



U.S. Department of Housing and Urban
Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov
espanol.hud.gov

**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-01566-W-RE

HEROS Number: 900000010365521

Start Date: 11/14/2023

State / Local Identifier: Default

Project Location: , Cidra , PR 00739

Additional Location Information:

Location centroid: Latitude 18.147767, longitude -66.122134 at the address given above. Cadastral:
300-021-250-03-001

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

This project (PR-RGRW-01566-W-RE) entails the award of a grant to Hacienda La Promesa Monticello, Inc., an agricultural business, at Carretera #1 KM 56.7 interior Barrio Beatriz Sector Monticello, Cidra, PR 00739. Tax ID Number: 300-021-250-03-001. Coordinates Greenhouse Option 1 (18.147668, -66.121549) and Greenhouse Option 2 (18.147324, -66.122792). This project had an original CENST review which included the purchase of farm equipment including a transit vehicle and UTV for project cost of \$75,745.00. See attached CENST environmental review. This review includes a scope item previously considered as an EA level of review (greenhouse and aquaponic system) which is now evaluated as CEST level of review in accordance with FR-6492-N-01 with a project cost of \$60,800.00. The proposed project includes the purchase and installation of an aquaponic greenhouse. The new greenhouse is approximately 1,800 square feet (sq. ft) in size (30 feet [ft] by 60 ft) that will be anchored in the ground with 1-foot-deep holes filled with concrete. There will be approximately 60 posts approximately 12 ft apart. The greenhouse will be made from various materials including steel, aluminum, plastic, and monofilament mesh. Two locations are evaluated for the new greenhouse and based on aerial imagery, a maximum of 125 trees may be affected if avoidance is not an option. Option 1 is in the southeast corner portion of the parcel and is replacing the existing greenhouse requiring no new ground disturbing activities and little vegetation removal/pruning. Option 1 requires no tree clearing or new ground disturbance for construction as it will replace an abandoned greenhouse that the applicant will have removed prior to construction of the new greenhouse. Some minimal tree pruning may be required but all the utility connections are in place. The existing electricity (18.14782365, -66.12118587) and water lines (18.14780692, -66.12119852) will be connected to the new greenhouse about 120 ft from the existing connection via above ground connections. The work associated with the removal of the existing greenhouse is not included in the applicant's Intended Use of Grant Funds application and costs associated with this activity will be covered under additional, non-federal funding not yet disclosed. Option 2 is in the

southwest corner portion of the parcel and is currently undeveloped. Option 2 will require vegetation and tree removal; The existing electricity (18.14782365, -66.12118587) and water lines (18.14780692, -66.12119852) will be connected to the new greenhouse about 550 ft from the existing connection via above ground connections. The electrical provider is LUMA and the water provider is PRASA; the applicant will obtain any necessary permits required for the new utility connections. The applicant owns the property and currently uses it for agricultural use; therefore, no acquisition or conversion is required. The project Hacienda La Promesa Monticello, Inc., PR-RGRW-01566-W-RE has been evaluated in accordance with FR-6492-N-01. The activities identified 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 have been classified as 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: \$60,800.00

Estimated Total Project Cost [24 CFR 58.2 (a) (5)]: \$60,800.00

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

	<p>the PR Boa does not move off, the construction manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask for them to relocate the PR Boa. We have reviewed the information provided and our files, and concur with PRDOH's determination that the proposed project may affect, but is not likely to adversely affect the Puerto Rican boa with the implementation of the conservation measures. Also, the Service acknowledges receipt of the NLAA DKey consistency letter for the Puerto Rican sharp-shinned hawk and Puerto Rican broad-winged hawk. Although there will be no tree removal, the Service recommends that PRDOH implement the following conservation measures for the bird species in case an encounter occurs:</p> <ol style="list-style-type: none">1. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973, as amended. During breeding seasons (see below), nest surveys shall be conducted if a project occurs within the range of any of the species listed above and if habitat for those species will be impacted by the proposed actions. Nest searches must be conducted by qualified personnel with the appropriate permits from the Puerto Rico Department of Natural and Environmental Resources (PRDNER) prior to start of work. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 50-meter buffer around any nest(s) found within the project area. This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. <ul style="list-style-type: none">* Breeding Seasons:* Puerto Rican parrot: February-June.* Puerto Rican sharp-shinned hawk: December-June.* Puerto Rican broad-winged hawk: December-June. <ol style="list-style-type: none">2. Outside the breeding season no nest			
--	--	--	--	--

	<p>surveys are required, but if a nest is encountered, all construction activities or human disturbance must be avoided within a 50-meter buffer around that nest(s). This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. Furthermore, if any of the species indicated above is observed (e.g., foraging, resting) within the project area, avoid any disturbance to the individual(s) and do not flush the bird until it leaves on its own.</p> <p>3. For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office at Caribbean_es@fws.gov. For questions, the Point of Contact (POC) is Jose Cruz-Burgos, Endangered Species Program Coordinator, and can be contacted at: Mobile: 305-304-1386 Office phone: 786-244-0081 Office Direct Line: 939-320-3120 Email: jose_cruz-burgos@fws.gov</p>			
--	--	--	--	--

Determination:

<input type="checkbox"/>	This categorically excluded activity/project converts to EXEMPT 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; Funds may be committed and drawn down after certification of this part 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, publish NOI/RROF and obtain "Authority to Use Grant Funds" (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR
<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 8, 2025

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

Responsible Entity Agency Official Signature: _____ **Date:** 6/4/2025

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-01566-W-RE

HEROS Number: 900000010365521

Start Date: 11/14/2023

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

State / Local Identifier: Default

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: , Cidra , PR 00739

Additional Location Information:

Location centroid: Latitude 18.147767, longitude -66.122134 at the address given above. Cadastral: 300-021-250-03-001

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-01566-W-RE) entails the award of a grant to Hacienda La Promesa Monticello, Inc., an agricultural business, at Carretera #1 KM 56.7 interior Barrio Beatriz Sector Monticello, Cidra, PR 00739. Tax ID Number: 300-021-250-03-001. Coordinates Greenhouse Option 1 (18.147668, -66.121549) and Greenhouse Option 2 (18.147324, -66.122792). This project had an original CENST review which included the purchase of farm equipment including a transit vehicle and UTV for project cost of \$75,745.00. See attached CENST environmental review. This review includes a scope item previously considered as an EA level of review (greenhouse and aquaponic system) which is now evaluated as CEST level of review in accordance with FR-6492-N-01 with a project cost of \$60,800.00. The proposed project includes the purchase and installation of an aquaponic greenhouse. The new greenhouse is approximately 1,800 square feet (sq. ft) in size (30 feet [ft] by 60 ft) that will be anchored in the ground with 1-foot-deep holes filled with concrete. There will be approximately 60 posts approximately 12 ft apart. The greenhouse will be made from various materials including steel, aluminum, plastic, and monofilament mesh. Two locations are evaluated for the new greenhouse and based on aerial imagery, a maximum of 125 trees may be affected if avoidance is not an option. Option 1 is in the southeast corner portion of the parcel and is replacing the existing greenhouse requiring no new ground disturbing activities and little vegetation removal/pruning. Option 1 requires no tree clearing or new ground disturbance for construction as it will replace an abandoned greenhouse that the applicant will have removed prior to construction of the new greenhouse. Some minimal tree pruning may be required but all the utility connections are in place. The existing electricity (18.14782365, -66.12118587) and water lines (18.14780692, -66.12119852) will be connected to the new greenhouse about 120 ft from the existing connection via above ground connections. The work associated with the removal of the existing greenhouse is not included in the applicant's Intended Use of Grant Funds application and costs associated with this activity will be covered under additional, non-federal funding not yet disclosed. Option 2 is in the southwest corner portion of the parcel and is currently undeveloped. Option 2 will require vegetation and tree removal; The existing electricity (18.14782365, -66.12118587) and water lines (18.14780692, -66.12119852) will be connected to the new greenhouse about 550 ft from the existing connection via above ground connections. The electrical provider is LUMA and the water provider is PRASA; the applicant will obtain any necessary permits required for the new utility connections. The applicant owns

the property and currently uses it for agricultural use; therefore, no acquisition or conversion is required. The project Hacienda La Promesa Monticello, Inc., PR-RGRW-01566-W-RE has been evaluated in accordance with FR-6492-N-01. The activities identified 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 have been classified as CEST under the waiver.

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

[ReEvaluation Memo .docx](#)

[PR-RGRW-01566-W-RE Site Map.pdf](#)

[PR-RGRW-01566-W-RE IUGF CEST.pdf](#)

[PR-RGRW-01566 CENST ERR.pdf](#)

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

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

[PR-RGRW-01566-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 EXEMPT 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; Funds may be committed and drawn down after certification of this part for this (now) EXEMPT project; OR
✓	This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, publish NOI/RROF and obtain "Authority to Use Grant Funds" (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR
	This project is 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)).

Approval Documents:

[01566-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 Hacienda La Promesa Monticello, Inc., PR-RGRW-01566-W-RE has been evaluated in accordance with FR-6492-N-01. The activities identified 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 have been classified as CEST under the waiver.

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

[PR-RGRW-01566 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: \$60,800.00

Estimated Total Project Cost: \$60,800.00

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

Compliance Factors: 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)
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 & § 58.6		
Airport Hazards 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 nearest military and civil airport, Luis Munoz Marin International Airport, is located 110,405 ft (21 miles[mi]) from the project site. The project is in compliance with Airport Hazards requirements.
Coastal Barrier Resources Act Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project is not located in a CBRS Unit. It is at 69,787 feet from a protected area. Therefore, this project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act.
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Flood Map Number 72000C1215J, effective on 11/18/2009: 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.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 & § 58.5		
Air Quality Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	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.
Coastal Zone Management Act Coastal Zone Management Act, sections 307(c) & (d)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project is not located in or does not affect a Coastal Zone as defined in the state Coastal Management Plan. The project is located 63,953 feet from the coastal zone. The project is in compliance with the Coastal Zone Management Act.
Contamination and Toxic Substances 24 CFR 50.3(i) & 58.5(i)(2)]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	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.
Endangered Species Act Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	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.
Explosive and Flammable Hazards Above-Ground Tanks)[24 CFR Part 51 Subpart C	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	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.

Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	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.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Flood Map Number 72000C1215J, effective on 11/18/2009 : This project does not occur in a floodplain. The project is in compliance with Executive Order 11988. PFIRMS in Puerto Rico were only developed for certain sections of the municipalities of Carolina, Canovanas, Loiza, San Juan and Trujillo Alto. The proposed project is located in the municipality of Cidra; 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.
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Owner's house and stable: ca. 1990) 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.
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	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.
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	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.
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	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.
Wild and Scenic Rivers Act 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 project is located 121,460 feet from the nearest Wild and Scenic River. The project is in compliance with the Wild and Scenic Rivers Act.
HUD HOUSING ENVIRONMENTAL STANDARDS		
ENVIRONMENTAL JUSTICE		
Environmental Justice 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	In accordance with the 2024 Puerto Rican Boa General Project Design Guidelines, if a Puerto	N/A		

	<p>Rican Boa (PR Boa) is found in the project action site, work shall cease until the individual moves off on its own. If the PR Boa does not move off, the construction manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask for them to relocate the PR Boa.</p> <p>We have reviewed the information provided and our files, and concur with PRDOH's determination that the proposed project may affect, but is not likely to adversely affect the Puerto Rican boa with the implementation of the conservation measures. Also, the Service acknowledges receipt of the NLAA DKey consistency letter for the Puerto Rican sharp-shinned hawk and Puerto Rican broad-winged hawk. Although there will be no tree removal, the Service recommends that PRDOH implement the following conservation measures for the bird species in case an encounter occurs:</p> <p>1. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973, as amended. During breeding seasons (see below), nest surveys shall be conducted if a project occurs within the range of any of the species listed above and if habitat for those species will be impacted by the proposed actions. Nest searches must be conducted by qualified personnel</p>			
--	---	--	--	--

	<p>with the appropriate permits from the Puerto Rico Department of Natural and Environmental Resources (PRDNER) prior to start of work. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 50-meter buffer around any nest(s) found within the project area. This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently.</p> <p>* Breeding Seasons:</p> <p>* Puerto Rican parrot: February-June.</p> <p>* Puerto Rican sharp-shinned hawk: December-June.</p> <p>* Puerto Rican broad-winged hawk: December-June.</p> <p>2. Outside the breeding season no nest surveys are required, but if a nest is encountered, all construction activities or human disturbance must be avoided within a 50-meter buffer around that nest(s). This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. Furthermore, if any of the species indicated above is observed (e.g., foraging, resting) within the project area, avoid any disturbance to the individual(s) and do not flush the bird until it leaves on its own.</p> <p>3. For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office at Caribbean_es@fws.gov. For</p>			
--	--	--	--	--

	questions, the Point of Contact (POC) is Jose Cruz-Burgos, Endangered Species Program Coordinator, and can be contacted at: Mobile: 305-304-1386 Office phone: 786-244-0081 Office Direct Line: 939-320-3120 Email: jose_cruz-burgos@fws.gov			
--	--	--	--	--

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 the 2024 Puerto Rican Boa General Project Design Guidelines, if a Puerto Rican Boa (PR Boa) is found in the project action site, work shall cease until the individual moves off on its own. If the PR Boa does not move off, the construction manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask for them to relocate the PR Boa. We have reviewed the information provided and our files, and concur with PRDOH's determination that the proposed project may affect, but is not likely to adversely affect the Puerto Rican boa with the implementation of the conservation measures. Also, the Service acknowledges receipt of the NLAA DKey consistency letter for the Puerto Rican sharp-shinned hawk and Puerto Rican broad-winged hawk. Although there will be no tree removal, the Service recommends that PRDOH implement the following conservation measures for the bird species in case an encounter occurs: 1. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973, as amended. During breeding seasons (see below), nest surveys shall be conducted if a project occurs within the range of any of the species listed above and if habitat for those species will be impacted by the proposed actions. Nest searches must be conducted by qualified personnel with the appropriate permits from the Puerto Rico Department of Natural and Environmental Resources (PRDNER) prior to start of work. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 50-meter buffer around any nest(s) found within the project area. This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. * Breeding Seasons: * Puerto Rican parrot: February-June. * Puerto Rican sharp-shinned hawk: December-June. * Puerto Rican broad-winged hawk: December-June. 2. Outside the breeding season no nest surveys are required, but if a nest is encountered, all construction activities or human disturbance must be avoided within a 50-meter buffer around that nest(s). This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. Furthermore, if any of the species indicated above is observed (e.g., foraging, resting) within the project area, avoid any disturbance to the individual(s) and do not flush the bird until it leaves on its own. 3. For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office at Caribbean_es@fws.gov. For questions, the Point of Contact (POC) is Jose Cruz-Burgos, Endangered Species Program Coordinator, and can be contacted at: Mobile: 305-304-1386 Office phone: 786-244-0081 Office Direct Line: 939-320-3120 Email: jose_cruz-burgos@fws.gov

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 nearest military and civil airport, Luis Munoz Marin International Airport, is located 110,405 ft (21 miles[mi]) from the project site. The project is in compliance with Airport Hazards requirements.

Supporting documentation

[PR-RGRW-01566-W-RE Airports.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. It is at 69,787 feet from a protected area. Therefore, this project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act.

Supporting documentation**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-01566-W-RE FIRM.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**

Flood Map Number 72000C1215J, effective on 11/18/2009: 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 project is located 63,953 feet from the coastal zone. The project is in compliance with the Coastal Zone Management Act.

Supporting documentation[PR-RGRW-01566-W-RE CZM.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)
Reference		
https://www.onecpd.info/environmental-review/site-contamination		

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](#)

[Radon Attachments.pdf](#)

[PR-RGRW-01566-W-RE Toxics.pdf](#)

[PR-RGRW-01566-W-RE Radon Memo.docx](#)

[PR-RGRW-01566-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:

In accordance with the 2024 Puerto Rican Boa General Project Design Guidelines, if a Puerto Rican Boa (PR Boa) is found in the project action site, work shall cease until the individual moves off on its own. If the PR Boa does not move off, the construction manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask for them to relocate the PR Boa. We have reviewed the information provided and our files, and concur with PRDOH's determination that the proposed project may affect, but is not likely to adversely affect the Puerto Rican boa with the implementation of the conservation measures. Also, the Service acknowledges receipt of the NLAA DKey consistency letter for the Puerto Rican sharp-shinned hawk and Puerto Rican broad-winged hawk. Although there will be no tree removal, the Service recommends that PRDOH implement the following conservation measures for the bird species in case an encounter occurs: 1. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973, as amended. During breeding seasons (see below), nest surveys shall be conducted if a project occurs within the range of any of the species listed above and if habitat for those species will be impacted by the proposed actions. Nest searches must be conducted by qualified personnel with the appropriate permits from the Puerto Rico Department of Natural and Environmental Resources (PRDNER) prior to start of work. If nesting activity is detected, all construction activities or human disturbance must be avoided within a 50-meter buffer around any nest(s) found within the project area. This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. * Breeding Seasons: * Puerto Rican parrot: February-June. * Puerto Rican sharp-shinned hawk: December-June. * Puerto Rican broad-winged hawk: December-June. 2. Outside the breeding season no nest surveys are required, but if a nest is

encountered, all construction activities or human disturbance must be avoided within a 50-meter buffer around that nest(s). This avoidance strategy must be kept until fledglings successfully leave the nest(s) permanently. Furthermore, if any of the species indicated above is observed (e.g., foraging, resting) within the project area, avoid any disturbance to the individual(s) and do not flush the bird until it leaves on its own. 3. For all nest sightings, the Applicant must record the time and date of the sighting and the specific location where it was found. All sightings and incidental lethal take reports should be sent to the USFWS Caribbean Ecological Services Field Office at Caribbean_es@fws.gov. For questions, the Point of Contact (POC) is Jose Cruz-Burgos, Endangered Species Program Coordinator, and can be contacted at: Mobile: 305-304-1386 Office phone: 786-244-0081 Office Direct Line: 939-320-3120 Email: jose_cruz-burgos@fws.gov

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-01566-W-RE USFWS Consultation Package.pdf](#)
[PR-RGRW-01566-W-RE USFWS Conservation Measures.pdf](#)
[PR-RGRW-01566-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.)	7 CFR Part 658

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:

No prime farmland or farmlands of statewide importance are within the project area.

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-01566-W-RE Farmlands.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-01566-W-RE FIRM.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**

Flood Map Number 72000C1215J, effective on 11/18/2009 : This project does not occur in a floodplain. The project is in compliance with Executive Order 11988. PFIRMS in Puerto Rico were only developed for certain sections of the municipalities of Carolina, Canovanas, Loiza, San Juan and Trujillo Alto. The proposed project is located in the municipality of Cidra; 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-01566-W-RE ABFE.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" https://www.govinfo.gov/content/pkg/CFR-2012-title36-vol3/pdf/CFR-2012-title36-vol3-part800.pdf

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
----------------------------------	-----------------------------	------------------	--------------------------

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

(Owner's house and stable: ca. 1990) 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-01566-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
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.	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-01566-W-RE Sole Source Aquifers.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-01566-W-RE Wetlands.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 project is located 121,460 feet from the nearest Wild and Scenic River. The project is in compliance with the Wild and Scenic Rivers Act.

Supporting documentation

[PR-RGRW-01566-W-RE Wild and Scenic.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 | Rio Grande | St Croix
P.O. Box 491
Boquerón, Puerto Rico 00622



In Reply Refer to:
FWS/R4/CESFO/72041-Gen

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

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

Re: CDBG-DR PR-RGRW-01566 Hacienda La
Promesa Monticello, Inc, Cidra Puerto Rico

Dear Mr. Pérez-Bofill

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

The Puerto Rico Department of Housing (PRDOH) is proposing the construction of a new greenhouse in a 4.41 acres property (18°08'53.1"N 66°07'17.0"W) located on State Road PR-1, Km 56.7 Int., Barrio Beatriz Sector Monticello in the municipality of Cidra, Puerto Rico. Two optional locations are being evaluated for the greenhouse. The construction of either option will require vegetation removal, and option 2 will require some tree clearing and/or pruning.

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 (*Epicrates inornatus* now known as *Chilabothrus inornatus*) and Puerto Rican plain pigeon (*Columba inornata wetmorei*).

The Caribbean Determination Key (DKey) in the IPaC application was used to evaluate the potential impacts to federally listed species for this project (Project code: 2024-0018680). Based on the answers provided, a consistency letter was obtained for the Puerto Rican boa, which determined that the proposed actions for this project may affect but is not likely to adversely affect (NLAA) this species. As for the Puerto Rican plain pigeon a consultation is required.

Based on the nature of the project, scope of work, information available, and analysis of the IPaC lists together with field direct observations of the area where the project will be developed, the PRDOH has determined that the proposed project will have no effect (NE) on the Puerto Rican plain pigeon due to the lack of suitable habitat.

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

As for the Puerto Rican boa, the Service acknowledge receipt of the NLAA DKey consistency letter. As per the conservation measures (updated conservation measures enclosed), please note that if a Puerto Rican boa is encountered during the project activities, it should not be captured. If a boa needs to be moved out of harm's way, the Puerto Rico Department of Natural and Environmental Resources (PRDNER) should be contacted for safe capture and relocation of the animal. If immediate relocation is not an option, project-related activities in the area where the boa is found must stop until it moves out of harm's way on its own.

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

Sincerely,

LOURDES
MENA

Digitally signed by LOURDES
MENA
Date: 2024.02.19 19:57:10 -04'00'
Adobe Acrobat version:
2023.008.20533

Lourdes Mena
Acting Field Supervisor

drr

Enclosure: Puerto Rican boa conservation measures

cc:

Susan Fischer, SWCA



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

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

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

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



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

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

Conservation Measures:

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

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

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

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



ENVIRONMENTAL CONSULTANTS

Sound Science. Creative Solutions.®

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

TECHNICAL MEMORANDUM

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

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

Date: December 29, 2023

Re: **Threatened and Endangered Species Evaluation for the Puerto Rico Department of Housing ReGrow PR-RGRW-01566 Project/ SWCA Project No. 72428**

Project Description

Hacienda La Promesa Monitcello, Inc, the applicant, is proposing to construct a new greenhouse on a 4.41-acre property in the Municipio of Cidra, Puerto Rico (project) (Appendix A, Figure 1). The project is located at Carretera #1 KM 56.7 Interior Barrio Beatriz Sector Monticello CIdra, Puerto Rico 00739, in a rural area. The estimated dimensions of the greenhouse will be approximately 30 feet by 60feet (1,800 square feet). Two optional locations are being evaluated for the greenhouse (Appendix A, Figure 2).

Existing conditions

The existing habitat conditions at the proposed greenhouse locations consist of dense grasses, shrubs, and vines; Option 2 also has trees within the proposed project area. Forested areas lie adjacent to both greenhouse location options. No wetlands or waterbodies are mapped within or adjacent to the property (Appendix A, Figure 3). Construction of the greenhouse at both locations would require removal of the vegetation within the proposed project area, and Option 2 would require removal and/or pruning of trees within the proposed project area. Representative photographs of the proposed locations are provided in Appendix B.

Federally Protected Species

SWCA obtained a federal threatened and endangered species list from the USFWS (2023a) Information for Planning and Consultation (“IPaC”) website for a 100-foot buffer around the two optional greenhouse and locations (review area) (Appendix C). The IPaC automatically generates a list of species and other resources of concern, such as critical habitat, that are known or expected to be in the specified area and could potentially be directly or indirectly affected. According to the IPaC query for the project, two federally listed endangered species has the potential to occur in the review area; the Puerto Rican plain pigeon (*Columba inornata wetmorei*) and the Puerto Rican boa (*Chilabothrus inornatus*). SWCA also evaluated the review area for potential habitat for bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) as they are protected by the Bald and Golden Eagle Protection Act of 1940 (“BGEPA”).

The bald and golden eagle's range do not extend into Puerto Rico (Cornell Lab of Ornithology 2023); therefore, these species were eliminated from further analysis for this project. Table 1 identifies the species carried forward for further evaluation and summarizes each species' habitat requirements, potential for occurrence in the project area, and determination of effects.

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

Common Name (Scientific Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Project Area	Determination of Effects/Impacts
Birds				
Puerto Rican Plain Pigeon (<i>Columba inornata wetmorei</i>)	FE	The Puerto Rican Plain Pigeon is found mostly in wooded ravines, second-growth areas, bamboo thickets, and patches of farmland and pasture within moist mountain forests (Birds of Puerto Rico 2023). The species nests in bamboo groves and hardwood canyons (USFWS 1982).	<i>Unlikely to occur.</i> There are no wooded ravines or bamboo thickets within the proposed project locations.	<i>No effect.</i> There is no suitable habitat for the Puerto Rican plain pigeon within the project area.
Reptiles				
Puerto Rican Boa (<i>Chilabothrus inornatus</i>)	FE	Considered to be a habitat generalist, the Puerto Rican boa tolerates a wide variety of terrestrial and arboreal habitats, including rocky areas, haystack hill, trees and branches, rotting stumps, caves, plantations, various types of forested areas such as karst and mangrove forests, forested urban and rural areas, and along streams and road edges (USFWS 2011).	<i>May occur.</i> The project area is located within and adjacent to the forested areas and dense vegetative ground cover is present throughout the review area.	<i>May affect, but not likely to adversely affect.</i> See discussion below.

*Status Definitions:
FE = Federally listed endangered

Based on a site visit and habitat evaluations, the Puerto Rican plain pigeon is considered unlikely to occur due to lack of suitable habitat within the project areas. Therefore, the project will have *no effect* on this federally listed species. Due to the generalist nature of the Puerto Rican boa, forested habitat surrounding the project areas, and dense ground cover present throughout the review area, the Puerto Rican boa may occur within the project area. The applicant will employ the conservation measures outlined in the 2023 USFWS General Project Design Guidelines for the Puerto Rican boa (Appendix D), including but not limited to issuing a stop work if a Puerto Rican boa were to occur within the project area, and contacting the PRDNER for safe capture and relocation of the individual if such action is required. Consequently, it is anticipated that the project *may affect, but is not likely to adversely affect* the Puerto Rican boa. The USFWS Consistency Letter obtained through IPaC is included in Appendix E.

Critical Habitat and National Wildlife Refuges

Potential effects to habitat(s) within the project area critical to endangered species must be analyzed along with the endangered species themselves, while any activity proposed on National Wildlife Refuge lands must undergo a compatibility determination conducted by the Refuge. No designated critical habitats are present within 100-feet of any of the proposed project location options (Appendix A, Figure 4) (USFWS 2023b).

LITERATURE CITED

- Birds of Puerto Rico. 2023. Plain Pigeon (*Patagioenas inornata*). Available at: <https://birdsofpuertorico.com/bird/56/Plain-Pigeon>. Accessed December 2023.
- Cornell Lab of Ornithology. 2023. All About Birds. Available at: <https://www.allaboutbirds.org/guide/>. Accessed November 2023.
- U. S. Fish and Wildlife Service (USFWS). 1982. *Puerto Rican Plain Pigeon Recovery Plan*. U.S. Fish and Wildlife Service, Atlanta, Georgia. 52pp.
- . 2011. *Puerto Rican Boa (Epicrates inornatus) 5-Year Review: Summary and Evaluation*. U.S. Fish and Wildlife Service, Southeast Region. Boquerón, Puerto Rico.
- . 2023a. Information for Planning and Consultation System (IPaC). Available at: <http://ecos.fws.gov/ipac/>. Accessed November 2023.
- . 2023b. Critical Habitat for Threatened & Endangered Species [USFWS]. Available at: <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>. Accessed November 2023.

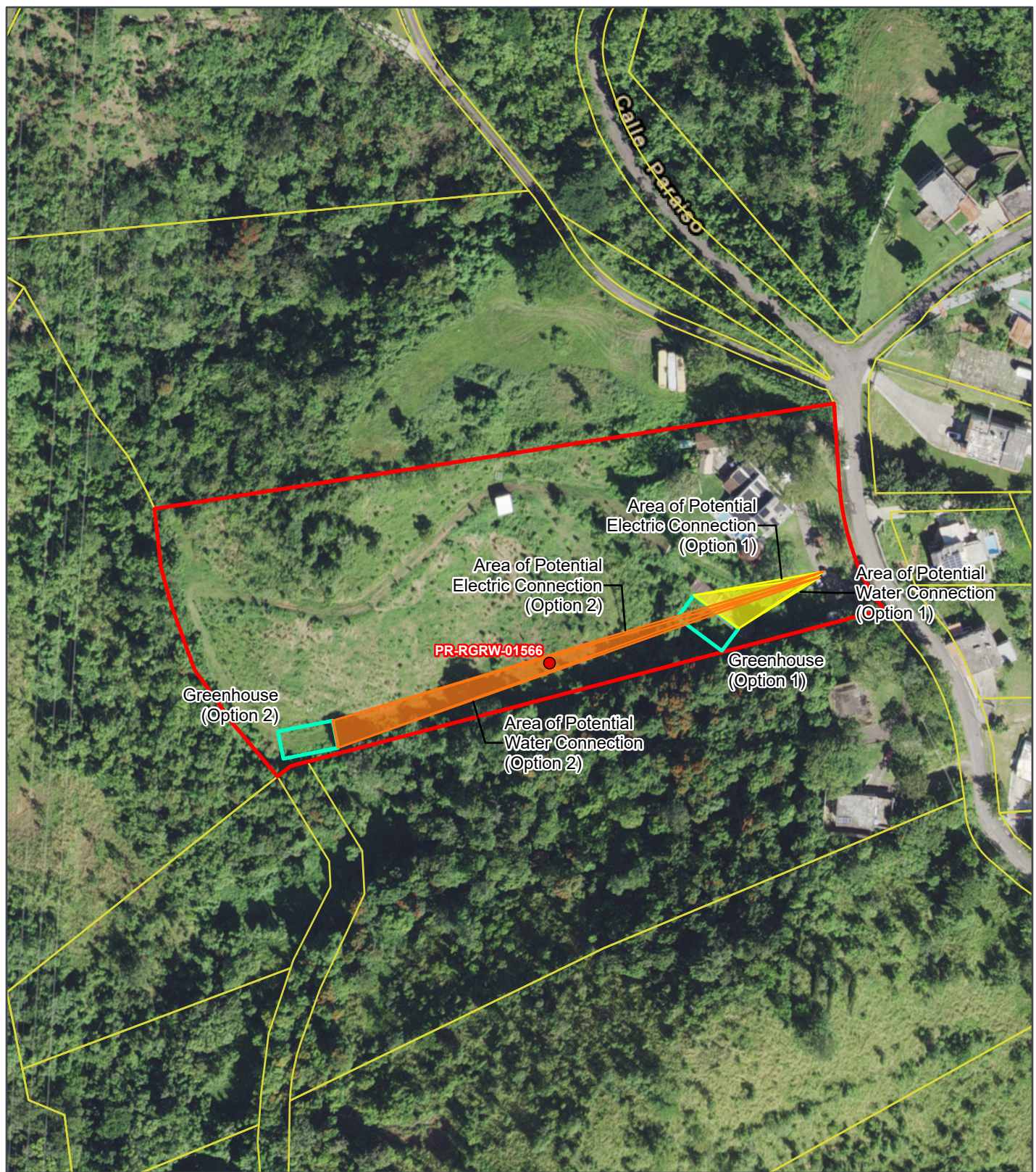
APPENDIX A

Maps

Figure 1

USGS Topographic Map

Figure 2
Site Vicinity Map



REGROW PROGRAM

Figure A-2: Site Vicinity

Applicant ID: PR-RGRW-01566

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)
- Potential Area of Disturbance (Option 1)
- Potential Area of Disturbance (Option 2)

Carr #1 KM 56.7 interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739

Parcel ID: 300-021-250-03-001
Parcel Center:
66.122134°W 18.147767°N

Base Map: USA NAI/P Imagery
Imagery Year: 2022
Updated: 5/3/2024

Layout: Site Vicinity
Aprx: 72428_ReGrowTier2Maps

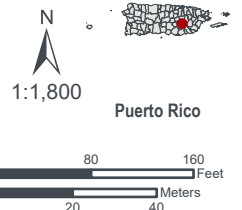
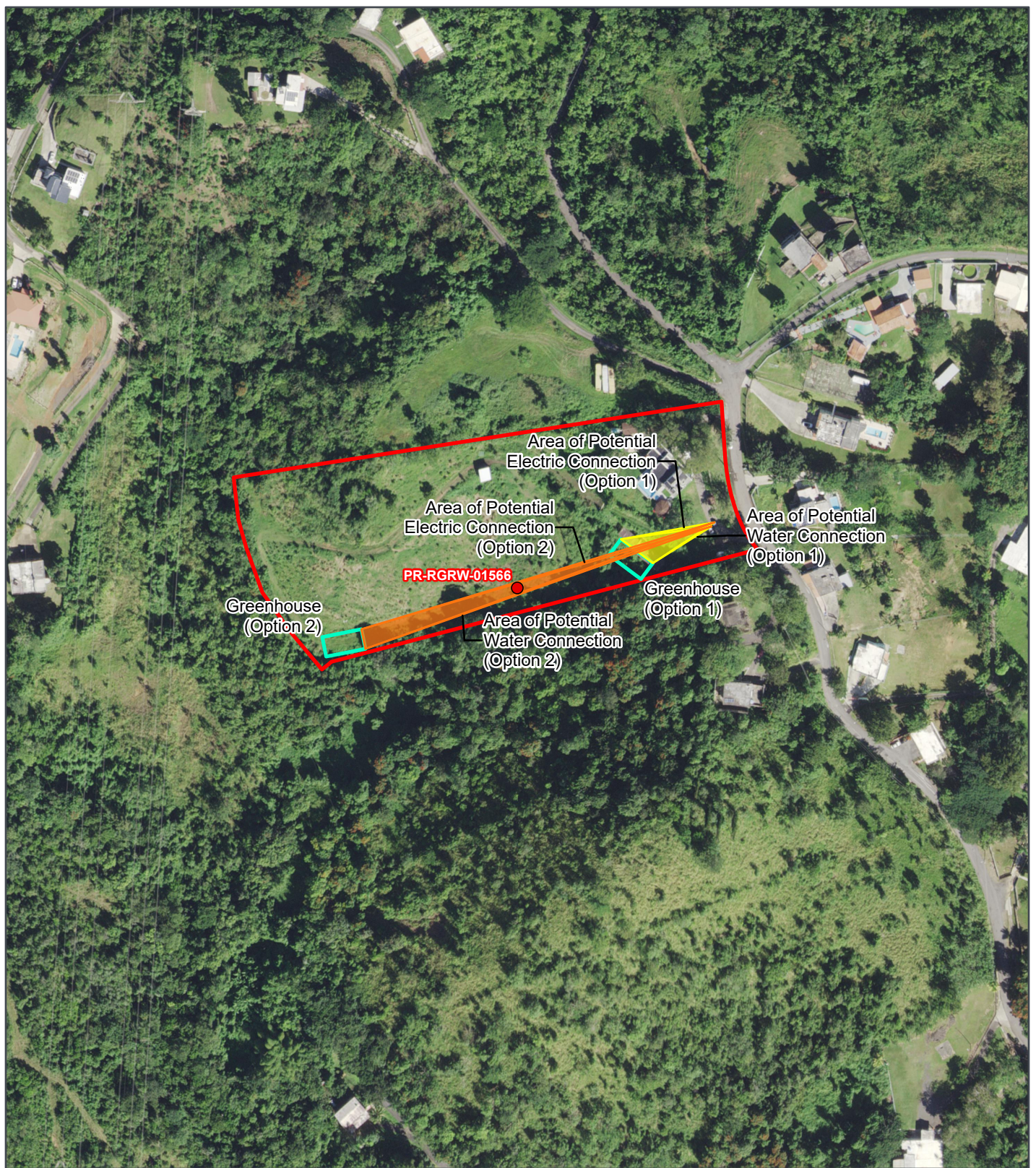


Figure 3
Wetlands Map

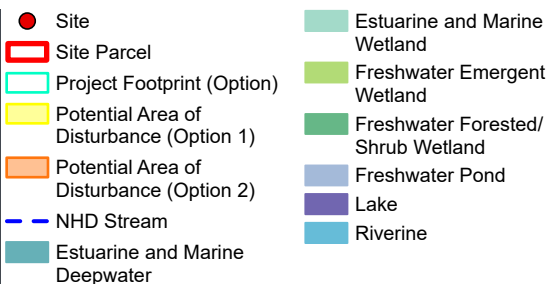


REGROW PROGRAM

Figure B 13-1: Wetlands Protection Map

Applicant ID: PR-RGRW-01566

SWCA
ENVIRONMENTAL CONSULTANTS



Carr #1 KM 56.7 interior Barrio Beatriz Sector Monticello Cidra, Puerto Rico 00739
Parcel ID: 300-021-250-03-001 Parcel Center: 66.122041°W 18.14755°N

Data Source: <https://apps.nationalmap.gov/downloader/#/https://www.fws.gov/program/national-wetlands-inventory/data-download>
Base Map: USA NAIP Imagery
Imagery Year: 2022
Updated: 5/3/2024
Layout: Wetlands Protection

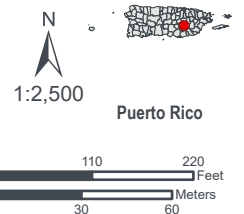


Figure 4
Critical Habitat Map



REGROW PROGRAM

Figure B 7-1: Critical Habitat Map

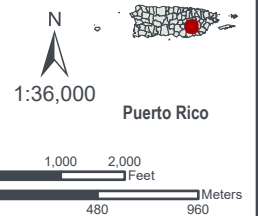
Applicant ID: PR-RGRW-01566



- Site
- Site Parcel
- Buffer (100-ft)
- Critical Habitat - Final
- National Wildlife Refuges

Carr #1 KM 56.7 interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739
Parcel ID: 300-021-250-03-001
Parcel Center:
66.095145°W 18.131184°N

Data Source: https://services.arcgis.com/QVENGdaPbd4LUkLV/arcgis/rest/services/USFWS_Critical_Habitat/Base_Map/ESRI/ArcGIS/Online,
accessed May 2024
Updated: 5/3/2024
Layout: Critical Habitat
Aprx: 72428_ReGrowTier2Maps




APPENDIX B

Photographic Log

Project #: PR-RGRW-01566	Photographer: Armando Ramos
Location Address: Carr #1 KM 56.7 interior Barrio Beatriz Sector Monticello Cidra , P.R. 00739	Coordinates: 18.148082, -66.121388

Photo #: 01	Date: 10/26/2023	
Photo Direction: Southwest		
Description: Overview of location to replace greenhouse.		

Photo #: 02	Date: 10/26/2023
Photo Direction: Southeast	
Description: Overview of location to replace greenhouse.	

A photograph showing a dense green forest on a hillside. In the foreground, there is a large, dark, curved object, possibly a piece of debris or a structure, partially covered by green foliage. The background shows a clear sky with some clouds and distant mountains.

Project #: PR-RGRW-01566	Photographer: Armando Ramos
Location Address: Carr #1 KM 56.7 interior Barrio Beatriz Sector Monticello Cidra , P.R. 00739	Coordinates: 18.148082, -66.121388

Photo #: 03	Date: 10/26/2023	
Photo Direction: South		
Description: Abandoned greenhouse. Preferred location for new greenhouse. Applicant would simply replace the old one.		

Photo #: 04	Date: 10/26/2023	
Photo Direction: South		
Description: Abandoned greenhouse. Applicant prefers to replace this one with new one since electric and water connection already exists.		

Project #: PR-RGRW-01566	Photographer: Armando Ramos
Location Address: Carr #1 KM 56.7 interior Barrio Beatriz Sector Monticello Cidra , P.R. 00739	Coordinates: 18.148082, -66.121388

Photo #: 05	Date: 10/26/2023	
Photo Direction: South		
Description: Abandoned greenhouse. Applicant prefers to replace this one with new one since electric and water connection already exists.		

Photo #: 06	Date: 10/26/2023	
Photo Direction: Southwest		
Description: Overview of second option for greenhouse 30x60ft. on flat area just beyond where white pipes can be seen planted vertically on the ground.		

Project #: PR-RGRW-01566	Photographer: Armando Ramos
Location Address: Carr #1 KM 56.7 interior Barrio Beatriz Sector Monticello Cidra , P.R. 00739	Coordinates: 18.148082, -66.121388

Photo #: 07	Date: 10/26/2023	
Photo Direction: Southeast		
Description: Northwest corner of second option for greenhouse 30x60ft.		

Photo #: 08	Date: 10/26/2023	
Photo Direction: Southwest		
Description: Northeast corner of location for second option for greenhouse 30x60ft.		

Project #: PR-RGRW-01566	Photographer: Armando Ramos
Location Address: Carr #1 KM 56.7 interior Barrio Beatriz Sector Monticello Cidra , P.R. 00739	Coordinates: 18.148082, -66.121388

Photo #: 09	Date: 10/26/2023	
Photo Direction: South		
Description: Southeast corner of second option of greenhouse 30x60ft. Will be a few feet to the south of picture location where the overgrown vegetation is.		

Photo #: 10	Date: 10/26/2023	
Photo Direction: Northwest		
Description: Southeast corner of site location for second option of greenhouse 30x60ft.		

Project #: PR-RGRW-01566	Photographer: Armando Ramos
Location Address: Carr #1 KM 56.7 interior Barrio Beatriz Sector Monticello Cidra , P.R. 00739	Coordinates: 18.148082, -66.121388


Photo #: 11	Date: 10/26/2023	
Photo Direction: Northeast		
Description: Southwest corner of second option for greenhouse 30x60ft.		

Photo #: 12	Date: 10/26/2023	
Photo Direction: North		
Description: Center point for location of second option for greenhouse 30x60ft.		


Project #: PR-RGRW-01566	Photographer: Armando Ramos
Location Address: Carr #1 KM 56.7 interior Barrio Beatriz Sector Monticello Cidra , P.R. 00739	Coordinates: 18.148082, -66.121388

Photo #: 13	Date: 10/26/2023
Photo Direction: East	
Description: Center point for location of second option for greenhouse 30x60ft.	

A photograph of a steep, overgrown hillside covered in dense green vegetation. The hillside is covered in various types of plants, including tall grasses and leafy shrubs. At the top of the hill, a small red roof is visible, partially obscured by trees. The sky is clear and blue. The foreground is filled with thick, green foliage, including large-leafed plants and vines. The overall scene is a lush, green landscape.

Photo #: 14	Date: 10/26/2023	
Photo Direction: South		
Description: Center point for location of second option for greenhouse 30x60ft.		

Project #: PR-RGRW-01566	Photographer: Armando Ramos
Location Address: Carr #1 KM 56.7 interior Barrio Beatriz Sector Monticello Cidra , P.R. 00739	Coordinates: 18.148082, -66.121388

Photo #: 15	Date: 10/26/2023	
Photo Direction: West		
Description: Center point for location of second option for greenhouse 30x60ft.		

APPENDIX C

USFWS Information for Planning and Consultation



United States Department of the Interior

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



In Reply Refer To:
Project Code: 2024-0018680
Project Name: PR-RGRW-01566

November 21, 2023

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

To Whom It May Concern:

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

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

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

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

to caribbean_es@fws.gov. To obtain guidance for completing this process and the minimum requirements for project packages, please visit:

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

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

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

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

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

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

This species list is provided by:

Caribbean Ecological Services Field Office

caribbean_es@fws.gov

Post Office Box 491

Boqueron, PR 00622-0491

(786) 244-0081

Attachment(s):

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

OFFICIAL SPECIES LIST

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

This species list is provided by:

Caribbean Ecological Services Field Office

Post Office Box 491

Boqueron, PR 00622-0491

(787) 834-1600

PROJECT SUMMARY

Project Code: 2024-0018680
Project Name: PR-RGRW-01566
Project Type: Disaster-related Grants
Project Description: Construction of a greenhouse
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.14751615,-66.12231239056158,14z>



Counties: Cidra County, Puerto Rico

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

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

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

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

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

BIRDS

NAME	STATUS
Puerto Rican Plain Pigeon <i>Columba inornata wetmorei</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7955	Endangered

REPTILES

NAME	STATUS
Puerto Rican Boa <i>Chilabothrus inornatus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6628 General project design guidelines: https://ipac.ecosphere.fws.gov/project/U4LTATSK5VBLFHMLKMHVXD7VEI/documents/generated/7140.pdf	Endangered

CRITICAL HABITATS

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

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

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

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

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

BALD & GOLDEN EAGLES

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

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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

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

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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

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

WETLANDS

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

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

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

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: SWCA

Name: Kaitie Wilms

Address: 911 Hammond Drive

City: North Augusta

State: SC

Zip: 29841

Email: kaitie.wilms@swca.com

Phone: 8436930711

APPENDIX D

Project Design Guidelines

General Project Design Guidelines (1 Species)

Generated November 21, 2023 06:37 PM UTC, IPaC v6.100.0-rc4

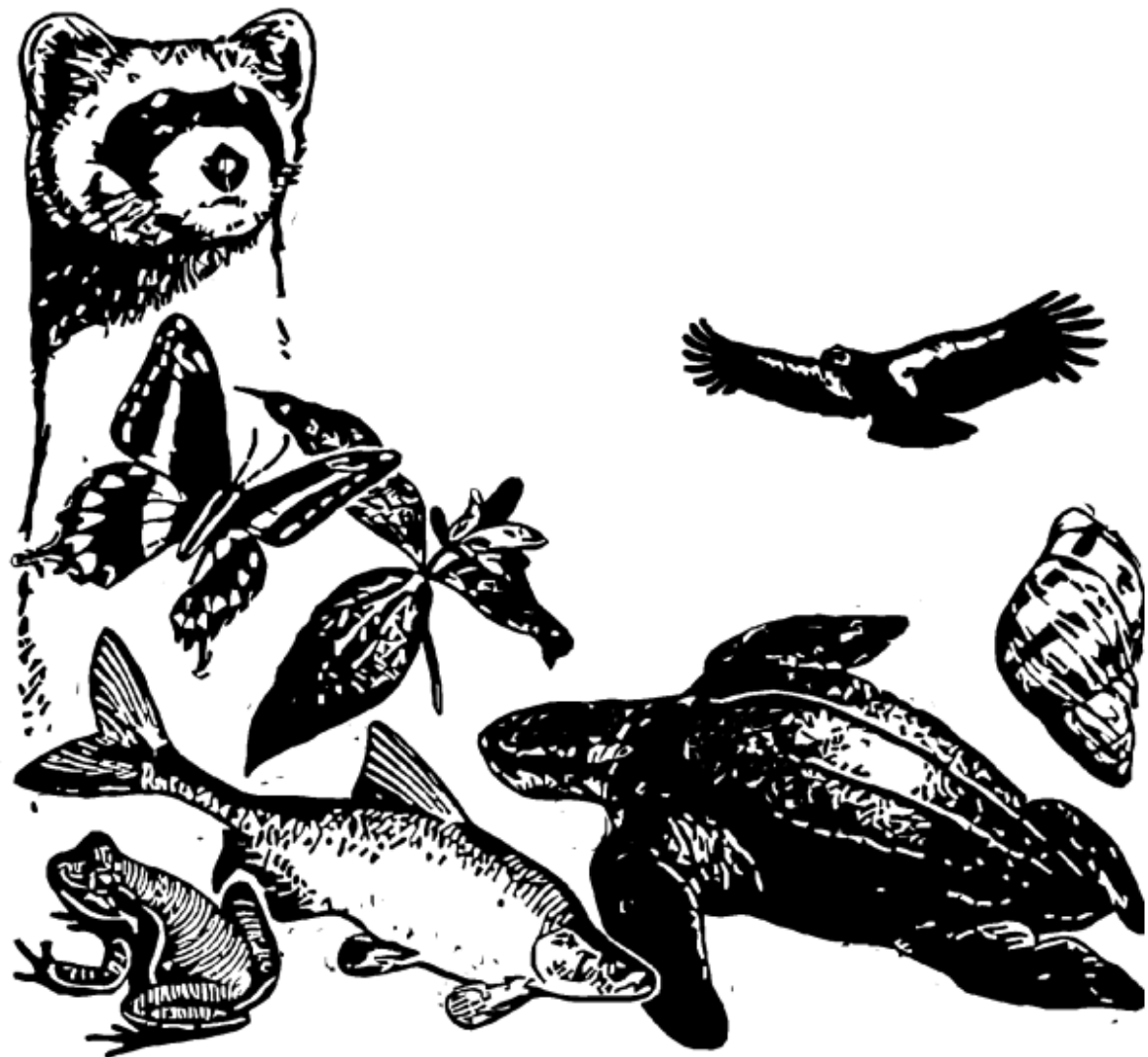


Table of Contents

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

Species Document Availability

Species with general design guidelines

Puerto Rican Boa *Chilabothrus inornatus*

Species without general design guidelines available

Puerto Rican Plain Pigeon *Columba inornata wetmorei*

General Project Design Guidelines - Puerto Rican Plain Pigeon and 1 more species

Published by Caribbean Ecological Services Field Office - Publication Date: October 12, 2023 for the following species included in your project

Puerto Rican Plain Pigeon *Columba inornata wetmorei*

Puerto Rican Boa *Chilabothrus inornatus*



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 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 Puerto Rican 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 like roadsides or houses, especially if near their habitat in rural areas. This 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 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. The PR boa is considered more active at night. Thus, in order to maximize its detection, the species should be searched at nights prior to habitat disturbance.
5. Once the area has been searched for PR boas, vegetation should first be cleared by hand to the maximum extent possible. Vegetation should be cut about one meter above ground prior to the use of heavy machinery for land clearing. Cutting vegetation by hand will allow boas present on site to move away on their own to adjacent available habitat. Any stone walls or naturally occurring rock piles must be carefully dismantled by hand as these are refuges for the snake. This will allow any boas present to vacate the site without injury.
6. 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.

7. If a PR boa is found within any of the working or construction areas, activities should stop at that area and information recorded (see #6). **Do not capture the boa.** If boas need to be moved out of harm's way, designated personnel shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #s: (787) 724-5700, (787) 230-5550, (787) 771-1124). If immediate relocation is not an option, project-related activities at this 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.
8. If a PR boa is captured by the PRDNER, record the name of the PRDNER staff and information on where the PR boa will be taken. This information should be reported to the Service.
9. 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 #7). If not possible, the animal should be left alone until it leaves the vehicle on its own.
10. 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.
11. If a dead PR boa is found, immediately cease all work in that area and record the information accordingly (see #6). 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 that 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.
12. 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 Coordinator
 - Email: jose_cruz-burgos@fws.gov
 - Office phone (305) 304-1386
- Jan Zegarra, Fish and Wildlife Biologist
 - Email: jan_zegarra@fws.gov
 - Office phone (786) 933-1451

Amended Programmatic Biological Opinion (Version 1.1)

Recurrent development, infrastructure, and maintenance projects under the jurisdiction of the Federal Emergency Management Agency (FEMA), Federal Transportation Authority (FTA), Federal Highway Administration (FHA), U.S. Department of Housing and Urban Development (HUDS), USDA Rural Development (RD), U.S. Army Corps of Engineers (USACE), Environmental Protection Agency (EPA), USDA Natural Resources Conservation (NRCS) and/or Federal Communication Commission (FCC) in Puerto Rico and the U.S. Virgin Islands

FWS Log #: MM-173



Prepared by:

U.S. Fish and Wildlife Service
Caribbean Ecological Services Field Office
PO Box 491
Boquerón, Puerto Rico 00622

EDWIN MUNIZ

Digitally signed by EDWIN
MUNIZ
Date: 2023.07.25 08:29:03 -0400'

Edwin E. Muñoz, Field Supervisor

Date

CONTENTS

1. INTRODUCTION	5
2. PROPOSED ACTIONS.....	7
2.1. Construction work	9
2.2. Demolition.....	9
2.3. Staging areas	9
2.4. Vegetation and debris management.....	9
2.5. Other Activities Caused by the Actions:.....	10
2.6. Action Area.....	10
3. SOURCES OF CUMULATIVE EFFECTS	11
4. PUERTO RICAN BOA AND VIRGIN ISLANDS TREE BOA	11
4.1. Status of PR boa and VI tree boa:.....	11
4.1.1. Species Description	11
4.1.2. Life History	12
4.1.3. Distribution and Abundance	13
4.1.4. Conservation Needs and Threats	13
4.2. Environmental Baseline for VI and PR boas	14
4.2.1. Action Area Numbers, Reproduction, and Distribution.....	14
4.2.2. Action Area Conservation Needs and Threats.....	15
4.3. Effects of the Actions on the PR and VI boas.....	15
4.3.1. Construction Work	15
4.3.2. Demolition.....	16
4.3.3. Staging areas	16
4.3.4. Vegetation and debris management.....	16
4.3.5. Other Activities Caused by the Action	17
4.3.6. Summary	17
4.4. Cumulative Effects on the VI and PR boa	17
4.5. Conclusion for VI and PR boa	17
5. CRITICAL HABITAT FOR VI and PR BOA	18
6. INCIDENTAL TAKE STATEMENT.....	19
6.1. Amount or Extent of Take	20
6.2. Effect of take	20
6.3. Reasonable and Prudent Measures.....	21
6.4. Terms and Conditions.....	21
6.5. Monitoring and Reporting Requirements.....	24
6.5.1. PR and VI Boa	25
7. CONSERVATION RECOMMENDATIONS	25
8. REINITIATION NOTICE.....	25
9. LITERATURE CITED.....	26

EXECUTIVE SUMMARY

This Endangered Species Act (ESA) amended Programmatic Biological Opinion (PBO) of the U.S. Fish and Wildlife Service (Service) addresses urban and rural developments, as well as reconstruction and maintenance projects in Puerto Rico and U.S. Virgin Islands (USVI) funded or authorized by the Federal. These Actions are of Federal Nexus under the jurisdiction of the Federal Emergency Management Agency (FEMA), Federal Transportation Authority (FTA), Federal Highway Administration (FHA), U.S. Department of Housing and Urban Development (HUD), USDA Rural Development (RD), USDA Natural Resources Conservation Service (NRCS), U.S. Army Corps of Engineers (USACE), Environmental Protection Agency (EPA) and other Federal agencies. The Actions addressed in this PBO occur recurrently. The above agencies have previously consulted with the Service through Blanket Letters or informal consultations for most projects. However, after coordination with our Regional Office (RO), we are required to exempt the take resulting from the capture and relocation of the Puerto Rican boa (PR boa) and the Virgin Islands tree boa (VI boa) through a Biological Opinion as part of the formal consultation under Section 7 of the Act. Moreover, FEMA determined that the Actions listed below are likely to adversely affect the Puerto Rican boa and the Virgin Islands tree boa. Thus, we developed this PBO to cover all actions, including FEMA's and the other Federal agencies that have previously consulted or will consult in the future with the Service. Projects from any Federal agency that meet the conditions specified below, or that the Service determines will have similar effects on the Puerto Rican boa and Virgin Islands tree boa, may be appended to this programmatic consultation. This PBO concludes that the Actions are not likely to jeopardize the continued existence of these species. Neither the Puerto Rican boa nor the Virgin Islands tree boa have designated critical habitat. This conclusion fulfills the requirements applicable to the Actions for completing consultation under §7(a)(2) of the Endangered Species Act (ESA) of 1973, as amended, with respect to these species. Any Action not covered by this PBO that may affect the PR boa and the VI boa will need consultation with the Service on a case-by-case basis. This PBO does not apply to any other federally listed species or designated critical habitat, therefore, Federal agencies are required to consult with the Service for proposed projects that may affect other federally listed species.

The PBO includes an Incidental Take Statement (ITS; Section 6) that requires the Federal Agency and the Recipient to implement reasonable and prudent measures (Section 6.3) that the Service considers necessary or appropriate to minimize the impacts of anticipated taking on the listed species. Incidental taking of listed species that is in compliance with the terms and conditions (Section 6.4) of this statement is exempted from the prohibitions against taking under the ESA. This PBO (version 1.1) includes amended terms and conditions (Section 6.4, T&C 1) and monitoring and reporting requirements (Section 6.5).

In the Conservation Recommendations section, the PBO outlines voluntary actions that are relevant to the conservation of the listed species addressed in this PBO.

Reinitiating consultation is required if the Federal Agency and the Recipient retains discretionary involvement or control over the Action (or is authorized by law) when:

- (a) the amount or extent of incidental take is exceeded;

- (b) new information reveals that the Actions may affect listed species or designated critical habitat in a manner or to an extent not considered in this PBO;
- (c) the Actions are modified in a manner that causes effects to listed species or designated critical habitat not considered in this PBO; or
- (d) a new species is listed or critical habitat designated that the Actions may affect.

The Service will re-evaluate this programmatic consultation as required, to ensure that its continued application will not result in unacceptable effects on the Puerto Rican boa and the Virgin Islands tree boa.

CONSULTATION HISTORY

This section lists key events and correspondence during the course of this consultation with FEMA, as well as previous consultations with other Federal agencies. A complete administrative record of this consultation is on file in the Caribbean Ecological Services Field Office (CESFO).

Consultation with FEMA:

- 2017-09-05 Hurricane Irma struck the USVI and Puerto Rico.
- 2017-09-07 FEMA declared the USVI as an active disaster zone due to the strike of Hurricane Irma.
- 2017-09-10 FEMA declared Puerto Rico as an active disaster zone due to the strike of Hurricane Irma.
- 2017-09-20 Hurricane María struck the USVI and Puerto Rico.
- 2017-09-20 FEMA declared Puerto Rico and the USVI as an active disaster zone due to the strike of Hurricane María.
- 2017-11-06 The Service provided a technical assistance letter with BMPs as per emergency ESA consultation process including BMPs for recovery efforts of the electric systems in Puerto Rico to minimize and avoid impacts to listed species. The consultation process covered the emergency work to be performed by PREPA, and the USACE under Mission Assignment with FEMA.
- 2018-02-18 FEMA requests clarification of the BMPs and inclusion of additional work.
- 2018-03-15 The Service consulted and provide BMPs for the power lines in Rio Abajo Forest.
- 2018-03-18 The Service issued an addendum to the BMPs to include restoration action in addition to emergency actions.

- 2018-02-28 As part of a programmatic consultation under section 7 of the ESA with the Service to address impacts caused by natural disasters, FEMA developed a Matrix that included all their actions and the effects of those actions on federally listed species in Puerto Rico and the USVI. The purpose of the Matrix is to expedite the consultation process between FEMA and the Service given the large number of projects for the recovery of both Puerto Rico and the USVI as part of the disaster declarations due Hurricanes Irma and María.
- 2019-06-25 FEMA sent a letter to the Service requesting concurrence on the informal programmatic section 7 consultation using the Matrix.
- 2019-07-19 The Service sent a letter to FEMA concurring with the programmatic consultation and the use of the Matrix for effects determinations.
- 2020-05-08 The Service sent an email to FEMA proposing changes to the Matrix as part of the annual reporting requirements stipulated in the 2019-07-19 concurrence letter.
- 2020-07-22 The Service requested guidance to the Service's RO in Atlanta on the implementation of conservation measures developed during the programmatic consultation for the PR boa and VI boa that would result in a not likely to adversely affect determination for both species.
- 2020-10-07 The Service sent an email to FEMA informing that based on guidance from the RO, the conservation measures for the PR and VI boas, required to be modified since the capture and relocation of these species constitute take (as defined by the ESA) needed to be exempted by a Biological Opinion (BO) through a formal consultation under section 7 of the ESA.
- 2020-10-07 FEMA sent an email to the Service agreeing with the modifications and supporting the writing of this BO.
- 2023-07-24 The Service amended the first version of this Programmatic BO dated June 23, 2022, by revising the Terms and Conditions 1 (T&C 1) under Section 6.4 and Monitoring and Reporting Requirements under Section 6.5.1.

Previous Consultations with Other Federal Agencies:

- 2013-01-14 The Service issued a Blanket Clearance Letter for Federally sponsored projects to the HUD with the purpose of facilitate the evaluation of projects located on urbanized areas, vacant lots covered by grassland and/or disturbed scrubs in the U.S. Caribbean.
- 2013-01-14 The Service issued a Blanket Clearance Letter for Federally sponsored projects to the FHA with the purpose of facilitate the evaluation of projects located on

urbanized areas, vacant lots covered by grassland and/or disturbed scrubs in the U.S. Caribbean.

- 2014-07-24 The Service issued a Blanket Clearance Letter for Federally sponsored projects to the FEMA with the purpose of expedite the consultation process on Hazard Mitigation and Public Assistance Grant for project activities that typically result in no adverse effects to federally listed species in the U.S. Caribbean.
- 2018-02-09 The Service concurred with NRCS biological assessment consultation for the recovery of agricultural lands impacted by Hurricanes Irma and María.

BIOLOGICAL OPINION

1. INTRODUCTION

A biological opinion (BO) is the document that states the findings of the U.S. Fish and Wildlife Service (Service) required under section 7 of the Endangered Species Act of 1973, as amended (ESA), as to whether a Federal action is likely to:

- jeopardize the continued existence of species listed as endangered or threatened; or
- result in the destruction or adverse modification of designated critical habitat.

As explained in the Consultation History above, a section 7 consultation with FEMA was the trigger to develop this BO. However, given there are other Federal agencies working on actions that also are likely to result in take of both PR and VI boas in the form of capture and relocation, we decided to develop a Programmatic Biological Opinion (PBO). A PBO addresses multiple actions on a program and/or regional basis, thus achieving efficiencies in the process. The Federal actions addressed in this PBO are urban and rural development, as well as reconstruction and maintenance projects in Puerto Rico and USVI funded or authorized by the Federal Emergency Management Agency (FEMA), Federal Transportation Authority (FTA), Federal Highway Administration (FHA), U.S. Department of Housing and Urban Development (HUD), USDA Rural Development (RD), USDA Natural Resources Conservation Service (NRCS), U.S. Army Corps of Engineers (USACE), Environmental Protection Agency (EPA) and other Federal agencies, hereafter the Action Agency. For the purposes of this PBO, all individual projects will be collectively referred to as the Actions. This PBO considers the effects of the Actions on the endangered Puerto Rican boa (listed as *Epicrates inornatus*, but currently recognized as *Chilabothrus inornatus*; PR boa) and the endangered Virgin Islands tree boa (listed as *Epicrates monensis granti*, but currently recognized as *Chilabothrus granti*; VI boa). Neither species has designated critical habitat, thus will not be addressed in this PBO. Information in this PBO regarding the PR boa and the VI boa has been summarized from the final Species Status Assessment (SSA) for the PR boa and the final SSA for the VI boa (Service 2018, 2021).

BO Analytical Framework

A BO that concludes a proposed Federal action is *not* likely to *jeopardize the continued existence* of listed species and is *not* likely to result in the *destruction or adverse modification* of critical habitat fulfills the Federal agency's responsibilities under §7(a)(2) of the ESA.

"Jeopardize the continued existence means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species" (50 CFR §402.02).

"Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species" (50 CFR §402.02).

The Service determines in a BO whether we expect an action to satisfy these definitions using the best available relevant data in the following analytical framework (see 50 CFR §402.02 for the regulatory definitions of *action*, *action area*, *environmental baseline*, *effects of the action*, and *cumulative effects*).

- a. *Proposed Action*. Review the proposed Federal action and describe the environmental changes its implementation would cause, which defines the action area.
- b. *Status*. Review and describe the current range-wide status of the species or critical habitat.
- c. *Environmental Baseline*. Describe the condition of the species or critical habitat in the action area, without the consequences to the listed species caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early consultation, and the impacts of State or private actions which are contemporaneous with the consultation.
- d. *Effects of the Action*. Predict all consequences to species or critical habitat caused by the proposed action, including the consequences of other activities caused by the proposed action, which are reasonably certain to occur. Activities caused by the proposed action would not occur but for the proposed action. Effects of the action may occur later in time and may include consequences that occur outside the action area.
- e. *Cumulative Effects*. Predict all consequences to listed species or critical habitat caused by future non-Federal activities that are reasonably certain to occur within the action area.
- f. *Conclusion*. Add the effects of the action and cumulative effects to the environmental baseline, and in light of the status of the species, formulate the Service's opinion as to whether the action is likely to jeopardize species or adversely modify critical habitat.

2. PROPOSED ACTIONS

On an annual basis, the number of developments, infrastructure and maintenance projects funded or authorized by FEMA, HUD, FTA, FHA, RD, USACE, EPA, NRCS and other Federal agencies will largely be influenced by funding availability and needs. Some of the actions occur on a recurring basis and some due to an emergency response after a disaster. In general, the Actions reviewed under this PBO entails the maintenance, repair, and/or improvement of already existent infrastructure and/or that falls within existing footprint or urbanized areas, vacant lots covered by grassland and/or shrub vegetation, among others. However, there might be Actions that entail new constructions, expansions, or extension beyond existing footprints on already disturbed areas, within existing rights of ways (ROWS) or in undisturbed forested habitat. Actions that fall under this PBO are projects that may adversely affect the PR boa and the VI boa, either by take of individuals and/or temporary disturbance or permanent loss of habitat. The following Actions resulting from projects that meet the descriptions specified below are covered by this PBO. Any other project that the U.S. Fish and Service determines will have similar effects on the PR boa and the VI boa, may be appended to this programmatic consultation.

Any Action not covered by this PBO that may affect the PR boa and the VI boa will need consultation with the Service on a case-by-case basis. This PBO does not apply to any other federally listed species or designated critical habitat not specifically included in this PBO. Therefore, Federal agencies are required to consult with the Service for proposed projects that may affect other federally listed species.

A. Development projects:

- a. Residential;
 - i. Rebuilding, demolition and/or replacement of houses or buildings (public and private).
 - ii. Elevation of residential homes and associated structures and utilities occurring on disturbed and regularly maintained property, including the staging of equipment.
- b. Commercial;
 - i. Demolition and/or replacement of commercial building to restore the facility to its pre-disaster condition.
- c. Parks and recreational areas;
 - i. Repair and/or replacement of recreational structures (bleachers, playground equipment, pools, tennis courts, basketball courts, gazebos, baseball diamonds, gymnasium equipment, bath houses, kiosks, picnic tables, etc.).
- d. New construction work which expands the footprint of an existing structure and occurs entirely on disturbed, regularly maintained, upland, including the staging of equipment.

B. Infrastructure projects:

- a. Utility and Telecommunication: new and existing towers and associated infrastructure (e.g., facilities, roads)

- i. Excavation, repair and/or replacement of utility lines and associated appurtenances.
 - ii. Maintenance of access roads to utility facilities and associated structures, and telecommunication towers.
 - iii. Construction of telecommunication facilities within disturbed areas.
- b. New road construction and maintenance and associated structures within ROWs;
 - i. Repair, improvement, replacement of roads, bridges and highways.
 - ii. Construction of gutters and sidewalks along existing roads.
 - iii. Rehabilitation of facilities of an already established Public Transportation System (signs, sidewalks and ramps, bus stops and existing routes).
 - iv. Expansion of Public Transportation facilities.
 - v. New construction of facilities for Public Transportation System.
 - vi. In-kind replacement of eroded sections of non-beach fill including soil, gravel, crushed stone, gravel, soft armoring with biomaterials.
 - vii. Repair and/or replacement of a hardened roadway or pedestrian walkway and associated structures (retaining walls, guard rails, curbs, elevation, road signs, lampposts, traffic signals, etc.).
- c. Repair and/or replace coastal structures;
 - i. Boardwalks.
 - ii. Repair or replacement of coastal wetlands.
- d. Repair and/or replacement of a fence.
- e. Repair and/or replacement water structures;
 - i. Storm water management facility
 - ii. Engineered shoreline and/or bank stabilization structure.
 - iii. Bridge, culvert or storm water outfall.
 - iv. Engineered drainage channel.
- f. Installation of a permanent, back-up emergency generator and/or quick connect switch, and all associated structures (e.g., concrete pad, electrical connections, etc.).

C. Maintenance projects

- a. Redistribution/grading of beach material from adjacent sources
- b. Dredging/clearing of an engineered drainage channel which does not alter the channel's pre-disaster width, depth, grade, or course, provided that bank vegetation is kept intact.
- c. Clearing and snagging with the intent to reduce risk for further flood damage by removing storm mediated vegetative debris and sediments from streams channels to restore flow capacity.
- d. Streambank stabilization, clearing and snagging and/or critical area planting with the intent of restoration flow capacity of artificial and natural waterways to mitigate flood risk.
- e. Debris removal on natural or improved waterways.
- f. Woody and structural debris removal on agricultural lands.
- g. Hydroseeding/mulching over recently placed fill.
- h. Post hurricane debris removal.

The main activities within the proposed Actions are listed below. These types of activities pose danger to the boas as they are secretive animals, are slow movers, and typically hide under debris piles and dense vegetation. However, both PR boas and VI boas could be safely removed out of harm's way and relocated into a safe location. Thus, this PBO covers the capture and relocation of PR and VI boas to remove them from harm's way when engaging on any of the actions described below. For all activities associated to the Actions, the Service has added terms and conditions to minimize any harm to boa individuals (See terms and conditions below.). Therefore, engaging on any of the following actions requires following Terms and Conditions stated in section 6.4 of this PBO.

2.1. Construction work:

Construction activities related to rebuilding, repairing, replacing, or installations will be conducted on a needed basis. Many of the construction activities do not extend outside current existent footprint, or outside already disturbed areas. Nevertheless, some actions may require extension or expansion from existing footprint, and therefore, areas surrounding the original project footprint may be negatively impacted, such as forested areas. The preparation of this areas for construction may require the use of heavy machinery (see clearing area below). Additionally, heavy machinery might be use for transportation of construction materials and other construction activities, which could result on the impact to boa individuals. Heavy machinery also needs to be stored during not working hours (See staging areas below).

2.2. Demolition:

Demolition associated to infrastructure that is no longer functioning or has been damaged, will be conducted based on needs. This activity does not extend outside existent footprint. Boas may use infrastructures as shelters and might be injured or killed during demolition activities.

2.3. Staging areas:

Staging areas are places where equipment, a temporary field office, and/or materials are temporarily stored or located in preparation for the construction, repair, demolition or maintenance work. These areas are typically cleared and located within or adjacent to the Action site. Equipment left on staging areas overnight might function as shelters for boas, and individuals would likely be injured or killed the following day as a result of equipment operation.

2.4. Vegetation and debris management:

Clearing, access road maintenance and other activities that entails removing above-ground vegetation or debris, generally takes place within pre-marked areas necessary for the proposed Action. However, there might be Actions that might entail expansions beyond existing footprints and might require clearing of forested vegetation, of already previously disturbed land, for which the use of heavy machinery might be needed for site preparation and/or debris removal. Access road maintenance when done by hand does not require heavy machinery, but it

does impact habitat by removing vegetation. Boa individuals present in the area might be injured or killed during vegetation and debris management using heavy machinery.

2.5. Other Activities Caused by the Actions:

A BO evaluates all consequences to species or critical habitat caused by the proposed Federal action, including the consequences of other activities caused by the proposed action, that are reasonably certain to occur (see definition of “effects of the action” at 50 CFR §402.02). Additional regulations at 50 CFR §402.17(a) identify factors to consider when determining whether activities caused by the proposed action (but not part of the proposed action) are reasonably certain to occur. These factors include, but are not limited to:

- (1) past experiences with activities that have resulted from actions that are similar in scope, nature, and magnitude to the proposed action;
- (2) existing plans for the activity; and
- (3) any remaining economic, administrative, and legal requirements necessary for the activity to go forward.

Although the species’ natural habitat is not expected to be impacted, urban expansion into rural, forested habitat may increase human-boia interactions, which can negatively affect individual boas. Human-boia conflicts, such as roads, persecution by humans, and predation by domestic and invasive species are considered limiting factors for the PR boa and VI boa, particularly if adjacent to forested suitable habitat. Actions that occur within purely and entirely developed areas that are not adjacent or within forested suitable habitat, are not expected to affect the species.

2.6. Action Area

The action area (AA) is defined as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action” (50 CFR §402.02). Delineating the AA area is necessary for the Federal action agency to obtain a list of species and critical habitats that may occur in that area, which necessarily precedes any subsequent analyses of the effects of the action to particular species or critical habitats.

Since this PBO collectively evaluates a large number of individual projects, the AA includes all projects related to the Actions throughout all of Puerto Rico and the U.S. Virgin Islands, and is hereafter referred to as the Programmatic AA.

It is practical to treat the AA for a proposed Federal action as the spatial extent of its direct and indirect “modifications to the land, water, or air” (a key phrase from the definition of “action” at 50 CFR §402.02). Indirect modifications include those caused by other activities that would not occur but for the action under consultation. The AA determines any overlap with critical habitat, but none has been designated for this species. For the PR boa and VI boa, the AA establishes the

bounds for an analysis of individuals' exposure to action-caused changes, but the subsequent consequences of such exposure to those individuals are not necessarily limited to the AA.

3. SOURCES OF CUMULATIVE EFFECTS

A BO must predict the consequences to species caused by future non-Federal activities within the AA, *i.e.*, cumulative effects. "Cumulative effects are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation" (50 CFR §402.02). Additional regulations at 50 CFR §402.17(a) identify factors to consider when determining whether activities are reasonably certain to occur. These factors include, but are not limited to, existing plans for the activity; and any remaining economic, administrative, and legal requirements necessary for the activity to go forward.

Since this programmatic biological opinion considers all Puerto Rico and U.S. Virgin Islands as the AA, non-Federal activities are expected to occur within the range of various Federally protected species, including the PR and VI boa, and will contribute to cumulative effects to the species. Species with small population sizes, endemic locations, or slow reproductive rates will generally be more susceptible to cumulative effects. Cumulative effects will be further analyzed at the local landscape scale, as appropriate, during a step-down ESA Section 7(a)(2) consultation, when site- and species-specific information is reviewed by local Service biologists familiar with the project area and the biology of local species.

4. PUERTO RICAN BOA AND VIRGIN ISLANDS TREE BOA

This section provides the Service's biological opinion of the Actions for the PR boa and VI boa.

4.1. Status of PR boa and VI tree boa:

This section summarizes best available information about the biology and condition of the endangered PR boa and VI boa throughout their range, that are relevant to formulating an opinion about the Actions. The Service published its decision to list the PR boa as endangered in 1970 (35 FR 16047). For the VI boa, the Service published its decision to list the species as endangered in 1970 (35 FR 16047), and again under a different taxonomic classification in 1979 (44 FR 70677). A Species Status Assessment (SSA) was recently completed for the VI boa and compiles the most recent information available for this species (available online at <https://ecos.fws.gov/ecp/species/3247>) (Service 2018). Similarly, an SSA is being completed for the PR boa and compiles the most recent information for the species. The following information in the subsections below was obtained from those SSAs.

4.1.1. Species Description

The PR boa is a large (on average 3 to 6 feet (ft)), semi-arboreal and nonvenomous snake with color variations from tan to very dark brown and some black body markings. Dorsal coloration of the PR boas is variable and has been described from tan to reddish brown to very dark brown, with several dark bars or spots along its body, and juveniles may have reddish color (Rivero

1998). Body markings are usually more pronounced in neonates and juveniles, but those markings tend to fade with age (Joglar 2005). The ventral scales also vary from gray to dark brown (Rivero 1998).

The VI boa is a medium length (on average 2-3 ft), slender, nonvenomous snake. Adults are gray-brown with dark brown blotches that are partially edged with black, and may feature a blue-purple iridescence on their dorsal surface; the ventral surface is creamy white or yellowish white. Neonates on the other hand have an almost greyish-white body color with black blotches. The head is arrow-shaped, with a blunt nose and silvery eyes.

4.1.2. Life History

The actual life span of the PR boa in the wild is unknown, but there are captive records over 20 years and suggestions that they might live between 20 and 30 years (Rivero 1998). Courtship and mating for the PR boa is considered seasonal and reproduction in the wild appears to be mostly biennial. Although there can be some variability on when the PR boa reproductive activity starts, research suggests that courtship for most *Chilabothrus* (also *Epicrates*) starts in February (Tolson 1994) and that mating for most PR boas is reported to occur at the beginning of the wet season, from late April to May (Tolson and Henderson 1993). Young PR boas are born after a gestation period of approximately 5-6 months (Huff 1978, Rivero 1998). Puente-Rolón (2012) reported PR boa courtship occurring between March and May, while most parturition occurs from August to November. Thus, the reproductive cycle of the PR boa is synchronized with the seasonal patterns of precipitation and temperature in Puerto Rico (Huff 1978, Tolson and Henderson 1993, Puente-Rolón 2012).

For the VI boa, much of what is known about its life history comes from studies in captivity. Life spans in captivity often exceed 20 years, and can exceed 30 years, but typical life spans in the wild are not known. Females breed biennially, but studies have suggested that annual breeding may occur in some conditions. Courtship behaviors and copulation occur from February through May, and interaction with conspecifics of the opposite sex appears to be necessary for reproductive cycling. The gestation period, observed from a single known copulation between two individuals, is about 132 days (Tolson 1989). VI boas give birth to live young from late August-October to litters of 2-10 young, and litter size increases with female body size.

Both VI and PR boas are considered mostly nocturnal but can also be active during the day. The two species forage, bask, and disperse using trees but use terrestrial refugia as well. The VI boa forages at night by gliding slowly along small branches in search of sleeping lizards. While PR boa uses both ambush and active foraging modes. The primary prey for the VI boa is Anole lizards (*Anolis* sp.) but can also consume other prey such as small birds, green iguana hatchlings and mice and rats. For PR boa adults, the main food source are rats, but may include other prey such as bats, lizards, birds (including domestic fowl), and frogs.

4.1.3. Distribution and Abundance

The PR boa is endemic to Puerto Rico, where it has been reported in all the 78 municipalities. However, we do not know the specific details of these accounts or if they represent isolated occurrences in some municipalities. Despite several anecdotic reports of large snakes in Vieques Island, there is surprisingly only one confirmed PR boa sighting within the west side of the Vieques National Wildlife Refuge from 2010 (Barandiaran 2014, Service, pers. comm.). Reynolds and Henderson (2018) do suggest the species was likely extirpated from Vieques, but do not provide further explanation. There is also only one confirmed PR boa sighting from Culebra Island in 2013, but genetic analysis suggests it may have been introduced by humans from Puerto Rico (Reynolds and Puente-Rolón 2014), which could have been the same case for the Vieques sighting. Based on the available information, it is unlikely that there is a PR boa population in either Vieques or Culebra. The PR boa neither occur in any other offshore islands such as Mona, Monito or Desecheo Islands, etc.

In general, the PR boa is considered more abundant now than at the time of listing (1970) and more abundant in the karst region of northern Puerto Rico, and less abundant in the dry southern region of the Island (Rivero 1998). Available density estimates for the PR boa range from 1.24 to 5.6 boas/ha (Mulero-Oliveras 2019, Ríos-López and Aide 2007, Tolson 1997). A recent population model for PR boa suggests a current island-wide estimated population size of more than 30,000 PR boas (Tucker et. al 2020).

The VI boa is endemic to Puerto Rico and the Virgin Islands (U.S. and British). Presently, the species is known to occur on 6 islands in Puerto Rico and USVI: the eastern Puerto Rican islands of Cayo Diablo, Culebra, and Cayo Ratones (introduced); Río Grande on the Puerto Rican mainland; and St. Thomas and an offshore cay in USVI (introduced). The species is also known or thought to occur, either presently or historically, on Tortola Island, Jost Van Dyke, Guana Island, Necker Cay, Great Camanoe, and Virgin Gorda of the British Virgin Islands, but data and confirmed observations are severely limited.

In St. Thomas, the VI boa seems to be restricted to the extreme eastern end where the climate is drier and hotter than other regions of the island. In 1991, a conservative estimate of 300-400 VI boas in St. Thomas was suggested, all within rapidly dwindling habitat (Tolson 1991). In 2009, the abundance of the species in its range within the US jurisdiction was estimated to be at approximately 1,300 - 1,500 boas (Service 2009). A more recent estimate of fewer than 100 VI boas in St. Thomas was made using genetic analysis (Reynolds et al. 2015). However, these population estimates are sporadic, limited, and uncertain. There are no areas within the range of the VI boa on St. Thomas that are protected and managed for conservation.

4.1.4. Conservation Needs and Threats

Where PR and VI boas occur close to urban settlements, development threatens their populations. Consequences of human expansion on boa habitat include habitat loss and fragmentation, as land is deforested for urban and tourism development, areas of suitable habitat are increasingly isolated from each other. Direct impacts on boas include roadkill, predation by domestic and feral cats associated with human populations, predation or competition with other

exotic snake species, and/or persecution by humans. Also, the species are affected by inadequate translocations, emergent diseases, post-hurricane debris management, and by the effects of climate change, particularly increasing sea levels, and frequency of intense hurricanes. Conservation actions that have benefited the VI boa include captive breeding and subsequent reintroductions, and rat eradication efforts. For the PR boa, conservation actions include designation of protected areas all over Puerto Rico, research, and implementation of conservation measures during development projects. Other influential factors include negative public attitudes towards snakes, need for education and outreach, genetics (i.e., inbreeding), and the financial resources and political will to carry out conservation (Service 2018).

4.2. Environmental Baseline for VI and PR boas

This section is an analysis of the effects of past and ongoing human and natural factors leading to the current status of the PR and VI boas, its habitat, and ecosystem within the Programmatic AA. The environmental baseline is a “snapshot” of both species’ condition in the Programmatic AA at the time of the consultation and does not include the effects of the Actions under review.

4.2.1. Action Area Numbers, Reproduction, and Distribution

The Actions occur island wide in Puerto Rico and the U.S. Virgin Islands, and varies yearly based upon need, funding, agency, and/or disaster occurrence. Therefore, the species’ occurrence within a project’s AA will depend on the project’s location.

The PR boa is currently thought to be more abundant than at the time of listing and has a wide distribution in Puerto Rico, but not uniformly abundant. Available density estimates for the PR boa range from 1.24 to 5.6 boas/ha (Mulero-Oliveras 2019, Ríos-López and Aide 2007, Tolson 1997) depending on the landscape in which they occur, with lower expected densities within urban landscapes. The PR boa is known to occur within both urban and rural landscapes, particularly if associated to forested areas. Thus, AAs in urban and rural areas within or adjacent to forested areas, would be more likely to encounter this species.

The VI boa has a more limited distribution in Puerto Rico and the USVI. In Puerto Rico, there are 4 known populations: one in the municipality of Río Grande, another on Culebra Island, and the offshore cays of Cayo Diablo and Cayo Ratones. In the USVI, the species is limited to the eastern half of St. Thomas and an offshore cay in the USVI. All of the known populations of the VI boa are considered relatively small and their current population trends are considered either declining, potentially declining, or unknown (Service 2018). The VI boa also occurs in habitat patches encroached by developed areas, therefore any AA within the reported locations of the species and near suitable habitat patches would be more likely to encounter this species.

Both the PR and VI boa are considered primarily active at night, mostly arboreal, and have a low detection probability due to their cryptic behavior and inactivity while sheltering. All of the boa’s life stages from neonate to adult may be encountered depending on the specific location of the AA. Both species may also be found within undocumented areas of occurrence, particularly if the areas present suitable habitat.

4.2.2. Action Area Conservation Needs and Threats

Human activity such as urbanization, road construction, and development, has caused habitat modification and degradation, resulting on habitat fragmentation, boa displacement, and increased human-boa interactions that may result in detrimental effects to the species. Thus, the need for effective implementation of management strategies (e.g., habitat protection and enhancement, search for boas within AAs, and implementation of an appropriate boa relocation program) to reduce those detrimental effects (see Section Terms and Conditions).

Under this PBO, the AA lies within public and private land in both rural and urban landscapes, including, but not limited to forested lands, wetlands, creeks, rivers, and coastal habitats. Although most of the Actions covered under this PBO are within existent footprints on already disturbed areas, some are within or adjacent to forested habitat that may harbor suitable habitat for the PR and VI boa. Actions that occur within purely developed areas and are not within or adjacent to forested habitat, should have minimal to no impact on the species. Impacts could be greater for actions which expand or extend beyond the existing footprint, particularly those that occur within or adjacent to forested areas where boas are prone to occur. Impacts may also apply to areas that have been previously abandoned, including buildings or structures where vegetation has overgrown. Potential impacts can also be expected from those AA that have accumulated debris piles which needs to be removed or shred, particularly if debris piles are placed within or near forested and/or abandoned areas. Boas are known to enter buildings or other structures, as well as use debris piles to seek food or shelter, and thus, care should be taken as well in order to avoid and minimize potential effects on the species.

4.3. Effects of the Actions on the PR and VI boas

In a BO for a listed species, the effects of the proposed action are all reasonably certain consequences to the species caused by the action, including the consequences of other activities caused by the action. Activities caused by the action would not occur but for the action. Consequences to species may occur later in time and may occur outside the AA.

We identified and described the activities included in the proposed Action in section 2.1. We identified and described other activities caused by the proposed Actions in section 2.2. Our analyses of the consequences caused by each of these activities follows.

4.3.1. Construction Work

Change Caused by the Activity: Construction work could result in permanent loss of PR and VI boa habitat within the AA. Additionally, any construction that requires the use of heavy machinery could result on the direct killing of a boas. Construction could also expand from existing footprints, impacting forested habitat nearby and, therefore, boa habitat.

Exposure to the Change: We expect all PR and VI boas (adults and juveniles) within the range of an AA to be exposed during the proposed activity and, after construction is completed if boas venture into the developed AA.

Consequences Resulting from Exposure: Individual PR and VI boas (adults or juveniles) within an AA could be either be killed or injured due to activities related to construction, for example: as heavy machinery move through the AA or construction material is transported and deposited in the AA. Also, the area would no longer provide habitat for the boas, thus reducing overall habitat available for the species.

4.3.2. Demolition

Change Caused by the Activity: Demolition of existing structures could result on the direct killing of the boas by use of heavy machinery or falling debris.

Exposure to the Change: We expect all PR and VI boas (adults and juveniles) within the range of an AA to be exposed during the proposed activity. However, we do not expect a high abundance of PR and VI boas because the AAs have already been disturbed.

Consequences Resulting from Exposure: Individual PR and VI boas (adults or juveniles) within an AA could be either be killed or injured as demolition is being completed. Any PR and VI boa killed as a result of an Action would reduce the species' population number, recruitment potential, and likely the genetic variability of the species.

4.3.3. Staging areas

Change Caused by the Activity: Staging areas are mainly areas near the AA cleared (see Land clearing below) to maintain equipment and other heavy machinery. Additionally, this machinery is sometimes used by boas as shelters, threatening their survival.

Exposure to the Change: The individuals will be exposed to these threats while the Action is being completed.

Consequences Resulting from Exposure: Individual PR and VI boas (adults or juveniles) within an AA could be either be killed or injured as vegetation and debris piles are cleared or can also be relocated out of harm's way if found before disturbance. Also, the area would no longer provide habitat for the boas, thus reducing overall habitat available for the species. Any PR and VI boas killed as a result of an Action would reduce the species' population number, recruitment potential, and likely the genetic variability of the species.

4.3.4. Vegetation and debris management

Change Caused by the Activity: Land clearing, vegetation management and debris removal could result in permanent loss of PR and VI boa habitat within an AA and surrounded areas. For example, the use of heavy machinery for land clearing will result in habitat loss and can also cause direct killing to the boas. Similarly, vegetation management without the use of heavy machinery, could also result on habitat loss or direct boa individual kills.

Exposure to the Change: We expect all PR and VI boas (adults and juveniles) within the range of an AA to be exposed during the proposed activity and, after construction is completed if boas

venture into the developed AA. However, we do not expect a high abundance of PR and VI boas because most AAs have already been disturbed.

Consequences Resulting from Exposure: Individual PR and VI boas (adults or juveniles) within an AA could be either be killed or injured as vegetation and debris piles are cleared or can also be relocated out of harm's way if found before disturbance. Also, the area would no longer provide habitat for the boas, thus reducing overall habitat available for the species. Any PR and VI boas killed as a result of an Action would reduce the species' population number, recruitment potential, and likely the genetic variability of the species.

4.3.5. Other Activities Caused by the Action

PR and VI boas may return to the AA during construction and operation. The Actions that increase human-boas interaction also increase the possibility of injury and death of individual boas. For example, boas could be injured or killed by cars, poachers, humans, and domestic animals. In addition, human activity will attract exotic mammals such as cats, further increasing risk to the boas.

4.3.6. Summary

The proposed Actions may cause adverse effects on the PR boa and VI boa by accidental injury or death from construction activities, vegetation and debris management, demolitions and preparation of staging areas as well as having heavy machinery overnight in the AA or nearby. Boas are expected to be impacted on AAs close to forested habitat compared to urban areas and on those Actions that require extending existing footprint. Consequences include a reduction in the species' abundance. Therefore, we expect captures and relocations to occur in the future in order to remove boa individuals out of harm's way.

4.4. Cumulative Effects on the VI and PR boa

Cumulative effects include the effects of future Commonwealth, Territory, local or private actions that are reasonably certain to occur in the AAs considered in this PBO. Future Federal actions that are unrelated to the proposed actions are not considered in this section because they require separate consultation pursuant to section 7 of the ESA.

Since actions will occur within all Puerto Rico and U.S. Virgin Islands in unknown areas, cumulative effects are likely to occur. Therefore, cumulative effect will be reviewed case by case during the project review and the approval to be covered under this amended PBO.

4.5. Conclusion for VI and PR boa

In this section, we summarize and interpret the findings of the previous sections (status, baseline, effects, and cumulative effects) relative to the purpose of the PBO for the VI boa and PR boa, which is to determine whether the Action is likely to jeopardize its continued existence.

Status

The PR and VI boas are both considered endangered throughout their range. Nevertheless, the PR boa is considered a habitat generalist and have a broad distribution in Puerto Rico, particularly in the northern karst region. Loss of habitat and fragmentation due to urban development and human expansion is one of the major factors that affect these species.

Baseline

According to the information provided, any Action completed within urban areas and not surrounded by forested habitat, is not likely to hold boas or have a high abundance of PR or VI boas. In contrast, Actions that occur in rural areas or have nearby forested areas are likely to hold a greater abundance of PR and VI boas.

Effects

The proposed Action may directly affect the PR and VI boa through injury or death caused by mechanized land clearing or debris removal, construction, boas hidden on engine vehicle compartment, and demolition. Thus, consequences include a potential loss of individuals. Capture and relocation of boas is an effective nonlethal mechanism of removing individuals out of harm's way. Although quantifying the number of PR boas and VI boas taken through nonlethal relocation is difficult because boas are not uniformly distributed, and we have no way of knowing how exactly many future projects will occur or where they will occur, we used species behavior, distribution, population size estimates and previous consultations, to estimate boa individual take in the form of capture and relocation (see section Amount or Extent of Take).

Cumulative Effects

Cumulative effects will be evaluated on a case-by-case basis.

Opinion

After reviewing the status of both the PR boa and VI boa, both species have demonstrated to be resilient to stochastic events and based on their current known distribution, estimated population numbers, environmental baseline for the AA, the effects of the Actions, and the cumulative effects, it is the Service's biological opinion that level of expected take, in the form of capture and relocation, is not likely to jeopardize the continued existence of either PR boa or VI boa.

5. CRITICAL HABITAT FOR VI AND PR BOA

There is no federally designated critical habitat for the PR boa nor VI boa.

6. INCIDENTAL TAKE STATEMENT

ESA §9(a)(1) and regulations issued under §4(d) prohibit the take of endangered and threatened fish and wildlife species without special exemption. The term “take” in the ESA means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (ESA §3(19)). In regulations, the Service further defines:

- “harm” as “an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering;” (50 CFR §17.3) and
- “incidental take” as “takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or the Recipient” (50 CFR §402.02).

Under the terms of ESA §7(b)(4) and §7(o)(2), taking that is incidental to a Federal agency action that would not violate ESA §7(a)(2) is not considered prohibited, provided that such taking is in compliance with the terms and conditions of an incidental take statement (ITS).

The Actions considered in this PBO include terms and conditions to avoid and minimize impacts as outlined in Section 2 of this document. This includes the capture and relocation of boa found on AAs, and which are in harm’s way. Because the capture and relocation of boas is the result of an otherwise lawful action, such capture and relocation is considered incidental take, and no section 10a1A permit for such capture and relocation is required.

Through this statement, the Service exempts take from this Action as described and contemplated by this PBO from being considered prohibited take under section 9. Exception to the prohibitions against trapping, capturing, or collecting listed species.

For the exemption in ESA §7(o)(2) to apply to the Action considered in this PBO, the Federal Agency and the Recipient must undertake the non-discretionary Reasonable and Prudent Measure and their Terms and Conditions described below. These terms and conditions must become binding conditions of any permit, contract, or grant issued for implementing the Action. Consistent with ESA section 7(b)(4)(C)(iv), the Federal Agency and the Recipient has a continuing duty to regulate the Action activities covered by this ITS. The Federal Agency is responsible for the Action activities covered by this ITS that are under its control and are not under their jurisdiction. The protective coverage of §7(o)(2) may lapse if the Federal Agency and the Recipient fails to:

- assume and implement the terms and conditions; or
- require a permittee, contractor, or grantee to adhere to the terms and conditions of the ITS through enforceable terms that are added to the permit, contract, or grant document.

In order to monitor the impact of incidental take, the Federal Agency and the Recipient must report the progress of the Action and its impact on the species to the Service as specified in this ITS.

6.1. Amount or Extent of Take

This section specifies the amount or extent of take of listed wildlife species that the Action is reasonably certain to cause. Based on the Effects of the Action analysis above, the Service anticipates that take in the form of capture and relocation of boas is likely to occur as a result of the proposed Actions.

For PR boa, we estimate that as many as 20 individuals may be relocated per year. We reached this number based on the total number of boas that were encountered (dead and alive) during the island-wide debris management project after Hurricane María (Service 2021). This is the maximum number of PR boas ever encountered for one island-wide project. Due to species cryptic nature and island-wide distribution we expect that no more than 20 PR boas will be encountered per year for all projects.

For VI boa, we estimate that 5 VI boa individuals may be relocated per year. This number is based on a previous Biological Opinion (Service 2020). We have no information of this species ever been encountered in previous projects where section 7 consultations have been conducted. Due to species limited distribution, and small population size we expect that no more than 5 VI boas will be encountered per year for all projects.

Table 6-1 identifies the species, life stage(s), estimated number of individuals, and the section of the PBO that contains the supporting analysis. We describe procedures for monitoring take that occurs during Actions' implementation for the PR and VI boa in section 6-4.

As shown in Table (6-1), the Service exempts take in the form of capture and relocation of 20 PR boa individuals and 5 VI boa individuals, only if it aims to remove the individuals from harm's way during projects implementation.

Table 6-1. Estimates of the amount of take (# of individuals) caused by the Actions by species, life stage, and form of take, collated from the cited BO effects analyses.

Common Name	Life Stage	# Of Individuals	Form of Take	BO Effects Analysis Section
PR boa	Adult or juvenile	20	Capture or Release	No Jeopardy
VI boa	Adult or juvenile	5	Capture or Release	No Jeopardy

6.2. Effect of take

In the accompanying biological opinion, population models for PR boa suggest a population density ranging from 1 to 6 individuals per hectare for the entire island of Puerto Rico (Service 2021). With regards to VI boa, population estimates are uncertain. However, the species is distributed throughout 6 islands in Puerto Rico and USVI, and at Virgin Gorda in British Virgin Islands. Several intents of population estimate have been made for the VI boa throughout its

range. In 1991, a conservative estimate of 300-400 VI boas in St. Thomas was suggested, all within rapidly dwindling habitat (Tolson 1991). In 2009, the abundance of the species within its range in U.S. jurisdiction was estimated to be approximately 1,300 - 1,500 individuals (Service 2009). A more recent estimate of fewer than 100 VI boas in St. Thomas was made using genetic analysis (Reynolds et al. 2015). However, these population estimates are sporadic, limited, and uncertain.

Both species have demonstrated to be resilient to stochastic events and based on their current known distribution and estimated population numbers, the Service determined that the level of expected take is not likely to result in jeopardy of either species.

6.3. Reasonable and Prudent Measures

The Service believes the reasonable and prudent measures (RPMs) described in this section for PR and VI boas are necessary or appropriate to minimize the impacts, (*i.e.*, the amount or extent) of incidental take caused by the Actions.

RPM 1. The Service requires the Federal Agency and Recipient to ensure projects are conducted and operated as designed, planned, documented, and reported.

RPM 2. The Service requires the Federal Agency and Recipient to strictly follow Terms and Conditions below while capturing, handling, transporting, temporary holding, and relocating PR and VI boas in order to minimize the risk of injury and mortality to the species.

6.4. Terms and Conditions

In order for the exemption from the take prohibitions of §9(a)(1) and of regulations issued under §4(d) of the ESA to apply to the Action, the Federal Agency and the Recipient must comply with the terms and conditions (T&Cs) of this statement, provided below, which carry out the RPMs described in the previous section. These T&Cs are mandatory. As necessary and appropriate to fulfill this responsibility, the Federal Agencies must require any permittee, contractor and recipient to implement these T&Cs through enforceable terms that the Federal Agency include in the permit, contract, or grant document.

T&C 1 (RPM 1). The Service and the Federal Agency will ensure take levels do not exceed levels anticipated in this PBO.

1. Inform all project personnel about the potential presence of the PR and VI boa in areas where the proposed work will be conducted and provide training session on PR and VI boa identification. A pre-construction meeting will be conducted to inform all project personnel about the need to avoid harming these species. An educational poster or sign with photo or illustration of these species will be displayed at the project site.
2. Prior to any construction activity, including removal of vegetation and earth movements, the boundaries of the project area and areas to be excluded and protected will be clearly

marked in the project plan and in the field in order to avoid further habitat degradation outside of the AA.

3. Once areas are clearly marked, and right before the use of heavy machinery and any construction activity (including removal of vegetation and earth movement), a biologist or designated project personnel with experience on these species will survey the areas to be cleared to verify the presence of any PR or VI boa within the AA. If a PR or VI boa is found during the search, it should be captured and managed as per #6 below. Once the removal of vegetation begins, the biologist or designated personnel must remain at the work site and be ready to capture any boa that might be in harm's way as the result of the habitat disturbance (see #6).
4. For VI boas, once the area has been searched, vegetation will be cut about one meter above ground prior to the use of heavy machinery for land clearing. Cutting vegetation by hand will allow VI boas present on site to move away on their own to adjacent available habitat. If there is no suitable habitat adjacent to the project site, any VI boa found will be relocated accordingly (see #6).
5. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. Data will also include a photo of the animal (dead or alive), relocation site GPS coordinates, the time and date of the relocation, and comments on how the animal was detected and its behavior.
6. If any PR or VI boa (dead or alive) is found within the AA and on harm's way, the action will stop at that area and information recorded (see #5). If a PR or VI boa is located within harm's way, all attempts will be made to immediately safely capture the animal (refer to T&C 2). PR boas will be safely captured and relocated at least 1km within suitable habitat (forested) and away from construction areas. PR boa relocation sites will be pre-determined before the project starts and sites shared with the Service for revision and concurrence. Relocation of PR boas will be conducted by trained and designated personnel and will not harm or injure the captured boa. If any VI boa is found, do not relocate. Capture and temporary hold the individual accordingly (refer to T&C 2). Contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers immediately if in Puerto Rico (787-724-5700, 787-230-5550, 787-771-1124) or contact the USVI Department of Planning and Natural Resources (DPNR), Division of Wildlife, immediately if in St. Thomas (340-775-6762, 340-773-1082). The Action may continue at other work sites within the AA where no PR and VI boas have been found. If immediate relocation of PR boa by the project biologist or designated personnel is not an option, project related activities at this area will stop until the boa moves out of harm's way on its own or call the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (787-724-5700, 787-230-5550, 787-771-1124). The potential use of the PRDNER staff for these purposes should be coordinated with them at least 30 days before the project starts. If a PR boa is captured by the PRDNER, record the name of the PRDNER staff and information on where the PR boa will be relocated.

7. Measures will be taken to avoid and minimize PR boa and VI boa casualties by heavy machinery or motor vehicles being left in the AA. Any heavy machinery left on site (staging areas) or near potential PR or VI boa habitat will be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the heavy machinery. If a PR boa or VI boa is found within vehicles or heavy machinery, boas will be safely captured accordingly (refer to T&C 2). If not possible, the animal will be left alone until it leaves the vehicle or machine by itself.
8. The PR boa and VI boa may seek shelter within debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in new debris piles as a result of project activities. New debris piles should be placed in areas farthest away from forested areas. Prior to moving, disposing, or shredding, debris piles should be carefully inspected for the presence of PR boas and VI boas. If debris piles will be left on site, we recommend they be placed in an undisturbed area.
9. In the event a PR boa and VI boa is found dead within the project footprint, the Federal Agency and the Recipient must contact the Service to appropriately dispose the animal.
10. Should the forms of take reach the amount of exempted take (Table 6-1) during the Action, the Federal Agency and the Recipient shall terminate the authorized activities and contact the Service within 24 hours in order to reinitiate consultation. The Service and the Federal Agency and the Recipient will re-consult to determine whether authorized activities should continue as proposed and whether modifications or stipulations are warranted.
11. If a PR boa or a VI boa is accidentally injured or killed during capture and relocation activities during the Action, the Federal Agency and the Recipient shall terminate the authorized activities and contact the Service within 24 hours in order to reinitiate consultation. The Service and the Federal Agency and the Recipient will re-consult to determine whether authorized activities should continue as proposed and whether modifications or stipulations are warranted.
12. The contact information for the Service must be followed: Fish and Wildlife Biologist: Jan P. Zegarra at jan_zegarra@fws.gov, 786-933-1451; Endangered Species Program Coordinator: Jose Cruz at Jose_Cruz-Burgos@fws.gov, 305-304-1386. All reporting must be submitted at caribbean_es@fws.gov.

T&C 2 (RPM 2). The Service requires the Federal Agency to follow standard procedures while capturing, handling, transporting, temporary holding, relocating and tracking VI boas in order to minimize the risk of injury and mortality to the species.

- A. The Federal Agency and the Recipient shall identify who will capture PR or VI boas and assess and determine if a boa has been injured as a result of project activities, and if it is in need of veterinary care or rehabilitation. If an injured PR boa or VI boa is in need of veterinary care or rehabilitation, the Federal Agency and the Recipient

shall immediately seek veterinary care for the animal and inform the Service within 24 hours of the event.

- B. The Federal Agency must ensure that any permitted individuals, contractor, recipients or cooperators follow proper procedures and methods for capturing, handling, temporary holding, relocating of the PR and VI boa. The following procedures will be followed:
- i. All PR and VI boas shall be handled safely to avoid injury. The preferred method of capture is by hand, although a snake hook or stick may also be used if snake is uncatchable by hand, or in order to help move the snake into a safer position for capture.
 - ii. All PR and VI boas may be temporarily held during and/or relocation purposes. Boas will be handled as little as possible, and they shall not be kept for more than three days since the day of capture. Temporary holding of boas will be in burlap bags (1 boa per bag) and/or secured containers, which must be placed in cool dry areas that are not in direct sunlight or extreme temperatures. Burlap bags shall be placed inside a container with other boas each inside their own burlap bag and labeled properly. All containers shall be well-ventilated and with a secure lid to avoid boas from escaping.
 - iii. Only qualified, experienced personnel, with a required State and Federal applicable permits may place PIT tag injections. PIT tags may be subcutaneously injected mid-body using sterile syringes. When injecting tags, keep needle parallel to the boa's body and do not force the needle into the muscle tissue or between the ribs. Snakes greater than 400 mm (15.7 in) in length, but that weigh less than 100 grams (3.5 oz), may be PIT tagged with a 5 mm (0.19 in.) PIT tag. An 8 mm (0.31 in) PIT tag may be used for all snakes that weigh over 100 grams (3.5 oz).
 - iv. The Federal Agency and the Recipient and/or contractors shall obtain all necessary permit(s) from the corresponding State agency for capturing, handling, transporting, temporary keeping, relocating and tracking PR and VI boas.

6.5. Monitoring and Reporting Requirements

In order to monitor the impacts of incidental take, the Federal Agency and the Recipient must report the progress of the Action and its impact on the species to the Service as stated in the ITS section above (50 CFR §402.14(i)(3)). This section provides the specific instructions for such monitoring and reporting (M&R), including procedures for handling and disposing of any PR and VI boas killed or injured. These M&R requirements are mandatory.

As necessary and appropriate to fulfill this responsibility, the Action Agency must require any permittee, contractor, or grantee to accomplish the M&R through enforceable terms that the Action Agencies include in the permit, contract, or grant document. Such enforceable terms must include a requirement to immediately notify the Service if the amount or extent of incidental take specified in this ITS is exceeded during Actions' implementation.

6.5.1. PR and VI Boa

M&R 1. The Federal Agency and the Recipient will ensure that incidental take levels will be minimal.

- A. For all PR and VI boa sightings (dead or alive), the Action Agency shall ensure that an effective monitoring and reporting method is established. Reporting shall include the following and should injury or mortality occurred during the Action, the Federal Agency and the Recipient shall contact the Service within 24 hours of the event:
 - i. Date, time and location (latitude/longitude) of the sightings and relocation sites.
 - ii. Size, weight and sex (if possible) of the PR and VI boa.
 - iii. A photograph of the snake as found or after capture.
 - iv. Description of how and what caused the take in the case of injury or death.
 - v. Description of any additional conservation measures that may be implemented to further avoid and minimize take.

M&R 2. Disposition of Dead or Injured boas

- A. Disposition of dead animals must be immediately coordinated with the Service for appropriate disposal of the animal.
- B. The Service may request some dead specimens of PR boa and all for VI boa. The Federal Agency and the Recipient shall coordinate the delivery of such specimen to the Service.
- C. In case of an injured boa, the Federal Agency and the Recipient must seek veterinary care for the animal and inform the Service within 24 hours of the event.

7. CONSERVATION RECOMMENDATIONS

§7(a)(1) of the ESA directs Federal agencies to use their authorities to further the purposes of the ESA by conducting conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary activities that an action agency may undertake to avoid or minimize the adverse effects of a proposed action, implement recovery plans, or develop information that is useful for the conservation of listed species.

We have not identified actions the Service could take, on a programmatic basis, to address Section 7(a)(I) that are not part of its normally mandated mission. However, previous consultations have incorporated conservation measures for both PR and VI boa. Those conservation measures could be implemented during the actions covered by this PBO. This will be decided on a project-by-project basis by the action agency and the FWS when the FWS is reviewing a project for coverage under this PBO.

8. REINITIATION NOTICE

Formal consultation for the Action considered in this BO is concluded. Reinitiating consultation is required if the Federal Agency and the Recipient retains discretionary involvement or control over the Action (or is authorized by law) when:

- a. the amount or extent of incidental take is exceeded;
- b. new information reveals that the Action may affect listed species or designated critical

- habitat in a manner or to an extent not considered in this PBO;
- c. the Action is modified in a manner that causes effects to listed species or designated critical habitat not considered in this PBO; or
 - d. a new species is listed or critical habitat designated that the Action may affect.

In instances where the amount or extent of incidental take is exceeded, the Action Agency is required to immediately request reinitiating the formal consultation.

9. LITERATURE CITED

- Barandiaran, M. 2014. Puerto Rican boa report. Email dated February 20, 2014. Service, Caribbean Ecological Services Field Office. 2 p.
- Huff, T. A. 1978. Breeding the Puerto Rican boa at the Reptile Breeding Foundation. *International Zoo Yearbook* 16:81–82.
- Joglar, R.L. 2005. Reptiles, p. 99 – 190. In: Joglar, R.L. (Ed.) *Biodiversidad de Puerto Rico: Vertebrados Terrestres y Ecosistemas*. Serie de Historia Natural. Editorial Instituto de Cultura Puertorriqueña, San Juan, P.R. 563 p.
- Mulero-Oliveras, E. S. 2019. Population and habitat utilization of the Puerto Rican boa (*Chilabothrus inornatus*) in an urban fragmented habitat. University of Puerto Rico.
- Puente-Rolón, A.R. 2012. Reproductive ecology, fitness, and management of the Puerto Rican Boa (*Epicrates inornatus*, Boidae). P.h.D. thesis. University of Puerto Rico, Río Piedras, PR. 151 p.
- Reynolds, R.G., D.C. Collar, S.A. Pasachnik, M.L. Niemiller, A.R. Puente-Rolón, and L.J. Revell. 2016. Ecological specialization and morphological diversification in Greater Antillean boas. *Evolution* 70: 1882-1895.
<https://onlinelibrary.wiley.com/doi/abs/10.1111/evo.12987>
- Reynolds, R.G. and A.R. Puente-Rolón. 2014. Conservation Genetics of the Puerto Rican boa (*Chilabothrus inornatus*). Final Report, Cooperative Agreement #F12AP01103. Service, Caribbean Ecological Services Field Office, Boquerón, PR. 18 p.
- Reynolds R.G. and R.W. Henderson. 2018. Boas of the World (Superfamily Booidae): A Checklist with Systematic, Taxonomic, and Conservation Assessments. *Bulletin of the Museum of Comparative Zoology* 162 (1). 1-58. <https://doi.org/10.3099/MCZ48.1>
- Ríos-López, N. and T.M. Aide. 2007. Herpetofaunal dynamics during secondary succession. *Herpetologica* 63(1): 35-50.
- Rivero, J.A. 1998. Los anfibios y reptiles de Puerto Rico. University of Puerto Rico Press, Río Piedras, Puerto Rico. 510 pp.

- Tolson, P. 1989. Breeding the Virgin Islands boa (*Epicrates monensis granti*) at the Toledo Zoological Gardens. *International Zoo Yearbook* 28:163-167.
- Tolson, P. J. 1991. *Epicrates* (West Indian Boa) reproductive longevity. *Herpetological Review* 22:100.
- Tolson, P.J. 1994. The reproductive management of the insular species of *Epicrates* (Serpentes: Boidae) in captivity, p. 353-357. In J.B. Murphy, K. Adler, and J.T. Collins (eds.). *Captive Management and Conservation of Amphibians and Reptiles*. Society for the Study of Amphibians and Reptiles, Ithaca, New York. *Contributions to Herpetology*, Vol. 11.
- Tolson, P.J. 1997. Population Census and Habitat Assessment for the Puerto Rican boa, *Epicrates inornatus*, at the U.S. Naval Security Group Activity, Sabana Seca, Puerto Rico. Final Report submitted to the DNER. San Juan, PR. 11 p.
- Tolson, P.J. and R.W. Henderson. 1993. The natural history of West Indian boas. R. & A. Publ. Limited. 125 p.
- Tucker, A. M., C.P. McGowan, E.S. Mulero Oliveras, N. F. Angeli and J. P. Zegarra. 2020. A demographic projection model to support conservation decision making for an endangered snake with limited monitoring data. *Animal Conservation* 24 (2), 291-301
- U.S. Fish and Wildlife Service (Service). 2009. Virgin Islands tree boa (*Epicrates monensis granti*) 5-Year Review: Summary and Evaluation. U.S. Fish and Wildlife Service, Boquerón, Puerto Rico. 25 pp.
- U.S. Fish and Wildlife Service (Service). 2018. Virgin Islands Tree Boa (*Chilabothrus granti*) Species Status Assessment. Atlanta, GA. Version 1.0. 62 pp.
- U.S. Fish and Wildlife Service (Service). 2021. Puerto Rican Boa (*Chilabothrus inornatus*) Species Status Assessment. Atlanta, GA. Version 1.2 67 pp.
- U.S. Fish and Wildlife Service (Service). 2020. Biological Opinion: Housing and Urban Development and VI Housing Authority, Construction of 84 Housing Units, Estate Donoe, St. Thomas, USVI. 17pp.

APPENDIX E

USFWS Consistency Letter



United States Department of the Interior



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

In Reply Refer To:
Project code: 2024-0018680
Project Name: PR-RGRW-01566

November 21, 2023

Subject: Consistency letter for the project named 'PR-RGRW-01566' 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 November 21, 2023, Kaitie Wilms used the Caribbean DKey; dated October 12, 2023, in the U.S. Fish and Wildlife Service's online [IPaC application](#) to evaluate potential impacts to federally listed species, from a project named 'PR-RGRW-01566'. The project is located in Cidra County, Puerto Rico (shown below).

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.14751615,-66.12231239056158,14z>



The following description was provided for the project 'PR-RGRW-01566':

Construction of a greenhouse

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

Species	Listing Status	Determination
Puerto Rican Boa (<i>Chilabothrus inornatus</i>)	Endangered	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 **129-134937150**

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

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

- Puerto Rican Plain Pigeon *Columba inornata wetmorei* Endangered

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

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

Action Description

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

1. Name

PR-RGRW-01566

2. Description

The following description was provided for the project 'PR-RGRW-01566':

Construction of a greenhouse

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.14751615,-66.12231239056158,14z>



QUALIFICATION INTERVIEW

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

No

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

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

No

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

No

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

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

No

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

No

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

No

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

No

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

No

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

No

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

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

Yes

11. Is the project area more than 1 acre?

Yes

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

No

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

Yes

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

Automatically answered

Yes

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

Yes

IPAC USER CONTACT INFORMATION

Agency: SWCA

Name: Kaitie Wilms

Address: 911 Hammond Drive

City: North Augusta

State: SC

Zip: 29841

Email: kaitie.wilms@swca.com

Phone: 8436930711

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Housing and Urban Development



REGROW PROGRAM

Figure B 7-1: Critical Habitat Map

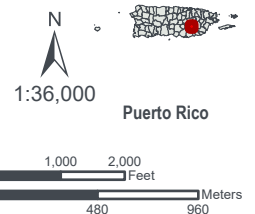
Applicant ID: PR-RGRW-01566



- Site
- Site Parcel
- Buffer (100-ft)
- Critical Habitat - Final
- National Wildlife Refuges

Carr #1 KM 56.7 interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739
Parcel ID: 300-021-250-03-001
Parcel Center:
66.095145°W 18.131184°N

Data Source: https://services.arcgis.com/QVENGdaPbd4LUkLV/arcgis/rest/services/USFWS_Critical_Habitat/Base_Map/ESRI/ArcGIS/Online,
accessed May 2024
Updated: 5/3/2024
Layout: Critical Habitat
Aprx: 72428_ReGrowTier2Maps





GOVERNMENT OF PUERTO RICO

STATE HISTORIC PRESERVATION OFFICE

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

Wednesday, March 20, 2024

Lauren B Poche

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

SHPO-CF-03-18-24-02 PR-RGRW-01566 (Cidra), Hacienda La Promesa Monticello, Inc.

Dear Ms. Poche,

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

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

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

Sincerely,

Carlos A. Rubio Cancela

State Historic Preservation Officer

CARC/GMO/MB



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

March 18, 2024

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

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

Section 106 NHPA Effect Determination Submittal: PR-RGRW-01566 – Hacienda La Promesa Monticello, Inc. – Cidra, Puerto Rico – *No Historic Properties Affected*

Dear Architect Rubio Cancela,

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

On behalf of PRDOH and the subrecipient, the Puerto Rico Department of Agriculture, HORNE is submitting documentation for activities proposed by Hacienda La Promesa Monticello, Inc. located at Carr #1 KM 56.7 interior Barrio Beatriz Sector Monticello in the municipality of Cidra. The undertaking for this project includes the purchase and installation of an aquaponic greenhouse. The new greenhouse is approximately 1,800 square feet (sq. ft) in size (30 feet [ft] by 60 ft). Each pipe will be anchored on the ground with 1-foot-deep holes filled with concrete. Two optional locations are evaluated for the new greenhouse: Option 1 is in the southeast corner portion of the parcel; Option 2 is in the southwest corner portion of the parcel. Both electricity and water lines will be connected to the new greenhouse via above ground connection from the existing utilities.

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

Please contact me by email at lauren.poche@horne.com or phone at 225-405-7676 with any questions or concerns.

Kindest regards,




Lauren Bair Poche, M.A.

Architectural Historian, EHP Senior Manager

LBP/JLE

Attachments

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM ReGROW PUERTO RICO PROGRAM Section 106 NHPA Effect Determination		 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
Applicant: Hacienda La Promesa Monticello, Inc.		
Case ID: PR-RGRW-01566	City: Cidra	

Project Location: Carr #1 KM 56.7 interior Barrio Beatriz Sector Monticello Cidra, P.R. 00739	
Project Coordinates: (as provided by applicant during field visit) Greenhouse Option 1 (18.147668, -66.121549) Greenhouse Option 2 (18.147324, -66.122792)	
TPID (Número de Catastro): 300-021-250-03-001	
Type of Undertaking: <input type="checkbox"/> Substantial Repair/Improvements <input checked="" type="checkbox"/> New Construction	
Construction Date (AH est.): Owner's house and stable: ca. 1990	Property Size (acres): 4.41 acres total Greenhouse Option 1 and 2: 0.041322 acres (1800 sq ft.)

SOI-Qualified Architect/Architectural Historian: Erin Edwards, MPS
Date Reviewed: February 1, 2024
SOI-Qualified Archaeologist: Heath Anderson, Ph.D., RPA
Date Reviewed: February 5, 2024


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

Project Description (Undertaking)

The proposed project includes the purchase and installation of an aquaponic greenhouse. The new greenhouse is approximately 1,800 square feet (sq. ft) in size (30 feet [ft] by 60 ft). Each pipe will be anchored on the ground with 1-foot-deep holes filled with concrete. Two optional locations are evaluated for the new greenhouse: Option 1 is in the southeast corner portion of the parcel; Option 2 is in the southwest corner portion of the parcel. All potential location areas are currently undeveloped.

Option 1 requires no tree clearing but minor pruning will be required for construction as it will replace an abandoned greenhouse. The existing electricity and water lines will be connected to the new greenhouse about 120 ft from the existing connection via above ground connections. The work associated with the removal of the existing greenhouse is not included in the applicant's Intended Use of Grant Funds application and costs associated with this activity will be covered under additional, non-federal, funding not yet disclosed.

Option 2 will require minimal tree clearing/pruning and would be connected to the same existing lines as option 1 and also via above ground connections, however, it will be about 550 ft away.

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: Hacienda La Promesa Monticello, Inc.	
Case ID: PR-RGRW-01566	City: Cidra

The applicant owns the property and currently uses it for agricultural use; therefore, no acquisition or conversion is required.


Area of Potential Effects

As defined in 36 CFR §800.16(d), the area of potential effects (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such properties exist. Based on this definition and the nature and scope of the Undertaking, the Program has determined that the direct APE for this project is the location of the anchors for the new greenhouse plus a 15-meter horizontal buffer to allow for some variation in final placement during construction and the visual APE is the viewshed of the proposed project.

Identification of Historic Properties - Archaeology

Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information by a Program contracted archaeologist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) who searched the records at the SHPO and the Instituto de Cultura Puertorriqueña which shows that there are no reported archaeological materials or significant cultural properties within a half-mile (mi) radius of the project location. Two archaeological surveys (ICP-CAT-CD-05-09-01 and ICP-CAT-CD-97-05-05) and one Section 106 study (Código SHPO 10-27-14-03) have been carried out within 0.5 mi of the project area. ICP-CAT-CD-05-09-01 was a Phase IA survey performed 0.39 mi east-northeast of the project area in 2005 by Agamemnon Gus Pantel Tekakis. None of the cultural resources recorded as a result of the survey were located within 0.5 mi of the project area. ICP-CAT-CD-97-05-05 was a Phase IA-IB survey performed 0.44 mi southeast of the project area in 1997 by Ethel V. Schlafer Román. Código SHPO 10-27-14-03 was carried out 0.49 mi north-northeast of the project area in 2017, in support of a low-income housing rehabilitation program. No archaeological sites were recorded as a result of the survey.

The proposed project is located in a rural, mountainous region in the east portion of the island at an elevation of 1,476 ft (450 meters [m]) above mean sea level. Per the USGS/NRCS Web Soil Survey, the project area crosses one mapped soil series: MxE (Mucara clay, 20 to 40 percent slopes). The project area APE is in the southeastern portion of Municipio Cidra. The general project area is located on a gentle south facing slope surrounded by thick tropical forest within an agricultural area with a residence at the eastern portion. The closest freshwater source is an unnamed tributary that flows south to the Río de la Plata, located 0.2 mi (0.3 kilometers [km]) northwest of the project area. The southern coast is approximately 13.7 mi (32.1 km) from the project area.

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: Hacienda La Promesa Monticello, Inc.	
Case ID: PR-RGRW-01566	City: Cidra

Identification of Historic Properties - Architecture

Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information, by a Program contracted Historic Preservation Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) shows that the project area is not within the boundaries of a National Register of Historic Places (NRHP)-eligible or listed Traditional Urban Center or Historic District.


The only survey directly focused on historic architectural resources in proximity to the project area, Código SHPO #10-27-14-03, was performed in 2017 for low-income housing rehabilitation funded by HUD. The survey area had two recorded points; A and B, which are 0.49 mi to the north-northwest of the project site and 0.48 mi to the north/northwest of the project site. The findings were negative for both sites and No Historic Properties were found. Several surveys were recorded with ICP that are discussed in the archaeology section above.

The project area is in a suburban area of Cidra, just north of Brisas de Monticello. The project area is hilly and encircled with vegetation. Historic aerials from 1962 show vacant land and no neighbors around the project site (<https://www.historicaerials.com/viewer>). Google Earth imagery shows houses and neighbors by 1994 (googleearth.com). Earth Explorer aerial photography ([EarthExplorer \(usgs.gov\)](http://EarthExplorer.usgs.gov)) from 1977 indicate no activity in the area, and there is no further aerial imagery through the 1980s and 1990s. The applicant has stated that he purchased the land in 2011 and the stable was extant. Therefore, a date of construction of 1990 for the house and stable seems appropriate and accords with the materials used. As the project site is in a rural area, and everything in the area was built between 1980 and 1990, no historic buildings or properties will be affected by the project. Either location option would be acceptable for this project – Option 1 would replace an extant greenhouse, and Option 2 is toward the back of the property and encircled with vegetation.

Determination

The following historic properties have been identified within the APE:

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

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: Hacienda La Promesa Monticello, Inc.		
Case ID: PR-RGRW-01566	City: Cidra	

Based on the results of our historic property identification efforts, the Program has determined that no previously identified historic properties are located within or adjacent to the proposed project Area of Potential Effect. The project area is not within or adjacent to the boundaries of a National Register of Historic Places (NRHP)-eligible or listed historic district or Traditional Urban Center. There are no reported archaeological materials or significant cultural properties within a half-mile radius of the proposed project location. No known archaeological sites or NRHP listed/eligible historic properties are within or adjacent to the property or the parcel in which the Area of Potential Effect of case PR-RGRW-01566 is located. The closest freshwater body is approximately 0.2 mi (0.3 km) of the project area. The size of the proposed project activities is very small (0.041322 acres [1800 sq ft.]) and construction of residential structures and agricultural infrastructure has impacted the surrounding terrain is located on a gentle slope of the landform, and minimal ground disturbance will be required. Therefore, no historic properties will be affected by the proposed project activities.

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)

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: Hacienda La Promesa Monticello, Inc.	
Case ID: PR-RGRW-01566	City: Cidra

This Section is to be Completed by SHPO Staff Only

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



Applicant: Hacienda La Promesa Monticello, Inc.

Case ID: PR-RGRW-01566

City: Cidra

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



REGROW PROGRAM

Project Location Area of Potential Effects (APE) Map

Applicant ID: PR-RGRW-01566



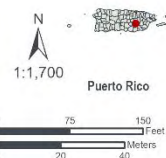
- Site
- ▭ Site Parcel
- ▭ Project Footprint (Option)
- ▭ APE (Buffer (15-meters))

Carr #1 KM 56.7 Interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739

Parcel ID: 300-021-250-03-001
Parcel Center:
66.122172°W 18.147508°N

Base Map: ESRI ArcGIS Online,
accessed October 2023
Updated: 10/27/2023

Layout: APE
Aprx: 72428_RegrowTier2Maps

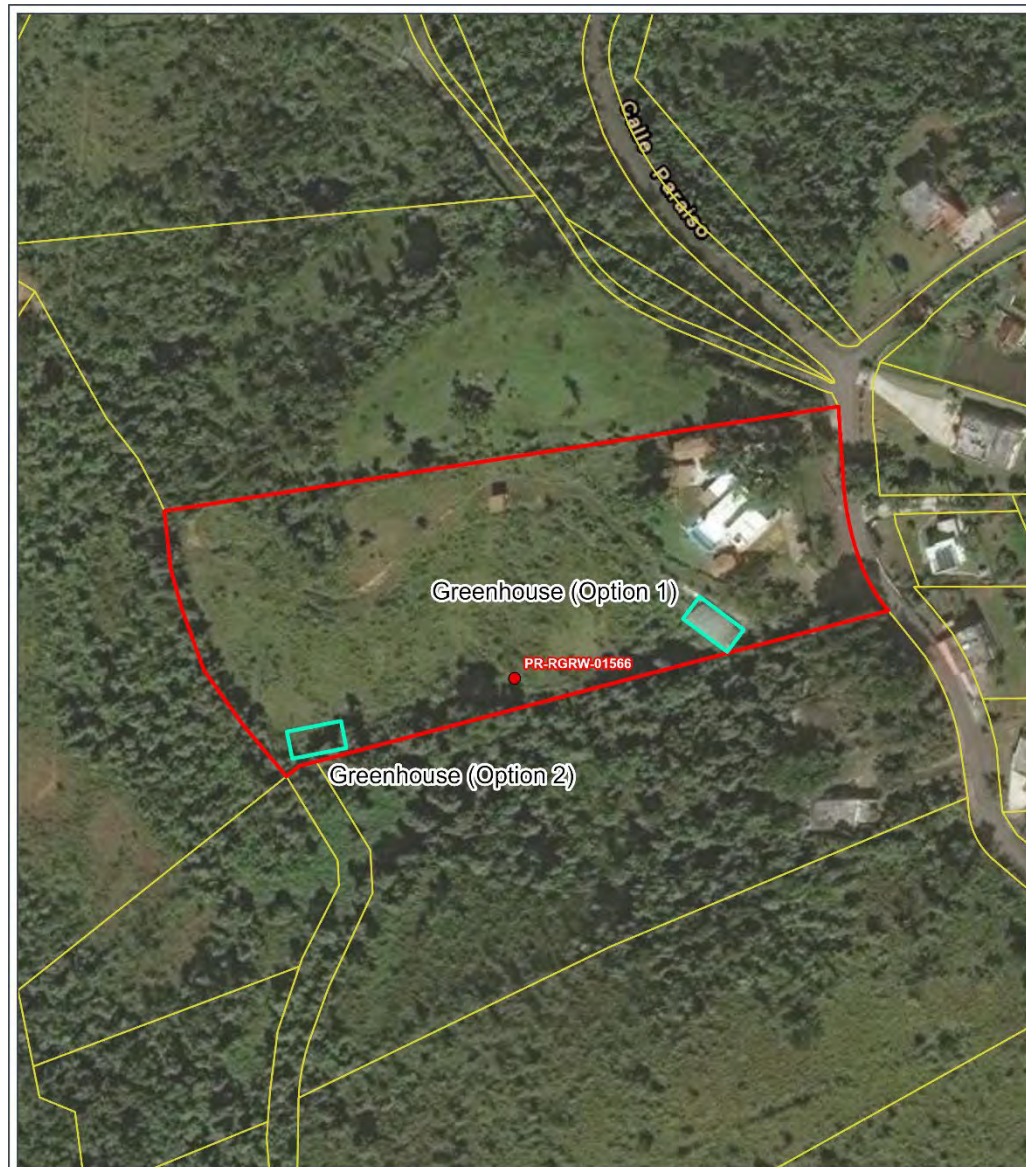


Applicant: Hacienda La Promesa Monticello, Inc.

Case ID: PR-RGRW-01566

City: Cidra

Project (Parcel) Location - Aerial Map



REGROW PROGRAM

**Figure A-2:
Site Vicinity**

Applicant ID: PR-RGRW-01566

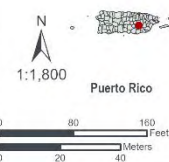
SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)

Carr #1 KM 56.7 Interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739

Parcel ID: 300-021-250-03-001
Parcel Center:
66.122134°W 18.147767°N

Base Map: ESRI ArcGIS Online,
accessed October 2023
Updated: 10/27/2023
Layout: Site Vicinity
Aprx: 72428_RegrowTier2Maps

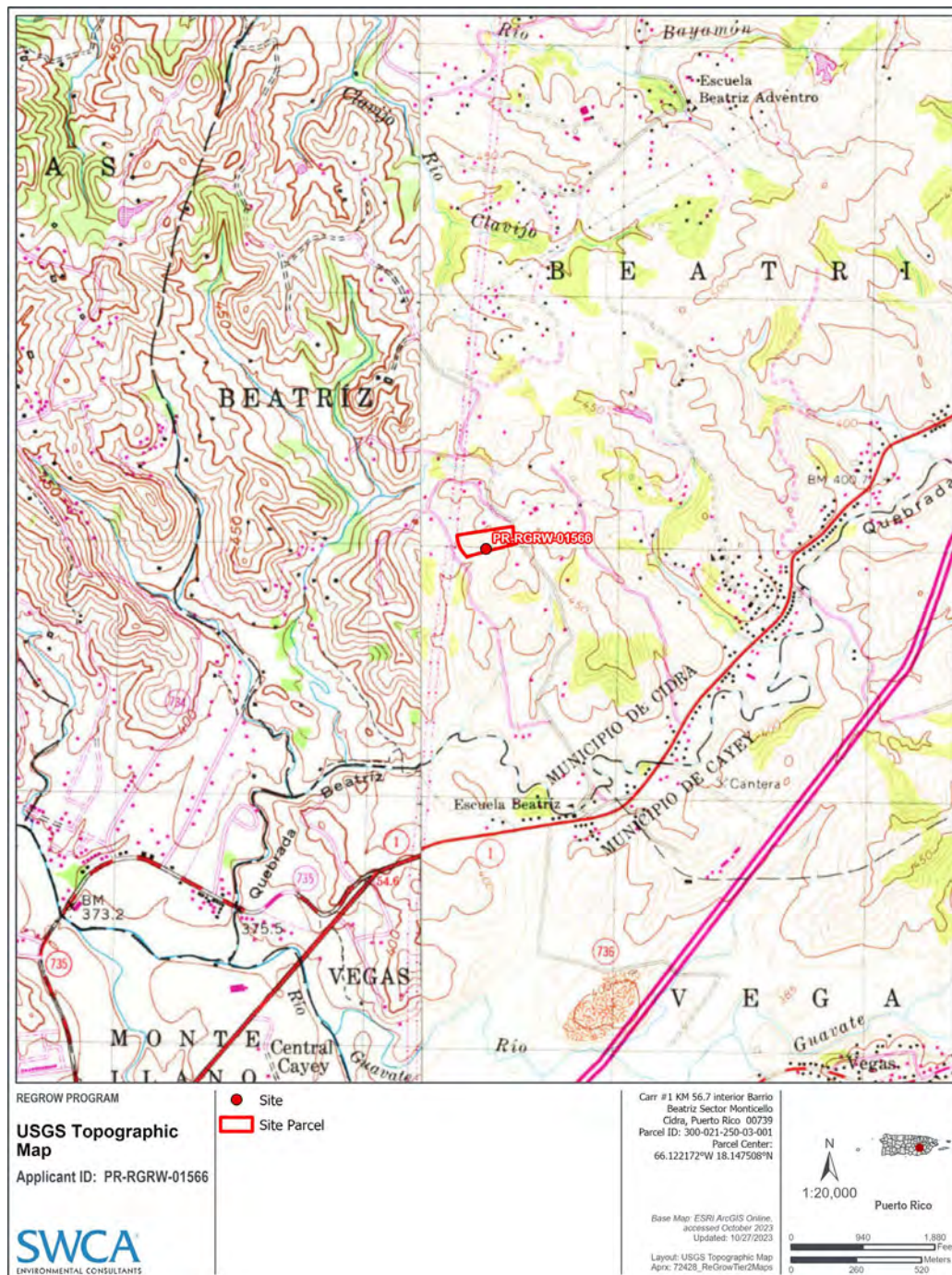


Applicant: Hacienda La Promesa Monticello, Inc.

Case ID: PR-RGRW-01566

City: Cidra

Project (Parcel) Location - USGS Topographic Map



Applicant: Hacienda La Promesa Monticello, Inc.

Case ID: PR-RGRW-01566

City: Cidra

Project (Parcel) Location – Soils Map



Applicant: Hacienda La Promesa Monticello, Inc.

Case ID: PR-RGRW-01566

City: Cidra

Project (Parcel) Location with Previous Investigations - Aerial Map



REGROW PROGRAM

Previous Investigation Map

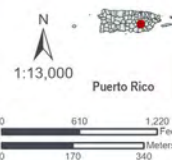
Applicant ID: PR-RGRW-01566

SWCA
ENVIRONMENTAL CONSULTANTS

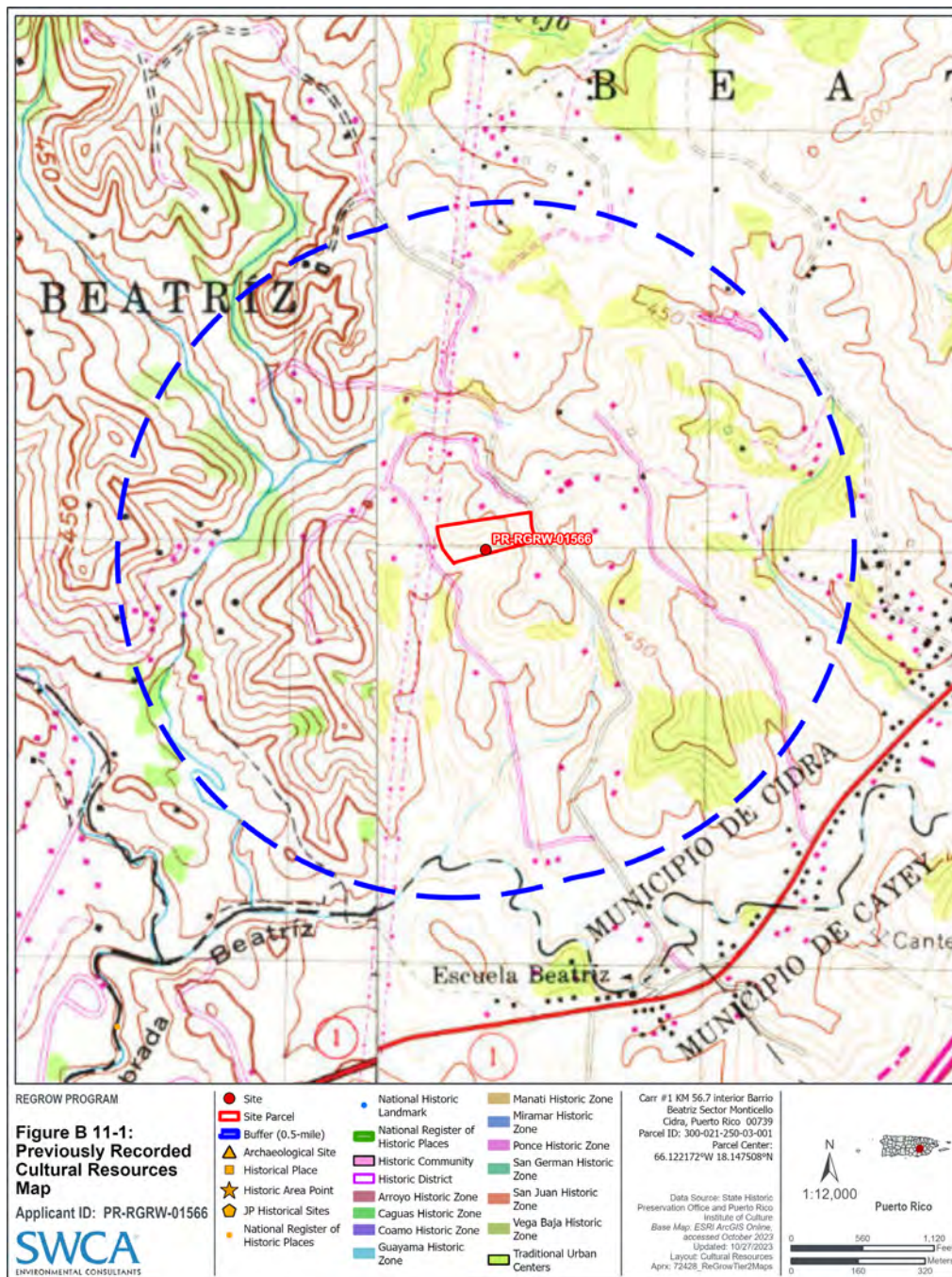
- Site
- ▭ Site Parcel
- ▭ Project Footprint (Option)
- Buffer (0.5-mile)
- ▭ Previously Recorded Survey
- ▭ MIPR Arqueologia
- ▭ Traditional Urban Centers

Carr #1 KM 56.7 Interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739
Parcel ID: 300-021-250-03-001
Parcel Center:
66.122172°W 18.147508°N

Data Source: State Historic
Preservation Office and Puerto Rico
Institute of Culture
Base Map: ESRI ArcGIS Online,
accessed February 2024
Updated: 2/9/2024
Layout: Previous Investigation
Apr: 72428_ReGrowTier2Maps



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





Applicant: Hacienda La Promesa Monticello, Inc.

Case ID: PR-RGRW-01566

City: Cidra

Photograph Key





Applicant: Hacienda La Promesa Monticello, Inc.

Case ID: PR-RGRW-01566

City: Cidra

Photo #:
01

Date:
10/26/2023

Photo Direction:
South

Description:
Option 1. Abandoned greenhouse. Applicant prefers to replace this greenhouse with a new one since electric and water connection already exists.



Photo #:
02

Date:
10/26/2023

Photo Direction:
South

Description:
Option 1. Abandoned greenhouse. Applicant prefers to replace this one with a new one since electric and water connection already exists.





Applicant: Hacienda La Promesa Monticello, Inc.

Case ID: PR-RGRW-01566

City: Cidra

Photo #:
03

Date:
10/26/2023

Photo Direction:
Northwest

Description:
Electric source for
greenhouse 30x60ft., at
the far eastern corner of
the property.



Photo #:
04

Date:
10/26/2023

Photo Direction:
South

Description:
Water source for
greenhouse 30x60ft., at
the far eastern corner of
the property.





Applicant: Hacienda La Promesa Monticello, Inc.

Case ID: PR-RGRW-01566

City: Cidra

Photo #:
05

Date:
10/26/2023

Photo Direction:
Southwest

Description:
Overview of second option for greenhouse 30x60ft. on flat area just beyond where white pipes can be seen planted vertically on the ground.



Photo #:
06

Date:
10/26/2023

Photo Direction:
Southeast

Description:
Northwest corner of second option for greenhouse 30x60ft.

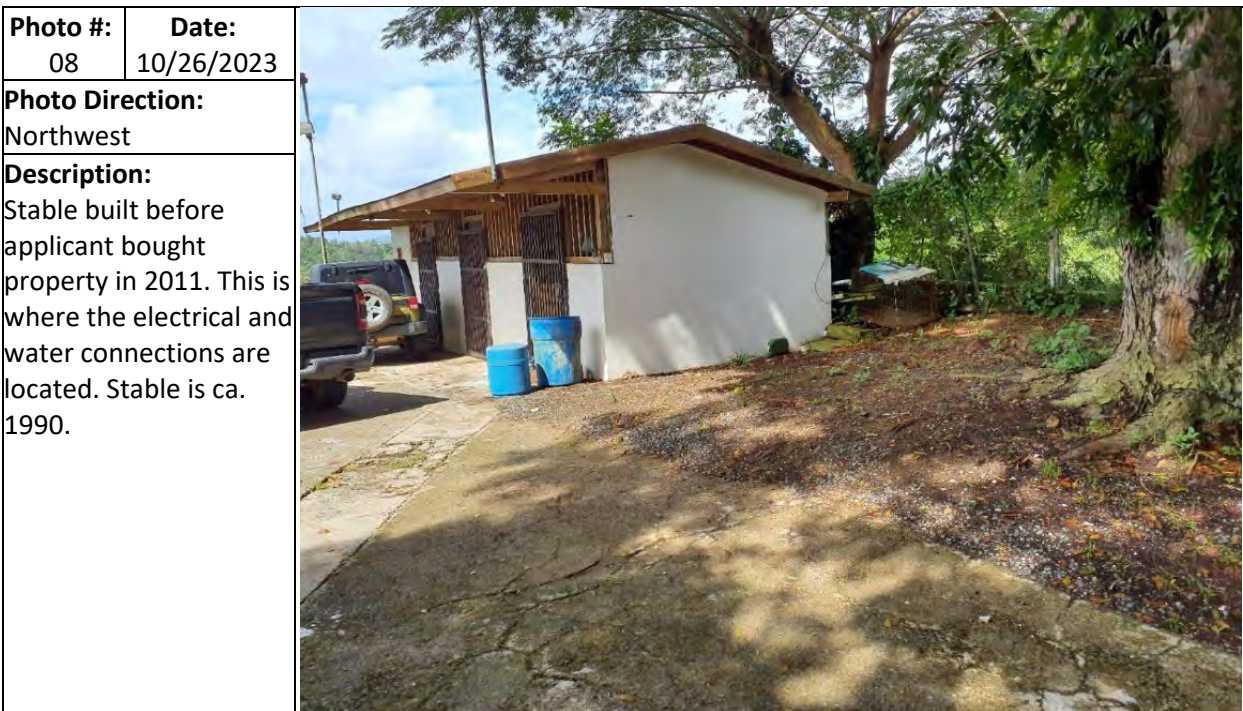




Applicant: Hacienda La Promesa Monticello, Inc.

Case ID: PR-RGRW-01566

City: Cidra





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

Radon Attachments



August 20, 2024

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

Via email: guerrero.carmen@epa.gov

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

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

This Notice emphasizes the importance of radon testing and mitigation in ensuring safe living environments, particularly in HUD-assisted properties. PRDOH, as the grantee of the Community Development Block Grant for Disaster Recovery and Mitigation (CDBG-DR/MIT), is responsible for ensuring compliance with environmental requirements under CDBG-DR/MIT programs. To fulfill our obligations under this Notice, we must compile comprehensive and up-to-date information on radon levels, testing practices, and any mitigation efforts within the islands of Puerto Rico.

Specifically, we are seeking for possible availability of the following information:

Radon testing data – Results from radon testing conducted within your agency's purview, including details on location, testing methods, and recorded radon levels.

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



August 20, 2024

Dr. Silvina Cancelos
Professor
College of Engineering
University of Puerto Rico – Mayagüez Campus
259 Norte Blvd. Alfonso Valdés Cobián
Mayagüez, Puerto Rico

Via email: silvina.cancelos@upr.edu

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

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

This Notice emphasizes the importance of radon testing and mitigation in ensuring safe living environments, particularly in HUD-assisted properties. PRDOH, as the grantee of the Community Development Block Grant for Disaster Recovery and Mitigation (CDBG-DR/MIT), is responsible for ensuring compliance with environmental requirements under CDBG-DR/MIT programs. To fulfill our obligations under this Notice, we must compile comprehensive and up-to-date information on radon levels, testing practices, and any mitigation efforts within the islands of Puerto Rico.

Specifically, we are seeking for possible availability of the following information:

Radon testing data – Results from radon testing conducted within your agency's purview, including details on location, testing methods, and recorded radon levels.

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

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

Policies and guidelines – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

Historical data – If available, historical data or trends in radon levels within the regions you monitor that may impact HUD-assisted housing.

This information is vital to ensure that our radon management strategies are practical and compliant with federal requirements. If some of this information may be sensitive or confidential, we are prepared to discuss any necessary agreements or protocols for sharing this data securely.

Please let us know if you require additional details or have any questions regarding this request. We would greatly appreciate your response by September 15, 2024, so we can incorporate this data into our ongoing compliance efforts.

Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

Sincerely,

William O. Rodríguez Rodríguez, Esq.
Secretary

Cc: Mr. Oleg Pavetko, Pavetko.Oleg@epa.gov
Mr. Matthew Laitila, laitila.matthew@epa.gov

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

Policies and guidelines – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

Historical data – If available, historical data or trends in radon levels within the regions you monitor that may impact HUD-assisted housing.

This information is vital to ensure that our radon management strategies are practical and compliant with federal requirements. If some of this information may be sensitive or confidential, we are prepared to discuss any necessary agreements or protocols for sharing this data securely.

Please let us know if you require additional details or have any questions regarding this request. We would greatly appreciate your response by September 15, 2024, so we can incorporate this data into our ongoing compliance efforts.

Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

Sincerely,

William O. Rodríguez Rodríguez, Esq.
Secretary

Cc: Dr. Carlos Marín, carlos.marin3@upr.edu



August 20, 2024

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

Via email: OIA@cdc.gov

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

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

This Notice emphasizes the importance of radon testing and mitigation in ensuring safe living environments, particularly in HUD-assisted properties. PRDOH, as the grantee of the Community Development Block Grant for Disaster Recovery and Mitigation (CDBG-DR/MIT), is responsible for ensuring compliance with environmental requirements under CDBG-DR/MIT programs. To fulfill our obligations under this Notice, we must compile comprehensive and up-to-date information on radon levels, testing practices, and any mitigation efforts within the islands of Puerto Rico.

Specifically, we are seeking for possible availability of the following information:

Radon testing data – Results from radon testing conducted within your agency's purview, including details on location, testing methods, and recorded radon levels.

Barbosa Ave. #606, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 | PO Box 21365 San Juan, PR 00928-1365
Tel. (787) 274-2527 | www.viviendap.rg.pr.gov

CDBG-DR/MIT Program
Request for Information in relation with HUD CPD-23-103 for Puerto Rico
Page 2 / 2

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

Policies and guidelines – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

Historical data – If available, historical data or trends in radon levels within the regions you monitor that may impact HUD-assisted housing.

This information is vital to ensure that our radon management strategies are practical and compliant with federal requirements, if some of this information may be sensitive or confidential, we are prepared to discuss any necessary agreements or protocols for sharing this data securely.

Please let us know if you require additional details or have any questions regarding this request. We would greatly appreciate your response by September 15, 2024, so we can incorporate this data into our ongoing compliance efforts.

Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

Sincerely,


William O. Rodríguez Rodríguez, Esq.
Secretary



August 20, 2024

Mrs. Anais Rodríguez
Secretary
Puerto Rico Department of Natural Resources
Carretera 8838, km. 6.3, Sector El Cinco,
Río Piedras San Juan, PR 00926

Via email: anais.rodriguez@dma.pr.gov

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

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

This Notice emphasizes the importance of radon testing and mitigation in ensuring safe living environments, particularly in HUD-assisted properties. PRDOH, as the grantee of the Community Development Block Grant for Disaster Recovery and Mitigation (CDBG-DR/MIT), is responsible for ensuring compliance with environmental requirements under CDBG-DR/MIT programs. To fulfill our obligations under this Notice, we must compile comprehensive and up-to-date information on radon levels, testing practices, and any mitigation efforts within the islands of Puerto Rico.

Specifically, we are seeking for possible availability of the following information:

Radon testing data – Results from radon testing conducted within your agency's purview, including details on location, testing methods, and recorded radon levels.

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

Barbosa Ave. #606, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 | PO Box 21365 San Juan, PR 00928-1365
Tel. (787) 274-2527 | www.viviendap.rg.pr.gov

CDBG-DR/MIT Program
Request for Information in relation with HUD CPD-23-103 for Puerto Rico
Page 2 / 2

Policies and guidelines – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

Historical data – If available, historical data or trends in radon levels within the regions you monitor that may impact HUD-assisted housing.

This information is vital to ensure that our radon management strategies are practical and compliant with federal requirements. If some of this information may be sensitive or confidential, we are prepared to discuss any necessary agreements or protocols for sharing this data securely.

Please let us know if you require additional details or have any questions regarding this request. We would greatly appreciate your response by September 15, 2024, so we can incorporate this data into our ongoing compliance efforts.

Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

Sincerely,


William O. Rodríguez Rodríguez, Esq.
Secretary

Cc: Mr. Luis Márquez, secretariogaire@dma.pr.gov
Eng. Amarilis Rosario, aire@dma.pr.gov
Mrs. Elid Ortega, ortega@dma.pr.gov



GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

August 20, 2024

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

Via email: dr.carlos.mellado@salud.pr.gov

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

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

This Notice emphasizes the importance of radon testing and mitigation in ensuring safe living environments, particularly in HUD-assisted properties. PRDOH, as the grantee of the Community Development Block Grant for Disaster Recovery and Mitigation (CDBG-DR/MIT), is responsible for ensuring compliance with environmental requirements under CDBG-DR/MIT programs. To fulfill our obligations under this Notice, we must compile comprehensive and up-to-date information on radon levels, testing practices, and any mitigation efforts within the Islands of Puerto Rico.

Specifically, we are seeking for possible availability of the following information:

Radon testing data – Results from radon testing conducted within your agency's purview, including details on location, testing methods, and recorded radon levels.

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

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



GOVERNMENT OF PUERTO RICO
DEPARTMENT OF HOUSING

August 20, 2024

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

Via email: hweyers@usgs.gov

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

The Puerto Rico Department of Housing (PRDOH) kindly requests your assistance in gathering data, information, or reports related to radon testing in Puerto Rico, as this information is crucial for our compliance with the U.S. Department of Housing and Urban Development (HUD) Community Planning and Development (CPD) Notice CDP-23-103.

This Notice emphasizes the importance of radon testing and mitigation in ensuring safe living environments, particularly in HUD-assisted properties. PRDOH, as the grantee of the Community Development Block Grant for Disaster Recovery and Mitigation (CDBG-DR/MIT), is responsible for ensuring compliance with environmental requirements under CDBG-DR/MIT programs. To fulfill our obligations under this Notice, we must compile comprehensive and up-to-date information on radon levels, testing practices, and any mitigation efforts within the Islands of Puerto Rico.

Specifically, we are seeking for possible availability of the following information:

Radon testing data – Results from radon testing conducted within your agency's purview, including details on location, testing methods, and recorded radon levels.

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

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

CDBG-DR/MIT Program
Request for Information in relation with HUD CDP-23-103 for Puerto Rico
Page 2 / 2

Policies and guidelines – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

Historical data – If available, historical data or trends in radon levels within the regions you monitor that may impact HUD-assisted housing.

This information is vital to ensure that our radon management strategies are practical and compliant with federal requirements. If some of this information may be sensitive or confidential, we are prepared to discuss any necessary agreements or protocols for sharing this data securely.

Please let us know if you require additional details or have any questions regarding this request. We would greatly appreciate your response by September 15, 2024, so we can incorporate this data into our ongoing compliance efforts.

Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

Sincerely,


William O. Rodríguez Rodríguez, Esq.
Secretary

Cc: Mr. Raúl Hernández Dabla, rhernandez2@salud.pr.gov

CDBG-DR/MIT Program
Request for Information in relation with HUD CDP-23-103 for Puerto Rico
Page 2 / 2

Policies and guidelines – Information or any policy, guideline, or protocol your agency follows concerning radon testing, exposure limits, or mitigation.

Historical data – If available, historical data or trends in radon levels within the regions you monitor that may impact HUD-assisted housing.

This information is vital to ensure that our radon management strategies are practical and compliant with federal requirements. If some of this information may be sensitive or confidential, we are prepared to discuss any necessary agreements or protocols for sharing this data securely.

Please let us know if you require additional details or have any questions regarding this request. We would greatly appreciate your response by September 15, 2024, so we can incorporate this data into our ongoing compliance efforts.

Thank you in advance for your cooperation and support. We look forward to working together on this critical initiative.

Sincerely,


William O. Rodríguez Rodríguez, Esq.
Secretary

Cc: Mr. R. Randall Schumann, rschumann@usgs.gov

From: Charp, Paul (CDC/NCEH/DEHSP) <pac4@cdc.gov>
Sent: Tuesday, September 3, 2024 6:36 AM
To: Miranda, Sandra (CDC/PHIC/DPS); Irizarry, Jessica (CDC/PHIC/DPS); Rzeszutarski, Peter (CDC/NCEH/DEHSP); Vinson, D. Aaron (CDC/NCEH/DEHSP)
Cc: Kostak, Liana (CDC/PHIC/DPS); Vazquez, Germaine (CDC/NCEH/DEHSP)
Subject: RE: REHi: Puerto Rico Request for Information- Randon testing and levels

Good morning, Sandra and others,

In response to the request from Mr. William Rodriguez of the Department of Housing, Government of Puerto Rico, I have reviewed all the available data within the CDC National Environmental Public Health Tracking Network system for data related to radon in Puerto Rico. In addition to the tracking data available on the internet, I also reached out to Mr. Aaron Vinson of the NCEH Tracking Branch.

I was not able to find any data in the CDC systems and this was confirmed by Mr. Vinson. We also reached out the US Environmental Protection Agency who indicated they had no radon data in their systems. Please relay this information to Mr. Rodriguez in your response to his requests

If you have any additional questions, please contact me.

Thank you and best regards,

Paul A. Charp, Ph.D., Fellow, HPS
Senior Health Physicist
Emerging Environmental Hazards and Health Effects Branch (EEHHEB)
Division of Environmental Health Science and Practice (DEHSP)
National Center for Environmental Health (NCEH)
Centers for Disease Control and Prevention (CDC)
pcharp@cdc.gov
770-488-0723 office
404.388.0614 Cell



From: Schumann, R. Randall <rschumann@usgs.gov>
Sent: Wednesday, August 21, 2024 4:39 PM
To: Melanie Medina Smaine <mmedina@vivienda.pr.gov>; Weyers, Holly S <hsweyers@usgs.gov>
Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez <aarivera@vivienda.pr.gov>
Subject: RE: Request for Information- Radon testing and levels

Dear Ms. Medina Smaine,

In the early 1990s the U.S. Geological Survey (USGS) conducted geologic assessments of radon potential for all 50 states and the territories of Guam and Puerto Rico, in collaboration with the U.S. EPA. I conducted the geologic radon potential assessment for Puerto Rico. The PDF file of the report is too large to attach to this message but it can be obtained at <https://pubs.usgs.gov/of/1993/0292k/report.pdf>. The USGS did not conduct indoor radon testing and we did not conduct field studies associated with this assessment; it was based on existing data. Mr. David Saldana of the Puerto Rico Department of Health kindly provided us with data for 610 homes that were tested for indoor radon by his agency between 1993 and 1995, which are summarized in the report. I am not aware of any other radon-related geologic studies conducted in the Commonwealth of Puerto Rico by the U.S. Geological Survey.

Best regards,

R. Randall Schumann
Scientist Emeritus
U.S. Geological Survey
Geosciences and Environmental Change Science Center
Denver, Colorado, USA
rschumann@usgs.gov
<https://www.usgs.gov/staff-profiles/r-randall-schumann>

From: Raul Hernandez Doble <rhernandez2@salud.pr.gov>
Sent: Wednesday, August 21, 2024 2:13:31 PM
To: Melanie Medina Smaine <mmedina@vivienda.pr.gov>; Dr. Carlos Mellado <drcarlos.mellado@salud.pr.gov>
Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez <aarivera@vivienda.pr.gov>; Mayra Toro Tirado <mtoro@salud.pr.gov>
Subject: RE: [EXTERNAL] Request for Information- Radon testing and levels

Good afternoon. Ms. Medina

I regret to inform that we do not have any recent information on radon testing, since we do not have a certified radiation laboratory certified for radon testing. There are companies that sell test kits available online that can be done and mailed to a testing laboratory. There are also lists of radon contractors and these companies that process radon testing cartridges with instructions, on the Environmental Protection Agency Indoor air Quality web page. The last radon study in Puerto Rico done by the PR Department of Health was done on the year 1993.

Raul Hernandez Doble
Director, Seccion Salud Radiologica
Division de Salud Ambiental
Secretaria Auxiliar para la Vigilancia y la Proteccion de la Salud Publica
rhernandez2@salud.gov.pr
Phone: (787)765-2929 ext. 3210

From: Reyes, Brenda <Reyes.Brenda@epa.gov>
Sent: Wednesday, September 18, 2024 11:48 AM
To: Cesar O Rodriguez Santos <cesarrodriguez@drna.pr.gov>; Maritza Rosa Olivares <maritzarosaolivares@drna.pr.gov>; Silvina Cancelos Mancini <silvina.cancelos@upr.edu>; Melanie Medina Smaine <mmedina@vivienda.pr.gov>
Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez <aarivera@vivienda.pr.gov>; Povetko, Oleg (he/him/his) <Povetko.Oleg@epa.gov>
Subject: RE: Request for Information- Randon testing and levels

Saludos.

La EPA esta trabajando una respuesta a su petición. Se sometió borrador a la directora y el subdirector para su aprobación y firma.

Brenda Reyes Tomassini
Public Affairs
U.S. EPA
Region 2
Caribbean Environmental Protection Division
(787) 977-5869/(787) 977-5865
Mobile: 202-834-1290

From: Silvina Cancelos Mancini <silvina.cancelos@upr.edu>
Sent: Friday, September 6, 2024 15:04
To: Melanie Medina Smaine <mmedina@vivienda.pr.gov>
Cc: Elaine Dume Mejia <Edume@vivienda.pr.gov>; Luz S Colon Ortiz <Lcolon@vivienda.pr.gov>; Aldo A. Rivera-Vazquez <aarivera@vivienda.pr.gov>; Maritza Rosa Olivares <maritzarosaolivares@drna.pr.gov>; Reyes, Brenda <Reyes.Brenda@epa.gov>; Povetko, Oleg <Povetko.Oleg@epa.gov>
Subject: Re: Request for Information- Randon testing and levels

Estimada Melanie Medina

Quería dejarle saber que recibimos su correo el 21 de agosto al igual que el de Maritza Rosa el pasado 4 de septiembre. Ya las personas involucradas de EPA, junto conmigo y el Dr. Marín estamos al tanto del asunto y estamos trabajando para poder enviarles la información.

Atentamente

Silvina Cancelos
Professor
Associate Director
Mechanical Engineering Department
University of Puerto Rico - Mayaguez
Call BOX 9000 Mayaguez PR 00680
Tel: 787-832-4040 ext 5956
email: silvina.cancelos@upr.edu



Bubble Dynamics Lab
University of Puerto Rico - Mayaguez



EPA REGION 2
CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION

September 23, 2024

VIA EMAIL

William O. Rodriguez Rodriguez, Esq.
Secretary
Puerto Rico Department of Housing
Barbosa Ave. 606 Building Juan C. Cordero
San Juan, PR 00917
Email: W.Rodriguez@vivienda.pr.gov

RE: EPA Response to August 20, 2024 request for information of data on radon testing and levels in Puerto Rico

Dear Honorable Secretary Rodriguez Rodriguez:

This communication is in response to your letter of August 20, 2024 addressed to the Puerto Rico Department of Natural and Environmental Resources (DNER) and referred to the U.S. Environmental Protection Agency (EPA) regarding available data on radon testing and levels within Puerto Rico.

EPA's National Radon Action Plan 2021–2025 sets a goal for the nation to find, fix and prevent high indoor radon levels in 8 million buildings by 2025 and prevent 3,500 lung cancer deaths per year. Under this Plan, leaders from across multiple sectors are working together to plan, guide, and sustain nationwide action to prevent exposure to radon.

Due to the lack of data in Puerto Rico, EPA undertook an investigation in collaboration with the University of Puerto Rico-Mayaguez (UPRM) Campus, Departments of Civil Engineering and Surveying and Mechanical Engineering, to find out if radon presented a problem in Puerto Rico. Up until 2021, the only data we had for Puerto Rico was a 1993-1995 mail-in radon screening study referred to by the U.S. Geological Survey report (USGS, 1995) in which the USGS concluded that several areas of Puerto Rico have the geologic potential to generate indoor radon levels exceeding the EPA Action Level of 4 pCi/L (picocuries per liter), perhaps locally reaching very high levels above 50 pCi/L, if a house construction and

ventilation allow for soil-gas radon to enter and concentrate within the structure.¹ According to the USGS report, most of these areas are located in the northwest part of the island. Please note that the actual 1993-1995 study documentation is not available to the EPA.

Typical radon testing technology used in mainland United States (charcoal canisters or electric-powered devices) are impractical in Puerto Rico because of high humidity and power outages. The recovery and rebuilding of communities following the aftermath of 2017 Hurricanes Irma and Maria presented an opportunity to develop radon prevention and mitigation strategies in 2019. Initially, EPA sampled indoor radon air in over 170 single-family residences in the municipalities of San Sebastian, Lares, Ciales, Arecibo, Morovis, Camuy, and Hatillo and later expanded the project to other municipalities such as Rincon, Aguada, Aguadilla, Isabela, Quebradillas, Barceloneta and Vega Baja. The quality assurance protocols were anchored in American National Standards Institute/American Association of Radon Scientists and Technologists (ANSI/AARST) standards of practice (ANSI/AARS, 2019). The sampling was designed in two stages: scoping and confirmatory sampling. The scoping sampling was conducted using Corentium Home (CH) electronic monitors and E-Perm systems. Locations measuring above the EPA Action Level of 4 pCi/L with CH were measured at the second stage of the sampling using RAD7 and Corentium Pro Continuous Radon Monitors (CRMs). Nationally certified radon sampling professionals led by one such professional from the UPRM conducted confirmatory sampling in the second stage. Also, during the study, the nationally certified radon mitigation professionals inspected several homes with elevated indoor radon levels.

Mapping radon in Puerto Rico proved to be a complicated endeavor given the COVID-19 pandemic in 2020. EPA and UPRM continue to work on the project, however, results have not been finalized, and no scientific report has been published yet. Unfortunately, EPA cannot share preliminary data at this time because it contains privileged information. Nevertheless, preliminary data from the study does show homes with levels over 4 pCi/L (EPA Action Level) that might need mitigation to protect the health of their inhabitants.

Although many states have developed laws and regulations governing radon disclosure, certification, and mitigation, Puerto Rico lacks legislation or mandatory radon testing provisions for new construction, remodeling, selling or buying homes. Given this loophole and aiming to answer your request, the EPA can provide information on Best Management Practices for sampling indoor radon in Puerto Rico.

¹ **Reference:** USGS. Geologic Radon Potential of Guam and Puerto Rico, Report 93-292-K. Washington, DC: USGS. Retrieved 9/11/2024, from <https://pubs.usgs.gov/of/1993/0292k/report.pdf>.

CITY VIEW PLAZA II BUILDING, 7TH FLOOR
ROUTE 185 GUAYNABO, PR 00988

2

If you have any questions or need any additional information, please contact me at 787-977-5865 or guerrero.carmen@epa.gov or have your staff contact Reyes, Brenda at reyes.brenda@epa.gov or (787) 977-5869.

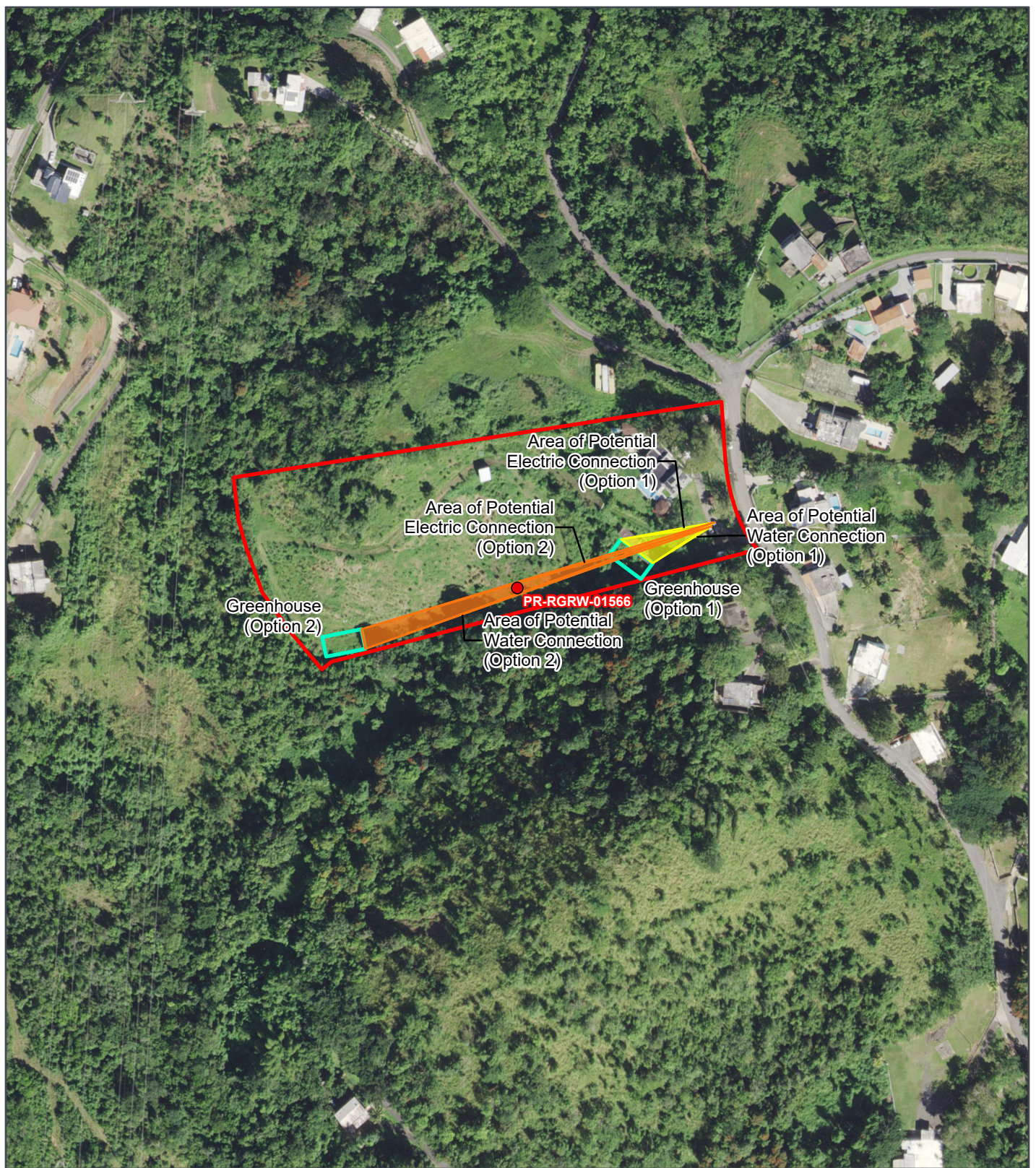
Sincerely,

**CARMEN
GUERRERO
PEREZ**

Carmen R. Guerrero Pérez
Director

Digitally signed by
CARMEN GUERRERO PEREZ
Date: 2024.09.23 09:41:39
-04'00'

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



REGROW PROGRAM

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

Applicant ID: PR-RGRW-01566

SWCA
ENVIRONMENTAL CONSULTANTS

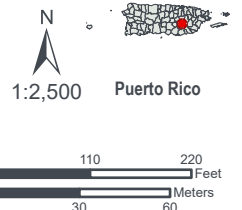
- Site
- Site Parcel
- Project Footprint (Option)
- Potential Area of Disturbance (Option 1)
- Potential Area of Disturbance (Option 2)

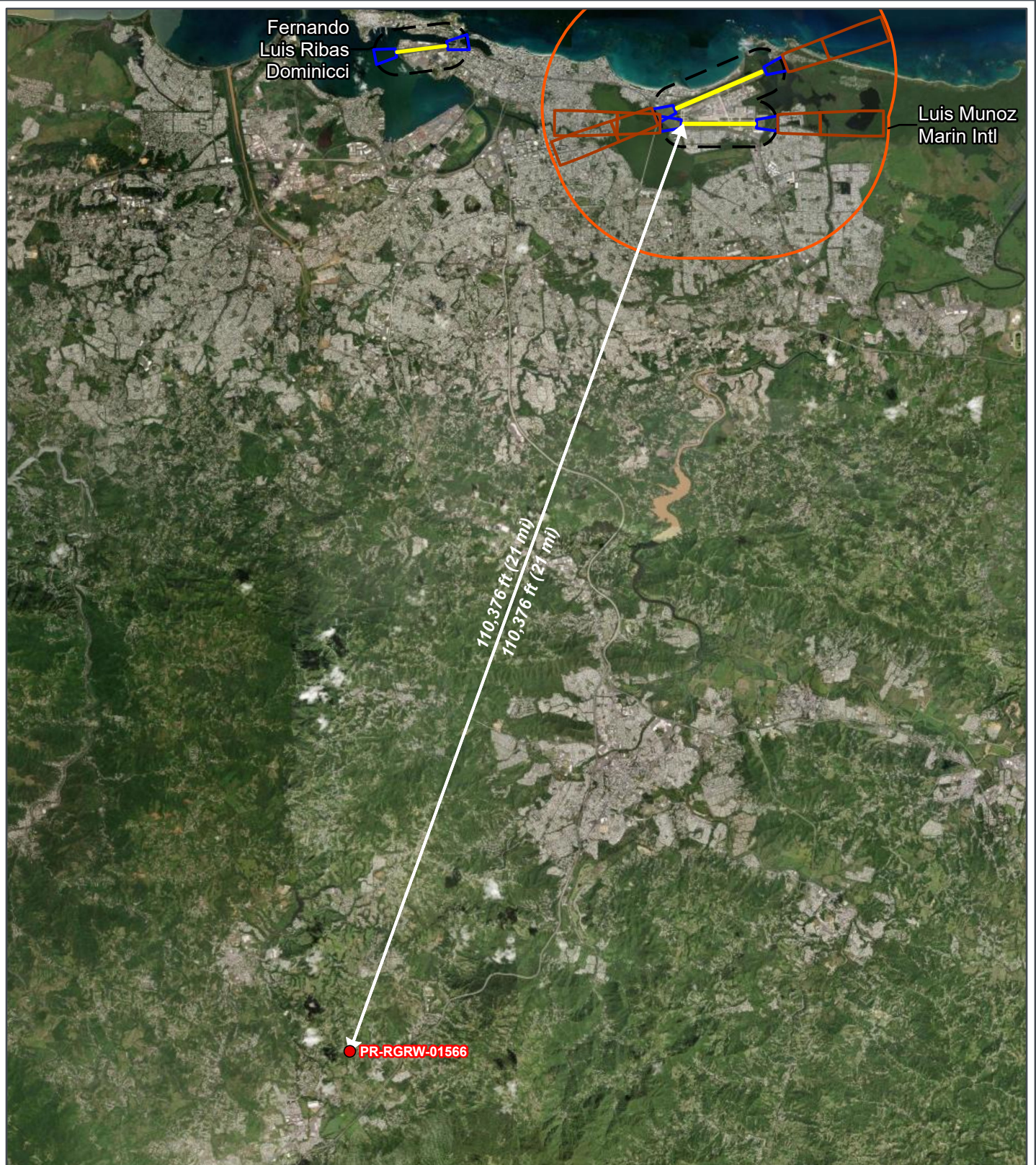
Carr #1 KM 56.7 interior Barrio Beatriz
Sector Monticello
Cidra, Puerto Rico 00739

Parcel ID: 300-021-250-03-001
Parcel Center:
66.122134°W 18.147767°N

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

Base Map: USA NAIP Imagery
Imagery Year: 2022
Updated: 5/3/2024
Layout: ABFE 1Pct
Aprx: 72428_ReGrowTier2Maps





REGROW PROGRAM

Figure B 1-1: Airport Hazards Map

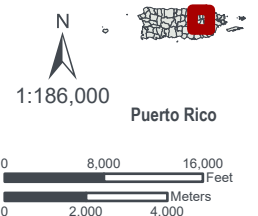
Applicant ID: PR-RGRW-01566

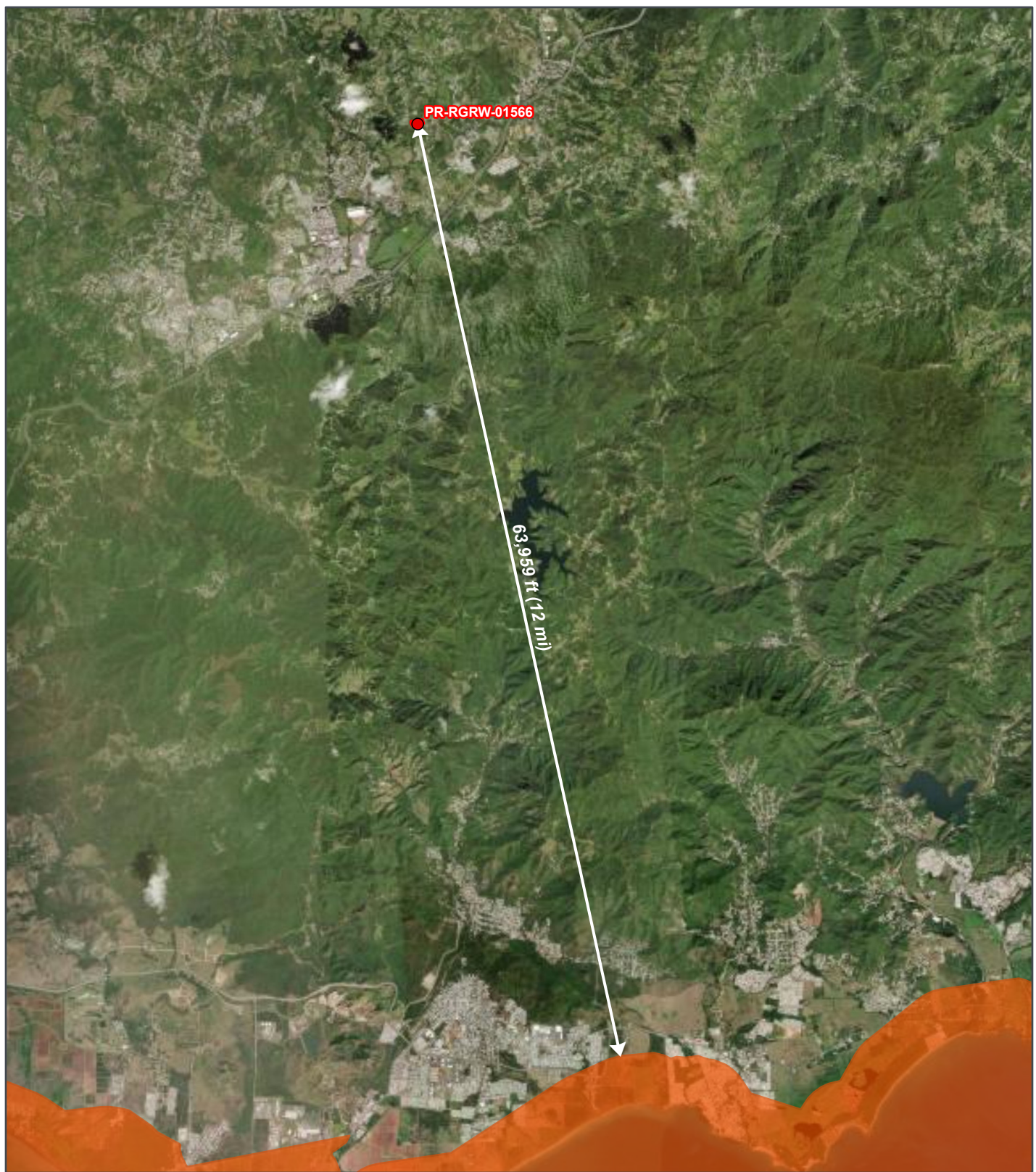
SWCA
ENVIRONMENTAL CONSULTANTS

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

Carr #1 KM 56.7 interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739
Parcel ID: 300-021-250-03-001
Parcel Center:
66.122134°W 18.147767°N

Data Source: <https://geodata.bts.gov/>
Base Map: ESRI ArcGIS Online,
accessed May 2024
Updated: 5/3/2024
Layout: Airport Hazards
Aprx: 72428_ReGrowTier2Maps





REGROW PROGRAM

Figure B 5-1: Coastal Zone Management Map

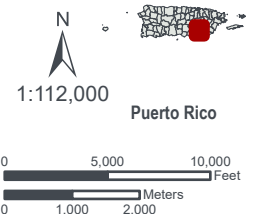
Applicant ID: PR-RGRW-01566

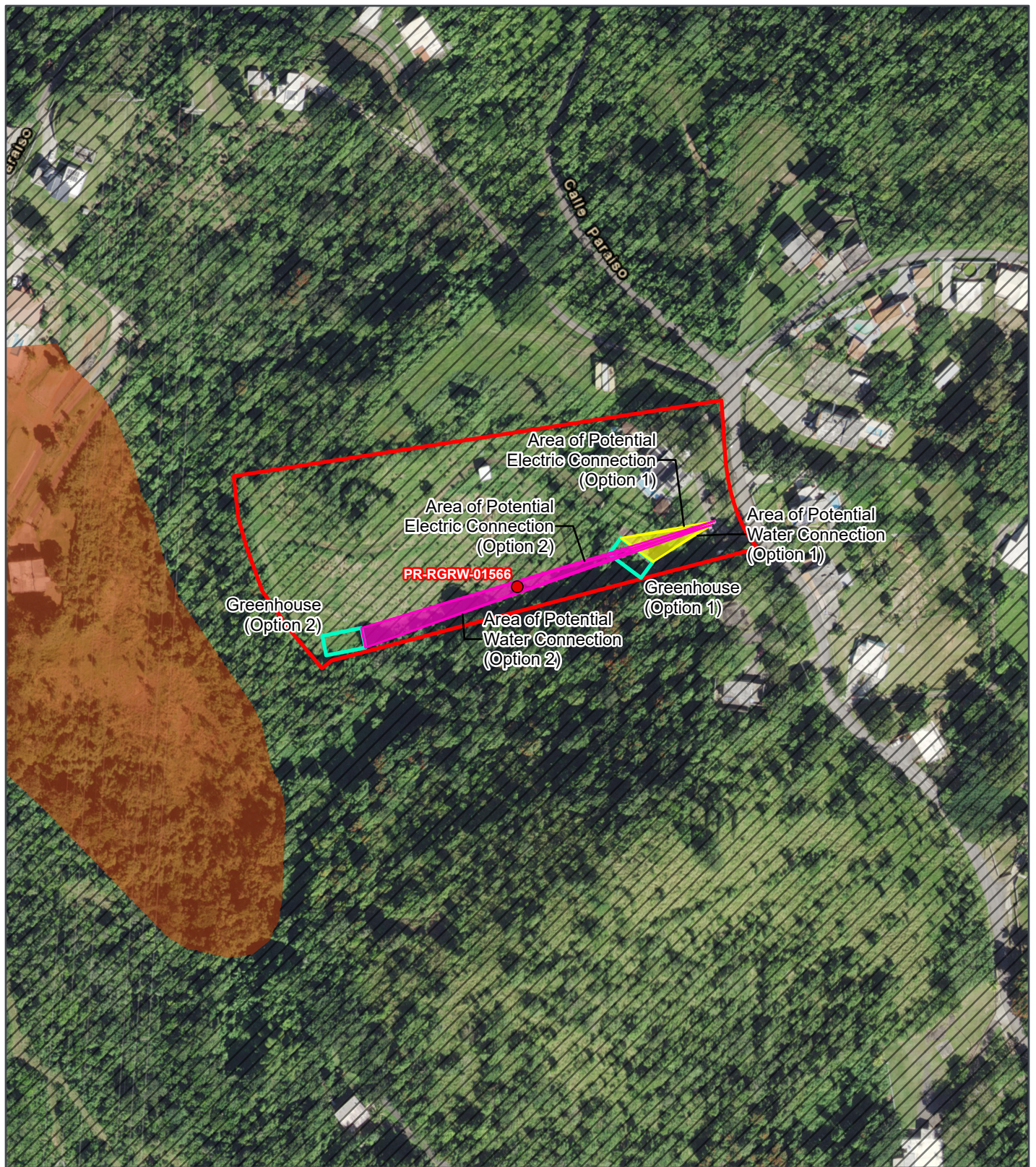
SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Coastal Management Zone

Carr #1 KM 56.7 interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739
Parcel ID: 300-021-250-03-001
Parcel Center:
66.122134°W 18.147767°N

Data Source: <https://coast.noaa.gov/arcgis/rest/services/Hosted/CoastalZoneManagementAct/BaseMap>: ESRI ArcGIS Online, accessed May 2024
Updated: 5/3/2024
Layout: Coastal Zone Management
Aprx: 72428_ReGrowTier2Maps



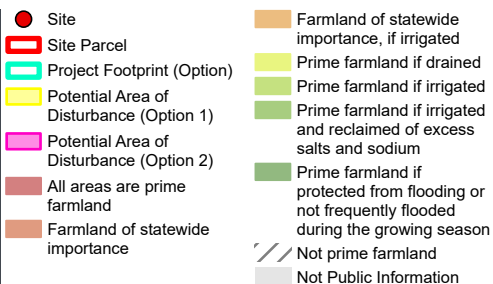


REGROW PROGRAM

Figure B 9-1: Prime Farmland Map

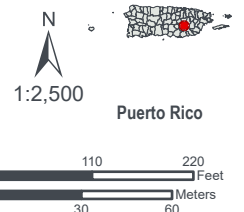
Applicant ID: PR-RGRW-01566

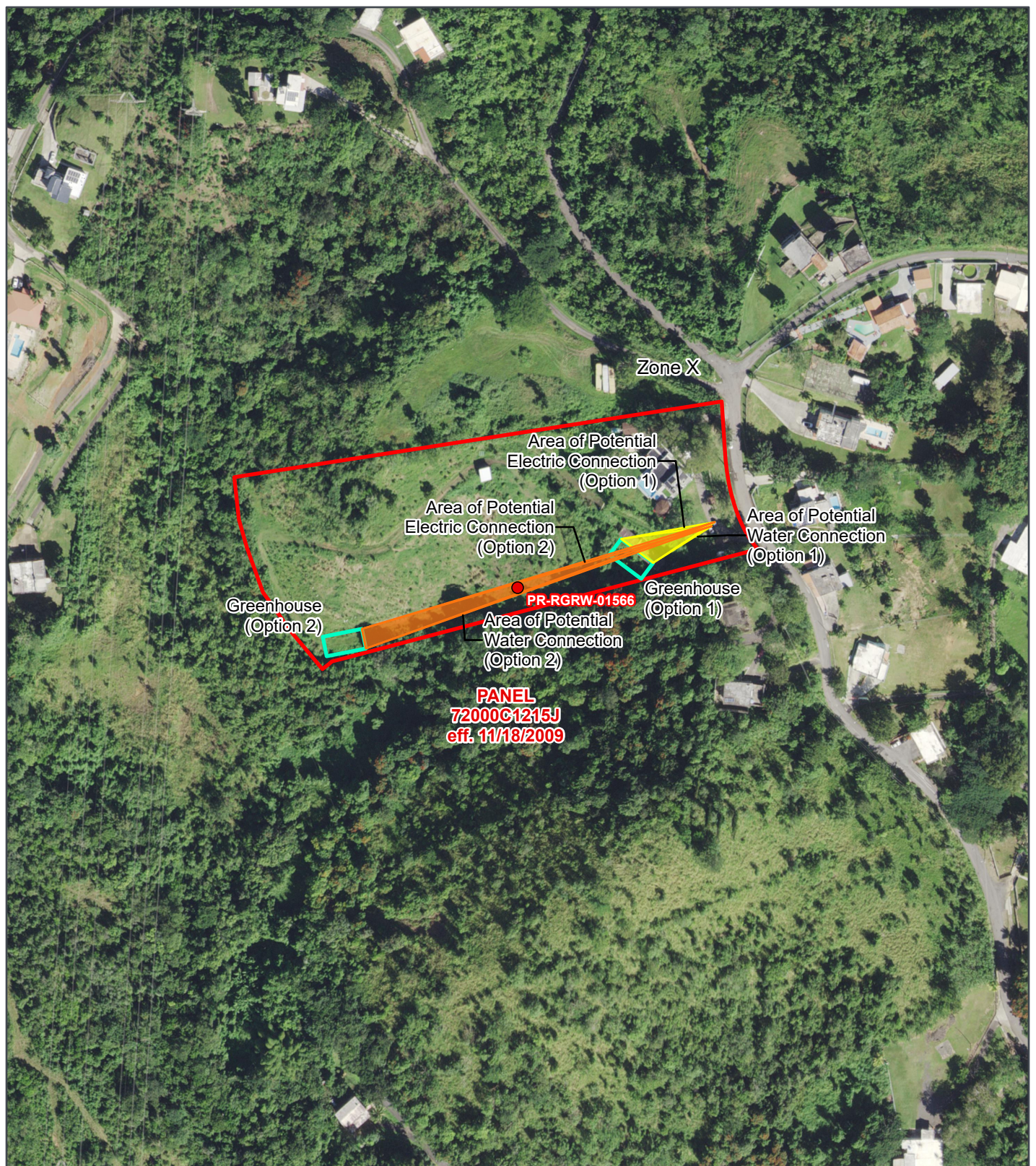
SWCA
ENVIRONMENTAL CONSULTANTS



Carr #1 KM 56.7 interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739
Parcel ID: 300-021-250-03-001
Parcel Center:
66.122134°W 18.147767°N

Data Source: <https://websoilsurvey.nrcs.usda.gov/app/>
Base Map: USA NAIP Imagery
Imagery Year: 2022
Updated: 5/3/2024
Layout: Prime Farmland
Aprx: 72428_ReGrowTier2Maps





REGROW PROGRAM

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

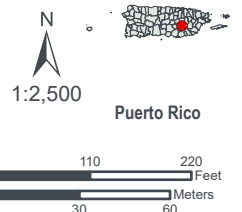
Applicant ID: PR-RGRW-01566

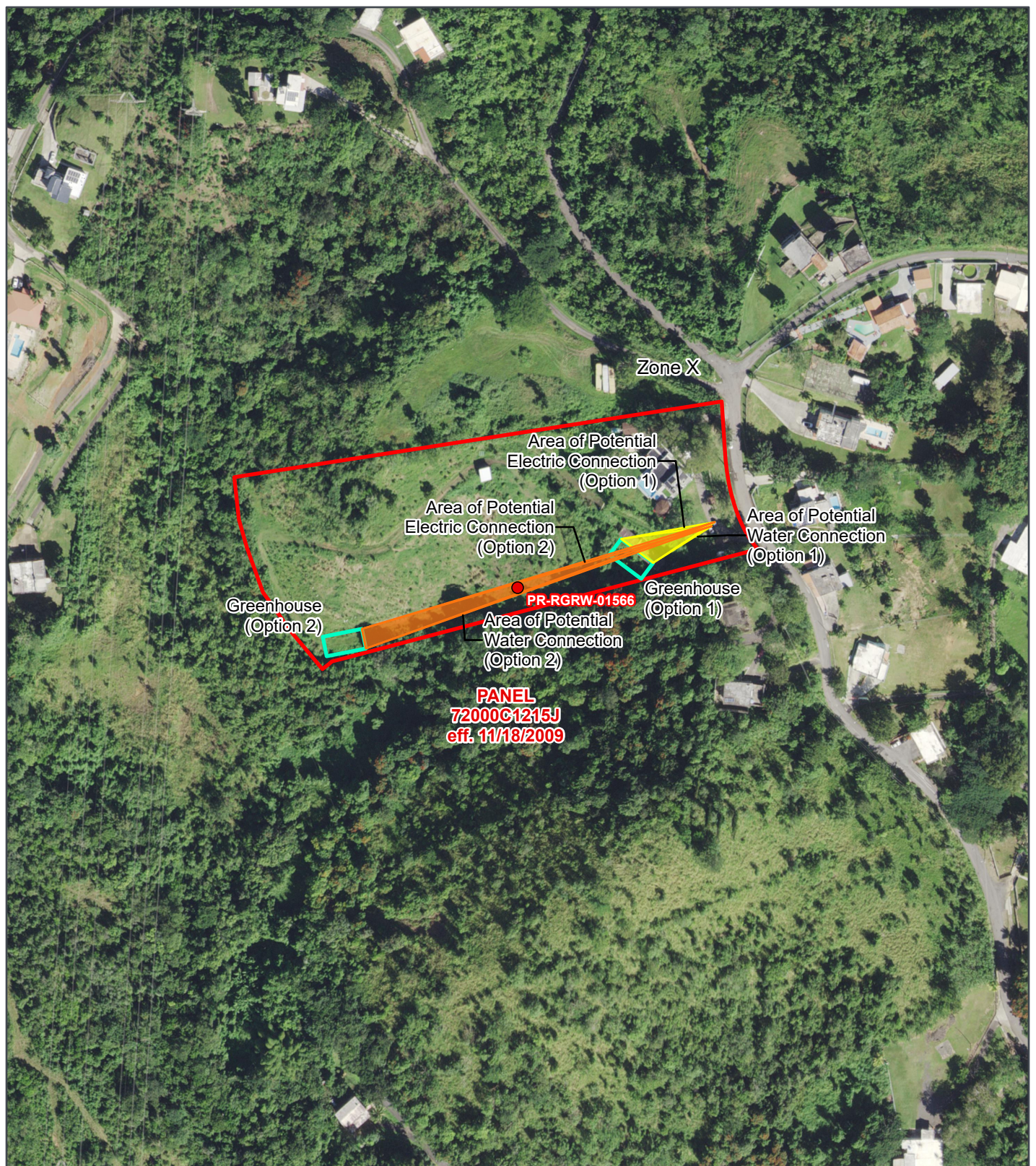
SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)
- Potential Area of Disturbance (Option 1)
- Potential Area of Disturbance (Option 2)
- ~ Base Flood Elevations
- Zone A
- Zone AE
- Zone AH
- Zone AO
- Zone VE
- Floodway
- Zone X - Shaded (500-year floodplain)
- Zone X - Unshaded
- Area Not Included
- Open Water

Carr #1 KM 56.7 interior Barrio Beatriz Sector Monticello Cidra, Puerto Rico 00739
Parcel ID: 300-021-250-03-001
Parcel Center: 66.122134°W 18.147767°N

Data Source: <https://hazards.fema.gov/gis/nfhl/rest/services/public/NFHL/MapServer>
Base Map: USA NAIP Imagery
Imagery Year: 2022
Updated: 5/3/2024
Layout: Effective Floodplain
Aprx: 72428_ReGrowTier2Maps





REGROW PROGRAM

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

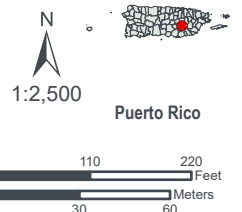
Applicant ID: PR-RGRW-01566

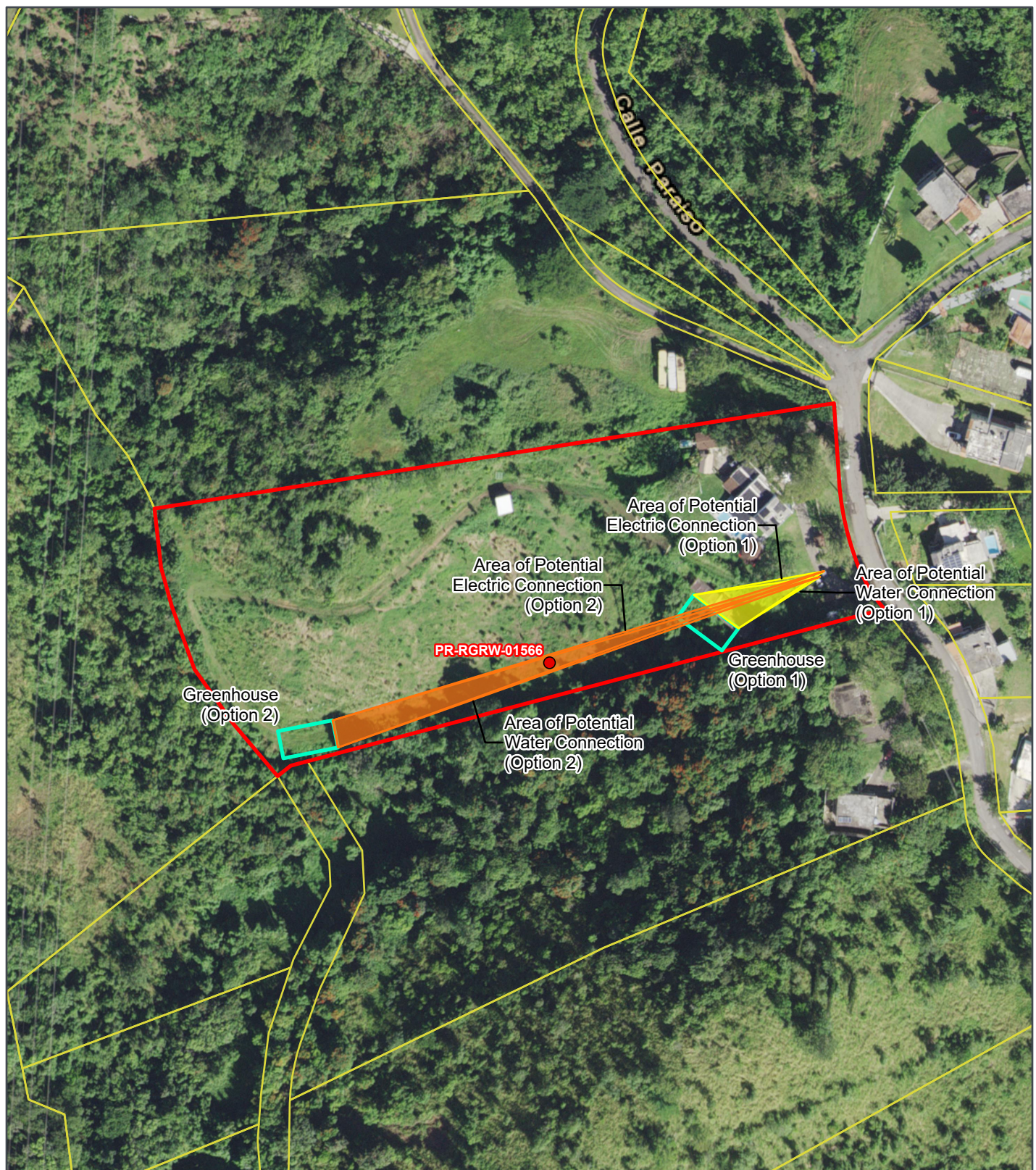
SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)
- Potential Area of Disturbance (Option 1)
- Potential Area of Disturbance (Option 2)
- ~ Base Flood Elevations
- Zone A
- Zone AE
- Zone AH
- Zone AO
- Zone VE
- Floodway
- Zone X - Shaded (500-year floodplain)
- Zone X - Unshaded
- Area Not Included
- Open Water

Carr #1 KM 56.7 interior Barrio Beatriz Sector Monticello Cidra, Puerto Rico 00739
Parcel ID: 300-021-250-03-001
Parcel Center: 66.122134°W 18.147767°N

Data Source: <https://hazards.fema.gov/gis/nfhl/rest/services/public/NFHL/MapServer>
Base Map: USA NAIP Imagery
Imagery Year: 2022
Updated: 5/3/2024
Layout: Effective Floodplain
Aprx: 72428_ReGrowTier2Maps





REGROW PROGRAM

Figure A-2: Site Vicinity

Applicant ID: PR-RGRW-01566

SWCA
ENVIRONMENTAL CONSULTANTS

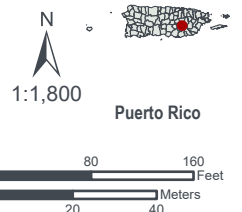
- Site
- Site Parcel
- Project Footprint (Option)
- Potential Area of Disturbance (Option 1)
- Potential Area of Disturbance (Option 2)

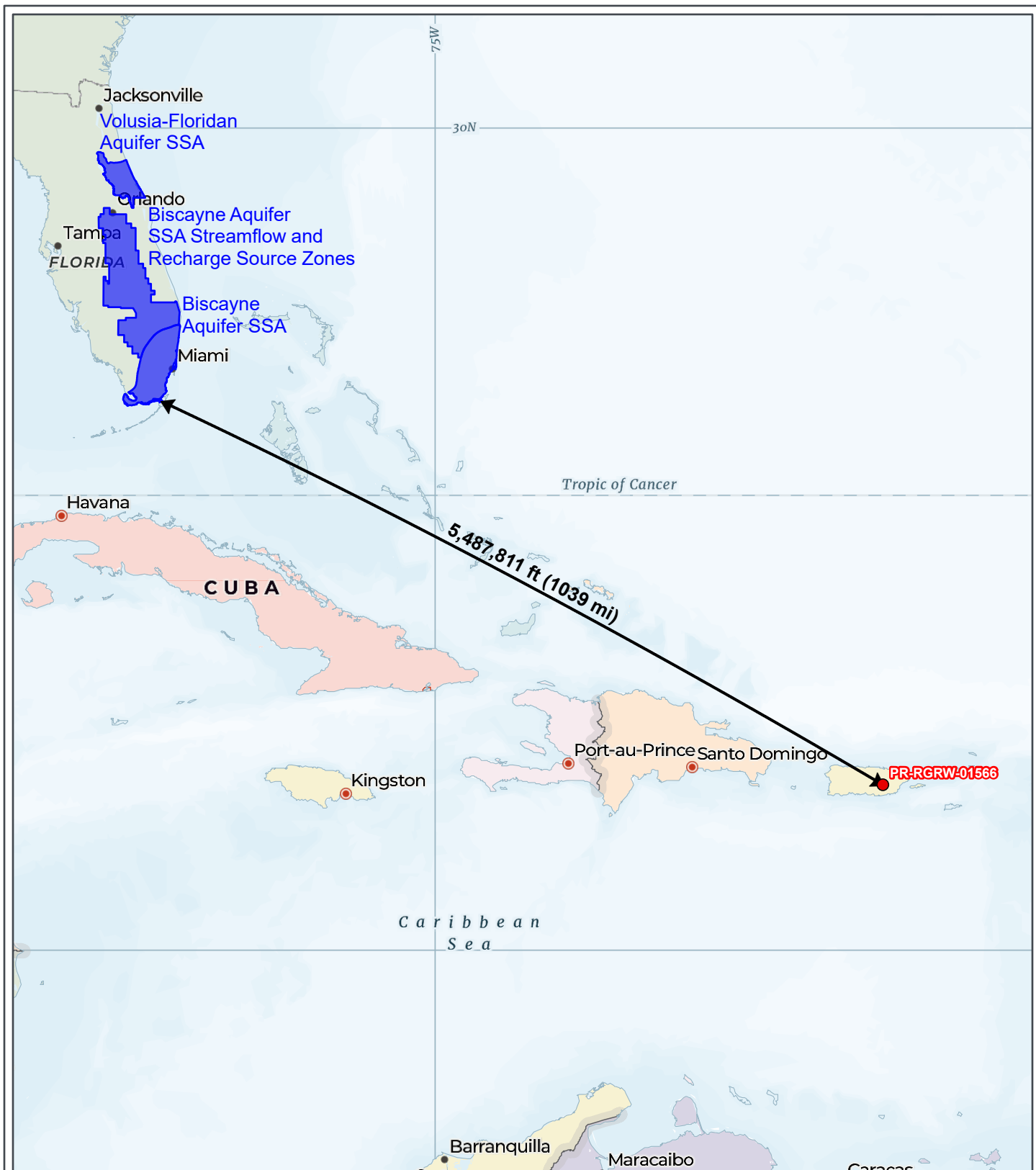
Carr #1 KM 56.7 interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739

Parcel ID: 300-021-250-03-001
Parcel Center:
66.122134°W 18.147767°N

Base Map: USA NAI/P Imagery
Imagery Year: 2022
Updated: 5/3/2024

Layout: Site Vicinity
Aprx: 72428_ReGrowTier2Maps





REGROW PROGRAM

Figure 15-1: Sole Source Aquifers Map

Applicant ID: PR-RGRW-01566

SWCA
ENVIRONMENTAL CONSULTANTS

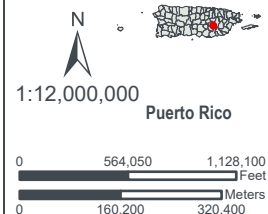
● Site

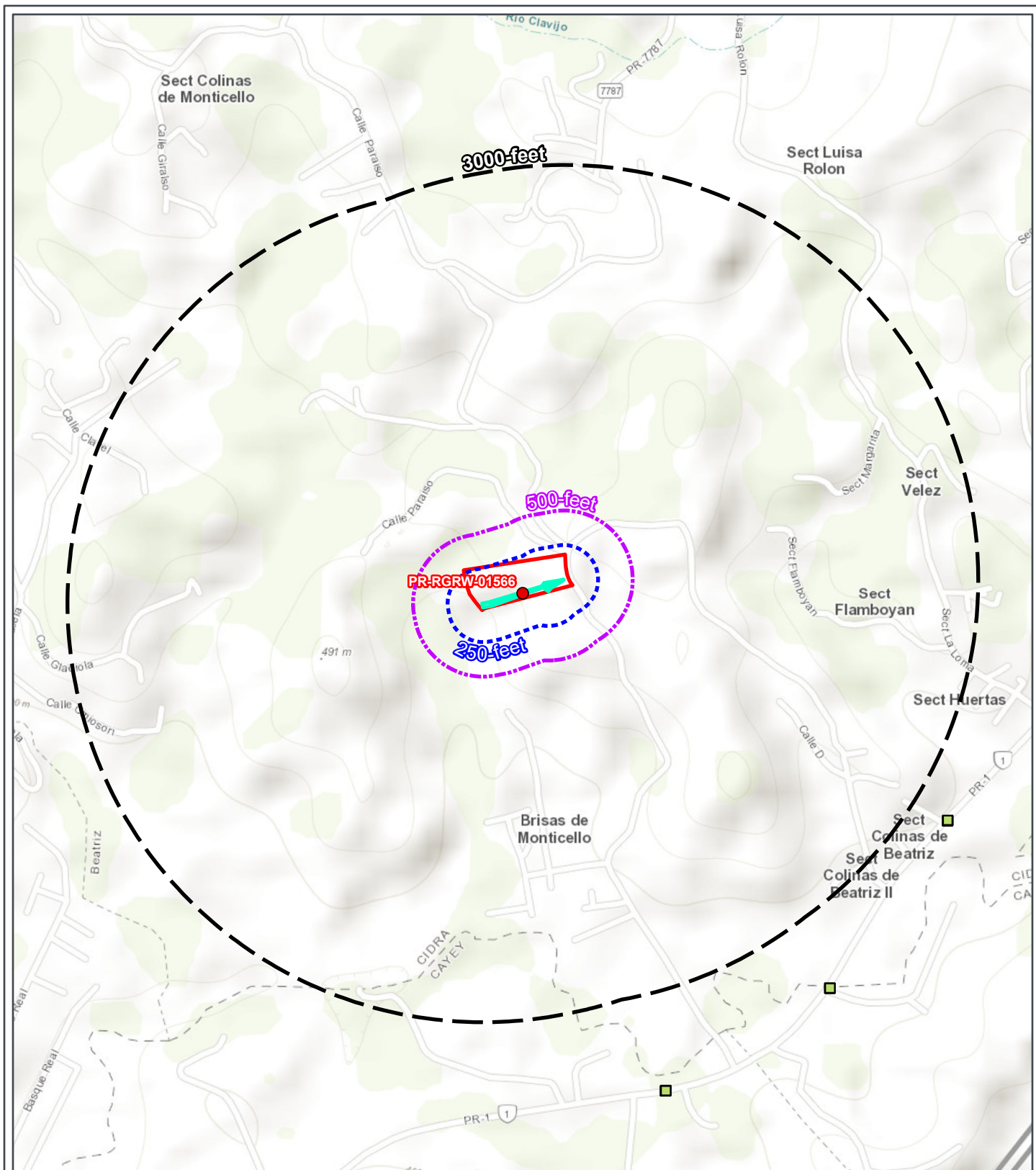
■ Sole Source Aquifers

*There are no Sole Source Aquifers in Puerto Rico.

Carr #1 KM 56.7 Interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739
Parcel ID: 300-021-250-03-001
Parcel Center:
66.122134°W 18.147767°N

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





REGROW PROGRAM

Figure B 6-1: Contamination and Toxic Substances Map

Applicant ID: PR-RGRW-01566

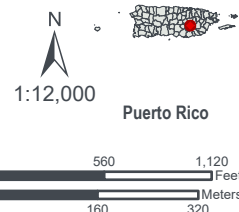
SWCA
ENVIRONMENTAL CONSULTANTS

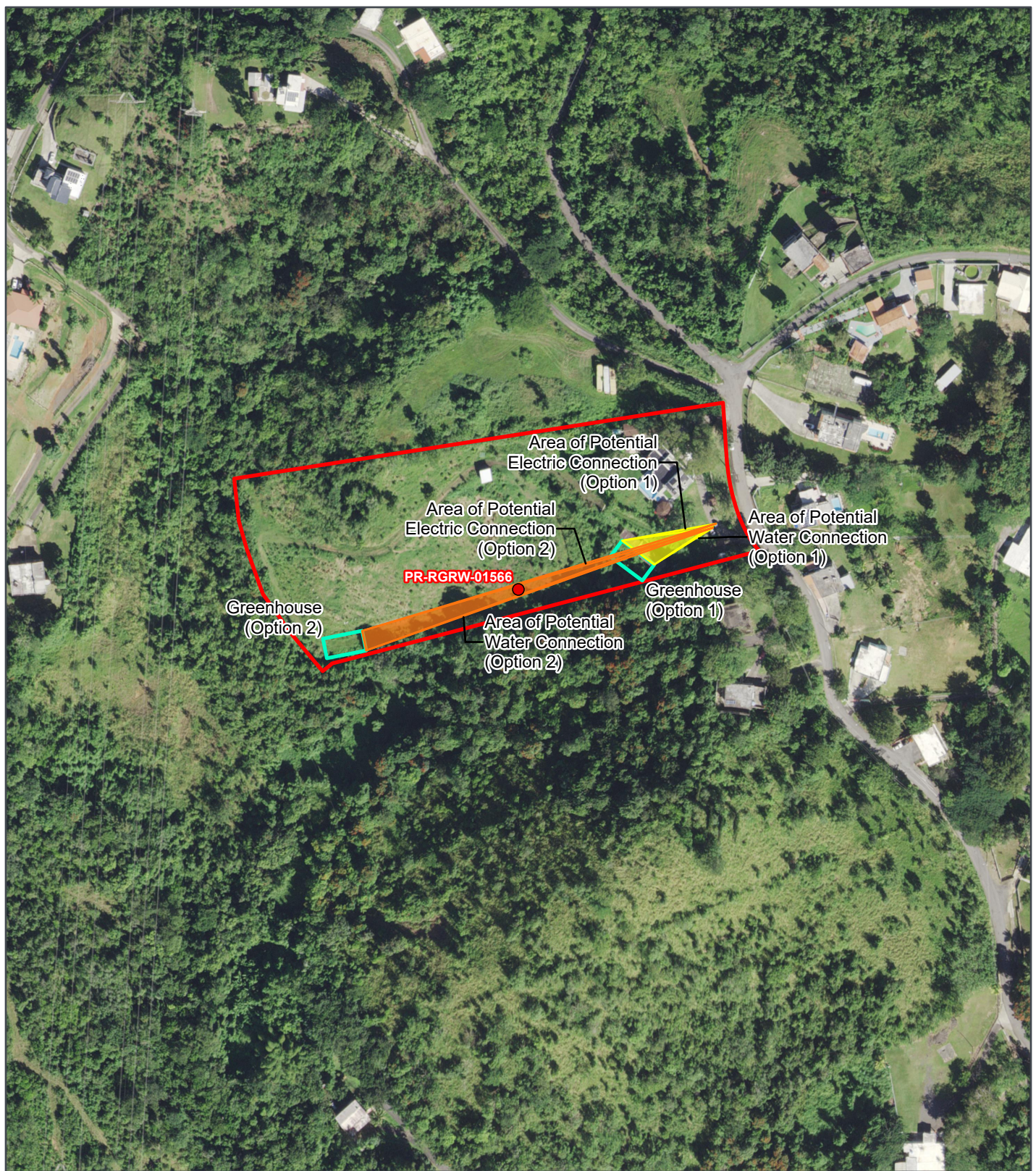
- Site
- ▭ Site Parcel
- ▭ Project Footprint (Option)
- ▭ Buffer (250-feet)
- ▭ Buffer (500-feet)
- ▭ Buffer (3000-feet)
- ▭ Water dischargers

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

Carr #1 KM 56.7 interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739
Parcel ID: 300-021-250-03-001
Parcel Center:
66.122134°W 18.147767°N

Data Source: <https://geopub.epa.gov/arcgis/rest/services/EMEF/MapServer>
Base Map: ESRI ArcGIS Online, accessed May 2024
Updated: 5/3/2024
Layout: Contamination and Toxic Substances



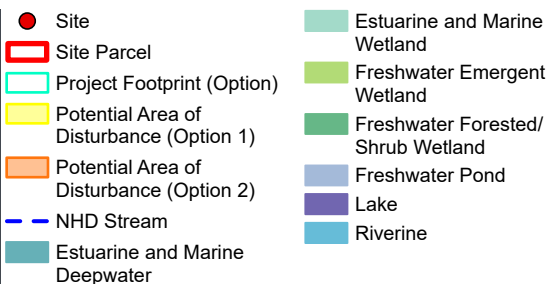


REGROW PROGRAM

Figure B 13-1: Wetlands Protection Map

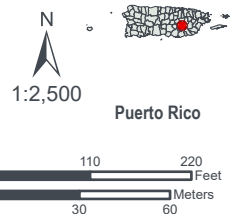
Applicant ID: PR-RGRW-01566

SWCA
ENVIRONMENTAL CONSULTANTS



Carr #1 KM 56.7 interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739
Parcel ID: 300-021-250-03-001
Parcel Center:
66.122134°W 18.147767°N

Data Source: <https://apps.nationalmap.gov/downloader/#/>
<https://www.fws.gov/program/national-wetlands-inventory/data-download>
Base Map: USA NAIP Imagery
Imagery Year: 2022
Updated: 5/3/2024
Layout: Wetlands Protection





REGROW PROGRAM

Figure B 14-1: National Wild and Scenic River Map

Applicant ID: PR-RGRW-01566

SWCA
ENVIRONMENTAL CONSULTANTS

- Site
- National Wild and Scenic River

Carr #1 KM 56.7 interior Barrio
Beatriz Sector Monticello
Cidra, Puerto Rico 00739
Parcel ID: 300-021-250-03-001
Parcel Center:
66.122134°W 18.147767°N

Data Source: https://apps.fs.usda.gov/arcx/rest/services/EDW/EDW_WildScenicRiverSegments_01/mapserver
Base Map: ESRI ArcGIS Online,
accessed May 2024
Updated: 5/3/2024

