



U.S. Department of Housing and Urban  
Development  
451 Seventh Street, SW  
Washington, DC 20410  
[www.hud.gov](http://www.hud.gov)  
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**Environmental Review for Activity/Project that is  
Categorically Excluded Subject to Section 58.5  
Pursuant to 24 CFR 58.35(a)**

**Project Information**

**Project Name:** PR-RGRW-01232-W

**HEROS Number:** 900000010460340

**Start Date:** 03/21/2025

**State / Local Identifier:**

**Project Location:** , Yauco, PR 00698

**Additional Location Information:**

The project is located at latitude 18.066378, longitude -66.830596 at the address given above. Tax ID Number: 337-000-009-57-001

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

This project (PR-RGRW-01232-W) entails the award of a grant to ELIZARDO MARTINEZ RAMOS, an agricultural business, at Barrio Quebradas de Yauco Carretera 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698. Tax ID Number: 337-000-009-57-001. Coordinates (latitude 18.066378, longitude -66.830596). The proposed project includes the repair and expansion of an existing fence, installation of a new water well, and upgrades and repair of a water distribution system, including installation of a new water pump on a new concrete pad and new water lines. The new water well will be 6 inches (in) wide with a maximum depth of 300 ft. Water from the well will run approximately 275 ft southwest to the cistern, then approximately 25 ft southeast to the cattle corral through underground pipes 1.5 in wide and 1 ft deep with a total length up to 300 linear feet (LF). Water distribution improvements will involve installing a 5 ft by 5 ft concrete slab that extends a maximum of 2 ft deep for the new water pump. The slab will be adjacent to the water well. Minor grading may be required for the slab. The applicant will acquire a permit from DNER prior to well installation. The existing fence that runs along the property line is approximately 8,565 linear feet and will be repaired and/or replaced, within the existing footprint, with a barbed wire fence and iron stakes/posts. The posts are a maximum of 6 ft tall, depending on the incline, that extend 1 ft deep and are spaced approximately 4 ft to 10 ft apart, based on the needs of the topography, totaling approximately 850 to 2,142 posts. The fence will follow parcel boundaries and encircle the entire parcel with parts of an existing fence along the central and south-central areas of the property will also be replaced. There is a riverine wetland that runs through the north-central and eastern parts of the parcel, so to minimize potential adverse impacts the applicant will construct the fence with materials that have minimal footprint (t-posts, stakes, and barbed wire) that can not only withstand floodwaters but will also allow the floodwaters to enter and exit at will while still allowing for full functionality of the fence. None of the sites require grading. An electrical connection is required for the water pump. Aboveground cables will connect from the existing electrical meter (18.06591972, -

66.83092583) to the water pump, approximately 190 LF northeast and will not require any ground disturbance, vegetation removal or tree trimming/removal for installation. Electrical connections are provided by LUMA/PREPA and are not included in the Intended Use of Grant Funds. The applicant will obtain authorization and any permits required by LUMA/PREPA prior to electrical connections being made. No tree clearing is required for construction, but the project will involve ground disturbance and minimal vegetation removal. The applicant owns the property and currently uses it for agricultural use; therefore, no acquisition or conversion is required. The project ELIZARDO MARTINEZ RAMOS, PR-RGRW-01232-W has been evaluated in accordance with FR-6492-N-01. The activities identified CE: #6 - 6. 7 CFR 799.32 (d) (3) (i): Fence installation and replacement. HUD Level of Review: CENST. Potential application to HUD activities: Fence installation and replacement that support agricultural needs, without ground disturbance, and CE: #11 - 11. 7 CFR 799.32(e) (2) (xxxvi11): Wells. HUD Level of Review: CEST. Potential application to HUD activities: Well installation and repairs for agricultural needs, with ground disturbance have been classified as CENST and CEST under the waiver.

#### Level of Environment Review Determination:

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

#### 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:** \$38,441.25

**Estimated Total Project Cost [24 CFR 58.2 (a) (5)]:** \$38,441.25

#### 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	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	N/A	



	<p>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.</p> <p>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.</p> <p>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.</p> <p>4. If a PR boa is found within any of the working or construction areas, activities should stop at that area and information recorded (see #5). Do not capture the boa. If boas need to be moved out of harm's way, designated personnel shall immediately contact the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers for safe capture and relocation of the animal (PRDNER phone #: (787) 724-5700, (787) 230-5550, (787) 771-1124). If immediate relocation is not an option, project-related activities at that area must stop until the boa moves out of harm's way on its own. Activities at other work sites, where no boas have been found after surveying the area, may continue.</p> <p>5. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. PR boa data should also include a photo of the animal (dead or alive), site GPS coordinates, the time and date, and</p>			
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	<p>comments on how the animal was detected and its behavior.</p> <p>If a PR boa is captured by PRDNER personnel, record the name of that person and information on where the PR boa will be taken. This information should be reported to the Service.</p> <p>7. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal, and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal (see #4). If not possible, the animal should be left alone until it leaves the vehicle on its own.</p> <p>8. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future.</p> <p>9. If a dead PR boa is found, immediately cease all work in that area and record the information accordingly (see #5). If the PR boa was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what actions will be taken to avoid further killings. A dead boa report should be sent by email (see contacts below) to the Service within 48 hours of the event.</p> <p>10. Projects must comply with all state laws</p>			
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	and regulations. Please contact the PRDNER for further guidance.			
Wetlands Protection	The proposed project has minimal impact to wetlands. However, to best minimize the potential adverse, direct and indirect, impacts the applicant will construct the fence with materials that have a minimal footprint (using existing post holes separated by 8-foot intervals, t-posts, stakes, and barbed wire) and that allow water to flow freely without creating an impermeable barrier while sustaining full functionality of the fence. To mitigate direct and indirect impacts, best management practices, such as proper site management, implementation and maintenance of erosion and sedimentation control measures, and soil stabilization will be followed to minimize potential impacts to wetlands.	N/A		

**Determination:**

<input type="checkbox"/>	This categorically excluded activity/project converts to <b>EXEMPT</b> per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; <b>Funds may be committed and drawn down after certification of this part</b> for this (now) EXEMPT project; OR
<input checked="" type="checkbox"/>	This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, <b>publish NOI/RROF and obtain "Authority to Use Grant Funds"</b> (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR
<input type="checkbox"/>	This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature:  Date: March 24, 2025

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

Responsible Entity Agency Official Signature:  Date: 3/28/2025

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-01232-W

**HEROS Number:** 900000010460340

**Start Date:** 03/21/2025

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

**State / Local Identifier:**

**RE Preparer:** Ricardo Espiet Lopez

**Certifying Office**  
**r:**

**Grant Recipient (if different than Responsible Entity):**

**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:** , Yauco, PR 00698

**Additional Location Information:**

The project is located at latitude 18.066378, longitude -66.830596 at the address given above. Tax ID Number: 337-000-009-57-001

**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-01232-W) entails the award of a grant to ELIZARDO MARTINEZ RAMOS, an agricultural business, at Barrio Quebradas de Yauco Carretera 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698. Tax ID Number: 337-000-009-57-001. Coordinates (latitude 18.066378, longitude -66.830596). The proposed project includes the repair and expansion of an existing fence, installation of a new water well, and upgrades and repair of a water distribution system, including installation of a new water pump on a new concrete pad and new water lines. The new water well will be 6 inches (in) wide with a maximum depth of 300 ft. Water from the well will run approximately 275 ft southwest to the cistern, then approximately 25 ft southeast to the cattle corral through underground pipes 1.5 in wide and 1 ft deep with a total length up to 300 linear feet (LF). Water distribution improvements will involve installing a 5 ft by 5 ft concrete slab that extends a maximum of 2 ft deep for the new water pump. The slab will be adjacent to the water well. Minor grading may be required for the slab. The applicant will acquire a permit from DNER prior to well installation. The existing fence that runs along the property line is approximately 8,565 linear feet and will be repaired and/or replaced, within the existing footprint, with a barbed wire fence and iron stakes/posts. The posts are a maximum of 6 ft tall, depending on the incline, that extend 1 ft deep and are spaced approximately 4 ft to 10 ft apart, based on the needs of the topography, totaling approximately 850 to 2,142 posts. The fence will follow parcel boundaries and encircle the entire parcel with parts of an existing fence along the central and south-central areas of the property will also be replaced. There is a riverine wetland that runs through the north-central and eastern parts of the parcel, so to minimize potential adverse impacts the applicant will construct the fence with materials that have minimal footprint (t-posts, stakes, and barbed wire) that can not only withstand floodwaters but will also allow the floodwaters to enter and exit at will while still allowing for full functionality of the fence. None of the sites require grading. An electrical connection is required for the water pump. Aboveground cables will connect from the existing electrical meter (18.06591972, -66.83092583) to the water pump, approximately 190 LF northeast and will not require any ground disturbance, vegetation removal or tree trimming/removal for installation. Electrical connections are provided by LUMA/PREPA and are not included in the Intended Use of Grant Funds. The applicant will obtain authorization and any permits required by LUMA/PREPA prior to electrical connections being made. No tree clearing is required for construction, but the project will involve ground

disturbance and minimal vegetation removal. The applicant owns the property and currently uses it for agricultural use; therefore, no acquisition or conversion is required. The project ELIZARDO MARTINEZ RAMOS, PR-RGRW-01232-W has been evaluated in accordance with FR-6492-N-01. The activities identified CE: #6 - 6. 7 CFR 799.32 (d) (3) (i): Fence installation and replacement. HUD Level of Review: CENST. Potential application to HUD activities: Fence installation and replacement that support agricultural needs, without ground disturbance, and CE: #11 - 11. 7 CFR 799.32(e) (2) (xxxvi11): Wells. HUD Level of Review: CEST. Potential application to HUD activities: Well installation and repairs for agricultural needs, with ground disturbance have been classified as CENST and CEST under the waiver.

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

[PR-RGRW-01232-W Site Map.pdf](#)

[PR-RGRW-01232-W IUGF.pdf](#)

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

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

[PR-RGRW-01232-W EFOR.pdf](#)

**Level of Environmental Review Determination:**

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

58.35(a)(3)(iii)

**Determination:**

	This categorically excluded activity/project converts to <b>EXEMPT</b> per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; <b>Funds may be committed and drawn down after certification of this part</b> for this (now) EXEMPT project; OR
✓	This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, <b>publish NOI/RROF and obtain "Authority to Use Grant Funds"</b> (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR
	This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

**Approval Documents:**

[01232-SIG-PAGE.pdf](#)

**7015.15 certified by Certifying Officer on:**

**7015.16 certified by Authorizing Officer  
on:**

**Funding Information**

<b>Grant / Project Identification Number</b>	<b>HUD Program</b>	<b>Program Name</b>	<b>Funding Amount</b>
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
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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:** \$38,441.25

**Estimated Total Project Cost:** \$38,441.25

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

<b>Compliance Factors:</b> Statutes, Executive Orders, and Regulations listed at 24 CFR §50.4, §58.5, and §58.6	Are formal compliance steps or mitigation required?	Compliance determination (See Appendix A for source determinations)
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 &amp; § 58.6</b>		
<b>Airport Hazards</b> Clear Zones and Accident Potential Zones; 24 CFR Part 51 Subpart D	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The nearest civil primary or commercial service airport, Mercedita, is located 91,030 ft (17 miles [mi]) from the project site. The nearest military airport, Luis Munoz Marin International Airport, is located 313,295 ft (59 mi) from the project sites. The



		project is in compliance with Airport Hazards requirements.
<b>Coastal Barrier Resources Act</b> 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 40,519 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.
<b>Flood Insurance</b> Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Flood Map Number 72000C1605H, effective on 4/19/2005: 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.
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 &amp; § 58.5</b>		
<b>Air Quality</b> 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.
<b>Coastal Zone Management Act</b> 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 25,277 feet from the coastal zone. The project is in compliance with the Coastal Zone Management Act.
<b>Contamination and Toxic Substances</b> 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. 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. The project is in

		compliance with contamination and toxic substances requirements.
<b>Endangered Species Act</b> 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.
<b>Explosive and Flammable Hazards</b> 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.
<b>Farmlands Protection</b> 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.
<b>Floodplain Management</b> Executive Order 11988, particularly section 2(a); 24 CFR Part 55	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Flood Map Number 72000C1605H, effective on 4/19/2005: This project does not occur in the FFRMS floodplain. The project is in compliance with Executive Orders 11988 and 13690. 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 Yauco; therefore, PFIRM information was not available for the area and therefore not considered in the review.
<b>Historic Preservation</b> National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Construction Date (AH est.): ca. 1984) 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.
<b>Noise Abatement and Control</b> Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	<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.

<b>Sole Source Aquifers</b> 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.
<b>Wetlands Protection</b> Executive Order 11990, particularly sections 2 and 5	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The project results will impact on- or off-site wetlands. An 8 Step Process has been completed. With mitigation, identified in the mitigation section of this review, the project will be in compliance with Executive Order 11990.
<b>Wild and Scenic Rivers Act</b> Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project is not within proximity of a NWSRS river. The project is located 368,439 feet from the nearest Wild and Scenic River. The project is in compliance with the Wild and Scenic Rivers Act.
<b>HUD HOUSING ENVIRONMENTAL STANDARDS</b>		
<b>ENVIRONMENTAL JUSTICE</b>		
<b>Environmental Justice</b> Executive Order 12898	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No adverse environmental impacts were identified in the project's total environmental review. The project is in compliance with Executive Order 12898. On January 21, 2025, President Donald Trump issued the Executive Order 14173 titled "Ending Illegal Discrimination and Restoring Merit-Based Opportunity", which revoked Executive Order 12898 and eliminated federal mandates requiring agencies to assess environmental justice impacts. Consequently, there is no longer a federal requirement to address environmental justice concerns in the environmental compliance review process.

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

Summarized below are all mitigation measures adopted by the Responsible Entity to reduce, avoid or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements and other relevant documents.

The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

<b>Law, Authority, or Factor</b>	<b>Mitigation Measure or Condition</b>	<b>Comments on Completed Measures</b>	<b>Mitigation Plan</b>	<b>Complete</b>
Endangered Species Act	<p>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.</p> <p>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.</p> <p>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.</p> <p>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</p>	N/A		

	<p>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.</p> <p>5. For all boa sightings (dead or alive), record the time and date of the sighting and the specific location where it was found. PR boa data should also include a photo of the animal (dead or alive), site GPS coordinates, the time and date, and comments on how the animal was detected and its behavior.</p> <p>If a PR boa is captured by PRDNER personnel, record the name of that person and information on where the PR boa will be taken. This information should be reported to the Service.</p> <p>7. Measures should be taken to avoid and minimize PR boa casualties by heavy machinery or motor vehicles being used on site. Any heavy machinery left on site (staging) or near potential PR boa habitat (within 50 meters of potential boa habitat), needs to be thoroughly inspected each morning before work starts to</p>			
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	<p>ensure that no boas have sheltered within engine compartments or other areas of the equipment. If PR boas are found within vehicles or equipment, do not capture the animal, and let it move on its own or call PRDNER Rangers for safe capture and relocation of the animal (see #4). If not possible, the animal should be left alone until it leaves the vehicle on its own.</p> <p>8. PR boas may seek shelter in debris piles. Measures should be taken to avoid and minimize boa casualties associated with sheltering in debris piles as a result of project activities. Debris piles should be placed far away from forested areas. Prior to moving, disposing or shredding, debris piles should be carefully inspected for the presence of boas. If debris piles will be left on site, we recommend they be placed in areas that will not be disturbed in the future.</p> <p>9. If a dead PR boa is found, immediately cease all work in that area and record the information accordingly (see #5). If the PR boa was accidentally killed as part of the project actions, please include information on what conservation measures had been implemented and what actions will be taken to avoid further killings. A dead boa report should be sent by email (see contacts below) to the Service within 48 hours of the event.</p> <p>10. Projects must comply with all state laws and regulations. Please</p>			
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	contact the PRDNER for further guidance.			
Wetlands Protection	The proposed project has minimal impact to wetlands. However, to best minimize the potential adverse, direct and indirect, impacts the applicant will construct the fence with materials that have a minimal footprint (using existing post holes separated by 8-foot intervals, t-posts, stakes, and barbed wire) and that allow water to flow freely without creating an impermeable barrier while sustaining full functionality of the fence. To mitigate direct and indirect impacts, best management practices, such as proper site management, implementation and maintenance of erosion and sedimentation control measures, and soil stabilization will be followed to minimize potential impacts to wetlands.	N/A		

**Project Mitigation Plan**

See attached mitigation list.

[PR-RGRW-01232-W Mitigation List.docx](#)

**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 civil primary or commercial service airport, Mercedita, is located 91,030 ft (17 miles [mi]) from the project site. The nearest military airport, Luis Munoz Marin International Airport, is located 313,295 ft (59 mi) from the project sites. The project is in compliance with Airport Hazards requirements.

**Supporting documentation**

[PR-RGRW-01232-W 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 40,519 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**

[PR-RGRW-01232-W CBRS.pdf](#)

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

Yes

✓ No

**Flood Insurance**

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

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

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

✓ Yes

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

[PR-RGRW-01232-W 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 72000C1605H, effective on 4/19/2005: 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 25,277 feet from the coastal zone. The project is in compliance with the Coastal Zone Management Act.

**Supporting documentation**[PR-RGRW-01232-W 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		
<a href="https://www.onecpd.info/environmental-review/site-contamination">https://www.onecpd.info/environmental-review/site-contamination</a>		

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

ASTM Phase I ESA

ASTM Phase II ESA

Remediation or clean-up plan

ASTM Vapor Encroachment Screening.

☒ None of the above

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

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

**2. Were any on-site or nearby toxic, hazardous, or radioactive substances\* (excluding radon) 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?)**

Provide a map or other documentation of absence or presence of contamination\*\* and explain evaluation of site contamination in the Screen Summary at the bottom of this screen.

☒ 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

\* This question covers the presence of radioactive substances excluding radon. Radon is addressed in the Radon Exempt Question.

\*\* Utilize EPA's Enviromapper, NEPAAssist, or state/tribal databases to identify nearby dumps, junk yards, landfills, hazardous waste sites, and industrial sites, including EPA National Priorities List Sites (Superfund sites), CERCLA or state-equivalent sites, RCRA Corrective Action sites with release(s) or suspected release(s) requiring clean-up action and/or further investigation. Additional supporting documentation may include other inspections and reports.

**3. Evaluate the building(s) for radon. Do all buildings meet any of the exemptions\* from having to consider radon in the contamination analysis listed in CPD Notice [CPD-23-103](#)?**

Yes

Explain:

✓ No

\* Notes:

- Buildings with no enclosed areas having ground contact.
- Buildings containing crawlspaces, utility tunnels, or parking garages would not be exempt, however buildings built on piers would be exempt, provided that there is open air between the lowest floor of the building and the ground.
- Buildings that are not residential and will not be occupied for more than 4 hours per day.
- Buildings with existing radon mitigation systems - document radon levels are below 4 pCi/L with test results dated within two years of submitting the application for HUD assistance and document the system includes an ongoing maintenance plan that includes periodic testing to ensure the system continues to meet the current EPA recommended levels. If the project does not require an application, document test results dated within two years of the date the environmental review is certified. Refer to program office guidance to ensure compliance with program requirements.
- Buildings tested within five years of the submission of application for HUD assistance: test results document indoor radon levels are below current the EPA's recommended action

levels of 4.0 pCi/L. For buildings with test data older than five years, any new environmental review must include a consideration of radon using one of the methods in Section A below.

**4. Is the proposed project new construction or substantial rehabilitation where testing will be conducted but cannot yet occur because building construction has not been completed?**

Yes

Compliance with this section is conditioned on post-construction testing being conducted, followed by mitigation, if needed. Radon test results, along with any needed mitigation plan, must be uploaded to the mitigation section within this screen.

✓ No

**5. Was radon testing or a scientific data review conducted that provided a radon concentration level in pCi/L?**

Yes

✓ No

If no testing was conducted and a review of science-based data offered a lack of science-based data for the project site, then document and upload the steps taken to look for documented test results and science-based data as well as the basis for the conclusion that testing would be infeasible or impracticable.

Explain:

Radon testing is not feasible or practicable for this case, please see the attached Radon Memo.

File Upload:

[Radon Attachments.pdf](#)  
[PR-RGRW-01232-W Radon Memo.docx](#)

Based on the response, the review is in compliance with this section. Continue to the Screen Summary at the bottom of this screen.

Non-radon contamination was found in a previous question.



**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. 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. The project is in compliance with contamination and toxic substances requirements.

**Supporting documentation**

[PR-RGRW-01232-W Toxics.pdf](#)

[PR-RGRW-01232-W 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:

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. 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.

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-01232-W USFWS Consultation Package.pdf](#)  
[PR-RGRW-01232-W USFWS Conservation Measures.pdf](#)  
[PR-RGRW-01232-W USFWS Concurrence Letter.pdf](#)

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

✓ Yes

No

**Explosive and Flammable Hazards**

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

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

☒ No

Yes

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

☒ No

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

Yes

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

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

**Supporting documentation**

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

Yes

☒ No

**Farmlands Protection**

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

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

Yes

✓ No

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

The project site locations are classified as General Agricultural (A-G) land use. The proposed action is continued agricultural use of property, which is compatible with zoning and existing land use.

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-01232-W 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 * Executive Order 13690 * 42 USC 4001-4128 * 42 USC 5154a * only applies to screen 2047 and not 2046	24 CFR 55

**1. Does this project meet an exemption at 24 CFR 55.12 from compliance with HUD's floodplain management regulations in Part 55?**

Yes

(a) HUD-assisted activities described in 24 CFR 58.34 and 58.35(b).

(b) HUD-assisted activities described in 24 CFR 50.19, except as otherwise indicated in § 50.19.

(c) The approval of financial assistance for restoring and preserving the natural and beneficial functions and values of floodplains and wetlands, including through acquisition of such floodplain and wetland property, where a permanent covenant or comparable restriction is place on the property's continued use for flood control, wetland protection, open space, or park land, but only if:

(1) The property is cleared of all existing buildings and walled structures; and

(2) The property is cleared of related improvements except those which:

(i) Are directly related to flood control, wetland protection, open space, or park land (including playgrounds and recreation areas);

(ii) Do not modify existing wetland areas or involve fill, paving, or other ground disturbance beyond minimal trails or paths; and

(iii) Are designed to be compatible with the beneficial floodplain or wetland function of the property.

(d) An action involving a repossession, receivership, foreclosure, or similar acquisition of property to protect or enforce HUD's financial interests under previously approved loans, grants, mortgage insurance, or other HUD assistance.

(e) Policy-level actions described at 24 CFR 50.16 that do not involve site-based decisions.

(f) A minor amendment to a previously approved action with no additional adverse impact on or from a floodplain or wetland.

(g) HUD's or the responsible entity's approval of a project site, an incidental portion of which is situated in the FFRMS floodplain (not including the floodway, LiMWA, or coastal high hazard area) but only if: (1) The proposed project site does not include any existing or proposed buildings or improvements that modify or occupy the FFRMS floodplain except de minimis improvements such as recreation areas and trails; and (2) the proposed project will not result in any new construction in or modifications of a wetland .

(h) Issuance or use of Housing Vouchers, or other forms of rental subsidy where HUD, the awarding community, or the public housing agency that administers the contract awards rental subsidies that are not project-based (i.e., do not involve site-specific subsidies).

(i) Special projects directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and persons with disabilities.

Describe:

✓ No

**2. Does the project include a Critical Action? Examples of Critical Actions include projects involving hospitals, fire and police stations, nursing homes, hazardous chemical storage, storage of valuable records, and utility plants.**

Yes

Describe:

✓ No

**3. Determine the extent of the FFRMS floodplain and provide mapping documentation in support of that determination**

The extent of the FFRMS floodplain can be determined using a Climate Informed Science Approach (CISA), 0.2 percent flood approach (0.2 PFA), or freeboard value approach (FVA). For projects in areas without available CISA data or without FEMA Flood Insurance Rate Maps (FIRMs), Flood Insurance Studies (FISs) or Advisory Base Flood Elevations (ABFEs), use the best available information<sup>1</sup> to determine flood elevation. Include documentation and an explanation of why this is the best available information<sup>2</sup> for the site. Note that newly constructed and substantially improved<sup>3</sup> structures must be elevated to the FFRMS floodplain regardless of the approach chosen to determine the floodplain.

Select one of the following three options:

CISA for non-critical actions. If using a local tool, data, or resources, ensure that the FFRMS elevation is higher than would have been determined using the 0.2 PFA or the FVA.

- ✓ 0.2-PFA. Where FEMA has defined the 0.2-percent-annual-chance floodplain, the FFRMS floodplain is the area that FEMA has designated as within the 0.2-percent-annual-chance floodplain.

FVA. If neither CISA nor 0.2-PFA is available, for non-critical actions, the FFRMS floodplain is the area that results from adding two feet to the base flood elevation as established by the effective FIRM or FIS or — if available — a FEMA-provided preliminary or pending FIRM or FIS or advisory base flood elevations, whether regulatory or informational in nature. However, an interim or preliminary FEMA map cannot be used if it is lower than the current FIRM or FIS.

<sup>1</sup> Sources which merit investigation include the files and studies of other federal agencies, such as the U. S. Army Corps of Engineers, the Tennessee Valley Authority, the Soil Conservation Service and the U. S. Geological Survey. These agencies have prepared flood hazard studies for several thousand localities and, through their technical assistance programs, hydrologic studies, soil surveys, and other investigations have collected or developed other floodplain information for numerous sites and areas. States and communities are also sources of information on past flood 'experiences within their boundaries and are particularly knowledgeable about areas subject to high-risk flood hazards such as alluvial fans, high velocity flows, mudflows and mudslides, ice jams, subsidence and liquefaction.

<sup>2</sup> If you are using best available information, select the FVA option below and provide supporting documentation in the screen summary. Contact your [local environmental officer](#) with additional compliance questions.

<sup>3</sup> Substantial improvement means any repair or improvement of a structure which costs at least 50 percent of the market value of the structure before repair or improvement or results in an increase of more than 20 percent of the number of dwelling units. The full definition can be found at [24 CFR 55.2\(b\)\(12\)](#).

5. Does your project occur in the FFRMS floodplain?

Yes

✓ No

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

Flood Map Number 72000C1605H, effective on 4/19/2005: This project does not occur in the FFRMS floodplain. The project is in compliance with Executive Orders 11988 and 13690. 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 Yauco; therefore, PFIRM information was not available for the area and therefore not considered in the review.

**Supporting documentation**

[PR-RGRW-01232-W 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" <a href="https://www.govinfo.gov/content/pkg/CFR-2012-title36-vol3/pdf/CFR-2012-title36-vol3-part800.pdf">https://www.govinfo.gov/content/pkg/CFR-2012-title36-vol3/pdf/CFR-2012-title36-vol3-part800.pdf</a>

### Threshold

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

No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA ). (See the PA Database to find applicable PAs.)

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

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

### Step 1 – Initiate Consultation

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

- ✓ State Historic Preservation Offer (SHPO) Completed

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

Other Consulting Parties

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

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

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

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

Yes

No

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

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

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

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

Address / Location / District	National Register Status	SHPO Concurrence	Sensitive Information
----------------------------------	-----------------------------	------------------	--------------------------

**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**

(Construction Date (AH est.): ca. 1984) 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-01232-W SHPO Package.pdf](#)

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

Yes

☒ No

## Noise Abatement and Control

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

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

New construction for residential use

Rehabilitation of an existing residential property

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

An interstate land sales registration

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

☒ None of the above

### **Screen Summary**

#### **Compliance Determination**

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

#### **Supporting documentation**

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

Yes

☒ No





**Sole Source Aquifers**

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

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

Yes

✓ No

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

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

< No

✓

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

Yes

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

Yes

No

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

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

**Supporting documentation**

[PR-RGRW-01232-W 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

✓ Yes

**2. Will the new construction or other ground disturbance impact an on- or off-site wetland? The term "wetlands" means those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.**

**"Wetlands under E.O. 11990 include isolated and non-jurisdictional wetlands."**

No, a wetland will not be impacted in terms of E.O. 11990's definition of new construction.

✓ Yes, there is a wetland that be impacted in terms of E.O. 11990's definition of new construction.

You must determine that there are no practicable alternatives to wetlands development by completing the 8-Step Process.

Document and upload the completed 8-Step Process as well as all documents used to

make your determination, including a map below. Be sure it includes the early public notice and the final notice with your documentation.

**3. 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.**

The proposed project has minimal impact to wetlands. However, to best minimize the potential adverse, direct and indirect, impacts the applicant will construct the fence with materials that have a minimal footprint (using existing post holes separated by 8-foot intervals, t-posts, stakes, and barbed wire) and that allow water to flow freely without creating an impermeable barrier while sustaining full functionality of the fence. To mitigate direct and indirect impacts, best management practices, such as proper site management, implementation and maintenance of erosion and sedimentation control measures, and soil stabilization will be followed to minimize potential impacts to wetlands.

**Which of the following mitigation actions have been or will be taken? Select all that apply:**

Permeable surfaces

Natural landscape enhancements that maintain or restore natural hydrology through infiltration

Native plant species

Bioswales

Evapotranspiration

Stormwater capture and reuse

Green or vegetative roofs with drainage provisions

Natural Resources Conservation Service conservation easements

Compensatory mitigation

Other

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

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

The project results will impact on- or off-site wetlands. An 8 Step Process has been completed. With mitigation, identified in the mitigation section of this review, the project will be in compliance with Executive Order 11990.

**Supporting documentation**

[PR-RGRW-01232-W Wetlands.pdf](#)

[PR-RGRW-01232-W 8-Step\\_Step 7 Proof of Publication.pdf](#)

[PR-RGRW-01232-W 8-Step\\_Step 2 Proof of Publication.pdf](#)

[PR-RGRW-01232-W 8-Step Process.docx](#)

**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 368,439 feet from the nearest Wild and Scenic River. The project is in compliance with the Wild and Scenic Rivers Act.

**Supporting documentation**

[PR-RGRW-01232-W 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 | Río Grande | St Croix  
P.O. Box 491  
Boquerón, Puerto Rico 00622



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

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

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

Re: CDBG-DR PR-RGRW-01232 Elizardo  
Martínez Ramos, Yauco, Puerto Rico

Dear Mr. Pérez-Bofill

Thank you for your letter dated January 4, 2024, requesting informal consultation on the above referenced project. As per your request, our comments are provided under the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The Puerto Rico Department of Housing (PRDOH) is proposing the repair and expansion of an existing fence, installation of a roof on an existing structure, installation of a water well and a cistern. Construction of the fence and installation of the water well and cistern will require vegetation removal, but no tree clearing is proposed. The project area is located in a 37.03 acre property (18°03'57.2"N 66°49'51.2"W) at State Road PR-375, Km 2.5, Sector Cuesta Grande in the municipality of Yauco.

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 harlequin butterfly (*Atlantea tulita*).

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: 2024-0019437). 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 harlequin butterfly 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 harlequin butterfly due to the lack of suitable habitat and the designated critical habitat for the species is approximately 15,052 feet from the proposed project site.

The Service acknowledges receipt of the NLAA DKey consistency letter for the Puerto Rican boa. 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.

As for the Puerto Rican harlequin butterfly, the Service acknowledge receipt of PRDOH's NE determination. 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 and the Service is not required to concur with PRDOH's NE determination.

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

Sincerely,

LOURDES  
MENA

Digitally signed by LOURDES  
MENA  
Date: 2024.02.12 16:41:11 -04'00'  
Adobe Acrobat version:  
2023.008.20470

Lourdes Mena  
Acting Field Supervisor

dr

Enclosure: Puerto Rican boa conservation measures

cc:  
Susan Fischer, SWCA





## aviso público

Aviso Final y Explicación Pública de una  
Actividad Propuesta en un humedal

Elizardo Martínez Ramos  
PR-RGRW-01232

Para: Todas las partes interesadas, grupos e individuos

Este aviso notifica que el Departamento de la Vivienda de Puerto Rico (Vivienda, en adelante) completó una evaluación según establece la Orden Ejecutiva 11990, de acuerdo con los reglamentos de HUD en 24 CFR 55.20 Subpart C - Procedimientos para hacer determinaciones sobre el manejo del valle inundable y la protección de humedales. La actividad está subvencionada con fondos del Programa Renacer Agrícola de PR - Agricultura Urbana y Rural, Subvención en Bloque para el Desarrollo Comunitario - Recuperación ante Desastres (CDBG-DR), número de subvención B-17-DM-72-0001 y B-18-DM-72-0001. El proyecto propuesto, PR-RGRW-01232, está localizado en la carretera PR-375 km 2.5, barrio Quebradas, sector Cuesta Grande, Yauco, PR 00698, coordenadas 18.06588, -66.8309, en una parcela de 3703 acres. El proyecto incluye la reparación y expansión de una cerca existente, la instalación de un pozo de agua, y mejoras y reparación de un sistema de distribución de agua, incluyendo la instalación de una nueva bomba de agua sobre una plataforma de concreto y nuevas líneas de agua. La cerca es la única actividad del proyecto dentro de un humedal. La cerca existente que corre a lo largo del límite de la propiedad será reemplazada por una cerca de alambre de púas con estacas de hierro de 5 y 6 pies de altura, dependiendo de la pendiente, que se extienden 1 pie de profundidad y están espaciadas a 8 pies de distancia. La cerca seguirá los límites de la parcela y rodeará toda la parcela. También se reemplazarán partes de una cerca existente que atraviesa las áreas central y centro-sur de la propiedad. Ninguno de los sitios requiere nivelación. Un humedal ribereño cruza la cerca en cuatro secciones diferentes de la parcela, incluyendo las partes noroeste, este y sureste, con un total aproximado de 0.0049 acres de la cerca que se encuentran dentro del área cartografiada de este humedal. Los humedales almacenan y filtran agua, lo que proporciona beneficios de reducción del riesgo de inundaciones al almacenar el agua de las inundaciones y filtrar las aguas pluviales y residuales. También son increíblemente productivos biológicamente y sustentan un ecosistema diverso para una abundancia de flora y fauna variadas. El área de humedal se encuentra en la página del Inventario Nacional de Humedales en <https://asprinywim.usgs.gov/wetlands/app/wetlands-mapper/>.

Vivienda ha considerado las siguientes alternativas y medidas de mitigación a tomar para minimizar los impactos adversos y restaurar y preservar los valores naturales y beneficiosos: (1) ubicar el proyecto dentro del humedal; (2) reconstruir la cerca en otras áreas de la propiedad; (3) el uso de materiales alternativos para cercas; y (4) no tomar ninguna acción. Reconstruir la cerca en otras áreas de la propiedad requeriría mucha más alteración del suelo y posible limpieza de vegetación que la actividad actual. La cerca tiene como finalidad mantener el ganado en la propiedad, por lo que debe rodear toda la parcela del solicitante. No es posible hacer esto sin cruzar el humedal ribereño, por ende, reconstruir la cerca en otras áreas de la propiedad no es una alternativa viable. Se consideró el uso de materiales alternativos para cercas, pero las cercas que no permiten el flujo de agua impactarían el humedal. Los materiales seleccionados para la cerca, los postes en T, las estacas de hierro y el alambre de púas, proporcionarían la mejor protección para los animales del solicitante mientras permiten que el agua pase a través de la cerca. De no tomar acción, el solicitante no recibiría fondos federales para reparaciones, mejoras y expansión del negocio agrícola existente. En consecuencia, es posible que el solicitante no pueda recuperar y continuar la producción agrícola. Ubicar la actividad dentro del humedal fue la alternativa seleccionada, se utilizarán los agujeros de las estacas existentes para no realizar nuevas perturbaciones y estarán espaciadas a aproximadamente 8 pies, permitiendo que el agua del humedal pase a través de la cerca. Se seguirán las mejores prácticas de gestión, como la gestión adecuada del sitio, la implementación y el mantenimiento de medidas de control de la erosión y la sedimentación y la estabilización del suelo para minimizar los posibles impactos en los humedales. Se ha logrado el cumplimiento de todos los procedimientos estatales y locales de protección de humedales.

Vivienda reevaluó las alternativas para construir en el humedal y determinó que no cuenta con alternativas prácticas. La documentación ambiental que evidencia el cumplimiento de los pasos 3 a 6 de la Orden Ejecutiva 11990, está disponible para inspección, revisión y reproducción de parte del público, de ser solicitado, en el horario y lugar indicado en el último párrafo sobre recibos de comentarios de este aviso.

Este aviso tiene tres propósitos principales. Primero, las personas que pueden verse afectadas por actividades en el humedal y aquellos que tengan interés en la protección del ambiente natural deben recibir la oportunidad de expresar sus inquietudes y proveer información sobre estas áreas. Segundo, un programa adecuado de avisos públicos puede ser una importante herramienta de educación pública. La divulgación de información y solicitud de comentarios sobre humedales puede facilitar y mejorar los esfuerzos federales para reducir los riesgos e impactos asociados con la ocupación y alteración de estas áreas especiales. Tercero, como materia de justicia, cuando el gobierno federal determine participar en acciones ubicadas en el humedal, debe informarlo a quienes puedan ser expuestos a un riesgo mayor o similar al presente.

Vivienda considerará todos los comentarios recibidos en o antes del 10 de julio de 2024. Pueden enviar los comentarios de forma impresa a la siguiente dirección: Departamento de la Vivienda de Puerto Rico, edificio Juan C. Cordero Dávila, 606 avenida Barbosa, Río Piedras, PR 00918-8461. Atención: Limay Véliz-Marrero, Especialista en Permisos y Cumplimiento Ambiental. Una descripción completa del proyecto está disponible al público para revisión de 8:30 am a 4:00 pm, en el Departamento de la Vivienda de Puerto Rico, edificio Juan C. Cordero Dávila, 606 avenida Barbosa, Río Piedras, PR 00918. El número para obtener información es (787) 274-2527 ext. 4320. Como alternativa, también pueden enviar los comentarios a Vivienda por medio electrónico a [environmental@vivienda.gov](mailto:environmental@vivienda.gov).

Fecha: 3 de julio de 2024

Lodo William O. Rodríguez Rodríguez  
Secretario del Departamento de la Vivienda

Autorizado por la Oficina del Contralor  
Electoral OCE-SA-2023-00076



## public notice

Final Notice and Public Explanation of a  
Proposed Activity in a Wetland

Elizardo Martínez Ramos  
PR-RGRW-01232

To All Interested Parties, Groups & Individuals

This is to give notice that the Puerto Rico Department of Housing (PRDOH) has conducted an evaluation as required by the Executive Order 11990, in accordance with HUD regulations at 24 CFR 55.20 Subpart C - Procedures for Making Determinations on Floodplain Management and Wetlands Protection. The activity is funded under the Community Development Block Grant - Disaster Recovery (CDBG-DR), Re-Grow PR Urban-Rural Agriculture Program, Grant number B-17-DM-72-0001 and B-18-DM-72-0001. The proposed project, PR-RGRW-01232, is located at PR-375 Road Km 2.5, Quebradas Ward, Cuesta Grande Sector, Yauco, PR 00698, coordinates 18.06588, -66.8309, on a 3703-acre parcel. The project includes the repair and expansion of an existing fence, installation of a water well, and upgrades and repair of a water distribution system, including installation of a new water pump on a concrete pad and new water lines. The fence is the only project activity within a wetland. The existing fence that runs along the property line will be replaced with a barbed wire fence with iron stakes that are 5 and 6 feet tall, depending on the incline, that extend 1 foot deep and are spaced 8 feet apart. The fence will follow parcel boundaries and enclose the entire parcel. Parts of an existing fence that run through the central and south-central areas of the property will also be replaced. None of the sites require grading. A riverine wetland crosses the fence in four different sections of the parcel, including the northwestern, eastern and southeastern parts, totaling approximately 0.0049 acres of the fence are within the mapped area of this wetland. Wetlands store and filter water, providing flood risk reduction benefits by storing flood water and filtering stormwater and wastewater. They are also incredibly biologically productive, supporting a diverse ecosystem for an abundance of various flora and fauna. The wetland in the project area can be found in the National Wetlands Inventory at <https://asprinywim.usgs.gov/wetlands/app/wetlands-mapper/>.

PRDOH has considered the following alternatives and mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial values: (1) locate the project within the wetland; (2) reconstruct the fence in other areas of the property; (3) use of alternative fencing materials; and (4) take no action. Reconstructing the fence in other areas of the property would require much more ground disturbance and potential vegetation clearing than the current activity. The purpose of the fence is to keep cattle on the property, so it must enclose the applicant's entire parcel. It is not possible to do this without intersecting the riverine wetland, therefore this is not a practicable alternative. Alternative fencing materials were considered, but fencing that does not allow the flow of water would impact the wetland. The selected materials for the fence, T-posts, iron stakes and barbed wire, will provide the best protection for the applicant's animals while allowing water to pass through the fence. If no action is taken, the applicant would not receive federal funding for repairs, upgrades and expansion to the existing agricultural business. Consequently, the applicant may not be able to recover and continue agricultural production. Locating the activity within the wetland was the selected alternative, the existing stake holes will be used to avoid new disturbances and will be spaced approximately 8 feet apart, allowing wetland waters to pass through the fence. Best management practices, such as proper site management, implementation and maintenance of erosion and sedimentation control measures, and soil stabilization, will be followed to minimize potential impacts to wetlands. Compliance with all state and local wetland protection procedures has been achieved.

PRDOH has re-evaluated the alternatives to building in the wetland and has determined that it has no practicable alternative. Environmental files that document compliance with steps 3 through 6 of the Executive Order 11990 are available for public inspection, review and copying upon request at the times and location delineated in the last paragraph of this notice for receipt of comments.

There are three primary purposes for this notice. First, people who may be affected by activities in the wetland and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public education tool. The dissemination of information and request for public comment about wetlands can facilitate and enhance Federal efforts to reduce the risks and impacts associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in the wetland, it must inform those who may be put at greater or continued risk.

PRDOH will consider all comments received on or before July 10, 2024. Written comments can be sent to the following address: Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Dávila Building, Río Piedras, PR 00918-8461. Attention: Limay Véliz-Marrero, Permits and Environmental Compliance Specialist. A complete description of the project is available to the public for review from 8:30 am to 4:00 pm at the Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Dávila Building, Río Piedras, PR 00918. The number to get information is (787) 274-2527 ext. 4320. In the alternative, comments may also be sent to PRDOH by email at [environmental@vivienda.gov](mailto:environmental@vivienda.gov).

Date: July 3, 2024

William O. Rodríguez Rodríguez, Esq.  
Secretary of the Department of Housing

Autorizado por la Oficina del Electoral  
Comptroller OCE-SA-2023-00076

## AVISO IMPORTANTE

Atención sucesión de ENCARNACION RODRIGUEZ LOPEZ y JAMES RODRIGUEZ constituida por Carlos Javier Ramírez Otero y/o herederos desconocidos. Comuníquese con el abogado Walter Alomar Santiago; Tel. (787)225-2842; dirección física en Ave. Barbosa #107(Altos), Cataño, PR 00963; dirección postal: Box 471, Cataño, PR 00963 y email: [walter.alomar.santiago@gmail.com](mailto:walter.alomar.santiago@gmail.com)



## AVISO PÚBLICO

El Municipio Autónomo de Vega Baja, desea notificarle a la ciudadanía, según requisito del Departamento de Agricultura Federal (USDA, por sus siglas en inglés), que se va a someter una solicitud de fondos bajo la Sección 533 - Programa de Preservación de Hogares (Housing Preservation Grant) para el año fiscal 2024.

El Municipio solicitará fondos por la cantidad de \$50,000.00 para ser utilizados en la rehabilitación y/o mejoras de propiedades privadas en todas las comunidades y sectores del Municipio de Vega Baja, cuyos propietarios son familias de ingresos bien bajos y bajos, que cualifiquen de acuerdo con los criterios establecidos por el programa.

El Municipio de Vega Baja radicará su solicitud de participación en o antes del 29 de julio de 2024. Copia del borrador de la descripción del proyecto estará disponible por un periodo de 15 días calendario, a partir de esta publicación.

Las personas que deseen información adicional al respecto y/o someter comentarios, pueden comunicarse con el Departamento de Vivienda al (787) 855-2500 ext. 2801, también por correo electrónico [vivienda@vegabaja.gov.pr](mailto:vivienda@vegabaja.gov.pr) o visitarnos o escribimos a la dirección que se indica a continuación:

Departamento de Vivienda  
Calle Baldorioty de Castro  
Esquina Padilla Dávila  
P.O. Box 4555  
Vega Baja, P.R. 00694

Héctor L. Rosado Calderón  
Director

Autorizado por la Oficina del Contralor Electoral  
OCE-SA-2024-01690

\* Aportada 4555, Vega Baja, PR 00691 • (787) 855-2500 ext. 2700 • Email: [vivienda@vegabaja.gov.pr](mailto:vivienda@vegabaja.gov.pr)



## aviso público

Aviso Preliminar y Revisión Pública de una  
Actividad Propuesta en un humedal

Elizardo Martínez Ramos  
PR-RGRW-01232


Para: Todas las partes interesadas, grupos e individuos

Este aviso notifica que el Departamento de la Vivienda de Puerto Rico (Vivienda, en adelante) ha determinado que la siguiente acción propuesta bajo el Programa Renacer Agrícola de Puerto Rico - Agricultura Urbana y Rural, Subvención en Bloque para el Desarrollo Comunitario - Recuperación ante Desastres (CDBG-DR), número de subvención B-17-DM-72-0001 y B-18-DP-72-0001, se encuentra en un humedal. Vivienda está evaluando e identificando alternativas prácticas para realizar la acción propuesta y el impacto potencial en el humedal debido a la acción propuesta, según establecido por la Orden Ejecutiva 11990, de acuerdo con las regulaciones de HUD en 24 CFR 55.20 Subparte C - Procedimientos para tomar determinaciones sobre el manejo de llanuras aluviales y la protección de humedales. El proyecto propuesto, PR-RGRW-01232, se encuentra dentro de un municipio que sufrió daños debido a los huracanes Irma y María, y está localizado en la carretera PR-375 km 2.5, barrio Quebradas, sector Cuesta Grande, Yauco, PR 00698; coordenadas 18.06588, -66.8309, en una parcela de 37.03 acres. El proyecto propuesto consiste en la reparación y expansión de una cerca existente, la instalación de un pozo de agua, y reparación y mejoras de un sistema de distribución de agua, que incluye la instalación de una nueva bomba de agua sobre una plataforma de concreto y nuevas líneas de agua. La cerca es la única actividad del proyecto dentro de un humedal. La cerca existente que corre a lo largo del límite de la propiedad será reemplazada por una cerca de alambre de púas con estacas de hierro de 5 a 6 pies de altura, dependiendo de la pendiente, que se extienden 1 pie de profundidad y están espaciadas a 8 pies de distancia. La cerca seguirá los límites de la parcela y rodeará toda la parcela. También se reemplazarán partes de una cerca existente que atraviesa el área central y centro-sur de la propiedad. Ninguno de los sitios requiere calificación. Un humedal ribereño cruza la cerca en cuatro secciones diferentes de la parcela, en las partes noroeste, este y suroeste, con un total aproximado de 214,421 pies cuadrados (0.0049 acres) de la cerca que se encuentra dentro del área cartografiada de este humedal. Los humedales almacenan y filtran agua, lo que proporciona beneficios de reducción del riesgo de inundaciones al almacenar el agua de las inundaciones y filtrar las aguas pluviales y residuales. También son increíblemente productivos biológicamente y sustentan un ecosistema diverso para una abundancia de flora y fauna variadas. El área del humedal se encuentra en la página de National Wetlands Inventory en <https://vswprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>.

Este aviso tiene tres propósitos principales. En primer lugar, las personas que puedan verse afectadas por las actividades en el humedal y aquellos que tengan interés en la protección del ambiente natural deben tener la oportunidad de expresar sus inquietudes y proveer información sobre estas áreas. Se exhorta a la comunidad a ofrecer ubicaciones alternas fuera del humedal, métodos alternos para cumplir el mismo propósito del proyecto y métodos para minimizar y mitigar los impactos. Segundo, un programa adecuado de avisos públicos puede ser una herramienta importante para la educación pública. La divulgación de información sobre los humedales puede facilitar y mejorar los esfuerzos federales por reducir los riesgos e impactos asociados con la ocupación y alteración de estas zonas especiales. Tercero, como materia de justicia, cuando el gobierno federal determine participar en acciones ubicadas en el humedal, debe informárselo a quienes puedan ser expuestos a un riesgo mayor o similar al presente.

Vivienda considerará todos los comentarios recibidos en o antes de 4 de abril de 2024. Pueden enviarse los comentarios de forma impresa a la siguiente dirección: Departamento de la Vivienda de Puerto Rico, edificio Juan C. Cordero Dávila, 606 avenida Barbosa, Río Piedras, PR 00918-8461, Atención: Limary Vélez-Marrero, Especialista en Permisos y Cumplimiento Ambiental. Una descripción completa del proyecto está disponible al público para revisión de 8:30 a.m. a 4:00 p.m. en el Departamento de la Vivienda de Puerto Rico, edificio Juan C. Cordero Dávila, 606 avenida Barbosa, Río Piedras, PR 00918. El número para obtener información es (787) 274-2527 ext. 4320. Como alternativa, también pueden enviarse los comentarios a Vivienda por medio electrónico a [environmentcdbg@vivienda.pr.gov](mailto:environmentcdbg@vivienda.pr.gov).

Fecha: 20 de marzo de 2024

  
Lcdo. William O. Rodríguez Rodríguez  
Secretario del Departamento de la Vivienda

Autorizado por la Oficina del Contralor  
Electoral OCE-SA-2023-00076

## public notice

Early Notice and Public Review of a  
Proposed Activity in a Wetland

Elizardo Martínez Ramos  
PR-RGRW-01232

To: All Interested Parties, Groups & Individuals

This is to give notice that the Puerto Rico Department of Housing (PRDOH) has determined that the following proposed action under the Re-Grow Puerto Rico Urban-Rural Agriculture Program, Community Development Block Grant - Disaster Recovery (CDBG-DR), Grant number B-17-DM-72-0001 and B-18-DP-72-0001, is located within a wetland. PRDOH will be identifying and evaluating practicable alternatives to locating the action in the wetland and the potential impacts on the wetland from the proposed action, as required by the Executive Order 11990, in accordance with HUD regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management and Protection of Wetlands. The proposed project, PR-RGRW-01232, is within a municipality with structures damaged by Hurricanes Irma and María and it's located at PR-375 Road Km 2.5, Quebradas Ward, Cuesta Grande Sector, Yauco, PR 00698; coordinates 18.06588, -66.8309, on a 37.03 acres parcel. The proposed project consists in the repair and expansion of an existing fence, installation of a water well, and repairing and upgrading a water distribution system, which include the installation of a new water pump on a concrete pad and new water lines. The fence is the only project activity within a wetland. The existing fence that runs along the property line will be replaced with a barbed wire fence with iron stakes that are 5- to 6-feet tall, depending on the incline, that extend 1-foot deep and are spaced 8-feet apart. The fence will follow parcel boundaries and will surround the entire parcel. Parts of an existing fence that run through the central and south-central areas of the property will also be replaced. None of the sites require grading. A riverine wetland crosses the fence in four different sections of the parcel, in the northwestern, eastern, and southeastern parts, totaling approximately 214,421 square feet (0.0049 acres) of the fence within the mapped area of this wetland. Wetlands store and filter water, providing flood risk reduction benefits by storing flood water and filtering stormwater and wastewater. They are also incredibly biologically productive, supporting a diverse ecosystem for an abundance of various flora and fauna. The wetland in the project area can be found at National Wetlands Inventory at <https://vswprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>.

There are three primary purposes for this notice. First, people who may be affected by activities in the wetland and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Commenters are encouraged to offer alternative sites outside of the wetland, alternative methods to serve the same project purpose, and methods to minimize and mitigate impacts. Second, an adequate public notice program can be an important public educational tool. The dissemination of information and request for public comment about the wetlands can facilitate and enhance Federal efforts to reduce the risks and impacts associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in the wetland, it must inform those who may be put at greater or continued risk.

PRDOH will consider all comments received on or before April 4, 2024. Written comments can be sent to the following address: Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Dávila Building, Río Piedras, PR 00918-8461, Attention: Limary Vélez-Marrero, Permits and Environmental Compliance Specialist. A complete description of the project is available to the public for review from 8:30 am to 4:00 pm at the Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Dávila Building, Río Piedras, PR 00918. The number to get information is (787) 274-2527 ext. 4320. In the alternative, comments may also be sent to PRDOH by email at [environmentcdbg@vivienda.pr.gov](mailto:environmentcdbg@vivienda.pr.gov).

Date: March 20, 2024

  
William O. Rodríguez Rodríguez, Esq.  
Secretary of the Department of Housing

Autorizado por la Oficina del Electoral  
Contralor OCE-SA-2023-00076



**AVISO PÚBLICO**  
ADMINISTRACIÓN DE SERVICIOS GENERALES

## Reglamento de la Academia de Adiestramiento y Educación Continua de la Administración de Servicios Generales

La Administración de Servicios Generales ("ASG") de conformidad con la Sección 2.1 de la Ley Núm. 38-2017, conocida como "Ley de Procedimiento Administrativo Uniforme del Gobierno de Puerto Rico", publica este anuncio para promulgar el Reglamento de la Academia de Adiestramiento y Educación Continua de la Administración de Servicios Generales.

La base legal para promulgar el reglamento antes mencionado surge, además, en virtud del Artículo 22 de la Ley 73-2019, según enmendada, conocida como "Ley de la Administración de Servicios Generales para la Centralización de las Compras del Gobierno de Puerto Rico de 2019", la cual dispone que la ASG puede adoptar, enmendar y derogar reglamentos para cumplir con las disposiciones de esta ley y cualesquiera otras leyes aplicables.

Las personas interesadas en emitir comentarios por escrito podrán hacerlo, dentro del término de treinta (30) días siguientes a la publicación de este aviso, de la siguiente manera: (a) personalmente, durante días laborables en horario de 8:00am a 11:30am y de 12:30pm a 4:00pm, en el Centro Gubernamental Minillas, Torre Norte, Piso 13, Oficina de Asuntos Legales en San Juan, Puerto Rico; (b) al correo electrónico: [reglamentos@asg.pr.gov](mailto:reglamentos@asg.pr.gov); (c) mediante correo postal a la siguiente dirección: Oficina de Asuntos Legales, Administración de Servicios Generales, PO Box 41249 San Juan, P.R. 00940. El reglamento propuesto puede obtenerse accediendo a la página web [www.asg.pr.gov](http://www.asg.pr.gov).

Lcda. Karla G. Mercado Rivera  
Administradora y Primer Oficial  
de Compras del Gobierno de Puerto Rico

Autorizado por la Oficina del Contralor Electoral  
OCE-SA-2024-05548



Restaurante De Comidas Criollas  
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# GOVERNMENT OF PUERTO RICO

## STATE HISTORIC PRESERVATION OFFICE

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

Tuesday, April 23, 2024

**Lauren B Poche**

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

SHPO-CF-04-12-24-05 PR-RGRW-01232 (Yauco), Elizardo Martinez Ramos

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



April 12, 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 - SHPO ID: 07-03-23-01 - PR-RGRW-01232 – Elizardo Martinez Ramos – Barrio Quebradas de Yauco Carr. 375 Km 2.5, Sector Cuesta Grande, Yauco, Puerto Rico – *No Historic Properties Affected***

Dear Architect Rubio Cancela,

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

On behalf of PRDOH and the subrecipient, the Puerto Rico Department of Agriculture, HORNE is re-initiating consultation for activities proposed by Elizardo Martinez Ramos located at Barrio Quebradas de Yauco Carr. 375 Km 2.5, Sector Cuesta Grande, in the municipality of Yauco due to a change in the project scope. Consultation for the proposed project was initiated in July of 2023 for the following proposed activities: repair of existing fencing, installation of a 5x5 foot concrete slab, and the installation of 180 ft of new underground waterlines. In a letter dated July 13, 2023, the Puerto Rico SHPO office concurred that a finding of no historic properties affected was appropriate for the above-described undertaking. Consultation is being reinitiated due to substantial changes in the scope of work for the project. These changes include: changes in location and scope of fence repairs, addition of areas of new fencing, addition of a new water well, change in the location of the proposed concrete pad, change in the proposed route of the below ground water lines, and the addition of a new cistern and galvanized roof.

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

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

Kindest regards,




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

Architectural Historian, EHP Senior Manager  
LBP/JLE

Attachments



<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>ReGROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>		 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
<b>Applicant: Elizardo Martinez Ramos</b>		
<b>Case ID: PR-RGRW-01232</b>		<b>City: Yauco</b>


Project Location: Barrio Quebradas de Yauco Carr. 375 Km 2.5, Sector Cuesta Grande, Yauco, P.R. 00698	
Project Coordinates: (as provided by applicant during field visit) Cistern: 18.065771, -66.830808 Fence: 18.064769, -66.831857 Galvanized Roof: 18.0657, -66.830778 Water Well: 18.066378, -66.830596 Below ground water line: 18.066042, -66.830706	
TPID (Número de Catastro): 337-000-009-57-001	
Type of Undertaking: <input checked="" type="checkbox"/> Substantial Repair/Improvements <input checked="" type="checkbox"/> New Construction	
Construction Date (AH est.): ca. 1984	Property Size (acres): <b>37.03 acres total</b> Cistern: 0.001794 acre (78 sq. ft) Fence: 0.149248 acre (6501 sq ft) Galvanized Roof: 0.009183 acre (400 sq ft) Water Well: 0.000646 acre (28 sq ft) Below ground water line: 0.006 acre (240 sq ft)

<b>SOI-Qualified Architect/Architectural Historian:</b> Caitlin Mee, MHP
<b>Date Reviewed:</b> February 1, 2024
<b>SOI-Qualified Archaeologist:</b> Delise Torres Ortiz, M.A.
<b>Date Reviewed:</b> January 18, 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)

Consultation for Case PR-RGRW-01232 (SHPO ID: 07-03-23-01) was initiated in July of 2023 for the following proposed activities: repair of existing fencing, installation of a 5x5 foot concrete slab, and the installation of 180 ft of new underground waterlines. In a letter dated July 13, 2023, the Puerto Rico SHPO office concurred that a finding of no historic properties affected was appropriate for the above-described undertaking. Consultation is being reinitiated due to substantial changes in the scope of work for the project. These changes include: changes in location and scope of fence repairs, addition of areas of new fencing, addition of a new water well, change in the location of the proposed concrete pad, change in the proposed route of the below ground water lines, and the addition of a new cistern and galvanized roof.

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>ReGROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>	 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
<b>Applicant: Elizardo Martinez Ramos</b>	
<b>Case ID: PR-RGRW-01232</b>	<b>City: Yauco</b>

The proposed project includes the repair and expansion of an existing fence, installation of a water well, and upgrades and repair of a water distribution system, including installation of a new water pump on a concrete pad and new water lines.

The new water well will be 6 inches (in) wide and water from the well will run to an existing concrete cistern (18.065771, -66.830808; 32 ft northwest of the existing storage container) to the cattle corral (9 ft west of the existing storage container) through underground pipes 1.5 in wide and 1 ft deep. Water distribution improvements will involve installing a 5 ft by 5 ft concrete slab that extends a maximum of 2 ft deep for the new water pump and 300 linear feet (LF) of new underground water lines that extend 1 ft deep. The slab will be adjacent to the water well.

The existing fence that runs along the property line will be replaced with a barbed wire fence with iron stakes that are a maximum of 6 ft tall, depending on the incline, that extend 1 ft deep and are spaced approximately 4 ft to 10 ft apart based on the needs of the topography. The fence will follow parcel boundaries and encircle the entire parcel. Parts of an existing fence along the central and south-central areas of the property will also be replaced. There is a riverine wetland that runs through the north-central and eastern parts of the parcel, so to minimize potential adverse impacts the applicant will construct the fence with materials that have minimal footprint (t-posts, stakes, and barbed wire) and can not only withstand floodwaters but will also allow the floodwaters to enter and exit at will while still allowing for full functionality of the fence. None of the sites require grading.


An electrical connection is required for the water pump. Aboveground cables will connect the electrical meter to the water pump 190 LF northeast. Electrical connections are not included in the Intended Use of Grant Funds.

No tree clearing is required for construction, but the project will involve ground disturbance and minimal vegetation removal. The applicant owns the property and currently uses it for agricultural use; therefore, no acquisition or conversion is required.

Although the construction of a new concrete cistern and purchase of a galvanized roof for the cattle corral are not covered under the current grant, the proposed locations of the new cistern and new galvanized roof are presented below in both the Area of Potential Effects (APE) mapping and documented through photographs. The IUGF only covers the repair and expansion of an existing fence, installation of a water well, and upgrades and repair of a water distribution system, including installation of a new water pump on a concrete pad and new water lines.

### **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


<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>ReGROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>	 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
<b>Applicant: Elizardo Martinez Ramos</b>	
<b>Case ID: PR-RGRW-01232</b>	<b>City: Yauco</b>

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 concrete slab, a fence, and the new underground water lines 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 within a half-mile (mi) radius of the project location. Three (3) archaeological evaluations and one (1) survey of cultural resources have been conducted within the 0.5 mi review radius with no cultural resources found. The closest survey conducted is SHPO#02-28-94-07 at 0.00 mi (0.01 kilometers [km]) east of the project location according to the SHPO quadrangular map, which is an archaeological investigation on highway PR-375. The archaeological evaluation SHPO#0-01-09-02, located at 0.26 mi southeast, was part of the effort to pave the community roads at the Barrios Aguas Blancas and Quebrada sponsored by the Housing and Urban Development Department (HUD). SHPO#10-09-15-01, at 0.29 mi south from the project location, was funded by the CDBG Program to repair multiple local roads throughout the community. The CDBG also sponsored the rehabilitation of houses according to SHPO#07-11-16-03 at 0.40 mi north from the project location.

The proposed project is located on the southern coastal plains at an elevation of 704 feet (ft; 214 meters [m]) above mean sea level. Per the USGS/NRCS Web Soil Survey, the project area crosses four (4) mapped soil series: DsD (Descalabrado clay, 12 to 20 percent slopes); DsF (Descalabrado clay, 20 to 60 percent slopes); SdD (San German cobbly clay loam, 5 to 20 percent slopes); SdF (San German cobbly clay loam, 20 to 60 percent slopes). The project area APE is in the rural mountain east region of the Municipio Yauco. The general project area is on gentle slopes surrounded by dense forested vegetation with sparse residences west, north, and east. The residences are situated alongside highway PR-375 moving south, where the terrain becomes less steep. The closest freshwater source is a tributary of Río Yauco located 0.05 mi (0.08 km) which crosses the property northwest to south of the project area. The south coast is approximately 5.47 mi (8.81 km) from the project area.

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>ReGROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>	 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
<b>Applicant: Elizardo Martinez Ramos</b>	
<b>Case ID: PR-RGRW-01232</b>	<b>City: Yauco</b>

## Identification of Historic Properties - Architecture

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


The general setting of the area is heavily forested and set on a mountain ridge. The single-family dwelling is located approximately 200 feet south of the roadway. The area directly around the building consists of manicured grass with scattered mature trees. Historically, based on historic aerials from 1977, the area was not largely populated until after the 1980s. It is likely, based on information gathered in the field and through the review of aerials and extant architecture, the building was constructed ca. 1984.

## Determination

The following historic properties have been identified within the APE:

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

Based on the results of our historic property identification efforts, the Program has determined that no previously identified historic properties are located within or adjacent to the 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-01232 is located. The closest freshwater body is approximately 0.05 mi (0.08 km) which crosses the property northwest to south of the project area. The size of the proposed project activities is very small (0.161 acre total) and construction of public roads, residential structures, and agricultural infrastructure has impacted the surrounding terrain. Therefore, no historic properties will be affected by the proposed project activities.

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>ReGROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>		 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
<b>Applicant: Elizardo Martinez Ramos</b>		
<b>Case ID: PR-RGRW-01232</b>		<b>City: Yauco</b>

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

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

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

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

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

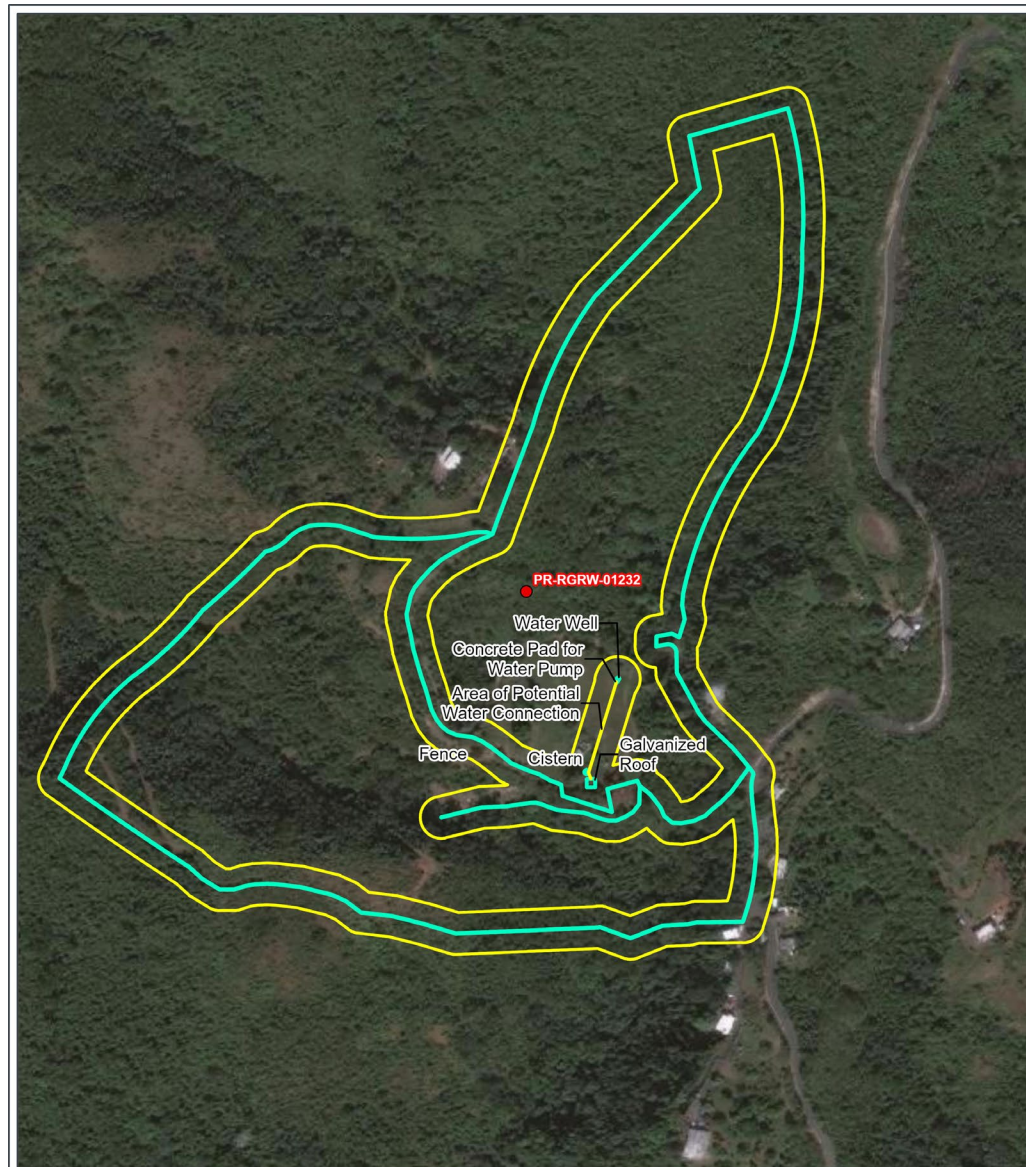


Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco

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



REGROW PROGRAM

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

Applicant ID: PR-RGRW-01232

**SWCA**  
ENVIRONMENTAL CONSULTANTS

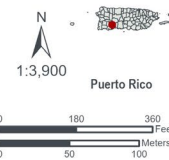
- Site
- Site Parcel
- Project Footprint (Option)
- Potential Area of Disturbance
- APE (Buffer (15-meters))

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698

Parcel ID: 337-000-009-57  
Parcel Center:  
66.831218°W 18.066941°N

Base Map: ESRI ArcGIS Online,  
accessed November 2023  
Updated: 11/29/2023

Layout: APE  
Aprx: 72428\_ReGrowTier2Maps

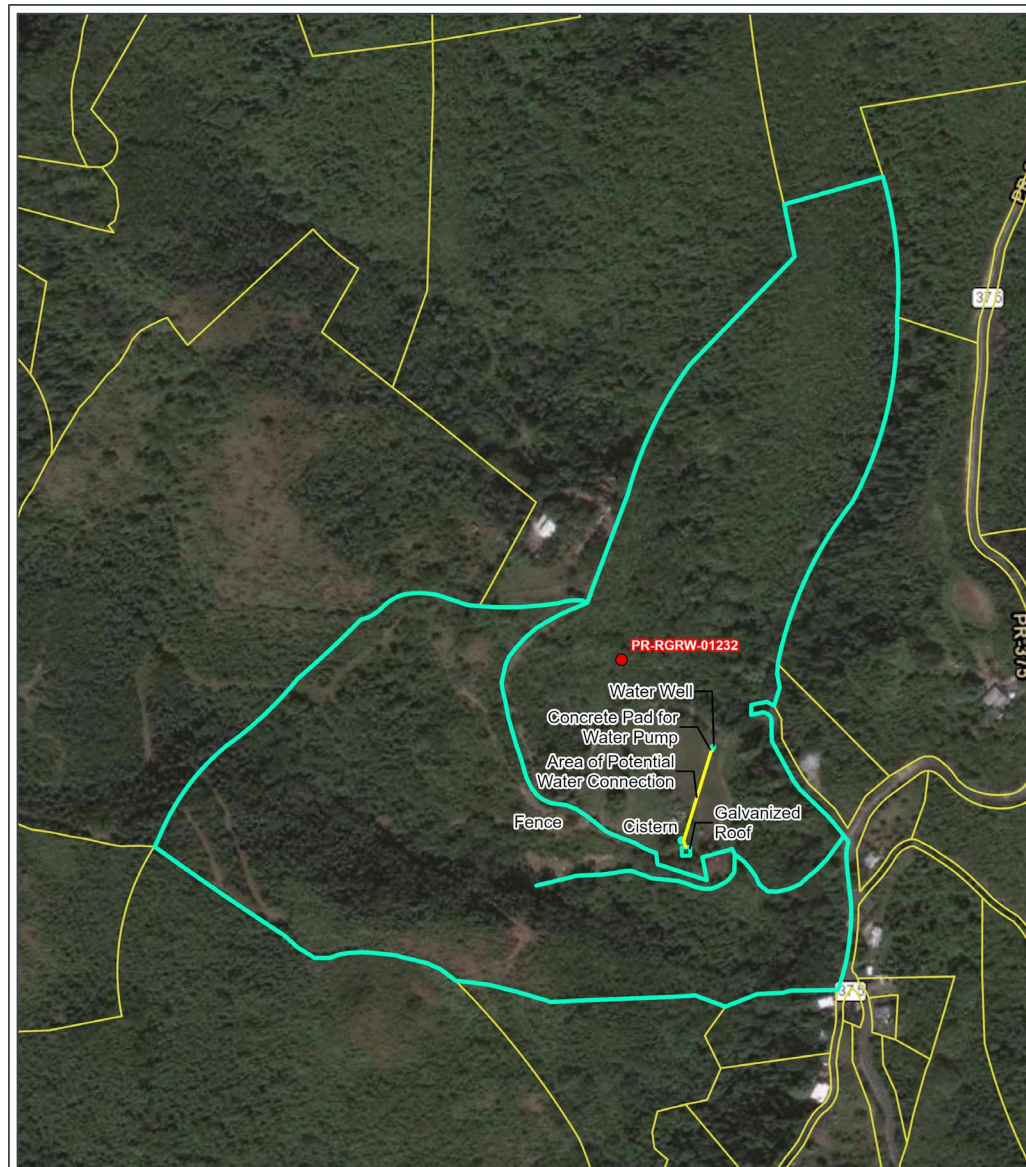


Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco

## Project (Parcel) Location - Aerial Map



REGROW PROGRAM

**Figure A-2:  
Site Vicinity**

Applicant ID: PR-RGRW-01232

**SWCA**  
ENVIRONMENTAL CONSULTANTS

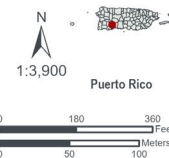
- Site
- Site Parcel
- Project Footprint (Option)
- Potential Area of Disturbance

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698

Parcel ID: 337-000-009-57  
Parcel Center:  
66.831863°W 18.067383°N

Base Map: ESRI ArcGIS Online,  
accessed November 2023  
Updated: 11/29/2023

Layout: Site Vicinity  
Aprx: 72428\_ReGrowTier2Maps



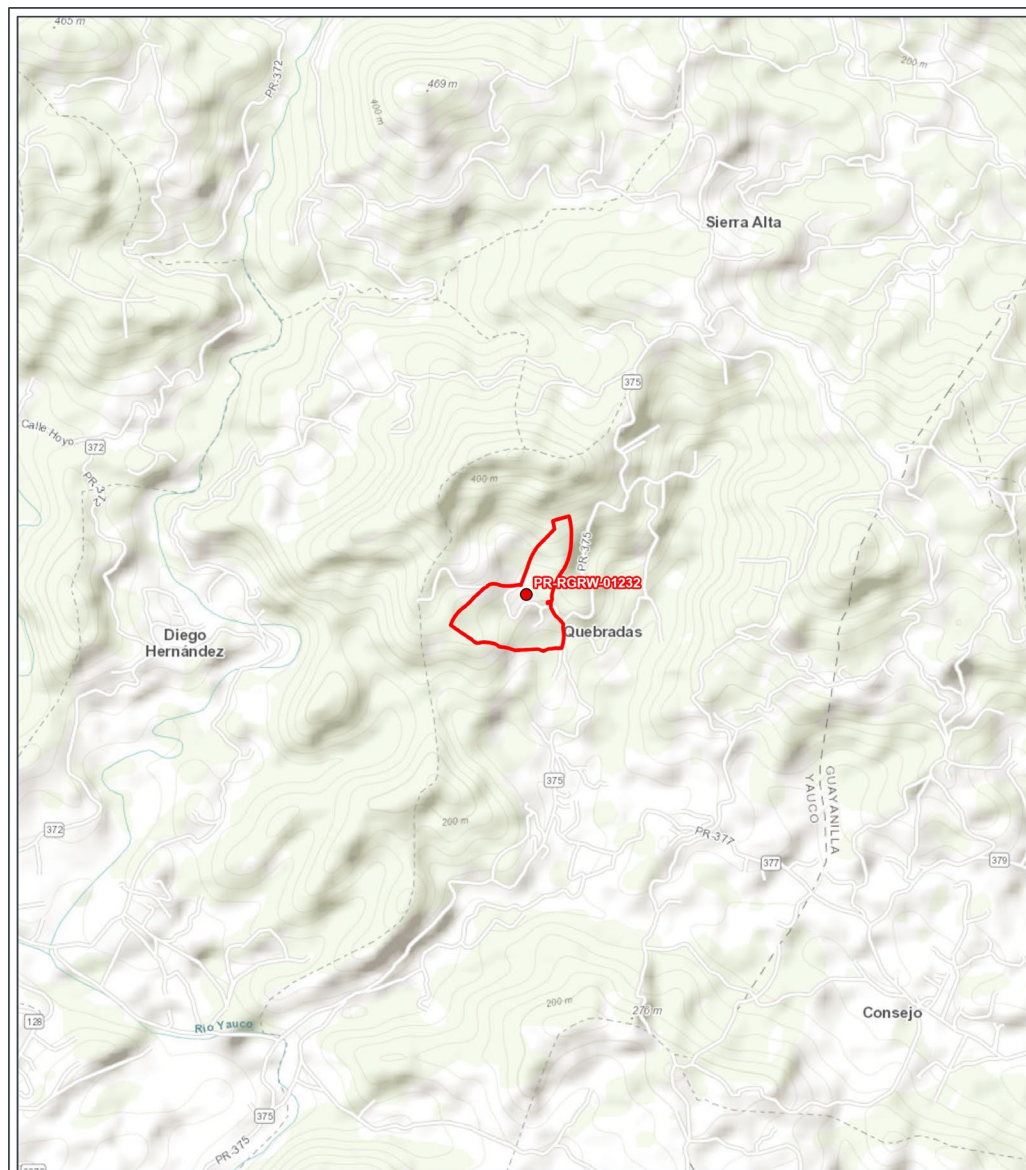


Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco

### Project (Parcel) Location - USGS Topographic Map



REGROW PROGRAM

**Figure A-1:  
Site Location**

Applicant ID: PR-RGRW-01232

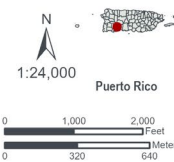
**SWCA**  
ENVIRONMENTAL CONSULTANTS

● Site  
□ Site Parcel

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698

Parcel ID: 337-000-009-57  
Parcel Center:  
66.831218°W 18.066941°N

Base Map: ESRI ArcGIS Online,  
accessed November 2023  
Updated: 11/7/2023  
Layout: Site Location  
Aprx: 72428\_ReGrowTier2Maps



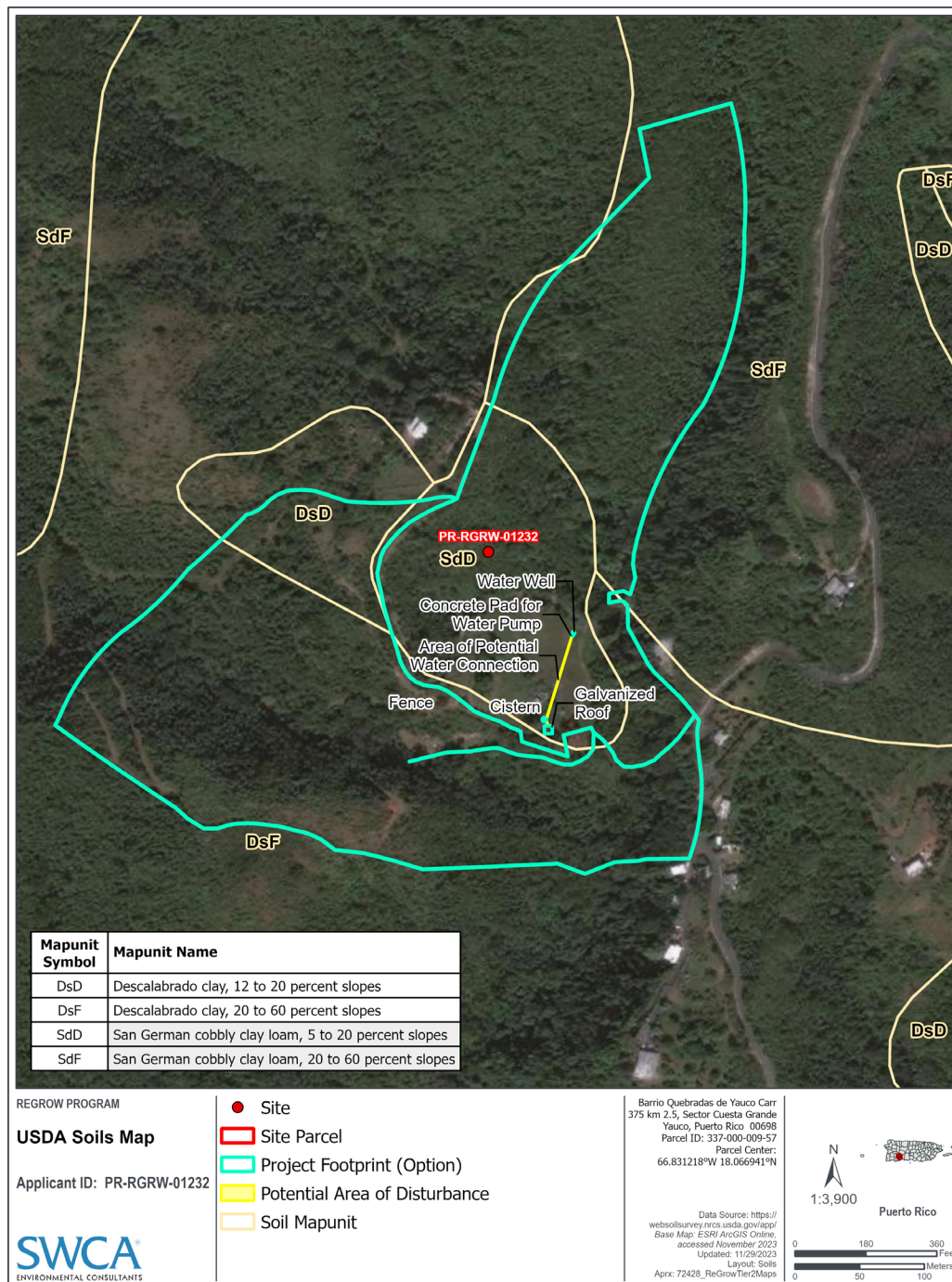


Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco

## Project (Parcel) Location – Soils Map

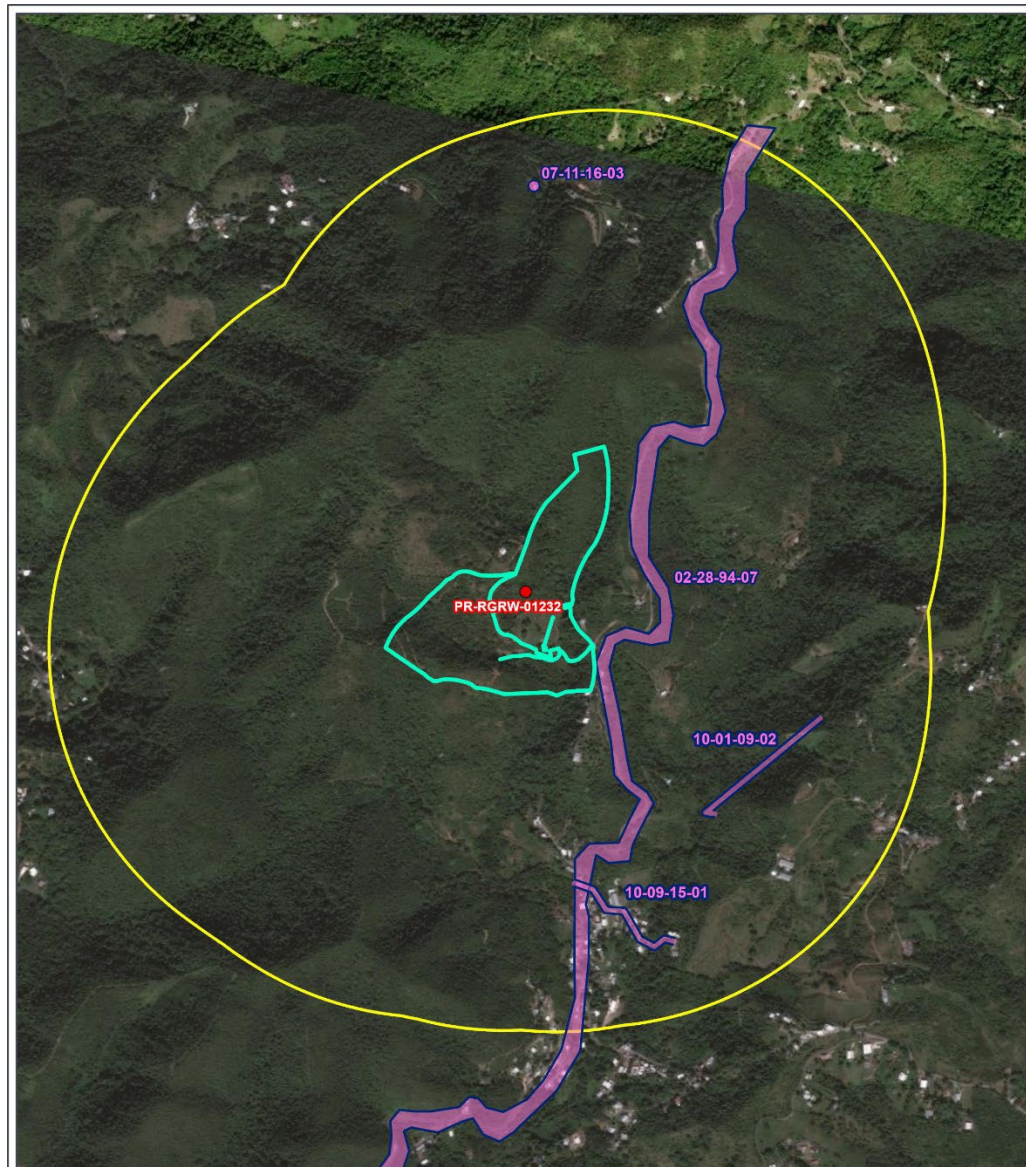


Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco

## Project (Parcel) Location with Previous Investigations - Aerial Map



REGROW PROGRAM

### Previous Investigation Map

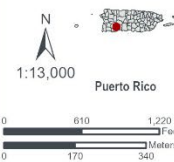
Applicant ID: PR-RGRW-01232

**SWCA**  
ENVIRONMENTAL CONSULTANTS

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

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico. 00698  
Parcel ID: 337-000-009-57  
Parcel Center:  
66.831218°W 18.066941°N

Data Source: State Historic  
Preservation Office and Puerto Rico  
Institute of Culture  
Base Map: ESRI ArcGIS Online,  
accessed January 2024  
Updated: 1/22/2024  
Layout: Previous Investigation  
Aprx: 72428, ReGrowTier2Maps



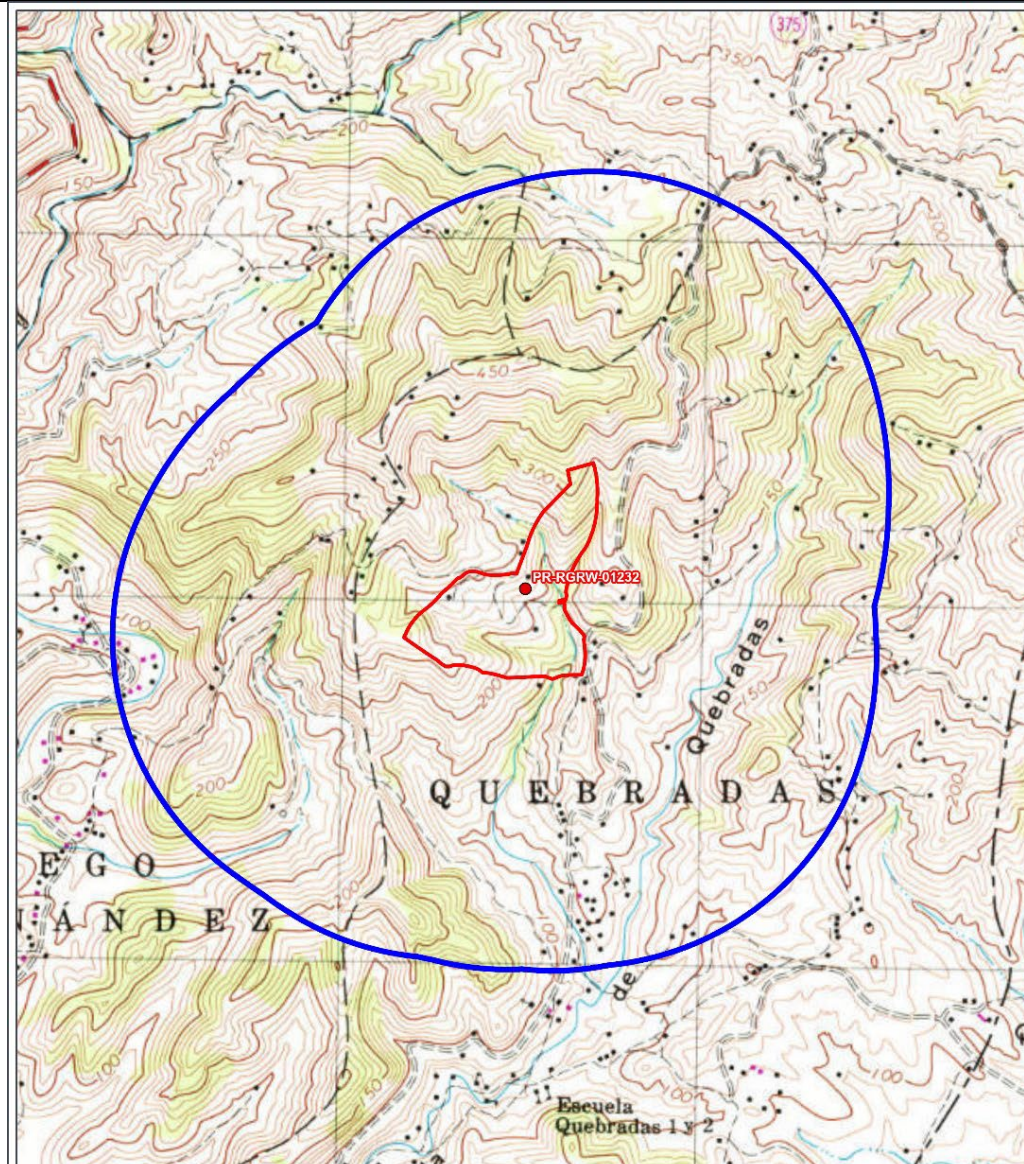


Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco

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



REGROW PROGRAM

**Figure B 11-1:  
Previously Recorded  
Cultural Resources  
Map**

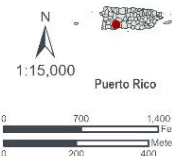
Applicant ID: PR-RGRW-01232

**SWCA**  
ENVIRONMENTAL CONSULTANTS



Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00998  
Parcel ID: 337-000-009-57  
Parcel Center:  
66.831218°W 18.066941°N

Data Source: State Historic  
Preservation Office and Puerto Rico  
Institute of Culture  
Base Map: ESRI ArcGIS Online  
accessed November 2023  
Updated: 11/28/2023  
Layout: Cultural Resources  
Apr: 72428 ReGrowTier2Maps



Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco

### Photograph Key





Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco



Photo #: 01

**Description (Southeast):** Site location for water well 6in. diameter with concrete base 5x5ft and galvanized roof.

Date: 10/31/2023



Photo #: 02

**Description (Northwest):** Site location where applicant plans to put water well 6-in. diameter with concrete base 5x5ft and galvanized roof.

Date: 10/31/2023



Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco



Photo #: 03

**Description (North):** Overview of site location where applicant plans to put concrete cistern 10x10x8 ft, 9000-gallons, if he gets the funds.

Date: 10/31/2023



Photo #: 04

**Description (South):** Site location for new cistern 10x10x8ft.

Date: 10/31/2023

Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco



Photo #: 05

Description (West): Site location for new cistern 10x10x8ft.

Date: 10/31/2023



Photo #: 06

Description (East): Site location for new cistern 10x10x8ft.

Date: 10/31/2023



Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco



Photo #: 07

**Description (Southeast):** Site location for 20x20ft galvanized roof with rigid metal tubes.

Date: 10/31/2023



Photo #: 08

**Description (South):** Site location for galvanized roof 20x20ft.

Date: 10/31/2023



Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco



Photo #: 09

Description (Northeast): Site location for fence along property line.

Date: 10/31/2023



Photo #: 10

Description (East): Site location for fence along property line.

Date: 10/31/2023

Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco



Photo #: 11

Description (South): Site location for fence along property line.

Date: 10/31/2023



Photo #: 12

Description (Northeast): Access Road. Applicant plans to replace fence along property line which is where those trees can be seen.

Date: 10/31/2023



Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco



Photo #: 13

**Description (East):** Applicant plans to replace fence along property line which is a bit closer from where the yellow house can be seen.

Date: 10/31/2023



Photo #: 14

**Description (Southwest):** Applicant plans to replace fence.

Date: 10/31/2023

Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco



Photo #: 15

Description (Southwest): Applicant plans to replace fence.

Date: 10/31/2023



Photo #: 16

Description (Southeast): Applicant plans to replace fence.

Date: 10/31/2023



Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco



Photo #: 17

Date: 10/31/2023

**Description (West):** Applicant plans to replace fence up to property line and along the property line which is where the trees are at the top of the hill.



Photo #: 18

Date: 10/31/2023

**Description (Northeast):** Broken cistern. Applicant says it can be fixed if funds are not sufficient for a new one.

Applicant: Elizardo Martinez Ramos

Case ID: PR-RGRW-01232

City: Yauco



Photo #: 19

Date: 10/31/2023

**Description (East):** Storage container applicant placed there when he bought the farm in 1978.



Photo #: 20

Date:  
10/31/2023

**Description (North):** Structure built in 1984 for storage, repurposed into home for applicant's workers.





October 20, 2022

**Arch. Carlos A. Rubio Cancela**

Executive Director

State Historic Preservation Officer

Cuartel de Ballajá Bldg.

San Juan, Puerto Rico

**Re: Authorization to Submit Documents**


Dear Arch. Rubio Cancela:

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

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

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

Cordially,

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



DEPARTMENT OF

# HOUSING

GOVERNMENT OF PUERTO RICO



## Memorandum to File

**Date:** 3/21/2025

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

**Application Number:** PR-RGRW-01232-W

**Project:** ELIZARDO MARTINEZ RAMOS

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

After reviewing Application Number PR-RGRW-01232-W under the Regrow Puerto Rico Program, administered by the Puerto Rico Department of Housing (**PRDOH**), to complete the property's contamination analysis in accordance with 24 C.F.R. § 50.3(i) and 24 C.F.R. § 58.5(i), we have determined that testing the property's radon levels is infeasible and impracticable.

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

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



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

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

As part of the evaluation for this determination, PRDOH sent information requests to six (6) local agencies at the state and federal levels. We received responses from the following agencies:

- United States Geological Survey;
- Centers for Disease Control and Prevention;
- Puerto Rico Department of Health; and
- United States Environmental Protection Agency.

The agencies mentioned above confirmed the lack of scientific data on Radon testing for Puerto Rico and the technical difficulties that we face to comply with HUD's Radon testing requirement. For the above-mentioned reasons, Radon testing is infeasible and impracticable for this property, and no further consideration of Radon is needed for the environmental review.

PUERTO RICO DEPARTMENT OF HOUSING  
PARQUE DEL QUINTO CENTENARIO, OLD SAN JUAN  
SAN JUAN, PUERTO RICO

**Procedure for Making Determination on Wetlands Eight Step Process**

The Puerto Rico Department of Housing (PRDOH) intends to use U.S. Department of Housing and Urban Development (HUD) - Community Development Block Grant (CDBG) funding to engage in improvements for repair and expansion of an existing fence, installation of a water well, and upgrades and repair of a water distribution system, including installation of a new water pump on a concrete pad and new water lines at an existing farm. The PR-RGRW-01232 project is proposed to take place at Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698; 18.065879, -66.830869.

Introduction

The fence is the only project activity within a wetland. The remaining scope of work including installation of a water well, concrete pad for water pump and water line connection is located approximately 135 feet from the wetland at the nearest point. Given the distance from the wetland, these project activities will have no impact on the wetland. The existing fence that runs along the property line will be replaced with a barbed wire fence with iron stakes that are 5 and 6 feet (ft) tall, depending on the incline, that extend 1 ft deep and are spaced 8 ft apart. The fence will follow parcel boundaries and encircle the entire parcel. Parts of an existing fence that run through the central and south-central areas of the property will also be replaced. None of the sites require grading. A riverine wetland crosses the fence in four different sections of the parcel in the northwestern, eastern, and southeastern parts of the parcel. Based on the attached wetlands map which includes the National Wetlands Inventory (NWI) and National Hydrography Datasets (NHD), approximately 0.0049 acres of the fence are within the mapped area of this wetland.

Overview

Pursuant to Executive Orders (EOs) 11990, the PRDOH has determined that some project activities are mapped as occurring in a potential wetland. Therefore EO 11990 applies, which was enacted “*in order to avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative*”. Based on the attached map (Figure B 12-1) that includes National Wetlands Inventory (NWI) and National Hydrography Datasets (NHD), the proposed improvement lies within mapped wetland areas.

Detailed below is a summary of the eight-step process and how the PRDOH has or will comply with EO 11990, as the project site occurs within wetlands.

### **Step 1- Determination of whether the proposed action is located within a wetland**

Regarding EO 11990, approximately 0.0049 acres of the proposed activity areas are located within a mapped NWI and/or NHD wetland (See Figure 1). Wetland impacts are expected to be minimal as a result of the proposed action with the implementation of best management practices (BMPs), such as proper site management, erosion and sedimentation control measures, and soil stabilization. Since the project activity involves repair of a fence, existing stake holes will be used so there will not be new ground disturbance. The stakes will be spaced approximately 8 feet apart, allowing wetland waters to move through the fence.

### **Step 2- Early Notification and Involvement of the Public in the Decision-Making Process**

The Re-grow PR Urban-Rural Agriculture Program, under the Puerto Rico Community Development Block Grant Program for Disaster Recovery (CDBG-DR) allocated funds to help shape and implement the future vision in communities that were affected by Hurricanes Irma and María.

Based on the program goals, it was determined for Yauco that this project, repair and expansion of an existing fence, installation of a water well, and upgrades and repair of a water distribution system, including installation of a new water pump on a concrete pad and new water lines, would be beneficial to the surrounding community. The project activities will keep the applicant's cattle clean, watered, and confined to the property where they are safe from traffic hazards and getting lost, improving local meat and dairy production. For the improvements, the Municipality of Yauco and PRDOH notified the public of the proposed actions located within the potential wetlands through an Early Wetlands Notice in local newspapers, for purposes of eliciting public comments for consideration during this review.

Copies of the Early Wetlands Notice were sent to potentially interested parties, such as the Environmental Protection Agency, State Environmental Natural Resources Department, Puerto Rico Planning Board, Puerto Rico Department of Economic Development Commerce, Federal Emergency Management Agency, the National Oceanic and Atmospheric Administration, U.S. Department of Housing and Urban Development, Fish and Wildlife Service, the United States Department of Agriculture Natural Resource Conservation Service, the State Department of Transportation and Public Works. A copy of the Early Wetlands Notice has been included within the Environmental Review Record for this action. No comments were received during the 15-day public comment period applicable to the Early Wetlands Notice.

### **Step 3- Identification and Evaluation of Practicable Alternatives.**

This project includes repair and expansion of an existing fence, installation of a water well, and upgrades and repair of a water distribution system, including installation of a new water pump on a concrete pad and new water lines. The project aims to increase agricultural production and support continued local agricultural production during future disasters. In accordance with the Department of Housing and Urban Development guidelines, practical alternatives to locating the proposed action in a wetland were identified and evaluated. These included the following alternatives:

- 1) Reconstructing the fence in other areas of the property
- 2) Impact of taking no action.

For each of these alternatives, various factors were considered including cost, feasibility, technology, hazard reduction, and environmental impacts. The evaluation of each alternative is summarized below.

#### **Alternative 1**

Reconstructing the fence outside of the wetland areas - The majority of the northern, western, and central portions of the parcel do not have a wetland running through them. However, the project activity is to replace and repair an existing fence that encircles the entire parcel and runs through the center of the property. The riverine wetland runs through the east side and again through the central part of the northeast portion of the property crossing the proposed fence line approximately six times. Removing the existing fence and reconstructing it elsewhere would require vegetation clearing and removal as well as significantly more ground disturbance, including new ground disturbance, than compared to the current activity. It would also not be possible to have a fence encircling the entire parcel without running through the riverine wetland. This would not meet the needs of the project, which include keeping the applicant's cattle on their land with access to a space that will meet the needs of livestock husbandry.

#### **Alternative 2**

No Action – Under the No Action Alternative, the applicant would not receive federal funding for repair and expansion of an existing fence, installation of a water well, and upgrades and repair of a water distribution system, including installation of a new water pump on a concrete pad and new water lines. Consequently, the applicant may not be able to recover and continue agricultural production. Given the degree of need for greater agricultural capacity in Puerto Rico following Hurricanes Irma and María, the costs of foregoing the project would exceed the benefits.

#### **Alternative 3**

Preferred Alternative – The preferred alternative includes the repair and expansion of an existing fence, installation of a new water well, and upgrades and repair of a water distribution system, including installation of a new water pump on a new concrete pad and new water lines. The existing fence that runs along the property line is approximately 8,565 linear feet and will be repaired and/or replaced, within the existing footprint and the new water well will be 6 inches (in) wide with a maximum depth of 300 ft. Water from the well will run approximately 275 ft southwest to the cistern, then approximately 25 ft southeast to the cattle corral through underground pipes 1.5 in wide and 1 ft deep with a total length up to 300 linear feet (LF). Water distribution improvements will involve installing a 5 ft by 5 ft concrete slab that extends a maximum of 2 ft deep for the new water pump. The slab will be adjacent to the water well. The preferred alternative is along an existing fence line that encircles the entire parcel, so that fence line allows the applicant to keep their cattle on the entirety of their land. Additionally, the preferred alternative are locations that require the least amount of environmental impact.

#### **Step 4- Potential Direct and Indirect Impact of the Proposed Action on Wetlands**

Wetlands store and filter water, which reduce flood risk from storm water and wastewater. They are also incredibly biologically productive, supporting a diverse ecosystem for an

abundance of various flora and fauna. Based on FEMA, NWI and/or NHD wetland maps, potential direct impacts resulting from the proposed action on wetlands are projected to be the loss of 0.0049 acres of riverine wetlands.

In addition to the direct impacts of the project to the riverine wetland, the project has the potential to indirectly disturb or alter water quality, as stormwater flow across a construction site can transport sediment and construction waste materials into adjacent surface waters or wetlands.

#### **Step 5- Minimization of Potential Adverse Impacts via Design or Modifications to the Proposed Actions**

The proposed project has minimal impact to wetlands. However, to best minimize the potential adverse, direct and indirect, impacts the applicant will construct the fence with materials that have a minimal footprint (using existing post holes separated by 8-foot intervals, t-posts, stakes, and barbed wire) and that allow water to flow freely without creating an impermeable barrier while sustaining full functionality of the fence. To mitigate direct and indirect impacts, best management practices, such as proper site management, implementation and maintenance of erosion and sedimentation control measures, and soil stabilization will be followed to minimize potential impacts to wetlands.

#### **Step 6- Reevaluation of the Proposed Action**

With respect to wetlands and waters of the United States, the proposed project actions do lie within include approximately 0.0049 acres of wetlands as identified by the NWI and/or NHD. Based on the type of project activities and the property's current use as agricultural land, prohibiting future construction or renovations in this area is not practical due to existing severe need within Puerto Rico for developing additional agricultural capacity and the minimal impacts that are anticipated to result under the project activities.

Based on a review of the practical alternatives and their implementation wherever possible, the proposed action of the PR-RGRW-01232 project is deemed to be the most appropriate and is selected as the final action. This determination is made on the basis of feasibility, cost, enhancement of quality of life, features for the community, land availability, and lack of impacts to wetlands.

#### **Step 7- Publication of the Final Notice**

In our reevaluation we have determined that there is no other practical alternative to the proposed actions. Therefore, a Wetland Explanation Notice for the (PR-RGRW-01232) project was published in the local newspapers in Yauco, Puerto Rico. This notice cites the reasons why the proposed actions must be located within the mapped wetlands, a list of the alternatives considered, and the design modifications taken to minimize adverse impacts.

#### **Step 8- Implementation of the Proposed Action**

The proposed action is anticipated to begin in calendar year 2024.



# **WETLAND PUBLICATIONS**



# **Radon Attachments**



August 20, 2024

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

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

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

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

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

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](http://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](mailto:silvina.cancelos@upr.edu)

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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](http://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](mailto:Pavetko.Oleg@epa.gov)  
Mr. Matthew Laitila, [laitila.matthew@epa.gov](mailto: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.

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Sincerely,

William O. Rodríguez Rodríguez, Esq.  
Secretary

Cc:

Dr. Carlos Marín, [carlos.marin3@upr.edu](mailto: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](mailto: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](http://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](mailto:anais.rodriguez@dma.pr.gov)

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Sincerely,

  
William O. Rodríguez Rodríguez, Esq.  
Secretary

Cc: Mr. Luis Márquez, [secretariogaire@dma.pr.gov](mailto:secretariogaire@dma.pr.gov)  
Eng. Amarilis Rosario, [aire@dma.pr.gov](mailto:aire@dma.pr.gov)  
Mrs. Elid Ortega, [ortega@dma.pr.gov](mailto: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](mailto:dr.carlos.mellado@salud.pr.gov)

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Barbosa Ave. #606, Building Juan C. Cordero Dávila, Río Piedras, PR 00981 | PO Box 21365 San Juan, PR 00928-1365  
Tel. (787) 274-2527 | [www.cdh.pr.gov](http://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](mailto:hweyers@usgs.gov)

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

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Sincerely,

  
William O. Rodríguez Rodríguez, Esq.  
Secretary

Cc: Mr. Raúl Hernández Dabla, [rhernandez2@salud.pr.gov](mailto:rhernandez2@salud.pr.gov)

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

  
William O. Rodríguez Rodríguez, Esq.  
Secretary

Cc: Mr. R. Randall Schumann, [rschumann@usgs.gov](mailto:rschumann@usgs.gov)

**From:** Charp, Paul (CDC/NCEH/DEHSP) <pac4@cdc.gov>  
**Sent:** Tuesday, September 3, 2024 6:36 AM  
**To:** Miranda, Sandra (CDC/PHIC/DPS); Irizarry, Jessica (CDC/PHIC/DPS); 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](mailto:rschumann@usgs.gov)  
<https://www.usgs.gov/staff-profiles/r-randall-schumann>

-----

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

Good afternoon. Ms. Medina

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

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

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**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

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

Estimada Melanie Medina

Quería 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](mailto:silvina.cancelos@upr.edu)



Bubble Dynamics Lab  
University of Puerto Rico - Mayaguez



EPA REGION 2  
CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION

September 23, 2024

**VIA EMAIL**

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

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

Dear Honorable Secretary Rodriguez Rodriguez:

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

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

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

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

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

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

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

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

CITY VIEW PLAZA II BUILDING, 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](mailto:guerrero.carmen@epa.gov) or have your staff contact Reyes, Brenda at [reyes.brenda@epa.gov](mailto:reyes.brenda@epa.gov) or (787) 977-5869.

Sincerely,

CARMEN  
GUERRERO  
PEREZ

Carmen R. Guerrero Pérez  
Director

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

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





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



# ENVIRONMENTAL FIELD ASSESSMENT FORM

## ReGrow

Applicant Name: Elizardo Martinez Ramos	Program ID: PR-RGRW-01232
Project Coordinates: 18.065879, -66.830869	Parcel ID: 337-000-009-57-001
Parcel Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR	Municipio: Yauco
Zip Code 00698	

Inspector Name: Armando Ramos	Inspection Date: 10/31/2023
-------------------------------	-----------------------------

### General Site Conditions

Was property accessible by vehicle?	Yes / No	Comment:
Access issues?	Yes / No	Comment: None / Examples of manual entry: Dogs, Locked gate, Traffic hazards, Uncooperative residents, Confrontational Neighbors.
Are water wells present?	Yes / No	Comment:
Are creeks or ponds present?	Yes / No	Comment:
Are any potential wetlands on-site or visible on adjacent parcel?	Yes / No	Comment:

### Parcel Conditions

**Note – for Any Yes answers specify type, contents and location**

Do any of the proposed project work areas show evidence of site preparation?	Yes / No	Comment: If yes, ask applicant when the preparation work was completed.
Are commercial or industrial hazardous facilities at parcel or within visual sight?	Yes / No	Comment:
Are there signs of underground storage tanks?	Yes / No	Comment:
Are above-ground tanks >10 gallons present? If Yes, also state condition.	Yes / No	Comment: Concrete cistern 10x10x8ft. Built over 20 years ago. Currently broken and not in use. Applicant says it can be fixed if ReGrow funds are not enough to build a new one.



## ENVIRONMENTAL FIELD ASSESSMENT FORM

### ReGrow

Are 55-gallon drums present? If Yes, also state condition.	Yes / <b>No</b>	Comment:
Are abandoned vehicles or electrical equipment present?	Yes / <b>No</b>	Comment:
Is other potential environmentally hazardous debris on the parcel?	Yes / <b>No</b>	Comment:
Is there non-environmentally hazardous debris on the parcel?	Yes / <b>No</b>	Comment:
Are any leaks, soil stains, or stressed vegetation present associated with any of the above or separately?	Yes / <b>No</b>	Comment:
Are there any pungent, foul or noxious odors?	Yes / <b>No</b>	Comment:
Are there any potentially hazardous trees that could fall?	Yes / <b>No</b>	Comment:
Are any bird nests visible?	Yes / <b>No</b>	Comment:
Are there any animal burrows visible?	Yes / <b>No</b>	Comment:
Are there any buildings in direct visual sight of the project locations?	<b>Yes</b> / No	Comment: Structure built in 1984 for storage. Repurposed into home for workers to stay in when necessary.

#### Additional Needs Analysis

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

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

Inspector Signature *Armando Ramos*





## ENVIRONMENTAL FIELD ASSESSMENT FORM

### ReGrow

{Inspector Name} Armando Ramos

{Inspection Date} 10/31/2023

Following pages are used for:

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

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

Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 01	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Southeast		
<b>Description:</b> Site location for water well 6in. diameter with concrete base 5x5ft and galvanized roof.		

<b>Photo #:</b> 02	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Northwest		
<b>Description:</b> Site location where applicant plans to put water well 6in. diameter with concrete base 5x5ft and galvanized roof.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 03	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  North		
<b>Description:</b> Overview of site location where applicant plans to put concrete cistern 10x10x8ft, 9000-gallons, if he gets the funds.		

<b>Photo #:</b> 04	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  South		
<b>Description:</b> Site location for new cistern 10x10x8ft.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 05	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  West		
<b>Description:</b> Site location for new cistern 10x10x8ft.		

<b>Photo #:</b> 06	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  East		
<b>Description:</b> Site location for new cistern 10x10x8ft.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 07	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Southeast		
<b>Description:</b> Site location for 20x20ft galvanized roof with rigid metal tubes.		

<b>Photo #:</b> 08	<b>Date:</b> 10/31/2023
<b>Photo Direction:</b>  South	
<b>Description:</b> Site location for galvanized roof 20x20ft.	

A photograph showing a site location for a galvanized roof. In the foreground, there is a green metal fence with a wooden post. Behind the fence, there is a large tree with green leaves and a building with a galvanized roof. The ground is covered with grass and weeds. The sky is blue with some clouds.



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 09	<b>Date:</b> 10/31/2023
<b>Photo Direction:</b>  Northeast	
<b>Description:</b> Site location for fence along property line.	

A photograph of a lush green hillside covered in dense tropical vegetation, including tall trees and thick undergrowth. The sky is blue with scattered white clouds. The vegetation is dense and green, with some taller trees visible in the background. The sky is a clear blue with a few white clouds. The overall scene is a natural, uncultivated landscape.

<b>Photo #:</b> 10	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  East		
<b>Description:</b> Site location for fence along property line.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869


<b>Photo #:</b> 11	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  South		
<b>Description:</b> Site location for fence along property line.		

<b>Photo #:</b> 12	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Northeast		
<b>Description:</b> Access road. Applicant plans to replace fence along property line which is where those trees can be seen.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 13	<b>Date:</b> 10/31/2023
<b>Photo Direction:</b>  East	
<b>Description:</b> Applicant plans to replace fence along property line which is a bit closer from where the yellow house can be seen.	

A photograph showing a rural property. In the foreground, there is a green metal fence running across the frame. To the left of the fence is a wooden utility pole. To the right is a large, mature tree with dense green foliage. Behind the fence, there is a grassy area and a small body of water or a muddy path. In the background, a steep, lush green hill rises, dotted with trees and a few small buildings. The sky is blue with scattered white clouds.

<b>Photo #:</b> 14	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Southwest		
<b>Description:</b> Applicant plans to replace fence.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 15	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Southwest		
<b>Description:</b> Applicant plans to replace fence.		

<b>Photo #:</b> 16	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Southeast		
<b>Description:</b> Applicant plans to replace fence.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 17	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  West		
<b>Description:</b> Applicant plans to replace fence up to property line and along the property line which is where the trees are at the top of the hill.		

<b>Photo #:</b> 18	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Northeast		
<b>Description:</b> Broken cistern. Applicant says it can be fixed if funds are not sufficient for a new one.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 19	<b>Date:</b> 10/31/2023
<b>Photo Direction:</b>  East	
<b>Description:</b> Storage container applicant placed there when he bought the farm in 1978.	

A photograph of a large, rusted orange metal storage container sitting on a grassy field. A dirt path leads towards the container. In the background, there are lush green hills under a blue sky with some clouds.

<b>Photo #:</b> 20	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  North		
<b>Description:</b> Structure built in 1984 for storage, repurposed into home for applicant's workers.		



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www.swca.com

December 29, 2023

Edwin E Muñiz, Field Supervisor  
Caribbean Ecological Services Field Office  
U.S. Fish and Wildlife Service  
P.O. Box 491  
Boquerón, Puerto Rico 00622  
Email: [caribbean@es@fws.gov](mailto:caribbean@es@fws.gov)

**Re: Federally Listed Threatened and Endangered Species Evaluation for the Puerto Rico  
Department of Housing ReGrow PR-RGRW-01232 Project/ SWCA Project No. 72428**

Dear Mr. Muñiz:

SWCA Environmental Consultants (SWCA), on behalf of the Puerto Rico Department of Housing, is requesting informal consultation under Section 7(a)(2) of the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 *et seq.*), and in accordance with the Fish and Wildlife Coordination Act (47 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) for the proposed ReGrow PR-RGRW-01232 Project (project). The Project is located on 37.03-acres at Barrio Quebradas de Yauco Carretera 375 KM 2.5, Sector Cuesta Grande, Yauco, Puerto Rico, 00698 (66.8309°W 18.06588°N).

The proposed Project involves the repair and expansion of an existing fence, installation of a roof on an existing structure, installation of a water well and a cistern. Construction of the fence and installation of the water well and cistern will require vegetation removal, but no tree clearing is proposed.

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

Species	Listing Status
Puerto Rican Boa ( <i>Chilabothrus inornatus</i> )	Endangered
Puerto Rican Harlequin Butterfly ( <i>Atlantea tulita</i> )	Threatened

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

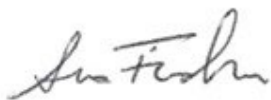
Species	Effect Determination	Conservation Measures to be Implemented
Puerto Rican Boa ( <i>Chilabothrus inornatus</i> )	Not likely to adversely affect (NLAA)	Puerto Rican Boa General Project Design Guidelines

Puerto Rican Harlequin Butterfly ( <i>Atlantea tulita</i> )	No effect (NE)	No Conservation Measures
--	-------------------	--------------------------

In accordance with the 2023 Puerto Rican Boa General Project Design Guidelines, if a Puerto Rican Boa (PR Boa) is found in the project action site, work shall cease until the individual moves off on its own. If the PR Boa does not move off, the construction manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask for them to relocate the PR Boa.

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

Sincerely,



Susan Fischer  
Wildlife Ecologist  
SWCA Environmental Consultants

Attachments: Threatened and Endangered Species Technical Memorandum





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## 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-01232 Project/ SWCA Project No. 72428**

---

### Project Description

Elizardo Martinez Ramos, the applicant, is proposing to repair and expand an existing fence, install a roof on a livestock area, and install a water well and new cistern on a 37.03-acre property in the Municipio of Yauco, Puerto Rico (project) (Appendix A, Figure 1). The project is located at Barrio Quebradas de Yauco Carretera 375 KM 2.5, Sector Cuesta Grande, Yauco, Puerto Rico 00698, in a rural area. The fence will run along the entire property line and be constructed of barbed wire and iron stakes, the roof will be 20 feet by 20 feet and be erected over an existing livestock area, the water well will be six inches wide and have a 5 foot by 5-foot base, and the cistern will be 10 feet by 10 feet by 8 feet (9,000 gallons) (Appendix A, Figure 2).

### Existing conditions

The existing habitat conditions at the proposed well and cistern locations consist of dense grasses and the fence location consists of dense vegetation, including trees, grasses, and shrubs. Forested areas surround the property. There is one riverine wetland mapped in the north-central and eastern portions of the parcel (Appendix A, Figure 3). Construction of the fence, well and cistern would require removal of the vegetation 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 fence, water well and cistern location (review area) (Appendix C). The IPaC automatically generates a list of species and other resources of concern, such as critical habitat, that are known or expected to be in the specified area and could potentially be directly or indirectly affected. According to the IPaC query for the project, two federally listed endangered species has the potential to occur in the review area; the Puerto Rican boa (*Chilabothrus inornatus*) and the Puerto Rican harlequin butterfly (*Atlantea tulita*). 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
<b>Reptiles</b>				
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.
<b>Insects</b>				
Puerto Rican Harlequin Butterfly ( <i>Atlantea tulita</i> )	FT	This species inhabits areas with moderately dense to dense canopy cover and dense vegetation and a source of water within a kilometer. Eggs and larvae are found only on the prickly bush ( <i>Oplonia spinosa</i> ), while adult butterflies feed on the nectar of several tree species and drink water (USFWS 2019).	<i>May occur.</i> The project area has forested areas with a nearby water source that could provide suitable habitat.	<i>No effect.</i> See discussion below.

\*Status Definitions:

FE = Federally listed endangered, FT = Federally Threatened

Based on a site visit and habitat evaluations, the Puerto Rican harlequin butterfly has the potential to occur due to potentially suitable habitat within the project area. However, there is no prickly bush (*Oplonia spinosa*) or tree removal proposed; therefore, the project is anticipated to 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

- 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). 2011. *Puerto Rican Boa (Epicrates inornatus) 5-Year Review: Summary and Evaluation*. U.S. Fish and Wildlife Service, Southeast Region. Boquerón, Puerto Rico.
- . 2019. *Species Status Assessment Report for the Puerto Rican Harlequin Butterfly (Atlantea tulita) Version 1.5*. U.S. Fish and Wildlife Service, Southeast Region. Atlanta, Georgia.
- . 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.

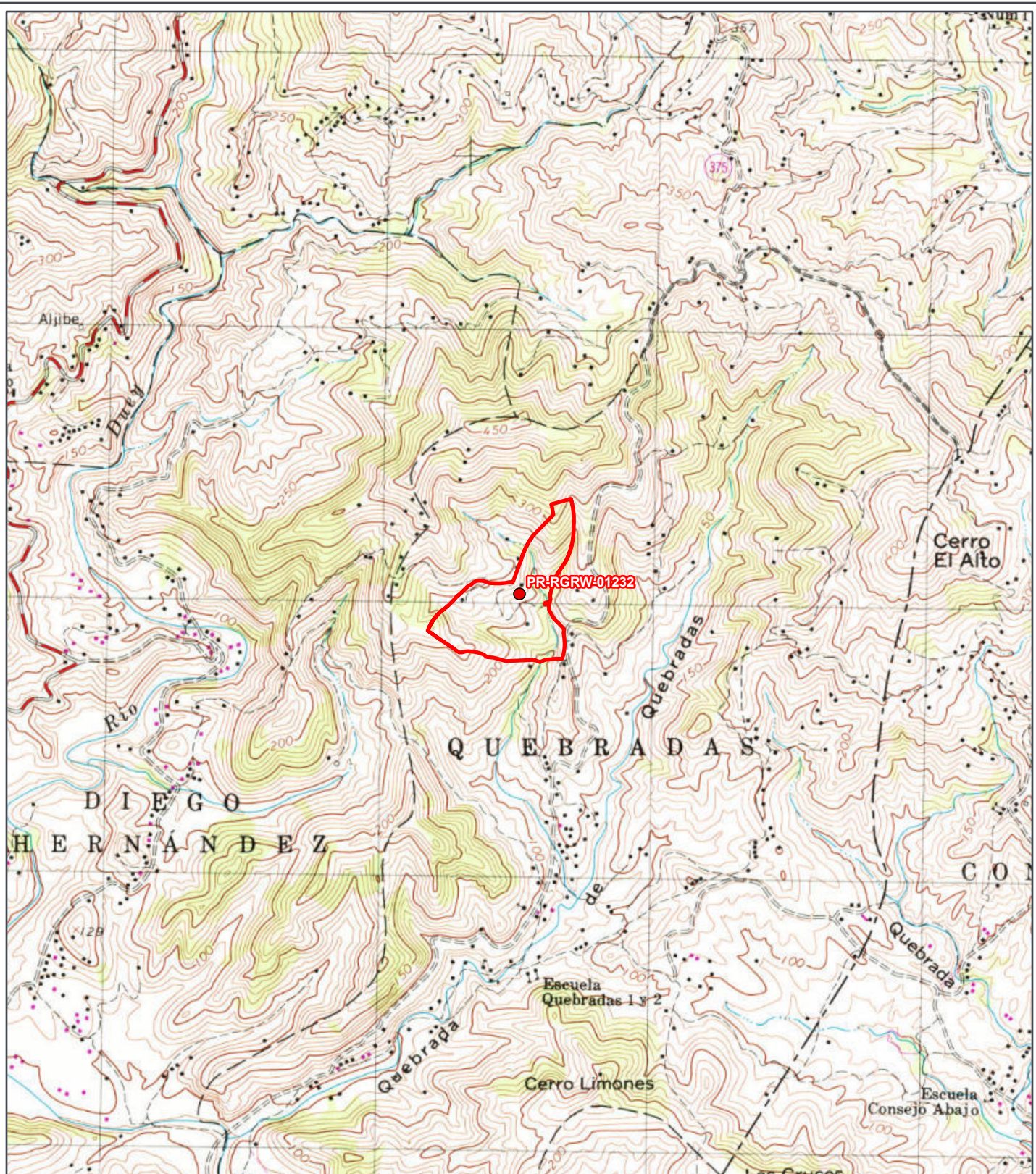
## **APPENDIX A**

### **Maps**

**Figure 1**

**USGS Topographic Map**





REGROW PROGRAM

## USGS Topographic Map

Applicant ID: PR-RGRW-01232

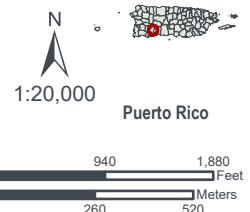
**SWCA**  
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698  
Parcel ID: 337-000-009-57  
Parcel Center:  
66.831218°W 18.066941°N

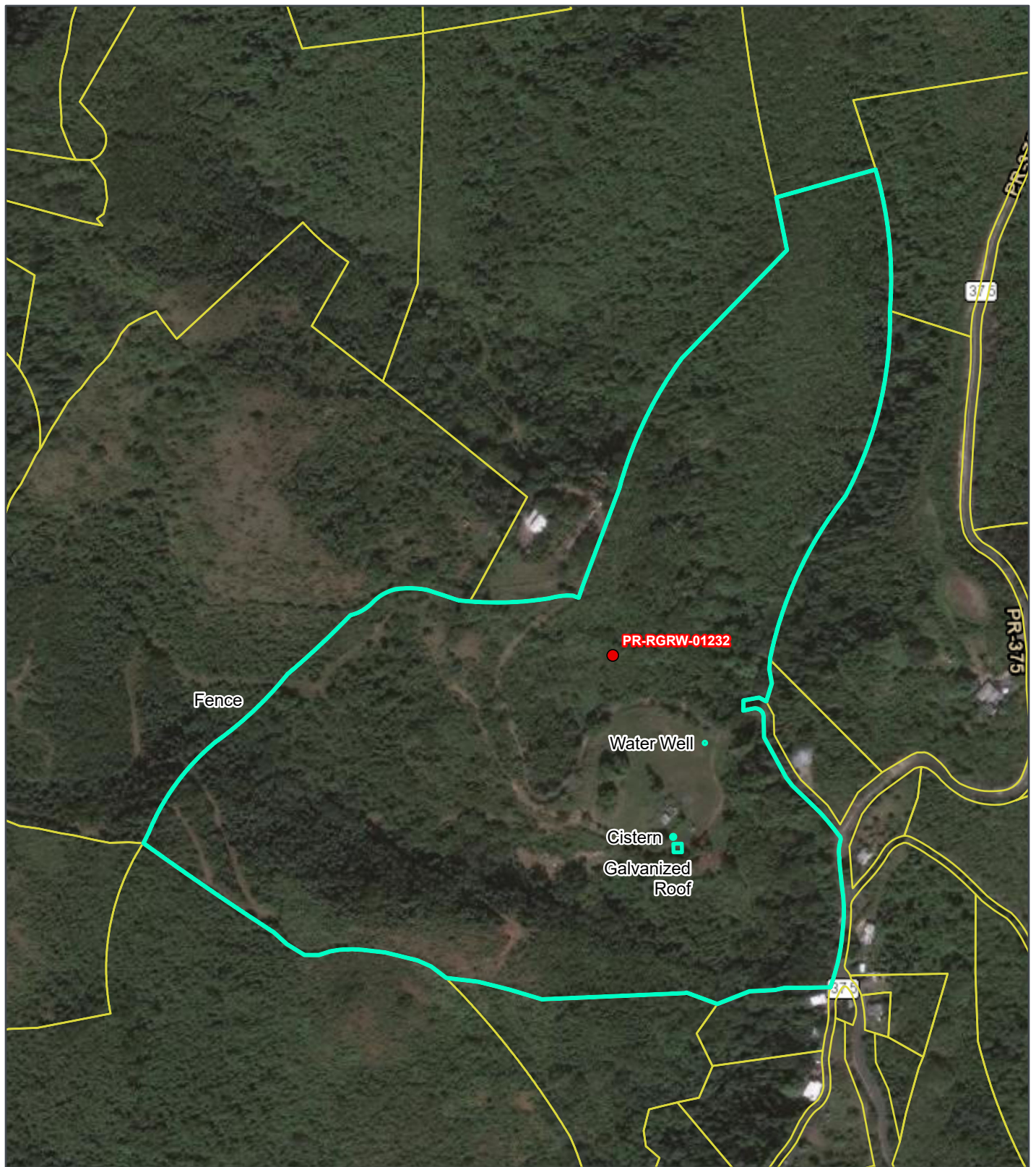
Base Map: ESRI ArcGIS Online,  
accessed December 2023  
Updated: 12/29/2023

Layout: USGS Topographic Map  
Aprx: 72428\_ReGrowTier2Maps





**Figure 2**  
**Site Vicinity Map**



REGROW PROGRAM

## Site Vicinity

Applicant ID: PR-RGRW-01232

**SWCA**  
ENVIRONMENTAL CONSULTANTS

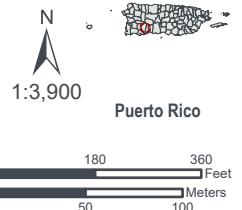
- Site
- Site Parcel
- Project Footprint (Option)

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698

Parcel ID: 337-000-009-57  
Parcel Center:  
66.831863°W 18.067383°N

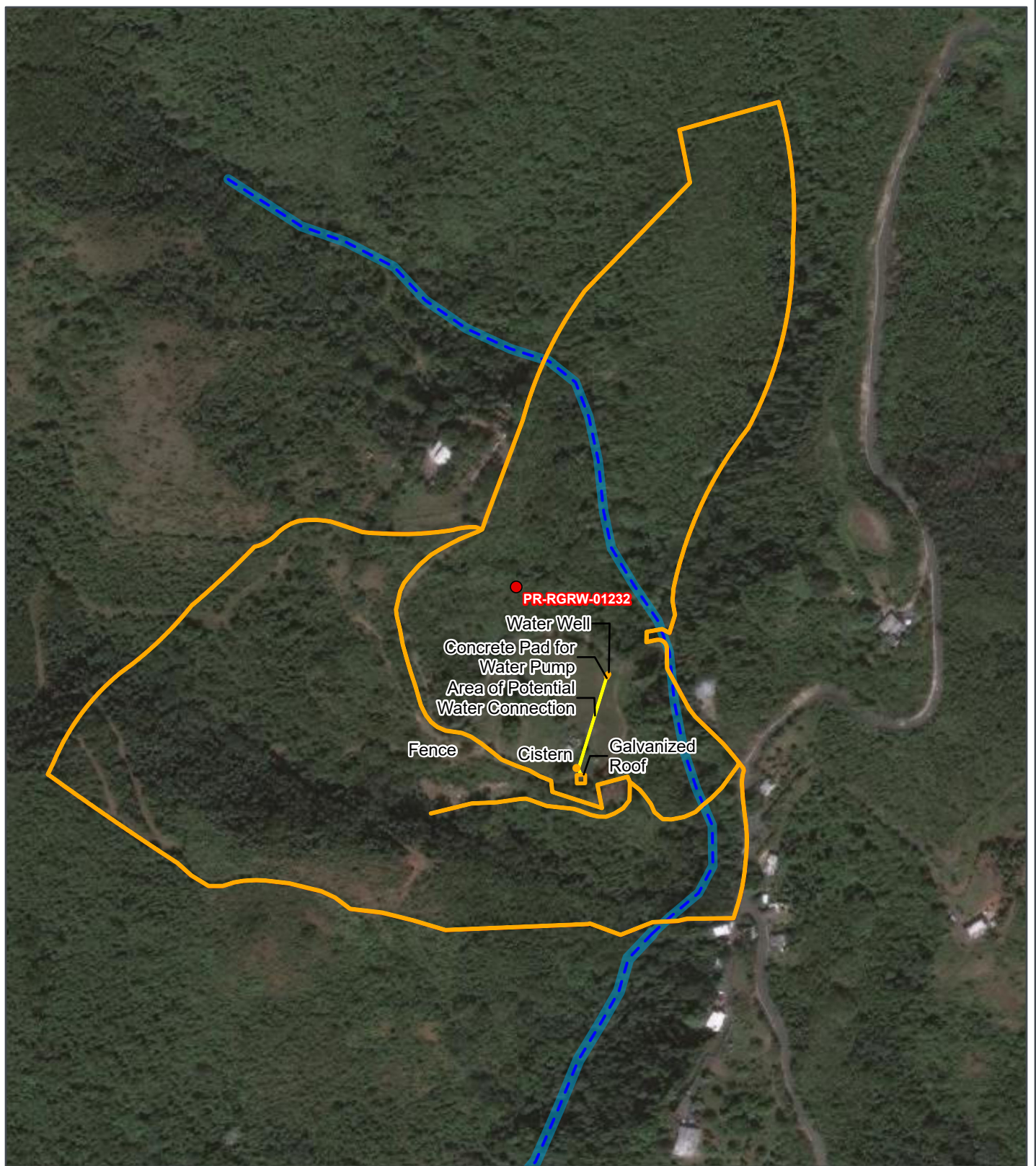
Base Map: ESRI ArcGIS Online,  
accessed November 2023  
Updated: 11/7/2023

Layout: Site Vicinity  
Aprx: 72428\_ReGrowTier2Maps



**Figure 3**  
**Wetlands Map**





REGROW PROGRAM

## Wetlands Protection Map

Applicant ID: PR-RGRW-01232

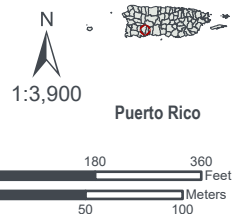
**SWCA**  
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)
- Potential Area of Disturbance
- - - NHD Stream
- Estuarine and Marine Deepwater

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

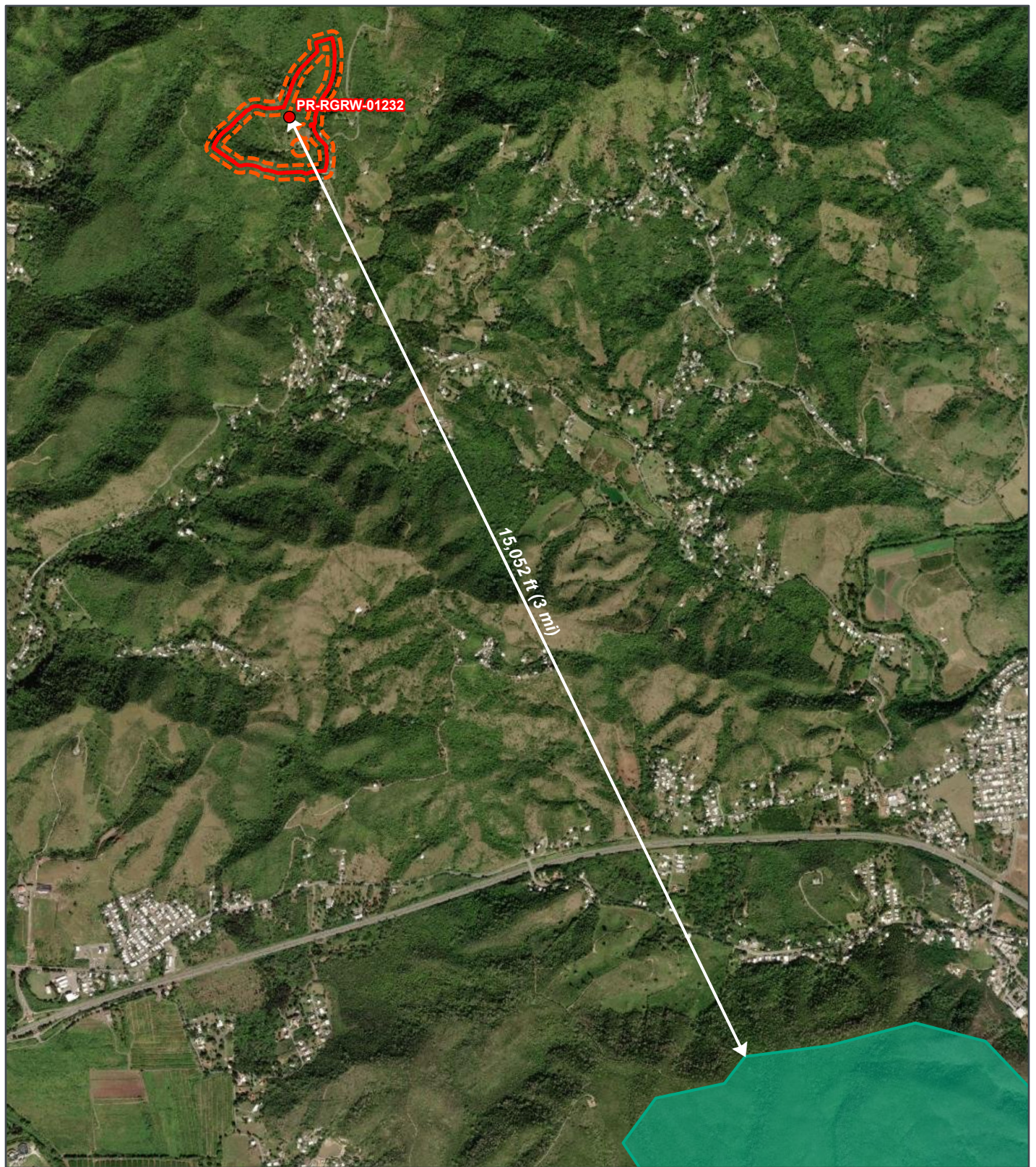
Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698  
Parcel ID: 337-000-009-57  
Parcel Center:  
66.831218°W 18.066941°N

Data Source: <https://apps.nationalmap.gov/downloader/#/https://www.fws.gov/program/national-wetlands-inventory/data-download>  
Base Map: ESRI ArcGIS Online,  
accessed December 2023  
Updated: 12/7/2023  
Layout: Wetlands Protection



**Figure 4**  
**Critical Habitat Map**





REGROW PROGRAM

## Critical Habitat Map

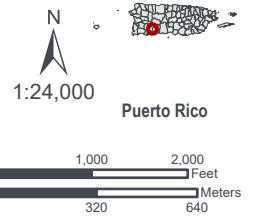
Applicant ID: PR-RGRW-01232



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

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698  
Parcel ID: 337-000-009-57  
Parcel Center:  
66.821718°W 18.048314°N

Data Source: [https://services.arcgis.com/QVENGdaPbd4LUkLV/arcgis/rest/services/USFWS\\_Critical\\_Habitat/Base\\_Map/ESRI/ArcGIS/Online](https://services.arcgis.com/QVENGdaPbd4LUkLV/arcgis/rest/services/USFWS_Critical_Habitat/Base_Map/ESRI/ArcGIS/Online)  
accessed November 2023  
Updated: 11/7/2023  
Layout: Critical Habitat  
Aprx: 72428\_ReGrowTier2Maps



## **APPENDIX B**

### **Photographic Log**



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 01	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Southeast		
<b>Description:</b> Site location for water well 6in. diameter with concrete base 5x5ft. And galvanized roof.		

<b>Photo #:</b> 02	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Northwest		
<b>Description:</b> Site location where applicant plans to put water well 6in. diameter with concrete base 5x5ft. And galvanized roof.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 03	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  North		
<b>Description:</b> Overview of site location where applicant plans to put concrete cistern 10x10x8ft. 9000-gallons, if he gets the funds.		

<b>Photo #:</b> 04	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  South		
<b>Description:</b> Site location for new cistern 10x10x8ft.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 05	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  West		
<b>Description:</b> Site location for new cistern 10x10x8ft.		

<b>Photo #:</b> 06	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  East		
<b>Description:</b> Site location for new cistern 10x10x8ft.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 09	<b>Date:</b> 10/31/2023
<b>Photo Direction:</b>  Northeast	
<b>Description:</b> Site location for fence along property line.	

A photograph of a lush green hillside covered in dense tropical vegetation, including tall trees and thick undergrowth. The sky is blue with scattered white clouds. The vegetation is dense and green, with some taller trees visible in the background. The sky is a clear blue with a few white clouds. The overall scene is a natural, uncultivated landscape.

<b>Photo #:</b> 10	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  East		
<b>Description:</b> Site location for fence along property line.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869


<b>Photo #:</b> 11	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  South		
<b>Description:</b> Site location for fence along property line.		

<b>Photo #:</b> 12	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Northeast		
<b>Description:</b> Access road. Applicant plans to replace fence along property line which is where those trees can be seen.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 13	<b>Date:</b> 10/31/2023
<b>Photo Direction:</b>  East	
<b>Description:</b> Applicant plans to replace fence along property line which is a bit closer from where the yellow house can be seen.	

A photograph showing a rural property. In the foreground, there is a green metal fence running across the frame. To the left of the fence is a wooden utility pole. To the right is a large, mature tree with dense green foliage. Behind the fence, there is a grassy area and a small body of water or a muddy path. In the background, a steep, lush green hill rises up, dotted with trees and some small structures. The sky is blue with scattered white clouds. The overall scene is bright and sunny.

<b>Photo #:</b> 14	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Southwest		
<b>Description:</b> Applicant plans to replace fence.		



Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 15	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Southwest		
<b>Description:</b> Applicant plans to replace fence.		

<b>Photo #:</b> 16	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  Southeast		
<b>Description:</b> Applicant plans to replace fence.		

Project #: PR-RGRW-01232	Photographer: Armando Ramos
Location Address: Barrio Quebradas de Yauco Carr 375 km 2.5, Sector Cuesta Grande, Yauco, PR 00698	Coordinates: 18.065879, -66.830869

<b>Photo #:</b> 17	<b>Date:</b> 10/31/2023	
<b>Photo Direction:</b>  West		
<b>Description:</b> Applicant plans to replace fence up to property line and along the property line which is where the trees are at the top of the hill.		



## **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](mailto:CARIBBEAN_ES@FWS.GOV)



In Reply Refer To:  
Project Code: 2024-0019437  
Project Name: PR-RGRW-01232

November 27, 2023

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

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

This species list is provided by:

---

Caribbean Ecological Services Field Office

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

Post Office Box 491

Boqueron, PR 00622-0491

(786) 244-0081

Attachment(s):

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

## OFFICIAL SPECIES LIST

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

This species list is provided by:

**Caribbean Ecological Services Field Office**

Post Office Box 491

Boqueron, PR 00622-0491

(787) 834-1600

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## PROJECT SUMMARY

Project Code: 2024-0019437

Project Name: PR-RGRW-01232

Project Type: Disaster-related Grants

Project Description: Installation of a cistern and water well, and the construction of a fence and roof on existing structure.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.0670655,-66.8314754621795,14z>



Counties: Yauco County, Puerto Rico

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## 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 Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

## REPTILES

NAME	STATUS
Puerto Rican Boa <i>Chilabothrus inornatus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6628">https://ecos.fws.gov/ecp/species/6628</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/PCMJHT3QBJBRPKTP7P5OFSDGFE/documents/generated/7140.pdf">https://ipac.ecosphere.fws.gov/project/PCMJHT3QBJBRPKTP7P5OFSDGFE/documents/generated/7140.pdf</a>	Endangered

## INSECTS

NAME	STATUS
Puerto Rican Harlequin Butterfly <i>Atlantea tulita</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9005">https://ecos.fws.gov/ecp/species/9005</a>	Threatened

## 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.

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## USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

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

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

## BALD & GOLDEN EAGLES

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

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

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

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

## MIGRATORY BIRDS

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

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

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

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

## WETLANDS

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

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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.

RIVERINE

- R5UBH
  - R4SBC
-



## **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

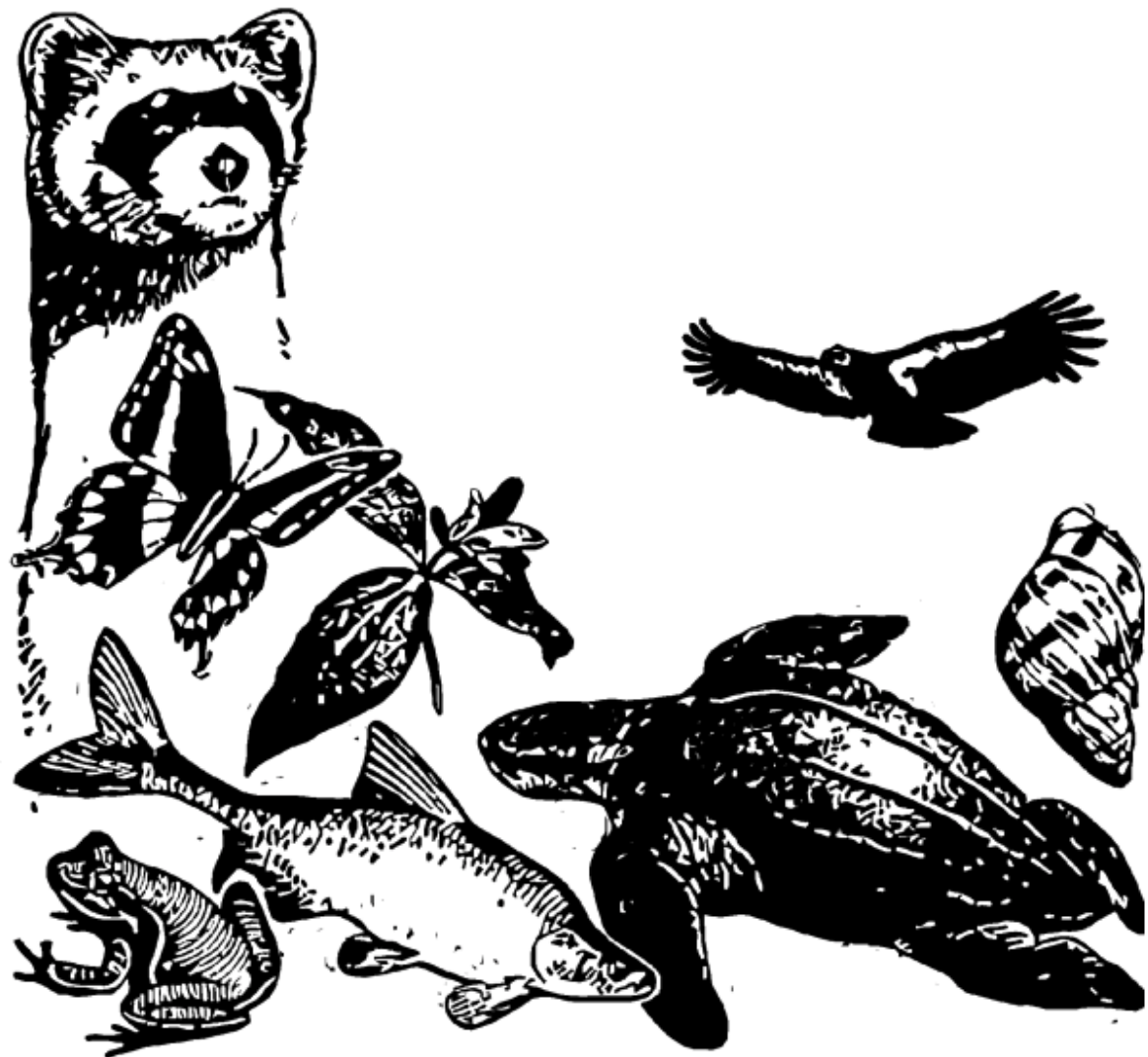
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## **APPENDIX D**

### **Project Design Guidelines**

# *General Project Design Guidelines (1 Species)*

Generated November 27, 2023 04:19 PM UTC, IPaC v6.101.0-rc3



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# Species Document Availability

## Species with general design guidelines

Puerto Rican Boa *Chilabothrus inornatus*

## Species without general design guidelines available

Puerto Rican Harlequin Butterfly *Atlantea tulita*

# General Project Design Guidelines - Puerto Rican Harlequin Butterfly 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 Harlequin Butterfly *Atlantea tulita*

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

## 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

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## 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](mailto:jan_zegarra@fws.gov), 786-933-1451; Endangered Species Program Coordinator: Jose Cruz at [Jose\\_Cruz-Burgos@fws.gov](mailto:Jose_Cruz-Burgos@fws.gov), 305-304-1386. All reporting must be submitted at [caribbean\\_es@fws.gov](mailto: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.

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## **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](mailto:CARIBBEAN_ES@FWS.GOV)

In Reply Refer To:  
Project code: 2024-0019437  
Project Name: PR-RGRW-01232

November 27, 2023

Subject: Consistency letter for the project named 'PR-RGRW-01232' 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 27, 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-01232'. The project is located in Yauco County, Puerto Rico (shown below).

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.0670655,-66.8314754621795,14z>



The following description was provided for the project 'PR-RGRW-01232':

Installation of a cistern and water well, and the construction of a fence and roof on existing structure.

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 **313-135030654**

**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 Harlequin Butterfly *Atlantea tulita* Threatened

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-01232

**2. Description**

The following description was provided for the project 'PR-RGRW-01232':

Installation of a cistern and water well, and the construction of a fence and roof on existing structure.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@18.0670655,-66.8314754621795,14z>



## 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

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## 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:

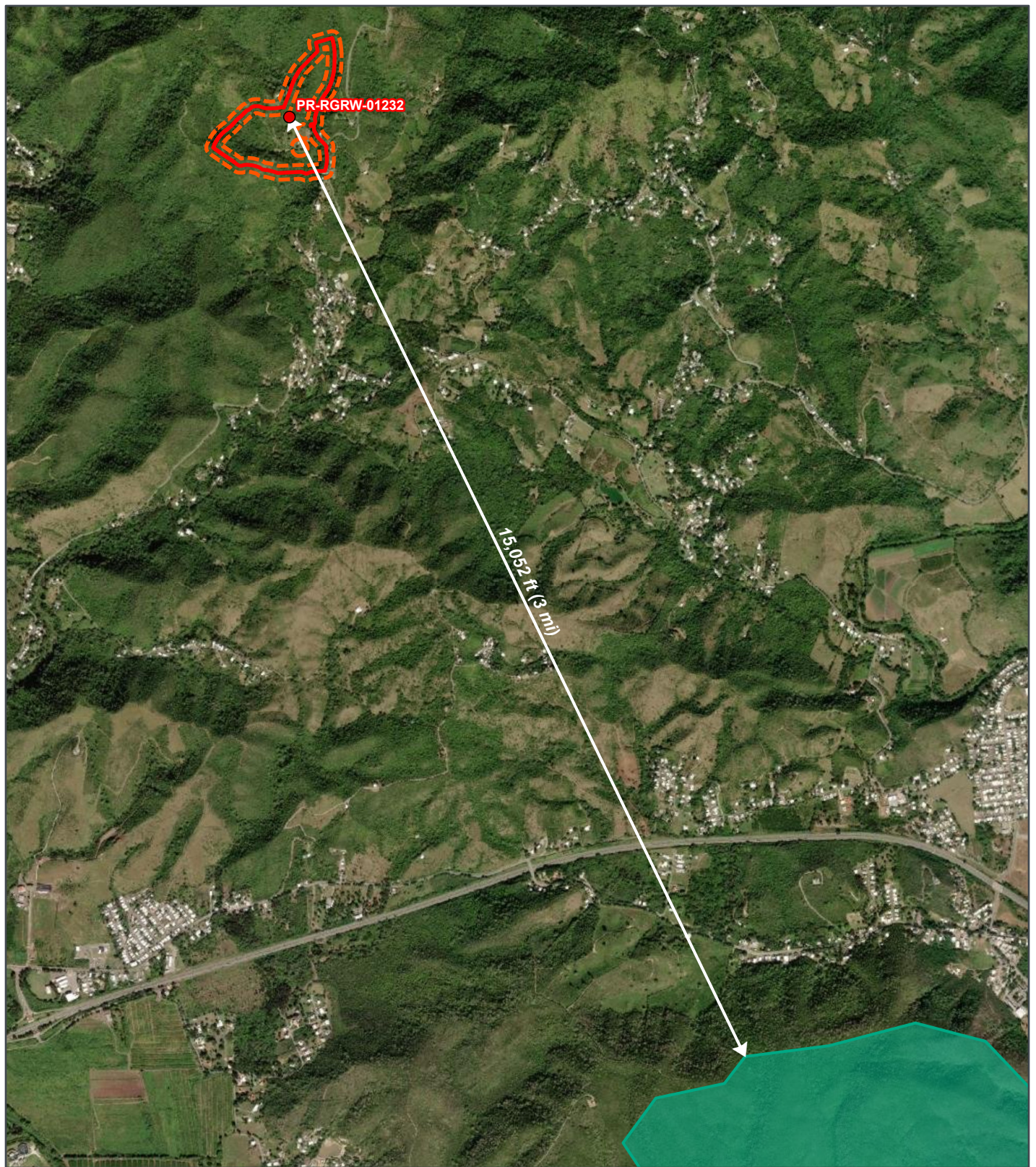
1. Inform all project personnel about the potential presence of the PR boa in areas where the proposed work will be conducted. A pre-construction meeting should be conducted to inform all project personnel about the need to avoid harming the species as well as penalties for harassing or harming PR boas. 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](mailto:jose_cruz-burgos@fws.gov)
  - Office phone (305) 304-1386
- Jan Zegarra, Fish and Wildlife Biologist
  - Email: [jan\\_zegarra@fws.gov](mailto:jan_zegarra@fws.gov)
  - Office phone (786) 933-1451





REGROW PROGRAM

# **Figure B 7-1: Critical Habitat Map**

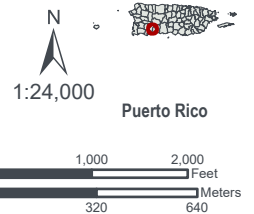
Applicant ID: PR-RGRW-01232

**SWCA**  
ENVIRONMENTAL CONSULTANTS

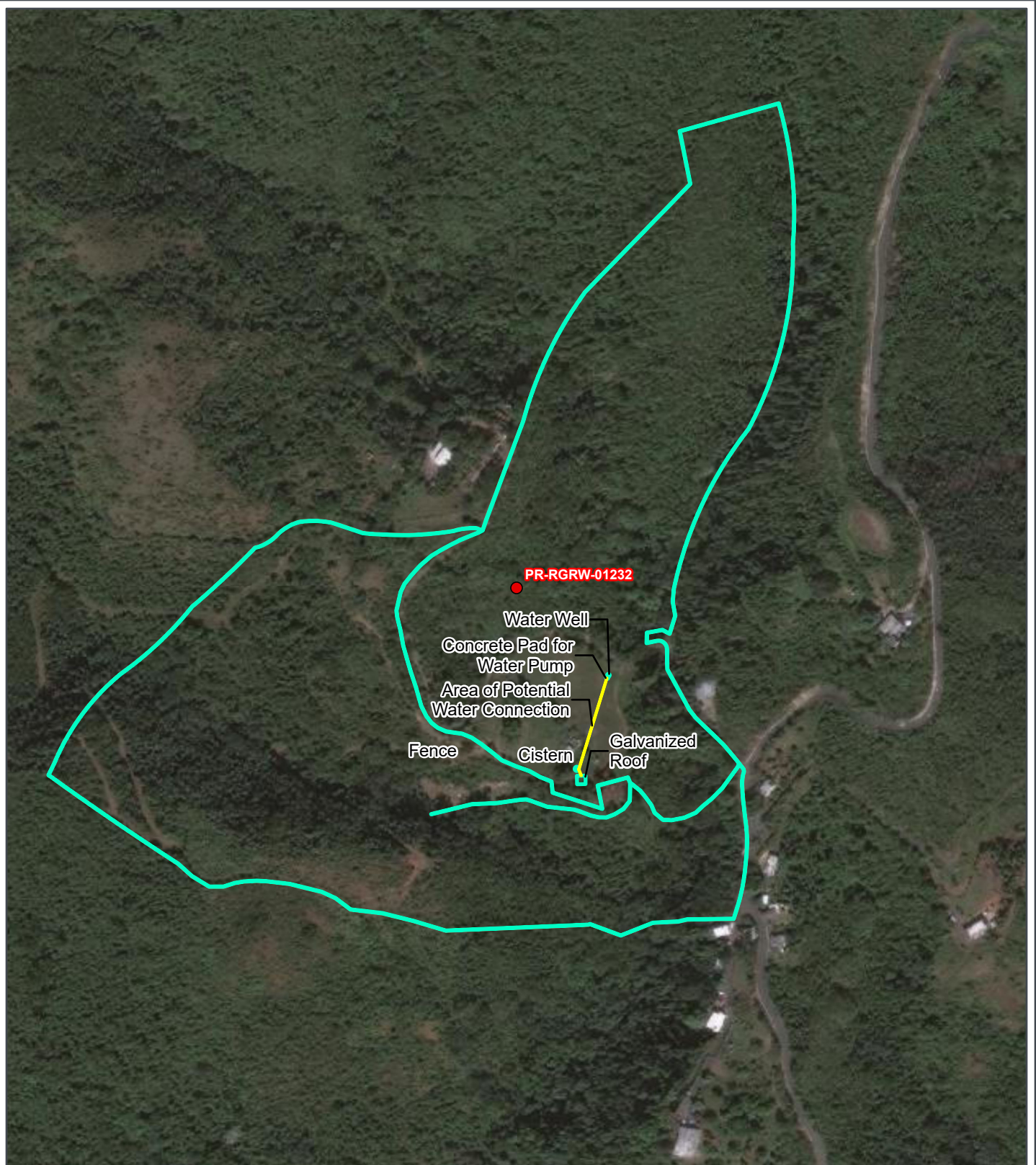
- Site
- Site Parcel
- Buffer (100-ft)
- Critical Habitat - Final
- ▨ National Wildlife Refuges

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698  
Parcel ID: 337-000-009-57  
Parcel Center:  
66.821718°W 18.048314°N

Data Source: [https://services.arcgis.com/QVENGdaPbd4LUkLV/arcgis/rest/services/USFWS\\_Critical\\_Habitat/Base\\_Map/ESRI/ArcGIS/Online](https://services.arcgis.com/QVENGdaPbd4LUkLV/arcgis/rest/services/USFWS_Critical_Habitat/Base_Map/ESRI/ArcGIS/Online)  
accessed November 2023  
Updated: 11/7/2023  
Layout: Critical Habitat  
Aprx: 72428\_ReGrowTier2Maps







REGROW PROGRAM

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

Applicant ID: PR-RGRW-01232

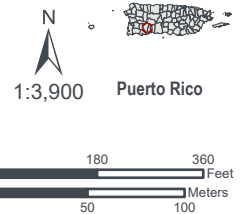
**SWCA**  
ENVIRONMENTAL CONSULTANTS

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

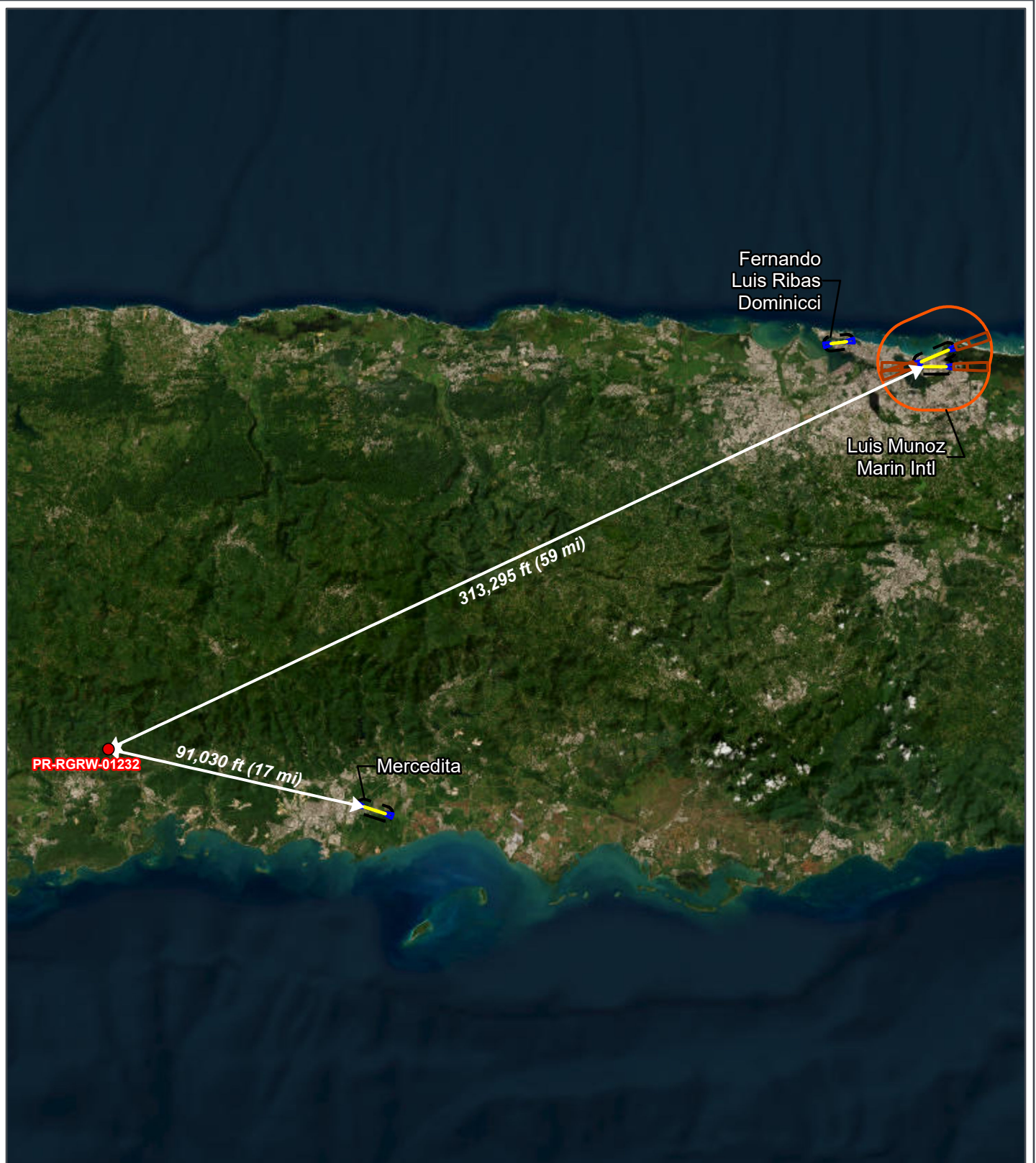
Barrio Quebradas de Yauco Carr 375 km  
2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698

Parcel ID: 337-000-009-57  
18.065879, -66.830869

Data Source: [https://gis.fema.gov/arcgis/rest/services/DR/PuertoRico\\_ABFE\\_1PCT/MapServer](https://gis.fema.gov/arcgis/rest/services/DR/PuertoRico_ABFE_1PCT/MapServer)  
Base Map: ESRI ArcGIS Online, accessed November 2023  
Updated: 11/29/2023  
Layout: ABFE 1Pct  
Aprx: 72428\_ReGrowTier2Maps







REGROW PROGRAM

# **Figure B 1-1: Airport Hazards Map**

Applicant ID: PR-RGRW-01232

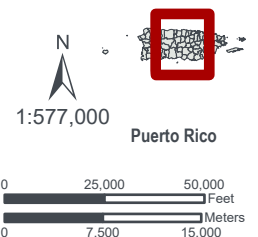
**SWCA**  
ENVIRONMENTAL CONSULTANTS

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

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698 Parcel  
ID: 337-000-009-57  
18.065879, -66.830869

Data Source: <https://geodata.bts.gov/>  
Base Map: ESRI ArcGIS Online,  
accessed November 2023

Updated: 11/7/2023  
Layout: Airport Hazards  
Aprx: 72428\_ReGrowTier2Maps







REGROW PROGRAM

# **Figure B 2-1: Coastal Barrier Resources Map**

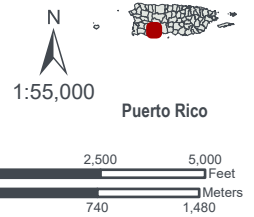
Applicant ID: PR-RGRW-01232



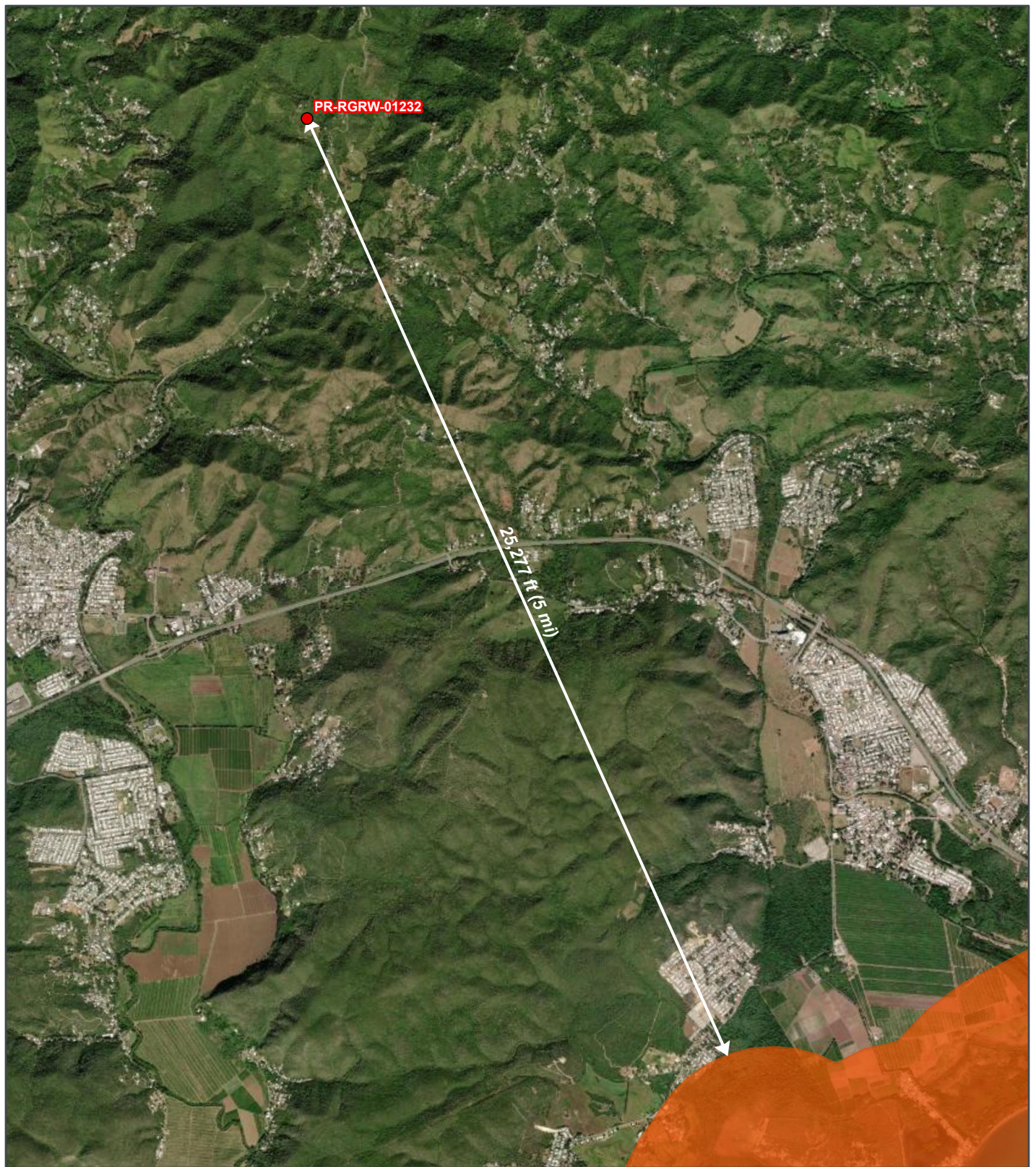
- Site
- Otherwise Protected Area
- System Unit

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698 Parcel  
ID: 337-000-009-57  
18.065879, -66.830869

Data Source: <https://cbrsgis.wim.usgs.gov/arcgis/rest/services/CoastalBarrierResourcesSystem/MapServer>  
Base Map: ESRI ArcGIS Online, accessed November 2023  
Updated: 11/7/2023  
Layout: Coastal Barrier Resources System







REGROW PROGRAM

# **Figure B 5-1: Coastal Zone Management Map**

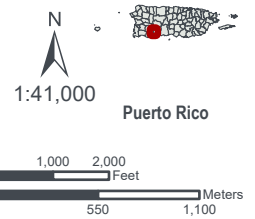
Applicant ID: PR-RGRW-01232

**SWCA**  
ENVIRONMENTAL CONSULTANTS

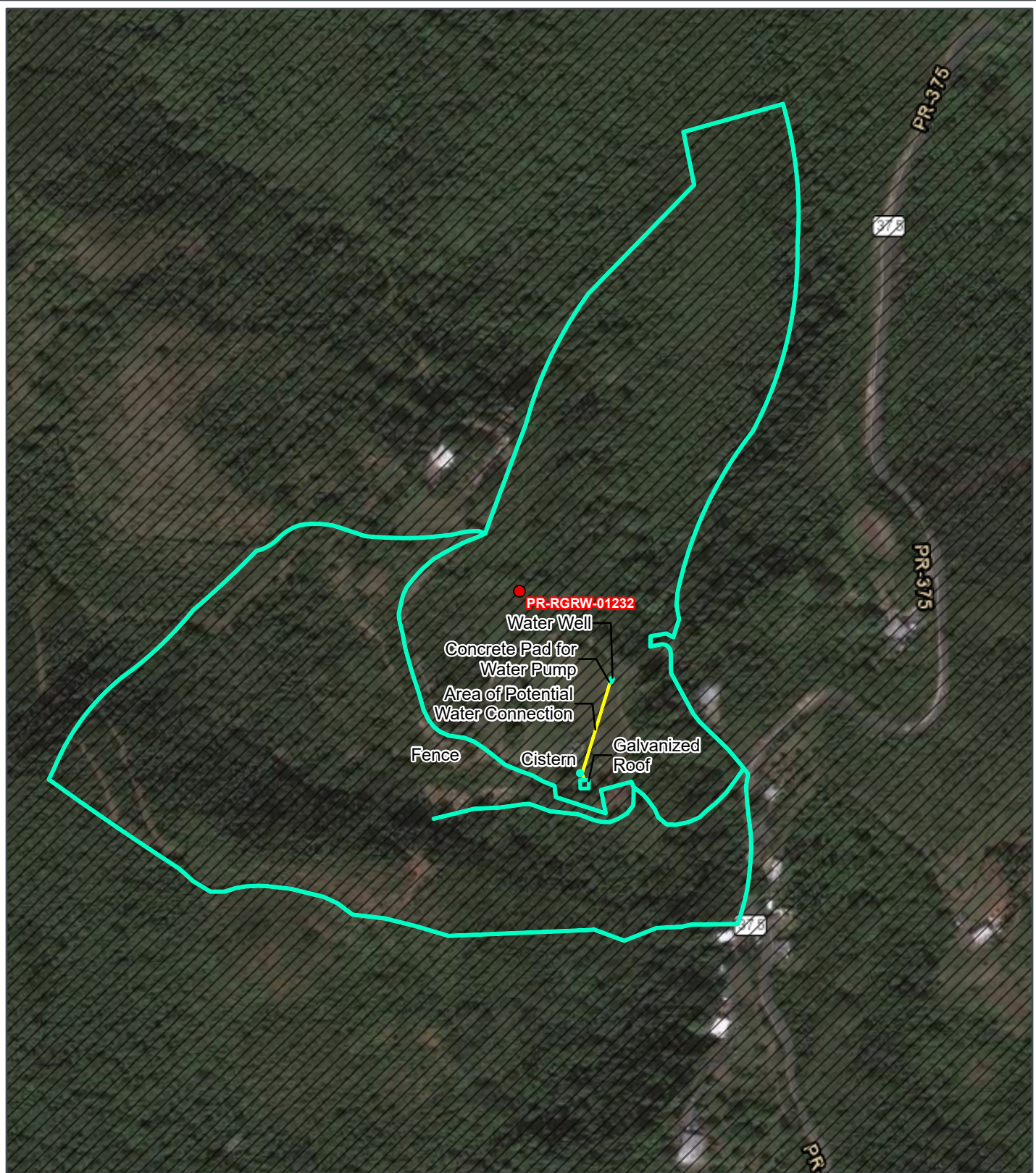
- Site
- Coastal Management Zone

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698 Parcel  
ID: 337-000-009-57  
18.065879, -66.830869

Data Source: <https://coast.noaa.gov/arcgis/rest/services/Hosted/CoastalZoneManagementAct/BaseMap:ESRI/ArcGIS/Online>  
accessed November 2023  
Updated: 11/7/2023  
Layout: Coastal Zone Management  
Aprx: 72428\_ReGrowTier2Maps







REGROW PROGRAM

## Figure B 9-1: Prime Farmland Map

Applicant ID: PR-RGRW-01232

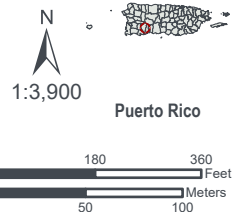
**SWCA**  
ENVIRONMENTAL CONSULTANTS

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

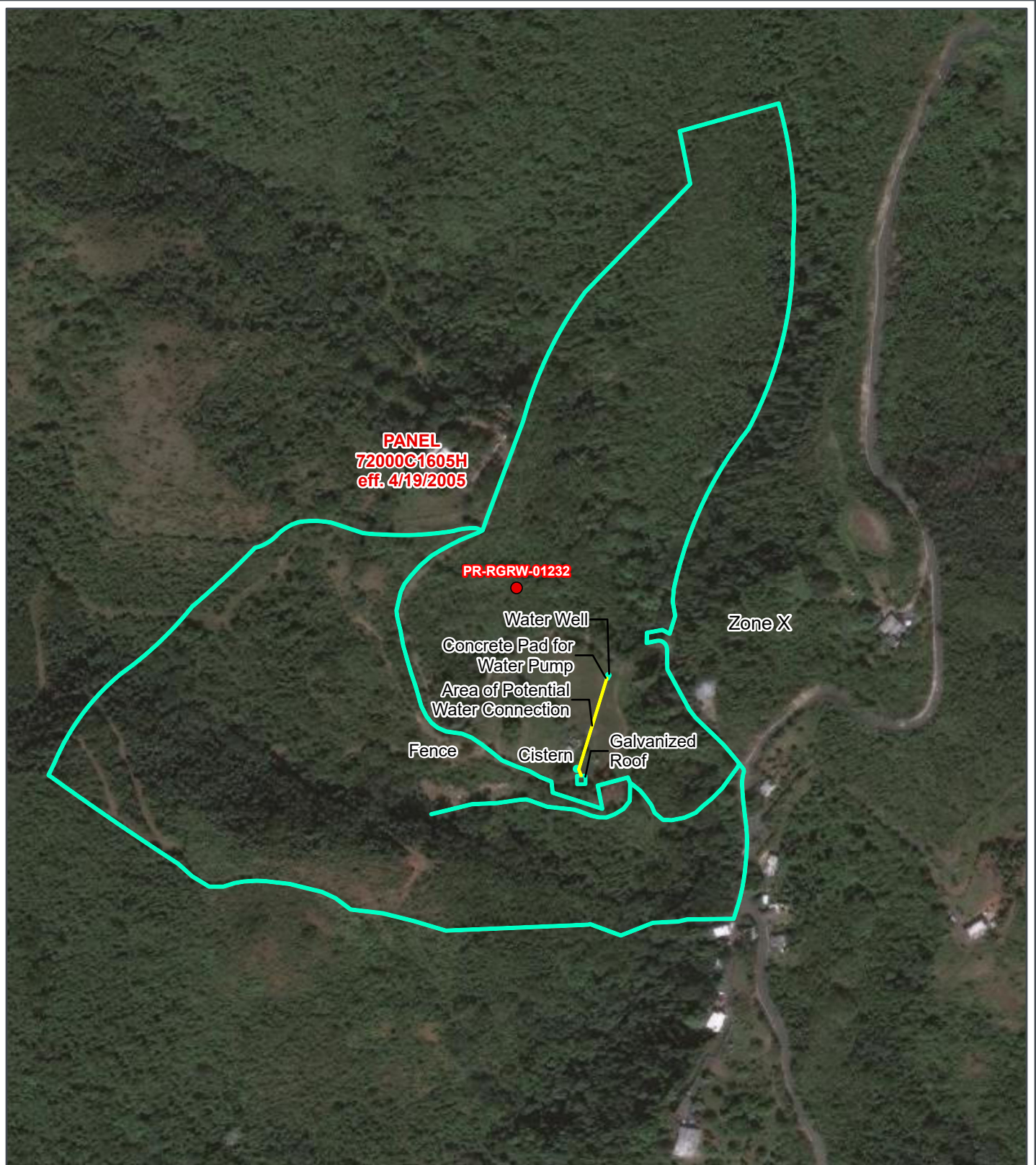
- Prime farmland if drained
- Prime farmland if irrigated
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Not prime farmland
- Not Public Information

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698 Parcel  
ID: 337-000-009-57  
18.065879, -66.830869

Data Source: <https://websoilsurvey.nrcs.usda.gov/app/>  
Base Map: ESRI ArcGIS Online,  
accessed November 2023  
Updated: 11/29/2023  
Layout: Prime Farmland  
Aprx: 72428\_ReGrowTier2Maps





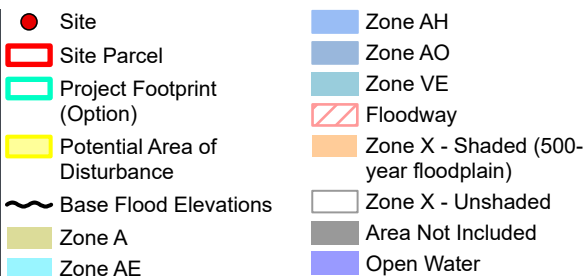


REGROW PROGRAM

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

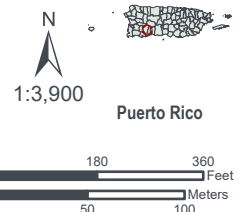
Applicant ID: PR-RGRW-01232

**SWCA**  
ENVIRONMENTAL CONSULTANTS

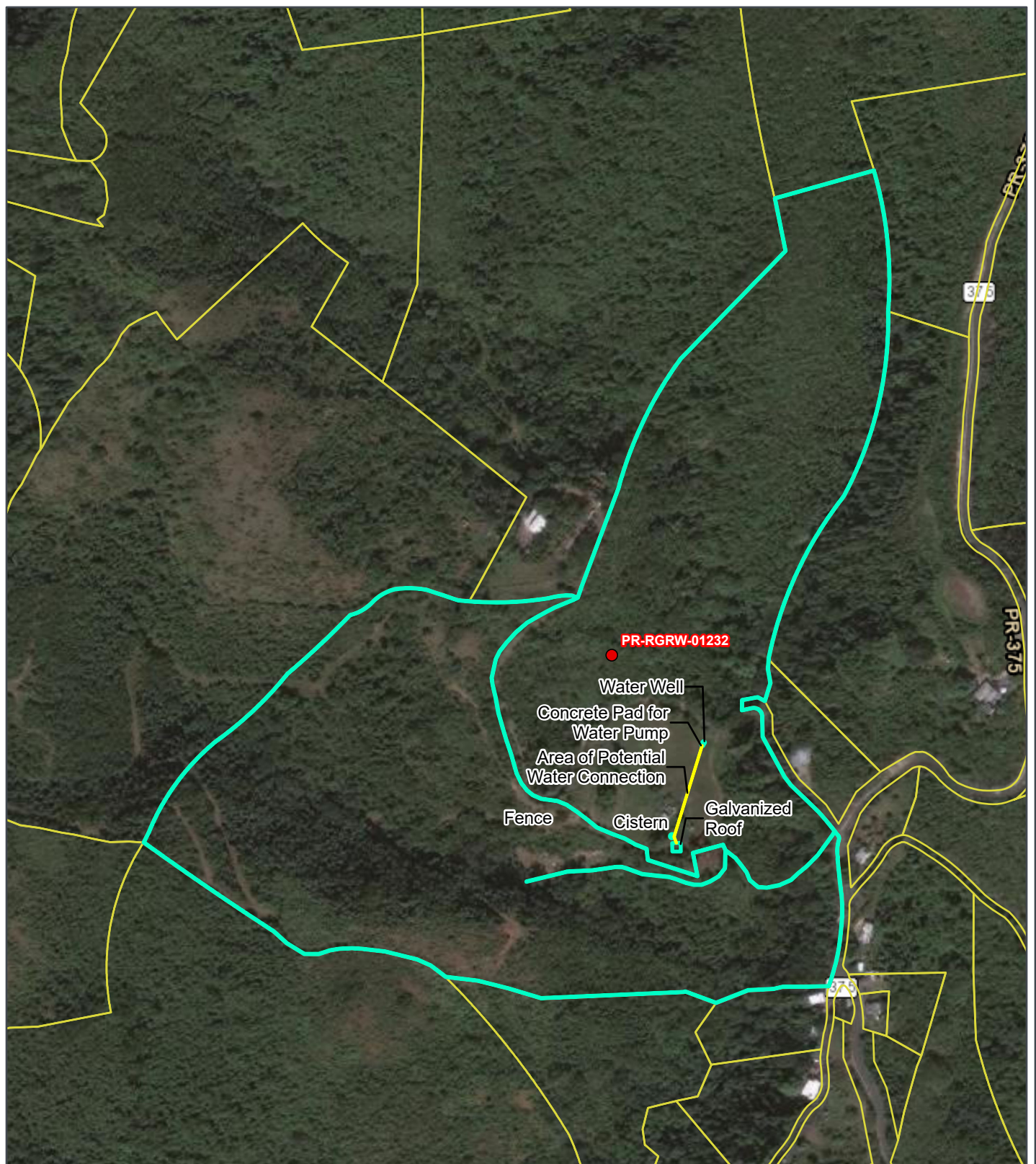


Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico. 00698  
Parcel ID: 337-000-009-57  
18.065879, -66.830869

Data Source: <https://hazards.fema.gov/gis/nfhl/rest/services/public/NFHL/MapServer>  
Base Map: ESRI ArcGIS Online, accessed November 2023  
Updated: 11/29/2023  
Layout: Effective Floodplain  
Aprx: 72428\_ReGrowTier2Maps







REGROW PROGRAM

## Figure A-2: Site Vicinity

Applicant ID: PR-RGRW-01232

**SWCA**  
ENVIRONMENTAL CONSULTANTS

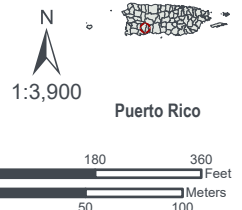
- Site
- Site Parcel
- Project Footprint (Option)
- Potential Area of Disturbance

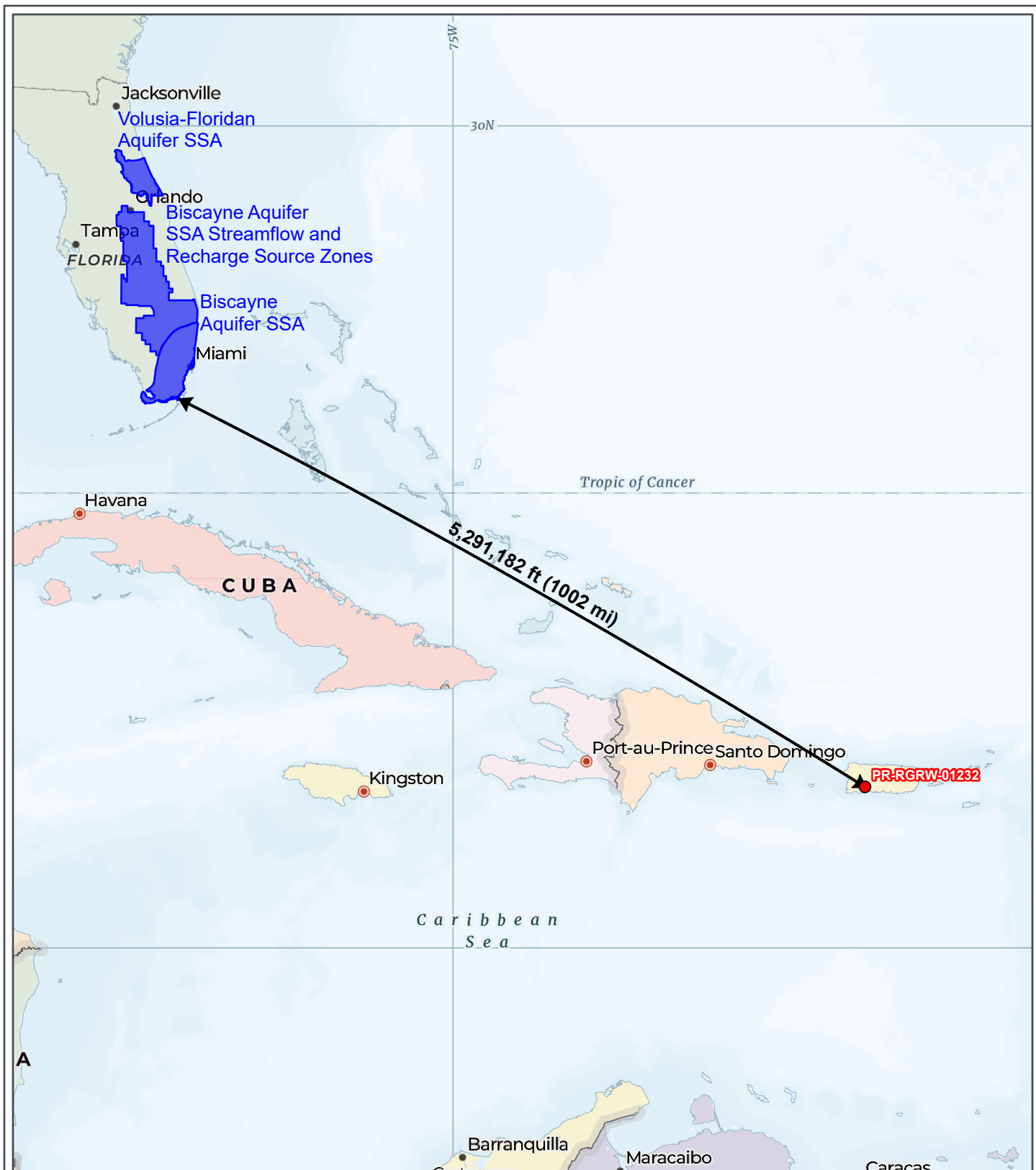
Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698

Parcel ID: 337-000-009-57  
18.065879, -66.830869

Base Map: ESRI ArcGIS Online,  
accessed November 2023  
Updated: 11/29/2023

Layout: Site Vicinity  
Aprx: 72428\_ReGrowTier2Maps





REGROW PROGRAM

## Figure 15-1: Sole Source Aquifers Map

Applicant ID: PR-RGRW-01232

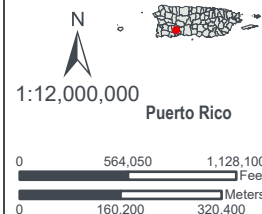
**SWCA**  
ENVIRONMENTAL CONSULTANTS

- Site
- Sole Source Aquifers

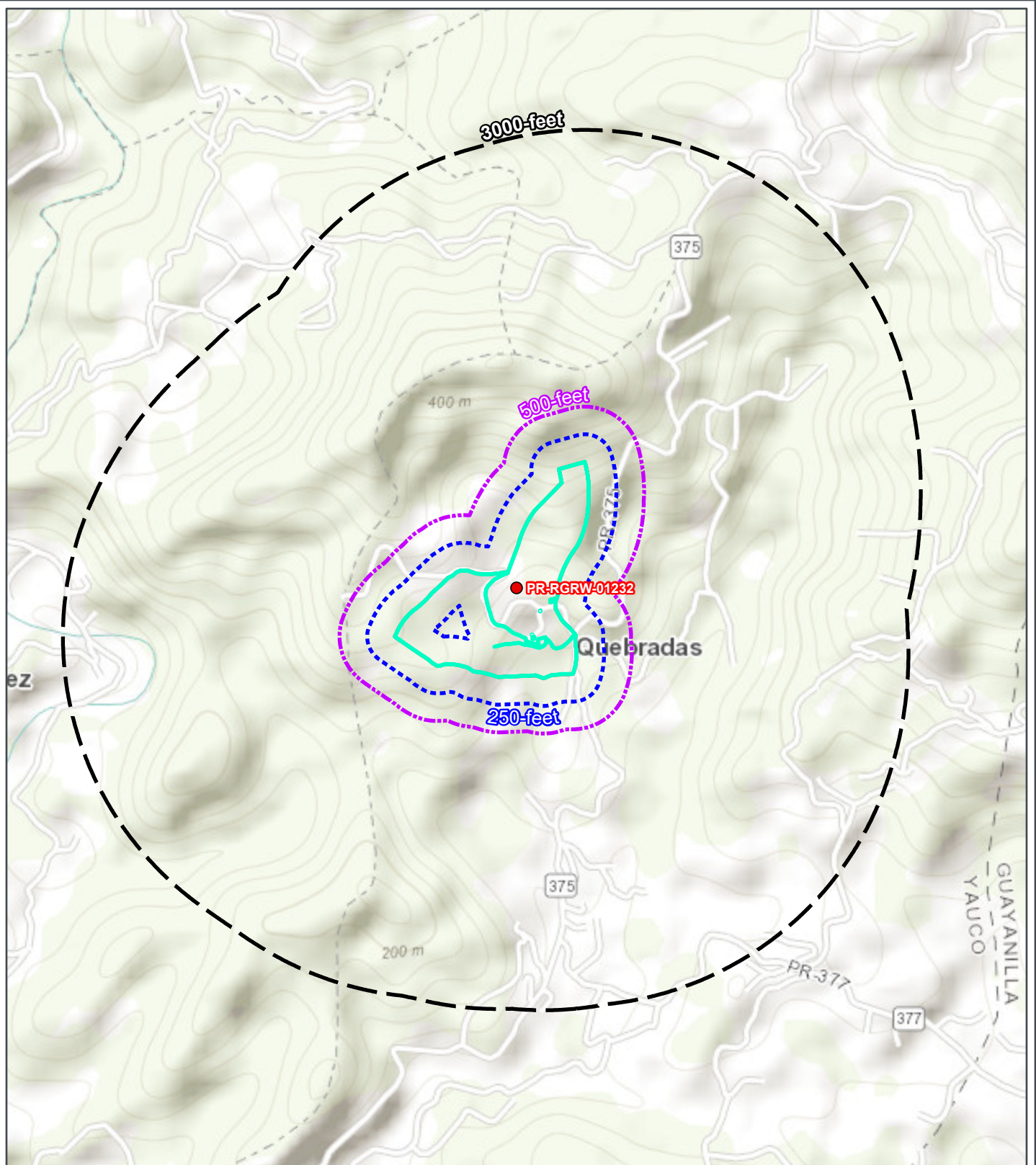
**\*There are no Sole Source Aquifers in Puerto Rico.**

Barrio Quebradas de Yauco Carr 375  
km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698  
Parcel ID: 337-000-009-57  
18.065879, -66.830869

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-01232

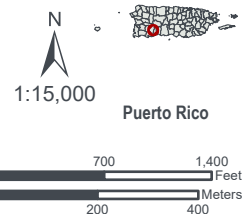


- Site
- Site Parcel
- Project Footprint (Option)
- Buffer (250-feet)
- Buffer (500-feet)
- Buffer (3000-feet)
- Water dischargers

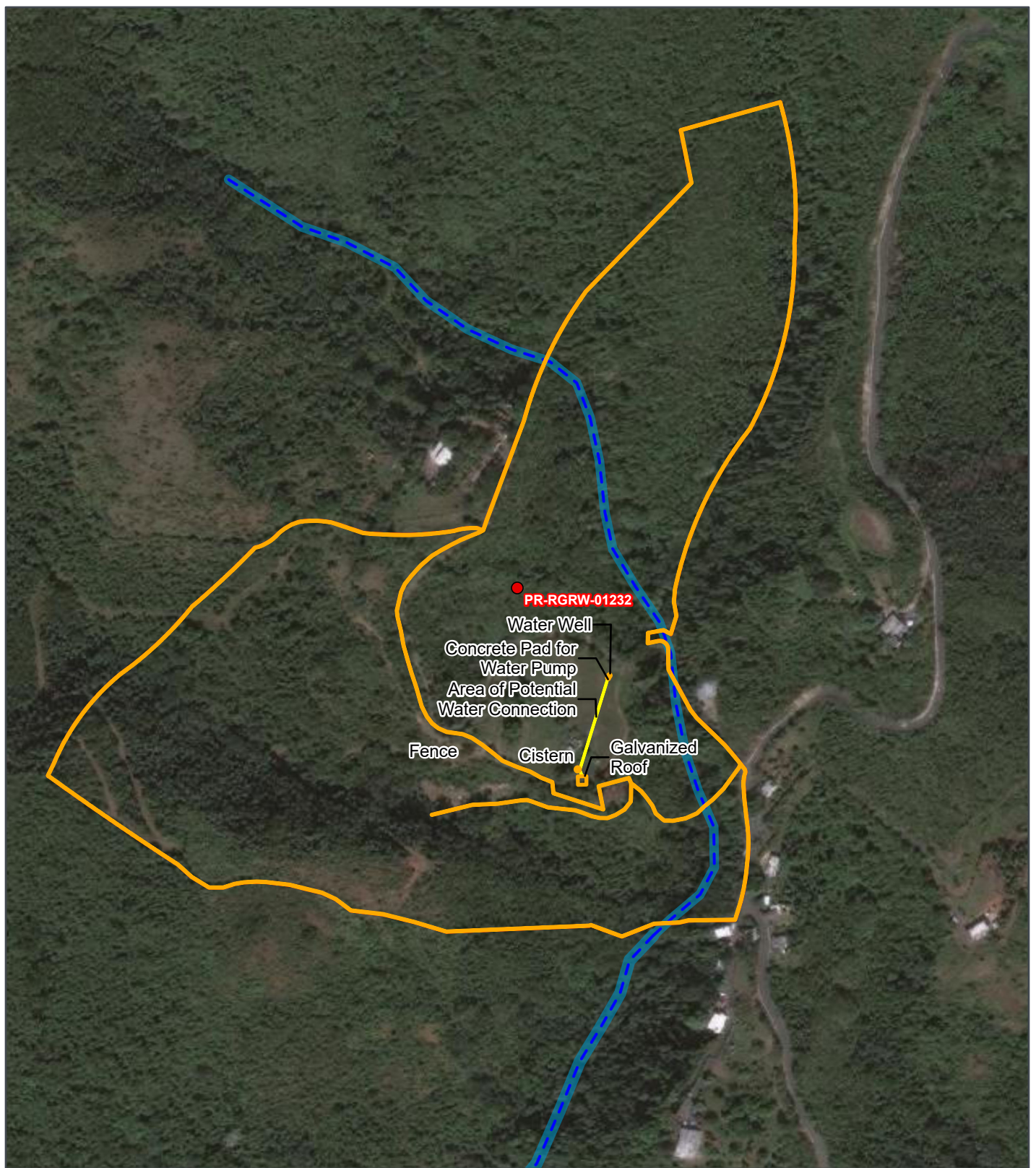
- Toxic Substances Control Act
- Toxic releases
- Superfund
- Hazardous waste
- Brownfields
- Air pollution

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico. 00698  
Parcel ID: 337-000-009-57  
18.065879, -66.830869

Data Source: <https://geopub.epa.gov/arcgis/rest/services/EMEF/efpoints/MapServer>  
Base Map: ESRI ArcGIS Online, accessed November 2023  
Updated: 11/28/2023  
Layout: Contamination and Toxic Substances







REGROW PROGRAM

# **Figure B 12-1: Wetlands Protection Map**

Applicant ID: PR-RGRW-01232

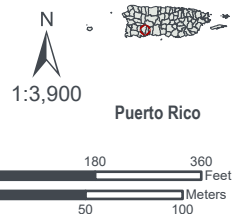
**SWCA**  
ENVIRONMENTAL CONSULTANTS

- Site
- Site Parcel
- Project Footprint (Option)
- Potential Area of Disturbance
- - - NHD Stream
- Estuarine and Marine Deepwater

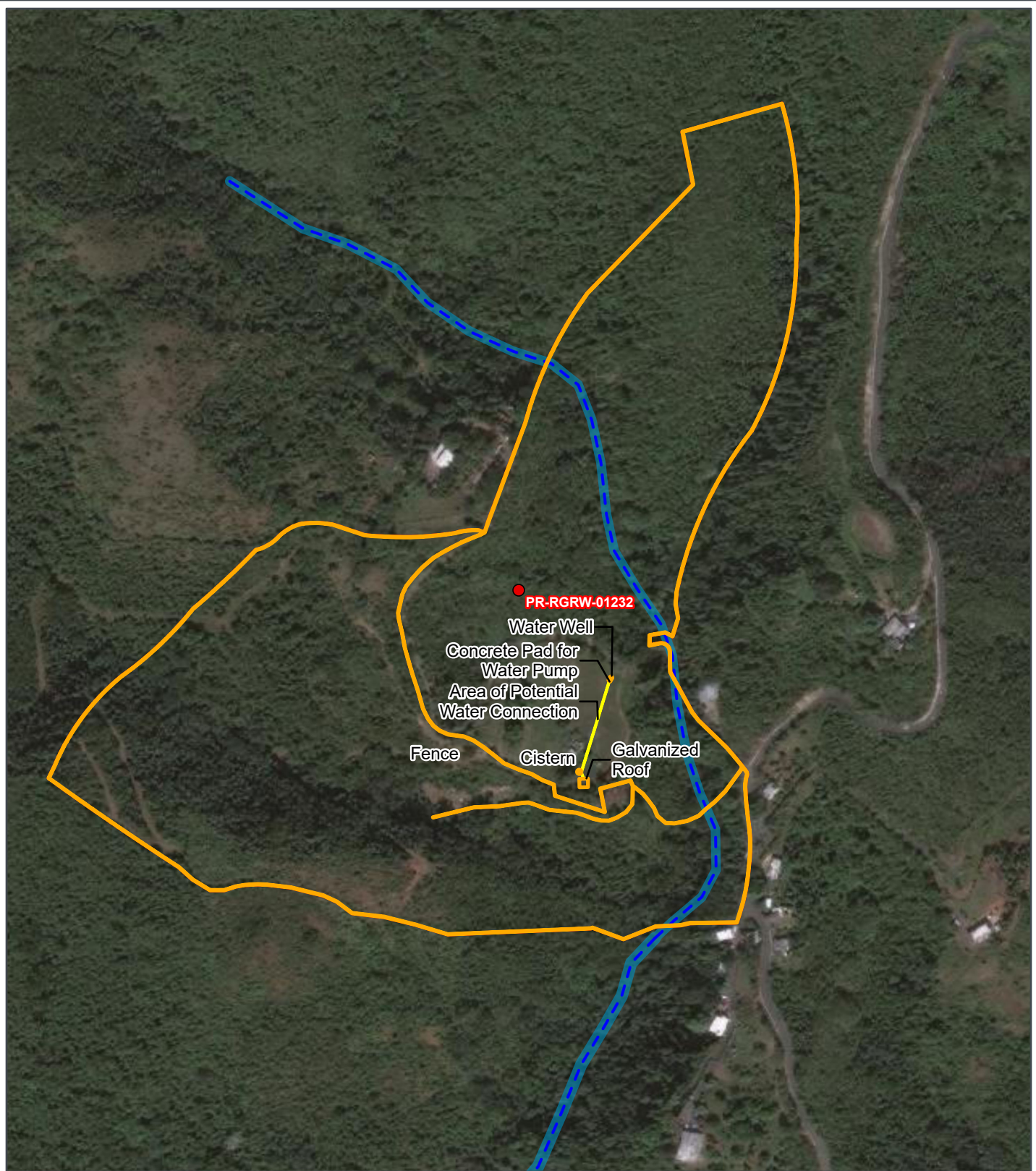
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico 00698  
Parcel ID: 337-000-009-57  
18.065879, -66.830869

Data Source: <https://apps.nationalmap.gov/downloader/#/>  
<https://www.fws.gov/program/national-wetlands-inventory/data-download>  
Base Map: ESRI ArcGIS Online,  
accessed December 2023  
Updated: 12/7/2023  
Layout: Wetlands Protection







REGROW PROGRAM

# **Figure B 12-1: Wetlands Protection Map**

Applicant ID: PR-RGRW-01232

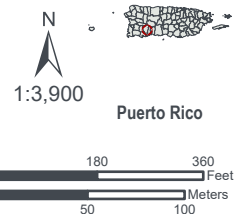
**SWCA**  
ENVIRONMENTAL CONSULTANTS

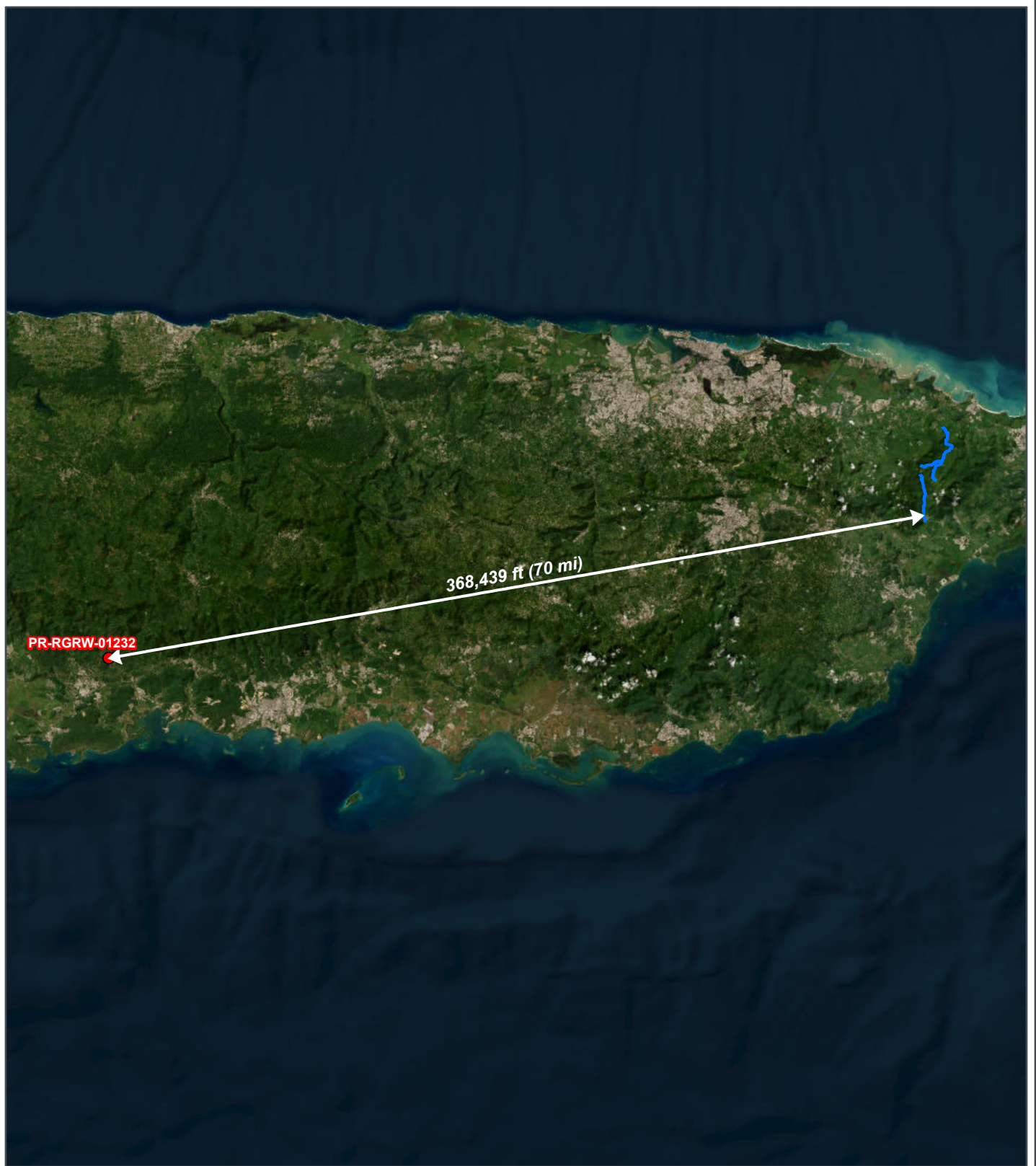
- Site
- Site Parcel
- Project Footprint (Option)
- Potential Area of Disturbance
- - - NHD Stream
- Estuarine and Marine Deepwater

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

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico. 00698  
Parcel ID: 337-000-009-57  
18.065879, -66.830869

Data Source: <https://apps.nationalmap.gov/downloader/#/>  
<https://www.fws.gov/program/national-wetlands-inventory/data-download>  
Base Map: ESRI ArcGIS Online,  
accessed December 2023  
Updated: 12/7/2023  
Layout: Wetlands Protection





REGROW PROGRAM

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

Applicant ID: PR-RGRW-01232

**SWCA**  
ENVIRONMENTAL CONSULTANTS

- Site
- National Wild and Scenic River

Barrio Quebradas de Yauco Carr  
375 km 2.5, Sector Cuesta Grande  
Yauco, Puerto Rico. 00698  
Parcel ID: 337-000-009-57  
18.065879, -66.830869

Data Source: [https://apps.fs.usda.gov/arcx/rest/services/EDW/EDW\\_WildScenicRiverSegments\\_01/mapserver](https://apps.fs.usda.gov/arcx/rest/services/EDW/EDW_WildScenicRiverSegments_01/mapserver)  
Base Map: ESRI ArcGIS Online,  
accessed November 2023  
Updated: 11/7/2023

