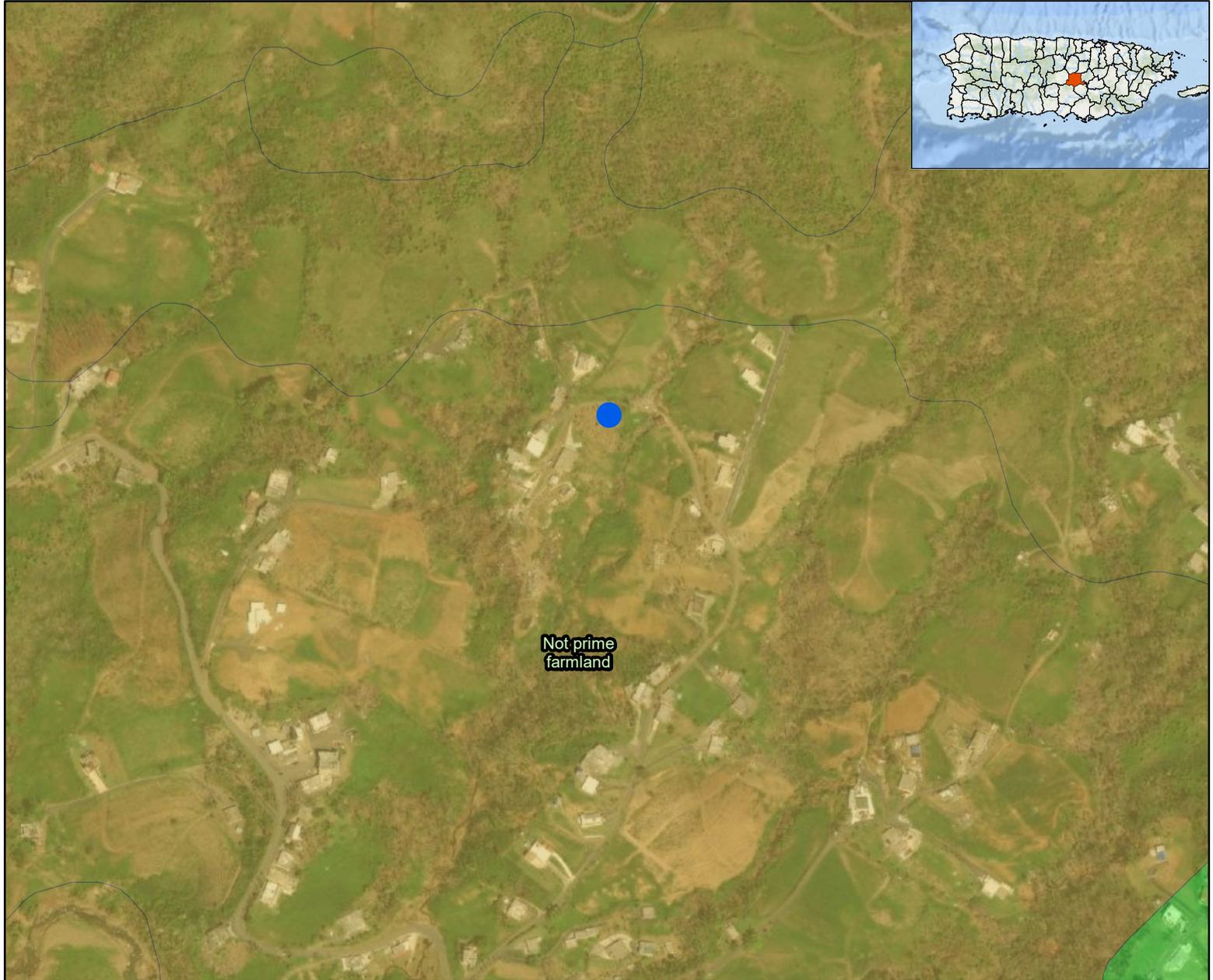
1:250,000

Figure 8.1

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carr. 772 Km 7.8 Interior,  
 Bo Canabón, Sect. Los Marrero,  
 Baranquitas, PR 00794  
 Catastro: 220-035-230-83 /220-035-230-81  
 Lat:18.237132, Long:-66.347909

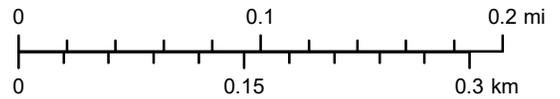
# Farmland Protection

Puerto Rico Department of Housing ReGrow



**Legend:**

- PR-RGRW-01327
- Farm Class**
- Farmland of statewide importance
- Not prime farmland



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



**Source**

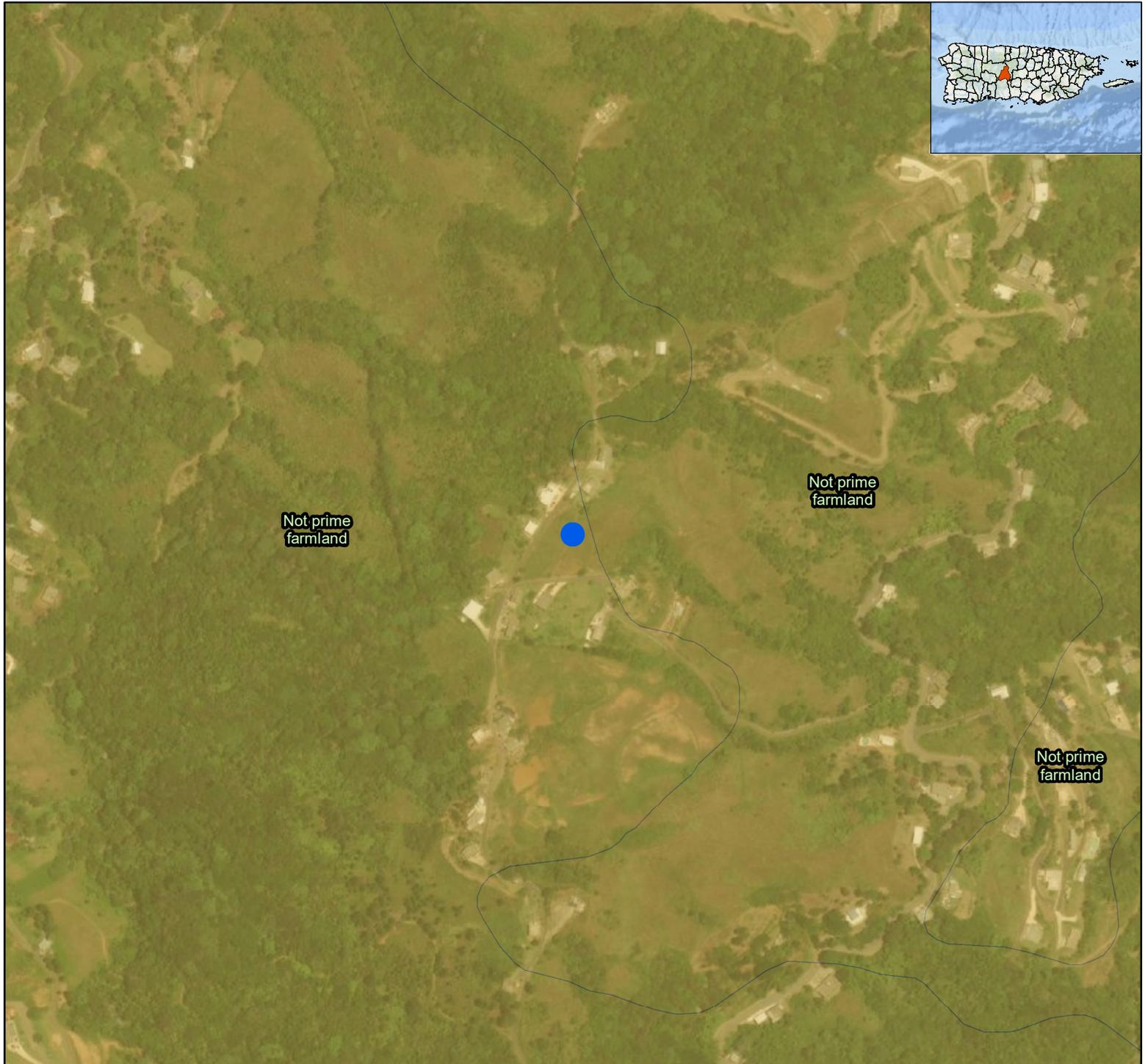
NRCS Gridded Soil Survey Geographic Database (gSSURGO)  
<https://data.nal.usda.gov/dataset/soil-survey-geographic-database-ssurgo>

Figure 8.2

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carretera 155, KM 23.7 Int,  
Bo. Saltos, Sector Los Rosados,  
Orocovis, PR, 00720  
Catastro: 245-017-109-16 / 245-007-109-03  
Lat:18.214155, Long: -66.399803

# Farmland Protection

Puerto Rico Department of Housing ReGrow

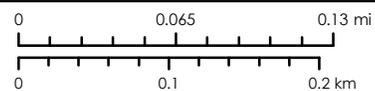


## Legend:

 PR-RGRW-01327

## Farm Class

 Not prime farmland



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

## Source

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



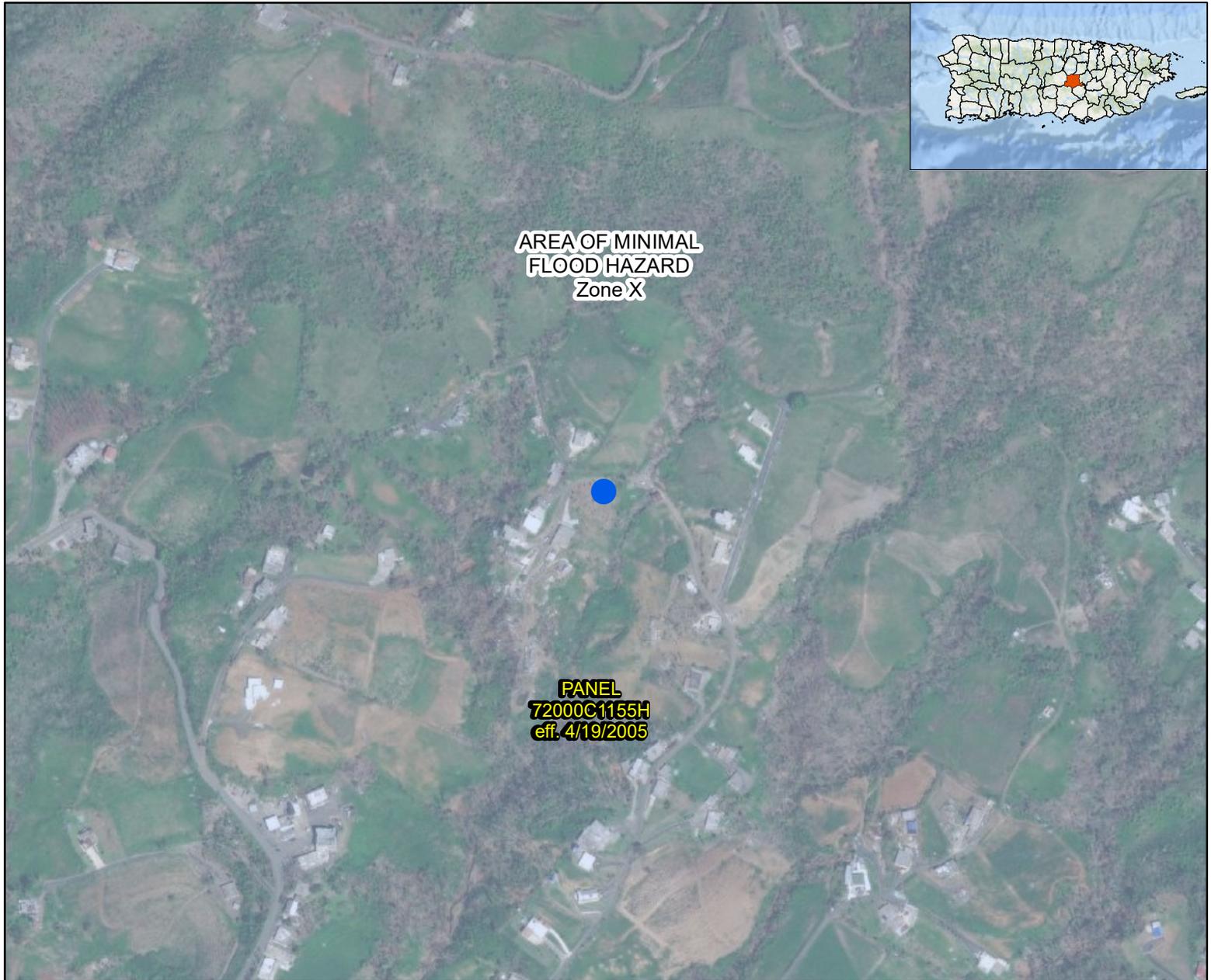
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Figure 4.1

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carr. 772 Km 7.8 Interior,  
 Bo Canabón, Sect. Los Marrero,  
 Baranquitas, PR 00794  
 Catastro: 220-035-230-83 /220-035-230-81  
 Lat:18.237132, Long:-66.347909

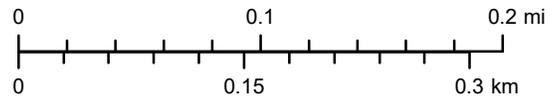
# Flood Insurance Rate Map

Puerto Rico Department of Housing ReGrow



**Legend:**

- PR-RGRW-01327
- Area of Minimal Flood Hazard-Zone X
- FIRM Panel



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



1:5,000

**Source**

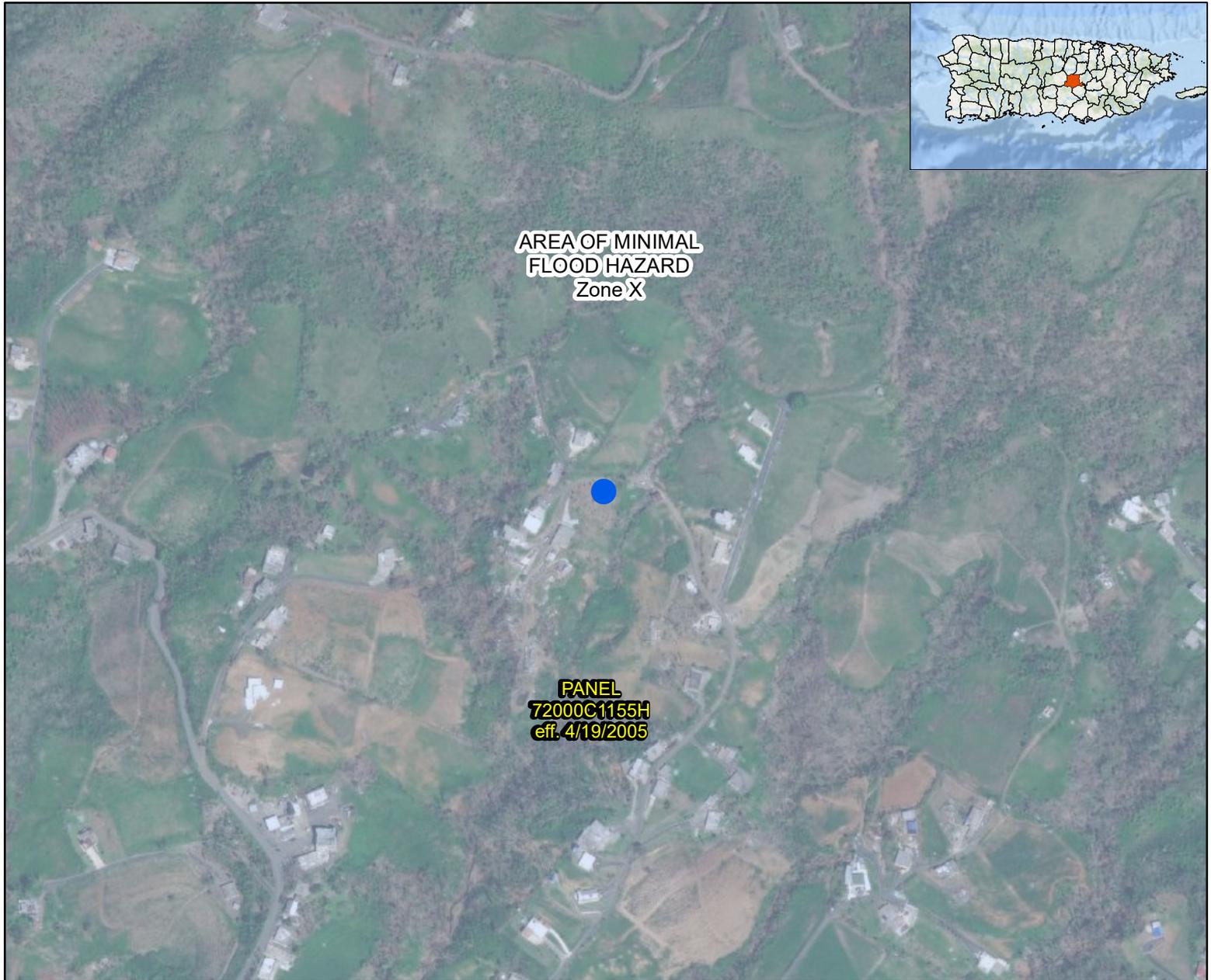
FEMA's National Flood Hazard Layer  
<https://www.fema.gov/flood-maps/national-flood-hazard-layer>

Figure 4.1

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carr. 772 Km 7.8 Interior,  
 Bo Canabón, Sect. Los Marrero,  
 Baranquitas, PR 00794  
 Catastro: 220-035-230-83 /220-035-230-81  
 Lat:18.237132, Long:-66.347909

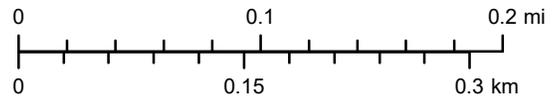
# Flood Insurance Rate Map

Puerto Rico Department of Housing ReGrow



**Legend:**

- PR-RGRW-01327
- Area of Minimal Flood Hazard-Zone X
- FIRM Panel



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



1:5,000

**Source**

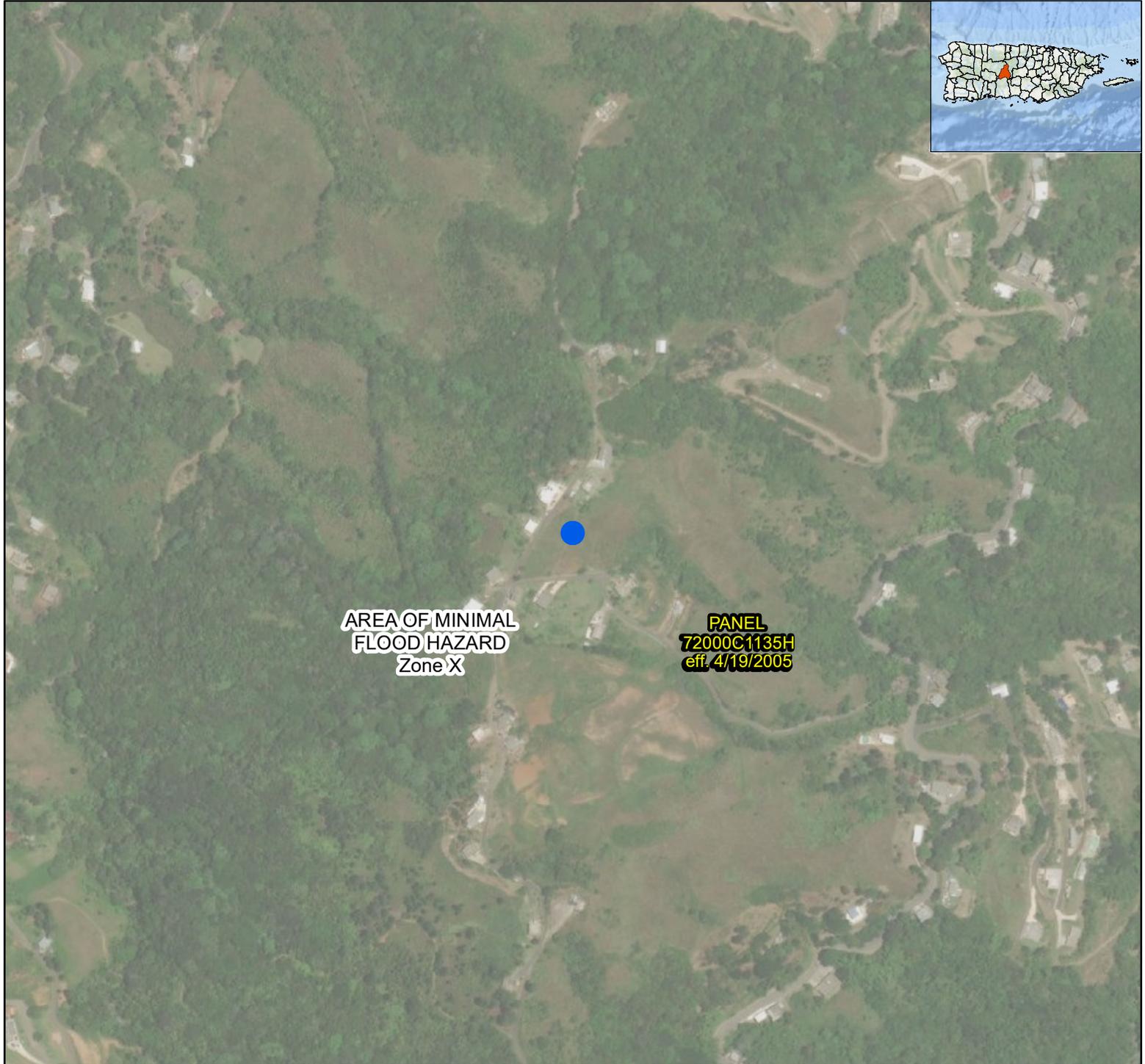
FEMA's National Flood Hazard Layer  
<https://www.fema.gov/flood-maps/national-flood-hazard-layer>

Figure 4.2

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carretera 155, KM 23.7 Int,  
Bo. Saltos, Sector Los Rosados,  
Orocovis, PR, 00720  
Catastro: 245-017-109-16 / 245-007-109-03  
Lat:18.214155, Long: -66.399803

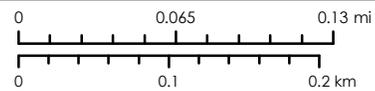
# Flood Insurance Rate Map

Puerto Rico Department of Housing ReGrow



## Legend:

-  PR-RGRW-01327
-  Area of Minimal Flood Hazard-Zone X
-  FIRM Panel



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>



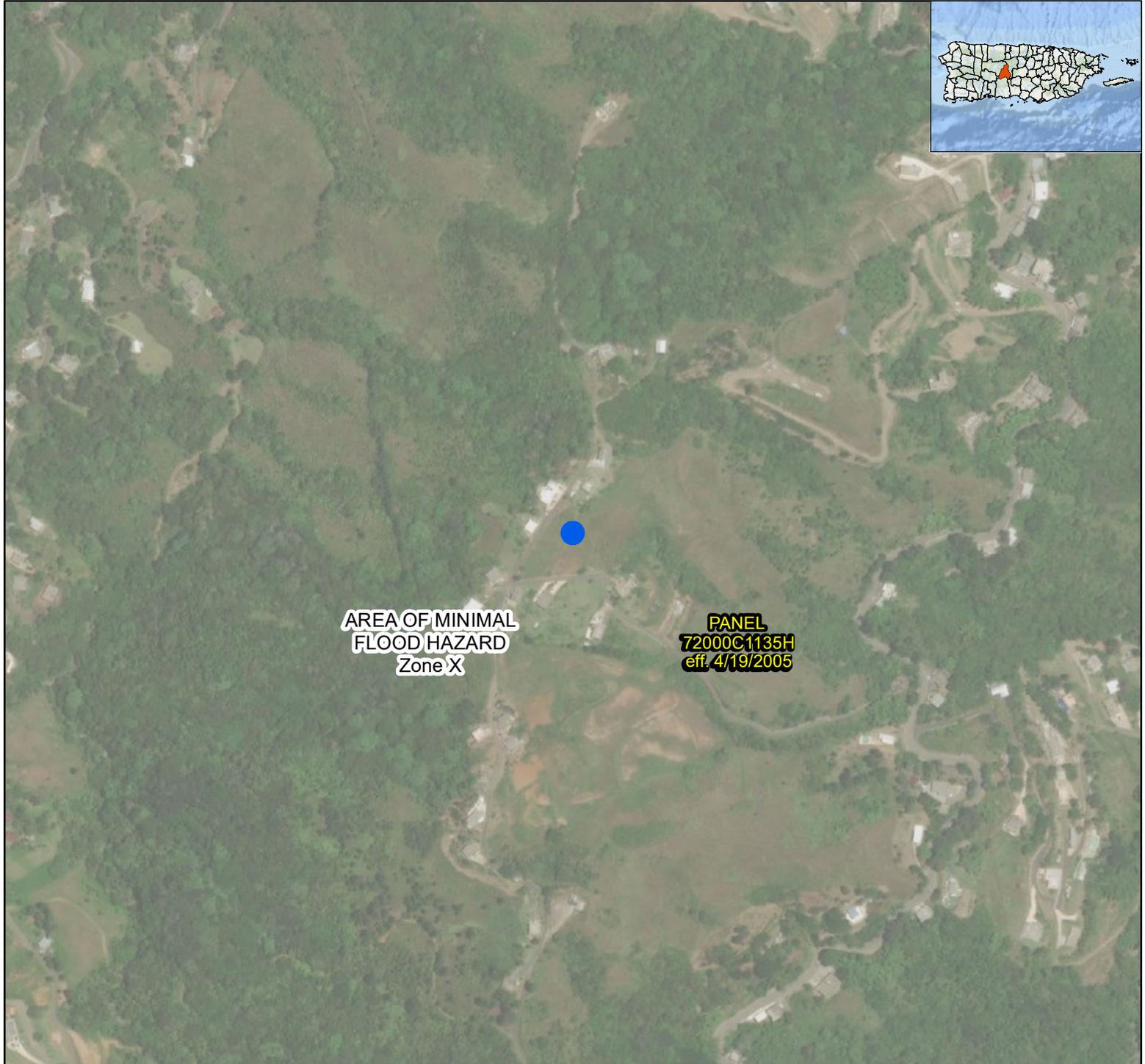
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Figure 4.2

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carretera 155, KM 23.7 Int,  
Bo. Saltos, Sector Los Rosados,  
Orocovis, PR, 00720  
Catastro: 245-017-109-16 / 245-007-109-03  
Lat:18.214155, Long: -66.399803

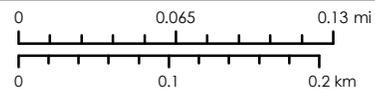
# Flood Insurance Rate Map

Puerto Rico Department of Housing ReGrow



## Legend:

-  PR-RGRW-01327
-  Area of Minimal Flood Hazard-Zone X
-  FIRM Panel



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>



1:5,000

Figure 1.2

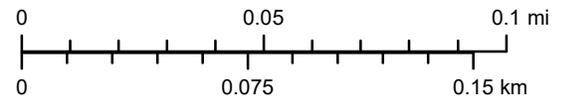
# Location: Aerial Map

Puerto Rico Department of Housing ReGrow



**Legend:**

- PR-RGRW-01327
- Fences
- Parcels-Orocovis
- CRIM Parcels



Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community  
 Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community and Google Earth



1:2,500

**Source**

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

Figure 11.1

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carr. 772 Km 7.8 Interior,  
Bo Canabón, Sect. Los Marrero,  
Barranquitas, PR 00794  
Catastro: 220-035-230-83 /220-035-230-81  
Lat:18.237132, Long:-66.347909

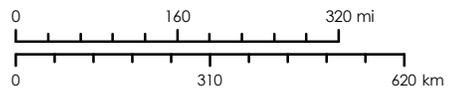
# EPA Sole Source Aquifers

Puerto Rico Department of Housing ReGrow



**Legend:**

-  PR-RGRW-1327
-  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>

1:12,000,000

Figure 11.2

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
Carretera 155, KM 23.7 Int,  
Bo. Saltos, Sector Los Rosados,  
Orocovis, PR, 00720  
Catastro: 245-017-109-16 / 245-007-109-03  
Lat:18.214155, Long: -66.399803

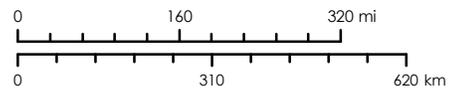
# EPA Sole Source Aquifers

Puerto Rico Department of Housing ReGrow



**Legend:**

-  PR-RGRW-01327
-  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=9ebb047ba3ec41ada187155fe31356b>

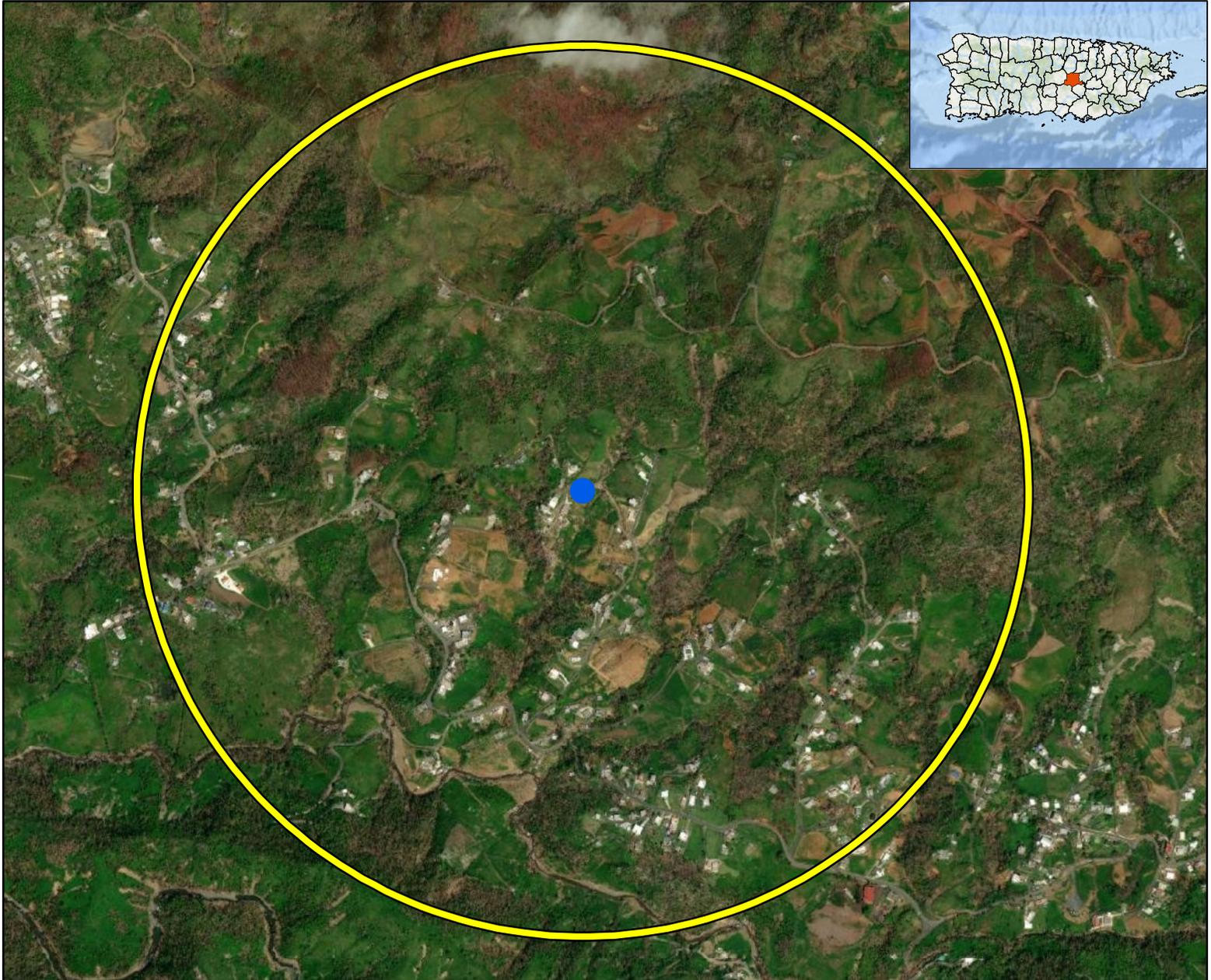
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Figure 6.1

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carr. 772 Km 7.8 Interior,  
 Bo Canabón, Sect. Los Marrero,  
 Baranquitas, PR 00794  
 Catastro: 220-035-230-83 /220-035-230-81  
 Lat:18.237132, Long:-66.347909

# Toxic and Hazardous Facilities

Puerto Rico Department of Housing ReGrow



**Legend:**

 PR-RGRW-01327

 01327 Toxic 3000

 FACILITY INTERESTS

 ICIS

 NCDB

 NPDES

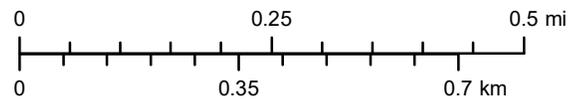
 NPDES MAJOR

 RCRA

 RCRA ACTIVE

 RCRA INACTIVE

 RCRA LQG



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

**Source**

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



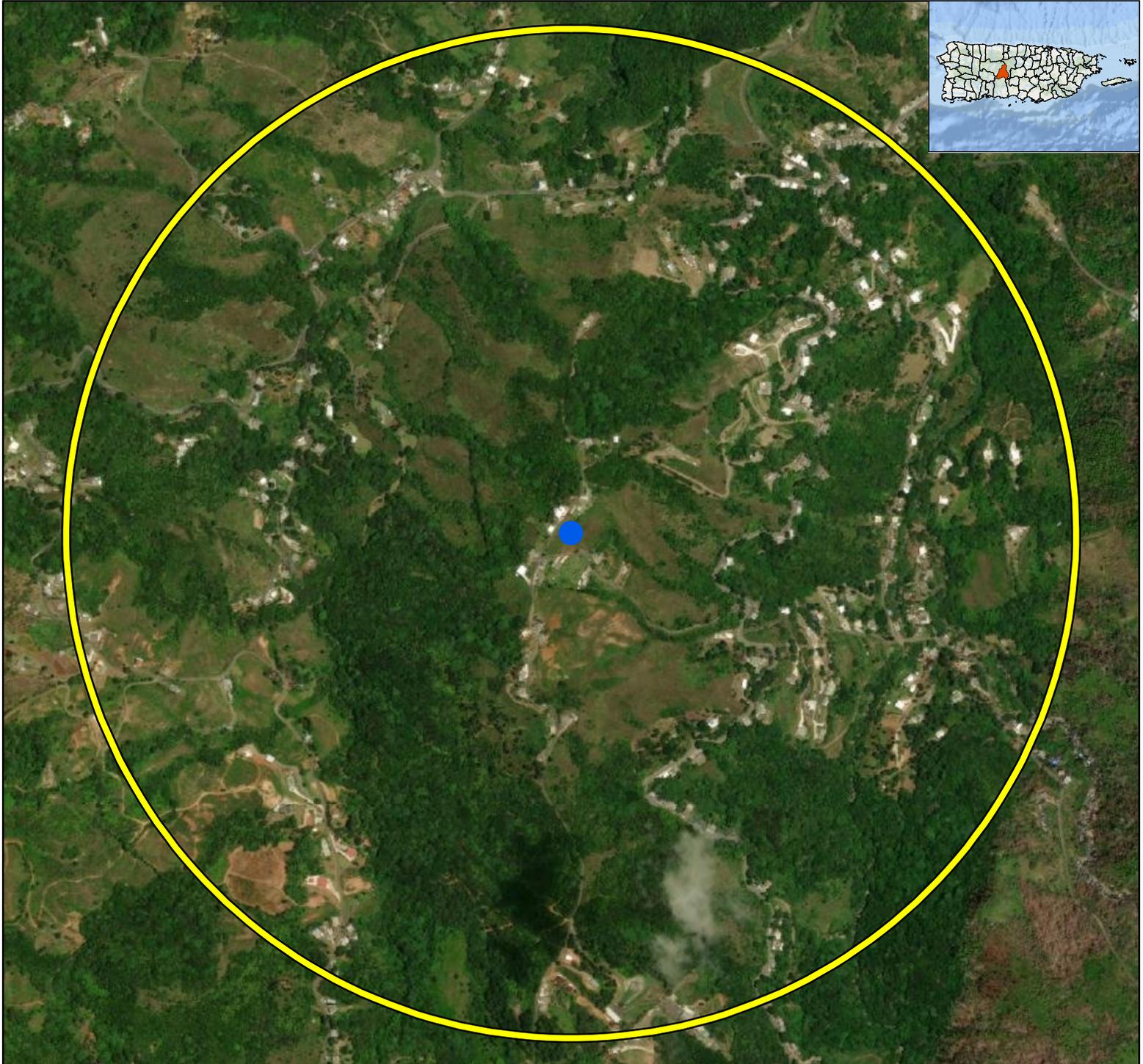
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Figure 6.2

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
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 Bo. Saltos, Sector Los Rosados,  
 Orocovis, PR, 00720  
 Catastro: 245-017-109-16 / 245-007-109-03  
 Lat:18.214155, Long: -66.399803

# Toxic and Hazardous Facilities

Puerto Rico Department of Housing ReGrow



## Legend:

- PR-RGRW-01327
- 01327 Toxic 3000
- FACILITY INTERESTS
- ICIS
- NCDB
- NPDES
- NPDES MAJOR
- ▲ RCRA
- ▲ RCRA ACTIVE
- ▲ RCRA INACTIVE
- ▲ RCRA LQG



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>

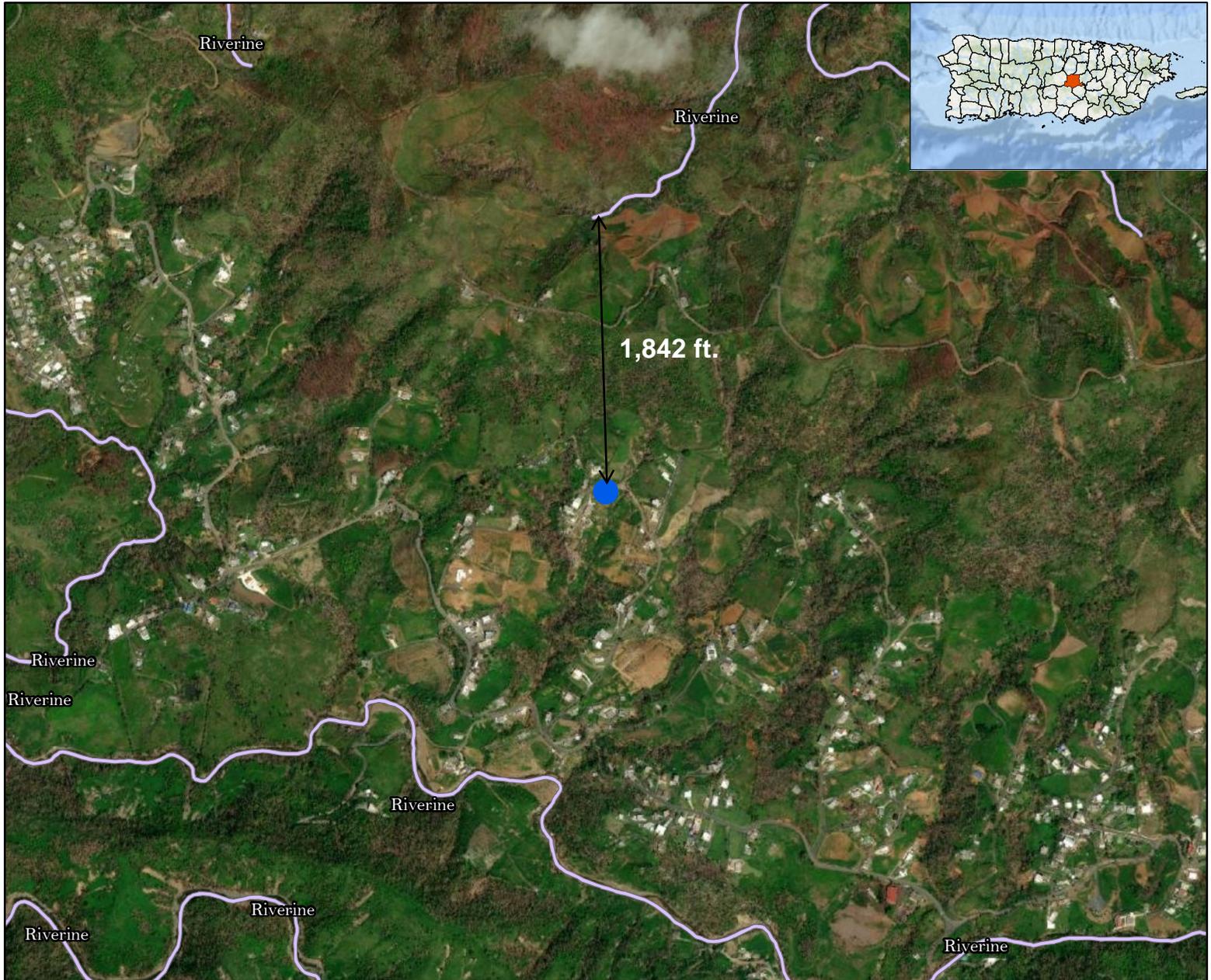


1:10,000

**Figure 12.1** Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carr. 772 Km 7.8 Interior,  
 Bo Canabón, Sect. Los Marrero,  
 Baranquitas, PR 00794  
 Catastro: 220-035-230-83 /220-035-230-81  
 Lat:18.237132, Long:-66.347909

# Wetlands

Puerto Rico Department of Housing ReGrow

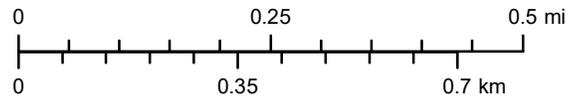


## Legend:

● PR-RGRW-01327

## National Wetlands Inventory

Riverine



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



1:12,000

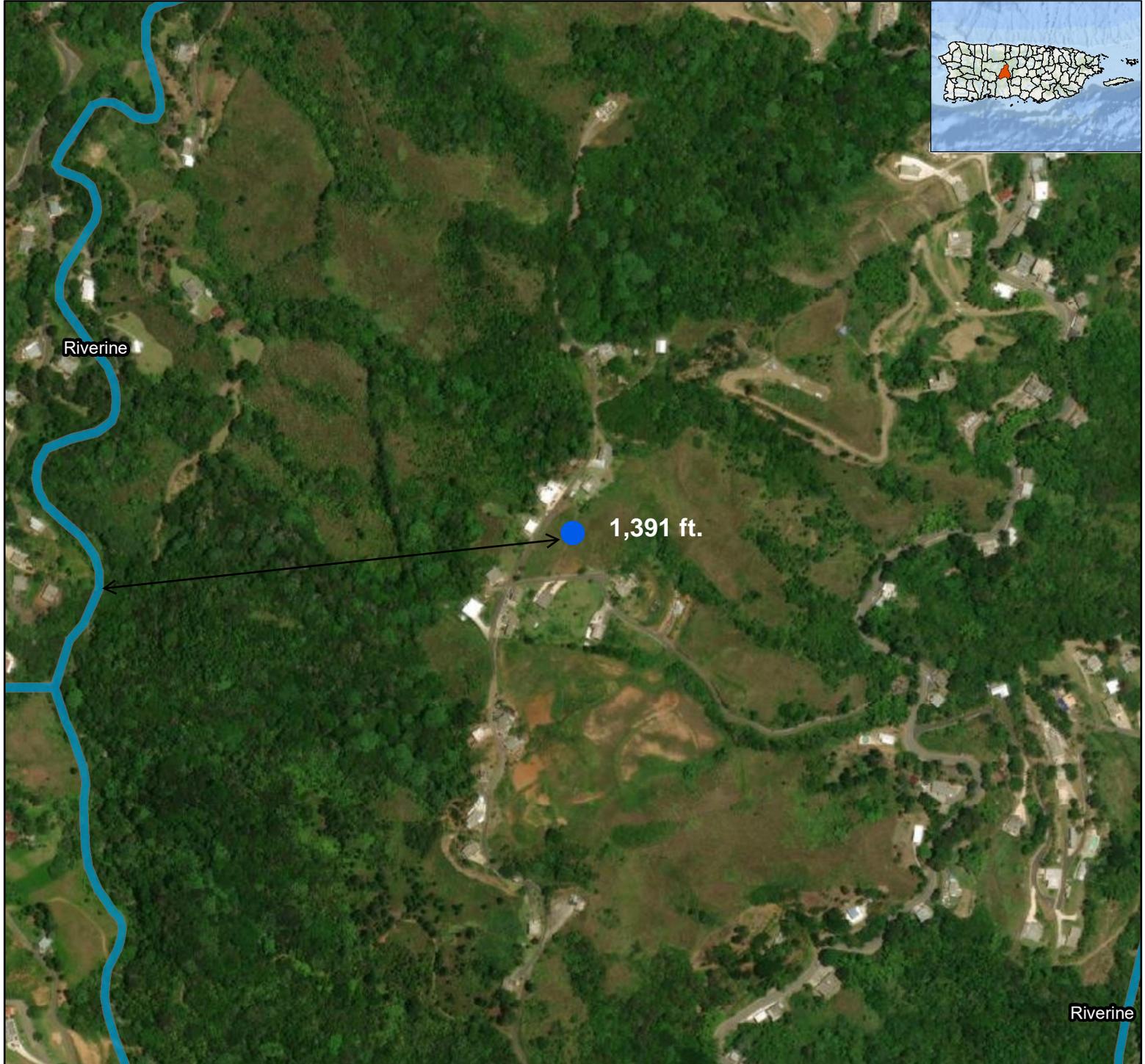
## Source

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

Figure 12.2

# Wetlands Map

Puerto Rico Department of Housing ReGrow

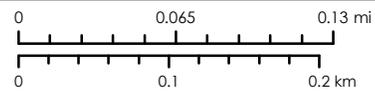


## Legend:

 PR-RGRW-01327

## National Wetlands Inventory

 Riverine



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>



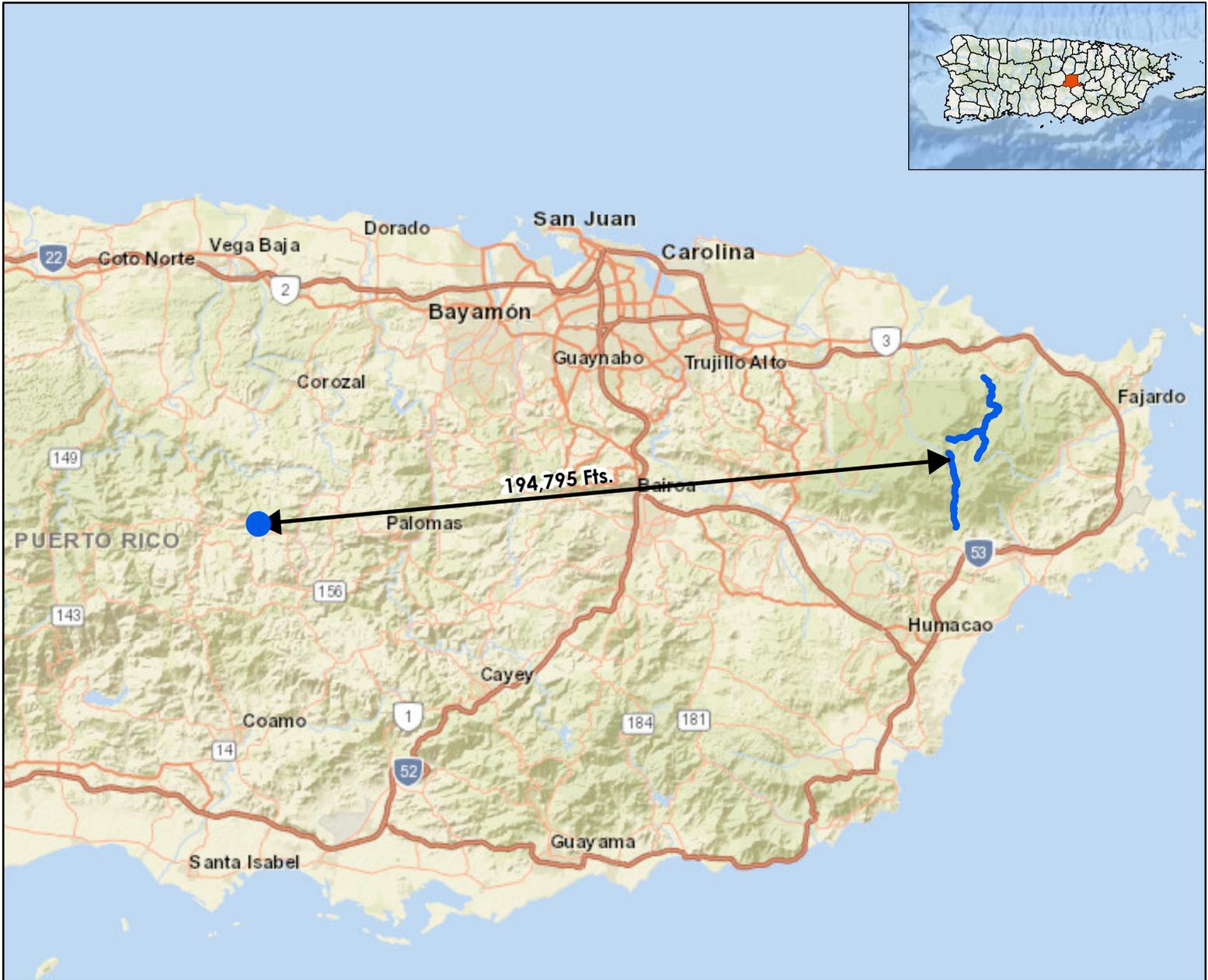
1:5,000

Figure 13.1

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carr. 772 Km 7.8 Interior,  
 Bo Canabón, Sect. Los Marrero,  
 Baranquitas, PR 00794  
 Catastro: 220-035-230-83 /220-035-230-81  
 Lat:18.237132, Long:-66.347909

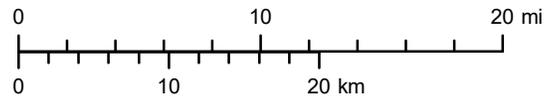
# Wild and Scenic Rivers

Puerto Rico Department of Housing ReGrow



**Legend:**

- PR-RGRW-01327
- ▬ Wild and Scenic Rivers



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 Esri, Garmin, GEBCO, NOAA NGDC, and other contributors



1:500,000

**Source**

FWS National Wild and Scenic Rivers System  
<https://www.rivers.gov/mapping-gis.php>

Figure 13.2

Miguel Marrero Torres/ DBA Finca Sector Los Marrero  
 Carretera 155, KM 23.7 Int,  
 Bo. Saltos, Sector Los Rosados,  
 Orocovis, PR, 00720  
 Catastro: 245-017-109-16 / 245-007-109-03  
 Lat:18.214155, Long: -66.399803

# Wild and Scenic Rivers

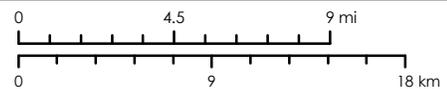
Puerto Rico Department of Housing ReGrow



**Legend:**

● PR-RGRW-01327

— Wild and Scenic Rivers



Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

**Source**

FWS National Wild and Scenic Rivers System  
<https://www.rivers.gov/mapping-gis.php>



1:350,000